It's a chilly morning to be on a boat off the Oregon coast. Sea spray clings to the beards of Nick Puhl and his father. It's perhaps an odd place to find a pair of cranberry farmers in the middle of the growing season, but they've chosen to take a much deserved fishing trip away from the constant demands of the family farm in Cape Blanco. It's been months since they've had this kind of time, but it's not as if all the work has stopped back on the farm.

It's time for their 75 acres of cranberry beds to be watered. Nick pulls a smartphone from his pocket, and with a few swipes, irrigation pumps located several miles inland rumble to life and sprinkle water onto his crops.

Conservation Service (NRCS), Cape Blanco Cranberries installed a new irrigation automation system that allows them to remotely control their sprinklers using an internet or radio connection.

"Most farmers and ranchers have little or no time to themselves and a lot to worry about," says Eric Moeggenberg, NRCS District Conservationist for Coos and Curry Counties. "Automated irrigation helps them save time, so they can be more productive on and off the farm and spend more time with family."

More than a Time Saver

But automated irrigation isn’t just about saving time for fishing trips. It’s a major step forward for conservation and crop production. In conventionally irrigated cranberry beds, a farmer must manually go to each pump house, which may be...
many miles apart, to turn on sprinklers. As a result, dispersed cranberry beds may get more or less water at suboptimal times of day depending on where they are located on the farm.

By contrast, automated systems can detect temperature fluctuations and water all, or only select beds, depending on real-time needs. This is especially important for sensitive crops such as cranberries. Despite being ideally suited for Cape Blanco’s climate, the berries are susceptible to sudden changes in temperature, especially frost. To prevent the berries from freezing, farmers must water them ahead of a frost event. Without an automated system, farmers must turn on their pumps earlier than necessary to have enough time to start all of their pumps before frost hits. An automated system, which can cycle water on and off as needed based on temperature readings, can reduce water and energy use by up to 50 percent.

“But cranberries, you might have a bed that needs 90 minutes of water, and another that needs 45 minutes, but with the old way of doing it, they both got 90 minutes,” says Nick. “Now, we can be more precise, and there’s a big water and energy savings in that.”

In the case of Cape Blanco Cranberries, there’s an added risk in the production cycle—time. The Puhls take advantage of the area’s mild climate to extend the cranberry growing season to grow from early spring all the way to Christmas. Keeping berries on the vine longer produces sweeter fruit, but also increases the amount of time for something to go wrong. Automated irrigation keeps plants healthier by exposing them to less stress, decreasing the potential for fruit rot, and ultimately increasing the pounds of cranberries harvested per acre.

“If you’re willing to put in the work to learn the technology, you can really increase your sustainability,” Nick says. “The equipment is expensive, but with NRCS’s help, we’re able to produce more fruit with less wear on our equipment, all while using less water and electricity.”

— Nick Puhl
Landowner
“This land has been in my family for over 100 years, and I’d like to see it in my family for a lot longer,” he adds.

**About the Irrigation Automation Strategy in Coos and Curry Counties**

NRCS, Coos and Curry County Soil and Water Conservation Districts and other partners are working to modernize cranberry and blueberry irrigation in Coos and Curry Counties. In 2010, a local working group including farmers identified water quality and quantity as the top natural resource concerns in the counties. By investing in irrigation systems using a three year conservation strategy, partners are helping local farmers realize more sustainable operations through more efficient use of water, reduced energy consumption and reduced labor.

Project funding was made available in October 2015 with the goal of improving irrigation on 520 acres of cranberries and blueberries. Today, the project is on target to exceed the original goal and will improve irrigation on up to 590 acres by the end of 2018. Cranberry beds along the South Coast produce 99 percent of Oregon’s cranberry crop, and this project will assist nearly 18 percent of cranberry growers in its target counties.

To learn more about this project and other conservation resources available in Coos and Curry Counties, contact the NRCS Coquille Service Center at 541-396-2841, Coos Soil and Water Conservation District at 541-396-6879, or Curry County Soil and Water Conservation District at 541-247-2755.

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**EFFIE’S CRANBERRY BREAD**

2 cups Flour  
1 cup sugar  
1 1/2 tsp. baking powder  
1 tsp. salt  
1 orange, juiced (add water to make 3/4 cup juice)  
1 tsp. grated orange rind  
1 egg, beaten  
2 T. oil or margarine  
1 cup chopped nuts  
1 cup Cape Blanco Cranberries

Preheat oven to 350 degrees. Mix dry ingredients in large bowl. Add juice, rind, egg, oil, nuts and cranberries. Mix just enough to make damp. Bake in greased loaf pan for 55-65 minutes.

Recipe courtesy of Cape Blanco Cranberries capeblancocranberries.com.