State of Oregon Agriculture

Industry Report from the State Board of Agriculture
January 2015

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ORS 561.378
State Board of Agriculture Report

The State Board of Agriculture shall report as provided in ORS 192.230 to 192.250 on a biennial basis to the Governor and the Legislative Assembly regarding the status of the agriculture industry in this state.

At a glance

Oregon's agriculture and food industries are healthy and growing. Farms, ranches, and food businesses provide food, feed, fiber, scenery, jobs, income, and natural resource benefits across rural and urban Oregon. They contribute to Oregon's economy and the wellbeing of Oregonians in every region of the state.

Many opportunities exist to make Oregon agriculture even more successful. This report describes the Board of Agriculture's key priorities for investment, both at the state level and in Oregon's seven agricultural regions.

State investments in the agriculture and food sectors—particularly in market access, transportation, entry into agriculture/farming, labor, food safety, and water— will yield economic and natural resource benefits to Oregon. In addition, investments to address key regional issues, such as opportunities in aquaculture, irrigation water infrastructure, and sage grouse conservation, will address unique and diverse regional needs.

We thank Oregon's leaders for their attention to these opportunities and praise Oregon's farmers, ranchers, and food businesses for their contributions to our state.

Photographs

Photographs used in this document were provided by employees of the Oregon Department of Agriculture, the SAGE Center, Northwest Food Processing Association, Tillamook County Creamery Association, Ron Meyer, Rex Barber, NORPAC, and Jeff Otto with the Journal of Communications.

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Board members toured the Parrish Middle School garden in Salem during the February 2014 Board meeting.

Food processing adds value to agricultural products and creates jobs in urban and rural Oregon. Investments in building Oregon's agriculture and food processing industries yield jobs and infrastructure investments, such as the processing facilities shown in these photos.

Executive summary

Agriculture benefits Oregonians throughout the state. Oregon's farms, ranches, and food businesses provide jobs, income, and natural resource stewardship to rural and urban citizens alike.

Oregon's agriculture and food industries are healthy and growing. The diversity of these industries, including size, products, and target markets, keeps agriculture vibrant in good times and bad.

The Board believes that investments in Oregon agriculture, whether at the regional or state level, will yield both natural resource and economic returns to our state. Key areas for investment are: market access, transportation, entry into agriculture/farming, labor, food safety, and water.

Investments and policy recommendations in the key areas include:

- Increased support for water supply developments that benefit farmers and fish.
- Continued support for Oregon agriculture and food producers to access local, regional, and international markets.
- Continued efforts to resolve labor disputes at the Port of Portland.
- A higher estate transfer tax exemption limit to make it easier for young people to inherit the family farm.
- Pressure on Congress to pass comprehensive immigration reform, including an agricultural guestworker program.
- Continue to prioritize food safety in the state budget.
- Support for the agricultural water quality program, including strategic implementation and monitoring.

Oregon's seven agricultural regions have unique and diverse needs and priorities. Regional and local policy and investment recommendations include:

- Strategies to help diverse agricultural operations coexist with one another.
- Identification of and support for irrigation water delivery infrastructure needs in the Willamette Basin.
- Support for the lower and upper Klamath restoration agreements.
- State resources for sage grouse conservation efforts; restoration dollars for juniper and non-native weed control.
- Support for development and expansion of an aquaculture industry in Oregon.
- Technical assistance for small livestock producers in Central Oregon.
- Support for studies and forecasts of water supplies in the Deschutes Basin.
- Continued support for the Wolf Depredation Compensation and Financial Assistance Grant Program to prevent wolf-livestock conflicts and compensate those with documented livestock kills and injuries.
- Rules discouraging energy facility siting on high-value farmland.

About the State Board of Agriculture

The State Board of Agriculture advises the Oregon Department of Agriculture about programs, policies, and issues affecting Oregon agriculture. The Board is composed of ten members. Oregon's governor appoints nine of the board members; the chair of the Oregon Soil and Water Conservation Commission serves as the tenth member. The director of the Oregon Department of Agriculture, and the dean of the College of Agriculture at Oregon State University, serve as ex-officio members.

State law requires seven of the appointed board members be actively engaged in the production of agricultural commodities and that the governor seek to ensure that these members reflect the diverse nature of agricultural commodity production within Oregon. By law, two board members must be appointed who are not actively involved in the agricultural industry to be representatives of the public interests.

In the 2005 Legislative session, the Legislature passed a bill giving the Board a more active role in advising ODA on program and policy implementation. The bill also required the Board to submit biennial reports to the Legislature. This is the Board's fifth biennial report to the Legislature since these changes were passed.

The Board views these biennial reports as an opportunity to give the Legislature a snapshot of Oregon's agriculture industry. We also see the reports as a way to share our priorities for future state investments in the agricultural industry. We believe investing in Oregon agriculture will provide economic benefits to the state, and protect the natural resources that we all value and depend on.

Photos top to bottom: Board members toured the Archer Daniels Midland plant in Portland during the December 2013 board meeting. • Board members spoke with Governor Kitzhaber's Natural Resources Policy Director Richard Whitman during the February 2014 board meeting.

Oregon State Board of Agriculture

Barbara Boyer
McMinnville

Pete Brentano
St. Paul

Stephanie Hallock
Lake Oswego

Doug Krahmer
St. Paul

Tracey Liskey
Klamath Falls

Sharon Livingston
Long Creek

Natural resources subcomittee

Barbara Boyer, chair

- Water, air, and soil quality
- Water quantity, availability, irrigation efficiency
- Long-term water strategy
- Invasive species
- Pesticides: crop and animal protectants
- Global Warming Commission

Government relations subcomittee

Tracey Liskey, chair

- Biennial Report to the Legislature
- Labor, immigration, and minimum wage
- Tax policies
- Farm Bill program priorities
- Legislative contacts and federal issues
- Governor's Office liaison
- Wildlife depredation
- Renewable energy issues

Oregon State Board of Agriculture

Land use subcomittee
Laura Masterson, chair

- Land use policy for agriculture
- Urban growth management policies
- Interim review of land use system
- Agri-tourism use of agricultural lands
- Utility siting and aggregate mining issues for agricultural lands
- Right to Farm laws
- Agriculture in urban environments

Marketing & food safety subcomittee
Steve Van Mouwerik, chair

- Market development for agricultural products (local, regional, international)
- Transportation and infrastructure, freight movement strategy
- Food processing and agri-business development issues
- Farmers' markets, direct to consumer, and other local marketing ventures
- Farm-to-School Program
- Phytosanitary issues and international trade barriers
- Food safety programs
- Small farm assistance
- Certification programs

Laura Masterson
Portland

Tyson Raymond
Helix

Steve Van Mouwerik
Portland

Dan Arp
Ex-Officio member
OSU Dean of
Agricultural Sciences

Katy Coba
Ex-Officio member
ODA Director

"People need to understand that agriculture is not just about growing food, it's about promoting Oregon. It's about keeping the land clean and sustainable. And, it's about us, it's about our communities. Actually, agriculture has been one of our bright spots during the recession; it's our second highest trading sector after technology. In 2012, 25 of our 36 counties showed an increase in their overall agricultural product." Governor Kitzhaber

"Oregon's rural and urban economies all depend in some way on agriculture and food processing. Agriculture truly benefits each and every Oregonian, no matter where they live." Oregon State Senator Arnie Roblan

"We're lucky to live in Oregon, where our farmers grow the world's greatest food." ODA Director Katy Coba, Celebrate Oregon Agriculture commercial

"The bounty of Oregon's fields and farms draws us all together. It is a unifying force that knits the fabric of Oregon society, giving us health, strength and hope for the future." Oregon State Senator Ted Ferrioli

INTRODUCTION

Whether we live in urban or rural Oregon, agriculture connects us. Oregonians throughout the state share an appreciation for the delicious food, beautiful fiber, and expansive scenery that Oregon agriculture provides.

We also share the benefits of agriculture's economic contribution to the state. Oregon's agriculture and food industries make up 15% of Oregon's economy and provide one in every 10 jobs (OSU Rural Studies Program, 2011). Actions that help Oregon's agriculture industry grow will also build jobs and income for the state.

Oregon's agriculture economy is healthy and has a bright future. Yearly farmgate production value is now above and beyond pre-recession levels. Oregon's food processing industry gained jobs during the recession and is expected to continue to grow.

The incredible diversity of Oregon agriculture helps keep the industry healthy. Farmers and ranchers operate farms ranging from two to several thousand acres. They produce over 200 commodities in seven unique growing regions around the state. These products are sold into diverse markets, from the grower's own farm stand to a high-end grocery store in downtown Shanghai.

Despite that diversity, Oregon's farms and ranches share some common opportunities and challenges. All farmers and ranchers need water to grow their crops, labor to grow and harvest their products, and a marketplace to sell those products.

In this report, we highlight both the diversity and the commonalities within Oregon agriculture. The report includes sections describing the seven unique growing regions of the state. It also includes sections describing the top issues and opportunities facing Oregon agriculture today. These include market access, transportation, labor, entry into agriculture/farming, and water.

The report also identifies priority recommendations for the Oregon Legislature. These include protecting and enhancing water supply for irrigation, supporting comprehensive federal immigration reform, revising the tax structure to support farm ownership transition, and maintaining resources for local, regional, and international marketing of Oregon products.

Implementing these recommendations represents an investment in economic development and natural resources, values that connect rural and urban Oregonians. Investments in this healthy, growing sector of Oregon's economy will yield results for decades to come.

Oregon agriculture provides a variety of urban and rural jobs. In addition to on-farm jobs, a variety of agricultural and food businesses exist to process farm products, supply farm inputs, and provide services to farms and ranches.

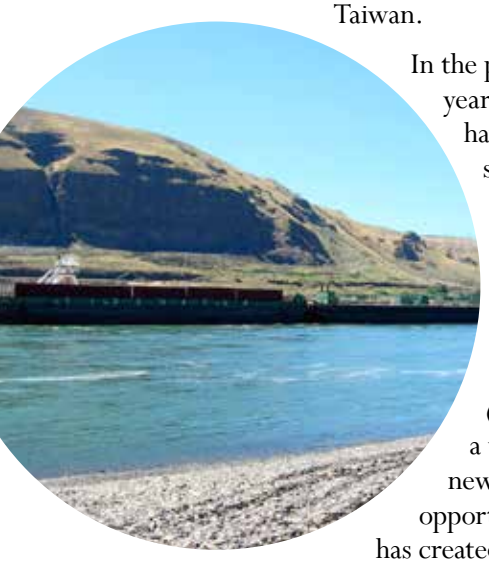
ISSUES AND COMMON THEMES

Market Access

International

Introduction by Steve Van Mouwerik

As a public member of the Board of Ag, I have been one of the "value added processors" for Oregon seed, straw, and hay producers. For more that 20 years I have been purchasing, handling, and processing export quality hay and straw for shipment to dairy and beef cattle markets in Japan, Korea, and Taiwan.



In the past three years, we have begun shipping wheat straw to the United Arab Emirates (camels), a wholly new market opportunity that has created additional revenue to eastern Oregon. Starting this year, an entire plant that employs 30 people directly and 10 more indirectly is in operation in the Umatilla County serving this market.

The support that we derive from ODA's inspection and technical resources has been essential to our commercial success and our ability to innovate confidently with new markets and product mixes. And the Oregon reputation that our export industry enjoys leads us to constantly growing opportunities.

Overview

You can walk into stores all over the world and see food from Oregon on the shelves. Oregon agriculture and food exports travel far and wide, bringing new dollars into the state and generating urban and rural jobs.

International markets are a major source of agricultural sales revenue and key contributors to Oregon's economy. Oregon exported $2.6 billion in raw agriculture products internationally in 2013, representing about 40% of farmgate cash receipts (USDA Economic Research Service, 2014). Agriculture and food exports comprise about 6% of Oregon's economy and provide 7.4% of the state's jobs (OSU Rural Studies Program, 2011).

Many Oregon products, such as wheat, have built an international reputation and have well-established markets in foreign countries. Other products are just starting to make their way into foreign markets. ODA's Marketing Program helps build and maintain international demand for these products. For example, ODA organizes outbound trade missions from Oregon that travel abroad to trade shows, government meetings, and targeted business meetings to showcase Oregon products. Inbound trade missions are constantly flying into Portland International Airport to tour farms and food businesses in the Portland metro area with ODA staff.

The international marketplace represents an exciting opportunity for Oregon farms and food businesses to scale up their operations. As businesses begin to explore international markets, they need assistance to learn about their target markets and need support as they develop relationships. Group trade missions help these businesses get the most value out of the time and expense involved with travel abroad.

Photo: Wheat is barged down the Columbia River before traveling to Asia, the Middle East, and other international destinations.

International

State and federal investments to build Oregon's ag and food exports yield results. For the years 2008 through 2012, Oregon managed $943,000 in federal Market Access Program funds and assisted 185 Oregon businesses to access international markets for their products. The participating businesses reported a total of $8.8 million in sales resulting from this assistance (Western United States Agricultural Trade Association, 2013).

Farms and food businesses also need technical assistance to comply with the standards of the country that will be importing their product - any deviation from strict food safety and pest and disease standards can cause an expensive rejection. These highly technical issues are the reason that scientists from a variety of disciplines are involved in inspecting, testing and certifying agricultural products for export.

Trade agreements are valuable tools to help reduce financial barriers to exporting Oregon products; once these barriers are removed, the technical experts help exporters work through the quality and safety requirements of their intended market.

Key issues and opportunities

In much of Asia, the middle class is rapidly growing and so is the percentage of people who live in urban areas. These two trends are increasing global demand for value-added food products. (USDA Foreign Agricultural Service, 2014) Oregon is geographically well-positioned to take advantage of this opportunity if the state continues to invest in its value-added food processing sector. Oregon's total processed food exports grew about 80% between 2009 and 2013, outpacing the 55% growth in U.S. exports overall (International Trade Administration, 2014, and USDA Foreign Agricultural Service, 2014).

Free trade agreements have the potential to lower tariffs and make Oregon agricultural products more competitive in overseas markets. As agreements are approved, producers will need technical assistance to access these markets.

Photos top to bottom: Chef Leif Eric Benson demonstrates potato recipes at a grocery store as part of a trade mission promoting Oregon and Washington potatoes. • Buyers on a trade mission to Oregon from the Middle East sample products from food processor NORPAC. • Gary McAnich gives a presentation about Oregon's nursery industry and ODA nursery program to an inbound trade mission from China. ODA and the Oregon Association of Nurseries (OAN) collaborated to deliver the presentation to Chinese buyers at the 2014 FarWest show, OAN's annual trade show.

Market Access

International

U.S. processed and prepared dairy exports grew 232% between 2009 and 2013 (USDA Foreign Agricultural Service, 2014). Oregon's Dairy Export Initiative is a collaborative effort to increase market access for Oregon dairy products in light of increasing overseas demand for shelf-stable milk, cheese, yogurt, and other products. The initiative involves ODA, the Dairy Products Commission, dairy farmers, OSU, and others.

Recommended actions and investments

- ODA and the Legislature should continue to devote resources in its market development, market access, and certification programs towards expanding international markets for Oregon agriculture and food products.
- State agencies and the Legislature should continue to encourage the development of value-added agriculture and food processing facilities to create employment and make Oregon products more competitive in the world market.
- State leaders should encourage Congress to pass free trade agreements to reduce or eliminate tariffs and stimulate international trade.

Domestic

Introduction by Sharon Livingston

Oregon ag sells many of our products across the country. Oregon beef gets processed and distributed across the US. Many of our nursery products travel east and south. Our grass seed goes across the country and is even helping farmers in the Midwest protect water quality. Regional and national markets are important for our value-added ag and food products, too.

Sometimes it is possible to brand products as Oregon-grown in regional and national markets. But often they are commingled with products from other states. We need to collaborate with our fellow growers in other states to market them. This is the case with a lot of the beef produced in Oregon, although we have some very successful niche producers too.

Some of our growers are just starting to explore these markets, while others are already well-established. For anyone going regional and national, it's not only important to build business contacts, but you also have to understand the other state and national requirements that apply to your shipments. Anything we can do to support Oregon's ag and food businesses with that effort is a good investment.

Overview

Regional and national markets are tremendously important for Oregon agriculture, but there are very few publicly available statistics about these markets. We have more information about sales from Oregon to every other country in the world than we have about domestic Oregon agricultural sales.

Despite these data gaps, it is clear from anecdotal information how important domestic markets are for many of Oregon's top agricultural products. It's estimated that about 40% of Oregon agricultural products go to the domestic market outside of Oregon, bringing new dollars into Oregon and supporting rural and urban jobs in agriculture, food processing, and other associated industries. When a small farmer wants to scale up his or her business beyond the local, direct market, the regional market is often the next step.

Photos top to bottom: Oregon Fruit Products displays tartlets, canned fruit, and other products at a trade show. • ODA and Oregon's ryegrass industry teamed up on a trade mission to the Midwestern US, where Oregon ryegrass is used as a cover crop to help scavenge nutrients and protect water quality. • Oregon's nursery industry hosts buyers from all over the US and the world as part of its annual trade show, the FarWest show. Pictured here is the Loen Nursery 2014 FarWest show booth.

Market Access

Domestic

Domestic trends during the Great Recession created major challenges for many of Oregon's producers in regional and national markets. Today, however, the domestic outlook is generally good for Oregon's farmers and food businesses. As consumers and businesses across the country increase their spending on domestic agricultural products, it is important to keep Oregon at the forefront of their thoughts as a high-quality source of product.

Key issues and opportunities

Consumers, retailers, institutions, food processors, and wholesalers are putting greater emphasis on locally sourced food (USDA Economic Research Service, 2014b). They are interested in developing contacts with farmers who can supply significant volumes of product and meet strict quality and safety requirements.

Recommended actions and investments

- ODA should devote resources towards helping farmers, ranchers, and food businesses who want to scale up their businesses to serve regional and national markets and towards finding ways to consolidate goods from multiple growers to meet demand from retailers, wholesalers, and institutions.
- State agencies and the Legislature should continue to invest in the development of value-added agriculture and food processing facilities to create employment and make Oregon products more competitive in regional and national markets.

Photo: Oregon squash are washed and shined for decorative markets domestically and overseas.

Introduction by Laura Masterson

My farm has supplied local produce since 1994 through Community Supported Agriculture (CSA) subscriptions. I literally started on a double lot in Portland, and local demand and support has helped me grow to about 50 acres on two properties over the past 20 years.

I hope to see Oregon agriculture increasingly sustainable so it is better for people and the planet, and of course, more profitable. One of the ways I see to do this is to connect consumers to local food. This has the potential to build healthier communities and increase profitability for farmers too.

As a local food producer, I've learned we have an important role in bridging the urban-rural divide. A lot of urban folks might hear about some of the issues in agriculture today but don't see how it directly relates to where their food comes from. Local farmers have an opportunity to show their customers how an issue, like protecting farmland, affects both urban and rural communities alike.

Overview

Oregon farmers sell directly to local consumers through farmstands, farmer's market booths, and weekly deliveries of farm products. These types of local sales have grown astronomically in Oregon and around the US in recent decades.

But there are some indications that the market for farm direct to consumer sales is getting saturated. Oregon remains a national leader in farm direct to consumer sales, but direct sales have not increased over the last five years

as measured by the Census of Agriculture. At the same time, the number of farms reporting direct sales has steadily increased since 1992, reaching 6,680 in the 2012 Census (National Agricultural Statistics Service, 2014).

There is a growing interest in developing additional tools for farmers to get their product into the local marketplace. Additional strategies could help make room for more start-up farm businesses and help existing small farms grow their businesses.

Some strategies involve linking farmers with institutional buyers who buy large quantities of food to serve in their own facilities. These include school districts, hospitals, and cafeterias. Other potential buyers include local grocery stores and grocery store chains. For these relationships to be successful, farmers need to understand and meet buyers' specifications and demand schedules.

Photos top to bottom: This booth at the Salem Farmer's Market displays colorful produce accessible to all shoppers, including Oregon Trail card users and WIC and Senior Farm Direct benefit recipients. • Institutional buyers, such as hospital cafeterias and the school food service shown here, are becoming more interested in procuring and serving locally grown foods, and represent an important local market for farmers who can meet their specifications.

Market Access

Local

Processing is another strategy to add value to farm products and extend their shelf life. Some farmers are conducting on-farm processing, while others have found local processing plants to pack their product for them.

All of these strategies involve several challenges. Many organizations, agencies, and farmers are working together to solve this piece of the puzzle to increase local markets for Oregon farmers and ranchers.

Key issues and opportunities

One challenge in local food markets has been developing a network to gather, package or process, and distribute food. With the level of enthusiasm for developing local markets around the state, there are a large number of organizations working to solve the local food distribution puzzle. Funders of local food system development work, including ODA and Meyer Memorial Trust, have worked together to ensure their funds complement each other and identify priorities for funding (Hanson, 2010).

Interest is growing in engaging children and families to learn about agriculture and food production, build connections between children and families and local agriculture, and improve access to healthy, nutritious foods. The Celebrate Oregon Agriculture campaign, Farm to School Program, and Farm Direct and Senior Nutrition programs all help connect children, caregivers, families, and seniors to healthy, local, nutritious food and agriculture products. Over the life of the 2008 Farm Bill, $7.7 million was distributed to Oregon seniors, women, infants and children through farmers market nutrition programs (USDA Food and Nutrition Service, 2013). ODA and Oregon Health Authority have both helped make this possible by promoting the program to farmers and providing them the infrastructure to accept nutrition assistance vouchers. Oregon has provided cost-share dollars to the WIC and Senior Farm Direct Nutrition programs to help additional eligible women, infants, children, and seniors buy fresh fruits, vegetables and herbs from farmers markets.

A number of livestock producers are interested in small-scale meat processing options. Producers want to supply local consumers with locally grown meat products, in some cases at a scale beyond farm direct to consumer sales. However, federal law mandates that meat products sold to the public must be inspected by US Department of Agriculture (USDA) officials. A USDA Economic Research report (2012) concluded that growth in small-scale slaughter, cut-and-wrap, and processing facilities depends on whether producers in need of these services can provide enough business, for enough of the year, and pay a high enough fee for the services to make such facilities economically viable. This is also dependent on consumer demand and willingness to pay for more locally-sourced meat.

Photo: Board members help students start seeds during a tour of the Parrish Middle School garden and Food Corps program in Salem. ODA is the Oregon host for the Food Corps program. Food Corps volunteers help schools with school garden projects and nutrition curriculum.

Recommended actions and investments

- ODA should continue to support local food system development, according to the joint priorities identified by the consortium of local food system funders.
- ODA should continue to host the Farm to School Program and participate in pilot programs funded through the Farm Bill.
- ODA should continue to support farm-direct marketing by assisting farmers markets and promoting the Farm Direct and Senior Nutrition programs.

Transportation

Introduction by Pete Brentano and Tracey Liskey

In the state of Oregon, there seems to be a divide between the east side and west side. The population and climate make this happen. The rules and regulations made in Salem don't always fit one side or the other. Transportation has the same split on many issues too.

The distance from markets on the east side makes transportation more costly. Almost everything has to be shipped by truck to a distribution facility. Often the roads are smaller, and have limitations as to the size and length of the loads allowed. The weather is also a bigger issue on the east side, having to deal with mountain passes, snow and winter conditions. Sometimes it is closer to go to neighboring states, but then you have to deal with a different set of rules and regulations which can make the cost go up.

On the west side you have a closer shipping destination, but you also have to deal with more people and traffic. To move large farm machinery down the road has become more dangerous to the farmer and the citizens of the state. The congestion at the port and on the major roads sometimes makes a two hour trip last all day long, or you leave early just so you can get there and then the day gets very long.

Transportation is one of the biggest costs that the consumer will have to pay for in higher prices for food and supplies. Anything that we can do to help agriculture and local business get products to the market easier and safer will help the economy of Oregon grow and prosper.

Overview

All food starts on a farm, and nearly all food begins its journey from the farm to the consumer on a truck. Whether a product ends up at the farmer's market, local grocery store, east coast, or Asia, it must go from the farm by truck to an aggregation center. Many of Oregon's agriculture and food products continue their journey from the aggregation center by truck, all the way to the end consumer.

Rail, sea, and air are also important methods to move agricultural products out of state. Local ports with international shipping capacity are key to getting that product out of state at an affordable cost. Rail is a highly cost-effective way to move products to key markets in the eastern US. And while a relatively small amount of Oregon agriculture and food products are shipped by air, these are generally specialty products that make up a higher percentage when measured by value.

Gridlock and aging infrastructure present a challenge to Oregon's quality agricultural products. Time is money, and in agriculture this also means product quality. The more quickly Oregon's entire transportation system can

Photos top to bottom: Harvested Christmas trees are shaken, bound, and loaded onto a truck for transport. • Food processing products begin their journey on a truck toward local, domestic and international destinations. • A truck loaded with onions. Oregon's farmers, ranchers, and food processors depend heavily on trucks, and Oregon's roads and highways, to transport products.

move agricultural products to market, the fresher and less expensive they will be, and the more competitive Oregon's products will remain in the local, regional, and international marketplace.

Key issues and opportunities

International steam shipping company Hanjin has decided to stay at the Port of Portland for the time being, despite a variety of labor and management problems that negatively affect port productivity. Hanjin is the largest container carrier calling Portland's Terminal 6. If Hanjin were to leave, farmers and food businesses that currently ship containers overseas out of Portland would be forced to pay considerably more to send containers to Washington or California by rail or truck.

Photo: Grain is loaded onto a barge at Arlington, Oregon.

Recommended actions and investments

- The Governor's Office and Port of Portland should continue to try to resolve the labor disputes that contribute to shipping inefficiencies at the Port of Portland.
- ODA should coordinate with ODOT and the Oregon Freight Advisory Committee to preserve existing and invest in new rail infrastructure.
- ODA should collaborate with counties and agricultural organizations to identify infrastructure needs to facilitate efficient transportation of products.

Entry Into Agriculture/Farming

Introduction by Doug Krahmer and Tyson Raymond

We have both been very fortunate with our family farm transition experiences. One of us has two children involved with the farm business. The other has left a career in medicine to return to the family farm and now farms with a brother.

With multiple generations involved in farming, and the different backgrounds people are bringing to it, you get a combination of experiences and ideas to tackle problems and see new opportunities. With good communication, this makes a farm business and the industry as a whole stronger.

We need to keep recruiting new farmers and bring new people into every aspect of agriculture and food production. Even with the greater interest in agriculture and food production, it seems like many folks don't realize how sophisticated the ag industry is and all of the career opportunities that are out there. Regardless of your field of interest, from nutrition to environmental science and genetics to economics, there is a job somewhere in the ag industry that is a good fit.

Overview

There are many reasons to be optimistic about Oregon's future farm operators. Strong crop prices in recent years, and increasing public interest in food and agriculture, are encouraging young people to return to their family farm and prospective farmers of all ages to start new farms.

Farming is both incredibly rewarding and demanding. Most say they can't imagine a more meaningful job than producing food for other people and plants that benefit and beautify the landscape. To do this work, farmers need technical knowledge about crop and livestock production, expertise on how to manage a business, familiarity with the many laws and regulations that apply to farm businesses, and the energy to work long hours.

To help interested prospective farmers decide if farming is the right business for them, and help them gain the knowledge they need to start or continue a farm business, both hands-on and classroom experience are extremely valuable. In addition, whether they are starting a new business or taking over a family business, farmers need access to capital. This is true of any business, but it is particularly critical in farming. Renting on a small scale can be a lower-cost and lower-risk alternative to buying land, but prospective farmers still must purchase farm machinery and inputs such as seed, fertilizer, and irrigation equipment.

Farming is a risky business with unpredictable weather, input costs, and prices. Most farmers' goals are to support their families, hand over a successful business to their children, or if they are start-up farmers, to eventually leave their other job and farm full-time. To achieve these goals, they need to be profitable over time. Optimism, enthusiasm, and passion for farming are a must, along with the strategies that will achieve profitability and keep farms financially sustainable.

Key issues and opportunities

Capital and land access are top needs among farmers starting a business or taking over a family business. A survey by the National Young Farmers Coalition (2011) found the top challenges faced by young farmers were access to capital and access to land. American Farm Bureau's annual young farmer and rancher survey (2014) found access to land was the top concern among those who responded to the survey. In recognition of this challenge, USDA and a variety of state and local organizations have launched programs to support young and beginning farmers. In 2013, the Oregon Legislature passed a bill, nicknamed the

"Aggie Bonds" bill, intended to provide lower-interest loans to farmers starting or expanding a small farm.

The inheritance tax can make it difficult for farmers to pass along their businesses to their children. Some children find themselves having to sell some of their parents' farm property to pay inheritance tax.

Popular in other states, the use of easements to protect farm lands in production could give Oregon a strong tool to complement its land use system and ultimately keep those working lands from disappearing. Easements are a voluntary, legal agreement between a landowner and a land trust or government agency in which the landowner is compensated. They can be used to permanently protect a family's legacy by making the land available for farm use for future generations, helping with land succession.

Programs designed to improve agriculture literacy and nutritional awareness, including Agriculture in the Classroom, Farm to School, Future Farmers of America, and 4-H, are helping children learn about agriculture and consider it as a future career. However, there are still many young people who have never considered agriculture as a career because they don't appreciate how it might mesh with their interests in science, business, or the outdoors.

Recommended actions and investments

- The legislature should raise the estate transfer tax exemption limit to make it easier for young people to inherit the family farm without paying high inheritance taxes.
- ODA should continue to support beginning farmer development programs, including the Aggie Bonds Program, farm internship programs, farm incubator programs, and farm succession planning with partner organizations. ODA should also continue to make the Farm Mediation Program available to assist families with succession planning.
- As resources allow, ODA should contribute staff time to support agriculture literacy and career development programs such as Agriculture in the Classroom, Future Farmers of America, and 4-H.

Labor

Introduction by Doug Krahmer

Farmers depend on immigrant workers to harvest the fresh fruits and vegetables you eat, the Christmas tree in your home, and the milk that makes cheese, ice cream, and yogurt. Our workers are skilled, experienced, and willing to do jobs that non-immigrants are not willing to do.

As agricultural employers, we want workers that have legal documents. I advertise with Oregon Employment Department, hire high school students, and advertise locally in a variety of locations, but there aren't enough legal workers willing to prune our farm's blueberry bushes and pick fruit. We also harvest by machine for the processed market, but need pickers for fresh-market quality berries.

If farmers can find a legal, stable solution to our labor challenges, it will benefit everyone – our workers won't have to fear immigration enforcement actions, we'll be able to harvest our crops when they are ready for harvest, and consumers can continue to count on the fruits, vegetables, Christmas trees, nursery plants, milk, eggs, and hundreds of other products that depend on agricultural labor.

Overview

It's estimated that 50% to 70% of the agricultural work force is undocumented. Much of the nation's food supply relies on this unsustainable situation. It leaves farmers vulnerable to perishable crop losses, undocumented workers fearful of deportation, and consumers at risk of losing local fruits, vegetables, and other foods.

How can a farmer harvest his or her crops? Some are turning to mechanized harvesters and other labor-saving equipment. This means a huge capital investment and can be difficult to use for fresh-market crops without damaging them. Only a handful of Oregon farmers are using a guestworker program. They are concerned about the paperwork involved with the program, the cost to bring workers to the US, and the consequences if they make a mistake.

The immigration bill passed in the Senate last summer included several solutions preferred by many farmers and agricultural organizations, and represented a compromise with labor groups. It would have encouraged farmworkers to remain in agriculture for a few years, and created a guestworker program administered by the USDA. So far, the House has not taken up comprehensive immigration reform, and the timeline for doing so is unknown.

In the absence of federal action, there are some things the state can do to help farmers with short and long term solutions to labor challenges. These include strategies to attract more of the existing agricultural labor force to Oregon, and strategies that will help farmers need less workers in the long-term.

Photos top to bottom: Doug Krahmer produces blueberries in the Willamette Valley. Photo courtesy of Jeff Otto/Journal Communications. • Workers harvest wine grapes and pour buckets of picked grapes into plastic totes. • Workers carefully pick up and pack watermelons at a packing shed in Umatilla County.

Key issues and opportunities

It is unknown whether the US House will take up immigration reform this year. Ag groups continue to call for comprehensive federal reform.

Regulatory agencies have stepped up enforcement of federal labor laws, at times using tactics that are unacceptable to state leaders. In 2012, the US Department of Labor accused three Oregon blueberry farms of violating federal minimum wage requirements and invoked a "hot goods" provision of the law that prohibited the farmers from selling perishable blueberries until they had admitted guilt and signed consent agreements. State officials and Congressional representatives have expressed outrage over the application of "hot goods" to perishable products, and a federal judge has ruled that the Department of Labor denied the farmers due process by invoking the "hot goods" provision. The Department of Labor is appealing the judge's decision. Congressman Schrader has introduced a bill that would prohibit the use of the "hot goods" provision in cases involving perishable products.

Technologies such as mechanized harvesters, GPS-guided tractors and combines, and soil moisture monitoring have helped many farmers save labor. These technologies have the potential to reduce labor needs even further, but farmers will still need workers who are trained to use these technologies. In addition, it is difficult for the private sector to justify developing specialized technology for some of the small-acreage crops in Oregon, such as strawberries.

Oregon's farm mediation program continues to help interested farmers and farmworkers resolve labor disputes, in much less time and at a lower cost than the court system.

Recommended actions and investments

- State policymakers should urge the US House to adopt comprehensive federal immigration reform legislation.
- ODA and the Legislature should continue to support the Farm Labor Mediation Program to assist in addressing labor disputes.
- ODA, state agencies, and higher education institutions should continue to prioritize training and research that supports a skilled labor force and helps farmers mechanize.

Photo: In the Columbia Gorge, a worker stands on a ladder while carefully picking pears and balancing a basket of fruit. Farmers in the Gorge look for skilled and athletic employees to safely and efficiently harvest pears and other tree fruit.

Food Safety Modernization Act

Introduction by Doug Krahmer and Laura Masterson

As fresh produce growers, food safety is a top priority for both of us. We are extremely concerned about delivering a safe, wholesome product to our consumers, and we each have rigorous food safety programs in place to reduce risk of problems on our own farms.

We share the overall goal of the federal Food Safety Modernization Act to prevent food-borne illness. When there is a food safety outbreak, it not only hurts the grower and the consumer, but also the entire group of farmers growing that product. It benefits all of us to have proactive programs in place to prevent illness.

At the same time, we were very concerned about some of the Food and Drug Administration's initial proposal to implement the Food Safety Modernization Act. The draft produce rule released in 2013 would have been unworkable for many irrigators and organic farmers. We are relieved that FDA has made some positive changes to the rules, but they will still mean a huge learning curve for produce farmers, and many human and animal food processors.

Overview

How do we protect consumers while keeping regulations practical and affordable for farmers and food producers? How do we continue to recycle valuable food processing by-products for livestock feed while protecting the health of livestock? And who should pay for the cost of increased oversight of human and animal food safety? These are just some of the policy questions that farmers, states, the Food and Drug Administration (FDA), and others have been discussing over the past year as FDA starts to implement the federal Food Safety Modernization Act.

Congress passed the federal Food Safety Modernization Act (FSMA) in 2011 to create a more proactive approach to food safety. Over the past two years, FDA has released several draft rules to implement the act. The first draft of the produce rule caused widespread concern among farms of all sizes and types, from large-scale onion farms to apple orchards to small organic vegetable farms. ODA and Oregon's agriculture and food industry groups have commented extensively on the rules and helped host a tour to introduce FDA to western farming and irrigation systems.

The rules will affect thousands of fruit and vegetable farmers, food processors, and animal food producers in Oregon. About 4,000 farms in Oregon grow fruits, nuts, and vegetables (National Agricultural Statistics Service, 2014). Roughly 3,350 food businesses, including food processors, dairies, and bakeries, will be subject to at least one of the proposed rules (Oregon Department of Agriculture, 2014b). Some businesses may be subject to multiple rules. ODA licenses 400 animal feed manufacturers that will be regulated by the proposed FDA rules; additional businesses that are not currently licensed by FDA will be covered by the animal food rule as well (Oregon Department of Agriculture, 2014b).

To comply with the rules and improve consumer protection, Oregon's farmers and food producers face a very steep learning curve. Education and training programs are essential for all of the fresh produce farms, food processors, and animal food producers that will be affected by these rules.

The State of Oregon also faces some important decisions about its role to implement FSMA. Many stakeholders have indicated they prefer to have the state conduct FSMA compliance inspections, rather than the FDA. They also want research, education, and assistance from the state to comply with the rules. However, state agencies and institutions will need additional federal resources to fulfill these roles.

Food Safety Modernization Act

Key issues and opportunities

Farmers and human and animal food processors have told the Oregon Department of Agriculture that they would like the state to implement FSMA in Oregon. To do this, ODA would need additional federal resources for inspectors, training, and education.

ODA, Oregon State University, and grower and food processor groups have identified many research needs. These needs include identifying key risks in production, packing, and processing of various agriculture commodities and food products, as well as strategies to reduce those risks. In addition, resources are needed to disseminate research results to agriculture and food producers, and educate them about food safety practices.

The proposed rule for produce includes an allowance for variances from some of the FSMA requirements if scientific information can demonstrate that the rules can be achieved through other methods.

Recommended actions and investments

- ODA and the Legislature should continue to prioritize food safety in the state budget.
- ODA should continue to track and comment on the FSMA rules.
- ODA and OSU should continue to encourage adequate federal funding to implement FSMA.

Photo: Congressional representatives, agencies, universities, irrigation districts, agriculture organizations, farmers, and packers collaborated to organize an August 2013 tour of Pacific Northwest agriculture for the federal Food and Drug Administration.

Water

Introduction by Stephanie Hallock and Barbara Boyer

Water is the lifeblood of agriculture, and water is essential to all life on our planet. Human beings, animals, fish and aquatic life, forests and plants —all must have water to survive. Simply put, without water we have nothing.

Water-producing snowpack and mountain glaciers have been diminishing in the West, and drought declarations have become an annual occurrence. As the largest consumptive user of water in Oregon - 80% - agriculture has a unique responsibility to be a leader in ensuring a clean and plentiful supply of water for everyone in the state.

Too often, multiple demands for a clean, abundant water supply result in conflict, and change is driven by litigation and regulation, rather than by respectful dialogue and willingness to do things differently. It is time for all Oregonians, led by the agricultural community, to respect the resource and each other if we are to meet the demands we make on our stressed and precious water supply.

As passionate stewards of the land, farmers and ranchers have a critical stake in changing how Oregonians think and act about water. Agriculture has the power and economic incentive to lead in creative thinking that results in positive outcomes for all. Agriculture can and should sit at the head of the table, working with others to conserve water and energy provided by hydropower, protect riparian areas along streams, and ensure adequate infrastructure for storage and delivery of water to meet the needs of all Oregonians now and in the future.

Overview

Thousands of miles of streams and rivers flow through Oregon's 16.4 million acres of farm and ranchland. These streams support fish and wildlife, provide drinking water for livestock, and supply irrigation water for crops. Over 75% of the harvested crop value in Oregon is produced using this irrigation water (USDA National Agriculture Statistics Service, 2011).

The agricultural lands next to these streams influence water quantity and quality. For the past twenty years, the State of Oregon has worked with farmers, ranchers, and federal and local partners to conserve and improve water quality, and meet the goals of the Oregon Plan for Salmon and Watersheds. Initiatives include voluntary, incentive-based programs, as well as regulatory programs.

These programs have led to the completion of thousands of projects throughout Oregon by farmers and ranchers, but it has been challenging to demonstrate the outcomes from these investments. To better document improvements in streamside area vegetation and other conditions, the State of Oregon is collaborating with partners on several initiatives. ODA is conducting pilot compliance assessments of agricultural lands in two small watersheds. These assessments in Noyer Creek in Clackamas County and Mill Creek in Wasco County found concerns in 37 of 237 parcels and 24 of 315 parcels, respectively. ODA will work with these

Photo: Cottonwoods grow along a stream on a Wasco County ranch. Thanks to state, federal, and private investments, the rancher was able to participate in a program to restore the streamside area. ODA and partner organizations are working to better document the environmental outcomes that result from these types of investments.

landowners, SWCDs, and other partners, using voluntary and regulatory methods as needed.

The program plans to expand compliance assessments to other watersheds, and is currently developing a tool to prioritize agricultural lands with a connection to waters of the state. Meanwhile, monitoring of randomly selected stream segments along agricultural lands across the state has found significant improvements in the Inland Rogue and Upper Willamette Basins, along with some notable improvements in the Coos and Coquille basin and other individual streams. Conditions along some individual streams in the state have declined due to storm and/or flood events, increased livestock pressure, and urban/suburban development.

In a separate initiative, each of Oregon's 45 Soil and Water Conservation Districts is assessing and conducting focused work in small watersheds. Approximately 85% of the initial streamside vegetation assessments have been completed as part of these projects. After two years of intensive work with landowners in each of the focus areas, SWCDs will reassess land conditions in the watershed to document improvements.

While water quality and quantity are separate topics managed by separate agencies, they are highly inter-related. Oregon has an integrated water resource strategy that includes both water quality and water quantity priorities. This strategy has increased the momentum in Oregon around water resource management, not only to increase water conservation, but to look at how additional water supplies can be developed that benefit both farmers and fish.

Key issues and opportunities

ODA's Agricultural Water Quality Management Program has been working with stakeholders to identify strategies to more effectively evaluate the results of agriculture's work. A key piece of this work has been the identification of Strategic Implementation Areas. ODA is conducting pilot compliance assessments of all lands in two small watersheds and will work with landowners to address problems.

In the 2013 Legislative Session, the Oregon Legislature provided funding to continue and expand Pesticide Stewardship Partnerships (PSPs) to additional areas of the state. These outstanding programs involve collaboration with farmers, agencies, and organizations to gather data about pesticide concentrations in surface water. If the monitoring detects a problem, farmers voluntarily change their management strategies. The program remains invaluable as farmers struggle to deal with invasive insects while protecting water quality.

Oregon has begun an exciting path of investing in water supply developments to benefit both producers and fish. Senate Bill 839, passed in the 2013 Legislative session, provided funding for water supply development and conservation projects. This funding is a vital first step that will support economic development and natural resources in the state.

Photo: An efficient, low-pressure linear sprinkler irrigates alfalfa in Umatilla County. About 75% of Oregon's harvested crop value is produced with irrigation.

Water

Recommended actions and investments

- The Oregon Legislature should continue to support state programs that improve and monitor water quality, including the Agricultural Water Quality Management Program, the expanded Pesticide Stewardship Partnerships Program, and Confined Animal Feeding Operation Program.
- The Oregon Legislature should continue to invest in water supply development that benefits both farmers and fish. The Legislature should increase the funding available through the state's water supply development account, and the grant program for water conservation, storage, and reuse feasibility studies. ODA should remain engaged as implementation of SB 839 goes forward, and conduct outreach to growers about new incentives created in SB 839 and how incentives relate to ODA water supply reservations and water supplies in the 13 Willamette Basin reservoirs.
- State agencies should continue to contribute staff and funding resources to support completion of the Willamette Basin Reservoir Study and Deschutes WaterSMART Basin study, identify existing and future irrigation water needs, and identify infrastructure needs to deliver more stored water to irrigators. State leaders should also support federal funding for the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation work on these studies.

GROWING REGIONS
The Coast

Introduction by Barbara Boyer and Joe Rocha, Chairman of the Board, Tillamook County Creamery Association, Tillamook

This region is full of family farmers and fishers who work together to add value to their products. They have created incredible, lasting brands through quality products, sustainable practices, and strong cooperation.

It's an exciting time for the dairy industry, which is a big part of the coastal agricultural economy. After years of unpredictable milk prices as well as high input costs, we are seeing better milk prices. We see a bright future in the export market with a growing international dairy consumer base. Tillamook Creamery, one of the state's most well-known food producers, is pursuing a creative and aggressive growth strategy.

At the same time, we are making progress on sustainability goals. Our friends in the fishing industry have received widespread recognition for their sustainable harvest practices. And in Tillamook Bay, cooperation between dairy farmers, agencies and organizations, and cities has led to improved water quality.

Overview

The Oregon Coast's mild climate and ample rainfall provide excellent growing conditions for pasture and hay. It's not surprising that beef, dairy products, and lamb are among the region's main products. The south coast also supports two very unique regional types of agriculture—cranberries and lily bulbs.

Despite the numerous tourists that flock to the coast every year, this region is fairly isolated from a farmer or rancher perspective. Branding and niche marketing are both strategies for growers to receive a higher price for their product and compensate for the higher cost of production and transportation. Tillamook cheese, ice cream, and other products are one of the region's and the state's most well-known brands. Many dairy farmers in Coos County produce organic milk. Other agricultural industries, including beef and lamb producers, are exploring opportunities such as local processing and marketing, and many cranberry farmers are working to diversify to a more year-round and fresh market for their fruit.

Commercial fishing is also a critical part of the region's agricultural economy, supplying high quality Dungeness crab, pink shrimp, salmon, rockfish, albacore, and other seafood, and providing local jobs in seafood processing plants.

Photos top to bottom: Barbara Boyer of Yamhill County co-authored the introduction to the Oregon Coast. • Tillamook County Creamery Association Chairman of the Board Joe Rocha proudly displays Tillamook Cheese. • A fishing vessel along the Oregon coast. Oregon's fishing industry is a vital part of the coastal economy and is sustainably managed through public and private cooperation.

The Coast

Like Oregon's farms, most commercial fishing businesses are owned and operated by families. A consistent message from fishery to fishery is that Oregonians can be proud of the sustainable way the fisheries are managed. The industry works well with the Oregon Department of Fish and Wildlife and gives the agency high praise for the level of cooperation and management.

Like the seafood industry, processing and handling of coastal crops and livestock products creates jobs for people in local communities. In Tillamook County, Tillamook Creamery is a major employer, and it also draws tourists to the county. Oceanspray and independent producer-handlers employ people in the handling of cranberries in Coos and Curry counties.

Given the growing interest among Northwest consumers in purchasing locally grown, the reputation of the region's signature products for quality and sustainability, and international interest in high quality products, coastal growers can continue to expect enthusiastic tourists to travel far to sample their products, and for their products to travel far and wide to enthusiastic end consumers.

Key issues and opportunities

Oregon has a historically important aquaculture industry with significant growth potential. Currently, the US imports 91% by value of the seafood it consumes, suggesting major opportunities for growth for US-produced seafood (National Marine Fisheries Service, 2011). ODA has convened an aquaculture advisory committee to plan for sustainable statewide aquaculture development. The industry would greatly benefit from additional assistance from both ODA and OSU on production practices as well as marketing and development.

The fishing industry is concerned with preserving access to fishing grounds. Competing pressures on those grounds include renewable energy developments, research areas, and marine reserves. Fishermen and women have invested significant volunteer time participating on stakeholder groups discussing how competing pressures can minimize impacts to Oregon's fishing industry.

Farmers and ranchers on the south coast are interested and actively exploring the use of agricultural land conservation easements as a way to complement the existing land use program to provide long-term protection of the agricultural land base while enhancing fish and wildlife habitat.

Coastal farmers have expressed concern about the loss of productive agricultural land due to public land acquisitions and the subsequent development to nonfarm land uses and the impacts of such uses to the surrounding farms and ranches.

Cooperative efforts by a variety of land users have significantly decreased bacteria levels in many parts of the Tillamook Bay watershed. These efforts provide a variety of benefits, including protection of coastal shellfish industries.

Technologies and marketing strategies are available to help coastal farmers and ranchers extend the growing season and develop distribution channels, but they are more expensive than for producers in less isolated areas.

Photo: Sheep graze on the Wahl ranch along the southern Oregon coast. Pasture, livestock and dairy products are some of coastal Oregon's top agricultural products.

Recommended actions and investments

- ODA should stay engaged in discussions about marine reserves and other activities that may impact Oregon's fishing industry, in order to ensure preservation of fishing grounds.
- State leaders should work with farmers and other stakeholders to protect working agricultural lands while identifying ways to restore habitats and achieve state water quality goals.
- ODA should continue to support development and expansion of an aquaculture industry in Oregon.

Key facts

Total land area: 4.0 million acres
Source: Oregon Secretary of State, 2014

Land in farms: 303,996 acres
Irrigated land: 22,698 acres
Source: National Agricultural Statistics Service, 2014

2012 farm, ranch, and fisheries sales:
$374 million
Source: Oregon State University, 2013

Top ag products:
1. Dairy products
2. Commercial fisheries
3. Farm forest products
4. Cattle
5. Cranberries

Source: Oregon State University, 2013

Photo: Cranberry harvest in Bandon, Oregon.

Willamette Valley

Introduction by Pete Brentano and Laura Masterson

Farms in this incredibly fertile region grow just about every crop you can imagine. You only have to travel a few minutes from any city or town to see farmland covered with grass seed, fruits, vegetables, hazelnuts, and dozens of other crops. You can taste wine, buy pumpkins and bedding plants, and cut your own Christmas tree.

This agricultural bounty is not only consumed locally, but all over the world. For one of us, customers subscribe to a weekly selection of farm-fresh fruits and vegetables grown within a few miles of their homes. For the other, a nursery delivers trees all over the United States. These and many other agricultural products are a major piece of the Willamette Valley's diverse economy.

Two of our region's major crops, nursery and grass seed, are recovering from the great recession. Demand is growing for hazelnuts, wine, blueberries, and locally grown products. Food processing has stayed strong in good times and bad. All of these trends suggest a bright outlook for agriculture in the Willamette Valley.

There are many ways to keep that future bright and healthy. Farmland is still thriving in the state's most populous region because of Oregon's land use planning system. We've got to continue protecting that farmland base. We need to take advantage of upcoming opportunities to secure more irrigation water while ensuring enough water supplies for fish. And we need to continue engaging our urban consumers and neighbors to build that urban-rural connection.

Overview

The Willamette Valley is proof that with careful planning, a large population can coexist with a diverse and thriving agriculture industry. Preserving farmland for agriculture has proven to be an effective economic development strategy for an industry that comprises 15% of the state's economy. This farmland remains under constant pressure, however, from other land uses.

While the Willamette Valley is one of the wetter regions of the state, dry summers limit the crops that farmers can grow without irrigation. Nearly all of the fruits, vegetables, and nursery crops grown in the region are produced with irrigation. In some parts of the valley, wet winters and clay soils also limit the types of crops that can be grown. State laws, as well as restrictions on federal incentives, limit the tools that farmers can use to improve drainage in these soils.

Growing interest in local agriculture is helping to build relationships between many farmers and urban residents. People are more and more interested in learning where and how their food was grown, and from buying directly from the farmer or rancher who

Photos top to bottom: Laura Masterson and Pete Brentano both farm in the Willamette Valley. • Nursery and greenhouse operations are recovering from the Great Recession and remain Oregon's top-grossing agricultural industry.

produced their food. Interest in farming and starting a farm is also high in the region. Hundreds of new and established small farmers and ranchers attend the annual Small Farms Conference presented by Oregon State University's Small Farms Program.

There are also tremendous opportunities for the region's agriculture in domestic and international markets. International exports of Oregon agriculture and food processing products are steadily increasing. Consumers in Asia and elsewhere view Oregon fruits and nuts as healthy and safe. Interest in Oregon dairy products is growing overseas. As the US housing market recovers, so are the nursery and grass seed industries. And as interest in water quality protection grows in the Midwest, demand grows for Oregon grass seed as a cover crop to help keep nutrients out of rivers, streams, and groundwater.

Diverse food processors help the region's farmers and ranchers add value to products and provide a highly stable source of jobs in the region. There have been many exciting regional developments in food processing. A new meat processing plant in Brownsville provides an opportunity for local livestock producers. NORPAC has completed a new headquarters in the Salem area. Throughout the farm to consumer chain, the outlook is bright for Willamette Valley agriculture.

Key issues and opportunities

The Willamette water reservations process represents an emerging economic development opportunity for agriculture in the region. Senate Bill 839, which established the Water Supply Development Account, provided the state with $10 million in bonding authority and a variety of tools to develop new sources of irrigation water and to conserve water. The US Army Corps of Engineers and US Bureau of Reclamation are cooperating with the State of Oregon to evaluate existing multi-purpose water reservations and to explore strategies that make water available for irrigation while meeting other instream and out of stream needs.

As urban and rural needs have largely coexisted in the valley, there is also widespread coexistence between different types of agriculture. However, this coexistence is increasingly fragile in a region with ever-diversifying types of crops. Challenges include keeping closely related crops from cross-pollinating, keeping genetically engineered crops from cross-pollinating with conventional and organic crops, keeping honeybees healthy in diverse landscapes where neighbors may be using insecticides, ensuring that sensitive crops are not impacted by a neighbor's herbicide applications, and ensuring that agri-tourism activities are compatible with

Photo: Grass seed is grown throughout the Willamette Valley, and is one of the few crops that can be grown without irrigation in some of the valley's heavy clay soils. • Farmers' cooperative NORPAC and Henningsen Cold Storage Co celebrated the opening of a new cold-storage warehouse in Salem in 2014. NORPAC also relocated its headquarters to Salem. The warehouse was a $25.5 million investment.

surrounding agricultural land uses. Intensive communication and mutual respect among all farmers and ranchers, as well as between farmers and non-farmer neighbors, can help prevent damages and conflicts. Of all these coexistence challenges, genetically engineered crop coexistence with conventional and organic crops has been especially controversial over the past few years.

Governor Kitzhaber convened a Task Force on Genetic Engineering to frame issues and information around genetically engineered seeds and agricultural products so that policymakers have a foundation to consider future options for managing conflicts and improving consumer choice. Perspectives represented on the task force include growers and dealers of GE crops, organic agriculture, retail, and research and education. In addition, ODA Director Katy Coba is an ex-officio member of the Task Force. The Task Force is not charged with making recommendations, but rather identifying key issues, describing areas of agreement and disagreement, and identifying strategies used in other jurisdictions to address similar concerns. Topics explored by the task force include coexistence between GE and non-GE crops, mandatory and voluntary food labeling programs, and existing federal authorities related to GE crops and foods. The Task Force is developing a report which will be finalized in December 2014.

Agricultural lands in the Willamette Valley continue to face conversion pressure to a variety of non-farm uses, including aggregate mining, inclusion into urban growth boundaries, and conversion to residential areas.

Goose populations have increased in the Willamette Valley, leading to significant damage to grain and grass seed crops. A 2010 report by USDA APHIS estimated that

300,000 migratory geese winter in the lower Columbia/Willamette Valley each year. The report estimated that crop damage from wintering geese in these areas is about $15 million per year and that damage to Oregon's grass seed industry is about $9.4 million per year.

One challenge unique to Columbia County is the maintenance needs of the levee system. Levees along the Columbia River reduce flooding of farmland in the north party of the county. The US Army Corps of Engineers has always inspected the levees annually and drainage/diking districts assess small fees to covered farms to keep dikes in good condition. After Katrina, FEMA beefed up its regulations and now requires a certification process for levees. This process is extensive and expensive, and difficult for the diking districts to afford. And without certification, FEMA will raise the insurance rates significantly for properties behind the levy. In addition, it's impossible to get a loan for any improvements to a property without it being behind a certified levy.

Photo: Hops are one of hundreds of crops that are grown in the Willamette Valley.

Recommended actions and investments

- ODA, the Oregon Water Resources Department, OSU, and ag stakeholders should cooperate to identify irrigation water delivery infrastructure that will be needed to deliver water from Willamette Basin reservoirs to new irrigators in the region. These needs should be a high priority for feasibility studies and capital funds to support economic development in the region.
- State leaders should continue to adopt and implement policies that preserve agricultural land as the valley's population and development pressure increase.
- Given the huge diversity of agriculture in the region, Oregon should continue to look at ways to help the industry coexist to allow all types of agriculture to be viable, and encourage ongoing dialogue among the perspectives represented on the GE task force.

Key facts

Total land area: 9.0 million acres
Source: Oregon Secretary of State, 2014

Land in farms: 1.7 million acres
Irrigated land: 235,676 acres
Source: National Agricultural Statistics Service, 2014

2012 farm and ranch sales: $2.3 billion
Source: Oregon State University, 2013

Top ag products:
1. Nursery
2. Dairy products
3. Tall fescue
4. Greenhouse products
5. Wheat

Source: Oregon State University, 2013

Columbia Gorge/Plateau

Introduction by Tyson Raymond

In our area, we are very young and experiencing an agricultural resurgence. Young, progressive, and aggressive farmers are coming back and changing the landscape. They don't just do things because that's the way it has always been done. They are taking a close look at management practices and asking if it's the best way to do it. It's a really great process to be a part of. All of this makes me look forward to where we are going in agriculture and where we will be in 10 years.

Agriculture and food processing are the major economic engine in our area. Our exports bring new dollars into the region, and farms and food processors support thousands of jobs. As the industry becomes more technologically advanced, the demands on our agricultural work force become more technical as well.

Overview

It's very possible that the package of potatoes in your freezer, the cherries and watermelons in your local grocery store, and the beef and onions on your deli sandwich all came from this region. The region's farms include pear, apple, and cherry orchards as well as a growing number of berry farms and vineyards. They produce Hermiston watermelons, onions, potatoes, peppers, and other vegetables. They raise alfalfa and grass hay, grain corn, and corn silage for livestock feed. Farmers here produce the majority of the state's wheat, and raise cattle on pasture and rangeland.

Farms in this region are highly sophisticated in many ways, including land and water management, risk management, and marketing. Farmers use technology and data to efficiently apply irrigation water, nutrients, and pesticides. Fresh produce growers keep extensive records to satisfy complex product quality and food safety specifications from multiple buyers. Growers, packers and co-ops have helped develop Oregon's international reputation for high quality wheat, fruit, hay, and vegetables.

This region includes the state's largest onion producer, the largest dairy, and several large beef feedlots. Packing houses, a thriving food processing industry, two important ports, and a network of grain elevators help the region's farmers add value to their products and transport products to market.

Packing, processing, and port facilities are also an extremely important source of jobs in the region for both urban and rural residents. For example, a study completed in 2013 found that the Port of Morrow supports over 6,850 jobs across Oregon (FCS Group, 2013). Many of these jobs are associated with the food processing plants located at the Port, which process potatoes, onions, and other locally grown vegetables.

Photos top to bottom: Tyson Raymond farms in the Helix area. Photo courtesy of Jeff Otto/Journal Communications. • Hermiston watermelons, such as these watermelons grown and packed at Walchli Farms, are famous throughout the Pacific northwest. • Workers process potatoes at a plant within the Port of Morrow industrial area in Boardman. Processing and packing facilities at the Port and throughout the region support thousands of rural and urban jobs.

Growing middle classes in many of Oregon's key international markets should provide continued opportunities for both raw and processed products from this region. In addition to international factors, local water supplies are key to agricultural economic development in the region. If additional water can be found for agriculture while also meeting instream needs, it is certain that farmers and food processors in the region will make the most of it.

Key issues and opportunities

Farmers are struggling to meet several specific labor needs. Orchardists need workers with specific abilities to balance on ladders while picking fruit and holding heavy sacks. Many crop farmers need workers who are technically skilled to operate GPS-guided tractor steering systems, computers that monitor soil moisture, and complex fertilizer and pesticide application equipment. Tighter immigration enforcement discourages some workers from coming to the region.

The Oregon Legislature provided funding to continue Pesticide Stewardship Partnerships (PSP) in several areas of the region. These outstanding programs involve collaboration with farmers, agencies, and organizations to gather data about pesticide concentrations in surface water. If the monitoring detects a problem, farmers voluntarily change their management strategies. This program remains invaluable as farmers struggle to deal with invasive insect pests while protecting water quality. For example, after a new pest appeared in Oregon orchards, PSP monitoring and education helped farmers achieve an 82% reduction in median concentrations of the insecticide malathion in monitored Wasco county watersheds (Oregon Department of Environmental Quality, 2013).

Wolves travel through the region and pose a threat to sheep and cattle. In addition to documented kills, wolf presence can reduce livestock weight gain. Wolves also cause undocumented livestock deaths. State grants to counties help ranchers discourage wolf presence, reducing conflicts, and also compensate ranchers for livestock kills and injuries. In 2014, Umatilla County received $39,675 in wolf compensation and depredation management grants; Morrow County received $3,675 (Oregon Department of Agriculture, 2014c).

Energy facilities present opportunities and challenges to the region's farmers. Wind farms offer additional income to farmers as well as rural counties, as long as they are compatible with the agricultural use. Other types of energy facilities, such as transmission lines, are less compatible with the high-value land where they have been proposed.

Photo: Cherries bloom at Orchardview Farms in The Dalles. After harvest, Orchardview packs and sells the cherries to domestic and international customers.

Columbia Gorge/Plateau

Local farmers estimate that current proposed substation and transmission lines could cumulatively impact 3,000 to 8,000 acres of irrigated farmland (Levy and Rice, 2013), and have called for changes in the siting process of these lines to avoid unnecessary impacts to high-value agricultural land.

Photo: Over $200 million was invested in the new ConAgra/Lamb Weston facility at the Port of Morrow. In 2013, infrastructure investments at the Port totaled over $300 million.

Recommended actions and investments

- The State of Oregon should continue to fund Pesticide Stewardship Partnerships and other water quality monitoring efforts in agriculture.
- The Legislature should provide funding to continue and if possible, expand the precision agriculture program at Blue Mountain Community College.
- The Legislature and ODA should continue to fund the Wolf Depredation Compensation and Financial Assistance Grant Program and support efforts to prevent wolf-livestock conflicts.
- The Land Conservation and Development Commission should adopt rules discouraging energy facility siting on high-value farmland unless absolutely necessary. LCDC should develop new standards that better consider the cumulative effects to agricultural land of the siting of energy facilities in addition to evaluating impacts on a project-by-project basis.

Key facts

Total land area: 6.6 million acres
Source: Oregon Secretary of State, 2014

Land in farms: 5.2 million acres
Irrigated land: 287,000 acres
Source: National Agricultural Statistics Service, 2014

2012 farm and ranch sales:
$1.3 billion
Source: Oregon State University, 2013

Top ag products:
1. Wheat
2. Dairy products
3. Cattle
4. Potatoes
5. Sweet cherries

Source: Oregon State University, 2013

Northeast Oregon

Introduction by Sharon Livingston

Northeast Oregon is timber, cattle, crops, and water. Crops, livestock, wildlife and people all depend on the water that flows through our rivers and streams.

The farmers, ranchers, and foresters of northeast Oregon manage forests sustainably, battle invasive weeds and juniper, and carefully manage grazing on public and private lands. Many people are restoring the streamside areas along their land. They care for the land because they know that's the only way to stay in business over the long term.

Overview

A classic scene from this region is a small, green valley with crops or hay and spectacular rugged rock formations or mountains in the background. Cattle and hay dominate this region of Oregon, but it is also an important producer of several other crops, including wheat, potatoes, grass seed, and mint.

This region of the state is relatively remote, with cropland and grazing land often located next to wilderness areas. Public lands are a major source of grazing land for cattle producers in the region. Ranchers strive to sustainably manage both public and private grazing land, tracking their livestock over thousands of acres of vast rangeland during the spring, summer and fall grazing seasons.

Irrigation water is a critical input for the region's hay, pasture, potatoes, and mint and seed crops. Dryland crop and cattle producers also depend on sufficient water, in the form of rainfall, to grow their wheat and to support rangeland plants for cattle and wildlife.

Coexisting with wildlife is a part of farming and ranching in northeast Oregon. It is not unusual for farmers to observe deer, elk, or even moose in their fields on a daily basis. Cattle and sheep are vulnerable to predators including coyotes, eagles, cougars, and now wolves.

Photos top to bottom: Sharon Livingston is a cattle rancher from Long Creek, Oregon. • Wallowa County, Oregon.

Northeast Oregon

International markets are important for wheat and are growing for the region's high-quality hay. Some farmers and ranchers are niche marketing local and/or certified beef, lamb, and crops to specialty grocery stores in Oregon and the West. Others sell on the open market, where strong beef prices have helped the region's cattle ranchers.

Hay prices have been strong in recent years, which helps hay farmers while increasing costs for cattle ranchers who feed hay.

Key issues and opportunities

The greater sage-grouse, which inhabits rangelands throughout central, eastern, and southeastern Oregon, is a candidate species for listing under the Endangered Species Act. In Oregon over the last 20 to 30 years, about five million acres of sage grouse habitat have been marginalized by fire, juniper encroachment, and other factors. US Fish and Wildlife Service will be making a determination in September 2015 about whether to list the bird. A listing would severely restrict livestock grazing on both public and private lands throughout the West. The State of Oregon, federal agencies, and organizations are collaborating on species recovery efforts to try and prevent the need for a listing. The state's goal is to maintain the 70% of the sage grouse habitat that is in good condition and enhance the remaining 30% (Oregon Department of Fish and Wildlife, 2011).

On many rangelands in the region, lack of fire has encouraged juniper to grow in areas that historically lacked trees. Thirsty juniper take water away from other types of plants and create areas of bare soil, reducing cattle grazing areas and ruining habitat for rangeland species such as greater sage grouse.

Wolf populations are growing in eastern Oregon, increasing the potential for conflicts with livestock. Ranchers can receive compensation for wolf kills of livestock, but are not reimbursed for increased stress to livestock due to wolf presence. Oregon Department of Agriculture administers a wolf compensation grant program funded by the Legislature, which gives grants to counties to compensate ranchers for losses and to adopt strategies that help minimize wolf-livestock conflicts. In 2014, Wallowa, Baker, Union, and Wheeler Counties received $65,523, $31,777, $5,000, and $2,000, respectively (Oregon Department of Agriculture, 2014c).

Certain types of energy facilities, such as transmission lines, are not compatible with the high-value land where they have been proposed. Land use advocates and farmers have called for changes in the siting process of these lines to avoid unnecessary impacts to high-value agricultural land.

Photos top to bottom: Curious cattle watch from a winter feeding and calving area near LaGrande, Oregon. • Invasive juniper have been cut and piled on this Baker County ranch. Removing invasive juniper helps rangeland plants, including grasses and sagebrush, to recover, improving water quality, water supply, and wildlife habitat.

Recommended actions and investments

- The Legislature and ODA should continue to fund the Wolf Depredation Compensation and Financial Assistance Grant Program and support efforts to prevent wolf-livestock conflicts.
- The State of Oregon should continue to devote state resources towards sage grouse conservation efforts and help avoid an ESA listing. The Oregon Watershed Enhancement Board and ODA's Weed Grant program should direct restoration dollars towards juniper control as well as non-native, high priority weeds, and the Legislature should increase funding for rural fire protection districts.
- The Land Conservation and Development Commission should adopt rules discouraging energy facility siting on high-value farmland unless absolutely necessary. LCDC should develop new standards that better consider the cumulative effects to agricultural land of the siting of energy facilities in addition to evaluating impacts on a project-by-project basis.

Key facts

Total land area: 9.4 million acres
Source: Oregon Blue Book

Land in farms: 2.9 million acres
Irrigated land: 230,000 acres
Source: 2012 Census of Agriculture

2012 farm and ranch sales: $321 million
Source: Oregon State University, 2013

Top ag products:
1. Cattle
2. Wheat
3. Alfalfa hay
4. Potatoes
5. Peppermint for oil

Source: Oregon State University, 2013

Southern Oregon

Introduction by Stephanie Hallock and Ron Meyer, Meyer Orchards

One of us a city-dweller who considers Southern Oregon is an idyllic playground —forests for camping, spectacular rivers for fishing and boating, world-class fruit to eat and award-winning wines to drink, all kinds of theater and music festivals, historical places to visit and stay, plus great food. For the other who makes a living in agriculture, it is all of these things and much more, it is home to family and others who have worked the land for generations.

For years, agriculture and forestry have sustained this region of tall firs, rushing rivers, and fertile valley soils. Making a living means hard work and adapting to environmental challenges, both natural and regulatory. Federal forest policy, issues like genetically modified crops, and multiple demands for abundant, clean water have a dramatic impact on the economic future of the region.

Today, a diverse agricultural heritage is sustained through livestock production and grazing, orchards of pears and other fruits, acres of viticulture grapes, and a growing demand for specialty crops such as cut flowers, herbs, small grains, and organic fruits and vegetables.

But the region is changing. One of us sees it becoming more of an urban valley with a little bit of agriculture scattered throughout. An increasing number of retirees are calling the area home, making healthcare a new driver in the economy. More people means more pressure to keep land in agricultural production, and increased density can cause tension over activities like spraying chemicals on orchards.

We believe that those accustomed to an urban lifestyle and families who have ranched and farmed the land for generations must find ways to work together if we are to ensure a continued bright future for agriculture in this beautiful, bountiful region and throughout Oregon.

Overview

Several famous Oregon brands from this region, including Harry and David, Rogue Cheese, and Umpqua Dairy products, take their names from local geography and history. The rolling hills and riverside lands along the inland Umpqua, Applegate, and Rogue river valleys allowed this rich agricultural heritage to develop. Today these valleys support pasture and livestock, hay, fruit orchards, and a rapidly growing number of vineyards.

The area's well-known and emerging agriculture and food industries influence the region's economy in many ways, including on-farm, food processing, and other food-related jobs for both urban and rural residents. Agriculture provides open space and bounty that enhances quality of life and attracts

Photos top to bottom: Stephanie Hallock, former DEQ Director, Portland. • Ron Meyer displays some of the pears from Meyer Orchards. Pears are one of Southern Oregon's top agricultural products. • Rogue Creamery, one of the region's best-known value-added agriculture businesses, has won numerous awards for its cheeses.

tourist dollars to all businesses in the region.

In recent years, a variety of small fruit, vegetable, herb, and flower farms have been launched and are now an important part of the region's economy. The OSU Small Farms program and Rogue Farm Corps provide technical support to new and prospective farmers, and Rogue Farm Corps offers the state's first approved farm internship program. These programs provide valuable hands-on and classroom training.

As in many areas of the state, much of the region's most fertile farm and ranchlands border its cities. Protecting these lands will preserve the vibrant agricultural heritage that is the economic development engine of this region, providing delicious and value-added fruits, vegetables, wine, cheese, and other agricultural products.

Key issues and opportunities

Challenges in this region include potential cross-pollination between genetically engineered and conventional or organic crops, and managing agri-tourism activities in a way that does not limit management options for neighboring types of agricultural operations. Farmers in the region have explored strategies to address some types of conflicts, including a system to map potentially incompatible crops to ensure enough separation distance, but so far a solution has not been reached. Voters in both Jackson and Josephine counties have passed bans on genetically engineered crops (the measure in Josephine County passed after state preemption legislation).

Governor Kitzhaber has convened a Task Force on Genetic Engineering to frame issues and information around genetically engineered seeds and agricultural products so that policymakers have a foundation to consider future options for managing conflicts and improving consumer choice. Perspectives represented on the task force include growers and dealers of GE crops, organic agriculture, retail, and research and education. In addition, ODA Director Katy Coba is an ex-officio member of the Task Force. The Task Force is not charged with making recommendations, but rather identifying key issues, describing areas of agreement and disagreement, and identifying strategies used in other jurisdictions to address similar concerns. Topics explored by the task force include coexistence between GE and non-GE crops, mandatory and voluntary food labeling programs, and existing federal authorities related to GE crops and foods. The Task Force is developing a report which will be finalized in December 2014.

A variety of value-added businesses are successfully operating in the region, including wineries, cheeses, and packaged specialty agricultural products. Some of the region's top employers include Harry and David, Umpqua Dairy, Tree Top, Amy's Kitchen, Food Services of America, and Associated Fruit Company (Medford/Jackson Chamber of Commerce, 2014; Umpqua Economic Development Partnership, 2012).

The impacts of nonfarm development and urban growth on irrigation district operations is a major concern in this region. Assessment and consideration of impacts on the ability to irrigate agricultural land and identification of potential mitigation measures to offset those impacts should be applied as a condition of approval of all proposals for the expansion of urban growth boundaries.

Wolves have recently expanded their range into this region of Oregon. State wildlife officials have confirmed that the wolf OR7 and a mate have produced offspring in the southwest Cascade Mountains, in the Rogue-Siskiyou National Forest.

Southern Oregon

Recommended actions and investments

- State leaders should continue to adopt and implement policies that preserve agricultural land and irrigation infrastructure as the valley's population and development pressure increase.
- Given the huge diversity of agriculture in the region, Oregon should continue to look at ways to help the industry coexist to allow agriculture to be viable, and encourage ongoing dialogue among the perspectives represented on the GE Task Force.
- Oregon Department of Agriculture and other state agencies should support and assist value-added agriculture opportunities in the region.

Key facts

Total land area: 6.1 million acres
Source: Oregon Blue Book

Land in farms 624,721 acres
Irrigated land: 60,132 acres
Source: National Agricultural Statistics Service, 2014

2012 farm and ranch sales: $164 million
Source: Oregon State University, 2013

Top ag products:
1. Cattle
2. Other hay–excludes alfalfa and hay silage
3. Winter pears
4. Farm forest products
5. Wine grapes

Source: Oregon State University, 2013

Photo: Haylage protected in plastic wrapping near Roseburg, Oregon.

Introduction by Tracey Liskey

For the most part, farms in these regions are very limited to the crops that can be grown. There are a few valleys, the Klamath Basin and the Vale area that are the exceptions. This is due to large irrigation systems.

The majority of area in these valleys is high desert, with a very limited growing season, and limited amount of rainfall. When you drive through this area you will mainly see cattle and hay ranches. In the areas that are able to irrigate you can see a much larger variety of crops including onions, potatoes, corn and many others.

When the residents or visitors drive through this land they see great areas of open space with beautiful mountains, streams to fish, and wildlife of all kinds. This makes this land a wonderful place to live. At the same time, it makes it a real hard place to make a living. The remoteness of this land from markets, the harsh weather conditions, the lack of supporting businesses due to the lack of population make this a challenging land. Over 70% of the land in these counties is federally owned. This opens up a lot of land for grazing allotments, but it also brings all the federal regulations with it. Having much of the land owned by the federal government limits the tax base for the county governments, which makes supplying the essential needs of the county difficult.

While the beauty of this land and its remoteness is what makes the citizens want to live here, we the people of the state need to make sure that we recognize the differences and the needs of this part of the state when we make rules and regulations.

Overview

Southeast Oregon is often called "Oregon's Outback." While it's classified as high desert, it is a highly productive region for both agriculture and wildlife. Its agricultural land is a mix of high desert rangeland, lowland meadows, and irrigated cropland.

Beef and other livestock products are the region's top agricultural commodity. Livestock in the region rotate between the rangeland, lowland meadows, winter feeding areas, and feedlots, grazing on rangeland plants in the growing season, and consuming hay and other feeds during the winter and on feedlots.

Much of the irrigated cropland in the region is used to grow high-quality alfalfa and grass hay, which feeds beef cattle, dairy cows, and other livestock in Oregon and around the western US. Two areas in the region are also important for dairy, wheat, and vegetable production. The Ontario area, on Oregon's border with Idaho, is an important onion-growing region. Just west of Ontario, in the Vale area, dairy farmers raise replacement heifers for dairy farms all over the state.

Photos top to bottom: Tracey Liskey farms and ranches in southeastern Oregon. • The Sprague River valley is part of the upper Klamath basin, where irrigators and tribes recently reached an agreement to resolve water conflicts.

Southeast Oregon

The Klamath Falls area is a famous potato producing region; there are also several dairies in the Klamath Falls area.

The region's agricultural industries provide a variety of on and off-farm jobs. On-farm workers in the region irrigate fields, feed, milk, and care for beef and dairy cattle, and harvest crops. Onion and potato packing plants, farm machinery and irrigation equipment supply companies, product inspection and certification services, and fertilizer, seed and other input supply companies are just some of the off-farm agricultural employers in the region.

Farmers in the Ontario and Klamath Falls areas receive water from irrigation districts, and use a variety of irrigation systems to provide water to their crops. Farmers, agencies, and other organizations have collaborated in both regions to adopt technologies that improve irrigation water use efficiency. These changes are expected to help improve water quality and conserve water, but many additional investments of time, effort, and funding will be needed to reach the state's water quality goals and address water supply challenges.

Key issues and opportunities

The greater sage-grouse, which inhabits rangelands throughout central, eastern, and southeastern Oregon, is a candidate species for listing under the Endangered Species Act. In Oregon over the last 20 to 30 years, about five million acres of sage grouse habitat have been marginalized by fire, juniper encroachment, and other factors. US Fish and Wildlife Service will be making a determination in September 2015 about whether to list the bird. A listing would severely restrict livestock grazing on both public and private lands throughout the West. The State of Oregon, federal agencies, and organizations are collaborating on species recovery efforts to try and prevent the need for a listing. The state's goal is to maintain the 70% of the sage grouse habitat that is in good condition and enhance the remaining 30% (Oregon Department of Fish and Wildlife, 2011).

Invasive species are a challenge throughout the state, but are particularly difficult in this region. Western juniper, while native, has spread well beyond its historic range and density. This threatens native plants, wildlife such as the sage grouse, cattle ranching, and water quality and supply. Non-native weeds such as cheatgrass and medusahead have taken hold throughout the region and also degrade rangeland for grazing and wildlife habitat.

Irrigators and irrigation districts in the lower Klamath area reached an agreement with tribes and other stakeholders several years ago. Recently, irrigators and tribes in the upper Klamath also reached an agreement. While agreements alone will not solve the region's severe water shortages, they can bring a resolution to years of water-related conflicts in the region and provide some level of assurance to all water users involved. Benefits of the Klamath agreements include increased

Photos top to bottom: Onion harvest in Malheur County, Oregon. Dry storage onions are one of the region's top agricultural products. • Premium fingerling Klamath potatoes are washed and packed at Wong Potatoes in Klamath Falls.

stream flows into Klamath Lake, more water certainty and stable power rates for irrigators, improved and protected streamside areas, and economic development for the Klamath tribes. The Board thanks the State and Oregon's Congressional delegation for its role in helping to reach solutions to these extremely difficult conflicts.

Irrigation water supplies are an issue throughout the rest of the region as well. Many farmers in irrigated regions would like to see additional water storage projects developed. However, the cost of the studies that would need to be done to complete such projects has been prohibitive. The Board is hopeful that these types of projects will be eligible for funding through the Water Supply Development Account authorized in Senate Bill 839.

Certain types of energy facilities, such as transmission lines, are not compatible with the high-value land where they have been proposed. Land use advocates and farmers have called for changes in the siting process of these lines to avoid unnecessary impacts to high-value agricultural land.

Photo: Baled hay in Lake County, Oregon. Alfalfa hay and other hay are both in southeast Oregon's top 5 agricultural products.

Recommended actions and investments

- Oregon's state and federal leaders should continue to support and fully fund the lower and upper Klamath restoration agreements.
- Oregon's leaders should continue supporting efforts to help recover the sage grouse and avoid an endangered species act listing. The Oregon Watershed Enhancement Board and ODA's Weed Grant program should direct restoration dollars towards juniper control as well as non-native, high priority weeds, and the Legislature should increase funding for rural fire protection districts.
- The Land Conservation and Development Commission should adopt rules discouraging energy facility siting on high-value farmland unless absolutely necessary. LCDC should develop new standards that better consider the cumulative effects to agricultural land of the siting of energy facilities in addition to evaluating impacts on a project-by-project basis.

Key facts

Total land area: 22.2 million acres
Source: Oregon Secretary of State, 2014

Land in farms: 3.9 million acres
Irrigated land: 657,400 acres
Source: National Agricultural Statistics Service, 2014

2012 farm and ranch sales: $861 million
Source: Oregon State University, 2013

Top ag products:
1. Cattle
2. Alfalfa hay
3. Dry storage onions
4. Dairy
5. Other hay

Source: Oregon State University, 2013

Central Oregon

Introduction by Steve Van Mouwerik and Rex Barber, Big Falls Ranch, Terrebonne

We are each involved in different aspects of agriculture, but face many similar challenges and opportunities in our respective roles. One of our families has farmed in Central Oregon since 1908 when a grandfather homesteaded near Culver. The family has been involved in agriculture ever since, evolving crops and cropping practices to match opportunities to the unique challenges of the region. The other of us has been harvesting and shipping Oregon grass seed straw overseas since the early 90s and more recently has begun supplying cellulosic ethanol projects in the Midwest with crop residues.

Two major themes in the Barber family farm operation are diversification and innovation. The family grows wheat, garbanzo beans, dry peas, carrot seed, and hay, all of which benefit from Central Oregon conditions. They converted to a minimal or no-till system in 2005, which required them to adjust planting technology, crop choice and management. They appreciate that the cost of changing how you farm can be a failed crop, but it can also bring new chances for productivity and success. For the other of us, a career in seed and grain residue management has tracked environmental initiatives including open field burning and the development of non-food based biofuels. The work reflects a persistent need for agriculturalists to find benefits in new opportunities and markets that are created by new legislation and new trading sectors.

We both recognize the importance of being involved in issues that affect the agriculture industry, whether at a local, state, or national level. One of us is in a second term on the Board of Agriculture. The other currently serves on the Central Oregon Agricultural Research Center Advisory Council and is Chairman of the Deschutes Soil and Water Conservation District. Many Central Oregon farmers have been involved in local issues such as land use, irrigation water supplies, right to farm, and non-traditional land use (weddings, on farm markets and events).

Overview

The Central Oregon region is home to agriculture large and small. In Jefferson County, farmers produce high-quality carrot seed, hay, grass seed, mint, and wheat. In Deschutes County, much of the agriculture is small-acreage hay and horse farms. Crook County agriculture includes farmland that produces garlic and hay; it is also a major beef-producing county with pasture and range on public and private lands.

Farm direct marketing to consumers is growing in the region, with urban consumers nearby that want locally grown products. Given the climate in the region, much of the locally grown agriculture opportunities are in livestock, but some local marketers also grow fruits and vegetables outdoors or in greenhouses. Several small dairies in the area are producing specialty cheese for local and regional markets.

Irrigation districts in the region play a major role in delivering water to farms of all sizes.

Photo: Two major themes in Rex Barber's farm are diversification and innovation.

The region's water comes from a series of reservoirs in the Deschutes river system, which are fed by snowmelt. These districts have been leaders in conservation, working with their patrons and with natural resource agencies to pipe water delivery systems, install efficient irrigation equipment, and protect fish with innovative fish screens. These piping projects have allowed many farmers in the region to use more efficient irrigation systems, conserving water and improving water quality.

Large or small, agriculture in the region helps employ people in a variety of related fields. Irrigation infrastructure associated with agriculture is an important source of jobs in Central Oregon. In addition to irrigation districts, other irrigation-related employers include electric, pump, and pipe companies. Seed companies in the region market and export hybrid carrot seed and grass seed all over the US, Europe, and Asia. And a variety of businesses, from veterinarians to farriers to fencing companies, serve the plentiful horse farms and cattle ranches in the region.

Agricultural income and jobs were an important source of stability during the great recession in a region hit hard by declines in housing, manufacturing, and tourism. Economic Development for Central Oregon reported in its 2012 and 2013 regional profiles that agriculture has helped mitigate job losses in other sectors in both Jefferson and Crook counties.

Key issues and opportunities

The greater sage-grouse, which inhabits rangelands throughout central, eastern, and southeastern Oregon, is a candidate species for listing under the Endangered Species Act. In Oregon over the last 20 to 30 years, about five million acres of sage grouse habitat have been marginalized by fire, juniper encroachment, and other factors. US Fish and Wildlife Service will be making a determination in September 2015 about whether to list the bird. A listing would severely restrict livestock grazing on both public and private lands throughout the West. The State of Oregon, federal agencies, and organizations are collaborating on species recovery efforts to try and prevent the need for a listing. The state's goal is to maintain the 70% of the sage grouse habitat that is in good condition and enhance the remaining 30% (Oregon Department of Fish and Wildlife, 2011).

Irrigation water is becoming an ever more precious resource in the region. Climate change in the Pacific Northwest is expected to reduce winter snowpack, an important source of summer irrigation water in the Deschutes Basin. A group including cities, irrigators and irrigation districts, and conservation interests has already completed extensive modeling to forecast supply and demand, and implement restoration projects.

Photos top to bottom: This carrot seed field in Jefferson County is irrigated using a drip system, which allows farmers to use irrigation water more efficiently. • Alfalfa hay and other hay are both among Central Oregon's top 5 agricultural products. Irrigation district canal piping projects have helped farmers transition from flood and furrow irrigation to more efficient irrigation systems, such as the sprinklers shown on the hillside in this photo.

The group was recently awarded a federal grant to refine and update supply and demand forecasts. In the 2014 short session, the Legislature added a budget note to the Oregon Water Resource Department's biennial budget indicating some of the state funding allocated for water supply developments should be used to support this study in the Deschutes River system.

A number of innovative livestock producers in the area are considering taking on the many challenges associated with small-scale meat processing. Producers want to supply local consumers with locally grown meat products. However, federal law mandates that meat products sold to the public must be inspected by US Department of Agriculture (USDA) officials. The region's two existing small-scale USDA meat processors are working with livestock producers to satisfy demand for USDA inspected meat products. A USDA Economic Research Report report (2012) concluded that growth in small-scale slaughter, cut-and-wrap, and processing facilities depends on whether producers in need of these services can provide enough throughput, for enough of the year, and pay a high enough fee for the services to make such facilities economically viable. This is also dependent on consumer demand and willingness to pay more for locally-sourced meat.

The region's short growing season limits some of the produce growing options that small farmers have in other regions of the state. However, growing product in greenhouses or other structures can extend the growing season for small farmers and allow them greater access to local markets.

Forests and rangelands in the region both face problems from lack of fire. On forestlands, lack of low-intensity fires has caused overcrowding with small trees. These trees shade out the grasses that would usually grow in this habitat and provide food for foraging wildlife and cattle. On rangelands, lack of fire has encouraged juniper to grow in areas that historically lacked trees. Thirsty juniper take water away from other types of plants and create areas of bare soil, reducing cattle grazing areas and ruining habitat for rangeland species such as greater sage grouse.

Salmon are coming back to the region thanks to improvements at the Pelton-Round Butte dams on the Deschutes River, and thanks to massive restoration efforts on agriculture and other lands in the region.

Recommended actions and investments

- The Legislature and state natural resource agencies should continue to support studies and forecasts of future water needs in the Deschutes Basin and support water supplies for agricultural producers and fish.
- ODA and OSU should continue communicating with small livestock producers who are exploring various meat processing alternatives, while also supporting and encouraging use of existing processors in the area as much as possible.
- Oregon's leaders should continue supporting efforts to help recover the sage grouse and avoid an endangered species act listing. The Oregon Watershed Enhancement Board and ODA's Weed Grant program should direct restoration dollars towards juniper control as well as non-native, high priority weeds.

Key facts

Total land area: 5 million acres
Source: Oregon Secretary of State, 2014

Land in farms: 1.8 million acres
Irrigated land: 137,000 acres
Source: National Agricultural Statistics Service, 2014

2012 farm and ranch sales: $148 million
Source: Oregon State University, 2013

Top ag products:
1. Cattle
2. Alfalfa hay
3. Other hay
4. Vegetable & flower seed
5. Wheat

Source: Oregon State University, 2013

REPORT CARD

The Board's 2013 report to the Legislature included recommendations on a number of key policy issues. As part of its 2015 report, the Board decided to take a look at the earlier recommendations and evaluate their status. Below are some key achievements as well as issues that need ongoing attention or remain unresolved.

Several of the Board's highest priority recommendations in 2013 related to support for water supply development, and significant progress has been achieved on these recommendations. Water supplies, and implementation of the Oregon Water Resources Strategy, were a major focus during the 2013 Legislative session. Several bills and budget increases passed in 2013 for OWRD and other agencies to support strategy implementation. This includes SB 839, which created grant and loan programs that support water supply developments and conservation. ODA received funding for a water resources specialist to distribute information about these programs and help implement projects.

The Legislature, ODA, and other natural resource agencies also continued their support for water quality monitoring, efforts to improve water quality, and efforts to control and eradicate noxious weeds. These were some of the Board's key recommendations in 2013 related to soil and water conservation. ODA's noxious weed program received full funding for the 2013-2015 biennium, as did agricultural water quality monitoring efforts that will help track agriculture's efforts to improve water quality over time.

As part of its increased focus on monitoring and documenting water quality outcomes, ODA is conducting pilot compliance assessments of agricultural lands in two small watersheds. These assessments in Noyer Creek in Clackamas County and Mill Creek in Wasco County found concerns in 37 of 237 parcels and 24 of 315 parcels, respectively. ODA will work with these landowners, SWCDs, and other partners, using voluntary and regulatory methods as needed. The program plans to expand compliance assessments to other watersheds, and is currently developing a tool to prioritize the other agricultural lands with a connection to waters of the state.

Many partner agencies and organizations, including ODA, have continued their support for new and small farms as recommended in the 2013 Board report. ODA's work in this area has included supporting farmer training and local marketing efforts through Specialty Crop Block Grants, launching the Celebrate Oregon Agriculture campaign, maintaining information for new and small farms on the agency web site, and collaborating with other funders of local food system development to ensure most strategic uses of funds.

Photos: Agricultural water quality management program staff conduct a community meeting in one of the Strategic Implementation Areas.

REPORT CARD

With the release of proposed rules to implement the Food Safety Modernization Act, significant federal support for food safety education, training, and state capacity is still needed, and it will remain a priority recommendation for the Board going forward.

Many of the Board's labor-related recommendations remain unresolved, although the Board was very pleased to see the agriculture work force housing tax credit renewed during the 2013 Legislative session. Farmers are still struggling to find the workers they need to harvest their crops in the absence of federal immigration reform.

The review of the Board's 2013 recommendations helped the Board revise its recommendations for 2015, recognizing the significant accomplishments that have been made while also acknowledging that there is still much to do on many other recommendations.

The Board's 2015 recommendations are available in a table format in an attachment that accompanies this report.

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