Historically, indigenous peoples in North America were divested of one or all of the following – land, sovereignty and control – when non-Indians wanted access to natural resources on tribal lands. In the modern era, as indigenous peoples asserted their legal and moral rights to control their own natural resources, these patterns of divestment changed. But greater control has often resulted in Native nations’ over-reliance on resource extraction for their economic needs. Renewable energy development presents the potential for tribes to maintain, and even increase, control over resource development on tribal lands, while they depart from an economic model dependent on resource extraction and its inevitable negative consequences, including climate change.

Tackling climate change will require many strategies to mitigate dangerous increases in global average surface temperatures and to adapt to present and future impacts. With regard to mitigation, climate change presents tribes with opportunities to add renewable energy development to their economic portfolio. For many Native nations, doing so would allow cultural values to align with economic development in ways that could fulfil long-deferred goals of true indigenous self-determination. This chapter will review historical patterns of natural resource development and their effects on Native nations in the United States and will briefly outline the possibilities for different directions in the future.

I. POST-COLONIAL PATTERNS OF NATURAL RESOURCE DEPRIVATION AND CONTROL

From its beginnings, the United States’ relationship with the American Indian nations within its borders was characterized by contests over natural resources. In post-colonial times, the main contest was over the land itself. A special federal committee investigating the troubled relations between American Indians and the southern states in 1787 put it this way:
‘an avaricious disposition in some of our people to acquire large tracts of land and often by unfair means, appears to be the principal source of difficulties with the Indians’.¹ That source of difficulty played out in ways that effectively appeased the non-Indian desire for land and eroded indigenous territory.

A. Deprivations of Land

As the United States grew and expanded during its earliest years, American Indians were divested of their lands in three principal ways: (1) conquest or purchase, (2) treaty making, and (3) removal to reservations. Early US policies reflected the view that the European nations that arrived in North America had exclusive rights, as against other arriving nations, to acquire property from the indigenous nations. The Discovery Doctrine, which originated in papal justifications for the crusades and other religiously inspired acts of colonialism, was embraced by Chief Justice Marshall in *Johnson v M’Intosh.*² The doctrine provides that the arriving European nations had the right, by virtue of ‘discovery’, to acquire land from the indigenous peoples and, under certain conditions, also to take the land by conquest.

Early in the development of American law regarding the rights of Native nations, the Supreme Court reviewed the nature of aboriginal title, and concluded that it was a ‘settled principle, that [the Indian] right of occupancy is considered as sacred as the fee simple of the whites’.³ In *Johnson,* however, the Court held that the US federal government had the sole power, exclusive of the individual states, to extinguish the tribes’ aboriginal title. This holding was key to formalizing the exclusive nature of the federal government’s authority in Indian affairs, particularly with respect to the vital question of indigenous rights to land.⁴

In many respects, *Johnson* merely formalized what had been the federal

¹ Committee Report on the Southern Department, 3 August 1787, in Francis Paul Prucha (ed.), *Documents of United States Indian Policy* 10 (University of Nebraska Press, Lincoln NE 1975).
² *Johnson v M’Intosh,* 21 U.S. 543 (1823).
³ *Mitchel v United States,* 34 U.S. 711, 746 (1835).
⁴ For a different interpretation of *Johnson,* see Michael C. Blumm, ‘Why Aboriginal Title is a Fee Simple Absolute’, 15 Lewis & Clark L. Rev. 975 (2012) (arguing that *Johnson* is best understood as recognizing a fee simple absolute title in tribes, subject only to the federal government’s right of preemption); see also Michael C. Blumm, ‘Retracing the Discovery Doctrine: Aboriginal Title, Tribal Sovereignty, and Their Significance to Treaty-Making and Modern Natural Resource Policy in Indian Country’, 28 Vt. L. Rev. 713 (2004).
government’s practice, as it had already established the necessary legal and administrative framework to act as the sole power in Indian affairs. Employing its constitutional authority to make treaties and regulate commerce with the Indian tribes, the federal government entered into multiple treaties and purchase agreements with tribal nations. The Trade and Intercourse Acts forbade the purchase of Indian lands except by government agents in official proceedings, which provided an efficient means for the United States to acquire massive land holdings previously controlled by Indian tribes. In the early post-colonial period, most tribal lands were acquired through purchase agreements and treaties without military force.

As the nation grew and expanded across the continent, the non-Indian demand for land increased, which led to more drastic policies. The idea of removing Indian tribes to the vast open West became increasingly popular, and in 1830 Congress passed the Indian Removal Act. Though authorizing only voluntary agreements with Indian tribes exchanging their eastern land holdings for western lands, the Act provided that refusal to emigrate would lead to the end of federal protection and subsequent state jurisdiction.

Despite the Supreme Court’s affirmance of the distinct political and territorial rights of Indian tribes against states in *Worcester v Georgia*, removal policies were ultimately enforced. The most famous example of removal is that of the Cherokee Nation, which won the legal battle against Georgia in *Worcester*, but lost the fight on the ground. Some Cherokee factions acquiesced and some resisted and fled, but the majority of the Cherokee people were force-marched by federal troops to their new home in eastern Oklahoma Territory. In the Cherokee’s case, the non-Indian desire for land for settlement and farming was combling with another goal: Gold had been discovered in the fertile hills of Georgia, increasing the pressure to move the Cherokee Nation off their aboriginal territory.

The federal government complemented its removal strategy with reservation policies. Together, these approaches resulted in the relocation of

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5 U.S. Const. art. I, § 8, cl. 3.
6 U.S. Const. art. II, § 2, cl. 2.
7 Trade and Intercourse Act, 1 Stat. 137 (1790); see also, Act of 1 March, 1 Stat. 329 (1793); Act of 19 May, 1 Stat. 469 (1796); Act of 3 March, 1 Stat. 452 (1799); Act of 17 January, 2 Stat. 6 (1800); Act of 30 March 30, 2 Stat. 139 (1802).
9 Indian Removal Act, 4 Stat. 411 (1830).
almost all of the east coast tribes, and the consolidation and shrinking of
the land base for many western tribes. Commissioner of Indian Affairs,
Thomas Medill, proposed the reservation system in 1848 as a means to
accomplish two ends: open up more land for non-Indians, and force the
assimilation of Indian people into a Christian and agrarian way of life.
Medill’s goals were clearly stated in his Annual Report:

The policy already begun and relied on to accomplish objects so momentous
and so desirable to every Christian and philanthropist is, as rapidly as it can
safely and judiciously be done, to colonize our Indian tribes beyond the reach,
for some years, of our white population; confining each within a small district
of country, so that, as the game decreases and becomes scarce, the adults will
gradually be compelled to resort to agriculture and other kinds of labor to
obtain a subsistence.11

By the late 1880s, removal and reservation policies had accomplished
significant land transfers from Native nations to non-Indians. These
transfers constitute a significant part of the history of natural resource
development and indigenous peoples.

B. Deprivations of Sovereignty

Physical separation of tribes from their lands was just one of the ways the
federal government gained access to natural resources controlled by indig-
enous peoples. Another means was the curtailment of tribal sovereignty,
carried out through judicial doctrine as well as congressional action. The
European ideology inherent in the Discovery Doctrine deprived Indian
Nations of one of their inherent sovereign powers by locking tribes into
exclusive relationships with a single European power. The Supreme
Court’s decision in *Johnson*12 enshrined this aspect of the discovery doc-
trine in US law, cementing the notion that the mere arrival of Europeans
onto the shores of North America resulted in an irreversible diminution of
tribes’ status as coequal foreign nations.

In *Cherokee Nation v Georgia*, the Supreme Court further clarified the
unique nature of American Indian tribal sovereignty, coining the term
‘domestic dependent nations’13 to describe tribal status. Noting that tribes
are distinct political entities, the Court nevertheless held that the tribes

12 *Johnson*, *supra* note 2.
13 *Cherokee Nation v Georgia*, 30 U.S. 1, 17 (1831).
were wards in a guardian relationship with the United States. The trust relationship, as it has become known, is a double-edged sword in Federal Indian law, implying duties of protection to tribes but also paternalistic control over them. The trust relationship has often been employed to dispossess tribes of their sovereignty by empowering the federal government as the ultimate authority in Indian affairs.

In terms of congressional action, in 1871, the House of Representatives, having grown resentful of Indian treaties that forced the House’s hand in appropriations matters, initiated a bill that purported to end the Executive’s power to enter into treaties with Indian tribes. Despite this legislative change, the Executive Branch and Congress continued to enter into agreements with tribes via ordinary legislation or Executive Orders, which have had the same effect as treaties.

C. Deprivations of Control

Land loss and the legal restrictions on tribal sovereignty tell only part of the story of indigenous loss of control over natural resources during the nineteenth century. In theory, despite the seeds of paternalism and control inherent in the ‘domestic dependent nation’ formulation, tribes retained all inherent sovereign powers not lost by virtue of discovery. In reality, the federal government assumed increasing authority over tribal affairs, including natural resources.

First, the federal government transferred authority over Indian tribes from the War Department to the Department of the Interior, which created the Bureau of Indian Affairs (BIA) in 1824. Second, Congress passed laws giving the Department of the Interior (and therefore the BIA) authority over key natural resources on Indian lands. In 1891, Congress passed the first general statutory authorization for the leasing of Indian lands, which allowed the Secretary of the Interior to approve

16 For example, in United States v Cook, 86 U.S. 591 (1873), the Supreme Court held that timber cut from reservation lands belonged to the federal government, likening tribal rights to those of a life tenant. This position was later repudiated in United States v Shoshone Tribe of Indians, 304 U.S. 111 (1938), which recognized tribal ownership of natural resources on Indian lands.
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of non-Indians leasing Indian land for grazing or mining purposes with tribal consent. Over the next 30 years, Congress passed legislation that increased the amount of land subject to leasing, the length of the leases and the types of development permitted by non-Indians. With each of these amendments, tribal control over natural resource development on tribal lands diminished.

In 1919, Congress authorized the Secretary of the Interior to approve mineral leases in Indian country in the nine western states. The Act did not require tribal consent or consultation, and even the Secretary, charged with protecting the interest of the tribes, could not reject leases if mining companies complied with all laws and regulations of the Department of Interior, regardless of tribal opposition.

Although tribal consent provisions were included in the 1924 and 1927 amendments to the 1891 Leasing Act, tribal control was severely undermined by the express authorization of state taxation. Despite the general principle that states cannot tax Indians or Indian interests within Indian country, Congress authorized state taxation on the entire output of leases authorized by the Acts. State taxes were to be levied against the tribal royalties and funds generated by the leases and held in trust by the federal treasury. The national policy of exploiting 'under-utilized' Indian land by making it productive through non-Indian development, coupled

18 The 1891 Act permitted leasing of lands ‘bought and paid for’ by Indians, which was generally interpreted as applying only to reservation lands set aside by treaty or agreement. Subsequent Acts (such as Leases of Allotted Lands for Mining Purposes, 25 U.S.C. § 396 (1909)) authorized leasing of other Indian lands.


20 Leases of Unallotted Lands for Oil and Gas Purposes, 25 U.S.C. §§ 398, 398a. The 1924 and 1927 amendments permitted the Secretary of the Interior to lease tribal lands for oil and gas development for terms of ten years and ‘as much longer as oil or gas shall be found in paying quantities’.


24 Leases of Unallotted Lands for Oil and Gas Purposes, 25 U.S.C. § 398a–398e (authorizing oil and gas leasing on reservations created by executive order).
with an array of complex leasing laws, kept tribal control over natural resources at a minimum.

II. THE ALLOTMENT PERIOD: A COMPREHENSIVE APPROACH TO DEPRIVING TRIBES OF LAND, SOVEREIGNTY AND CONTROL

In the last third of the nineteenth century, general Federal Indian policy shifted dramatically from removal and reservation approaches to assimilation and destruction of the tribal land base. In 1887, Congress passed the General Allotment Act of 1887, commonly known as the Dawes Act. The Dawes Act authorized the federal government to pursue allotment policies with tribes throughout the country. Before its passage, individual statutes had already imposed allotment on particular reservations. In general, the Dawes Act and its companion statutes authorized the break-up of tribal lands held in trust by the federal government into individual parcels, to be owned by Indian ‘heads of household’. Initially, these allotted interests were to be held in trust for a definite number of years and then released in fee simple to the allottees. Early amendments to the Dawes Act allowed for the accelerated issuance of fee patents. Once individuals received fee patents, the federal trust relationship was extinguished, which meant that those lands could be alienated and were subject to state taxation. In addition, reservation lands that remained after allotment to tribal members (and in some cases, a reservation of some lands to the tribe) were declared ‘surplus’ and opened to non-Indian settlement.

The Allotment period had devastating effects on the tribal land base. In 1887, there were 138 million acres of land under tribal control. By the end of the Allotment period in 1934, Indian land holdings had fallen to 48 million acres. Some of the acreage was lost when tribal members, unaccustomed to paying taxes and often unable to do so, fell prey to speculators or became subject to tax foreclosures. Most of the land loss, however,
was caused by the surplus land sales. Roughly 60 million acres were declared surplus and sold to non-Indians. These patches of non-Indian lands within reservations remain one of the key hangovers from the allotment era, and have caused the slow unraveling of tribal sovereignty and control in a number of areas.\(^28\)

The Allotment era was equally damaging to tribal sovereignty. The Dawes Act did not require tribal consent before allotment. Even when treaties required consent before divestiture of land, Congress and the Executive paid no heed. The Supreme Court in *Lone Wolf v Hitchcock*\(^29\) ratified treaty abrogation and announced an extreme version of unfettered congressional power in Indian affairs, known as the Plenary Power Doctrine. Under *Lone Wolf*’s approach, congressional power to abrogate treaties was unreviewable by the courts, and the taking of Indian lands constituted a political question that courts will not consider. These aspects of *Lone Wolf* have since been softened or repudiated.\(^30\) The notion, however, that the government’s power over Indian affairs is broad, exclusive and may be exercised unilaterally, has been harder to unseat.

The Allotment era continues to have negative effects on tribal natural resource management in contemporary times. Sales of surplus lands and the short-lived practice of patenting and selling allotted lands created pockets of non-Indian lands owned in fee simple throughout some reservations. The resulting patchwork patterns of land ownership have made it difficult for tribes to engage in zoning and environmental regulation. Contests over jurisdiction have often concluded with decisions that either decrease tribal powers within reservation boundaries, or reduce the size of the reservations themselves.\(^31\)

Allotment policies have also resulted in extreme fractionation of Indian

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\(^{29}\) *Lone Wolf v Hitchcock*, 187 U.S. 553 (1903).


\(^{31}\) See, for example, *Brendale v Confederated Tribes and Bands of the Yakima Indian Reservation*, 492 U.S. 408 (1989) (holding that tribal zoning regulations did not apply to the heavily allotted portion of the reservation); *South Dakota v Yankton Sioux Tribe*, 522 U.S. 329 (1998) (holding that the Yankton Sioux Reservation was diminished in the context of a dispute over environmental regulation).
interests in lands. Allotted lands were subject to state inheritance laws, and most Indian allottees did not leave written wills. Their estates therefore descended to multiple heirs, resulting in common ownership of allotments by hundreds, and sometimes thousands, of individual Indian allottees. The divided ownership has made the natural resources on those lands virtually unusable. Two congressional attempts to address the problem were found unconstitutional because they deprived allottees of their fractionated interests without compensation.32 The latest effort, the American Indian Probate Reform Act, provides a uniform probate code for tribes that have not enacted one. The uniform code requires a decedent’s share that is smaller than a 5 per cent interest in an allotment to descend to a single heir.33 While there are some early indications of progress, it remains to be seen whether this attempt to address fractionation will prove to be successful on a large scale.

The Allotment period failed with respect to its stated goals of converting American Indians to an agrarian lifestyle, assimilating them into the dominant society, and destroying tribal political independence. Tribes survived and in subsequent periods regained much of what was lost in terms of self-governance. But allotment’s negative effects continue to hamper tribes’ efforts to chart their own paths, particularly with respect to natural resource and environmental management.

III. THE MODERN APPROACH TO NATURAL RESOURCES DEVELOPMENT: SLOW AND HALTING STEPS TOWARD TRIBAL CONTROL

The Allotment era’s disastrous effects ultimately led to a shift in Federal Indian policies away from assimilation and toward tribal self-governance. The Indian Reorganization Act (IRA) of 1934 allowed tribes to adopt IRA constitutions and receive federal charters of incorporation.34 IRA constitutions allowed tribal business councils to manage tribal property, and included the authority to enter into leases of up to ten years without secretarial approval. The constitutions also required tribal consent before the lease or encumbrance of tribal lands. The IRA’s drafters envisioned secular, corporate, and centralized tribal governments. Some tribes,

including the Navajo Nation, refused to adopt the one-size-fits-all template for self-governance. Others suffered bitter internal struggles over the legitimacy of the IRA government versus traditional decentralized structures of authority.35 Still, the majority of tribes adopted the IRA as a means to regain tribal sovereignty and control.

The IRA, along with its general re-structuring of Indian leasing policy, explicitly addressed the management of tribal timberlands as it required the Secretary of the Interior to create ‘Indian forestry units’ that should be operated on the basis of ‘sustained yield management’.36 This provision was a response to egregious BIA mismanagement, described by the Commissioner of Indian Affairs as ‘the slaughtering of Indian timber lands’.37 Grazing and mining leases were not specifically mentioned in the IRA provisions, but were later addressed by Congress. The Indian lands provisions of the Taylor Grazing Act of 193438 authorized the Secretary of the Interior to protect rangeland from over-grazing and other forms of degradation. The Indian Mineral Leasing Act (IMLA) of 193839 required all new mineral leases to have both tribal consent and secretarial approval. New leases could be issued for ten years and ‘as long thereafter as minerals are produced in paying quantities’.40 The Act also sought to achieve revitalization of Indian governments by providing for minimum lease payments and royalties, beginning a long history of tribal governmental reliance on extractive, and often destructive, natural resources development for revenue.

The IRA and subsequent legislation aimed, among other things, to consolidate and streamline federal leasing statutes while providing for increased tribal control over natural resources. Nonetheless, the federal government continued to approve the widespread leasing of Indian lands by non-Indians that began in the late nineteenth century, and federal policies centered on facilitating extractive natural resources development such as mining and timber production on Indian lands. These approaches had tremendous impacts on the economic development of Indian tribes, in many cases rendering tribes reliant on one or two sources for governmental revenue. Thus, despite the IRA’s move toward tribal self-governance,

37 Ibid (internal citation omitted).
40 Ibid.
federal management remained the norm and tribes had ‘more control on paper than in practice’. 41

Even non-IRA tribes were susceptible to the federal focus on extractive natural resources development. The Diné, commonly referred to as the Navajo, chose not to organize under the IRA. The Navajo Nation was also much less subject to the destructive policies of allotment than many tribes, and therefore retained a largely intact land base. Nonetheless, federal policies promoting the ‘productive’ use of tribal lands heavily influenced Navajo governance and economic development. The Navajo Nation Council, still the backbone of the Navajo Nation tribal government, was created after the discovery of oil on the reservation. Seeking to expedite an oil leasing agreement, the BIA organized the Council to provide a legitimate body of Navajo who could lease Navajo lands to non-Indians for drilling. 42 The Secretary of the Interior further limited Navajo control over their economic fate by rejecting the Council’s early attempt to enter into a partnership with an oil company, rather than a leasing arrangement. 43

Not long after the formation of the Navajo Tribal Council, the traditional Navajo political economy was dealt another blow. The federal government, under the auspices of protecting rangeland, decided to cull Navajo livestock, particularly their herds of sheep. The federally forced stock reductions of the 1930s left the Tribe’s economy in shambles, and many formerly self-sufficient Navajo found themselves in need of welfare. 44 Lacking other economic alternatives, the tribe was receptive to extractive industries as a means to rebuild their economy. While the Navajo story is unique in some of its features, it reflects the general overwhelming influence of the federal government’s preference for mineral extraction, as well as the BIA’s heavy-handed and often top-down approach to implementing natural resource decisions.

After World War II, the boom in the national economy ushered in a period of even greater reliance on resource extraction to support Native nations’ economic needs. In general, Federal Indian policies regarding natural resources continued to focus on non-Indian leasing and extraction.

42 Rosser, supra note 35, at 451.
43 See ibid.
44 Ibid, at 456 (stating ‘[t]he Roosevelt Administration’s program of stock reduction rivaled the Long Walk in its devastating consequences on the Diné people and on the tribal economy’) (internal citations omitted).
Leases for oil, gas, coal and uranium became the chief means for tribal governments to generate revenue. For example, by the late 1950s, royalties on oil leases represented 90 per cent of the Navajo Nation’s tribal budget.45

Eventually, after tribes recovered from the low-point of the 1950s termination policies,46 they began to take stock of the ways that the federal government had served them poorly as trustee of their natural resources. By the 1960s and 1970s, tribes became increasingly dissatisfied with the BIA’s leasing policies. Under the IRA, the ten-year maximum on leases without secretarial approval curtailed tribes’ abilities to act without the federal government. The BIA continued to negotiate leases on behalf of tribes, and because federal surveys of Indian lands were generally lacking, industry often nominated the tracts for leasing. Royalty rates, like those on federal public lands, were low and mineral leases were essentially perpetual once minerals were produced in paying quantities, preventing tribes from renegotiating more favorable terms. Against this backdrop of federal mismanagement and poor representation in lease arrangements, tribes began to assert claims that the United States had breached its trust obligations.

In two Supreme Court decisions, Mitchell I47 and Mitchell II,48 the Quinault Tribe and individual members who held interests in trust allotments on the Quinault Reservation alleged that the federal government had mismanaged their timber resources in a variety of ways, including making sales at below market value. In Mitchell I, the Court held that the General Allotment Act did not create a cause of action for breach of trust with respect to timber resources, but remanded for consideration of whether other statutes might serve as the basis for a claim. In Mitchell II, the Supreme Court held that violations of comprehensive statutory and regulatory obligations to manage tribal timber resource did create a

46 From 1947–61, the federal government implemented laws and policies aimed, once again, at terminating the separate political status of American Indian tribes. Backlash to the tribal independence fostered during the IRA period came from several places, including western politicians eager to get at the natural resources on Indian lands, and misguided sentiments to end ‘segregation’ of Indians. Though the termination era was short-lived, it sent shock waves through Indian country, and left serious consequences for the tribes whose relationship with the federal government was terminated. For a concise summary of termination era policies, see Robert T. Anderson et al., American Indian Law: Cases and Commentary 142–55 (2nd edn, West, Eagan MN 2010).
compensable claim for breach of trust.\textsuperscript{49} The Court noted that the statutory scheme resulted in constant and detailed supervision by the BIA, and therefore ‘clearly establish[ed] fiduciary obligations of the Government in the management and operation of Indian lands and resources. . .’.\textsuperscript{50}

\textit{Mitchell II} established that the federal government could be held fiscally accountable for its mismanagement of tribal natural resource assets. The conditions under which tribes can establish a compensable claim for breach of trust have proved to be very narrow, however. In later cases, the Court indicated that federal control must be broad in scope and leave virtually no room for independent tribal decision making in order for there to be a compensable claim.\textsuperscript{51}

The trust cases, therefore, sent mixed signals with respect to tribal control over natural resources. But during the same period that the \textit{Mitchell} cases were decided, the Court strengthened tribal authority over revenues from resource extraction in \textit{Montana v Blackfeet Tribe}.\textsuperscript{52} In \textit{Blackfeet}, the Court held that although Congress had authorized state taxation of mineral leasing in 1924, the IMLA of 1938 included no such authorization, and the later statute controlled. State taxation of tribal revenues and royalties generated from leases under the 1938 IMLA was therefore impermissible. \textit{Blackfeet} had direct and immediate effects on tribal revenues, and also strengthened the tribal position with respect to interpretation of Indian leasing statutes in general.

By the 1970s, both the Executive Branch and Congress recognized a new era of federal Indian policy focused on tribal self-determination.\textsuperscript{53} The Indian Financing Act of 1974,\textsuperscript{54} followed by the Indian Self-Determination and Education Assistance Act of 1975,\textsuperscript{55} created meaningful Indian self-determination policies by allowing tribes to assume control over federally funded Indian programs.

Self-determination policies encompassed natural resource development

\textsuperscript{49} See also \textit{United States v White Mountain Apache Tribe}, 537 U.S. 465 (2003).
\textsuperscript{50} 463 U.S. 206, at 226.
\textsuperscript{51} See \textit{United States v Navajo Nation}, 537 U.S. 488 (2003) (holding that allegations that the Secretary of the Interior intentionally delayed a lease agreement to the detriment of the Navajo Nation, and the benefit of a coal mining company, failed to create a compensable claim for breach of trust under the Indian Mineral Leasing Act); \textit{United States v Navajo Nation}, 556 U.S. 287 (2009) (rejecting the Navajo Nation’s attempt to revive trust claim under other statutory sources).
\textsuperscript{52} \textit{Montana v Blackfeet Tribe of Indians}, 471 U.S. 759 (1985).
\textsuperscript{53} See, for example, ‘President’s Special Message to the Congress on Indian Affairs’, Pub. Papers 564 (1974) (Richard M. Nixon).
\textsuperscript{55} Declaration of Commitment, 25 U.S.C. § 450a(b) (2011).
as well. In the Indian Mineral Development Act (IMDA) of 1982, Congress expanded economic alternatives for tribal governments, allowing tribes to move beyond the role of a passive lessee and authorizing direct negotiation of other business arrangements. Under the IMDA, tribes were authorized to enter into mineral agreements of any kind, including joint ventures and production sharing agreements. Although agreements were still subject to the approval of the Secretary of the Interior, the Act called for the Secretary to assume a more advisory role and provided tribes with assistance and information during negotiations.

The ethos of self-determination swept through other forms of natural resource development as well. In 1970, Congress amended the Indian Long-Term Leasing Act of 1955, also known as Section 415, to allow for surface leases not involving the exploitation of natural resources for up to 15 years under tribal regulations approved by the Secretary. If the leases met these requirements tribes did not have to seek secretarial approval. Congress again amended Section 415 to allow for business and agricultural leases up to 25 years under regulations approved by the secretary.

Congress also amended portions of the IRA in 1990, allowing federally approved IRA corporations to enter into leases without secretarial approval for up to 25 years, an increase from the previous limit of ten. Congress also passed the National Indian Forest Resource Management Act (NIFRMA), designed to increase the tribal role in management of their forests, in 1990. All of these statutes and subsequent federal regulations attempted to realize the federal policy of promoting Indian tribes’ political self-determination and encourage economic self-sufficiency.

For many tribes, however, the transition to self-governance in this area did not necessarily mean freedom to pursue alternatives to extractive industries. Until the self-determination era, tribes had little ability to say ‘no’ to the dominant federal policies of maximizing profits from resource extraction. The federal policies discussed above vested decisions with non-Indian industries and federal officials. Slowly, tribes were able

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56 Statement on Indian Policy, 1 Pub. Papers 96 (24 January 1983) (Ronald Reagan). The Reagan administration pledged to ‘assist tribes in strengthening their governments by removing the Federal impediments to tribal self-government and tribal resource development . . . and tribal governments have the responsibility to determine the extent and methods of developing the tribe’s natural resources’. Ibid.


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to assert their rights to be managers and beneficiaries of their own natural resources. This was accomplished not by a radical change with respect to the dominant view of natural resources development, but rather through the gradual displacement of federal governmental control in favor of tribal authority. The overarching economic framework that had been in place for over a century, dependent as it was on natural resources exploitation, remained largely unchanged. Tribal governments relied heavily on the revenues, royalties and taxes generated by this economic model. The increase in tribal control therefore usually fostered more of the same: leasing, and sometimes joint ventures, focused on unsustainable resource extraction.61

In 2005, as part of the massive Energy Policy Act, Congress enacted the Indian Tribal Energy Development and Self-Determination Act (ITEDSA).62 ITEDSA gives tribes the authority to enter into optional tribal energy resource agreements (TERAs) with the Department of the Interior. The Secretary of the Interior is required to approve tribal applications, provided they meet the statutory requirements. Once a tribe has an approved TERA it can enter into business deals and leases and grant rights-of-way for pipelines and transmission lines without needing secretarial approval. Lauded as removing the federal barriers to tribal energy development, ITEDSA continues the current trend of increasing tribal control over their own natural resources development. As final regulations of ITEDSA did not go into effect until 2008 and no tribe has been approved for a TERA yet, it remains to be seen whether ITEDSA will further tribal self-determination.

IV. STRENGTHENING TRIBAL SOVEREIGNTY THROUGH RENEWABLE RESOURCE DEVELOPMENT?

Tribal lands, particularly in the American West, are fertile sources for wind and solar energy,63 and often also contain vast undeveloped expanses that could support wind and solar projects. At the same time, the legacies of coal and uranium mining include despoiled landscapes, contaminated

61 See Rosser, supra note 35.
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water supplies and economies vulnerable due to over-reliance on these non-renewable resources. For these and other reasons, many tribes are looking to renewable energy as an alternative to traditional natural resource extraction.\textsuperscript{64} Below are a few examples, necessarily anecdotal and in-progress, of Native nations that have pursued renewable energy projects on tribal lands.

Aware of both the negative externalities of hydropower and the increasing demand for energy,\textsuperscript{65} the several Native nations in North and South Dakota joined together in 1994 to form the Intertribal Council on Utility Policy (COUP).\textsuperscript{66} Noting that the decreasing ability of hydropower to meet energy demands had created reliance on coal-fired power plants, COUP began looking toward renewable energy development as a means to achieve its goals of promoting tribal energy self-sufficiency and sustainable homeland economies on the reservations. The Rosebud Sioux Tribe, on whose reservation COUP is headquartered, became one of the first tribal renewable energy generators through the development of a tribally owned, utility-scale wind energy generation facility.\textsuperscript{67} The 750 kW wind turbine generates more than 2 million kW per year, powering the tribe’s casino complex and allowing the tribe also to generate revenue from selling excess power to the nearby Ellsworth Air Force Base. With a 190 MW wind farm currently in the permitting process, the Rosebud Sioux Tribe is continuing to develop renewable energy as a means for tribal economic development in a sustainable manner consistent with traditional tribal values.\textsuperscript{68}


\textsuperscript{65} Gough, supra note 64, at 68. The six large dams on the Missouri River have produced cultural impacts from relocation of historic river-based communities and loss of resources and habitats, to contemporary erosion of graves from cemeteries that were not relocated.

\textsuperscript{66} See http://www.intertribalcoup.org/about-us.html (last visited 2 September 2012).

\textsuperscript{67} For more information see http://www1.eere.energy.gov/tribalenergy/guide/cs_utility_scale.html (last visited 2 September 2012).

The tribes of the Dakotas are not alone in recognizing the potential of renewable energy development. The Campo Band of Mission Indians in California is currently seeking to develop a 300 MW wind energy project.\(^\text{69}\) The Makah Tribe of Washington participated in a consortium that operated the Makah Bay Offshore Wave Energy Pilot project, exploring the potential for ocean waves to generate electricity.\(^\text{70}\) Combining both water delivery and power generation, the Yakama Nation implemented a 1 MW hydroelectric system from inflow generators placed in the irrigation ditches of the Wapato Irrigation Project.\(^\text{71}\) The Oneida Tribe of Wisconsin looked to harness the power of the sun by installing 52 solar hot water and 18 photovoltaic systems.\(^\text{72}\) Other tribes are exploring energy generation from the methane produced by dairy cows. At least one American Indian tribe, the Little Traverse Bay Band of Odawa, has also used their concern for renewable energy development as a symbolic means to increase their political sovereignty by ratifying the Kyoto Protocol.\(^\text{73}\)

V. OBSTACLES TO THE FUTURE

Tribes that are inclined to shift toward renewable and sustainable forms of natural resource development face two sets of structural impediments. One stems from the past and the other is rooted in the present. With respect to the past, the legacies of allotment and the paternalistic version of the United States’ trust relationship with tribes create ongoing hurdles to tribal self-determination in natural resource management.\(^\text{74}\) In terms of during wind turbine siting to minimize the impacts on areas of cultural or religious significance and the native flora or fauna.

\(^{69}\) See http://apps1.eere.energy.gov/tribalenergy/projects_detail.cfm/project_id=136 (last visited 2 September 2012).


\(^{71}\) See http://apps1.eere.energy.gov/tribalenergy/projects_detail.cfm/project_id=168 (last visited 2 September 2012).

\(^{72}\) See http://apps1.eere.energy.gov/tribalenergy/projects_detail.cfm/project_id=32 (last visited 2 September 2012).


the present, legislative and fiscal barriers (some rooted in general national priorities that hamper all forms of renewable resource development and some specific to Indian tribes) prevent tribes from pursuing wind, solar and other renewable projects.

Tribes are working their way out of the past, slowly and haltingly. Fractionation and patchwork regulatory jurisdiction, two of the most serious consequences of allotment, have proved to be the most difficult issues to address. But many tribes have responded by buying back portions of their former reservation lands, as well as by entering into cooperative agreements with state and local governments to avoid litigation over jurisdictional issues. In tribal natural resource management, as in all issues respecting the health, welfare and survival of Native peoples, policies that foster self-determination, while clearing away the past’s destructive impacts, will set the path toward the future. These efforts must include assistance toward consolidation of the tribal land base, as well as laws to realign the federal government’s trust obligations with tribal jurisdiction over natural resources.

Regarding current legal impediments to renewable energy development, the general notion is that tribes must be allowed to pursue these projects on an equal footing with other governments and private industry. Broadly speaking, US policies must shift dramatically to encourage renewable energy development generally, and must simultaneously remove the particular barriers that apply to tribes. Both efforts are necessary to ensure a renewable energy future in which tribes can participate as equals.

CONCLUSION

American Indian tribes, and indigenous peoples globally, have suffered the adverse consequences of the nineteenth and twentieth century policies for natural resources development. Today, those consequences increasingly include the effects of global climate change. Turning to renewable energy offers a means for indigenous peoples to assert their rights as political sovereigns while protecting their culture and homelands from further harm. The natural resource story for indigenous peoples has evolved from its post-colonial roots in deprivation of land, sovereignty and control, to

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75 See text accompanying notes 30–31, supra.
contemporary policies supporting Native self-determination. But the story will not be complete until Native nations can exercise their sovereignty and control to heal and restore their homelands, rather than perpetuate practices that slowly destroy what they have struggled for so long to preserve. For Native nations, as for all governments, preservation in an era of climate change will be a daunting task. The paramount concern will be for Native peoples to have the room to determine, on their own and consistent with their political and cultural norms, the dimensions of that challenge.