

Power up with the wind!

Humans have used the power of the wind for thousands of years. Wind-powered boats sailed the lakes and rivers, and mills ground grain into flour and pumped water from the ground. Today in Sherman County, Oregon, wind fuels the 400-megawatt (MW) Klondike Wind Power Projects, located five miles east of Wasco. Built in four phases from 2001 – 2008, the developments use 197 GE 1.5 MW wind turbines, 44 Siemens 2.3 MW wind turbines and a Mitsubishi 2.4 MW wind turbine, a prototype of next-generation technology. Klondike is owned by IBERDROLA RENEWABLES, currently the world's leading provider of wind power with more than 8,000 MW of wind power in operation globally, and supplies clean, renewable electricity to Portland General Electric, Bonneville Power Administration, Pacific Gas and Electric Company, Puget Sound Energy and Eugene Water & Electric Board.



Klondike landowners: the Hilderbrand family

the payoffs to the local communities include economic benefits from jobs and annual lease payments, property tax payments to Sherman County, energy supply security and even tourist appeal. Wind turbines can be lucrative options for farmers as wind turbines generate more income per acre than many agricultural products. While the project spans thousands of acres of private land, the actual footprint is less than two percent of the total area. Landowners continue using the remainder of the land for wheat farming, ranching and other traditional activities.

Wind provides a domestic source of power that benefits rural America. Each megawatt of wind power provides enough energy to power 350 homes, and displaces 4,200 tons of carbon dioxide emitted into the atmosphere from traditional energy forms. In addition,

Wind Energy

In 2008, U.S. wind power sailed past the 20,000 megawatt (MW) landmark, achieving in two years what had previously taken two decades – installing 10,000 MW of wind power capacity in the United States. Wind power now generates 20,152 MW, enough electricity to serve 5.3 million American homes. That's enough to generate as much electricity every year as 28.7 million tons of coal or 90 million barrels of oil. Wind generation currently displaces 34 million tons of carbon dioxide annually, equivalent to taking 5.8 million vehicles off the road. A U.S. Department of Energy study released in May found that wind could provide 20% of U.S. electricity by 2030. At that level, wind power would support 500,000 jobs and reduce greenhouse gas emissions as much as taking 140 million vehicles off the road.

Today, Denmark and many regions of Germany and Spain meet 10 and 25 percent of their electricity needs from wind energy. By contrast, wind power supplies less than one percent of America's current electricity needs. America's wind resource is vast and could contribute toward a cleaner and more sustainable energy mix. Forecasts for wind power continue to be favorable with a 155 percent increase predicted worldwide to reach 240 GW of installed capacity by 2012. (Sources: IBERDROLA RENEWABLES, American Wind Energy Association, Global Wind Energy Council)

How does it work?

The rotor blades of a wind turbine work somewhat like the wings of an airplane. As air passes over the specially designed blades, "lift" is created. This lift, in turn, sends the blades spinning in a circular motion, which drives an electric generator. When winds reach about eight miles per hour, the rotor is engaged and the wind turbine begins producing power.

For more information contact

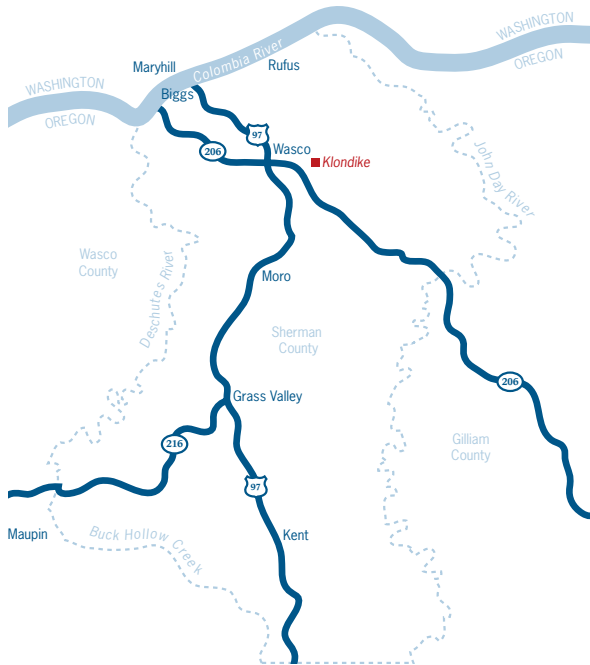
Sherman County Visitor Center
Sherman County Historical Museum in Moro
May - October
541-565-3232
info@shermanmuseum.org
www.shermanmuseum.org



Wind Power Projects
by IBERDROLA RENEWABLES

Land Between the Rivers

Wind energy uses no water, an important feature in this land of boating, fishing and windsurfing. Sherman County lies between the deep canyons of the John Day River on the east and the Deschutes River on the west in north central Oregon. The mighty Columbia River forms the boundary on the north. Much of the boundary on the south is defined by the rugged canyons of Buck Hollow, a tributary of the Deschutes.



Wasco, OR



Judge Gary Thompson at the Sherman County Courthouse



Local Attractions/Sites

- **Sherman County Courthouse**, built in 1899, originally with a handsome cupola, is located in Moro, the county seat.
- **Maryhill Museum of Art and Stonehenge** (a war memorial replica of Stonehenge in England) on the Columbia River at Maryhill, WA.
- **Wasco's Memorial Day Celebration** comprises a parade, recognition and appreciation of veterans, and a wide range of family activities.
- **Sherman County Fair**, just before Labor Day near Moro, celebrates the harvest, 4-H and FFA youth, children and families.
- **Oregon Trail kiosks** at



Sherman County Historical Museum in Moro. Museum hosts raise and lower the flag daily, May through October.

Deschutes State Park and the **John Day River Crossing** East of Wasco interpret the Trail. A historical monument and a hiking segment of the Trail are located west of Biggs.

- **Sherman County Experiment Station** at Moro provides facilities for research of dryland wheat and barley, and alternative crops.
- **Sherman County Fairgrounds**, near Moro, is the site of the annual post-harvest fair. Travelers are welcome at the RV park and campground.
- **DeMoss Springs Memorial Park** marks the location of the traveling musical DeMoss Family's 1880 town site. The park, once a hamlet with street names of poets and composers, is north of Moro on Highway 97.

• **Gordon Ridge**, offers a spectacular view of checkerboard fields, purple Goodnoe Hills and Mt. Adams across the Columbia River to the north; and to the west; the Deschutes River rushing below steep canyon walls, with Mt. Hood in the distance.



Sherman County Historical Museum

• The national award-winning **Sherman County Historical Museum** in Moro offers visitors unique interpretive exhibits, hands-on activities, tours and educational programs.

• **Deschutes River Campgrounds** include

Deschutes State Park at the mouth, and further south, accessible from Highway 216, Mack's Canyon and Beavertail Campgrounds.

• **A self-guided walking tour** of downtown Wasco shows the history of this small town. Maps are available at the City Hall.



"Eddie the Bass" caught in the John Day River, by Chloe Van Geider.

• **LePage Park** at the John Day River mouth offers facilities for boating, fishing, picnicking and swimming.

• **Windsurfing** can be especially challenging due to the Columbia River's unique wind and water conditions near Biggs and Rufus.

• **Sportsmen** come from near and far to hunt pheasant, deer, quail, chukar, ducks and geese in the fall and winter.



Lean To Cafe and Goose Pit Saloon

