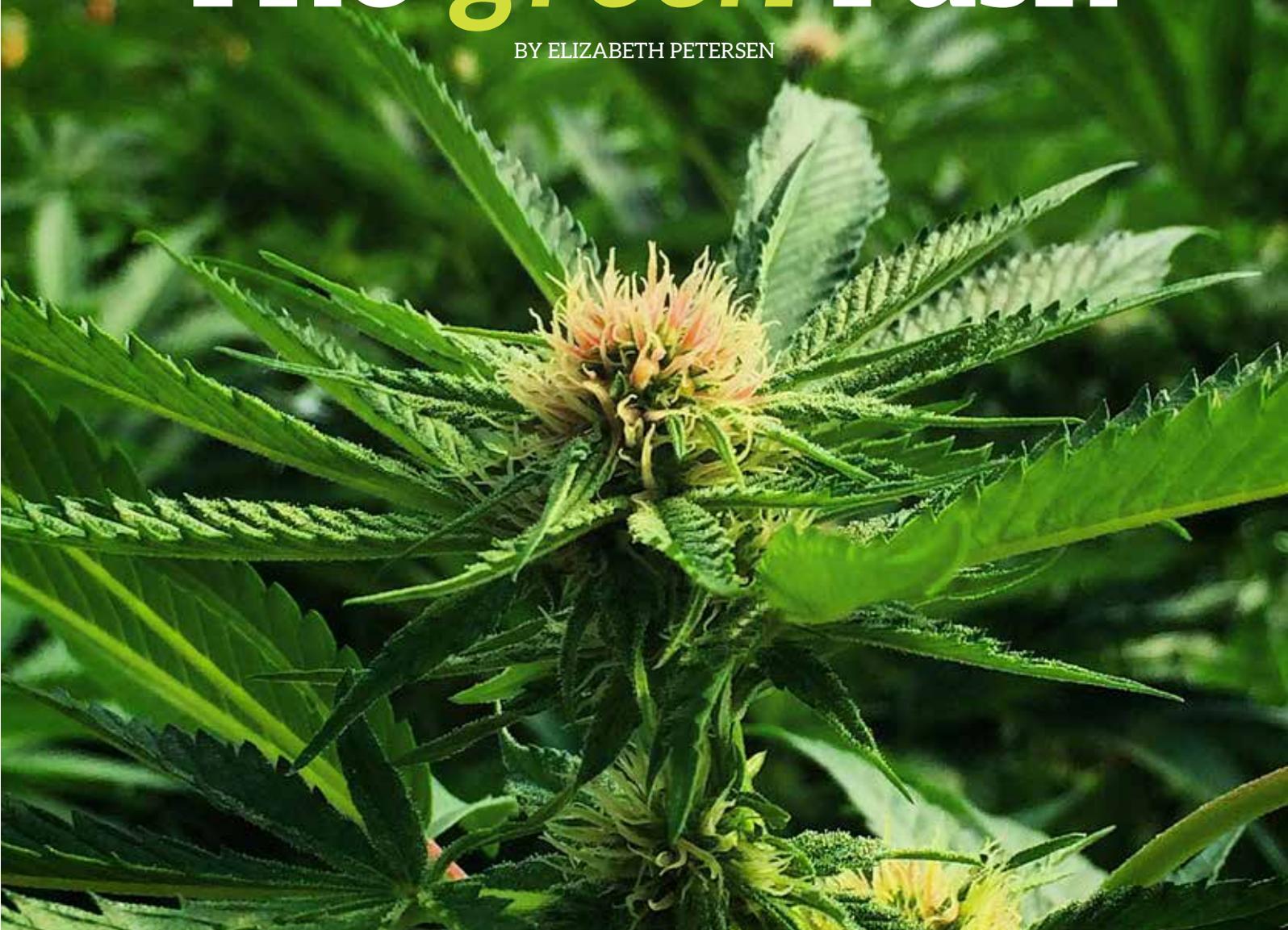


The *green* rush

BY ELIZABETH PETERSEN



Above: Sofresh Farms in Canby, Oregon, is ahead of the pack among many cannabis growing operations. The grower has been verified by Clean Green Certified, one of the only third-party certifiers to hold cannabis farmers to national and international organic standards.

PHOTO COURTESY OF SOFRESH FARMS

In 2014, Oregon voters legalized cannabis for recreational use, with grower permits becoming available in early 2016. It's a big change not only for law enforcement, but also Oregon agriculture — which may be the pre-existing economic sector best equipped to grow the crop well.

“Are we in flux? Gosh, yes,” said Oregon Rep. Ann Lininger (D-Lake Oswego), chair of the Joint House Committee on Marijuana

Legalization. Lininger and other panelists discussed the impact of cannabis legalization on Oregon’s nursery industry at the annual OAN Convention in November.

Many details still need to be worked out, she said, but the new recreational marijuana market looks like an extremely valuable opportunity for Oregon.

“We need more ways for people to earn a good living from the land,” Lininger said, noting that the new market will generate jobs and revenue for Oregonians. She estimated an annual value of \$1 billion for the new market, which is almost on par with the economic value of the current nursery industry.

The state stands to benefit from about **»**

The Green Rush

\$10.7 million in tax revenue for the 2015–2017 biennium too, according to OLCC estimates.

Not so fast

As a previously forbidden crop transitions into a legitimate horticultural business, the various types of “ganjapreneurs” in the budding industry — growers, processors, wholesalers, labs, retailers and researchers — will need licenses.

- **Producers** will be permitted to plant, cultivate, grow, harvest and dry marijuana.
- **Processors** will be able to sort, compound or convert marijuana into cannabinoid products, concentrates and/or extracts.
- **Labs** licensed by the Oregon Environmental Laboratory Accreditation Program will test for pesticides, solvents or residual solvents, as well as the concentration of active ingredients [tetrahydrocannabinol (THC) and cannabidiol (CBD)], and for microbiological or other contaminants.
- **Retailers** will sell or deliver marijuana to consumers.
- **Researchers** will be able to study marijuana to benefit the state’s cannabis industry, medical research, or public health and safety.

What all this means to Oregon’s horticultural industry is uncertain, but growers have to weigh the stigma associated with cannabis — especially the attitudes of customers in other states, who may strongly oppose cannabis legalization.

“Wherever you were on the issue, though, it’s legal now,” Lininger said.

She stressed how important it is that the state manage this new green industry carefully and correctly. For instance, people need to know what they are buying and consuming, Lininger said. Labs need to be properly regulated, and consumers need to know products are free of molds, pesticides and bacteria.

“If we legalize cannabis and regulate it, take cartels out of the picture, take

poaching on public land off the table, and spend money on prevention and recovery services so kids don’t get involved with marijuana, this could be a decent play for Oregon,” Lininger said. “Why not let Oregon businesses be at the forefront of solving problems associated with legal recreational marijuana?”

Understanding the rules

Like Oregon’s thriving wine, micro-brew and spirits producers, the recreational marijuana market will be regulated by state agencies, so potential canna-businesses need to know the rules.



To explain the regulatory environment for agriculture in Oregon, the OAN and Oregon Farm Bureau hosted informational Cannabis Rules Workshops in October 2015. These workshops brought together agencies that govern health, land use, the environment, energy, water and commerce to help prospective marijuana businesses understand production agriculture in Oregon. More than 1,000 people attended the workshops.

“What we saw was a lot of folks with naiveté about what Oregon commercial ag production looks like, and what folks have to comply with,” said Steve Shropshire of Jordan Ramis P.C., which has provided legal counsel for the OAN for 15 years.

An assortment of people attended the workshops: some had lumberjack beards, others wore business attire, some drove Porsches and others pickup trucks.

“Lots of money is coming into the state, akin to when the wine industry came to Oregon,” Shropshire said. “People from other states are bringing with them really big amounts of money and a varying degree of sophistication.”

The workshops used broad strokes to highlight rules affecting agricultural businesses. They proved useful, since some attendees did not know that land use laws can restrict what owners can do and how they do it, Shropshire said. Some attendees did not understand that legal commercial crops require water rights.

Since the passage of Measure 91 (Control, Regulation and Taxation of Marijuana and Industrial Hemp Act), rules governing all aspects of cannabis businesses have been compiled into the new “Business Readiness Guidebook for Oregon Recreational Marijuana Operations.” Developed with input from 15 state agencies, the guidebook lists contacts and tries to answer questions about general agricultural practices and about growing marijuana specifically.

Meanwhile, the governing bodies of some Oregon cities and counties moved to prohibit recreational marijuana businesses in their jurisdictions altogether. The opt-out option applied to cities and counties in Oregon where 55 percent or more of votes were cast against the measure that legalized marijuana businesses. The deadline to opt out was December 27, 2015, and by mid-December, more than 60 jurisdictions had done so.

Elsewhere in the state, local prohibition can also be implemented, but prohibition must be referred to voters again during the next general election. Until then, marijuana facilities in those jurisdictions will be banned.

Who’s in charge?

The Oregon Liquor Control Commission was assigned authority to license and regulate commercial recreation-

al marijuana operations, and to adopt rules for packaging and advertising. New businesses must comply also with a whole host of land use and water rights rules.

Applications for licenses, which were available online on Jan. 4, 2016, are expected to take several months to process. Applicants also need to submit a Land Use Compatibility Statement with their applications.

The Oregon Health Authority had until November 15 to finalize a set of temporary rules for pesticide training, for certifying labs and for labeling, serving sizes and dosage.

Public health toxicologist David Farrer said that rules addressing contaminants have been in a state of flux. What types of contaminants should be tested for? Who will do the testing? What should the thresholds and limits be?

Rules vary depending on the type of product. For instance, cannabis products for use on the skin or hair have different limits than do cannabis concentrates and extracts, which also have limits different from those of cannabis flowers and edibles. All products will be required to be tested by accredited private and commercial labs for pesticides, solvents, microbiologicals, water content and active compounds.

Designed to protect the health of recreational and medical marijuana consumers, final rules that detail how crops will be packaged, tested and tracked will take effect in June 2016.

“Every product that you purchase on the shelf you could trace back to the batch that was tested for pesticide,” Farrer was quoted as saying in a recent article published in *The Oregonian* newspaper (Portland, Oregon). “That is a tremendous amount of assurance that doesn’t exist for any other agricultural product.”

In terms of energy, indoor grow operations require a lot, according to Marty Snipe of the Oregon Department of Energy. Grow operations need intensive systems of lights, fans, heaters, air conditioners, pumps and controls to satisfy crop requirements.

Light is particularly important and

demanding of energy, Snipe said.

A typical grow cycle requires 30 days of 24-hour-a-day light followed by 60 days of 12-hour-a-day light. With the potential for four harvests a year, a 1,000-square-foot grow operation could use \$12,000 in electricity per year.

New LED options offer increased production and quality, but with the wide range of systems available, it is hard to define best practices this early in the game, Snipe said.

The Department of Environmental Quality will regulate cannabis operations by coordinating with other agencies and local governments to enforce existing regulations on air emissions and disposal of solid waste, including composting large quantities of vegetative materials. Rules also control hazardous wastes — both ignitable products, such as solvents, and toxic substances, such as pesticides and mercury contained in some lamps.

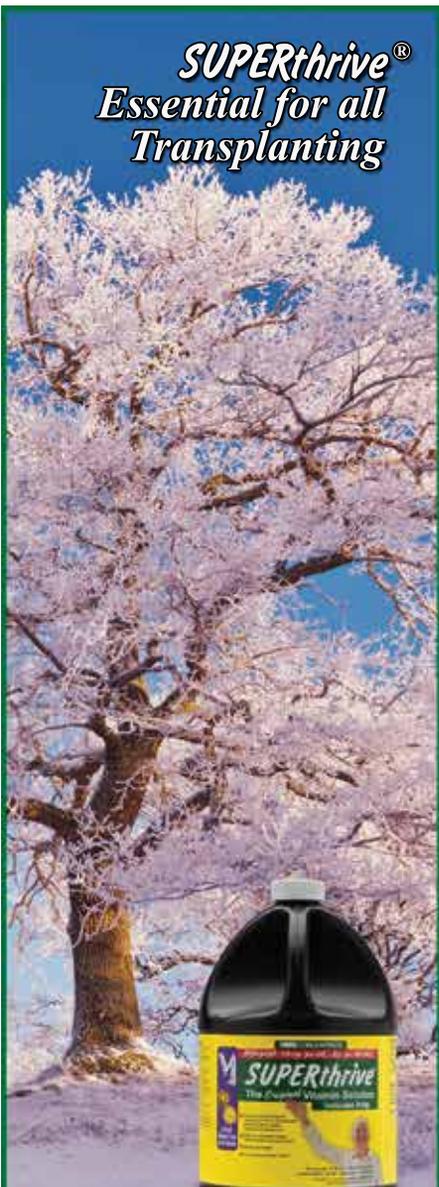
The Oregon Department of Agriculture, which already manages some 250 agricultural commodities that account for about 15 percent of Oregon’s economy, will license and inspect scales used for commercial transactions. It will also guide the responsible use of pesticides; license food establishments; and manage water quality, pest and disease controls for the cannabis industry.

Water rights and irrigation questions will fall to the Oregon Water Resources Department (OWRD). By law, all water in Oregon belongs to the public, so water users need permits or licenses to use water from most sources, including wells (groundwater) and streams or lakes (surface water).

Demand can exceed available water, though, and allotments are dictated by the Water Code that went into effect in 1909 and by a 1955 rule that put groundwater use on par with surface water use.

Water rights are complicated and specific to the source of the water, the place and type of use, the amount, point of diversion and timing of the use. Older water rights take priority when a shortage exists, and on many Oregon streams, no new water rights are being issued, so

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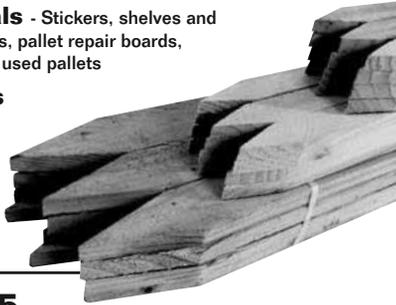
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existing water rights are very valuable.

“The watermaster has a big job,” Doug Woodcock, administrator of the OWRD field services division, said. Even having a water right doesn’t guarantee that water will be available if there is a shortage. “Know your water rights,” he said. “This year, rights are being regulated that have never been before.”

The Department of Revenue will handle collection of taxes on sales starting January 4, 2016. The legislature set the base tax rate at 17 percent, but cities and counties can add up to 3 percent more.

Cautious optimism

OAN Executive Director Jeff Stone said that interest in recreational cannabis is strong, but that to succeed, entrepreneurs are going to need experience in growing and in business. “Lots will try, and lots will fail,” Stone predicted.

Part of the challenge is that cannabis remains illegal at the federal level, which impacts everything from banking to pesticide use.

As Oregon growers consider whether and how they are going to engage the new marijuana market, their curiosity about cannabis as a plant, how to breed for particular characteristics, and even the possibility of tissue culture are being discussed.

“There isn’t a plant out there that can be used more in its entirety than cannabis,” said one attendee at the OAN Convention. “The fibers are as strong as anything out there, and the seeds are more nutritious.”

Prohibition hasn’t worked, he also pointed out. “Growing should be in the hands of businessmen and horticulturalists, not criminals,” he said. “It’s a plant, and no one knows how to grow plants better than the people in this room. We can produce it cheaper, cleaner and more efficiently, and make the black market say it’s not worth it.” ☺

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