

Idaho's AG defends state's handling of flood control issue

By SEAN ELLIS
Capital Press

BOISE — In a letter to 11 Treasure Valley lawmakers, Idaho Attorney General Lawrence Wasden defended the state's handling of the controversial issue of how flood control releases are accounted for on the Boise River system.

Responding to claims made in a Nov. 13 letter from five state senators and six representatives, Wasden said his office and the Idaho Department of Water Resources are "not engaged in 'reckless and unfounded attacks' on" the water rights of Treasure Valley water users.

Those legislators who received Wasden's Dec. 8 letter side with Treasure Valley water users who have been at odds with the IDWR and AG's office over how flood control releases are accounted for.

The irrigators say water released from Boise River system reservoirs for flood control should not count against their storage rights, while the state says it does.

Wasden defended IDWR Director Gary Spackman's handling of the issue. Spackman ruled in October that flood control releases should count against reservoir storage rights.

His ruling was contrary to a decision by a special master of the Snake River Basin Adjudication court six days earlier. Irrigators claim Spackman's ruling is trumped by the district court decision.

The letter from lawmakers said Spackman's ruling was biased and predetermined.

Wasden said Spackman is charged by law with distributing water in accordance with the state's prior appropriation doctrine.

"Part and parcel of this duty is determining when the Boise River storage water rights are satisfied," he wrote. "Thus, rather than engaging in an attack on the Treasure

Valley water users' storage rights, Director Spackman is fulfilling his statutory duty."

Sen. Jim Rice, R-Caldwell, one of the lawmakers who received Wasden's letter, said the IDWR director is not simply performing his statutory duties.

"The statutory duty of the director of the (IDWR) is not to take away people's water rights," said Rice, chairman of the Senate Agricultural Affairs Committee.

"Trying to change how all this works ... is not his statutory duty. It is an attack on Treasure Valley water rights," he said.

Rice and other Treasure

Valley irrigators defended their Nov. 13 letter's call for the AG's office and IDWR to "cease their coordinated attacks on Treasure Valley storage rights."

"You can't leave irrigators the choice of having their water or avoiding flooding the cities of the Boise River valley," Rice said. "The path to a solution is very, very clear but that means the director gets told he can't do what he's trying to do."

Some of Idaho's other water districts, including Water District 1, the state's largest, have sided with the IDWR on this issue.

Ron Shurtleff, watermaster

for the Payette River system, said he's in complete alignment with the IDWR's stance.

"I ... determined early in this issue (that) the department has gotten it right," he said. "I admire Director Spackman and his staff for holding tight to their conviction."

Sen. Grant Burgoyne, D-Boise, stood by legislators' Nov. 13 letter and said lawmakers need to weigh in on the issue of how much discretion the IDWR director has to determine when a water right is fulfilled.

"The legislature ... must address this policy question of how much discretion the director has," he said.

Author, scientist inspired by Martian spud research

By JOHN O'CONNELL
Capital Press

IDAHO FALLS, Idaho — As a retired potato seed pathologist who also writes science fiction novels, Phil Nolte will pay close attention when NASA and the International Potato Center seek to prove the plausibility of growing potatoes on Mars.

The experiment could help validate a central theme in one of Nolte's favorite books, "The Martian," by Andy Weir, which brought the concept of raising spuds on the Red Planet to the world's consciousness.

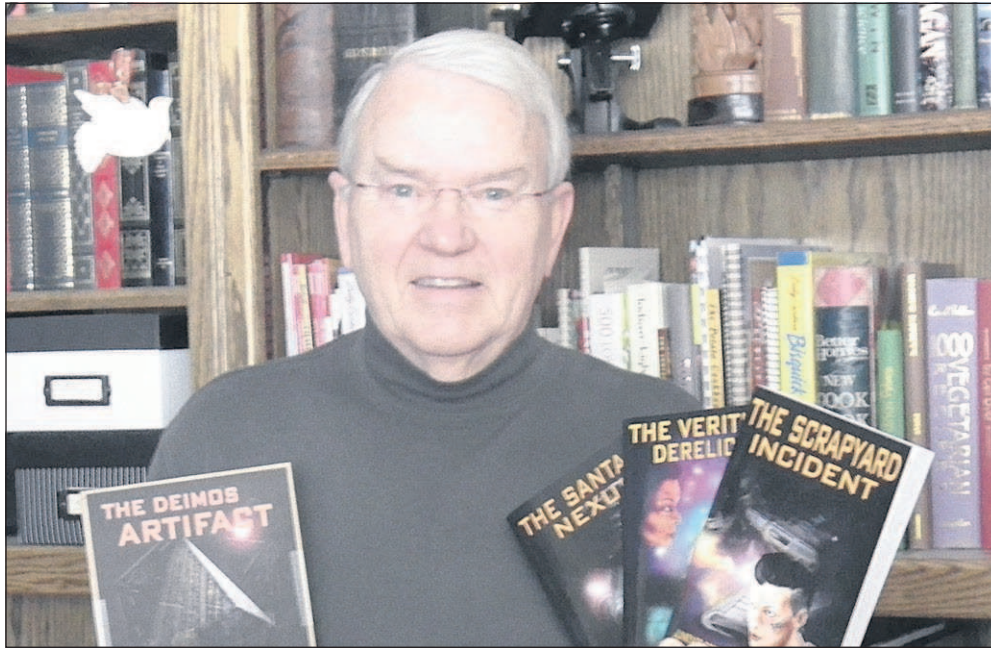
Nolte, who retired in early 2015 from University of Idaho and released his fourth novel, "The Deimos Artifact," on Dec. 15, understands authors must sometimes stretch the truth for the sake of a good story. With a few plot tweaks, Nolte believes the crop production system described in "The Martian," now a major motion picture, could be made "good enough."

Stretching the truth, however, won't be an option when a team of scientists seeks to raise potatoes in Peru, in conditions simulating the growing environment of a hypothetical climate-controlled dome on Mars.

Without artistic license at their disposal, Nolte has no idea if the simulation will succeed, but he sees value in the effort.

"I'm one of those people who at least hopes we manage to colonize other places besides just the planet we're on now," Nolte said. "A first step to try to make things like that happen is to try to create environments like this and see how your food source would do."

Nolte said sunlight would have to travel much farther to reach spuds on Mars, and researchers will have to find contingencies for extreme



File photo

Phil Nolte, a retired potato seed pathologist who writes science fiction novels, speaks prior to his retirement from University of Idaho during a tour of potato research plots at the UI's Aberdeen Research and Extension Center. Nolte has offered an assessment of the science behind potato production on Mars included in the book and movie "The Martian," and is intrigued by proposed research to test potato production in a simulated Martian environment.

temperature fluctuations.

According to a press release, the joint research project aims to "raise awareness of the incredible resilience of potatoes" and should demonstrate that farming is possible in the most challenging of environments on Earth. The researchers also believe the project will provide valuable insight into production possibilities in the face of climate change.

Soil from the Pampas de La Joya Desert in Peru will be used to simulate Martian dirt, and the atmosphere will be manipulated in a laboratory to have 95 percent carbon dioxide, as on Mars.

"We need people to understand that if we can grow potatoes in extreme conditions like those on Mars, we can save lives on Earth," Joel Ranck, an International Potato Center spokesman, said in the press release.

In Weir's story, stranded NASA astronaut Mark Watney

plants spuds, originally packed for a holiday meal, using his own excrement as fertilizer.

Nolte's major criticism of the science in the book is that spuds would either have to be treated with a sprout inhibitor, which would hinder growth, or they would break dormancy much too soon during the roughly 10-month journey to Mars. Furthermore, Watney immediately replanted the seed tubers he raised, though Nolte notes potato seed requires a dormancy period before sprouting.

To fix the discrepancies, Nolte suggests the author could have explained the presence of the potatoes as part of a science experiment, perhaps proposed by a major chemical manufacturer testing a new sprout inhibitor. Watney could then break dormancy in both the initial seed supply and the seed saved for replanting with a chemical included for the company's experiment.

Nolte noted seed potato

certification programs in Idaho and other major spud states use chemicals, such as gibberilic acid or rindite, to induce sprouting of seeds harvested during fall and planted shortly thereafter in winter trial plots in warmer climates. Nolte has also read reviews by critics who doubt Watney could have produced enough "fertilizer."

However, Nolte approves of the author's choice of using a potato as the astronaut's staple food.

"The potato is short a couple of amino acids from being a perfect food," Nolte said, noting researchers tried several years ago to introduce those missing amino acids to the potato through biotechnology.

Nolte acknowledges he may be nitpicking, but he believes attention to detail is the key to helping readers suspend their disbelief. He's sold roughly 13,000 copies of his first three space odysseys. Coincidentally, his latest book is named after a moon of Mars.

Producers and rural landowners can tap federal conservation grant funding

By ERIC MORTENSON
Capital Press

Oregon farmers, ranchers and other rural landowners can apply for federal money intended to help reduce wildfire threat, update irrigation systems, take care of rangeland and improve private woodlands, wildlife habitat and stream flows.

Grants are available through the USDA's Natural Resources Conservation Service. Filing deadlines are Jan. 15. Local NRCS service centers have more information, or applicants can visit www.or.nrcs.usda.gov for more information.

The funding, which comes from the 2014 Farm Bill, is part of an NRCS effort to target and apply a quick money fix to specific areas. In Eastern Oregon, for example, multiple grants are available for work in Union County, neighboring Baker County and the Grande Ronde River region. Wasco County, in the Columbia River Gorge, is another focus area.

Federal agencies spent \$705,000 in 2015 and about \$1.3 million in 2014 for pre-commercial thinning and other fire hazard reduction work as part of its ongoing East Face of the Elkhorn Mountains project in Union and Baker counties.

That money came from the "Joint Chiefs Landscape Initiative" from NRCS and the U.S. Forest Service, and the Elkhorns between La Grande and Baker City were among 13 sites chosen nationally for the work. The Ashland watershed in Southwest Oregon also was selected for the program.

With destructive wildfires of recent years in mind, La Grande NRCS District Conservationist Mike Burton said private landowners were quick to sign on.

"It hasn't been a tough sell at all," he said.

More money is available this year, as the agencies continue a three- to five-year project along 20 miles of shared boundary between private land, state land and the Wallowa-Whitman National Forest. The filing deadline is Jan. 15; another round of funding will come with an April 15 application. The past two years, NRCS funding helped landowners reduce the fire fuel load on more than 4,700 acres. The grant program pays half the cost.

In Ashland, agencies have spent \$2.3 million for thinning and slash removal on private, non-industrial forest lands. Funding is available in 2016 as well, and the same filing deadlines apply.

Other grant opportunities include:

- \$250,000 to help Union County farmers improve irrigation systems and reduce water use.

- \$375,000 for private woodland owners in Union County to reduce fire risk by pre-commercial thinning or slash disposal.

- \$290,000 for Union County ranchers improve range and forest health by changing livestock grazing and management practices in the Upper Grande Ronde.

- Wasco County farmers in the White River and Tygh Creek watersheds can apply for money intended to increase irrigation efficiency, stream flows and salmon habitat. Funding will pay for removing six barriers that block fish passage, installing irrigation pipes and sprinkler systems, and building structures for water control and wells. The idea is to conserve 7,300 acre-feet of water annually by making systems more efficient, and to restore stream flows in about 22 miles of the river and creek. The filing deadline is Jan. 15.

Oregon State University students form a cattlegirls club

By ERIC MORTENSON
Capital Press

Women studying agriculture at Oregon State University have out-numbered men since 1998, and now they have another avenue to find their footing in the industry.

Students Bailey Jenks and Jena Ozenna went through the university process to form the OSU Collegiate Cattlegirls club. Officially recognized by the university in November, the club has 15 members and

hopes to double membership in 2016, Jenks said.

Jenks, a junior from Northern California with a keen interest in ag communication, said she and Ozenna, the club president, wanted to highlight women's involvement in the cattle industry. The club is affiliated with the Oregon Cattlegirls.

Jenks said men dominate the beef cattle industry but women's voices are emerging in it as in other sectors of ag-

riculture. The club is intended to introduce female students to the industry and help them gain professional skills, contacts and experience that will help them succeed in the business.

"Now women are having a louder voice in the industry, and maybe we bring a little bit different perspective," Jenks said. OSU already has a cattlemen's club, she said, and the two clubs hope to work together on such things as

professional development and industry tours. Jenks said people seeking more information may visit the OSU Collegiate Cattlegirls' Facebook page.

Women's enrollment at OSU's College of Agricultural Sciences has been on the rise for the past couple decades, and women students have outnumbered men every year since 1998. As of fall term 2015, they made up 58 percent of ag students at

OSU, according to statistics furnished by Penny Diebel, assistant dean of academic programs for the College of Agricultural Sciences. The university counted 1,319 female undergrads and 218 female graduate students, compared to 894 male undergrads and 179 male graduate students.

The highest percentages of female students, well over 50 percent in each category, are in the fisheries and wildlife,

botany and plant pathology, ag education and environmental and molecular toxicology programs, according to OSU enrollment statistics.

Women account for 86 percent of students in the animal and rangeland sciences program, but Diebel said that's probably because it is one of the options for entering OSU's College of Veterinary Medicine. Of the vet school's 230 students, 194 are women, or 84 percent.

Oregon Food Bank credits farmers with contribution surge

By ERIC MORTENSON
Capital Press

PORTLAND — Hunger in Oregon is leveling off thanks in part to a growing collaboration with the state's farmers and their donations of surplus fruit and produce, the Oregon Food Bank's chief executive said.

That's not to say the problem is solved. Food Bank CEO Susannah Morgan said 800,000 people in Oregon and Southwest Washington, one-in-five residents, go hungry at times.

"If this was a disease we would call it an epidemic," Morgan said. "This is a crisis."

But for now the hunger numbers don't appear to be increasing, Morgan said in speech this month to the Oregon Board of Agriculture. The board toured the Food Bank's operations in Portland and helped pack some food for distribution.

In her speech to the board and in a followup interview, Morgan said Oregon's farmers have greatly increased their contributions of fresh fruit and produce. The Oregon Food Bank and others nationally primarily received and distributed canned and boxed food in the past, but the state organization set a goal of increasing vegetable and fruit distribution by 50 percent

over multiple years.

Instead, with farmers pouring in an additional 2 million pounds of potatoes, carrots, onions, pears, apples and other crops, the Food Bank blew that goal out of the water in one year, Morgan said.

The Food Bank takes in produce that is surplus, blemished or otherwise not suitable for commercial markets. Food is distributed through a network of four bank branches and 17 independent regional food banks serving Oregon and Clark County, Washington.

While the food bank can't afford to pay farmers much for food — or anything in many cases — state and fed-

eral legislation now encourage crop donation.

The 2014 Oregon Legislature passed a law giving farmers a 15 percent tax credit on the wholesale price of their donation. As part of a federal spending bill passed in mid-December, Congress permanently extended an enhanced tax deduction for charitable contributions of food by businesses.

Morgan said the possibility of no one in the region missing a meal is "doable in my lifetime."

"It's partly in our grasp because of our new and growing relationship with farmers," she said.

In her talk to the ag board,

Morgan said low income is the single biggest reason people ask for food assistance. About 72 percent of recipients live at or below the federal poverty line. More than a third of them are retired or disabled.

"Hunger hurts the most vulnerable," Morgan told the ag board. She said 52 percent of recipient households have children, 20 percent are elderly and 20 percent have a veteran in the household makeup.

"This is the population that we continue to try and serve," Morgan said. "Hunger remains a steady, persistent and excruciating large problem in our state and in our region."



Eric Mortenson/Capital Press

Susannah Morgan, CEO of the Oregon Food Bank, delivered her first "State of Hunger" address to the Oregon Board of Agriculture in mid-December.