February 10, 2010

VIA EMAIL AND REGULAR MAIL

Washington County Planning Commission
Department Land Use and Transportation
155 North First Avenue
Hillsboro, OR 97124

Re:  Evidence in Support of Committed Exception Determination
     Casefile No: 09-360-PA

Dear Chair San Soucie and Commissioners:

Our office represents KCL Inc., the applicant in the above referenced application for property located east of SW Brighton Lane and north of SW Bald Peak Road (Map Number 2S3 2 Tax Lot 100). The contents of this letter and the attached information are provided in response to the January 13, 2010 Staff Report analyzing the application for a committed exception to Goal 3. Staff raised several concerns in its report that are addressed through the additional analysis and evidence contained in this letter.

The requested plan amendment based upon the committed and developed exception to Goal 3 is not often utilized. However, it is certainly not without precedent. In the 1980s several such applications were approved and within the general area of this application. Those applications of the developed and committed exceptions for plan amendments provide precedent and a road map for your Commission to consider. See Exhibit 1. The standards upon which the County has approved similar requests for committed exception lands supports the approval of this request.
The Site Topography and History of Farm Use Suggests that the Subject Property is Committed.

Site Characteristics

The topography of this property is unique. It is steeply sloped with elevations ranging from 460 to 820 feet across the property from east to west. See Exhibit 2. The property drops off substantially along the south and east property lines and in some places these slopes exceed 30%. At the bottom of the slope, the property is bounded to the east by a small stream, an unnamed tributary of the Tualatin River. Considering the minimum economic farm use standard of 80 acres for agricultural parcels, the subject property is significantly smaller measuring a total of 58.2 acres. The sloping character of the property limits the amount of land available to grow various products. Some crops would only be able to utilize the property with extreme terracing or crop layouts but ultimately would not result in a viable farm unit because of the reduction in density of plantings. In addition, modern harvesting and planting techniques cannot be used because the instability of the slopes make maneuvering and access too dangerous for large tractors and other farm equipment. Plowing steep slopes increases the likelihood of erosion and potential for water quality impacts to the nearby stream.

The property does not have a water right allowing for irrigation of agricultural uses. The eastern facing slopes are dry and hot in the summer parching and scorching green seedlings. Although the soils are classified as Types II, III and IV, the relatively high elevation, coupled with the full east and south facing sun exposure make these soils impracticable for agricultural use. The exceptional dryness in the summer is evidenced by the default landscape of low water demand Madrone trees. Although more prevalent in Jackson, Josephine and Douglas counties, Madrone trees need little or no rain, do not tolerate shade, and thrive on very warm sites with shallow, rocky soils. Exhibit 3. The existence of the Madrone trees in an atypical area of Washington County is the result of the subject property comprising an arid microclimate. A microclimate is a highly localized atmospheric zone where the climate differs from the surrounding area. The term may refer to areas as small as a few square feet (for example a garden bed) or as large as many square miles (for example a valley). Here, although the soils are suitable for farming, the elevation, exposure and weather effects, make this area of Bald Peak unique when considering farming activities.

A number of existing property owners note that either because of the elevation or the exposure, the area is prone to sudden high winds from the south or the east. See Exhibit 4. Such

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1 This description of the property applies to the committed exception determination of the existing characteristics under OAR 660-004-0028(2)(a) described under the Committed Exception heading as a portion of the state regulations governing committed exceptions. Further, the characteristics of the subject property are relevant considerations as to whether resource use of the subject property is impracticable. DLCD v. Curry County, 151 Or. App. 7, 11 (1997).

2 Most of the rest of the east facing slope of Bald Peak at similar elevations is located within exception area #129 and zoned a combination of AF-5 and AF-10.
winds increase the likelihood of overspray from the use of herbicides and pesticides even when accomplished through ground application.

The Regan Bros., a successful, multi-state Christmas tree farming company, owned the property and attempted to use the property for Christmas tree farming from 1984 until 2008, when it was purchased by the applicant. With Regan Bros. 50 years of experience in growing Christmas trees for a profit, they were never able to make a practicable farming use of the property. After 20 years of unsuccessful attempts to make a profitable use of the property as a Christmas tree farm, the Regan Bros. accepted that it was impossible to use the site for a commercial agricultural purpose and proceeded to sell the property. See Exhibit 5. Now, left with the affects of a failed Christmas tree operation and the continued development of surrounding residences, the property is, in effect, committed to non-farm use and such circumstances support a change from the AF-20 exclusive farm use zone to AF-10.

The Regan Bros. did not harvest the Christmas trees remaining on the property upon the sale and the trees have neither been tended to, nor the soils subsequently tilled, nor protected. As such, these Noble, Grand, and Norman firs are not suitable for sale as Christmas trees and are the wrong species for sale in the timber market. See Exhibit 5. The soils have become a nesting ground for rodents as well as growth of soil disease pathogens making farming impracticable.

Also, since the property was designated AF-20, the EPA and other state agencies have enhanced their regulation of the use of pesticides and herbicides. Acknowledging the ease in which chemicals leach through soil as well as through the air, federal law now establishes buffers for the application of pesticides to soils. Generally, these buffers can extend between 75 to 150 feet from existing structures. See Exhibit 6. These buffer requirements were not in place when the land was designated AF-20 and now, due to a court order the EPA and Oregon State Department of Agriculture are instructed to establish additional or enhanced buffers pertaining to the use of pesticides which will be enacted in the near future.³

**Neighborhood Development⁴**

Since the property was designated AF-20, the surrounding properties have been improved with residential uses. Although staff is correct that most of the surrounding parcels were created before the land was designated AF-20⁵, 18 of the 20 developed parcels located on adjacent lands were improved for residential uses between 1983 and the present. Placing these lands into active

³ *Washington Toxics Coalition v. EPA, 413 F.3d 1024 (9th Cir. 2005)* resulted in the federal court order requiring additional buffers from pesticide use.

⁴ This information applies to the committed exception determination related to the characteristics of adjacent lands and relationship between the subject property and the lands adjacent to it under OAR 660-004-0028(2)(b) and (c) described *infra* under the Committed Exception heading.

⁵ The placement of the AF-20 zone on their property was the result of a legislative change impacting multiple properties. It is likely that an AF-20 designation would not have been approved on a site specific quasi-judicial basis.
residential uses over the last 20 years has increased the impacts on the farming activities on this parcel making farming activities much more difficult.

The impacts from this surrounding residential development are exacerbated given the County’s small setbacks and the close proximity of the neighboring houses to the applicant’s property lines. Three surrounding structures range from only 26 to 38 feet from the applicant’s property line. Exhibit 7. Recent federal EPA regulations prohibit the use of agricultural pesticides within 75 to 150 feet of adjacent building. See Exhibit 6. As a result the total land available, based on a 150 foot buffer area from adjacent structures, the remaining area available for farming is greatly reduced to approximately 35 acres. This severe limitation adds to the topographical constraints described above.

As mentioned above, at the base of the slope bounding the eastern property boundary an unnamed creek serving as a tributary to the Tualatin River. This creek is protected within the Tualatin River Subbasin Agricultural Water Quality Management Area Plan and accompanying regulations contained in Or. Admin. Rules 603-095 et seq. See Exhibit 8. These rules limit the use of pesticides or fertilizers near streams and require erosion control measures to retain overall water quality.

Although the property lacks water for irrigation, approval of applicant’s request for a change from AF-20 to AF-10, enabling the construction of five dwellings, will not adversely affect groundwater or existing wells. Based on information from the Assistant Water Master, Cole Deamon, and vineyard irrigation specialist, Bud Beck, five additional houses would not impact existing wells because the limited use of water for residential purposes is far below the demand for irrigation. See Exhibit 9. Therefore, the applicant’s project will not reduce water availability to surrounding areas.

The property is accessible via two private roads that currently serve as the sole access for other residential uses. Larkins Mill Road provides access for 11 homes and Brighton Lane provides access for 13 homes. These private roads are approximately 30 feet wide and tightly curved as they approach Bald Peak Road. Although these roads are adequate to serve the existing and future residential uses, they are wholly inadequate to support agricultural uses such as log trucks or farm equipment and the existence of routine residential traffic on this road, only exacerbates the conflict.

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6 Under County Development Code Section 3449.2, the applicable setbacks are: thirty (30) foot front yard; ten (10) foot side yard; twenty (20) foot rear yard; and thirty (30) foot street side yard.

7 Per Washington County Comprehensive Plan Policy 6, water quality and quantity will not be adversely affected by applicant’s District change from AF-20 to AF-10. In fact, approval of applicant’s request will help maintain water quantity and prevent water quality impacts by reducing heavy use of pesticides and herbicides. According to the Assistant Water Master, Cole Deamon the domestic use of water for a family of four is estimated at 400 gallons per day, or approximately 2,000 gallons per day for five more homes. In comparison, planting only one acre of grapes on the property would use more water in one watering at an amount of 2,490 gallons per day/acre, than all five homes.
The Committed Exception Factors of Goal 2, Or. Admin. Rule 660-004-0028, are satisfied.

A committed exception is generally available when the ability to farm the applicant’s property has been made impracticable by changes in the surrounding uses. The committed exception process is governed by a highly detailed administrative rule, OAR 660-004-0028, identifying the factors the County can take into consideration. As a result of the characteristics of this site, in terms of the topography, the earlier but failed use of the property as a Christmas tree farm, lack of water, and the recent developments in the surrounding area, the applicant’s property is uniquely situated to meet the requirements for a committed exception.

How are the Surrounding Uses Defined?

The review process for a committed exception includes the relationship of the applicant’s property and what uses might be employed as it relates to existing adjacent uses. In order to make this determination, an identification of surrounding uses is required. Staff has suggested that the surrounding lands inquiry is limited to those lands that are contiguous and cannot include three pre-existing exception areas #129, #130, and #131. The Oregon Administrative Rules defines the term “contiguous” to mean, “connected in such a manner as to form a single block of land,” in other words adjoining. Since the committed exception regulations do not use the term contiguous but instead use the term adjacent, the context for review of an application for committed exception is necessarily broader than contiguous, adjoining land. As a result of this broader definition, staff and the Planning Commission should take a more expansive view of the changing character of adjacent land to include the extensive non-farm development pattern within the existing exception areas.

Relationship Between Exception Area and Surrounding Lands

Of the 20 parcels adjacent to the applicant’s property all but two have constructed homes since 1975, mostly in the 1980s and 1990s. See Exhibit 10. All of these parcels are within one mile of the subject property and homes have been constructed practically up to the applicant’s property line. Notably, the development of homes in the last 20 years on neighboring properties shows that changing the District designation for the applicant’s property will not perpetuate a domino effect because so few vacant properties remain in the vicinity. Most of the AF-20 District property already contains non-farm dwellings permitted through the Marginal Lands

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8 ORS 197.732(2)(b) and OAR 660-004-0028(1) explain that, “A local government may adopt an exception to a goal when the land subject to the exception is irrevocably committed to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable.”

9 OAR 660-004-0028(2)(b).

10 See OAR 660-033-0020(3).

11 See PGE v. BOLL, 317 Or 606, 611 (a decision maker cannot omit what the legislature has inserted in a statute).
provisions. Also, consideration should include the adjacent exception areas #129, #130, and #131 as the overall area is already committed to residential uses. The two remaining vacant parcels designated AF-20 could be similarly developed as Marginal Lands with houses located as close to the subject property boundaries as the Code would allow. The subject property cannot be similarly developed with a dwelling because of deed restrictions imposed to remedy an illegal partition occurring before the applicant obtained the property.

Attached are a series of letters evidencing that neighbors would have significant concerns if this land was returned to farm use. Exhibit 4. The neighbors have expressed concerns about health risks resulting from the use of harmful pesticides. This problem is enhanced given the close proximity of the residential structures to the subject property lines. Neighbors are also concerned about how herbicides and pesticides would runoff the property given the steep slope, interfering with neighbors ability to maintain gardens and could impact ground water. Regan Bros. had to stop aerial spraying the Christmas tree operation located on the subject property, citing concern over liability when a neighbor complained that the spray had killed their goat.

Notwithstanding the general farm waivers in place on neighboring properties, residential use of those properties impact the full range of farm activities that could be pursued on applicant’s property ranging from access issues for large agricultural and logging equipment to potential liability if the neighbors were harmed from overspray of herbicides and pesticides. Even though these waivers are in place, a number of farmers had concerns with farming in such close proximity to residential uses. A farm waiver does not protect a farmer from being sued by a neighbor and expending the funds associated with mounting a defense. Moreover, a farm waiver does not protect farmers from regulation, and/or enforcement actions pursued by neighbors for monitoring and compliance with buffer restrictions. This concern is supported by the testimony of Forester, Jay Worley, who knows that aerial spray companies will not take a job in the Bald Peak mountain area because of concern about overspray. See Exhibit 11. Finally, a farm waiver does not forestall or mitigate the impact of farming practices in neighboring developed committed properties.

Although we generally think of chemical applications in farm uses impacting residential uses, the attached evidence from Oregon State University Extension suggests that a commercial farming operation on the subject property could be adversely affected by the application of over-the-counter household weed remover and pesticides on neighboring non-farm properties that could impact farm uses. See Exhibit 12. Generally, a farm waiver only insulates a farmer from liability resulting from his own pesticide application but does not similarly provide any such protections from a residential use of common chemicals used for residential horticultural maintenance. Therefore, it is important to keep in mind that a pesticide or herbicide would likely have adverse effects on the neighboring unrelated uses.

As mentioned above, the property is within a limited ground water protection area and notwithstanding the difficulty of obtaining a water right for agricultural uses, conducting a farm use on the applicant’s property could adversely affect existing domestic wells. As Darryl Hedin, the Water Master for District 18 explained, only residential uses and pasture uses up to one-half an acre can be served with domestic well water. Exhibit 13. Further, even if the applicant could
obtain a water right, the impact to the aquifer by such intense agricultural use would rapidly affect recharge rates as compared to domestic water use. See Exhibit 9. For example, two years of agricultural irrigation is approximately equal to the amount of seven years of residential water use. By spreading water consumption over the longer, domestic use period, groundwater quantity can be better protected as compared to drastic amounts of agricultural water use in a short time frame.

Practicability of Farm Uses

In addition to considering the relationship between the subject property and its surroundings, OAR 660-004-0028(3) requires consideration of whether the “uses or activities” allowed by Goal 3 are “impracticable.” Finding a farm use impracticable does not mean that farming of the land is impossible. Rather, impracticability is evaluated based on considering “farm use” as defined by state law, ORS 215.203(2)(a), and determining whether the land is suitable for farm use. “Farm use” includes employing land for harvesting and selling a long list of agricultural uses “for the primary purpose of obtaining a profit in money.” Therefore, one of the central qualifying phrases within the definition of “farm use” is whether the land is suitable to obtain a profit. If there is no evidence that the property could profitably be used for farm uses, its use is similarly impracticable. Although ORS 215.203 identifies a long list of uses that qualify for farm use, the staff report suggests that given the soil quality and the hilly terrain, it may be suitable for orchards, irrigated strawberries, small grain, hay, pasture, timber, or wildlife habitat.\textsuperscript{12} Although DLC\textsuperscript{D} argues that this list is too narrow, the applicant has broadened each category for consideration to respond to DLC\textsuperscript{D}’s concerns in order to cover all of the uses contemplated in ORS 215.203. The following information will show that it is impracticable for the applicant to use its property for profitable agricultural purposes.\textsuperscript{13}

a. Christmas Tree Farming

The testimony from Regan Bros. and Mike Ricks establishes that farming Christmas trees on the site is impracticable. The facts of this case are absolutely dissimilar to cases where a property has a history of farm use that provides a basis for determining farm use is practicable. Even with 50 years of experience, the Regan Bros. were not able to profitably farm the property, and were forced to give up when the surrounding development made farming impossible.\textsuperscript{14}

\footnote{12} Since ORS 215.203(2), the definition of farm use, does not include wildlife habitat, we will not consider it as a Goal 3 protected use.

\footnote{13} This discussion addresses the other relevant factors to be considered in reviewing a committed exception application under OAR 660-004-0028(2)(d). This discussion also addresses Washington County Comprehensive Plan Policy 17 because the site will not sustain even part-time or agriculture or forest production.

\footnote{14} Even if Christmas tree farming was feasible, a profit in today’s market is difficult. OSU Extension Service’s September 2009 publication regarding Christmas Tree Economics describes that, given today’s market for Christmas trees, value added services, like U-Cut opportunities or sales of ancillary products and services may be necessary for a farmer to make a profit. Exhibit 14. If the
Regan Bros., Jay Worley testimony and the earlier testimony of Mike Ricks establish that other timber uses of the property are not practicable uses of the property because of the cost in eradicating pests and disease from the property, the lack of water rights, competing trees and noxious weeds, poor soil conditions, high start up costs, and the need for spraying. Further, seedlings are subject to high mortality on the eastern slope because of the elevation and dry summer months.

b. Field Crops Such as Hay or Wheat

Turning to other crops like hay and wheat, the applicant relies on the expert opinion of Dick Eagle and Mike Cropp counseling against such use of the property. See Exhibit 15. The minimum acreage for a profitable hay harvest is 80 acres. However, the steep slopes, along with the EPA restrictions on application of pesticides, reduce the potential acreage for hay production by approximately 20 acres leaving only 38 acres for planting. The steep slopes prevent harvesting with modern farm equipment. Further, the site would be subject to high levels of erosion using current methods of tillage, and as a result of fallow conditions during winter rains. See Exhibit 16. Therefore, hay or wheat harvesting is not a practicable farm use on the property.

c. Orchard

The potential use of the property for an orchard use such as hazelnut propagation is similarly limited by the size of the parcel. According to neighboring hazelnut farmer, David Brown, it takes at least 100 acres of Prime Class I soil to make a marginal profit. See Exhibit 17. The applicant’s parcel is far too small and comprised of the wrong soil type for this orchard use. In addition, like other crops, herbicide and pesticide aerial applications are common to orchard trees and would be difficult given the close proximity of the neighboring structures. Further, the steep slopes are not suitable for the type of farm equipment used to maintain and harvest nuts.

d. Grapes Growing Activities

Once more emphasizing the impossibility of farming without a water right and in a groundwater restricted area, the applicant’s representative spoke with Dr. Scott Burns at Portland State University regarding the process for growing grapes on the subject property. Exhibit 18. Dr. Burns described that 70% of grape growers in the Washington County area irrigate their crops for about the first three years after initial planting. It would be impossible for the applicant to profitably grow grapes without a water right in the dry, hot environment of this eastern sloping property. Mr. Hedin, the District 18 Water Master, has stated that drip irrigation is required for applicant wanted to open the property to a U-Cut operation, such use would require a conditional use permit and analysis of neighborhood impacts related to traffic and the use of the private road to access the property. A U-Cut operation is impracticable because of the neighborhood impacts of such use would constrain access to the property, and the potential liability for people wandering along applicant’s sloping property looking for their choice Christmas tree.

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15 This analysis also applies to heavy water using viticulture activities and irrigated strawberries.
the first couple of year to establish grapes. Similarly, without an irrigation right, it would be impossible to proceed with growing irrigated strawberries.

Additionally, grapes are highly susceptible to injury from pesticide applications occurring on adjacent properties. As noted in the OSU study considering the same, drift from growth-regulator herbicides can injure grapes half a mile or more from the application site. Exhibit 12. Such growth-regulator herbicides are widely used in the growing of wheat, pasture, rangeland or corn. Wheat farming is already occurring on an adjacent parcel to the west and could significantly deter the success of grapes. Further, common household herbicides, such as Roundup, have adverse drift impacts up to a half mile.

e. Animal Husbandry

Another alternative for use of the property is animal husbandry. Once more the sloped terrain, small acreage and lack of water rights pose substantial hurdles to successful grazing of the land. The size of the property limits the number of animals that could graze, even in the best of circumstances. However, this property lacks water rights, a main ingredient for the survival of the animals and for irrigation of the property to grow grasses for feed. Therefore, the use of the property for animal husbandry is impracticable. See Exhibit 15.

f. Timber

Finally, the statement from professional forester, Jay Worley states that given the small parcel size, the close proximity of the property to existing residences and the low profitability margin, along with other outside impacts such as the invasion by nuisance plants such as scotch broom, the land is not suitable for timber uses. Exhibit 11. Given the testimony of both Mr. Worley and Mr. Ricks, it is clear that the timber currently located on the property is not merchantable because the trees are unmanaged; portions are suffering from pest invasion; and the trees are not suitable species for marketable timber products.

Based on the foregoing, the applicant has exhaustively shown that it is impracticable given the topography, uses on neighboring lands, and limitations to other potential agricultural uses to profitably farm the subject property. Therefore, the property is uniquely situated to be granted a committed exception as a result of changed circumstances since the Regan Bros. last and failed attempt to farm the property.

Conclusion

As staff correctly stated, the soil classification is not the only factor considered when determining whether lands qualify for an exception. Although the soils coupled with other

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16 As noted above, adequate water from a domestic well would not be permitted, nor available to provide this temporary support for seedlings.

17 If soil classification were the only basis by which a county could consider agricultural suitability for purposes of considering an exception, an exception would never be justified. We know from the exception areas surrounding the subject property, that notwithstanding soil quality, committed exceptions can be justified.
factors may have justified an AF-20 designation in 1983, the continued development of houses on existing parcels in close proximity to the subject parcel, along with increased EPA regulations limiting the range for use of pesticides, lack of irrigation rights in a designated limited ground water area, all combined with the already challenging topography make the subject property committed to non-farm uses.

The information contained within this letter and the associated application establish that the applicant has met the committed exception criteria in the following ways:

1) The characteristics of the exception area under OAR 660-004-0028(2)(a) that support a finding that the applicant’s property qualifies for a committed exception include:
   - Unique topography;
   - Lack of water right for irrigation purposes;
   - Dry, pest infested, disease ridden soil conditions;
   - Historical inability to successfully farm Christmas trees;
   - New EPA regulations severely restricting the use of pesticides and herbicides.

2) The characteristics of the adjacent lands under OAR 660-004-0028(2)(b) support a finding that applicant’s property qualifies for a committed exception:
   - Proliferation of surrounding residential uses since the property was designated AF-20;
   - Impacts of small setbacks severely limiting available agricultural lands;
   - Proximity to creek and potential for adverse water quality impacts from farming;
   - Infeasibility of accessing the property for farm use on the two available private roads.

3) The relationship between the exception area and the lands adjacent to it under OAR 660-004-0028(c) support a finding that applicant’s property qualifies for a committed exception:
   - Adverse impacts of farming operations to the surrounding residential uses;
   - Adverse impacts of residential horticultural activities to farming on applicant’s property;
   - Inability to obtain adequate water for irrigation of farmland because of groundwater protections.

4) The effects of other relevant factors under OAR 660-004-0028(2)(d) support a finding that applicant’s property constitutes a committed exception:
• Impracticability of a farm use on applicant's property including analysis of potential crops such as Christmas trees, hay, wheat, orchards, irrigated strawberries, grapes, and viticulture activities;

• Impracticability of using the applicant's property for animal husbandry;

• Impracticability of timber production on applicant's property.

Based on the foregoing, an exception is necessary to provide some functional use of the property that will help its development to better match the character of the area.

Sincerely,

GARVEY SCHUBERT BARER

By

John M. Junkin

cc: Veronica Smith
    Carrie Richter
    Ken Leahy
Subarea No. 129  Tax Map No. 253 1, 2, 11, 12

Existing Plan Designation Rural Existing Zoning AF-10

Proposed Plan Designation Rural Proposed Zoning AF-10

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Average Parcel Size 7.5

Smallest Parcel .26

Largest Parcel 59.99

Total Acres on Tax Deferral 332.74

Soil Types 75% Category 1; 15% Category 2; 10% Category 3

Availability of Public Water: Yes___ No X___

Water District Name N/A

Potential Additional Lots Based on Recommended Zoning 11

Potential Additional Lots Based on AF-5 Zoning 40

Characterization of Developed and Committed Area:

Area 129 is located north and south of West Laurel Road, east of Bald Peak Road in low rolling farmlands. Much of the area’s soil (at least 25%) is in poor condition.

The average lot size in Area 129 is 7.5 acres. The largest parcel is 60 acres. This parcel is bounded on the north and east by a 217 acre property outside the exception area, on the south and east by a 21 acre property and 2.0 and 9.9 acre parcels, and on the west by two 9.8 acre parcels. Eighty-four (84%) percent of the properties in the area are individually owned, and 53% are improved.

Area 129 is committed to non-resource uses due to the development in the area and the poor soil conditions.
Subarea No. 130  Tax Map No. 253 10A
Existing Plan Designation Rural Intermediate Natural Resource Existing Zoning AF-10
Proposed Plan Designation Rural Proposed Zoning AF-10

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Average Parcel Size 9.3
Smallest Parcel 4.29
Largest Parcel 10.59
Total Acres on Tax Deferral 23.2

Soil Types 75% Category 1; 20% Category 2; 5% Category 3

Availability of Public Water: Yes X No

Water District Name L.A. Water Co-op

Potential Additional Lots Based on Recommended Zoning 0

Potential Additional Lots Based on AF-5 Zoning 5

Characterization of Developed and Committed Area:

Bald Peak Road runs east/west through Area 130 and forms the northern border for the area. Along Bald Peak Road are two parcels (one vacant, one improved, both on deferral) and a small rural subdivision accessed by Elsimore Lane, a cul-de-sac. Six of the eight parcels in this subdivision are included in Area 130. Four of the six parcels in the subdivision are improved. Two are under common ownership, ten acres each in size, both are improved and neither are on deferral. One vacant parcel is bordered by two improved parcels on the west and south, Elsimore Lane on the east, and Bald Peak Road on the north. The other vacant parcel is bordered on the north by an improved parcel, on the south and west by a 33 acre vacant parcel (outside Area 130) and on the east by a 79 acre improved parcel on deferral, also outside Area 130.

To the west and south of Area 130 is another substantially larger developed and committed area (#131).
Subarea No. 131  
Tax Map No. 253 3, 8, 9, 9AA, 10B, 10C, 10D  
Rural Intermediate & Natural Resource  
Existing Zoning AF-10  

Proposed Plan Designation Rural  
Proposed Zoning AF-10  

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Soil Types 65% Category 1; 30% Category 2; 5% Category 3

Availability of Public Water: Yes X No

Water District Name L.A. Water Co-op (partial)

Potential Additional Lots Based on Recommended Zoning 6

Potential Additional Lots Based on AF-5 Zoning 68

Characterization of Developed and Committed Area:

Area 131 begins along Laurelwood Road and continues along both sides of Bald Peak Road. Yamhill County forms the southern boundary for a portion of this area which is hilly as it is in the Chehalem Mountain area. Bald Peak Road runs north/south and east/west (after its intersection with Laurelwood Road) through Area 131. Due to the size and configuration of Area 131, each of the tax maps will be discussed to facilitate description of the parcels in this area.

253 3' On the north side of Bald Peak Road and east of Laurelwood Road are thirty parcels which are in a rectangular pattern. These parcels range from 0.57 acres to 22 acres and the average parcel size is 8.3 acres. Of the thirty parcels, 10 are improved.

WCPD/9-81

EXHIBIT 1
5 of 6
253 9 and 253 9AA:

There are 15 parcels with frontage along Laurelwood Road, eight of which range from .95 to 2.2 acres in size and are clustered along the road just prior to its intersection with Bald Peak Road. Four of these parcels are about 10 acres in size. Nine of the fifteen parcels are developed and five are on deferral. The terrain is quite steep and these dwellings fall in a small valley just before the road climbs to meet Bald Peak Road.

Along the west side of Bald Peak Road south of its intersection with Laurelwood Road there are fourteen parcels, five of which are improved. There are three contiguous parcels totalling 39 acres, which are 'individually owned' under the County's definition, yet which are actually owned by a married couple (under the ownership pattern of Mary Smith, John Smith, John and Mary Smith). All three parcels are vacant and on deferral. These same individuals own four parcels on the east side of Bald Peak Road in Area 131 which total 39.9 acres which fall under the same ownership pattern (John Smith, Mary Smith, John Smith, John and Mary Smith). All four parcels are vacant and on deferral.

253 10B

There are three parcels on the east side of the intersection of Bald Peak Road and Laurelwood Road and one on the north side, all of which are improved, individually owned, and one of which is on deferral. These parcels range in size from .76 to 5.1 acres. South of these parcels (on the east side of Bald Peak Road) are three parcels, of which one is improved, all are on deferral. Two of the parcels are under common ownership (16.6 acres and 7.3 acres), both are on deferral and the 7.3 acre parcel is improved. The 7.3 acre parcel splits the 16.6 acre parcel in half. The third parcel is 9.2 acres, and is one of four parcels on the east side of Bald Peak Road which was discussed above (same owners as three parcels on the west side of the road). On the north side of Bald Peak Road and east of Laurelwood Road are thirty parcels which are in a rectangular pattern. These parcels range from 0.57 acres to 27 acres and the average parcel size is 8.3 acres. Of the thirty parcels, ten are improved. Bordering all the parcels on 253 10B on the east and north is a 43.3 acre parcel which is outside Area 131.

253 10C

Continuing down Bald Peak Road, on the east side, there are an additional 13 parcels. All but one are undeveloped; all but one are on deferral. Parcel size ranges from 4.5 to 39.4 acres. Eight of the parcels abut Bald Peak Road; the other four are reached through easements. Lands outside this area to the east are proposed for AF-20 zoning. There are eleven ownerships in this portion of Area 131.
Diseases and Insect Pests of Pacific Madrone

M. Bennett and D. Shaw

Pacific madrone (Arbutus menziesii) is a broadleaf evergreen tree famous for its smooth, reddish-orange bark (Figure 1). A Pacific Northwest native, it grows from southern California to Vancouver Island. In Oregon1, Pacific madrone is most abundant in Jackson, Josephine, and Douglas counties, but it grows in every county west of the Cascade crest, usually on warm sites with shallow, rocky soils.

As an evergreen, madrone retains foliage throughout the year. New leaves emerge each spring. As the year progresses, these leaves often acquire spots or discolorations as a result of foliar pathogens and, sometimes, insect activity. The foliage may appear unseemly. This is normal. By midsummer, most or all of these leaves are shed, leaving only the new growth from spring. In drought years, or in a year after heavy fruiting, new growth may appear very stunted.

Madrone does not tolerate shade—even its own. A tree will lose lower branches that are shaded by the upper portion of its canopy. Because madrone resprouts vigorously after cutting or fire, it often will dominate the canopy initially. Over time, however, trees that are more shade tolerant may crowd its sides or overtop it. Then the tree will begin to decline in vigor; it may show more symptoms of foliage and other diseases and eventually may die.

Madrone is drought tolerant. In natural settings, it is well adapted to survive long, hot summers with little or no rain. Extended droughts, however, may reduce tree vigor and increase disease susceptibility.

Madrone Diseases

Three major types of disease affect madrone: foliage diseases, branch dieback and trunk canker diseases, and root diseases.

Foliage Diseases

More than a dozen fungal organisms can cause leaf spots and dead regions on madrone leaves, and the specific disease can be difficult to identify. For all these foliage diseases, however, young leaves are infected by airborne or water-splashed spores during wet weather, often in spring. Trees growing in creek bottoms, valleys, and the forest understory are most likely to be infected.

Many foliage diseases cause circular to irregular spots about 0.25 to 0.5 inch in diameter (Figure 2, above, and Table 1, page 1). These may remain small or grow into a foliage blight, causing irregularly shaped, dead areas that coalesce and eventually may kill the entire leaf (Figures 3 and 4, page 2). A related disease, tar spot, produces irregularly shaped, black, tarlike spots on the undersides of leaves. These diseases may result in unseemly foliage but seldom are serious. They may lead to an increase in tree stress, however.

What can you do? In the home landscape, pruning dead branches and raking and destroying fallen leaves before

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1 In the southern part of madrone’s range, its name is pronounced “mah-drone”; in the north, it’s “mah-dron-ahh.” Long-time residents in the south sometimes call it laurel.

---

Max Bennett, Extension forester, Jackson County; David Shaw, Extension forest health specialist; both of Oregon State University.
fall rains may help reduce the spread of spores and infection of new leaves. Reducing competition for light helps, too; see "Maintaining Madrone Health," page 4. In the forest, minimizing shading and reducing competition will help the tree.

**Twig dieback and trunk cankers**

These diseases are caused by fungi that kill the cambium (the growth layer inside the bark). The bark initially looks discolored, then peels off, revealing blackened, cracked wood that almost looks as if it’s been burned. Madrone twig dieback (Figure 5) progresses from branch tips and works downward. It is associated with drought and is especially common in years following heavy flowering and berry production. Madrone canker occurs on the main trunk or major branches (Figure 6), but also can be on smaller twigs and in the flowering stalk. It usually develops after bark injury. Cankers may spiral around the trunk or branch, girdling and killing it. Vigorous trees form a ridge of callus tissue around the margins of the canker, limiting its spread. Rapidly spreading cankers lack calluses. Often, both twig dieback and trunk cankers are present on the same tree. Some trees affected by these diseases may decline rapidly and die in a year or two. More vigorous trees may persist with multiple cankers for years, perhaps decades.

**Table 1. Diseases of madrone.**

<table>
<thead>
<tr>
<th>Disease category</th>
<th>Pathogen</th>
<th>Disease name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Root rots</strong></td>
<td><strong>Pythium spp.</strong></td>
<td>Damping-off</td>
</tr>
<tr>
<td></td>
<td><strong>Phytophthora cactorum</strong></td>
<td>Collar rot or basal canker</td>
</tr>
<tr>
<td></td>
<td><strong>Phytophthora cinnamomi</strong></td>
<td>Phytophthora root rot</td>
</tr>
<tr>
<td></td>
<td><strong>Armillaria spp.</strong></td>
<td>Armillaria root disease</td>
</tr>
<tr>
<td></td>
<td><strong>Heterobasidion annosum</strong></td>
<td>Annosus root rot</td>
</tr>
<tr>
<td><strong>Twig dieback and branch cankers</strong></td>
<td><strong>Neofusicoccum arbuti</strong></td>
<td>Madrone canker</td>
</tr>
<tr>
<td></td>
<td><strong>(Nattrassia mangiferae, Fusicoccum arbuti, Rendersonula toruloidia)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Botryosphaeria dothidea</strong></td>
<td>Madrone twig dieback</td>
</tr>
<tr>
<td></td>
<td><em>(Fuscoecum aesculi)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Wood-decay fungi</strong></td>
<td><strong>Phellinus igniarius</strong></td>
<td>Brown top rot</td>
</tr>
<tr>
<td></td>
<td><strong>Fomitopsis cajanderi</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Poria subacida</strong></td>
<td>Yellow root rot</td>
</tr>
<tr>
<td><strong>Foliage diseases</strong></td>
<td><strong>Aecochyta hansenii</strong></td>
<td>Leaf spot</td>
</tr>
<tr>
<td></td>
<td><strong>Coccomyces quadratus</strong></td>
<td>Tar spot</td>
</tr>
<tr>
<td></td>
<td><strong>Cryptosticta arbuti</strong></td>
<td>Leaf spot</td>
</tr>
<tr>
<td></td>
<td><strong>Didymosporium arbuticola</strong></td>
<td>Leaf spot</td>
</tr>
<tr>
<td></td>
<td><strong>Diplodia maculata</strong></td>
<td>Leaf spot</td>
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<tr>
<td></td>
<td><strong>Disoeta arbuti</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Elsinoe maitriotiana</strong></td>
<td>Spot anthracnose</td>
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<tr>
<td></td>
<td><strong>Exobasidium vaccini</strong></td>
<td>Blisters blight</td>
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<tr>
<td></td>
<td><strong>Mycosphaerella arbuticola</strong></td>
<td>Madrone foliage blight</td>
</tr>
<tr>
<td></td>
<td><strong>Phyllosticta fimbrifera</strong></td>
<td>Leaf spot</td>
</tr>
<tr>
<td></td>
<td><strong>Pucciniastrum sparsum</strong></td>
<td>Rust</td>
</tr>
<tr>
<td></td>
<td><strong>Rhytisma arbuti</strong></td>
<td>Speckled tar spot</td>
</tr>
</tbody>
</table>

*Adapted from Elliott (1999) **Hansen (unpublished)*
Deep waterings may help prevent twig dieback (but see cautions below, in discussion of root diseases). Minimizing bark injury is the key to preventing cankers. Madrone bark is so thin, it is easily damaged by sunscald (when the trunk is suddenly exposed to sun) or by mechanical wounding. Trunk wraps can protect against sunscald if placed on the tree before it’s exposed to direct sun.

Once diseases are established in the main stem, there’s not much you can do; no fungicide is known to be effective. If caught early, however, pruning and burning individual cankered branches, shoots, and flowering stalks seems worthwhile. If the canker is partway up a branch, cut it 1 foot or so below the visible canker margin to include any fungus that may have spread into the wood.

Madrone root diseases

These diseases affect the roots and tree trunk. Cankers (areas of diseased tissue) are usually near the base of the tree (Figure 7) but may be farther up the trunk. Infected bark is brown, and sapwood also may be discolored. Loss of foliage and small, curled leaves are common symptoms. Infected trees often die, sometimes rapidly. Moist soil conditions favor the fungus; hence, overwatered trees or trees growing in poorly drained soils are most susceptible.

Other root diseases, such as Armillaria, are typically associated with root wounding (e.g., during trenching) and with poor tree health. These are most common on older trees.

The main way to avoid root disease problems is to avoid overwatering. In home landscapes, watering every day or two on flat or poorly drained ground and/or heavy clay soils is a recipe for trouble. While some individual madrone trees may do all right in these situations, the risk of developing root disease is much higher. On the other hand, deep waterings every 2 weeks or so, underneath the drip line but well away from the trunk, may promote tree vigor during extended summer dry spells.

Sudden Oak Death

Pacific madrone is a host species for the fungus *Phytophthora ramorum*, that causes Sudden Oak Death. The disease has not been detected on madrone in Oregon, however. Like the foliage and canker diseases described above, the Sudden Oak Death fungus causes leaf spots (Figure 8), leaf death, and branch dieback. Diagnosis is difficult: individual trees may be infected by *P. ramorum* and other fungal pathogens at the same time. In Oregon, *P. ramorum* is confined at this time to an area in southern Curry County, in and around Brookings.

Wood-decay fungi

Wood-decay fungi typically invade madrone through wounds, either from mechanical injury, as from pruning, or caused by cankers. The presence of wood-decay fungi in a tree often is obvious; for example, exposed heartrot (Figure 9) or conks (shelflike, fruiting bodies of the fungi). Decays usually are

Figure 7. Root disease (Phytophthora) canker near ground line. Photo: Ralph Byther, Washington State University.

Figure 8. Young madrone infected by *P. ramorum*. This leaf and shoot/stem blight often follows the midrib and petiole (connecting stem) of the leaf. Photo: P. Maloney and D. Rizzo, University of California, Davis.

Figure 9. Madrone with heartwood decay is excellent habitat for a number of cavity-nesting species such as woodpeckers, owls, bats, and small mammals. Note the cavity hole at the top and extensive decay exposed at the butt of the tree.
not considered a major factor in poor tree health, but they can be important in large, old trees near houses or in recreation areas. Madrone can remain standing with extensive heartrot for long periods, though heavy snow loads might result in extensive breakage. Unless the tree is a potential hazard, it usually is not important to remove it.

Proper pruning, avoiding wounds, and maintaining good health help avoid wood decays. Madrone is known as a good wildlife tree, because heartrot creates habitat for cavity-nesting birds and animals. Therefore, in trees that pose no risk to people or property, heartrot may be desired for wildlife values.

Madrone Insect Pests

Insects normally are not a serious threat to madrone health. Insect pests of madrone (Table 2, page 5) include the fall webworm and western tent caterpillar, aphids, and leaf miners. The western tent caterpillar is uncommon on madrone but can occur on it. The fall webworm is much more common on madrone in southwest Oregon (Figure 10). Both form tents, in which the caterpillars rest and feed. The western tent caterpillar tents are most obvious in late spring and early summer; fall webworm tents are more common in late summer and early fall.

These pests are easily controlled by pruning and rarely cause significant damage. Trees that are defoliated may have smaller leaves the following year. Aphids may attack leaves and terminals of madrone, and their feeding can cause some leaf curling. The pale green aphid produces copious "honeydew," which coats leaves and gives them a sticky look and feel. The best control for aphids is to knock them off, either by hand or with a strong stream of water. The madrone psyllid is common around flowers on madrone in California but isn't considered a major pest. However, the white, waxlike covering on the psyllid nymphs (the immature insect) makes them obvious and may alarm people.

Several moth caterpillars feed on madrone by mining the leaf, eating only its interior and not the epidermis. Some cause sinuous mines (Figure 11), others are blotch miners, and one is a blotch miner that cuts elliptical holes in the leaf after it finishes mining. The final injury looks like paper punch holes. Damage is usually minor from these insects, and no controls are necessary.

Wood-boring beetles may invade madrone wood that is exposed by injury or cankers, but the beetles are the most important and noticeable in dead material, especially firewood. Two roundheaded woodboring beetles are common: the western ash borer and the oak cordwood borer. These insects are known to arrive at firewood piles within hours of cutting during spring and summer, and they can seriously riddle the wood (Figure 12). Adults may emerge from firewood inside the home, but the beetles are not harmful to people or houses.

Maintaining Madrone Health

In forestland, ensuring that madrone has adequate sunlight will help promote its vigor and longevity. Adequate sunlight means full sunlight from above and at least partial light from the sides. This may require removing overtopping and/or surrounding trees.

In landscape, park, or home settings where shade is not an
issue, avoiding site disturbance within the critical root zone is key to maintaining tree vigor. The critical root zone is the area within the tree's drip line. (Note, however, that the tree's roots may extend well beyond its drip line.) Avoid piling soil over the existing soil surface, trenching, or soil compaction in this critical zone and, if possible, even beyond it.

As noted above, avoid frequent, light waterings and, especially, letting water directly contact the tree trunk. Deep, infrequent waterings away from the trunk but within the critical root zone may promote tree vigor during severe drought periods. In most cases, fertilizer is not necessary or recommended, because it may stimulate foliage growth, resulting in greater moisture stress. Mulching within the critical root zone will help conserve moisture and improve soil conditions. However, avoid piling up mulch against the tree trunk.

Because madrone has thin, easily injured bark, especially if the tree is growing in shade, avoid suddenly exposing the trunk and branches to full sunlight. To avoid this, thin out surrounding trees in fall or winter, or cut down neighboring trees gradually, or wrap the area of the lower trunk with arborist tree wrap.

<table>
<thead>
<tr>
<th>Table 2. Insect pests of madrone.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insect families</strong></td>
</tr>
<tr>
<td>Aphids/Psylids</td>
</tr>
<tr>
<td>Euphylla arbuti</td>
</tr>
<tr>
<td>Wood boring beetles</td>
</tr>
<tr>
<td>(Roundheaded wood borers)</td>
</tr>
<tr>
<td>Biotic and</td>
</tr>
<tr>
<td>Serpentine leaf miners (moths)</td>
</tr>
<tr>
<td>Defoliators and Leaf chewsers (moths)</td>
</tr>
<tr>
<td>Malacosoma californicum pluviale</td>
</tr>
</tbody>
</table>

**For More Information**


Southwest Oregon Forest Health Protection Service Center, U.S. Forest Service, Central Point, OR. http://www.fs.fed.us/r6/rogue/swofidsc/

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January 13, 2010

Marc San Scouie, Chairman
Washington County Planning Commission
Re: File No. 09-360-PA KCL, Inc.

Dear Mr. San Scouie,

I am a home owner on Brighton Lane, adjacent to the land subject to your review to change the District from AF-20 to AF-10. I have lived here for nearly 20-years. I support this Plan Amendment and ask that you approve this request.

There has been considerable residential development in the area over the past 20 years. It continues as two families are currently building very large estates, also adjacent to my property. These estates were approved as non-farm dwellings. They were approved as Marginal Land determinations. One is next to me and west of the subject parcel, and has little slope compared to the subject parcel.

I do not support commercial farming on the KCL property as there are environmental and health risks associated with farming so close to the surrounding residential non-farm uses. Such farm use is aerial spraying. The previous owners aerial sprayed for years and discontinued the practice several years ago. Probably because they found it too risky a hazard to spray near all the houses that surround the property, given the current level of environmental monitoring and associated licensing risks, potential fines and potential civil suits from overspray. I am glad they stopped. The helicopters flying low up over the slope were noisy and bothersome to our animals as well. Aerial spraying is a standard farm practice but it is just not compatible with the character of our rural residential development. It concerns me that spraying could accidentally overspray, given the area is prone to winds. Such an aerial drift to neighbors' lands could violate the Clean Air Act, EPA regulations and present health hazards to us and our pets.

In addition to the above, I have concerns that the continued applications of pesticides and herbicides could impact the ground water wells in our area, in particular the residential development that is below the property, on the east, where the parcel slope continues towards a stream at the bottom of the property. There is a very steep canyon along the north and east slope that most likely would be impacted by runoff from pesticides should the property be tilled. Maybe 20 years ago, this was okay, certainly not well regulated. Today, with the Clean Water Act and greater concerns about water quality, erosion and run off cannot be allowed. This property has a huge slope that is prone to erosion. Potential for contaminating the stream, or wells is too great a risk. It is time to make changes.

Over 20 years, the character of the area has certainly changed. There is no real farming on any on the nearby lands; just some hobby farm uses for horses a few cows or some hay and wheat. The parcels adjacent to mine are residential in use with a portion of their acreage leased out, just to keep them in farm tax deferral. The people who live around here are executives and professionals, certainly not farmers. There is limited water available and growing row crops without irrigation rights is just impracticable. The slopes on the property to the north, south and east are huge and residential homes were allowed to be built way too close to this parcel just to take advantage of the views. The County allowed small setbacks for non-farm dwellings without consideration for the impact those setbacks would be to farm uses. Please approve this request.

Sincerely,

Roger M. Harris
13005 SW Brighton Ln
Hillsboro, OR 97123
January 6, 2010

Planning Commissioners
Washington County, OR

Re: KCL, Inc. Amendment File No. 09-360-PA

Dear Planning Commissioners,

I support the requested Plan Amendment to change a 58 acre parcel from AF-20 to AF-10. I live on Brighten Lane and have for many years. Farming this parcel is highly impractical. The reason is very simple, conflicts in management practices. The use of aerial spraying is a health risk to us, who live nearby. Overspray due to sudden winds, especially from the south or east are unpredictable and where the elevation is steep, from around 400 foot to the 800 foot elevation of this property.

There is today, a greater awareness and concern for overspray of chemicals that are harmful to humans and domestic animals then there was many years ago. Homes were built close to the parcel’s property lines, and appear to be well within 200 feet of this property. This impact requires extra ordinary management to avoid overspray. We have had to put up this activity for too long.

The thought of new owners using herbicides and pesticides in proximity to all the wells in the area is a great concern also. We draw from the same aquifer. The slope on this parcel to the east can create impacts to a stream that is off site, below the parcel. Runoff, erosion of this steep slope, especially from tillage of new crops, especially row crops seems like a disaster waiting to happen.

Productivity of this land would have to limited on the north and south sides due to conflicts of residential uses too close to the property lines. Productivity should be severely limited where the eastern slope continues into a steep canyon, with a creek. It leaves little room for actual production, and without water rights, or a farm management home on site, farming the parcel for profit would significantly reduce yields and make use of the land not very practicable. The parcel is too small for a commercial farm use that would be profitable.

It is my hope that you will approve this request, finding that the accepted farming practice of aerial spray for Christmas trees, erosion issues and associated steep slopes, potential impacts to ground water, among other things like the neighborhood all around being residential in character, that this parcel is just not practicable to farm.

Thank you for your consideration.

Kind regards,

Tim Smith
12865 SW Brighton Lane
Hillsboro, Or 97123

EXHIBIT 4
2 of 2
January 28, 2010

Washington County Planning Commission
C/O Dept. of Land Use & Transportation
158 N First Ave., Suite 350-14
Hillsboro, OR 97124-3072

RE: File No. 09-360-PA KCL, Inc.

Dear Chairman Marc San Soucie and Planning Commissioners:

I understand you are considering a request to change a parcel of land owned by KCL, Inc. from AF-20 to AF-10. Our company sold this parcel to KCL, Inc. and I am writing to support this request. It is my understanding that the history of the use of this parcel and reasons why it is no longer a part of our Christmas tree operations is information that will help you make a determination that the site is impracticable for farm uses. It was impracticable from the day we purchased it.

Our family has been in the Christmas tree business since 1948. Today's market is in serious trouble. We are competing with artificial trees and are barely able to make a family living raising, marketing, and transporting our trees. We purchased the property in 1984 to develop the property into one of our ongoing tree plantations. In the twenty plus years it was in production, Regan Bros. never made a profit from this site. It was first planted in 1984 and it took three years of replanting 100% of the seedlings for them to take hold. That doubled the time for harvesting the first crop. The problem with establishing a viable crop was repeated in the mid 1990's when multiple years of replanting were required. What we found is that the soils on this eastern facing slope are impacted by summer heat, it dried out too quickly and the seedlings would die off. The Madrone trees that grow adjacent to the parcel should have been our clue that this parcel has a very unique micro climate. It was just too darn hot in the summer months to maximize their full growth and be profitable.

From our experience, it would also be too hot to grow other green seedlings, especially without irrigation water rights; which none are to be had these days. Row crops that might be suitable to the soil type would be extremely difficult to establish on this hillside without irrigation. Much like our tree seedlings, the expense to establish such crops would make it impracticable, if not impossible. In parts, the slope is considerably steep, so much so we had to hand plant the seedlings as tractor planting on contour was just too dangerous. In particular, the lower Eastern portion presented problems in every aspect of growing trees. The entire parcel has a potential for erosion and preventative steps should be taken to avoid impacting the creek below the parcel. There are considerably higher costs to establish plants, especially row crops where wider rows with terracing and trenching would reduce the amount of land in production which in turn results in diminished profitability.

I was asked to comment on allowing Christmas trees becoming timberland. Christmas trees do not grow into timber as they are the wrong species. Noble, Grand, and Nordman Firs which are currently on the property do not have a timber market.
I was also asked to talk about outside impacts that affected our Christmas tree farming activities. One such issue would be aerial spraying. It is a common practice in Christmas tree production. This parcel is surrounded by small lots and built with residential homes; some very close to the property lines on the North and South sides. These areas where developed after we started our plantation. The liability of overspray in an area where there are houses, pets, people and livestock is a considerable risk. Eventually we stopped aerial application. We had one incident where a neighbor complained that our aerial spray application killed their goat. That was not the cause, but the risk of being sued or being held liable for damages from overspray is difficult and costly to defend. Every time there is an environmental issue people are quick to point to the farmer, especially when they know herbicides and pesticides are being applied to crops. People do complain despite this so called "waiver". The right to farm waiver, is considered by most of us farmers a joke. It is getting harder to find crop dusters that will fly a small parcel like this one. I also should mention that like Christmas tree farmers, aerial spray companies are becoming extinct. It has increasingly become just too risky and costly for them to operate, especially with strict EPA regulations, monitoring, and licensing requirements that have increased year after year after year.

All the above mentioned factors made establishing and maintaining Christmas trees on this parcel unprofitable.

We sold the land. It was a good business decision, since it was never going to be profitable. With the decline in our industry, our other parcels need to stand alone for us to survive. We can't afford to carry unprofitable agriculture land. Today, anyone trying to get into this industry would be foolish. Without irrigation other crops, like our tree seedlings, would not be practicable to propagate on this parcel, if the objective is to farm for a profit.

I hope this information is helpful to you. I think you should approve this request, as the best use of this land is to divide it and put homes on it, just like the surrounding area.

Sincerely,

[Signature]

John E. Regan
Regan Bros. Christmas Trees
61151 South Neady Rd
Canby, OR 97013

Cc: KCL, Inc.; K Leahy, Pres.
February 1, 2010

To: Mr. Marc SanSoucie, Chairman
    Washington County Planning Commission

Subject Case File: 09-360-PA.

Dear Marc SanSoucie,

I have reviewed the staff report pertaining to KCL’s Comprehensive Plan Amendment. After further review I would like to make the following comments to clarify information concerning this land use request.

First, this site was in Christmas tree production for a period of years. However, the previous owners who were farming the site have their reasons for selling the property which they shall provide.

1. Currently the site is extremely steep. This makes it difficult to farm, including Christmas trees as stated in my initial report. The adjoining property which is being farmed primarily in wheat is a level site. This lends itself to tillage and harvest. The subject site does not have enough level ground to farm in this manner.
2. The site has two tree root diseases which make it difficult to re-establish this into a viable farm operation.
3. The tree species, Noble, Nordman, and Grand if left to grow for timber are not suitable. They are short-lived soft wood trees that are not used for building materials. They usually only live 20-30 years. Douglas fir is the tree type that has been left to grow on abandoned Christmas tree farms for timber purposes. There is no Douglas fir growing on this site.
4. Currently there are numerous buffer restrictions on the use of pesticides near homes and water-ways. I will list the most common chemicals used on Christmas tree pests and their existing buffers.

- “MSR” used for aphids and spider mites: 150 feet to adjacent buildings, 100 feet any area managed for wildlife.
- “Thionex 3 EC” 300 feet of any waterways or surface water sources.
- “Brigade 2 EC” Insecticide-miticide: 150 feet of any water sources.
- “Omite 6 E” 75 feet
- “Lorsban 4 E” 150 feet

EXHIBIT 6
1 of 9
These are just a few of the pesticides registered by EPA for use on Christmas trees. Now in 2010 the Federal court has issued a court order to EPA and Oregon State Department of Agriculture to establish many more buffers pertaining to other pesticides. These changes must be in place this year.

I hope this information as an addendum to my initial report is helpful in your decision making process.

Sincerely,

E. Michael Ricks

E. Michael Ricks
December 29, 2009

To: Mr. Marc San Soucie, Chairman  
Washington County Planning Commission

The following report concerns a 58.20 acre parcel of land located in Washington County identified as tax lot 100 within Section 3 T25 R3W and is currently owned by KCI, Inc.

I have been asked to evaluate this site for the purpose of commercial Christmas tree production and any other agricultural crops that might be suited for this site. The details are set forth in this document by headings. My final summary and conclusion that find the use of this parcel impracticable for agricultural and forest uses can be found on pages 6-7.

Qualifications:
My credentials for making this evaluation are as follows:
1. I have been a consultant to Christmas tree growers since 1974. I am currently working as a private consultant throughout the Willamette Valley. I advise about 15 different growers on approximately 10,000 acres of Christmas trees. My services include planting, fertility, and weed, insect and disease control advice.
2. I am also an adjunct faculty member at Chemeketa Community College in Salem, Oregon. My classes involve applicator license training, sprayer calibration, weed I.D., insect I.D. and disease management. I also teach a class on Christmas tree production and pest management.
3. I currently own 200 acres of land that is in various stages of Christmas tree production. I have been growing and marketing Christmas trees since 1988. My entire farm sales are wholesale only.

Christmas Tree Farming General Operations:
Typical Christmas tree farms are structured in the Pacific Northwest into two major categories. 1. The majority are full-time farms consisting of 80 - 1000 acres or more. 2. The second type is U-cut farms ranging in size from 5 - 100 acres, and generally are part-time growers who do so to supplement their income and keep the land in farm tax deferral.

Christmas tree species that are commonly grown in Oregon are Douglas fir, Noble fir, Grand fir and a new variety called Nordman fir.

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Douglas fir has the most variability in soil types, elevation, moisture needs and temperature in which it will grow.

Noble fir grows best on silty clay loam soils at elevations of 1,000' or higher. They do best when summer temperatures are moderate and precipitation is more frequent. They will not grow when soil is saturated or has prolonged periods of extreme wetness. When these conditions exist, the noble fir may contract phytophthora and will almost always die from this disease. High summer temperature will cause needle burn and loss of needles.

Grand fir does well under the same conditions as noble fir but will tolerate higher soil moisture levels. They do not grow well on hot, dry soils.

Nordman fir is chosen to grow in extremely wet soil environments. It tolerates saturated soils quite well and otherwise is suited to the same conditions as Noble fir. It also has the same physical appearance as Noble fir but is not as dark green.

Obviously, site selection and matching the correct specie for each location is of extreme importance. Matching the correct specie with soil type, elevation, moisture and temperature conditions will determine the success or failure of each planting of trees.

Christmas trees are transplanted from nurseries to the field. The seedlings are usually 1-3 years old before they are moved to the field. Spacing is usually five feet by five feet. They are planted at 1,730 trees per acre. Once they are transplanted, they will put on new growth once each spring. They will increase on the average of one foot of height each year thereafter.

Herbicides are applied annually in the spring each year to control grasses and broadleaf weeds. Insecticides and fungicides are applied throughout the summer as needed to control a variety of insects and diseases.

It usually takes seven years to reach the first harvest if the trees are well maintained and diseases and insects do not hamper their growth. Trees are then removed from the field over 3-4 year intervals. A normal tree rotation will usually take 9-10 years to harvest all the marketable trees.

The most common size trees sold are in the 6'-7' height range. This is approximately 75% of the market sold. The 7'-8' trees comprise 20% and trees 9' and higher is 5% of the market.
The larger commercial farms will usually grow 2 or 3 different species of trees. It is important to note that as accepted farming practices, they should be planted on a rotational basis so that they can have a continuous supply of trees to harvest each year. Normally, they would plant new seedlings each year in blocks that will fulfill their projected tree sales for subsequent years. For example, a 200 acre farm might plant 20 acres each year and clear 20 acres each year. Crop rotation leaves 20 acre sections fallow for a year or more. It is an important element of accepted farming practices in disease prevention from the soil.

The large commercial types of farms sell their trees wholesale to brokers, chain stores, nurseries and other parties that have retail outlets. Some may also develop their own sales lots in California, Arizona, Nevada and other locations as part of their sales strategy.

U-cut farms are structured differently than a commercial farm. U-cut farms depend on local buyers for their trees. They need to be located in the proximity of an urban market. They need to have at least two species for the customers to select from. Also, size range usually goes from 4'-10' in height, as consumer tastes vary widely. As trees are sold, the grower interplants seedlings where the trees have been harvested each year.

The fields usually have to be somewhat level or have slightly rolling hills with roads and trails for customer accessibility. Parking is also a necessary requirement for automobiles. The majority of trees are purchased on weekends and crowds and associated transportation impacts are problematic.

**Economics of Growing Christmas Trees:**

The economics of Christmas tree production is as follows:

The input costs start with the seedling at $.35-.45/c piece. At 1,730 trees/acre x $.40/c average = $692.00 per acre. Planting at .25/c/tree = $432.50/acre. You also have a highly variable cost of preparing the site for planting.

The first two years after planting, it will cost about $.50/c per tree for weed, insect and disease management. Starting in the third year, the trees will need culture work; shaping, shearing, etc. They will usually run a total combined annual maintenance cost of $1.00 per tree. The maintenance cost by specie varies only slightly per year.

The harvest cost for trees in a commercial operation runs approximately $3.50/tree. This includes tagging, cutting, moving the trees to a processing area, baling the trees and loading them on a truck. The freight is usually paid by the buyer. In addition the availability of labor has decreased, while the cost of labor has increased.
The harvest cost for U-cut is obviously different but other labor, sales, insurance, initial farm sales lot permits, signage, advertising, related transportation – safety impacts are a few elements that add significantly to harvest expenses.

The wholesale prices for Christmas trees hinge on supply and demand and the current conditions at the time of harvest. Historically, there have been major price swings in the wholesale tree market.

Currently, Noble fir has become the most popular tree in demand by the consumer. In the early 1990’s, prices were very profitable for Noble fir. This induced a significant over-planting of acreage by growers. We have been in an over-supply situation for 2 years now and most likely will continue for 3 or 4 more years. The wholesale prices are at the cost of production and, in some cases, even lower.

Douglas fir used to be the number one tree produced in Oregon. However, Noble fir has replaced it as the leader in sales. Douglas fir currently costs about $10.00 to raise and harvest. Sale prices are at about $10.00-$12.00 depending on size and quality.

In past years, large numbers of Douglas fir have been shipped into Mexico. The Mexican government has placed significant shipping restrictions and tariffs on imports and now this market has nearly gone away for Oregon growers. This has created a large surplus of Douglas fir as well.

Grand fir and Nordman fir are a very small percentage of the wholesale market. Their values and expenses closely parallel noble fir.

U-cut farmers are usually able to sell their trees at higher prices. Currently, Doug fir may sell for $10.00-20.00 per tree and Noble fir for $20.00-$40.00 depending on size and quality.

**Subject Parcel Site Conditions:**

I would now like to focus on the 58.20 acre parcel. From information provided to me this land was purchased in 1996 by commercial tree growers know as the Regan Bros. At which time they began growing Christmas trees on the property. Three species of conifer were planted on this site—Noble fir, Grand fir and Nordman fir. This planting of trees has been selectively harvested until about two years ago, at which time it was purchased by KCI, Inc.

The following observations were made by me from a visit to this site on Dec.11, 2009:

There is a scattering of Noble fir, Grand fir and Nordman fir still remaining on this land. Some of the Grand fir has been cultured this year in hopes of selling them. However, all of
the remaining trees are overgrown and have not been cultured or maintained for weed, insects and diseases for at least two years. All of these trees on this are not currently saleable and cannot be salvaged. These three species are not valuable as timber, they are soft woods and short lived and do not meet the standards for timber production.

As I stated, these trees have not had any weed, insect or disease management in at least two years. Weed competition has reduced the tree's color quality and growth vigor. Insects such as aphids and spider mites have caused permanent physical damage to these trees.

Two root diseases are present in this field. Phytophera root rot and annosus root rot are pathogens that live in the soil and attack the root systems of the trees. This causes the tree to die and it spreads throughout the field.

To ever grow a new stand of trees at this site, several tasks must be performed. First, all of the trees must be removed. The stumps must be pulled or ground into chips and the root system must be ground as well. No trees may be planted on this site afterward for at least two—three years to break the disease cycles.

This field has some extreme variability in slope. The range of slope varies from 7 - 12% near the higher portion (Brightwood Ln) to 20 - 30% on the lower section of this field (Larkins Mill Rd). On slopes this steep it is very difficult to grow Christmas trees. Tillage of the soil would cause significant erosion during rainy periods. It would be very difficult and unsafe to operate machinery on these slopes. Also, the trees do not grow straight at the stump portion of the tree and cultivating tends to be lop-sided on steep slopes making the trees hard to sell.

Most insecticides and fungicides used on Christmas tree farms are applied by helicopter. In fact, this would be the only method applicable to this site. Many of the pesticides registered by the Environmental Protection Agency (EPA) for Christmas trees have restrictions on how close they may be applied near homes and water sources. This would leave significant portions untreated for pests. Since this lot is not associated with any additional nearby lots in Christmas tree production, use of aerial application for a small area would be fairly costly, especially with today's rise in fuel costs. Even through surrounding property owners may not be able to complain about this farm practice, the EPA has taken measures to ensure that overspray should not occur by setting a 200 foot setback no spray rule. This better protects the surrounding non-farm uses, but effectively it limits the perimeter of the parcel for production.

Alternative Crops on Subject Parcel

There is no potential for irrigated crops at this site. Presently there are no existing water rights on this land. The feasibility of obtaining new water rights are non-existent because
of a lack of adequate water supply for irrigation purposes, the effect it would have on adjacent wells and a key factor that the Water Resources Dept. has curtailed the issuance of new rights for a variety of reasons. Without water rights the potential of growing crops such as ornamental crops, berries, other row crops without irrigation are not practicable.

To grow any crop on this site would require the same precautions as Christmas tree cultivation. Special attention would be required to tillage, equipment operation and the use of pesticides. There would be obvious management conflicts in the control of pests, soil born diseases, erosion, impacts from wildlife, and in particular deer foraging habits. All have negative impacts on productivity, and would contribute to increased farm management costs. These farm crop uses should be considered impracticable.

**Forest Production:**
Timber could eventually be grown on this land but it requires a long term investment and a very risky return because of economics of the timber industry and possible future harvest restrictions. In addition, a small lot surrounded by non-forest/farm production has the same negative impacts associated with conflicts in management practices and similar production issues as other crops.

**In summary I would like to highlight some of my most important observations and findings:**

1. Regan Bros. are highly regarded and successful Christmas tree growers. I would rank them in the top five growers in Oregon for the quality of their product and marketing abilities. I can only surmise that they gave this site up for sale because of the previously stated problems of growing Christmas trees on this site.
2. The investment required to re-establish this site into a viable tree growing farm would be cost prohibitive for someone not already established in the industry. Most likely it would take at least two growing cycles and twenty years to recover their investment.
3. The future of the Christmas tree industry is very uncertain. Currently, there is a tremendous oversupply of trees. Prices are depressed and will be for several more years. Transportation and labor costs have risen dramatically, cutting into profits. Artificial trees and people’s traditions are changing the demand for grown Christmas trees.
4. The site itself, with steep slopes, and the limitations imposed by the EPA for aerial spraying, limits tree production on this small lot.
5. Alternative crops for this site are very limited. Steep slopes and lack of irrigation eliminate most options.
6. Small U-cut Christmas tree operations could be developed if they were managed carefully in conjunction with the site limitations. Small on site sales lots have other
external impacts associated with them that would conflict with the surrounding non-farm uses.

7. The surrounding parcels are covered in a mixture of Alder, fir, oak, Madrone, some with little management of the understory. Others have manicured lawns and ornamental plantings. These environments, especially those with brush understory are ideal habitat for deer. Deer foraging of new seedling on a small open parcel such as the subject site can greatly reduce crop production and overall practicability of farming this site.

Conclusion:
My professional opinion is based on my knowledge and experience as a commercial farmer, teaching college courses on farm practices, pest management and proper application of chemicals as accepted farming practices. I conclude that the subject site is not suitable for commercial farm or forest production. The feasibility of making the land employable is impracticable based on the following factors:

1. The influence of the surrounding small non-farm parcels uses and their associated impacts that are not compatible with farm production.
2. The parcel lacks irrigation rights and Water Resources is not issuing new water rights for agricultural uses.
3. Row crops are not practicable on extremely steep slopes and lacking in irrigation rights.
4. Restricted productivity of land within 200 feet of surrounding residential homes, because of EPA chemical restrictions on application.
5. Costs associated with Christmas trees, in establishing new crops, finding a marketplace that competes with existing growers and other factors as discussed in more detail above.
6. This parcel is not part of larger farm unit and therefore it is not efficient to farm commercially.
7. Forest production, a small timber lot surrounded by non-forest uses should also be considered impracticable based on the key factors discussed above.

In closing, I hope this information has been informative and helpful in the planning of the future of this parcel of land. If you have any comments or questions, feel free to contact me.

Sincerely,

E. Michael Ricks

CC: Ken Leahy, Pres. KCL Inc.