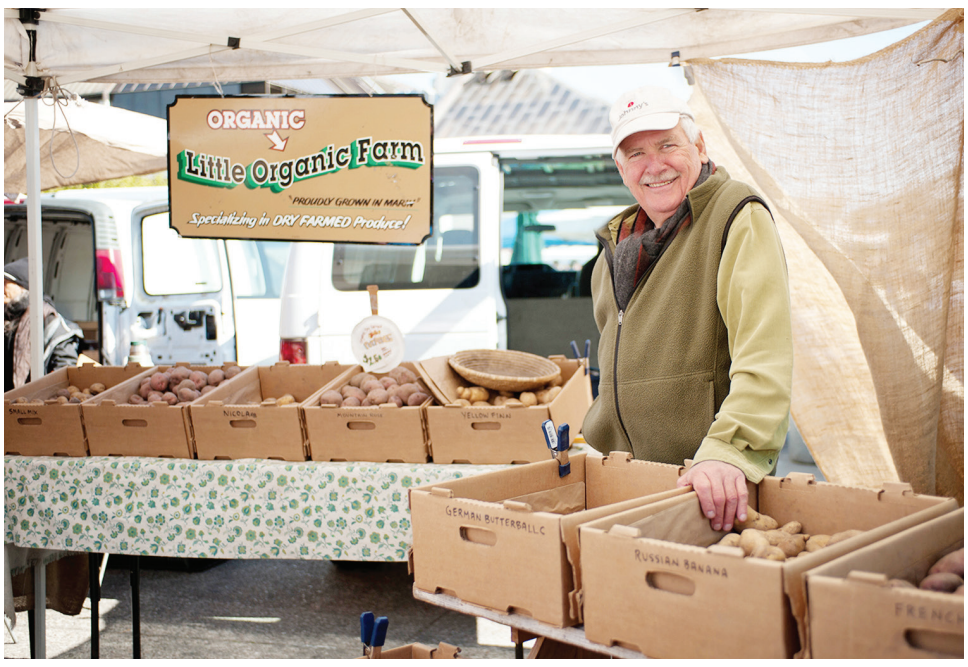


Gary Yost/CUESA

David Little, an organic farmer in Marin County, Calif., dry-farms 40 acres, most of which are planted to potatoes.

Old-school technique saves water on California farm

By JULIA HOLLISTER
For the Capital Press

PETALUMA, Calif. — Farmer David Little has two main reasons he dry-farms: it allows fewer weeds to take hold and it uses less water.

"I began dry-farming when I bought the property in 1995," he said. "Out of my 50 acres, about 30-40 acres are dry-farmed, and planted mostly to potatoes, winter squash, sunchokes (also known as Jerusalem artichokes) and tomatoes. All crops are organic."

For the few crops that are irrigated, he uses plastic tape that has holes every 8 inches like a soaker hose and only dispenses water around the plants so there is no excess.

All potatoes are dry-farmed. He uses an old-school tillage technique involving disking, plowing and compressing the soil, which serves to hold moisture from winter rains in the soil through late summer. This minimizes the need for irrigation, depending on the weather in a given year.

Little grows 20 varieties of potatoes including many with yellow, white, purple or red flesh. He says the yellow flesh potatoes are most popular. He also grows the popular fingerlings.

"Ferry Plaza Farmers Market shoppers are dazzled by the diversity of colorful and flavorful potato varieties at Little Organic Farm's stand, but David's championing of sustainable, dry-farming methods to conserve water by utilizing soil moisture is the deeper story, especially in times of climate change and drought," said Brie Mazurek, CUESA's communications director. CUESA is the acronym for the Center for Urban Education about Sustainable Agriculture and operates several farmers markets including the one at the ferry plaza.

"With David and his daughter, Caressa, the farm is truly a family operation, and their commitment to organic, sustainable stewardship is the foundation of their delicious dry-farmed produce."

In addition to CUESA's farmers markets, Little's organic produce is on the menu at high-end restaurants, from the French Laundry and Auberge de Soleil in Napa to Greens and Zuni in San Francisco.

The farm's coastal sandy loam is amended with compost to promote plant growth. Ground oyster shells provide a natural source of calcium that is essential for preventing tomato blossom end rot. Cover crops are planted to prevent soil erosion and to boost the soil's nitrogen content.

Little says it costs a lot of money to farm and water efficiency is more important today than it was 10 years ago.

"We are running out of water," he said. "It's already happening; a lot of farming is moving from Southern California to the north."

Yakama Nation uses three-pronged approach to water management

By DAVE LEDER
For the Capital Press

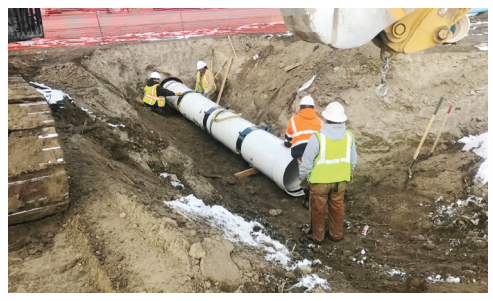
For the past 15 years, a team of Yakama Nation scientists and engineers has been working to remedy several long-term issues with the century-old Wapato Irrigation Project (WIP), which diverts roughly 650,000 acre-feet of water per year to farmers and landowners on the Central Washington reservation.

The tribe's work is far from done, but their efforts have been gaining momentum since 2019, when the WIP received authorization for $75 million as part of federal legislation for the Yakima Basin Integrated Plan.

With guidance from the Irrigation Training and Resource Center at California Polytechnic State University, the Yakama Nation and WIP have made significant progress on a plan to conserve 165,000 acre-feet of water per year throughout the 1.13-million-acre reservation. Combined with two other tribal initiatives, the Yakama Nation has enacted a three-pronged approach to water management.

The three interconnected projects — WIP modernization and conservation, managed aquifer recharge and Toppenish Creek restoration — are designed to help the tribe become more resilient to climate change and drought while also preserving cultural foods, improving in-stream flows and restoring fish habitats.

"Conservation is critical for the improvement of WIP, but we also need to plan for the changes that it will bring," said Danielle Squeochs, a Yakama Nation hydrogeologist and engineer who is leading the managed aquifer recharge portion of the project. "We know that conservation will likely reduce the amount of water recharging the aquifers, and that could be extremely detrimental if we don't plan for it."



Yakama Nation Engineering

A team of workers from the Yakama Nation upgrades the Wapato Irrigation Project infrastructure.

The tribe hopes to eventually procure an additional 50,000 acre-feet of water through the aquifer recharge effort, which will create more reserves to service ecosystem needs, in addition to providing more water to the WIP for irrigation and storage purposes.

"We're also trying to use the water for cultural foods, in-stream flows and to restore systems that have been altered," Squeochs said. "We could potentially use it for irrigated agriculture as well. But what's important to remember is that none of these three plans stands alone. They all complement one another, and they all have to be managed together."

State, federal funding helps Washington farmers convert to sprinkler irrigation

By DAVE LEDER
For the Capital Press

As water grows scarcer every year in Central Washington due to prolonged drought and a gradually changing climate, the Kittitas County Conservation District continues to make progress on its multi-year effort to help farmers transition from rill irrigation to sprinkler irrigation systems.

With funding from the Regional Conservation Partnership Program over the past five years, District Manager Anna Lael and her team have managed to help farmers in and around Ellensburg, Wash., improve their water efficiency from 50-60% with rill irrigation to 75-85% with sprinklers.

"More farmers are realizing that they can make the water they have go further when they use sprinklers," Lael said. "And, nowadays, that is especially important in districts that have junior water rights because they're the ones who get cut off when there's a shortage."

She explained that when an agricultural water shortage occurs in the region, hay producers in the Kittitas Reclamation District, for example, don't receive their expected water allocations to maintain their crops. These sudden shortages limit crop volumes, which inevitably leads to lost revenue.

"Sprinklers allow them to be more resilient in drought years," Lael said. "Farmers have been seeing the benefits of switching to sprinklers because they help conserve water, and they aren't as labor-intensive as rill irrigation systems."

The RCCP is funded by the USDA's Natural Resources Conservation Service, which collaborates with farmers, ranchers, communities and other groups to protect natural resources on private lands.

The Washington Department of Ecology also has been instrumental in the KCCD's work, providing $1 million for sprinkler conversions, while the Washington State Conservation Commission has contributed an additional $1.6 million.