To: Serena Glover, Executive Director, Friends of Sammamish Valley
From: Barbara Lau, MA, MBA, CRL
Date: May 16, 2019
Subject: King County SEPA Compliance – Ordinance 2018-0241

Introduction. You have asked me to draw upon my education and professional experience to comment on environmental impacts that are likely to result from land development and business operations that would be allowed by the proposed Adult Beverage Ordinance 2018-0241.2 (Ordinance). My education includes earning Bachelors and Masters degrees in Geography, both from the University of California, Los Angeles. My studies included a thesis in hydrology and erosion. I have completed course work and attained certification in climate change science from Cornell University.

My professional experience includes working in the position of Environmental Scientist with a major engineering firm where I prepared SEPA Checklists, Environmental Impact Statements and other regulatory documents. My professional work experience also includes work as the Environmental Compliance Specialist/Permitting Coordinator for an environmental law firm where I prepared environmental compliance documents and led environmental consultant teams preparing expert testimony, regulatory compliance actions, and mitigation. I have been active on a volunteer basis in multiple environmental and land use issues regionally and with a focus on the Sammamish Valley.

Environmental Impacts. As explained below, adoption of the Ordinance will legalize existing illegal business activities and authorize new land development and business activities that will cause significant environmental impacts. Under SEPA, impacts are "significant" if they will have more than a moderate effect upon the environment. The "environment" includes both the natural environment and the built environment. The thousands of homes in the rural residential neighborhoods that comprise the predominant land use in most of King County's Rural Areas are included in the term "built environment".

Impacts on the environment include increased demands for governmental facilities and services. "Facilities" include transportation infrastructure such as roads, signalization, sidewalks, and street lighting. This term includes utilities such as sanitary sewer and stormwater detention, treatment and conveyance systems. "Services" includes police, fire and emergency medical services.

Inconsistencies with land use regulations, adopted land use policies and plans such as the Growth Management Act (GMA), Countywide Planning Policies (CPP) and the King County Comprehensive Plan (KCCP) are red flags indicating environmental impacts. These fundamental regulations and plans comprise an interrelated system that has been implemented to minimize environmental impacts from land uses and development. Actions that are inconsistent with these regulations, policies and plans require environmental analysis.

In the context of a public proposal for a program or legislation (a "nonproject action"), analysis of environmental impacts must first include disclosure of impacts and then consideration of how impacts can be avoided or lessened ("mitigated") through alternatives to the proposal that could meet some or all of the objectives of the proposal with lesser environmental impacts.

The Ordinance identifies the objectives of supporting the adult beverage industry and fostering food and drink related tourism. However, the SEPA Checklist and DNS issued by King County do not acknowledge the impacts that even at this "nonproject" stage can be predicted as, for

example, associated with such increased ”tourism.” The resulting failure to require an EIS deprives the public, contrary to SEPA, of analysis of alternative locations for tourist destinations that are likely to incur less negative environmental impacts than the areas targeted by the Ordinance. This is particularly apt in the case of a proposal to allow retail and commercial business activities and related land development in Rural and Agricultural areas such as the Sammamish Valley.

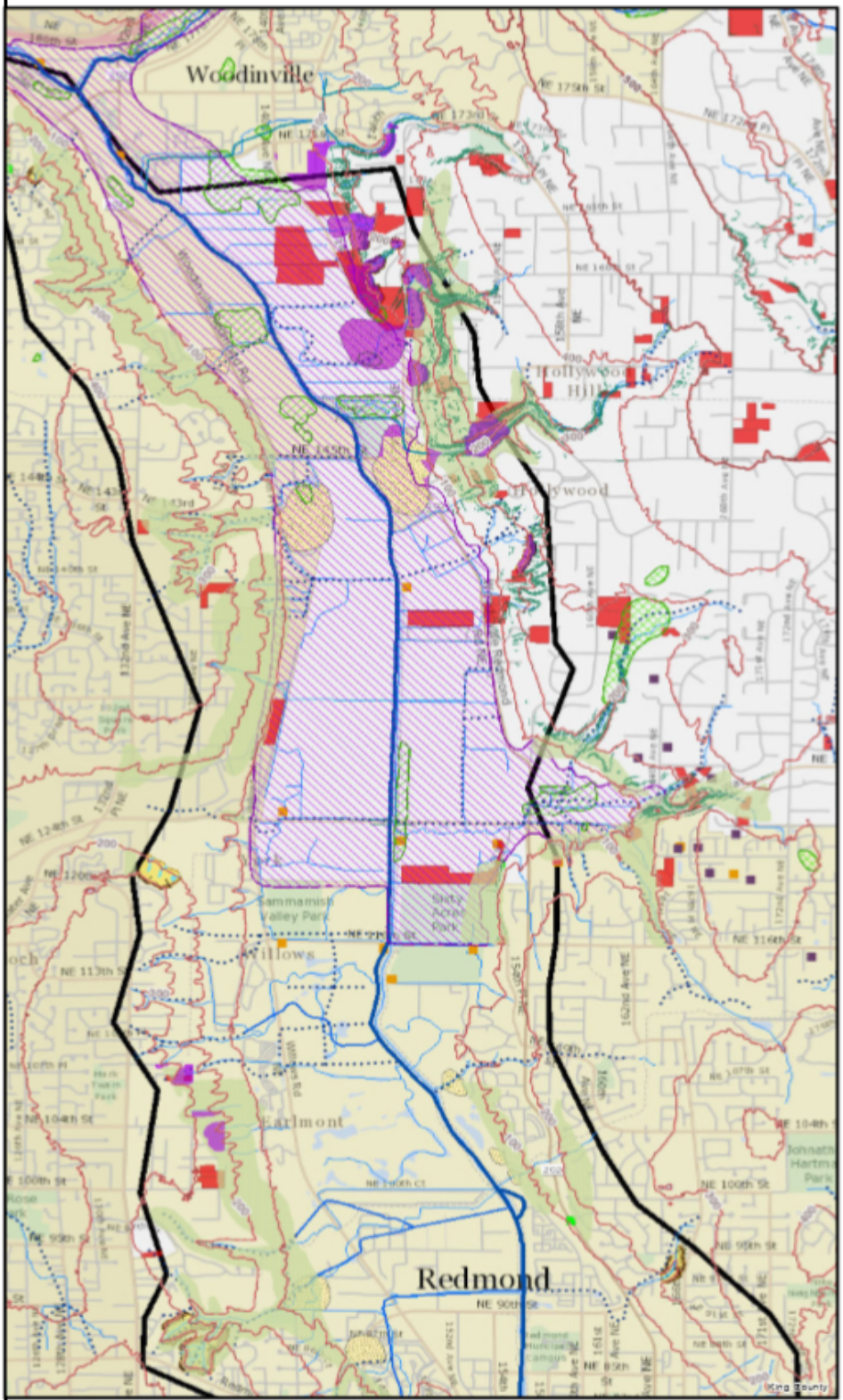
Impacts on the Sammamish Valley Ecosystem

The Ordinance promotes transformation of substantial portions of the Sammamish Valley Ecosystem into a food and adult beverage-oriented tourist destination. The Sammamish Valley Ecosystem is the entire broad Sammamish River Valley trough, steep sloped bluff hillsides, and upland plateaus. This is an area where a major migratory salmon river, Rural Area residential neighborhoods, prime farmlands, and, in the north end, a city regional center for wine-oriented tourism converge in a setting interspersed with environmentally sensitive natural features. The environmentally sensitive features within the eastern steeped slope Rural Area bluffs are protected by the county by a Special Overlay 120 (SO-120) designation and are within the Rural Area Buffer to the Agricultural valley.

Given the complex and sensitive nature of the Sammamish Valley ecosystem, it is particularly important that environmental impacts of this proposed governmental action—adoption of significant changes in the Zoning Code—be fully analyzed and considered in decision making.

A map identifying environmentally sensitive areas in the portion of the Sammamish Valley targeted for creation of a tourist destination area is set forth on the following page.

King County iMap Sam Valley S



Legend

- Index contours - 500 foot
- contours - 100 foot
- Potential landslide hazard areas (2016, see explanation--->)
- Potential steep slope hazard areas (2016, see explanation--->)
- Erosion hazard (1990 SAO)
- Seismic hazard (1990 SAO)
- Coal mine hazard (1990 SAO)

Stream (1990 SAO)

- class 1
- class 2 perennial
- class 2 salmonid
- class 3
- unclassified
- Wetland (1990 SAO)
- Sensitive area notice on title

Groundwater quality sampling sites

- group A wells
- group B wells
- group D wells
- Streams
- Study Limits
- Historical Landslides
- Lowland fans
- Alpine fans less likely subject to debris flows
- Alpine fans more likely subject to debris flows
- Rock fall potential
- Rock avalanche deposit
- Watercourses (paths that water can travel downslope)
- Toe of landslide along river (where bottom of slide is likely subject to erosion by a river)
- Ponded water
- Closed depressions (where water may pond)
- Landslide outline (polygon contains all features of deep-seated landslide)
- Top of main landslide (cliff like slopes on top of a slide)
- Top of internal landslides (cliff like slopes on top of a smaller slide within a larger slide)
- Headscarp and flanks (cliff like slopes on top and side of a slide)
- Landslide body (where debris from a slide has gone)
- Potential landslide hazard areas (2016,

Date: 9/28/2016

Notes:

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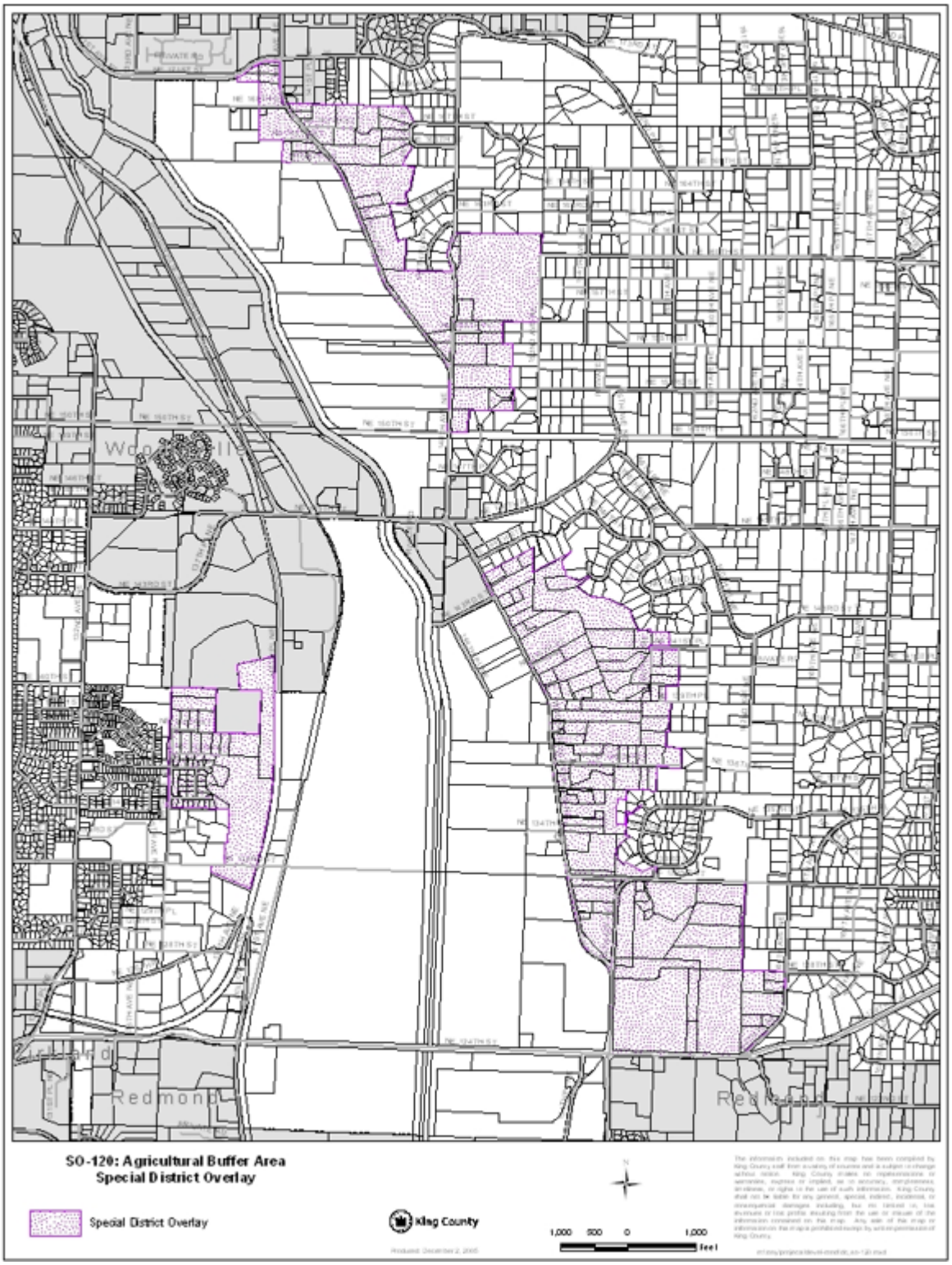
King County GIS Center

The proposed Ordinance would allow Wineries, Breweries, Distilleries (WBDs), remote tasting rooms and event centerson steep sloped hillside Rural Area Buffer land, in addition to Winery, Brewery, Distillery, (WBD) development on Agricultural land in the Valley floor. Demonstration Project Area~~s~~ A and B would be imposed directly on top of the King County Special District Overlay 120 (SO-120). The purpose of SO-120 is to provide a buffer between farmland in the APD and upslope land uses.

The SO-120 Agricultural Buffer Area Special District Overlay is depicted on the map on the following page.


SO-120: Agricultural Buffer Area
Special District Overlay
Special District Overlay
King County
1,000 500 0 1,000
feet

The land included in "Demonstration Area A" and "Demonstration Area B" is nearly coextensive with the Agricultural Buffer Area Special District Overlay 120. The following description of the purpose of the buffer appears on the DPR website:

> ***SO-120: Agricultural Production Buffer SDO***
>
> ***An agricultural production buffer special district overlay provides a buffer between agricultural and upslope residential land uses.***
>
> ***Development Condition Text***
>
> ***21A.38.130 Special district overlay - agricultural production buffer.***
>
> *A. The purpose of the agricultural production buffer special district overlay is to provide a buffer between agricultural and upslope residential land uses. An agricultural production buffer special district overlay shall only be established in areas adjacent to an agricultural production district and zoned RA.*
>
> *B. The following development standard shall apply to residential subdivisions locating in an agricultural production buffer special district overlay:* ***Lots shall be clustered in accordance with K.C.C. 21A.14.040 and at least seventy-five percent of a site shall remain as open space, unless greater lot area is required by the Seattle-King County department of public health.*** *(Ord. 15032 § 50, 2004: Ord. 12823 § 8, 1997).*

One way the SO-120 Rural Area Buffer provides environmental protection to the Sammamish Valley Agricultural Production District (APD) is by strictly limiting impervious surfaces in the Buffer area such that 75% of development sites must be open space. All water discharges from the uplands and from the SO-120 Rural Area Buffer area flow to the Sammamish Valley Floor. The Rural Area Buffer is necessary to protect the Valley floor from the erosion and deposition of sediments from the Valley bluffs and from changes in the surface and groundwater hydrology flowing to the Sammamish River.

Currently, precipitation falls on largely undisturbed slopes and slowly recharges the groundwater. This existing condition generally does not create Valley flooding, stream erosion or sediment deposition. Allowing commercial, urban development in the specially designated SO-120 Buffer to the Agricultural Lands will change the hydrology and water quality in the Rural Buffer Area and the Agricultural Land.

The Ordinance allows large parking lots and impervious surface areas in Rural Areas, including on the steep slopes of the SO-120 buffer to the Sammamish Valley APD. Most, if not all, of the current unlawful remote tasting room and event center sites have no stormwater or surface water catchment systems. None are served by a pubic sewer system. Several current violators have asphalt parking lots, downslope of the steep slopes that are within feet of channelized streams flowing directly into the Sammamish River.

Inadequately served sites such as these contaminate surface waters, overland flow, down gradient soils and multiple water bodies. For example, the creek on the Matthews property, parcel 152605-9092 (an illegally operating drinking establishment), runs down slope on the property, and alongside their parking lot and road frontage. This creek picks up toxics and

debris from the parking lot on the Matthews property as overland flows off the impervious surfaces are heated as water rushes over the compacted and impervious building and parking lot surfaces. The overland flow is deposited into the creek which flows directly into the Sammamish River from the Matthews property by way of the Tonnemaker Farm which grows organic produce. It contributes to heating of the Sammamish River, which is used by five migrating salmonid species. These salmonids need clean, cool water to travel to/from their natal streams.

Site development to support the uses allowed by the Ordinance will significantly reduce effectiveness of the SO-120 Rural Area Buffer. The more impervious surface and more compaction from vehicles traveling and parking on former open spaces that occurs, the more changes the hydrology of the Valley will be impacted. The SEPA Checklist does not acknowledge or address this at all, but the Ordinance will encourage commercial development that will increase impervious surfaces above ground, contributing to fast moving, increased volumes of surface and overland runoff.

Additionally, the SO-120 Rural Area Buffer helps to maintain the water quality in the Sammamish River. The Sammamish River serves as an important migratory corridor for fish that spawn in its tributaries. Salmonid species known or expected to be present in the river at least seasonally include Chinook salmon, Coho salmon, Sockeye salmon, as well as Kokanee, Steelhead, and Cutthroat trout. Chinook salmon and Steelhead Trout are listed as threatened under the Endangered Species Act. These species travel to/from spawning and rearing habitats, using the Sammamish River as a major migratory route.

Environmentally Sensitive Areas

The steep valley bluffs of the Sammamish Valley (Rural Area Buffer) include areas designated as Environmentally Sensitive Areas including areas of steep slope, erosion, landslide, wetland and seismic hazards.

> *Under the Growth Management Act (GMA), local jurisdictions must protect environmentally critical areas and designate natural resource lands (e.g., forest, agricultural, and mineral areas) and urban growth areas, which identify where urban growth and development may occur. The 2017 Salmon Recovery Plan calls for managing growth in a way that minimizes negative impacts to salmon. This includes maintaining existing UGA boundaries, unless altering the boundary would be beneficial to salmon.*
>
> Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan 10-year Update, pg.44.

Drainage from the eastern upland plateaus has created more than eleven mapped, perennial small creeks cutting down the Valley slopes. These creeks and other seeps all drain into the Valley and converge with the Sammamish River. Several, including Gold Creek and Tributary 0095, support fish populations. Derby Creek is considered to be an important source of cool water for the Sammamish River system. Cutthroat trout are known to use Derby Creek.

The Ordinance directly harms the fishery resources by increasing warm, impervious surfaces leading to hot, toxic increased runoff and sedimentation during rainfall events. Currently, several illegal remote tasting rooms and event centers have parking lots within five feet of Derby Creek and other direct tributaries to the Sammamish River with no storm water pollution

prevention controls. Even with such controls, which are imperfect, water contamination impacts associated with such uses as the Ordnance would allow threatens the salmon, and other fish, aquatic and avian species frequenting the area.

The 2017 Salmon Recovery Plan Update included an inventory of salmon enhancement projects along the stretch of the Sammamish River directly impacted by increased impervious surface area upon the SO-120 Rural Area Buffer. The inventory list four projects directly related to three of the eleven tributaries from the SO-120 Rural Area Buffer and a fourth in the Sammamish River. The cost to tax payers for two of the projects was over $2.2 million.

The Derby Creek Enhancement Project has been classified as a high-priority restoration action in the Lake Washington/Cedar/Sammamish watershed for more than a decade. The project is listed in the October 2017 10-year update of the Water Resource Inventory Area (WRIA) 8 Chinook Salmon Conservation Plan, which notes that the project would implement recovery strategies related to thermal stress, riparian vegetation, and passage barriers. The project is also listed in the current Four-Year Work Plan, which identifies the highest-priority, most ready-to-implement projects. The project, which is scheduled to begin work shortly, will remove or reduce impediments to fish migration and would improve fish habitat.

In addition to Sammamish River enhancement projects, there are many more enhancements in the Sammamish River WRIA 8 watershed aimed at salmon recovery. The Bear Creek/Cottage Lake Creek system, a tributary to the Sammamish River is the primary spawning tributary for the naturally produced portion of the Sammamish River Chinook salmon population. Issaquah Creek, Evans Creek and the Issaquah Hatchery all rear salmonids which must travel to/from these natal streams through the Sammamish River.

The Ordinance would legalize existing, and encourage new, commercial development and business activities that run counter to the objectives of public investments in these enhancement projects.

The Ordinance also incentivizes creation of subsurface storage rooms both in the SO-120 Rural Area Buffer and on the Agricultural Land. Groundwater is typically recharged through the slow percolation of precipitation into the soil. Thus, in the undisturbed steep Valley slopes, the precipitation soaks into the soils and slowly makes its way down gradient or to the natural streams originating on the slopes. Instead, with increased impervious surfaces, the runoff washes down into the Valley, and waterlogs the soils during the rainy season. However, by late summer this also creates a water deficit because groundwater has not been recharged by percolation. Thus, the farmlands are negatively impacted with waterlogged soils in the spring during crucial planting time, and also in late summer due to the need for irrigation. The removal of soils for the underground storage space further complicates this situation because subsurface water is blocked and forced to travel around the structures, thereby creating wetter and drier pockets down gradient.

Remote tasting room and event center structures, paved land areas, and unpaved but compacted land such as parking areas, will harm the farmland below. Rainfall from the upland slopes races off roofs and parking lots, heating the water and washing toxics and debris directly down gradient and onto the farmland and into the Sammamish River. This water rushes down into the Valley, turning the soil into unworkable muck. The result is waterlogged soils and increased soil toxicity. In addition, both the speed and intensity of the overland surface water decreases once it reaches the Valley floor leading to ponding water on soils from overland

flows. In the streams, the erosive nature upstream of the faster moving water erodes stream banks and, reaching the Valley floor, increases sedimentation in the Sammamish River.

Lack of Wastewater Treatment Facilities

The Rural Area Buffer land is not served by a sanitary sewer system. Sewer systems cannot legally be extended into Rural Areas. The increase in effluent from new construction within the SO 120 Rural Area Buffer, even assuming all regulations can be, and in fact are complied with, and the continued overuse of the old septic systems in former old single-family homes that have been, or could be, converted to remote tasting rooms and eventt centers, is of particular concern. Several of the current violating "tasting room/bars" must pump their inadequate household septic system tanks weekly. These systems can leach and/or overflow excess effluent into the groundwater, swamping the Valley farm soils. The Ordinance sets up a situation that is likely to be impossible to rectify. It aims to legalize businesses operated by violators on undersized lots and/or served by old residential septic systems, with the assumption that current Health Department standards for on-site sewage disposal can and will be complied with. In fact, given the volumes of effluent generated by special events and bars, compliance in terms of functioning on-site drain field systems may not be possible for many of the existing and potential sites.

Casa Feliciano remote tasting room (parcel 3407700006) is an example of an illegal drinking establishement operating in an old converted home. It is located in a home built in the 1920s. King County Public Health department does not have records of any upgrades to the septic system during the period the Health Department has been keeping records (at least 40 years). Other illegal remote tasting rooms in homes built in the 1920s include Cougar Crest, Forgeron and Cave B.

Septic systems on these old lots were designed, sized and constructed for domestic use. Commercial uses located on lots with deficient septic systems tend to pump excess effluent into the drain fields, which become waterlogged and further increase subsurface water flow down gradient to the creeks and farmlands. Failed septic systems leach excess or inadequately treated wastewater into the groundwater, causing contamination of the Valley groundwater, which can spread into the Sammamish River. This condition is very harmful during the winter when the already waterlogged soils and soil microbes do not have capacity for excess effluent. In the summer, septic system effluents may replace some of the previously clean groundwater.

Commercial uses often generate wastewater volumes that exceed the capacity of old, domestic on-site septic drain fields. For example, King County Public Health records indicate Matthews was required to cease using its drain field in 2016. At that time, the drain field served the Matthews drinking establishment, a converted RV storage garage that is located across the street from Tonnemaker's organic farm. Matthews is now required to collect sewage waste in a 1,500 gallon holding tank that must be pumped and trucked to a disposal facility, reportedly as frequently as every three days. No on-site drain field or other treatment is provided. Failure to empty the holding tank will result in raw sewage overflow. This facility, which refers to itself as a "winery," is in fact not allowed to engage in any wine production per conditions of their septic plan approval. Similar situations are likely to occur if other WBDs or event centers are built in the SO-120 Rural Area Buffer.

Thus, the septic issues will remain with the legalization of WBDs, tasting rooms and event centers, especially if the violating properties are allowed to remain on their inadequate systems.

The septic issues alone are cause to remove the Demonstration Project Overlays A and B for remote tasting rooms and event centers from the SO-120 Agricultural Buffer area.

Countywide Impacts to Farmland and Rural Areas.

Many of the provisions of the Ordinance will apply Countywide. For example, the definitions of "winery", "brewery" and "distillery" are so vague they allow virtually any business that has tenuous connections with actual production to claim to fit these definitions, and thus be allowed to primarily engage in retail service and sales of alcoholic beverages and in many cases to operate a special event center. An EIS is needed to quantify the impacts to the prime farmland of the Agricultural Production Districts (APDs), not only in the Sammamish River Valley, but also the North and South Snoqualmie River Valley APDs, Upper and Lower Green River Valley APDs and the Enumclaw Plateau, in addition to the Rural Area that serves as buffers to these APDs. More than 4,500 acres in the Snoqualmie watershed have been protected through the Farmland Preservation Program. The Ordinance affects all of Rural Area and Agricultural zoned lands in King County including the potential to impact the environmentally sensitive areas, threatened and endangered species that are associated with the prime farmlands in the APDs.

Rivers and Watersheds County-Wide

Under the Growth Management Act (GMA), local jurisdictions must protect critical areas and designate natural resource lands (e.g., forest, agricultural, and mineral areas) and urban growth areas, which identify where urban growth and development may occur. The KCCP calls for managing growth in a way that minimizes negative impacts to salmon. This includes maintaining existing UGA boundaries. An EIS is needed to address the adverse impacts of the Ordinance to the rivers and watersheds within the Rural Areas and the King County Agricultural Production Districts (APDs). Four of the APDs provide fish and wildlife habitats, including threatened species habitat for Chinook Salmon and Steelhead Trout. These include the Sammamish Valley APD, the North and South Snoqualmie APDs, and the Upper and Lower Green River APDs

Commercial business development that will be made legal by the Ordinance will impact the Snoqualmie River, which meanders 43 miles from near the town of Snoqualmie to its confluence with the Skykomish River, through both the North and South Snoqualmie APDs.

The Snoqualmie River supports wild runs of Coho, Chinook, Pink, Chum and Steelhead. In the 1980's, the Snohomish watershed (which includes the Snoqualmie and Skykomish watersheds) supported one third of the wild Coho salmon entering Puget Sound on an annual basis. The overwhelming majority of chinook that return to spawn in the Snoqualmie basin belong to the Snohomish Fall chinook stock.

The Sammamish and Cedar Rivers are within WRIA 8 and are Tier 1 areas "based on watershed condition and fish use. Tier 1 areas are the highest priority habitats for protection/ restoration, and include primary spawning areas, as well as migratory and rearing corridors. The Cedar and Sammamish rivers, Bear and Issaquah creeks, and shores of ~~lakes~~ Lake Sammamish, are classified as Tier 1. The Cedar River is considered the highest priority Tier 1 area because it includes spawning and rearing areas for the Cedar River salmonid population, which supports the largest number of natural-origin Chinook salmon in the watershed. With its tributaries, it is also the sole spawning area for the Cedar population." Much of the Cedar River

watershed is within the Rural Area zoning impacted by the Ordinance. (Lake Washington /Cedar/ Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan 10-year Update pg. 24)

Conclusion.

As explained above, the hydrology of the SO-120 Rural Area Buffer is not conducive to its designation in the proposed Ordinance as Demonstration Areas A and B for intense commercial development. While the effect of the Ordinance is particularly evident with respect to the Sammamish Valley, it will create significant adverse environmental impacts County-wide. An EIS is needed to determine the impacts created by the Ordinance to all Rural Areas and Agricultural Lands throughout King County.