

The Mercer commitment to land stewardship began in the late 1800s when our family 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 to preserving and protecting 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. Our sustainability practices focus on five critical areas: <sup>(1)</sup> Water Management <sup>(2)</sup> Soil & Fertility Management <sup>(3)</sup> Integrated Pest Management <sup>(4)</sup> Waste Management and <sup>(5)</sup> 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 wide range of activities including:

- Electronic soil moisture monitoring increases efficiency by helping to determine the time and duration of irrigation, thereby reducing overall water usage.
- Drip irrigation 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.
- Waste water mitigation standards have reduced biological oxygen demand (BOD) and total suspended solids (TSS) to levels lower than industry standards.
- The new tasting room and winery were landscaped with drought tolerant, native vegetation.

Soil & Fertility Management begins with years of research and on-going testing and mapping of the nutrient and mineral characteristics of the soil types throughout the farm using 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.
- 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 that utilizes 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.

- Heavy polluting oil heaters have been replaced with wine machines operating on 100% propane.
- 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.
- Engine oil, used posts and wire are recycled. Winery operations recycle cardboard, office paper, tin and glass.
- Use of an electric forklift safeguards air quality.

**Research & 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 all 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 keeps us in the forefront of sustainability practices.