Oregon sets sights on sequestration

Capturing carbon to achieve climate goals

By GEORGE PLAVEN Capital Press

CONDON — Tom Rietmann drove his pickup truck off the gravel road and onto a rugged, grassy hilltop known as Devils Butte in rural Eastern Oregon.

The area, along Highway 206 between Wasco and Condon, is mostly empty save for wheat fields, cattle and the occasional abandoned schoolhouse or old family cemetery conjuring images of early settlers and homesteaders on the American frontier.

As its name might suggest, farming atop Devils Butte is no easy feat. The land is particularly vulnerable to erosion, Rietmann said, with soil washing away in the rain and snowmelt.

Rietmann began working full time on his family's ranch in 1981. Since then, he has adopted several practices aimed at controlling soil erosion, such as reducing tillage, rotational grazing and replanting native vegetation.

The goal at first was simply to keep the soil on the property, but over time Rietmann said he has come to recognize added benefits for the environment.

One advantage is the increased ability to capture and store carbon from the atmosphere.

"If a plant is green and growing, it's not only converting carbon dioxide to oxygen, but it's also growing roots," Rietmann said. "So the roots are putting carbon into the soil."

Oregon officials are looking to farmers like Rietmann to increase soil carbon sequestration on farms and forests as a way to help the state reach its climate goals, reducing greenhouse gas emissions by 45% below 1990 levels by 2035 and 80% below 1990 levels by 2050.

Commission proposal

Last year, Gov. Kate Brown signed Executive Order 20-04 outlining the state's climate objectives and directing agencies to come up with plans for how to get there.

As part of the order, the Oregon Global Warming Commission has developed a natural and working lands proposal that calls for increasing carbon sequestration by 5 million metric tons of carbon dioxide per year by 2030, and 9 million metric tons per year by 2050.

Carbon sequestered in natural and working lands across the U.S. reduced total greenhouse gas emissions by 12% in 2019, according to the U.S. Environmental Protection Agency.

Researchers estimate that sequestration could be more than doubled annually by restoring natural habitats and modifying practices on farms, forests and rangelands.



Tom Reitmann, of Reitmann Ranch, looks over Devils Butte on his Eastern Oregon property.

George Plaven/Capital Press

The Oregon commission's proposal calls inc for the Legislature to establish and fund a climate-smart agricultural program, though what it will look like and how much money it

receives is yet to be determined. State Sen. Michael Dembrow, a Portland Democrat, is one of four lawmakers who serve as nonvoting members of the commission. He said the program will likely consist of both dollars for research and training, as well as direct payments to farmers.

A possible avenue could be funding the Oregon Agricultural Heritage Program, Dembrow said. It was created by the Legislature in 2017 to preserve farmland across the state.

"I think that's one of the key recommendations from the report, that we get some resources to that program," Dembrow said. "I'm hoping that's an area where we could find something during the short session in February."

Paying for carbon sequestration has already been ruled out in the Oregon Department of Environmental Quality's Climate Protection Program.

That program — also developed under Brown's 2020 executive order — creates a cap-and-trade model for Oregon, setting an annual limit on greenhouse gas emissions that gradually shrinks over time.

Regulated utilities and fuel suppliers can purchase what are referred to as community climate investments, or CCIs, under the program that would pay for other projects aimed at weaning Oregonians off fossil fuels.

CCIs could not pay for sequestration, however, since the program is geared more toward increasing adoption of renewable energy, according to the state Department of Environmental Quality.

Jan Lee, the executive director of the Oregon Association of Conservation Districts, said excluding sequestration projects from the Climate Protection Program was a missed opportunity, especially in light of the Global Warming Commission's proposal.

Instead, Lee said she favors funding the Agricultural Heritage Program to accelerate climate-smart farming. She said the Global Warming Commission has discussed needing \$15 million to \$20 million to get the program started.

With 45 soil and water conservation districts statewide, Lee said they could serve as the local experts to whom growers turn for advice.

"What we would do is have our people trained, so they would know how to help people in our districts apply carbon sequestration," she said.

A role to play

Megan Kemple, the co-director of the Oregon Climate and Agriculture Network, said farms can and should play a role in addressing climate change.

"Reducing emissions alone isn't sufficient to address the climate crisis," Kemple said. "We also have to prioritize carbon sequestration."

Some of this work is already being done around the state. A report by the American Farmland Trust and the U.S. Department of Agriculture's Agricultural Research Service shows Oregon farmers practiced cover cropping on 100,908 acres in 2017, or 2.8% of the approximately 3.6 million acres of available cropland.

No-till farming was practiced on nearly 41% of the available cropland, which is slightly lower than the regional average of 41.4% but higher than the national average of 37%.

To adopt these and other practices on a wider level, Kemple said farmers need technical assistance, education and financial incentives.

Over the next few months, Kemple said the network will be urging both the Legislature and governor's office to make funding available.

At the federal level, the Agricultural Resilience Act — part of the Biden administration's Build Back Better framework addressing climate change — would create a new soil health grant program for states and tribes as part of an effort to reach net-zero emissions by 2040.

Christian Gaston, the budget director for Brown, said the governor is reviewing the Global Warming Commission's proposal. A climate-smart agriculture program, Gaston said, "would be a strong addition to the state's portfolio of climate work."

Agriculture groups, including the Oregon Farm Bureau, have expressed concerns about the bevy of new climate policies coming out of Salem, arguing they will lead to higher costs and tighter margins for producers.

Mary Anne Cooper, the vice president of public policy for the farm bureau, said the Climate Protection Plan will drive up the cost of fuel, including diesel and natural gas.

As for carbon sequestration, Cooper said the targets identified by the Global Warming Commission are "beyond ambitious."

"I think they put too much on the agriculture sector when we are already doing our part," Cooper said.

In written comments submitted to the Department of Environmental Quality, Cooper stated Oregon has made significant progress over recent decades in terms of improving efficiency. She cited Oregon State University data that ranks Oregon 15th out of 50 states for efficiency, compared to 1960, when the state ranked 46th.

Yet the Global Warming Commission didn't seem to acknowledge these gains when soliciting input from the industry, Cooper said. The farm bureau is also concerned that farmers who are already implementing sequestration strategies will be left out of compensation.

"It's like our sector has already run a marathon," she said.

Any programs put in place must be voluntary and incentive-based, Cooper said, and not place additional regulatory burden on producers.

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