



Ill Wind in Cherry County

Power and politics in the Nebraska Sandhills.

By Carolyn Dufurrena

*"Turning and turning in the widening gyre,
The falcon cannot hear the falconer;
Things fall apart, the center cannot hold;
Mere anarchy is loosed upon the world,
The blood-dimmed tide is loosed, and
everywhere the ceremony of innocence is drowned;
The best lack all conviction, while the worst
Are full of passionate intensity."*

—W.B. Yeats, Irish poet (1865-1939)

The biologist creeps out across frozen Nebraska grasslands toward what looks like a hump of nondescript brush near a spring-fed lake, open water in the midst of a prairie winter. He startles a flock of half a dozen trumpeter swans; they fly before he can catch them on film.

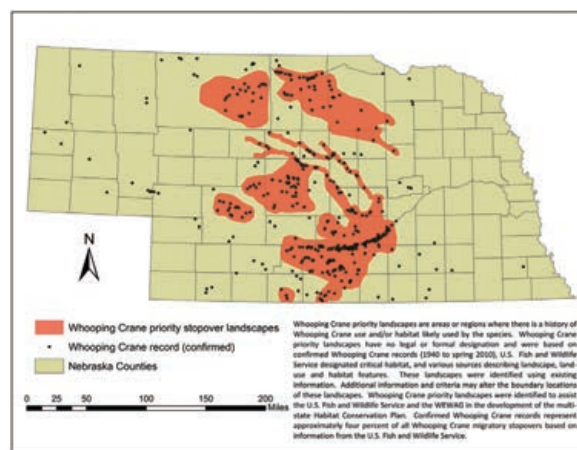
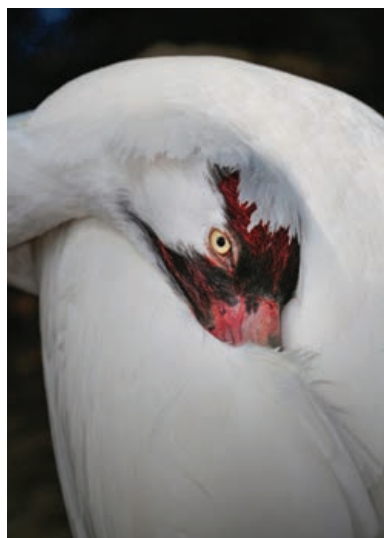
The hump turns out to be his camouflaged tent, where he snuggles in for the night. At 12:30 a.m. under a full moon, a flock of Canada geese plane into the lake, its surface a bright, black mirror. The biologist waits all night, but they don't come back. Somewhere out in the darkness, the trumpeter swans are winging their way across the Nebraska Sandhills in the moonlight.

The Sandhills cover 19,300 square miles,

11 million acres of prairie and one million acres of wetland. The stabilized dunes recharge a billion acre-feet of water in the Ogallala Aquifer. Early homesteaders realized that this land was no good for farming, but it's great cow country. Half a million beef cattle roam the grasslands. Eight percent of the world's sandhill cranes migrate through here

twice a year, as does the recovering population of trumpeter swans and most Endangered whooping cranes.

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ABOVE: Map of whooping crane stopover landscapes in Nebraska. Black dots represent confirmed sitings from 1940-2010, U.S. Fish & Wildlife Service. Cherry County, top left, is the largest county in the state. **LEFT:** A whooping crane tucks in for a rest. **AT TOP:** Trumpeter swan nesting in the wind, Nebraska. Nearly extinct 50 years ago, efforts to recover the population are highlighted by the Platte Basin Timelapse project (PBT), which kept an eye on this swan until her two cygnets launched.

Private property rights meet the public interest in this, the last intact grassland in the Western Hemisphere. In 2010, wind energy was the new shiny toy that everyone wanted to play with. Seventy people representing nearly 450,000 acres of private land in Cherry County, the heart of the Sandhills, formed Cherry County Wind LLC. They installed one wind turbine in Valentine, and sold the power to Nebraska Public Power District (NPPD), an experiment designed to defray the city's winter heating bills by 10 to 15 percent. No big deal. Conversations focused on responsible development, maintaining local control, making sure the people who had joined the local association all got the benefit of the wind farm.

By 2012 there was a joint venture with a developer, Bluestem Energy Solutions of Omaha, that would build the wind farm. The Kilgore Project was to be fairly small, 17 turbines, and could theoretically hook into the power grid to the west with no need for a new transmission line. Investors were local ranchers, some of whom put a significant chunk of change into the project. But the map included people's property who hadn't signed on to the venture.

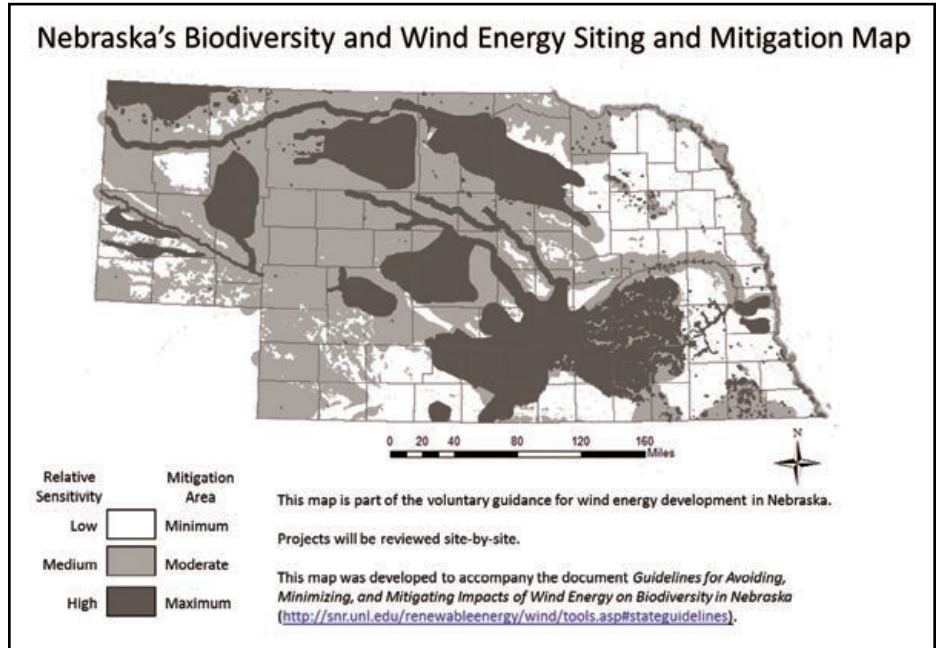
Interestingly, another much larger and somehow related project to the south was quietly included in the Conditional Use Permit (CUP). The Cascade Project is 147 turbines, and would rely on the now-stalled R-Line, a 345-kilowatt transmission line that would cross the Sandhills, and cross some folks' property who weren't in favor of it. "Legal descriptions for the land in the Cascade Project were somehow included in the CUP for the Kilgore project," says Wayne Eatinger, vice president of Preserve the Sandhills. Now why would that be?

By 2016 the Cherry County Planning Commission was ready to vote "before anybody even knew about this," says Eatinger. County commissioners in rural areas are often challenged by conflicts of interest, and Cherry County is no different. One commissioner, while not part of Cherry County Wind personally, has a brother who is one of the project's main proponents. Another commissioner, while not exactly participating in this project, lives on a homesite surrounded by his mother's ranch. And she is definitely participating.

There is still a law on the books in Nebraska that says a private entity (like a wind farm developer) can use eminent domain on another private entity, like a rancher who has not granted an easement



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ABOVE: This Nebraska Biodiversity and Wind Energy Siting and Mitigation map was developed as part of state efforts to minimize negative impacts of wind farm development. AT TOP: Wind turbine blade being delivered, shows relative size to truck and trailer. Each wind turbine is 262 feet high with a diameter of 14 feet. The blades can be 120 feet long so that the total height from the ground to the tip of the blade is more than 380 feet, approximately the height of a 32-story building.

for a transmission line, so it's no wonder the hair stood up on the back of some people's necks. Recent legislation put forth by the Sandhills' warrior state senator, Col. Tom Brewer, creates a cause of action and at least gives people the right to sue.

There were a lot of questions about this supposedly flawlessly sustainable new source of energy, from which some of the locals were going to make a potful of money while others bore the burden of living with the effects. The question of what to do after the Kilgore turbines wore out was unsuccessfully addressed by project advocates. In typical Nebraska rancher practical terms, there was no way to break even on recycling the parts. "And the blades would have to end up in somebody's municipal landfill." Nonetheless, the plan made it through the commissioning process. Preserve the Sandhills sued and the case is in the appeals process now.

In the meantime, the specter of eminent domain hangs over the issue. While NPPD says they would prefer not to use eminent domain and Bluestem Energy says they do

not have the right to eminent domain, there's no such declaration from any other wind farm developer.

Enter the R-Line. No wind farm can be sustainable without a transmission line to take the power onto the grid. There are no transmission lines yet that cross the Sandhills. The R-Project was proposed before anybody had thought seriously about wind farms in Nebraska, after the summer of 2006. No rain fell in eastern Nebraska, it was hotter than Hades, and pivots sustaining row crops had to be turned off. There simply was not enough transmission-line capacity available to meet the historically high demand. Many angry farmers said there must be a way to get more power from the western part of the state to struggling farmers in the east. The cheapest way was through the Sandhills. But there were concerns.

U.S. Fish & Wildlife Service had known about the concerns of its own employees since 2012, when FWS' Martha Tacha testified in a meeting with stakeholders that energy development in the area would result in unac-



Wake turbulence. Turbines rotate clockwise; the wake rotates counterclockwise, so there are upward winds on one side, and downdrafts on the other. Turbulence is only visible when fog is created, the result of colder air above warmer, humid air being mixed by the turbines. ABOVE RIGHT: Map of recovering trumpeter swan breeding and wintering habitat, Nebraska Sandhills. BELOW RIGHT: Trumpeters getting ready to fly.

ceptable impacts to certain species and to the dunes themselves. She also suggested that the inevitable wind development that would follow would be even worse for the Sandhills ecosystem.

FWS chieftains ignored extensive analysis by their own field biologists in preparing the Environmental Impact Statement for the R-Line. Eliza Hines and Robert Harms, who prepared the EIS, were both removed from the project after they concluded that dozens of whooping cranes would be killed trying to navigate their way across the power line's

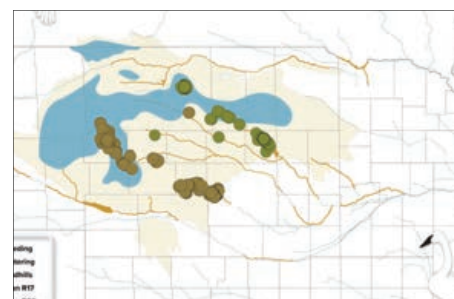
path. Most of the 500 or so wild whooping cranes left in the world migrate through the Sandhills from their breeding sites in Canada to winter in Aransas National Wildlife Refuge in Texas. The leading cause of death for juvenile cranes is collisions with power lines. Oregon-California Trails Association, Western Nebraska Resources Council and two private ranches sued.

Sen. Brewer filed an amicus brief after doing extensive research into the history of the problem. He argued that FWS regional director Noreen Walsh, Interior secretary

David Bernhardt and Margaret Everson, principal deputy director of FWS, had ignored their own research. They also apparently were contradicting their own mandate to protect the creatures under their care.

In a series of interviews with the *Lincoln Journal-Star's* JoAnne Young, Brewer told about efforts to talk with Everson in Washington, D.C. "It was clear the agency was not going to address my concerns in an effort to protect Walsh," she wrote, "its regional director, and the malfeasance conducted by her office with respect to the R-Project."

Brewer also met with deputy secretary of



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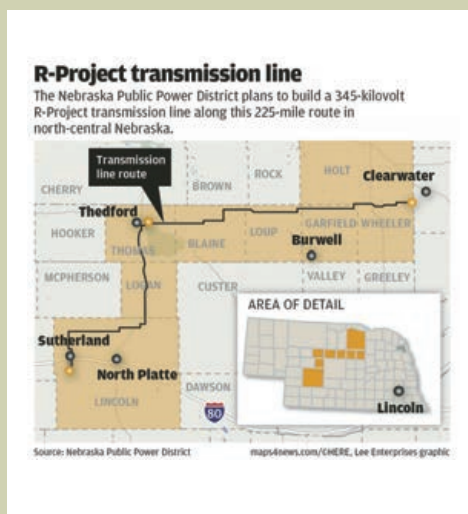


KEN HOEHN / TOM STACK & ASSOCIATES

Power Flows Downhill, Like Water

"I have often wondered why we need these new transmission lines intended to hook up new production capacity when the state has over 900 megawatts of surplus electrical generation. We have enough excess electricity in Nebraska to power a second city of Lincoln. [In 2020, some 291,000 souls.] Transmission lines are built to move electricity long distances. There are no industrial generators of electricity in the vicinity of the R-Project, unless you consider all the wind energy facilities that will sprout like weeds if this power line is ever built."

Sen. Tom Brewer, Nebraska District 43



the Interior Andrea Travnicek. She soon left her position, however, and the project was approved. FWS issued a take permit to allow the power company to "incidentally kill" or disturb an endangered species. The plaintiffs sued. NPPD's R-Line stalled.

The permit was vacated in the summer of 2020 by U.S. District Court Judge William Martinez, who was blunt in saying that the case was extremely complicated and project records were "enormous, oddly organized and difficult to navigate." He found arguments on both sides "underdeveloped and inexcusably belated, with a surprising number of relevant arguments not made. Having bushwhacked for weeks through the thicket," the court said, many challenges made by the plaintiffs were without merit.

FWS did not mention potential wind turbine development in its analysis, which affected all its other analyses of endangered species. Nor were effects of the R-Line on the Oregon-California Trail considered. On this portion of the trail, where visible ruts remain, thousands

of pioneers died of cholera and other diseases. They are buried in unmarked graves which the transmission line would have to cross.

There are other places that the transmission line could go, albeit not as cheaply. There's plenty of landscape outside the margins of the Sandhills that's already been subject to "grassland conversion" (development of one sort or another) that could play host to wind farms and the transmission line that must be built to support them. Land already converted to row crops or other development could host wind farms with less damage to the landscape, according to Sierra Club's George Cunningham. Every center pivot corner could have a wind turbine on it—for a price.

Nebraska is the only state in the country without a Public Utilities Commission. Its energy is managed by three publicly owned power districts, including Nebraska Public Power District. The governing board is not set up to regulate private energy companies, i.e., wind farm LLCs. In the past, NPPD bought power from those entities with contracts called Power Purchase Agreements (PPAs). It's cheaper and easier than building more power plants. Of course Nebraska didn't need more power plants.

Four early Nebraska windfarms were sold in 2012 when their parent company went bankrupt, and sold again in 2018 to Global Infrastructure Partners, a multinational monolith with strategic goals that have nothing to do with the whooping cranes or the delicately stabilized dunes in western Nebraska. NPPD terminated their contracts. The windfarms sued. NPPD lost.

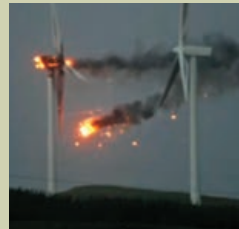
NPPD was an example of a small rural power company filling the needs of local communities until it became involved with the Southwest Power Pool, a consortium of power companies that operates across 14 midwestern states. Nebraska had power they were required to sell, and SPP was buying. Control of locally generated energy was slipping out of local hands and into the hands of faceless entities with more money than anybody in Nebraska could rustle up.

Today SPP has Green Energy Goals, and thus is foursquare behind expanding wind energy in Nebraska, energy increasingly generated not by Nebraskans, which will not be delivered to Nebraskans (they have more than enough power already, remember) but will go off to some other place to fill future energy needs. Not current needs. And the money will flow—from federal wind subsidies—into the pockets of someone far away.



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Wind turbine graveyard, Casper, Wyo. Currently, wind turbines that have reached the end of their useful life are cut into three pieces on site and hauled to a nearby municipal landfill or privately owned storage site. Blades are made of fiberglass and "carbon fiber," which is comprised of thin sheets of balsa wood harvested from tropical rainforests. The components are welded together with resin. Up to 8,000 blades will need to be disposed of a year in the U.S. alone. In pilot recycling efforts in the U.S., turbine blade pieces are shredded, then pelletized to be burnt in cement-making factories. Manufacturers are researching ways to recycle blades but component materials which do not easily separate from each other make this a daunting task. RIGHT: Burning and dead windmills, with no way to save them.



PHOTOS VIA INTERNET

NPPD doesn't buy power from wind-farms anymore, but they will deliver the power along existing transmission lines, the producers incurring what's called "wheeling charges." The output enters the Southwest Power Pool, and ultimately someone downstream will have to pay for the "wheeling."

Here's an example: Wayne County in northeast Nebraska is a rolling rural neighborhood of farms and cornfields with a small red-brick college and a world-famous Chicken Festival. Wayne County now has a new Danish neighbor, Ørsted Onshore, which is looking to expand its presence in North America. Plum Creek and Haystack Wind Farms, finished in 2020 and 2021 boast a total of 151 turbines and a maximum wind power generation of 528 megawatts. Neil O'Donovan, Ørsted senior vice president and chief

operating officer of Onshore said, "Plum Creek is our first project in SPP territory, a market which will play an important part of our ongoing growth in North America."

The 298-megawatt Haystack wind project, acquired in October 2020, neighbors Plum Creek. Ørsted Onshore was pleased to continue the expansion of its operations into the Southwest Power Pool, increasing the company's overall onshore capacity to three gigawatts. Ørsted has sold the power to a number of companies, including Vail Resorts, the J.M. Smucker Company and the Avery Dennison Corporation, "to help these organizations meet their renewable energy targets." The Danish company's goal is to produce five gigawatts of green energy in the United States by 2025.

The local residents deal with the flashing

lights, the noise, the dead birds, and the ultimate mess of the worn-out turbine blades. Ørsted Onshore, financed by who knows and delivering power to someplace other than Nebraska through the Southwest Power Pool, will be impacting Wayne County's environment, wildlife and the health of its inhabitants for decades to come.

The U.S. Geological Survey has an interactive monster of a database tracking current wind farm development in the United States. It's color-coded by year, red for most recent, then orange, etc. There were 67,000 wind turbines and counting as of January 2021. And those are only the turbines that are commis-

sioned.

The Nebraska portion of the map shows a mostly red, orange and yellow wave moving westward from the Iowa state line, but it ends about halfway across the state. It stops at the edge of the Sandhills, because that is where the

transmission line stops. If folks in the Sandhills want to keep this unique and beautiful place intact, they have to stop the R-Line. And so far, tangled in lawsuits and tearing its communities apart, it looks like they've been successful.

The Cost of Turbulence

The wind blows from the southeast, as it is more often than not on the edge of the Sandhills. The farm wife feels the rhythmic thrumming in her chest that happens on nights like this. The blinking red lights of the wind farm interrupt the dark Nebraska skies. The closest turbine is a little more than a mile away, not the four miles the farmers were promised. Living on the backside of a wind farm is different than living on the front side. Even the company representative who came out to apologize said he's never been on the back side of a wind farm before, where "wake turbulence" picks up from one turbine to the next. It sounds like a jet engine revving, but the jet never takes off. The farm couple will stay in a hotel in town tonight, again. ■

Carolyn Dufurrena spent her youth in Nebraska and now lives on a ranch in Nevada. She loves the Nebraska Sandhills and wanders around there at every opportunity.

WHOOPING CRANE © TOM STACK

