

NAVAJO AGRICULTURAL PRODUCTS INDUSTRY

Elevation:

- 5,300' to 5,800'

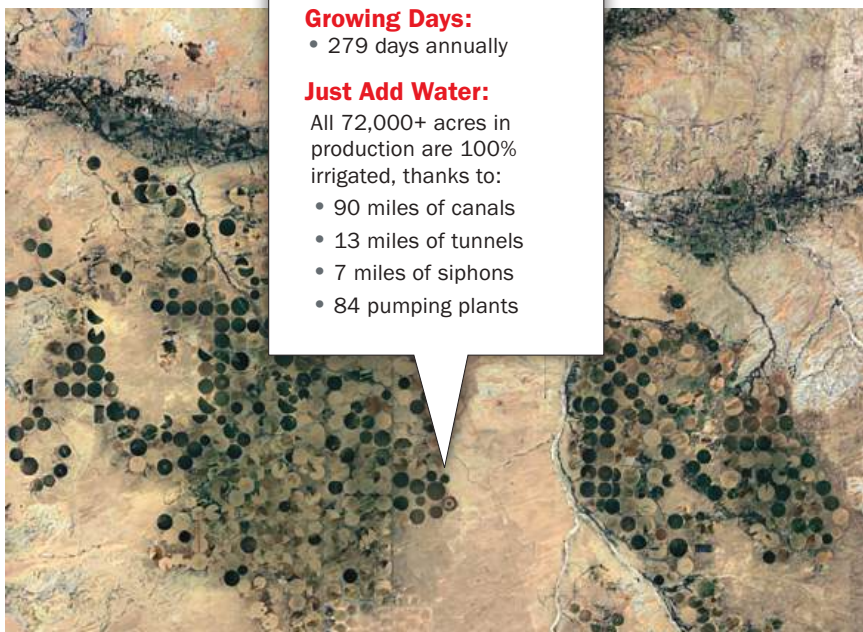
Growing Days:

- 279 days annually

Just Add Water:

All 72,000+ acres in production are 100% irrigated, thanks to:

- 90 miles of canals
- 13 miles of tunnels
- 7 miles of siphons
- 84 pumping plants



FEEDING A NATION AND BEYOND

For over 50 years, the Navajo Nation has run the largest contiguous irrigated farmland in the U.S.

By Deborah Huso

THE HIGH DESERT OF NORTHWEST NEW MEXICO MIGHT SEEM AN UNLIKELY

place for a large-scale commercial farming operation. The region receives only about 20" of annual precipitation. However, at an elevation of 5,300' to 5,800' with 279 often sun-filled growing days a year and naturally near neutral-pH soil, it offers the perfect environment for year-round production of many crops. All one has to do is add water.

That's exactly what Navajo Agricultural Products Industry (NAPI), the country's largest contiguous, irrigated farmland operation, is doing. Located on the Navajo Nation, the largest Native American reservation in the U.S., it occupies 275,876 acres. More than 72,000 of those are in active production in northwest New Mexico near Farmington.

Established by the Navajo Nation Council as a Navajo-Owned Enterprise to generate employment opportunities for tribe members and develop a profitable agribusiness,

NAPI has been operational since 1970. In the past 55 years, NAPI's initial mission of employing and feeding the Navajo people remains unchanged, but the operation, which has been GlobalG.A.P.-certified since 2001, sells to customers around the world, including Walmart, Bueno Foods, Whole Foods and Frito-Lay.

IRRIGATING THE HIGH DESERT

Aaron Benally has been involved in farmland operations on the Navajo Nation, which occupies 27,000 sq. mi. across Arizona, New Mexico and Utah, for more than 40 years. He began his career as a laborer, but now serves as NAPI's potato crop manager.

"I love what I do and helping my own people," he says.

Critical to that mission of food and economic security is water.

NAPI's farmland operations are 100% irrigated.

"Our water quality is the most pristine of any coming off the Upper Colorado River Basin," says Preston Toehe, NAPI engineering technician.

Navajo Lake, built between 1958 and 1963, serves as the principal stor-

age for the Navajo Indian Irrigation Project (NIIP). President John F. Kennedy signed NIIP into law in 1962, as partial satisfaction of the Navajo Nation's treaty and water rights, dating as far back as 1868.

NAPI has an allowable diversion from Navajo Lake of 508,000 acre-feet of water, which travels to NAPI's farm operations via 90 miles of canals, 13 miles of tunnels, 7 miles of siphons and with the help of 84 pumping plants. The farm's nearly 700 pivot irrigation systems are all remotely monitored and controlled. The federally funded NIIP remains incomplete, however, and stands at about 72% buildout. Its future will be dependent on receiving continued federal funding.

GROWING FOR BETTER HEALTH

"The point is economic stability for the Navajo Nation," explains Sky Hayes, specialty crop manager of NAPI's organic foods program, which produces USDA organic-certified melons, squash, pumpkins, chiles, wheat and corn. While NAPI sells some of that organic produce locally,

the farm also has contracts with the Navajo Nation, Whole Foods, Natural Grocers and other grocers in New Mexico, Colorado and even some as far as Pennsylvania.

Hayes says NAPI started the organics operation to address health concerns on the Navajo Nation where nearly half the adult population has Type 2 diabetes or prediabetes.

"Newer generations are really looking at what they're eating" he says. "Greens are especially popular."

Two years ago, NAPI started growing Huckleberry Gold low-glycemic potatoes and is currently working with New Mexico State University to perform testing that would eventually allow the farm to market the potatoes as low-GI.

"We brought back the low-GI potato to provide a healthy food staple to the Navajo people," Hayes says.

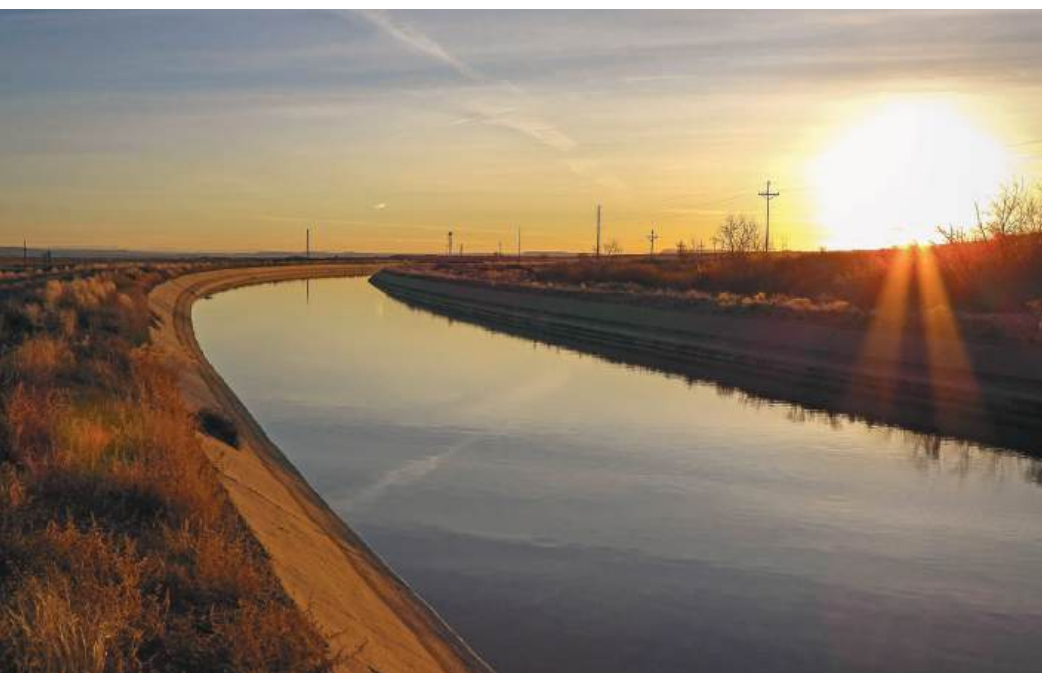
"There has been a lot of research on Huckleberry Gold potatoes, but farmers struggle to get certification," he adds. "NAPI has an advantage there. I don't know of any farmers growing that kind of potato." He expects the testing and certification process to take another three years.

FILLING THE NATIVE FOODS GAP

Meanwhile, NAPI produces an array of value-added native food products — 80% of which are sold directly to Navajo consumers. Among those native foods is traditional corn. NAPI cultivates more than 400 acres of it in a typical year.

Other native foods the farm produces, processes and packages on-site are sumac; Navajo tea; blue, white and yellow cornmeal; blue corn pancake mix and Navajo fry-bread mix.

A lifeline in the desert — one of NAPI's 90 miles of canals channels pristine water from Navajo Lake to irrigate thousands of acres of farmland across the high desert.





Raising Staple Dryland Crops

NAPI's bread and butter crops are alfalfa, corn, pinto beans, potatoes and small grains.

In a typical year, the farm plants more than 19,000 acres of alfalfa, 10,000 acres of feed corn and 3,500 acres in winter wheat. NAPI's No. 2 corn is traded on the Chicago Board of Trade, and both feed corn and wheat go to Purina, New Mexico, dairies and hog feedlots. Flour is also sold under the Navajo Pride brand through wholesale and direct-to-consumer sales.

NAPI also has nearly 6,000 acres of pinto beans in production. Beans are triple cleaned, packaged in an on-site processing plant and shipped nationwide and internationally. Mexico receives 75% of the crop each year, and the rest mostly stays in California and New Mexico — appearing as featured items on restaurant menus in Farmington and Albuquerque.

"We have the best pinto beans in the world," says Aaron Benally, NAPI's potato crop manager.

NAPI has also been growing potatoes since the early 1980s, when Benally first joined the farm as a laborer.

At one point, NAPI had 2,700 acres in potatoes, though its production has declined dramatically. Last year, the farm saw its lowest historic potato yield due to poor weather conditions. NAPI also leases farmland to Navajo Mesa, which sells the chipper potatoes it produces on the Navajo Nation to Frito-Lay.

In addition to its conventional potato crop, NAPI produces USDA organic-certified potatoes, which it sells to local retail stores and Natural Grocers. All those potatoes are hand washed and hand packaged at the farm's fresh-pack facility. "It's labor-intensive," says Vincent Cowboy, NAPI's sales and marketing manager, but he hopes the farm will eventually produce and sell organic potatoes on the same scale as their conventional crop.

"Being an enterprise of the Navajo Nation, we want to carry on the tradition of Navajo farming and provide food for future generations," Hayes explains. "Farming on the Navajo Nation has decreased the last 15 years." That's largely due to increasingly insufficient access to water on the reservation, which has become a major issue for local dryland farmers.

"The reservoirs have dried up," Benally adds. "We're all affected by climate change."

WORKING FOR THE PEOPLE

NAPI contends with the unique challenge of operating a commercial farm under two government jurisdictions — that of the Navajo Nation as well as the U.S. government. But Hayes

says at the end of the day, it's not going to be the government or even the weather that will determine the farm's success so much as water: "That's the farm's lifeline."

Along with its people.

NAPI employs around 300 full-time staff. Ninety-eight percent of the farm's workforce is Navajo, and a third of employees are women. Like many commercial operations around the country, NAPI often struggles to find and retain employees.

"The willingness of people to work in the ag industry has been declining," Hayes says. "People want an 8 a.m. to 5 p.m. indoor job, and we're seeing a decrease in participation — even among our own people."

And while NAPI is one of the larg-

est industries located in the Four Corners region of the Southwest, it's competing with the higher-margin oil and gas industry for workers,

"Energy companies can pay twice as much," Toehe says.

On the downside, however, energy employment is subject to travel and frequent boom and bust cycles.

"People who want a stable job are going to stay with us," Toehe explains. "NAPI has the backing of the Navajo Nation to keep it going into the next generation."

"I could have gone to work in the mines," says NAPI veteran Benally. "But this is a good place to work for people who don't have a higher education degree and are willing to work hard and move up the ladder." **TP**