A commitment to land stewardship began in the late 1800s when our families settled in southeastern Washington State. Nearly 125 years later, our farmland continues to be our home and our livelihood. There is nothing more important to us than the land that provides for our families. Our highest priority is to preserve and protect these lands now and for future generations.

Through our farming and winery practices, we uphold the long-standing belief that sustainability and conservation are the single most important factors in the continued success of our operations, Mercer Canyons, Hogue Ranches and Mercer Estates.

Sustainability practices focus on five critical areas: 1) water management; 2) soil and fertility management; 3) integrated pest management; 4) waste management; and 5) research.

Water management starts at the source with pristine water from annual Cascade Mountain Range snowpack delivered to the vineyards via the Yakima and Columbia Rivers. It involves a broad range of activities including electronic soil moisture monitoring that increases efficiency by helping to determine the time and duration of irrigation thereby reducing overall water usage and drip irrigation that reduces water usage, allows for accurate and reliable distribution to each vine, eliminates erosion and prevents silt-laden run-off from returning to natural waterways.
Winery water management practices have reduced water consumption to 25-50% of the industry average per gallon of wine and the new tasting room and winery were landscaped with drought tolerant native vegetation. Waste water mitigation standards have reduced biological oxygen demand (BOD) and total suspended solids (TSS) to levels lower than industry standards.

Soil and fertility management begins with years of research and on-going extensive testing and mapping of the nutrient and mineral characteristics of the soil types throughout the farms using the electronic conductivity (EC) methodology. It is these minerals that determine nutrient availability for plant health.
Extensive use of cover crops improves soil quality and reduces weeds, adds organic matter for soil structure, increases microorganisms and improves water penetration. And tractors are being replaced with all terrain vehicles (ATVs) to reduce soil compaction thereby enhancing soil quality.

Integrated pest management focuses on a whole systems approach utilizing indirect and direct pest management techniques to optimize natural processes. Weekly scouting and monitoring of pests and natural enemies, timely water applications, beneficial predator habitat development and conservation, mating disruption, the suppression of weeds and development of beneficial cover crops minimize the need for pesticide use.

Waste management is observed throughout vineyard and winery operations. Engine oil, used posts and wire are recycled, heavy polluting oil heaters have been replaced with wine machines operating on 100% propane and grape pomace is directed to land application for dust control, under vine weed control and pH enhancement. Grape pomace, wine tank lees and filtration lees are used in cattle feed. Winery operations recycle cardboard, office paper, tin and glass. Use of an electric forklift safeguards air quality.

Research and knowledge acquisition are enduring and essential components of our business model. We partner with Washington State University (WSU) Entomology, Virology and Viticulture Departments to conduct research involving the

most up-to-date industry concerns. This innovative work adds to the industry knowledge base that ultimately affects the long term sustainability of Washington State vineyards.

Our participation in development of the Integrated Environmental Stewardship (IES) program, designed to measure the impact of vineyard operations such as trunk suckering, fertilizer application, irrigation practices, water quality, cover crops, insect and disease control, herbicide use, tillage and leaf removal will keep us in the forefront of sustainability practices. This program will be ready for integration at harvest 2009.

Conservation efforts emphasize: 1) energy management; 2) wildlife habitat improvement; 3) native plant protection; 4) weed suppression; and 5) water management and soil protection.

Energy management to mitigate power consumption is practiced throughout our operations. The winery was built using insulated concrete, natural and energy efficient lighting, heat reclamation on refrigeration, and a single computer program to deliver excellent control and feedback on energy systems.
Power consumption has been reduced in the vineyards through fully pressurized water delivery systems, efficient electric and variable speed motors, and elimination of pumps and electric power supply boxes throughout many vineyard blocks.
Flex fuel and low emission vehicles are being integrated into the fleet while 4-cycle motor all terrain vehicles (ATVs) with electronic ignition and water cooled engines have reduced automobile and tractor work. Vineyard frost control now employs engine driven wind machines operating on 100% propane.

Wildlife habitat improvement is reflected in the numerous acres set aside and protected throughout the farms. We actively manage the ground that lies beyond the vineyards and fields and have planted thousands of trees and hundreds of acres of native grasses to enhance wildlife habitat and attract beneficial insects. Many include natural waterways and ponds that are managed to enhance fish and waterfowl habitat. Hedgerow plantings help mitigate dust and pesticide drift, stabilize soil to prevent erosion, provide food and shelter for beneficial or predatory insects and increase biodiversity. Our nursery ensures stock to maintain and improve the hedgerow program.

Native plant protection and promotion encourages biodiversity, provides food and shelter for beneficial insects, prevents soil erosion and suppresses weed growth. Operator training includes instruction on the importance of keeping the equipment off native grasses and staying on established roads.

Weed suppression is practiced along vineyard and field borders, within habitat areas and around winery and office locations. Annual and perennial cover crops are planted and maintained between vineyard rows for enhanced weed control. Grape pomace from the winery is recycled for under vine weed control. Trials are underway in several vineyard blocks with the goal of achieving herbicide free weed control, improved soil health and organic matter content and improved soil pH directly under the vine.

Water management and soil protection efforts are fully engrained in daily operations. Drip irrigation is actively used and moisture monitoring is in place to enhance irrigation scheduling. Cover crops are integrated in all blocks for erosion control, weed control and moisture retention. The Ag-Weather Net provided by Washington State University via the internet helps guide many decisions such as irrigation strategies, overall disease risk assessment and optimum spray times, frost alerts, heat unit accumulation and site-selection for new plantings.

Protecting the lands under our stewardship requires vision underscored by involvement and commitment. In addition to our Research efforts, we are actively engaged in a number of industry efforts including representing the industry as a governor- appointed Commissioner for the Washington State Commission on Pesticide Registration to find sustainable, biological and transitional strategies for pest management. And, as a participating member of WAWGG technical and research committees, we assist with the development of the Vinewise sustainable project. We will continue to seek out and implement the best long-term methodologies to sustain and conserve the lands entrusted to our care now and for future generations.