

ARTICLE

WIND AND WISDOM

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You have noticed that everything an Indian does is in a circle, and that is because the Power of the World always works in circles, and everything tries to be round The Sky is round, and I have heard that the earth is round like a ball, and so are all the stars. The wind, in its greatest power, whirls. Birds make their nests in circles, for theirs is the same religion as ours Even the seasons form a great circle in their changing, and always come back again to where they were. The life of a man is a circle from childhood to childhood, and so it is in everything where power moves.

Black Elk¹, Oglala Sioux Holy Man
1863–1950

I. WIND POWER REQUIRES WISDOM

Native American spirituality and cultural values teach that wind is an essential part of the environment and that humankind is part of, not separate from, this environment. Indeed, all parts of our world, including birds, plants, rocks, wind, and the seasons, are spiritually important and embody the complexity of this interrelationship.

Although there have been efforts to consider spiritual, cultural, and environmental concerns of tribes in decision making, it is questionable whether these efforts have been meaningful. In part, reliance upon Anglo-American law as the framework for federal action has proven inadequate to address tribal concerns and has fallen short of the process needed for true collaboration with tribes. This misplaced reliance is part of the colonization legacy and the federal government's relationship with tribal nations.

The larger scale commercialization of wind power is, in many ways, still in its formative stages and depends on subsidization from the federal government.² Currently more than

1. See First People, Black Elk-Oglala Sioux, <http://www.firstpeople.us/FP-HTML-Wisdom/BlackElk.html> (last visited Aug. 23, 2006).

2. Jon G. McGowan & Stephen R. Connors, *Wind Power: A Turn of the Century Review*, 25 ANN. REV. OF ENERGY & THE ENV'T 147, 173 (2000), available at <http://arjournals.annualreviews.org/doi/pdf/10.1146/annurev.energy.25.1.147>

fifty percent of Native American tribal land is targeted by the federal government for wind energy development.³ Thus, environmental justice⁴ suggests that more attention should be focused on the problems of potentially leaving tribes with unproven technologies, a lack of subsidies to sustain their investment, and lost investments that become worthless. After all, populations like tribal nations may be the least capable of dealing with this type of rapidly evolving technology. Finally, because wind power is seen as environmentally friendly technology, federal policy suggests a sweeping generalization that wind energy, therefore, must be compatible with Native American culture. This stereotyping, a form of environmental racism,⁵ may predetermine the acceptability of this technology before fully and fairly engaging tribal Nations, thereby not allowing them to determine whether the technology is truly compatible with their spiritual, cultural, and environmental values.

II. THE PROSPECT OF DEVELOPING WIND POWER

The United States energy policy promotes the use and support of renewables, which include geothermal, biomass, wind, and solar energy resources.⁶ This policy notes that growing

(by subscription; on file with author).

3. U.S. DEP'T OF ENERGY, WIND ENERGY PROGRAM MULTI YEAR TECHNICAL PLAN FOR 2004-2010 23 (2003), available at http://manhaz.cyf.gov.pl/manhaz/links/US_DOE_energy_efficiency+renewable_technologies/mytp_nov_2003.pdf [hereinafter TECHNICAL PLAN].

4. "Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." See U.S. Env'tl. Prot. Agency, Environmental Justice, <http://www.epa.gov/environmentaljustice/index.html> (last visited Sept. 7, 2006).

5. Environmental racism is defined in two ways. It can be "racial discrimination in environmental policy making and the unequal enforcement of environmental laws and regulations. . . the deliberate targeting of people of color communities for toxic waste facilities and the official sanctioning of life-threatening presence of poisons and pollutants in people of color communities." Michael Fisher, *Environmental Racism Claims Brought Under Title VI of the Civil Rights Act*, 25 ENVTL. L. 285, 289 (1995) (citing *Environmental Racism: Hearings Before the H. Subcomm. on Civil and Constitutional Rights*, 103d Cong. (1993) (testimony of Dr. Benjamin F. Chavis, Jr.)). Alternatively, it is "any policy, practice, or directive that, intentionally or unintentionally, differentially impacts or disadvantages individuals, groups, or communities based on race or color; as well as the exclusionary and restrictive practices that limit participation by people of color in decision-making boards, commissions, and staffs." Fisher, *supra*, at 289-90 n. 17 (citing Alice L. Brown, *Environmental Justice: New Civil Rights Frontier*, in ENVTL. L. UPDATE 1993 (PLI Litig. & Admin. Practice, Course Handbook Series No. 813, 1993) (quoting Robert Bullard)).

6. See NAT'L ENERGY POLICY DEV. GROUP, RELIABLE, AFFORDABLE, AND ENVIRONMENTALLY SOUND ENERGY FOR AMERICA'S FUTURE, at xiv, 1-1 (2001), available at

demand for electricity in the U.S. will require an additional 393,000 megawatts (“MW”) of generating capacity within the next twenty years.⁷ Wind is the fastest growing renewable energy resource, although the U.S. has lagged behind countries like Denmark and Germany in wind development because of erratic U.S. support for wind power in the 1990s.⁸ Wind power promises to slow the levels of air pollution and carbon dioxide emissions from the fossil fuel burning that it replaces. But, in order to utilize wind power, its generation cost must still be subsidized, a role often assumed by the federal government.⁹ It should therefore not be surprising that Secretary Gale Norton noted that twenty percent of wind power was generated on lands managed by the Department of the Interior.¹⁰

Wind power is not without its own environmental impacts, many of which are severe.¹¹ Among these impacts is the noise, often a constant sixty-five decibels, created by the turbines when the wind is blowing.¹² Unfortunately, the noise that is so

<http://www.whitehouse.gov/energy/National-Energy-Policy.pdf>.

7. *Id.* at 1–4.

8. See Mark Detsky, *The Global Light: An Analysis of International and Local Developments in the Solar Electric Industry and Their Implications for United States Energy Policy*, 14 COLO. J. INT’L ENVTL. L. & POL’Y 301, 308 (2003). See also ENERGY INFO. ADMIN., POLICIES TO PROMOTE NON-HYDRO RENEWABLE ENERGY IN THE UNITED STATES AND SELECTED COUNTRIES 8–11, 15–19, 25–26 (2005), available at http://tonto.eia.doe.gov/FTPROOT/features/nonhydrorenewablespaper_final.pdf.

9. Energy Policy Act of 2005, Pub. L. No. 109–58, 1303, 119 Stat. 594, see also North Carolina Solar Center, Database of State Incentives for Renewables and Efficiency, www.dsireusa.org/summarytables/financial.cfm?&CurrentPageId=7&EE=1&RE=1 (last visited January 12, 2006).

10. On February 24, 2004, Secretary of the Interior Gale Norton testified before the House Appropriations Committee on the major proportion of renewable energy projects on federal lands:

Energy: Lands and waters managed by Interior produce about 30 percent of the Nation’s energy supply. Approximately one-third of the natural gas, coal, and oil, one-half of geothermal energy, 17 percent of hydropower, and 20 percent of wind power are produced in areas managed by Interior. We are committed to implementing the President’s National Energy Plan, a part of which focuses on a long-term strategy for producing traditional and renewable sources of energy on Federal lands while maintaining environmental protections and involving all interested persons in open decision-making processes.

Fiscal 2005 Appropriations: Interior And Related Agencies: Hearings Before the Subcomm. on Interior and Related Agencies of the H. Appropriations Comm., 108th Cong. (2004), available at 2004 WL 349649 (emphasis added) [hereinafter *Hearings*] (statement of Gale A. Norton, Sec’y, Dep’t of the Interior).

11. Victoria Sutton & Nicole Tomich, *Harnessing Wind Is Not (by Nature) Environmentally Friendly*, 22 PACE ENVTL. L. REV. 91, 95–97 (2005).

12. R. DOOLING, AVIAN HEARING AND THE AVOIDANCE OF WIND TURBINES 5 (2002), available at <http://www.nrel.gov/docs/fy02osti/30844.pdf>. Cf. U.S. Dep’t of Energy, Decibel Levels, <http://www.newton.dep.anl.gov/askasci/phy99/phy99405.htm> (last visited Sept. 18, 2006) (stating that an ordinary speaking voice is approximately sixty decibels. A quiet countryside is twenty decibels or less, while a power lawnmower, up close, is at about

deafening for humans is too low in frequency for birds to hear.¹³ Moreover, birds have diminished visual acuity when compared to humans and thus may not be able to see the spinning wind turbine blades.¹⁴ Consequently, birds flying at heights comparable to the height of wind turbines are hacked by the blades and meet their death at the base of these wind turbines.¹⁵ The extent of the carnage depends upon the time of the year, the location of the turbines relative to the flight pathways of the birds, and the arrangement and height of the wind turbines.¹⁶

III. THE DISPROPORTIONATE IMPACT ON BIRDS OF PREY

The impact that wind turbines can have on the avian population should be a serious environmental consideration. Altamont Pass, California, one of the original wind farms in the U.S., has had a particularly destructive impact on many different species of raptors, including the golden eagle.¹⁷ Two environmental groups in California sought to prevent an Alameda County zoning board from issuing renewal permits for approximately 1,400 wind turbines.¹⁸ The groups pointed to the 22,000 bird deaths as evidence that the wind turbines were a “terrestrial Exxon Valdez” for birds.¹⁹ Indeed, studies estimate that hundreds of raptors died from turbines at the Altamont Pass wind farm in 2001 alone.²⁰

ninety decibels.)

13. Loudness of sound is a function of both decibel level (intensity) and frequency (pitch). See Kenneth R. Koehler, *Physics of Hearing*, <http://www.rwc.uc.edu/koehler/biophys/9d.html> (last visited Sept. 18, 2006). Turbine sound is predominantly low frequency. Humans can hear lower frequencies than birds and thus may be able to hear the turbines at greater distances. DOOLING, *supra* note 12, at 4–5.

14. This is known as the motion smear phenomenon. See KARIN C. SINCLAIR, STATUS OF AVIAN RESEARCH AT THE NATIONAL RENEWABLE ENERGY LABORATORY 6 (2001), available at <http://www.nrel.gov/docs/fy01osti/30546.pdf>.

15. MORGAN WINN TINGLEY, EFFECTS OF OFFSHORE WIND FARMS ON BIRDS: CUISINARTS OF THE SKY OR JUST TILTING AT WINDMILLS? 54 (2003) (unpublished B.A. thesis, Harvard University) (on file with author).

16. *Id.* at 54–56.

17. Rone Tempest, *Windmills Take Toll on Wildlife; Activists Target Site in the Bay Area Where Blades Have Killed 22,000 Birds*, L.A. TIMES, Dec. 8, 2003, at B1.

18. *Id.*

19. *Id.*; see also *Hot Air Over Bird Deaths to Stall Windmills? Activist Likens Turbines to Terrestrial Exxon Valdez*, WORLDNETDAILY, http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=36016 (last visited Sept. 18, 2006).

20. BUREAU OF LAND MGMT., U.S. DEP'T OF THE INTERIOR, FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT 5-59, tbl. 5.9.3-3 (2005), available at <http://windeis.anl.gov/documents/fpeis/maintext/Vol1/Vol1Ch5.pdf> [hereinafter BUREAU OF LAND MGMT.] (estimating .007 to .24 raptor fatalities per turbine per year; Altamont

But, the widely varying numbers of avian fatalities found by governmental studies combined with the conclusions that some researchers have drawn from the fatalities are misleading and cause distrust of the avian studies used to support wind energy projects. One such detractor argues that “compared to bird deaths resulting from other manmade structures, highway traffic, and housecats, bird kills by wind plants are numerically insignificant and are not expected to impact bird populations.”²¹ The study further cautions that “of course, deaths of endangered species are of greater concern, but again the only location with a suggestion of this problem is Altamont, and even in that case, experts disagree on the severity of the problem.”²² But, such statements ignore the fact that wind farms have disproportionately impacted raptors.²³ Moreover, the effort to distinguish Altamont Pass as a freak occurrence in terms of avian impacts disregards comparable wind farms that have also had comparably large numbers of raptor collisions.²⁴ This evidence suggests that wind farms do disproportionately impact raptors.

Further inconsistencies arise when discussing population-level effects on raptors. Studies have concluded that there is an average of 2.19 avian fatalities per wind turbine, per year.²⁵ The loss is stated in terms of the number of raptor or bird fatalities per year, per turbine, or per square meter coverage of the sweep of the blades (per 100,000 m²). The Altamont Pass study is perhaps the most dramatic, showing potentially 734 raptor fatalities per year for the entire wind farm, in part because it had more wind turbines than any other wind farm.²⁶ Of ninety-five

Pass had 5,400 turbines in 2001).

21. ED DEMEO, ET AL., SOME COMMON MISCONCEPTIONS ABOUT WIND POWER 5–6 (2003), available at http://www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/wpa/34600_misconceptions.pdf.

22. *Id.*

23. See TINGLEY, *supra* note 15, at 13–15 (arguing that studies comparing avian deaths with other sources fail to take into account idiosyncratic variables, such as the time it takes for some species to reproduce).

24. Stewart Lowther, *The European Perspective: Some Lessons from Case Studies*, in NAT'L AVIAN—WIND POWER PLANNING MEETING III 115–24, available at http://www.nationalwind.org/publications/wildlife/avian98/16-Lowther-European_Perspective.pdf (last visited Jan. 31, 2007) (noting that there were 106 avian fatalities at Tarifa, Spain wind farm, of which thirty were Griffon Vultures, a nationally protected species).

25. WALLACE P. ERIKSON ET AL., AVIAN COLLISIONS WITH WIND TURBINES: A SUMMARY OF EXISTING STUDIES AND COMPARISONS TO OTHER SOURCES OF AVIAN COLLISION MORTALITY IN THE UNITED STATES 2 (2001), available at http://www.west-inc.com/reports/avian_collisions.pdf.

26. CARL G. THELANDER & LOURDES RUGGE, AVIAN RISK BEHAVIOR AND FATALITIES AT THE ALTAMONT WIND RESOURCE AREA 1 (2000), available at

bird fatalities observed among its 685 monitored wind turbines, fifty-one percent of the fatalities were raptors.²⁷ In 1998, a study concluded that the golden eagle population was declining in the area as a direct result of the Altamont wind farm.²⁸ Yet, in direct contradiction to this study, the eleven-state Western State Programmatic Environmental Impact Statement for wind power in the region reports that “[t]o date, no studies have shown population-level effects in raptor populations associated with wind energy projects.”²⁹ Since raptors reproduce at the rate of less than two fledglings per year, per nest, it is difficult to sustain the population; inordinate deaths of individual birds cannot be so readily dismissed as having no effect on the larger population.³⁰

While avian collisions on wind farms can have a serious environmental impact, the issue for Native American tribal nations is also one of cultural, religious, and historical significance. While all energy resources have tradeoffs, including renewable energy resources, the tribal governments will ultimately consider the negative impacts on the environment in the context of their religious, cultural, and traditional frameworks when making their choices. Many studies ignore these other nontraditional considerations. Indeed, one fact sheet discusses the tradeoff in economic terms:

Environmental impacts are relative. All energy technologies have some negative environmental impacts. Society makes tradeoffs when making power plant choices. Wind plants may result in some bird fatalities or other unwanted impacts on wildlife and their habitats. Coal plants cause premature human deaths from respiratory problems. Maintaining open channels for free flow of oil causes military deaths. Society needs to choose from these alternatives, and it cannot assess a single energy technology in isolation.³¹

Other energy sources involve costs measured in human deaths, while the costs of wind power are traditionally measured only in bird deaths, trivialized in this unequal comparison of

<http://www.nrel.gov/docs/fy00osti/27545.pdf>.

27. *Id.* at 18, tbl. 5.

28. W.G. HUNT ET AL., A POPULATION STUDY OF GOLDEN EAGLES IN THE ALTAMONT PASS WIND RESOURCE AREA: POPULATION TREND ANALYSIS 1994–1997 (1999), available at <http://www.nrel.gov/docs/fy99osti/26092.pdf>.

29. BUREAU OF LAND MGMT., *supra* note 20, at 5-62.

30. *See* HUNT, *supra* note 28, at 17.

31. DEMEO, *supra* note 21, at 6.

losses.³² Such comparisons mislead by portraying a picture that includes substantial benefits and minimal risks associated with wind power. However, other economic analyses have considered the costs of constructing wind turbines including steel production and the loss of human lives in the mining and manufacturing process that produces the wind turbine equipment, in addition to human deaths and injuries resulting from falls and other accidents during installation.³³ In addition, at least one concern that has been raised in the less-than-complete accounting of the environmental and economic costs is the disposal cost of wind turbines.³⁴ The reliance of traditional analysis on cost-benefit comparisons leaves no room for the consideration of the unquantifiable spiritual and cultural context of the decision-making process.

IV. THE DISPROPORTIONATE IMPACT ON TRIBAL NATIONS: GOOD OR BAD?

Some state and local governments are weighing these environmental costs against the wind power benefits, and are finding that the benefits do not outweigh the costs. For example, Nantucket Sound is the development site for a twenty-eight square mile offshore wind farm, located in a very popular Cape Cod resort area.³⁵ Thousands of residents have opposed the project because of the destruction of their bay-view as well as the impact on the birds and wildlife.³⁶ In Wisconsin, after the development of two wind turbines, the Lincoln Zoning Committee prevented the Madison Gas and Electric Company from building any more wind turbines.³⁷ In Michigan, a developer filed suit against the Cheboygan County Planning Commission after being denied a special use permit for the construction of wind

32. *Id.* at 5–6.

33. See, e.g., JOHN K. SUTHERLAND, NUCLEAR POWER COMPARISONS AND PERSPECTIVE (2003), available at http://www.energypulse.net/centers/article/article_display.cfm?a_id=498 (comparing nuclear power to alternatives including wind power, and noting that accidental fatalities for wind turbine crews is “projected to lie between” 85 and 342 deaths per terawatt-year).

34. HENRIETTE HASSING & SØREN VARMING, LIFE CYCLE ASSESSMENT FOR WIND TURBINES 2–3 (2001), available at http://www.hornsrev.dk/nyheder/nyh_dec_01/N590hha.pdf.

35. DOUGLAS GIUFFRE ET AL., FREE BUT COSTLY: AN ECONOMIC ANALYSIS OF A WIND FARM IN NANTUCKET SOUND (2004), available at <http://www.beaconhill.org/BHISudies/Windmills2004/CapeWindEconAnalysis31604.pdf>.

36. *Id.* at 14.

37. Keith Matheny, *Wind Turbines a Turbulent Issue for Area*, TRAVERSE CITY RECORD EAGLE, Jan. 12, 2002, available at <http://www.record-eagle.com/2003/jan/12wind.htm>.

turbines.³⁸ In Charlevoix County, Michigan, a landowner filed a federal action alleging a constitutional violation when the township denied him permission to build wind turbine generators.³⁹ Also in Charlevoix County, the Eveline Township's Master Development Plan specifically states that it "[d]iscourage[s] wind power generating facilities and structures as undesirable encroachments on the rural character of the township."⁴⁰

Other local governments and municipalities are seeking to develop ordinances to accommodate wind turbines and the residents' environmental concerns. For example, Otsego County, Michigan has an ordinance which limits the area in which wind turbines can be constructed (forest recreation, agriculture and business districts) with a minimum of twenty acres for the project, five acres for each wind turbine installed, setbacks of one-and-a-half times the height of towers, and noise from generators not to exceed sixty-five decibels.⁴¹

Wealthier communities are more likely to have their values respected and have access to a wider range of energy resources that are consistent with their values from which to choose. Tribal nations, which include some of the poorest communities in America,⁴² are often not connected to the national power grid⁴³ and do not have sufficient financial resources to hire consultants to examine alternative energy proposals.⁴⁴ Consequently, they are more likely to accept alternative energies that, at first blush, appear to be less expensive and without risks.

As a result of poor economic conditions on reservation lands, "a growing number of Indian tribes [have been forced] to exchange their spiritual view of their once pristine environment for a commercial one."⁴⁵ Such competing interests require

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*

42. See STELLA UGONWOLE, U.S. CENSUS BUREAU, 2000 SPECIAL REPORT 28, WE THE PEOPLE: AMERICAN INDIANS AND ALASKA NATIVES IN THE UNITED STATES 9–12 (2006), <http://www.census.gov/population/www/socdemo/race/censr-28.pdf> (finding that members of Indian tribes were less likely to be engaged in permanent work, less likely to be in management or a professional occupation, had lower incomes, and had higher incidences of poverty than the national average).

43. ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, ENERGY CONSUMPTION AND RENEWABLE ENERGY DEVELOPMENT POTENTIAL ON INDIAN LANDS 3–4 (2000) (stating that one in seven households on tribal lands did not have access to electricity in 1990), available at <http://www.eia.doe.gov/cneaf/solar.renewables/ilands/ilands.pdf>.

44. *Id.*; see also UGONWOLE, *supra* note 42.

45. Roger Romulus Martella, Jr., Note, "Not In My State's Indian Reservation" A Legislative Fix to Close an Environmental Loophole, 47 VAND. L. REV. 1863–65 (1994).

vigilance over the wind power feasibility process to ensure that native tribal cultures are valued, respected, and recognized in any alternative energy development program, including wind power. A more insidious form of assimilation of values occurs in a process referred to in Indian country as “value colonialism” where “the systematic displacement of traditional values by those of the majority society” occurs.⁴⁶ Tribes, in response to “harsh realities,” depart from traditional norms to engage in nontraditional economic development.⁴⁷

For state and local governments as well as Native American tribal governments, wind power is promoted as being the most environmentally-friendly alternative energy form, yet its environmental and avian impacts are substantial.⁴⁸ The risk of these impacts tends to be considered negligible because of the perceived potential benefits from the technology. A risk perception study found that people perceive risk in terms of their comfort with the technology.⁴⁹ That is, if a person feels “bad” about a technology, she will perceive greater risks and lesser benefits. Conversely, if a person “feels good” about a technology, she will perceive greater benefits and fewer risks.⁵⁰ The fact that Native Americans have a special cultural and religious relationship with the Earth can lead to the erroneous conclusion that wind power either benefits all tribes, or the particular tribal nation where wind power is being developed. A number of scholarly observers, including Professor John LaVelle, have referred to this threat of value imposition to tribal nations by describing “[t]he reckless imposition of environmentalist values in Indian country as a type of environmental racism.”⁵¹

V. TRUE COLLABORATION: WIND POWER AS A MAJOR FORCE ON TRIBAL NATIONS’ LANDS

Secretary of the Interior Norton has made clear that renewable energies development must be a collaborative process. Testifying before the House Appropriations Committee on the

46. Rebecca Tsosie, *Tribal Environmental Policy in an Era of Self-Determination: The Role of Ethics, Economics, and Traditional Ecological Knowledge*, 21 VT. L. REV. 225, 309 (1996).

47. *See id.*

48. *See supra* notes 25–28 and accompanying text.

49. Melissa L. Finucane et al., *The Affect Heuristic in Judgments of Risks and Benefits*, 13 J. BEHAV. DECISION MAKING 1–17 (2000).

50. *Id.* at 3–4, 9.

51. John P. LaVelle, *Rescuing Paha Sapa: Achieving Environmental Justice by Restoring the Great Grasslands and Returning the Sacred Black Hills to the Great Sioux Nation*, 5 GREAT PLAINS NAT. RESOURCES J. 40, 73 (2001).

major proportion of renewable energy projects on federal lands, she said:

We are committed to implementing the President's National Energy Plan, a part of which focuses on a long-term strategy for producing traditional and renewable sources of energy on Federal lands while maintaining environmental protections and involving all interested persons in decision-making processes.⁵²

The Tribal Energy Program is specifically designed to promote renewable energy on tribal lands, including wind, solar, photovoltaic, geothermal energies, and hydroelectric power.⁵³ The incorporation of wind power projects utilizing Department of Energy ("DOE") funding began in 1994 for Native American tribal energy projects.⁵⁴ These projects, however, did not become a priority until 2000–01, when wind power was included as a prominent part of President George W. Bush's Energy Policy and the feasibility studies for wind power were funded.⁵⁵ In the following years, the energy policy of the Bush Administration encouraged and funded the growth of wind power projects.⁵⁶ As a result, during the 2002–06 period, seventeen Native American tribal nations were awarded wind power development and feasibility projects.⁵⁷ Many other projects incorporate wind power as one of several renewable energy projects.⁵⁸ The establishment of the Native American Wind Interest Group ("NAWIG") provides training, education and an equipment loan program for feasibility studies, while currently working with twenty tribes, marking another effort by the DOE to increase tribal interest for

52. See *Hearings*, *supra* note 10.

53. OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, U.S. DEP'T OF ENERGY, TRIBAL ENERGY PROGRAM, *available at* <http://www.nrel.gov/docs/fy04osti/35509.pdf> [hereinafter TRIBAL ENERGY PROGRAM].

54. See *id.* The Energy Policy Act of 1992 authorized funding for tribal energy projects. Energy Policy Act of 1992, Pub. L. No. 102-486, §§ 2601–2604, 2606 106 Stat. 2776, 3113–3116, 3118 (codified as amended at 25 U.S.C.A. §§ 3501–3504, 3506 (2005)).

55. See ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, ENERGY CONSUMPTION AND RENEWABLE ENERGY DEVELOPMENT POTENTIAL ON INDIAN LANDS 41–44 (2000), *available at* <http://www.eia.doe.gov/cneaf/solar.renewables/ilands/ilands.pdf> [hereinafter EIA, DEVELOPMENT POTENTIAL ON INDIAN LANDS].

56. See Energy Policy Act of 2005, Pub. L. No. 109-58 (2005) (codified as amended in scattered sections of 26 U.S.C.); see also *Fiscal Year 2005 Budget: Hearing Before the S. Com. On Indian Affairs*, 108th Cong. 108–110, 120–124 (2004) (statements of David Garman, Asst. Sec'y for Energy Efficiency & Renewable Energy, U.S. Dep't of Energy) (discussion of budget increases and program priorities for Tribal Energy Program) [hereinafter *Garman Testimony*].

57. OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, U.S. DEP'T OF ENERGY, TRIBAL ENERGY PROGRAM, *available at* http://www.eere.energy.gov/tribalenergy/projects_technology.html.

58. See *Garman Testimony*, *supra* note 56.

this technology.⁵⁹

Sixty-one reservations or areas controlled by tribes, which include fifty percent of the Indian population who live on Indian lands, have been designated as areas for potential wind development based upon the wind quality and quantity available in these locations.⁶⁰ The cost of wind generated electricity has been estimated at less than two cents per kilowatt hour (“kWh”) above regional wholesale prices.⁶¹ Incentives at the state or federal level for these projects could make the projects even more cost-effective according to the DOE.⁶² These wind projects must ultimately be economically sustainable or they will end as remnants of failed experiments on Indian lands. This sustainability requirement is particularly important because the attractiveness of wind power is significant on Indian lands; forty-five reservations have wind resources ranked as Class 5 or 6 winds (the highest ratings); forty-eight reservations have Class 4 winds; 205 have Class 3 or lower and are therefore not considered suitable for wind development.⁶³ All are in the western United States except for the Eastern Cherokee Reservation in North Carolina.⁶⁴

The development of wind-power projects and the related feasibility studies must include the cultural and environmental considerations of the tribe in addition to regulatory and statutory requirements. Environmental impacts, including impacts on listed endangered or threatened species, as well as cultural and archaeological sites, must be considered. The DOE, through the National Renewable Energy Laboratory (“NREL”), based in Golden, Colorado, includes tribes in its process for wind development projects in accordance with the 2000 Executive Order on activities that have “substantial direct effects” on tribal people and lands.⁶⁵

Under the National Environmental Policy Act (“NEPA”),⁶⁶ programmatic environmental impact statements (“PEIS”) may be prepared for a region where the cumulative impacts reflect the true impact rather than a project by project analysis, which may

59. See TECHNICAL PLAN, *supra* note 3, at 23.

60. ENERGY INFO. ADMIN., DEVELOPMENT POTENTIAL ON INDIAN LANDS 28, tbl. 6 (2000), available at <http://www.eia.doe.gov/cneaf/solar.renewables/ilands/ilands.pdf>.

61. *Id.* at ix.

62. *Id.* at 28, tbl. 6.

63. *Id.*

64. See *id.* at fig. 13.

65. Exec. Order No. 13,175, 65 Fed. Reg. 67,249 (Nov. 6, 2000).

66. Pub. L. No. 91-190, 83 Stat. 852 (1970) (codified at 42 U.S.C. §§ 4331–47).

believe the cumulative effect.⁶⁷ In September 2004, the Bureau of Land Management (“BLM”) completed a draft PEIS for the eleven-state study area for a Wind Energy Development Program.⁶⁸ The BLM reported that, of the 303 tribal governments contacted, only three tribes responded with an interest in being consulted.⁶⁹ Tribes typically do not have a staff of experts who might have the resources to evaluate the impacts of these projects. On certain issues, such as the potential impacts on eagles and other raptors, the impact of wind power is not commonly known, and tribes therefore cannot make assessments without some disclosure of the known impacts during the development of an environmental impact statement (EIS).

Despite these efforts at promoting wind energy for tribes, progress has been slow. Published in 2003, the DOE’s multi-year plan for the technological program in wind energy development finds that “[t]here are no large-scale wind developments on Native American Lands, despite the wide availability of excellent wind resources on those lands. A milestone was achieved in early 2003, however, when the first Native American 750 kW wind turbine was installed on the Rosebud Sioux Indian Reservation in South Dakota.”⁷⁰

While mitigating measures can be taken to make wind farms safer with respect to avian impacts, little of this information has been shared with the tribes. For example, stripes on the blades, and in particular, one black blade among the three blades can make a significant difference in visibility for raptors, potentially helping them to avoid a collision.⁷¹ Further, arrangement of wind turbines can be done in such a way as to avoid collisions. For instance, cluster arrangements may protect the migratory raptor better than a widely dispersed design.⁷² Tribal officials were

67. 42 U.S.C.A. § 4332 (2005) (requiring environmental impact statements (EIS)). See also *Friends of Yosemite Valley v. Norton*, 348 F.3d 789, 800 (9th Cir. 2003) (finding PEIS acceptable under “rule of reason” standard of review).

68. The BLM targeted tribes in eleven states—Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming—to offer consultation services. See BUREAU OF LAND MANAGEMENT, U.S. DEP’T. OF THE INTERIOR, DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT 7-2, tbl. 7.2-1 (2004), available at <http://windeis.anl.gov/documents/dpeis/maintext/section7.pdf>.

69. These tribes are: Lovelock Paiute, Taos Pueblo, and Pawnee Nation of Oklahoma. *Id.*

70. See TECHNICAL PLAN, *supra* note 3, at 45.

71. WILLIAM HODOS, NAT’L RENEWABLE ENERGY LAB., MINIMIZATION OF MOTION SMEAR: REDUCING AVIAN COLLISIONS WITH WIND TURBINES 24, 32–33 (2003), available at <http://www.nrel.gov/docs/fy03osti/33249.pdf>.

72. CALIFORNIA ENERGY COMM’N, A ROADMAP FOR PIER RESEARCH ON AVIAN COLLISIONS WITH WIND TURBINES IN CALIFORNIA 18–19 (2002), available at http://www.energy.ca.gov/reports/2002-12-24_500-02-070F.PDF.

clearly unaware of mitigating factors that should have been part of the cultural and environmental assessment: “[u]sually the wind farms are very tightly packed in a crowded area because of land ownership. The tribes have an abundance of windy lands available, which gives us an opportunity to maybe scatter them more in different parts of the reservation.”⁷³ This tribal official’s statement does not reflect a plan to address mitigating factors, but appears to be driven solely by the availability of land and the assumed willingness of the community to accept it.

The protection of tribal nations cannot depend only on self-government and self-determination because the federal government plays such a large role in altering the economy, environment, culture, and even the spirituality of tribal nations. Environmental justice requires that the burden of environmental impacts should not fall disproportionately on minorities and the communities most unable to protect themselves from these actions.⁷⁴ Nor should these tribal nations be made a laboratory for experiments not found suitable for implementation by wealthier communities. A truly collaborative approach can move this process forward in a positive way, while fully considering all aspects of wind projects for tribal nations in the context of what remains a somewhat experimental technology. The following examination of the legal tools available to best address the needs of a collaborative process is helpful in light of Anglo-American law’s failure to meet the needs of the process for tribal decision-making.

VI. CAN SPIRITUAL, CULTURAL AND ENVIRONMENTAL CONCERNS BE VALUED WITHIN ANGLO-AMERICAN LEGAL CONSTRAINTS?

The issues of concern for Native American tribal nations involve spiritual and cultural aspects that are intertwined with the environment, and are conceptually inseparable.⁷⁵ The bald eagle and golden eagle are good examples of this relationship, and are important to this analysis because they highlight the differences between Anglo-American law and the concerns of tribal nations. Legal constraints that protect the eagle for environmental reasons in Anglo-American law would serve the

73. Tara Tidwell, *First Rosebud Wind Turbine Generates Support: An Interview with Intertribal COUP Secretary Robert Gough*, CULTURAL SURVIVAL Q., Sept. 15, 2003, at 11, available at <http://209.200.101.189/publications/csqa/csqa-article.cfm?id=1697>.

74. See Env’tl. Prot. Agency, *supra* note 4.

75. See, e.g., Leanne Simpson, *Listening to Our Ancestors: Rebuilding Aboriginal Nations in the Face of Environmental Destruction* (2003), http://www.snowchange.org/snowchange/index2.php?option=com_content&do_pdf=1&id=29 (discussing the Aboriginal view of cyclical time and relationships).

same goal for tribal nations, but for cultural and spiritual purposes. The reasons for the eagle's protection are not important as long as the laws serve both Anglo and Native American goals. But what becomes of this balance when the legal constraint to protect the eagle for the sake of environmental protection as an endangered species disappears? When the eagle is no longer listed as an endangered species meriting protection through Anglo-American law, what law or process can protect the interests of the tribal nations in the continued protection of the eagle? Wind power development raises this important set of issues.

A. *The Significance of Place: Looking at Wind and Birds*

To truly understand the differences between the tribal and Anglo-American purposes for protecting the eagle, the relationship Native Americans have with the environment merits further discussion. The relationship Native American people have with the environment is one of interrelatedness with animals, plants, seasons, the sun, and the moon; it is a relationship that recognizes the holistic and cyclical nature of the relationship.⁷⁶ Accordingly "place" is an important and integral part of life and carries historical, cultural, and spiritual significance. But "place" is not limited by land and its attachments, as it might be considered in Anglo-American law, but encompasses a holistic sense of "place."⁷⁷ This concept is in contrast to the Anglo-American concept of the environment as something to conquer and own, where humankind is more of an aggressive master than a co-equal part of nature.⁷⁸ The Anglo-American system has been seen to view nature as "a lifeless commodity, and a nonliving collection of natural resources to be exploited."⁷⁹

76. *Id.*

77. *See id.* (stating that "'space' or 'place of creation' . . . [is] the earth lodge . . . an interrelated space where Aboriginal people have direct and extremely visceral relationships with the essential forces in nature") (quoting Sakej Youngblood Henderson, *Ayukpachi: Empowering Aboriginal Thought*, in *RECLAIMING INDIGENOUS VOICE AND VISION* (M. Battiste, ed., UBC Press 2000)).

78. *See, e.g.*, Richard Field, *Management and Motivation*, available at <http://www.bus.ualberta.ca/rfield/Management%20and%20Motivation.htm> (last visited Sept. 26, 2006) ("the dominant culture [in the United States and Canada] has seen the natural environment as something to conquer and exploit.").

79. CHRISTOPHER VECSEY ET. AL., *AMERICAN INDIAN ENVIRONMENTS: ECOLOGICAL ISSUES IN NATIVE AMERICAN HISTORY* 21 (Christopher Vecsey & Robert Venables eds., Syracuse Univ. Press 1980). For an example of Anglo-American exploitation of natural resources, see Robert N. Young, *Importance of Biodiversity to the Modern Pharmaceutical*

The bald eagle has a special religious and cultural significance for many tribes. Eagle feathers are universally recognized among Native Americans as an award of honor reserved for solemn and significant events and people.⁸⁰ The Hopi, Navajo, and Cheyenne Nations engage in ceremonial hunts for eagles as part of their cultural and religious practice, and treaty rights provide for a narrow exception to Anglo-American laws which otherwise forbid destruction of eagles for some of these practices.⁸¹ Anglo-American laws also grant an additional regulatory exception for the possession of eagle feathers and parts to Native Americans.⁸² Judicial review of this exception has resulted in the affirmation of the legality of the exception because of the special government-to-government relationship between Native American tribes and the United States government.⁸³

Traditional stories and oral histories about the wind and birds are found among many Native American tribes, particularly those in areas where significant winds have shaped the relationship between Native American peoples and their environment. These stories evidence a complexity of relationships, which typify the interrelatedness of humankind with all components of the environment.

The Abenaki emphasize the importance of wind through the story of Wuchosen and Gluscabi.⁸⁴ Wuchowsen, the Wind Eagle, lived on a mountain and made the wind blow by flapping his wings.⁸⁵ The constant winds made a young boy, Gluscabi, unhappy because the winds made it impossible for him to use his boat to hunt ducks. Gluscabi traveled to the mountain where Wuchowsen lived and convinced him to flap his wings on a higher

Industry, 71 PURE APPLIED CHEMISTRY 1655, 1655–61 (1999), available at http://www.iupac.org/publications/pac/1999/71_09_pdf/7109young_1655.pdf.

80. Brett Anderson, *Recognizing Substance: Adoptees and Affiliates of Native American Tribes Claiming Free Exercise Rights*, 7 WASH. & LEE RACE & ETHNIC ANCESTRY L.J. 61, 70 (2001); see also Brent Gunson, *Cultural Tag of Wars: An Analysis of the Legal Issues Involving the NPS Proposed Rule to Allow Taking of Golden Eagles at Wupatki National Monument for Religious Purposes*, 22 J. LAND RESOURCES ENVTL. L. 399 (2002).

81. See Anderson, *supra* note 80; see also Gunson, *supra* note 80.

82. *E.g.*, 50 C.F.R. § 22.22 (1984); see also 16 U.S.C.A. § 668a (2006).

83. See *United States v. Abeyta*, 632 F. Supp. 1301, 1307–08 (D.N.M. 1986) (memo. op.) (upholding taking of eagle feather for religious ceremonial use on aboriginal lands). *But see United States v. Dion*, 476 U.S. 734, 744–45 (1986) (holding that non-Indians cannot claim religious ceremonial use of eagle feathers).

84. First People, Native American Legends: Abenaki, <http://www.firstpeople.us/FP-Html-Legends/GluscabiandtheWindEagle-Abenaki.html> (last visited Aug. 22, 2006).

85. FLORENCE V. FARMER, NATURE MYTHS OF MANY LANDS 13–15 (Kessinger Publ'g 2003) (1910).

mountain. Gluscabi volunteered to carry Wuchowsen to the other mountain by bundling his wings. On the way, however, Gluscabi dropped Wuchowsen into a crevice and the wind ceased to blow. However, without the wind, the air was hot and the water was dirty. Gluscabi realized that the wind was important and moved Wuchowsen back to his place. Wuchowsen agreed to only make the wind blow sometimes.

The Blackfeet, a tribal Nation on the border area of Montana and Canada, adjacent to the Glacier National Park, have an oral tradition about Kut-oy-is, who went to the mountains where the spirits lived to find the Wind Sucking Monster.⁸⁶ This monster had sucked animals and people into his stomach with the wind. The use of laughter freed the animals and people from the monster. Another oral story explains how Windmaker Lake in the Park came by its name. A Blackfoot elder followed the wind to find it was created by a great Elk, who created the winds when he shook the water from his head as he emerged from the Lake.⁸⁷

The Aleuts have a story about the genesis of the winds.⁸⁸ A childless couple fashioned a wooden doll at the behest of the Moon Spirit. This doll came to life and traveled to the four corners of the world. At each corner, the doll found a bit of skin covering a hole. The doll pulled back the skin and let in the wind and the animals. Each time, the doll told the winds when to blow. This story recounts the creation of the winds.⁸⁹

A Tillamook oral story describes the origin of the thunderbird, a bird which flies where the winds are so harsh that the man in the story must close his eyes to avoid being hurt by the winds.⁹⁰ After enduring the wind, the man is shown whales. This story is considered the origin of Tillamook whale hunting.⁹¹

These stories underscore the importance of wind and birds to these tribes. Many other tribal nations also have oral traditions of the role of wind and birds in their origins and their survival stories. Because of the potential impacts on the relationships among the wind, birds, and humans, consideration of wind power development is of significant interest to elders and religious

86. DAVID ADAMS LEEMING, *THE WORLD OF MYTH* 302–303 (Oxford Univ. Press 1990).

87. *Glacier Plays Key Role in Blackfeet Myths, Culture*, GREAT FALLS TRIB., May 16, 2004, at 15EG.

88. First People, Native American Legends: Aleut, <http://firstpeople.us/FP-HTML-Legends/TheOriginoftheWinds-Aleuts.html> (last visited Aug. 22, 2006).

89. *Id.*

90. Franz Boas, *Traditions of the Tillamook Indians*, 11 J. AM. FOLKLORE 23, 24 (1898)

91. *Id.*

leaders of Native American tribal nations, and cannot be undervalued in the decision-making process.

B. Utilizing the Statutory and Executive Order Tools for Addressing the Complexity of Environmental, Spiritual and Cultural Issues

Within Anglo-American law, two legal mechanisms can be used to promote the common goals of environmentalists and Native Americans. Statutory laws protecting the environment may consequently protect spiritual and cultural concerns. But where statutes fail, executive orders for tribal collaboration, environmental justice, and the legal doctrine of the federal trust responsibility to tribes may ensure that spiritual and cultural interests important to self-government and self-determination are not ignored.

NEPA is intended to ensure that federal agencies consider the environmental impacts of actions taken. It provides visibility and an opportunity for the public to comment on certain actions and their impacts.⁹² However, NEPA cannot stop a project, even if the impacts to the environment are severe, because the statute requires only that an agency consider the impacts.⁹³ On the other hand, statutes such as the Endangered Species Act (ESA) can stop a federal project if it is impossible to effectively mitigate the effects on an endangered species or a species on the threatened list.⁹⁴ The species, as well as the habitat of the species, are protected by ESA and the habitat can go well beyond the boundaries of the federal project area.⁹⁵

President Clinton proposed removing the bald eagle from the ESA threatened list in 1999, four years after moves were taken to remove it from the endangered classification list.⁹⁶ The implications of the bald eagle's removal from the threatened list meant that impacts to the species, including destruction of its

92. National Environmental Policy Act §§ 101–02 (codified as amended at 42 U.S.C. §§ 4331–32 (2006)).

93. *Id.*; see also *Strycker's Bay Neighborhood Council v. Karlen*, 444 U.S. 223 (1980) (per curiam).

94. Endangered Species Act of 1973, Pub. L. No. 93-205, §§ 3, 4, 7 & 9, 87 Stat. 884, 885–87 (codified as amended at 16 U.S.C.A. §§ 1532, 1533, 1536 & 1538 (2006)).

95. *Id.* §§ 1531–38.

96. Todd Ackerman, *Recovered Bald Eagle Flies Off Endangered List*, HOUS. CHRON., July 3, 1999, at A1. The bald eagle was reclassified as “threatened” in 1995. 60 Fed. Reg. 36,000 (July 12, 1995) (effective August 11, 1995). Final delisting of the bald eagle is pending. See 71 Fed. Reg. 8,238 (Feb. 16, 2006) (reopening comment on proposed delisting).

habitat, would no longer prevent a project from going forward. Although the Golden Eagle and Bald Eagle Protection Act provides penalties for possession of the bird, or taking the bird or bird parts, it does not include the protection of its habitat.⁹⁷ The Act addresses three activities involving the birds: (1) removal from the environment, (2) requirement of a permit for transfer and possession; and (3) requirement of a permit for transfer in interstate commerce.⁹⁸ With the recent announcement that the delegates to the Convention on International Trade on Endangered Species (“CITES”) Convention approved the United States’ move to delist the bald eagle,⁹⁹ ESA can no longer be relied upon to prevent a wind project from going forward if the species or its habitat is jeopardized by a project.

The Migratory Bird Treaty Act addresses the destruction of birds, but only Executive Order 13,175 requires agencies to address threats to the habitat and survival of migratory birds.¹⁰⁰ Indian Nations are asked to comment on the archaeological and cultural sites that might be affected by a wind farm, as well as to provide input on environmental impact statements in accordance with Executive Order 13,175. The eagle is an important cultural part of the tribal environment, yet the statutes do not give the kind of consideration necessary to protect it. For example, the National Historic Preservation Act (NHPA) only protects land and its attachments.¹⁰¹ Since the eagle is neither land nor physically attached to the land, it is not protected as cultural property in Anglo-American law.¹⁰² Anglo-American property law separates that which is physically attached to the land from that which merely occupies the land. Therefore, animals are not cultural property and do not fall under the protection of this statute. Similarly, environmental law does not provide the authority to preserve or protect a part of the environment which has been de-listed as a threatened or endangered species, other

97. Bald Eagle Protection Act, ch. 278, 54 Stat. 250 (1940) (codified as amended at 16 U.S.C. §§ 668a–d (2004)); Bald and Golden Eagle Protection Act, ch. 278, §1 (codified as amended at 16 U.S.C. § 668 (2004)); Golden Eagle Protection Act, Pub. L. No. 87-884, 76 Stat. 1246 (1962).

98. Bald and Golden Eagle Protection Act § 1.

99. Press Release, U.S. Dep’t of Interior, United States Pleased With Outcome of CITES Conference in Bangkok, Assistant Secretary Craig Manson Declares (Oct. 14, 2004), available at <http://www.doi.gov/news/041014c>.

100. Migratory Bird Treaty Act, ch. 128, 40 Stat. 755 (1918) (codified as amended at 16 U.S.C.A. §§ 703–12 (West 2006)); Exec. Order No. 13,175, 65 Fed. Reg. 67,249 (Nov. 6, 2000).

101. Pub. L. No. 89-665, 80 Stat. 915 (1966) (codified as amended in scattered sections of 16 U.S.C.).

102. National Historic Preservation Act (NHPA) § 101 (codified as 16 U.S.C.A. §§ 470a, 470w (2006)).

than to ensure that its impacts are considered during the course of planning a major federal action.¹⁰³

Section 101 of the NHPA outlines the tribal consultation process that the federal government is required to follow when it embarks on a project that would substantially affect a tribe.¹⁰⁴ The process obligates the federal government to consider traditional cultural properties as identified by the tribe or through the process of a project study.¹⁰⁵ It is evident that the government is not doing enough to identify these cultural properties, as evidenced by the Confederated Tribes and Bands of the Yakima Nation's response to the Wild Horse Wind Power Project.¹⁰⁶ The tribes wanted more work to be done on the identification of cultural properties.¹⁰⁷ Interestingly, the tribes did not raise any concerns about the environmental assessment or the impact of the project on raptors, which neither statute protects, but would be included in a consultative process under Executive Order 13,175.

Additionally, Executive Order 12,898, addressing federal actions and environmental justice among minority populations, prohibits federal projects from disproportionately impacting minority populations with environmental burdens.¹⁰⁸ All Native American programs fall within these protections.¹⁰⁹ With regard to wind power projects, which have significant impacts on tribal nations in the sense of spiritual, cultural, and environmental issues, the Order similarly requires consideration of the project impact on tribes.¹¹⁰

103. See Endangered Species Act of 1973, Pub. L. No. 93-205, 87 Stat. 884.

104. NHPA § 101.

105. *Id.*

106. Letter from Jerry Meninick, Chairman of the Confederated Tribes & Bands of the Yakima Nation, to Chris Taylor, Project Dev. Manager (Apr. 6, 2004) (on file with author).

107. *Id.*

108. Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994) (“[E]ach Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States . . .”).

109. *Id.* at 7632 (“Each Federal agency responsibility set forth under this order shall apply equally to Native American programs. In addition, the Department of the Interior, in coordination with the Working Group, and, after consultation with tribal leaders, shall coordinate steps to be taken pursuant to this order that address Federally-recognized Indian Tribes.”).

110. *Id.*

C. Trust Responsibility

Tribes were never entrusted to manage their own resources when the pressure of progress demanded their appropriation. The legal rule for the recognition of a trust relationship with federal Indian tribes is found in one of the three foundation cases of Indian law. In *Cherokee Nation v. Georgia*, Justice Marshall wrote that “[Indian nations] occupy a territory to which we assert a title independent of their will Meanwhile, they are in a state of pupilage. Their relation to the United States resembles that of a ward to his guardian.”¹¹¹ In *Cherokee Nation v. Hitchcock*, a Senate Committee was quoted as finding that, “[w]hile we have recognized these tribes as dependent nations, the government has likewise recognized its guardianship over the Indians and its obligations to protect them in their property and personal rights.”¹¹²

The federal government’s trust responsibility to tribes is important in the protection of eagles, not only on Indian lands, but also on surrounding lands which may form part of the eagles’ habitat. The government’s responsibility includes preserving tribal cultures in order to preserve the self-government and self-determination of each tribe. The de-listing of the bald eagle would result in the loss of the statutory protection of its habitat, and the inability of tribes to ensure its protection through law.¹¹³

In the case of other natural resources for energy use on Indian lands, the Bureau of Indian Affairs (“BIA”), through the BLM, has leased mineral and natural resource rights to energy companies, including coal, oil, gas, uranium, and even geothermal resources.¹¹⁴ The BIA is required to manage these resources as trustee for the lands and to ensure that the proceeds from these leases go to benefit the individuals and tribes who own them.¹¹⁵ In 1996 a group of Native Americans filed a class action lawsuit against the BIA, alleging mismanagement of these lease proceeds for more than a century.¹¹⁶ The suit alleged that

111. *Cherokee Nation v. Georgia*, 30 U.S. 1, 33 (1831).

112. *Cherokee Nation v. Hitchcock*, 187 U.S. 294, 302 (1902) (quoting Senate Committee on Five Civilized Tribes of Indians, S. Rep. No. 53-377 (1894)).

113. *See supra* note 103.

114. *See* Indian Mineral Leasing Act of 1938, 52 Stat. 347 (codified as amended at 25 U.S.C.A. § 396 (West 2006)).

115. *Id.*

116. *See* *Cobell v. Babbitt*, 30 F. Supp. 2d 24 (D.D.C. 1998) (mem. opinion). This case has a long history, with close to 100 related citations, mostly related to procedural challenges filed by the U.S. *See, e.g.*, 407 F. Supp. 2d 140 (D.D.C. 2005), 391 F.3d 251 (D.C. Cir. 2004). However, the plaintiffs have been successful in defeating summary judgment and overcoming the government’s sovereign immunity defense. 30 F. Supp. 2d

billions of dollars were unaccounted for in the federal trust funds for Native Americans in the Department of the Interior.¹¹⁷ Aside from the question of the integrity of the trustee relationship, the potential unmarketability of wind power without subsidies should raise serious questions about the value of wind resources—if these resources were truly valuable and therefore marketable, the Bureau of Land Management would have already leased them to energy companies for development rather than leaving their use to the discretion of tribes.

VII. SPIRITUALITY AND CULTURAL CONCERNS
ARE NOT TO BE OVERCOME, BUT EMBRACED
IN A COLLABORATIVE EFFORT: CITING FAILURE?

In explaining the cyclical universe and the eternal and perpetual existence of nature, Lame Deer said that “[t]he nation was only a part of the universe, in itself circular and made of the earth, which is round, of the sun, which is round, of the stars, which are round. The moon, the horizon, the rainbow—circles within circles, with no beginning and no end,” testifying to the eternal and perpetual existence of nature.¹¹⁸

Often quoted wisdom from Black Elk, printed at the head of this article, also describes the cyclical and circular rhythm of nature. How is Black Elk’s wisdom not in balance with capturing the great and circular power of the wind? To the Native American, the maintenance of these circles clearly sustains the movement of nature’s power. To interrupt these cycles or break the circles would interfere with nature’s power. This interference must naturally have its consequence, and listening to and following the cultural, spiritual, and environmental direction of the tribe must be made a part of wind power projects. Decision makers should give serious thought to tribal cultural considerations for the protection of birds in wind projects, as well as to creating a process that allows tribal voices to be heard and given the value and respect that is the essence of a true

at 33–34; see also Billee Elliot McAuliffe, *Forcing Action: Seeking to “Clean Up” the Indian Trust Fund: Cobell v. Babbitt*, 30 F. Supp. 2d 24 (D.D.C. 1998), 25 SO. ILL. UNIV. L.J. 647 (2001). The litigation prompted the Indian Trust Reform Act of 2005 to settle the claims. S. 1439, 109th Congress, 1st session (July 20, 2005); see also H.R. 4332, 109th Cong. (Nov. 1, 2005).

117. *Cobell*, 30 F. Supp. 2d at 27–28.

118. John (Fire) Lame Deer was a full-blooded Sioux and Lakota holy man. See Robyn (Douglas) Peterson, *Lame Deer, Seeker of Visions*, <http://www.wmich.edu/dialogues/texts/lamedeer.html> (last visited Apr. 13, 2006). See also JOHN (FIRE) LAME DEER & RICHARD ERDOES, *LAME DEER, SEEKER OF VISIONS* 100 (Pocket Books 1976) (1972).

collaborative process.

The Department of Energy's Guide ("Guide") to Tribal Energy Development states:

Cultural issues must be considered when choosing where the equipment will go in siting the project. The ground will be disturbed on the surface and perhaps deeper through construction, access roads, pipelines and transmission towers. Making sure there are not archeological, spiritual, or other cultural impacts is obviously important.¹¹⁹

The Guide suggests that it is important to have no spiritual or cultural impacts. However, the Guide also suggests that education will cure spiritual issues in the way of the project site, stating "Your tribe may have special beliefs or sensitivities that impact the decisions, or call for extra discussions or even education. For example, some people believe that wind turbines slice through the air in a harmful way."¹²⁰

The suggestion that cultural beliefs must be changed through "education" does not value or respect the concerns of the tribe. Education cannot result in a meaningful process of collaboration with the tribe, without recognizing the value of the tribe's perspective. Moreover, the Guide suggestion that tribes need education suggests merely a one-sided exchange. Would "extra discussions" be meaningful if they ended development of the project? The Guide does not present this as an option.

The DOE gave only cursory consideration to the potential environmental impacts in its feasibility study of the Flathead Nation wind project near Ronan, Montana, and described those impacts with minimizing language: "[t]he potential environmental impacts from the wind assessment will focus on avian issues. The avian impact has been the most sensationalized, although now known to be minimal."¹²¹

The statement that avian impact concerns have been "sensationalized, although now known to be minimal,"¹²² underscores the devaluation of tribal concerns for this impact. Additionally, the suggestion that a further study will be conducted, despite the seemingly preordained conclusion that the

119. U.S. DEP'T OF ENERGY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, A GUIDE TO TRIBAL ENERGY DEVELOPMENT: THE IMPACTS OF AN ENERGY PROJECT (2004), *available at* http://www.eere.energy.gov/tribalenergy/guide/impacts_energy_proj.html.

120. *Id.*

121. U.S. DEP'T OF ENERGY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, FLATHEAD NATION: PROJECT SUMMARY (2004), *available at* http://www.eere.energy.gov/tribalenergy/projects/fy04_flathead_nation.html.

122. *See id.*

“avian impact [is] . . . known to be minimal,”¹²³ casts doubt on the reliability of such a study.

Identical language appears in the environmental impacts summary for the Three Affiliated Tribes of the Mandan Hidatsa and Arikara Nation in reference to avian impacts.¹²⁴ Again, the DOE used the word “sensationalized” to describe the concern for avian impacts.¹²⁵

The DOE’s attitude towards wind farming is reminiscent of the government’s dismissal of the Apaches’ spiritual and cultural objections to the disruption of Mt. Graham—the proposed site for an astronomical telescope; also a place sacred to the Apaches in southeastern Arizona—as “religious, magical, fanatical behavior.”¹²⁶ This dismissal came in spite of the fact that the spiritual understanding of the relationship between the Apaches and Mt. Graham was well-documented.¹²⁷

Avian field technicians assessed the potential avian impacts for the Blackfeet Nation wind-power feasibility study.¹²⁸ Three students from the Blackfeet Community College were assigned to observe and report on any bird deaths.¹²⁹ They reported that they found none, but the report also includes anecdotal evidence of the avoidance of the wind turbines by birds, intended to demonstrate the safety of the wind turbines for raptors.¹³⁰ The report states that “the eagles and hawks that were observed close to the turbine site, often approaching the turbine, as if on a collision course, only to eventually veer away, off to the side or over the top of the blades.”¹³¹

The following story is related in the summary:

During a visit by Dine Power representatives, a Tribal member was driving the guests up the hill for a tour of the

123. *See id.*

124. U.S. DEP’T OF ENERGY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, THREE AFFILIATED TRIBES OF THE MANDAN, HIDATSA, AND ARIKARA NATION: PROJECT SUMMARY (2004), available at http://www.eere.energy.gov/tribalenergy/projects/fy04_3_affiliated.html.

125. *Id.*

126. Robert A. Williams, Jr., *Essay on Environmental Justice: Large Binocular Telescopes, Red Squirrel Piñatas, and Apache Sacred Mountains: Decolonizing Environmental Law in a Multicultural World*, 96 W. VA. L. REV. 1133, 1164 (1994).

127. *Id.*

128. U.S. DEP’T OF ENERGY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, PROJECTS ON TRIBAL LANDS: TITLE XXVI, BLACKFEET INDIAN TRIBE (1995–1998 PROJECT): PROJECT SUMMARY, http://www.eere.energy.gov/tribalenergy/title26/blackfeet_summary.html (last visited Apr. 13, 2006).

129. *Id.*

130. *Id.*

131. *Id.*

site. When the vehicle was a distance of perhaps 200 yards from the turbine base, he noticed two very large red-tailed hawks flying toward the turbine rotor. Hurrying the rest of the way, the people became uneasy about what it appeared might happen. The wind was coming from the southwest at approximately 45-50 mph and the turbine rotor was at full velocity.

As they got out of the truck, the two hawks had joined each other, side-by-side, less than 50 feet directly upwind from the spinning rotor. The birds remained stationary, hovering in the high wind, in this position for 3 to 5 minutes. After this time, they dipped forward and peeled off, each in a different direction, and settled into a glide at a distance of approximately 0.25 mile. They each circled lazily for the next 10 minutes, then glided away and out of sight.

The conclusion drawn from direct and indirect observation of raptor behavior at the turbine site is that not only are the birds aware of the presence of the blades, but they masterfully negotiate their way around otherwise dangerous obstacles posed by the installation.¹³²

However, the conclusion drawn notes that the wind turbine is an “otherwise dangerous obstacle” without the masterful negotiation of the raptors in that instance.¹³³ It is not clear who related this story, but it is clear that the story contains no conclusive proof that birds are aware of and avoid the wind turbines. The tribe’s view of this occurrence is unclear because the report only gives the government contractor’s conclusion about the meaning of the observation.¹³⁴ But such an observation should not be assumed to bear the imprimatur of tribal elders. This story instead demonstrates a vestige of colonialism, not unlike the history of treaty-making between the U.S. and the tribes.¹³⁵ A few willing chieftains would sign the treaties, even

132. U.S. DEP’T OF ENERGY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, PROJECTS ON TRIBAL LANDS: TITLE XXVI, BLACKFEET INDIAN TRIBE (1995–1998 PROJECT): PROJECT SUMMARY, http://www.eere.energy.gov/tribalenergy/title26/blackfeet_summary.html (last visited Apr. 13, 2006).

133. *Id.*

134. *Id.*

135. See, e.g., Elizabeth A.C. Thompson, *Babbitt v. Youpee: Allotment and the Continuing Loss of Native American Property and Rights to Devise*, 19 U. HAW. L. REV. 265, 290–91 (1997) (stating that the U.S. had tribal governments enter into treaties whereby the tribes were “allowed” to keep the land not relinquished to the U.S.). See also Steven Andrew Light & Kathryn R.L. Rand, *Reconciling the Paradox of Tribal Sovereignty: Three Frameworks for Developing Indian Gaming Law and Policy*, 4 NEV. L.J. 262, 269 n. 46 (2003) (“During the treaty era, for instance, the federal government often grouped separate Native American nations sharing common languages into a single

though they were not tribal officials or leaders, and Congress would then ratify these treaties; the tribes were then unable to rescind the signatures of the chieftains.¹³⁶

VIII. CONCLUSION

While the Anglo-American legal system does not address Native American environmental, cultural, and spiritual concerns for development of wind power, newer mechanisms for a process that considers and respects tribal concerns could lead to a more holistic policy in this area. This process can only be truly appreciative of Native American culture if the parties understand and value the significance and interrelatedness of environmental, cultural, and spiritual concerns, and are willing to preserve these values, even where they do not serve the purposes of Anglo-American law.

Professor Robert Williams suggests that true collaboration can never occur until environmental law is decolonized, or reshaped to encompass the concept of Native American spiritual and cultural concerns:

[I]ndians have been required to conform to the dominant society's values, without any recognition of the values that might govern Indian social life. There are no alternatives by which the great diversity within Indian communities and across Indian country can be recognized and reflected in our environmental law. . . .

Indians can only engage in the federal land use and environmental regulatory process through cultural and political institutions determined by the dominant society. Of course, the irony of all this concern over the method for incorporating Indians into the environmental regulatory process is that even if a way could be found so that tribal religious interests are adequately represented, our environmental law is not required to respect or protect those interests."¹³⁷

The incongruence of environmental law with spiritual, cultural, and environmental concerns of tribal nations requires the utilization of executive orders which address the collaborative process, and environmental justice concerns to encapsulate the consideration of "place." Should this collaboration be achieved, it must be recognized that the concerns

'tribe,' sometimes designating an otherwise nonexistent 'chief' to facilitate land giveaways or reservation administration.").

136. *Id.*

137. Williams, Jr., *supra* note 126, at 1162-63.

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of tribal nations must be respected rather than conquered. Policy makers must learn to avoid any approach that changes, defeats, or minimizes beliefs and practices that serve to sustain tribal culture and are essential to the continued existence of tribal nations.