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MEMORANDUM

To: Clark Worth, Barney & Worth, Inc.
From: Bruce Prenguber
Subject: The Future for Agriculture in Yamhill County
Date: December 30, 2008

This report presents information for Task 1.4 of the Yamhill County Agri-Business Economic and Community Development Plan. This task assesses future conditions for Yamhill County agriculture by identifying current trends, opportunities, issues and constraints. The report also evaluates success factors necessary to sustain a viable local agriculture sector. Analysis in this report draws on interviews and baseline information about the Yamhill County agriculture in previous reports by Globalwise Inc. and Barney and Worth, Inc.¹

Yamhill County has a solid and prosperous agricultural foundation. The agriculture sector is well positioned to maintain its prominent role in the local economy in the years ahead.

The county's agriculture is diverse and robust with farm-level activity that generates about \$300 million of annual revenues. In 2007 Yamhill County ranked seventh largest in agricultural income among all 36 Oregon counties. This revenue total does not count the additional economic benefits from processing and marketing crops and livestock products. For example, more than 100 wineries annually generate about \$86 million in revenues from wine sales. Food processors also add to the local jobs, revenues and tax base.

¹ See Stakeholder Interviews – Agriculture Sector by Barney and Worth, Inc., November 2008 and Agriculture Profile of Yamhill County by Globalwise Inc., November 2008.

What lies ahead for agriculture is an important consideration for every Yamhill County resident – and every Oregonian. Yamhill County agriculture significantly impacts and contributes to the regional and statewide economy.

Emerging Conditions & Trends

Changing Face of Agriculture

The rural character of Yamhill County is being altered slowly as the population grows in the cities and towns throughout the county. There is a steady in-migration of people leaving urban places to experience rural lifestyles. Yamhill County offers innumerable amenities to draw these new residents.

This population growth is leading to changes for agriculture. Oregon's strong land use laws leave the agricultural land largely intact and encourage land owners to be forward thinkers about how they sustain their agricultural businesses.

Yamhill County's agricultural products take many pathways to the vast and complex national and global system for commodity and specialty crops as well as food and beverage production, processing and marketing. At one end of the spectrum is Yamhill farmer participation in the commodity production of grass/legume seeds, wheat and other grains.² Commodity crop operations rely on mechanization, efficiency and high volume yields to compete in world markets. Yamhill County's largest and longest operating farms have demonstrated their strength and capability in this segment. At the other end of the spectrum are small scale, labor intensive, artisanal agricultural enterprises. This is the face of "new" agriculture, and includes much of the vineyard and winery segment that has grown up over the last 40 years, and the more recent re-emergence of fresh, natural/organic food production. The ability to sell directly to consumers or command premium wholesale prices is often necessary to achieve sufficient profits for the smaller businesses. Significant growth in small farms, vineyards and wineries offering high value products makes this segment the safe bet for where much of Yamhill agriculture is headed.

Between commodity agriculture and "new" agriculture lies another large facet of this industry: nurseries, hazelnut and fruit orchards, processed vegetable producers, dairies and specialty food processors. Many of these businesses are full-time, family operations.

The only segment that is clearly declining in Yamhill County is livestock.³ Dairies and beef, hog and sheep production for meat are all trending down and that trend is likely to continue. Livestock enterprises tend to be land-extensive and low profit margins dictate that, over time, these businesses move to more rural locations that reduce operating costs. Another trend is the replacement of traditional livestock operations by smaller operations that use a host of environmentally sensitive production practices which attract local consumers to buy direct. Together, these small operations do not make up for the departure of traditional, larger livestock operations.

² Much of the data for this section is based on the National Agricultural Statistics Service (NASS) annual data for 2001 to 2007 and Agricultural Census data.

³ Recent NASS annual data shows total dairy cattle and beef cattle numbers rising but local livestock processors report that this counts animals owned by small acreage rural landowners who are not commercial producers.

Sustainable and Green Practices

Environmentally friendly production practices are not new to Oregon agriculture. Yamhill County agriculture is in the forefront. The county has an active Soil and Water Conservation District with strong representation in the farming community that gives major attention to soil and water conservation, water quality enhancement and related environmental practices.

Vineyard owners and other viticulture observers think there is substantial additional land in the county that can be developed for grape production. At present there are about 5,500 acres planted to wine grapes. Local industry observers estimate at least another 5,500 acres are suitable for viticulture plantings. How much land is ultimately planted depends on many factors, but constraints such as securing water rights and other factors will play an increasing role over the extent of vineyard development. The future for the county's wine sector is generally very bright, but constraints are looming (addressed below).

One reason small-scale food crop and livestock growers with sustainable production practices are drawn to Yamhill County is proximity to the large Portland metro market. Washington, Clackamas and Multnomah counties have farms that are closer to Portland, but Yamhill County has the big advantage of also having Portlanders "come to them." The premium wine reputation and ever expanding number of wineries is attracting visitors to the Yamhill region for tasting, dining and exploration that also leads visitors to food markets and local producers.

Yamhill County vineyard and winery owners are leading a trend to adopt environmentally conscious production practices. The Oregon Wine Board recognizes no less than five alternative sustainable systems for vineyard production: Demeter Certified Biodynamic; LIVE, Inc.; Oregon Tilth Certified Organic; Salmon-Safe; and Vinea – The Winegrowers' Sustainable Trust.⁴ To add coherence and help consumers readily identify Oregon growers and wineries with strong environmental awareness, the Oregon Wine Board is developing its own certification logo and brand known as "Oregon Certified Sustainable" (OCS). This new brand is currently being launched in cooperation with third party certifying agencies and the Oregon wine industry.

Many Yamhill County fruit and vegetable producers are also following green practices. As food producers see the strength of the wine industry's further adoption of sustainable practices it is likely that a specific form of brand identification for Yamhill County wine and food will emerge. Further adoption of certified farming practices may also follow. This will happen most quickly for food producers and processors that can tie their products most directly to wine-related business. A decade or so from now it is likely that much closer ties will be forged among Yamhill County wineries, local food producers and some processors. This natural association is an extension of wine *terroir* – the idea that the natural environment of the wine growing area, which expresses superiority in wine, extends as well to the foods grown in the same area. Exploring and developing this connection can further propel local, fresh food production in Yamhill County.

⁴ See the sustainable program descriptions and links to sites for more information at http://www.oregonwine.org/Discover_Oregon_Wine/Sustainability/

Buy Local

Rising sales of locally grown food in the Portland market is a very positive factor for expanding fruit, vegetable and livestock production in Yamhill County.⁵ Local food sales will increase in Portland, but there are also budding opportunities to sell within Yamhill County – at farmers markets, on-farm through subscription agriculture (Community Supported Agriculture), at local restaurants, farm/roadside stands and in more traditional retail food stores. Farmers markets elsewhere in the Willamette Valley and along the Oregon Coast have recently extended their days of operation and added new locations. For smaller farms, these emerging markets are very encouraging.

The influence of the wine industry is a key factor in the growth of local restaurants and catering businesses. One clear trend is the increasing quality of foods served in up-scale restaurants that feature local wines. There is strong demand for local fresh foods. Vegetables, fruits and meats are increasingly sourced locally and prominently identified to customers. The very up-scale Allison Hotel – destination resort/spa/restaurant – that will open next year in Newberg will further spur this trend.

Local Value-Added Processing

Value-added agricultural processing has become more concentrated among fewer firms as traditional fruit and vegetable processing has moved to other parts of the Willamette Valley or out of Oregon. Yamhill County's principal processing activities are hazelnut handling (sorting and shelling) and wine production. One large local milk processor remains in the area, and there are several meat packers and various other value-added processing firms. However much of this processing activity does not rely solely on locally produced crops or livestock.

It is not likely that this trend will change. Winery expansion seems poised to continue and the nut handling business should remain strong as hazelnut production shows growth potential. Local handling of fresh fruits and vegetables looks promising and this may be somewhat less visible because it often happens on the farms that produce fresh crops in their function as truck farms. (Truck farms grow, pack and deliver their own fresh fruits and vegetables.)

The lack of reliable water supplies is a constraint on expansion for many kinds of food processing. Large quantities of water are typically used in food processing plants that prepare foods by canning, bottling, refrigeration or freezing. Wineries are less intense water users than most food processing operations but still have significant water requirements at the time of grape crush which occurs in the early fall, while seasonal water demands are very high and supplies are low. Water constraints are significant in Yamhill County – this is a major factor that could constrain food processing expansion in the county.

Strength through Diversity

A major reason for the strength of local Yamhill agriculture is the diversity of agricultural operations found in the county. One of the major and positive trends discussed earlier in the report is the growth of fresh, local and sustainable food production. Yamhill County is going to be a major focal point for this trend in the future.

⁵ See Growing Portland's Farmers Markets by Barney & Worth Inc, Bonnie Gee Yosick LLC, Farmers' Markets America and Globalwise Inc., November 2008.

At the same time there is no reason to expect the major commodity crops of grass and legume seeds, hay and grain to disappear. Large farms have distinguished themselves with several generations of operating knowledge, business acumen and usually have considerable capital reserves and operating assets. Relatively short down cycles in commodity markets will not cause them to stop operating or force a complete transition to other types of farming. These farms also tend to successfully diversify their crops. It is common for commodity-centered farms to add hazelnut orchards, specialty vegetable seed production, or in some cases ornamental nursery crops to their enterprises. Some are also including vineyards and wineries in their plans. This diversity lowers their risk unless multiple sectors experience a downturn at the same time. They often operate with little debt except perhaps borrowing for annual operating expenses. The reduced fixed costs per unit of production of these farms also affords them management flexibility and greater resources to investigate and start new business ventures.

Issues for Yamhill County Agriculture

While farming, food and beverage production and nursery operations have enjoyed major growth in recent years, there are challenges that lie ahead. Some of these challenges need immediate attention to improve the long term outlook for Yamhill agriculture.

Water Resource Constraints

Water is a scarce and costly resource for agricultural businesses and others in Yamhill County.⁶ All major rivers and tributaries in the county are fully appropriated and junior water rights are subject to restriction during the low flow periods in the late summer and early fall months.

Securing new surface water supplies does not appear to be a viable alternative to groundwater pumping for agricultural users. The Palmer Creek Irrigation District, Yamhill County's only irrigation district, has senior water rights that allow the District to take water from the Willamette River to irrigate about 6,000 acres. The District wants to increase its surface water withdrawals, but the rights for additional withdrawals can only be obtained if the District contracts with the U. S. Bureau of Reclamation (BOR) for unallocated upstream waters of the Willamette River. Currently the BOR issues contracts for only one-year time periods. These contracts may be renewed by the BOR but annually renewed contracts are too tenuous for irrigators.

Four areas in Yamhill County are designated by the Oregon Water Resources Department (OWRD) as restricted groundwater areas: Amity Hills-Walnut Hill, Chehalem Mountain, Parrett Mountain, and Eola Hills.⁷ In all of the restricted groundwater areas it is possible to get a limited time water right for irrigation to establish a crop (vineyards are most likely the only significant crop that can benefit from the OWRD administrative rule on limited time water rights). The best aquifer conditions exist in the Amity Hills-Walnut Hill area for obtaining the limited time water rights. Few vineyard owners are willing to plant

⁶ See Yamhill County Water Supply Analysis, presented to Yamhill County Water Task Force, April 7, 2008 by HDR, Portland, OR.

⁷ The Eola Hills restricted area is principally in Polk County with a small portion extending into Yamhill County.

without a reliable source of water and some growers have strong preference for a permanent irrigation system to provide water in later years as well.

Even outside the groundwater restricted areas, some groundwater pumpers have experienced declining well yields. In addition the OWRD denies ground water permits if agency analysis shows a new well has a detrimental hydraulic connection to surface water sources. Expansion of new Yamhill County groundwater supplies by well drilling therefore appears to be a limited option.

Wineries and other commercial water users can operate without groundwater permits if they pump less than 5,000 gallons per day. If commercial users exceed the 5,000 gallon limit, the OWRD requires that the users have a water right permit. Some wineries without permits could be close to the limit at critical times of the year. Excessive groundwater withdrawal can result in enforcement actions by the OWRD. These conditions need closer attention to determine if workable solutions can be found.

While the vineyard and winery sectors command much of the attention, water supply shortages could also be very detrimental to nurseries, tree fruit and nut producers and vegetable growers. In recent years individual agricultural water users have been installing reservoirs to capture water for use in the critical low water time periods. One solution that is being informally discussed is expansion of public water reservoir storage for multiple users. Public storage systems or other alternatives are likely to be important for future agricultural development.

Labor Limitations

The availability of hired farm workers is another constraint weighing against future expansion of the more labor-intensive agricultural sectors in Yamhill County and elsewhere in the Willamette Valley. The most labor-intensive crops are wine grapes, ornamental nursery plants, orchard crops, and fresh market vegetables. Another consideration is that the highest value crops such as wine grapes attract more workers than lower value crops – growers of the higher value crops pay more for labor.

Over the next decade and perhaps beyond, farmers will be more reluctant to plant crops that need many hired workers because of an anticipated worker shortage plus pending tougher federal enforcement of immigration laws. Actions by the federal and state government in Oregon may reduce the ability of growers to hire farm workers.⁸ Established growers of fresh crops for farmers markets and other direct-market channels are seeking ways to reduce their dependence on labor. New growers of labor-intensive crops will be even more disadvantaged and reluctant to take the risk of planting these crops.

Suitable Land for Agricultural Production

The desirable valley land that is most suitable for crop or livestock production has been placed in production. City urban growth boundary expansion to accommodate population growth is leading to a net loss of low elevation ground available for agriculture. In addition there will be significant impacts on resource lands in Yamhill County if property owners continue to pursue and win a vesting claim under Measure 37. Measure 49 is the current governing law with respect to land development in EFU zones. Oregon land use

⁸ See Bermudez, Esmeralda. "Migrant measures bring bushels of labor trouble," *The Oregonian*, June 22, 2008.

laws promote agricultural land retention and if these policies remains in effect and are enforced land conversions should be minimal in the next ten to 15 years.

The best ground for vineyard development is generally southward sloping land in the foothills above the valley floor. This presents more complex evaluation under Oregon land use and environmental laws and policies. First, much of the higher elevation land was not originally considered “prime” agricultural land for traditional crops other than wine grapes. Therefore high quality vineyard lands are often not designated for Exclusive Farm Use zones and this compounds the difficulties of administering Oregon land use laws. Second, without proper management these lands can result in environmental problems, such as soil erosion and water quality degradation. Careful vineyard management can mitigate for these problems but losses of oak savannah and other forested land to vineyards are reported as concerns. Future constraints may be imposed as more environmentally sensitive land is brought into vineyard production.

Land scarcity is indicated by rapidly rising prices. Most agricultural land, even EFU zoned land, has non-agricultural amenity values priced into the market price of the land. This jeopardizes the economic viability of farmers especially if they produce low value crops or livestock. A good example is the decline of dairies and beef cattle operations.

Another problem is the advance of cities and towns and rural lifestyle residences closer to agricultural producers. This leads to urban-rural conflicts. For example, spray drift from grass seed farms and other field crops onto vineyards causes grape yield losses. High-volume automobile traffic on Yamhill County roads and highways is also restricting the movement of farm equipment and creating more traffic safety hazards.

Finally, there is a looming issue of organic crops being cross pollinated by transgenic crops such as conventional grass seed.⁹ The potential of altering the DNA of organic crops poses a difficult threat within the agricultural industry. The presence of both types of production practices in close proximity is a major concern. Wind-blown pollen is proven to travel long distances – bad news for Yamhill County’s organic producers. Litigation has occurred elsewhere in Oregon, but not yet in Yamhill County. Crop scientists and growers need to work on procedures and policies that will diminish the potential for such negative consequences here.

Path to a Secure Yamhill County’s Agricultural Future

Maintaining Critical Mass

Agriculture is strong, vital and growing in Yamhill County. Together with growers in neighboring counties Yamhill agriculture is sufficiently large to attract the necessary support services. Grass seed, nursery crops, nut and fruit crops, hay and grain, specialty seed production and vegetables all contribute to this strength. Farmers include second and third generation farm families that control thousands of acres, and also up-start small farms with new approaches. For now, there are enough successful growers to make agriculture a primary consideration in local policies and land use decisions and that is a very positive condition.

Oregon land use laws protect the land owners and their property from an unfettered land market, which gives farm families the security to reinvest and respond to changing conditions. This is a necessary pre-condition to keep agriculture on a forward path.

⁹ See Scott Learn, “Organic farmers fear what’s in the wind”, *The Oregonian*, November 1, 2008.

Among agricultural areas in Oregon, Yamhill County will be one of the first to experience impacts from any modification of the laws.

Focusing on Significant Opportunities

There is real untapped opportunity arising from the food and wine connection in and near Yamhill County. One example is the cross-promotion that exists between pinot noir wine and premium pork produced by a local meat packer. Local producers of vegetables and fruits should also focus marketing efforts on collaborations with the wine industry, restaurants, caterers and local retailers. Producers seeking more direct business can also approach the firms that distribute food and wine to determine what business growth can be created while also minimizing transportation to nearby targets such as the Portland market place and markets in Corvallis, Salem and at Oregon coast cities. The new Allison Hotel in Newberg will be a remarkable new showcase that introduces local food and wine to a clientele that will have ties to other upper-end food marketing venues.

Some crop and livestock producers may be ready to develop premium branded products but they are not willing to invest in owning or operating a processing facility. In this case existing food or beverage manufacturers can custom process private label products for the farmer/producer. This boosts economic opportunities for both processors and producers. A new investment in a meat processing facility in Yamhill County was recently made by a firm that also has a very successful retail supermarket business in the Portland metropolitan area. Livestock producers can jump start sales in Portland by having their livestock processed by this firm.

The future of Yamhill wineries is much brighter if tourism efforts concentrate on reducing barriers for visitors reaching the wineries. There is no doubt that more lodging choices and other visitor infrastructure will benefit wineries. These improvements will serve to coax local, regional, national and international visitors to Yamhill wine country attractions for longer stays. Some newer and small wineries reportedly rely on consumers to purchase 60% or more of total winery sales through direct non-premise purchases, or through club sales and special events. The many unique wineries in Yamhill County encourage consumers to “discover wine” which brings them to the County and naturally piques interest in other aspects of Yamhill agriculture.

Managing Water Use

Yamhill agriculture needs reliable water supply systems and strong conservation measures to protect irrigated agricultural production in much of the County yet the County’s water resources are fully allocated. Unless new water supplies are developed, local domestic water agencies will likely purchase a portion of their water supply from agriculture to meet future municipal demand. The finite water supply may mean many sectors of agriculture will begin to approach upper limits for expansion. Securing and conserving water will pay major dividends for the future of agriculture in this county.

Supporting Environmental Enhancement

Most agricultural producers are careful to operate in ways that add to long term productivity of the land and water resources they rely upon. Yet important safeguards for the environment must be diligently maintained. Some assessments have identified water quality as low in the Yamhill River Basin. Water quality is affected by pollution, nutrients, stream temperature, bacteria, chemicals, and stream flow. One of the ways for growers to improve water quality is to create riparian areas near rivers and streams, and several Oregon-based organizations identify farms that support such environmental enhancements. Yamhill County is already in a leadership position in this regard and

keeping this focus will help assure that the direct link to consumers' environmental values becomes even stronger.

Final Thoughts

Agriculture is important to the future of the citizens of Yamhill County. It is a leading means of providing the livelihood for more than 2,300 families and important to all 97,000 local residents. Agriculture also directly and indirectly provides jobs and income for farm families and others, and tax revenues that support governmental functions.

In less quantifiable terms, agriculture offers a foundation for the region's future. A major portion of the lower elevation land in Yamhill County remains devoted to agricultural production. Yamhill County is producing food and drink for export to a growing population outside its borders. As city populations continue to expand, this productive area is ever more significant for meeting the food needs of Oregonians.

Very different agricultural enterprises are active with no single sector dominating Yamhill agriculture. Grass seed, nurseries, nut and fruit orchards, vineyards and wineries, and dairy are some of the leading sectors. Even with the challenges identified here, the agriculture sector's diversity is a great strength that assures food, wine and related enterprises will have a long-term future in Yamhill County.