The following **prerequisite practices** are the minimum practices required by the second year of certification.[1] While prerequisites specify minimal scores, certified vineyards and wineries often score above these minimum practices. Prerequisites practices and the other certification requirements such as minimum scores threshold, performance metrics, and continuous improvement must be met by all certified vineyards and wineries using the **CERTIFIED SUSTAINABLE** logo on the bottle. These practices are a subset of the full **California Code of Sustainable Winegrowing,** which covers 140 vineyard criteria and 104 winery criteria. The Code also includes all four category scores for each criterion as well as additional footnotes, definitions, clarification, and educational information for each criterion that is not included in this table. To see the full Code, visit http://www.sustainablewinegrowing.org/swpworkbook.php.

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Sustainable Business	**2-1**	**Integrating Sustainability into Business Strategy**	Vineyard & Winery	The vineyard and/or winery operation has integrated sustainability into the business strategy (e.g., company mission, vision, values, or equivalent documents) And These were shared with appropriate employees. *(Category 3)*
Sustainable Business	**2-2**	**Environmental Compliance Planning**	Vineyard & Winery	The vineyard and/or winery operation had an established means or process for staying aware of environmental legal and regulatory requirements And The vineyard and/or winery operation had a compliance strategy to address legal and regulatory requirements that included a list of all relevant permits and licenses and a system for keeping abreast of permit renewal dates, any monitoring and reporting, and permit terms. *(Category 2)*
Viticulture	**3-12**	**Addressing Biological Problems**	Vineyard	Soil was fumigated to address a biological problem verified by testing, with spot fumigation done (if possible). *(Category 2)*
Viticulture	**3-16**	**Scion/Cultivar**	Vineyard	The scion was not tested for viruses, but some production history was known And Consideration was given to the appropriateness of scion for climate, soil, and rootstock. *(Category 2)*
Viticulture	**3-18**	**Conservation of Habitat for Wildlife and Pest Predators**	Vineyard	During initial vineyard establishment and/or development, efforts were made to understand and protect important habitat. *(Category 2)*

[1] Vineyards and wineries must meet a subset of requirements in Year One. The remaining requirements must be met by Year Two of certification. This allows time for vineyards and wineries of all sizes and in all California winegrowing regions to implement all requirements. Year Two requirements must be met to use CERTIFIED SUSTAINBLE logo/claims on bottle.

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Soil Management	**4-3**	**Nutrient Management**	Vineyard	Vine vigor, fruit quality, leaf symptoms, and vineyard history were factored into decisions made for nutrient applications And Results of plant tissue analysis were used as a guide for nutrient application decisions. *(Category 3)*
Soil Management	**4-4**	**Nitrogen Management**	Vineyard	Soil or plant tissue analysis was done within the last 6 years And Nitrogen was applied only if justified by plant tissue analysis, inadequate vine vigor* and/or balanced with nutrients removed by the crop And Nitrogen was only applied when vines can best utilize it. *(Category 2)*
Soil Management	**4-5**	**Fertigation**	Vineyard	Fertilization was done by fertigation if necessary** based on soil and vine nutrient status And Timing of applications was seasonally correct. *(Category 3)*
Soil Management	**4-10**	**Surface Water Diversions for Erodible Sites**	Vineyard	Temporary drainage structures such as hay bales or shoveled diversion ditches were utilized during the winter. *(Category 2)*
Soil Management	**4-11**	**Management of Erosion from Roads, Ditches, and Culverts**	Vineyard	Action(s) were taken to eliminate obvious sources of erosion (e.g., out-sloped or vegetated roads, vegetated or hardened** ditches, incorporated riprap*** into culvert outflows) But A comprehensive erosion control plan customized for the roads, ditches, and culverts was not developed And Road maintenance was sporadic (i.e., as needed) rather than preventive and regularly scheduled. *(Category 2)*
Vineyard Water Management	**5-1**	**Water Management Strategy**	Vineyard	The water management strategy* was based on grape-growing goals set before the growing season (yield, fruit quality, water quality/quantity, canopy characteristics, floor management, and/or fertility requirements) and accounted for soil types, slopes, and irrigation water availability, cost and quality. *(Category 2)*
Vineyard Water Management	**5-2**	**Monitoring and Amending Quality of Irrigation Water**	Vineyard	Irrigation water was tested at least once every three years for at least pH, salinity or total dissolved solids (electrical conductivity), and nitrate. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Vineyard Water Management	**5-3**	**Off-Site Water Movement**	Vineyard	Irrigation practices and/or property location or design caused no rills or gullies to form due to concentrated flows from rainfall or applied water And Preventive techniques (e.g., cover crops, vegetated, rocked, or solid surfaced ditches) were in place* to reduce rainfall runoff, minimizing off-site movement of silt, pesticides, and/or fertilizers And/Or If applicable, engineered drainage systems (culverts, drop inlets, diversions) were in place for hillside or terraced sites to minimize off-site movement of silt, pesticides, and/or fertilizers. *(Category 3)*
Vineyard Water Management	**5-5**	**Distribution Uniformity for Irrigation Systems**	Vineyard	The distribution uniformity of the irrigation system was tested within the last 7 years by monitoring outflows, or furrow distribution was checked visually. *(Category 2)*
Vineyard Water Management	**5-6**	**Filters and Lines**	Vineyard	Water filters in the irrigation system were inspected and cleaned when pressure differences were found, and irrigation lines were flushed annually and on a regularly scheduled basis. *(Category 2)*
Vineyard Water Management	**5-7**	**Water Budget**	Vineyard	The amount of water applied at each irrigation was applied at the optimized amount based on goals (e.g. yield, vine appearance) and general weather conditions And If soil salinity was believed to be an issue, it was confirmed annually (by analysis) and managed appropriately. *(Category 2)*
Vineyard Water Management	**5-8**	**Measuring Water Use**	Vineyard	Flow meters were installed on lines from the wells or other pumps, but flows were not monitored during each irrigation or frost sprinkler application Or Other methods to measure water were used (e.g., calculation based on duration, date, energy use, weir, reservoir gauges). *(Category 2)*
Vineyard Water Management	**5-9**	**Soil Water-Infiltration Rates and Water-Holding Capacity**	Vineyard	The infiltration rates and water-holding capacity of the vineyard soil(s) were approximated (based on soil type) And This information was used for estimating necessary irrigation volume per application and to support overall water management. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Vineyard Water Management	**5-10**	**Soil Moisture and Plant Water Status Monitoring Methods**	Vineyard	Soil moisture monitoring devices (e.g., gypsum blocks, tensiometers, capacitance sensors, neutron probe) were installed and used to track water availability (and/or depletion) and used to schedule irrigation for the vineyard And Soil moisture was measured and used to determine the start date for spring/summer irrigation And Plant water status was monitored and recorded by visually assessing shoot tips, leaves and tendrils*. *(Category 3)*
Pest Management	**6-1**	**Vineyard Monitoring for Insect and Mite Pests**	Vineyard	The vineyard was monitored at least weekly for insect and mite pests during the growing season And A written or electronic record of results was kept. *(Category 3)*
Pest Management	**6-2**	**Training for Insect and Mite Monitoring**	Vineyard	Vineyard employees* were trained and encouraged to draw attention to pest problems but could not accurately identify key insect and mite species. *(Category 2)*
Pest Management	**6-3**	**Economic Thresholds and Pest-Natural Enemy Ratios for Leafhoppers, Mites, and Thrips**	Vineyard	Control decisions for leafhoppers, mites, and thrips were based on the presence of these pests in the vineyard. *(Category 2)*
Pest Management	**6-4**	**Minimizing Risks from Insecticides and Miticides**	Vineyard	Non-target risks (e.g., impacts to beneficial insects and mites and environmental and human health) were considered when selecting and using insecticides or miticides And Pesticides were compared for risks, cost and efficacy, and lower risk pesticides were used when possible. *(Category 3)*
Pest Management	**6-5**	**Cultural Practices for Insect and Mite Management**	Vineyard	Cultural practices (e.g., leaf removal*, cover crops, hedgerows, sanitation, dust control, irrigation) were considered for managing insect and mite pests in the vineyard Or Vine vigor was maintained at a level appropriate for reducing pest pressure. *(Category 2)*
Pest Management	**6-7**	**Use of Weather Data and Degree-Days for Managing Moth Pests**	Vineyard	Treatments for moth pests were based on the time of year or vine development, and past experience. *(Category 2)*
Pest Management	**6-8**	**Portion of Vineyard Treated for Mites or Leafhoppers**	Vineyard	Pest hotspots were identified only as an indicator of a problem And The entire block or vineyard was treated when controlling mites or leafhoppers. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Pest Management	**6-9**	**Mealybug Management (vine, grape, obscure, and long-tailed)**	Vineyard	Mealybugs were monitored annually in the vineyard And If found, infested and non-infested areas were treated. *(Category 2)*
Pest Management	**6-11**	**Vineyard Monitoring for Disease**	Vineyard	The vineyard was monitored at least weekly for diseases during critical periods And A written or electronic record of results was kept. *(Category 3)*
Pest Management	**6-13**	**Minimizing Risks from Fungicides for Powdery Mildew and Botrytis Control**	Vineyard	Non-target risks (e.g., impacts to beneficial organisms and human and environmental health) were considered when selecting and using fungicides for powdery mildew and Botrytis control And Fungicides were compared for risks, cost and efficacy, and lower risk fungicides were used when possible And Synthetic fungicides with similar modes of action were rotated. *(Category 3)*
Pest Management	**6-15**	**Bunch Rot Management**	Vineyard	Fungicides for bunch rot were applied between bloom and bunch closure, unless prolonged wet weather occurs in the spring or at pre-harvest, which necessitates applications to protect shoots or ripe fruit And Practices were used to reduce physical fruit damage (predisposes berries to bunch rot) such as adjusting irrigation to limit berry size and splitting, and controlling feeding by OLR, orange tortrix, and birds. *(Category 2)*
Pest Management	**6-16**	**Pierce's Disease (PD) Management where Blue-Green Sharpshooter is the Primary Vector**	Vineyard	A strategy for PD management has been developed and includes monitoring of blue-green sharpshooters And Management of PD consists of insecticide applications for blue-green sharpshooter, if necessary. *(Category 2)*
Pest Management	**6-17**	**Vineyard Monitoring for Weeds**	Vineyard	The vineyard was monitored periodically for weeds And A written or electronic record of results was kept. *(Category 3)*
Pest Management	**6-20**	**Herbicide Leaching Potential**	Vineyard	The person(s) making pest management decisions was aware of ground water protection areas*, where applicable, and associated restrictions for herbicide use And Pest management decisions were made with awareness of herbicide leaching potential. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Pest Management	**6-22**	**Vineyard Monitoring for Vertebrate Pests**	Vineyard	The vineyard was monitored monthly for vertebrate pests (as appropriate based on species/lifecycles present) And A written or electronic record of results was kept And Employees** were trained to identify vertebrate pest activity and damage. *(Category 3)*
Pest Management	**6-23**	**Vertebrate Pest Management**	Vineyard	Anticoagulant and/or strychnine baits were regularly used to control vertebrate pests but extra precautions were taken to ensure non-target animals cannot ingest them And/Or Fumigants or explosive devices may have been used. *(Category 2)*
Pest Management	**6-26**	**Sprayer Calibration and Maintenance**	Vineyard	The sprayer was calibrated and coverage was checked (e.g., with water sensitive paper or dye, visual leaf coverage, etc.) every year And Recalibration was done if there was a change in tractor or tractor tires or a dramatic change in soil conditions And Worn nozzles were replaced every year And Sprayer components were checked yearly as part of scheduled maintenance. *(Category 3)*
Pest Management	**6-27**	**Spray Coverage**	Vineyard	The sprayer was driven at an appropriate speed for optimal coverage And Nozzles were positioned and adjusted as canopy size and density changed during the season. *(Category 2)*
Pest Management	**6-28**	**Spray Buffer Zone**	Vineyard	Reasonable buffer zones* were established near any sensitive areas** And Applications were not made when winds were blowing toward any sensitive areas. *(Category 3)*
Pest Management	**6-34**	**Using Lower Risk Crop Protection Materials**	Vineyard	Red List materials were not used* And Yellow List materials were used* And Lower risk alternatives (materials and cultural practices) were first used or considered as part of an Integrated Pest Management approach, and the justification for the use of Yellow List material(s) was documented, as required for certification. *(Category 3)*
Wine Quality	**7-3**	**Juice Chemistry**	Vineyard	Brix was measured, recorded, and was available. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Wine Quality	**7-8**	**Planning, Monitoring, Goals, and Results for Food Safety**	Winery	A food safety strategy was being investigated or developed that focused on preventive measures to minimize food safety risks for winegrapes and/or wine. *(Category 2)*
Wine Quality	**7-9**	**Planning, Monitoring, Goals, and Results for Security**	Winery	A security or defense strategy was being investigated or developed that focused on preventive measures to minimize security risks for winegrapes and/or wine. *(Category 2)*
Ecosystem Management	**8-1**	**Ecosystem Processes – Resource Base Ecosystem Biodiversity**	Vineyard & Winery	The vineyard or winery's role in a diverse and healthy ecosystem is understood And There was an understanding of which practices promote ecosystem biodiversity. *(Category 2)*
Ecosystem Management	**8-2**	**Watershed Management – Watershed Awareness**	Vineyard & Winery	Pertinent watershed issues were known (e.g., water quality, quantity, pollution, and/or endangered or threatened aquatic species) And Site specific efforts were made to minimize negative impacts on pertinent watershed issues. *(Category 3)*
Ecosystem Management	**8-5**	**Ecosystem Management – Aquatic Habitats: Streams, Rivers, and Wetlands**	Vineyard & Winery	Aquatic habitats near the vineyard and/or winery were considered in site selection and/or management (e.g., soil type and erosion ratings, slope of area, natural vegetation, and drainage were all considered to prevent off-site movement of sediments). *(Category 2)*
Ecosystem Management	**8-8**	**Sensitive Species**	Vineyard & Winery	Most of the sensitive species that have occurred in the region were known. *(Category 2)*
Ecosystem Management	**8-9**	**Sensitive Species and Collaboration with Partners**	Vineyard & Winery	Information developed by qualified experts was used to determine how best to address the presence of sensitive species known to exist on the property. *(Category 2)*
Energy Efficiency	**9-1**	**Planning, Monitoring, Goals, and Results**	Vineyard & Winery	An energy audit* of the overall winery operation or vineyard irrigation pump(s) was conducted in the last 5 years And The rate schedule for cost of electricity was recently reviewed And Results from the audit were considered when making decisions on maintenance, capital improvements, and employee training. *(Category 2)*
Energy Efficiency	**9-3**	**Vineyard Pump Efficiency**	Vineyard	Pump efficiency was considered as one element of vineyard irrigation management And Efforts were made to improve the energy efficiency of vineyard pumps. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Energy Efficiency	**9-4**	**Winery Motors, Drives, and Pumps**	Winery	Efforts were made to improve the energy efficiency of the motors, drives, and pumps system. *(Category 2)*
Winery Water Management	**10-1**	**Water Conservation Planning, Monitoring, Goals, and Results**	Winery	Total water use per year was known And Total water use was monitored throughout the year And The data was used to begin development of a water conservation program. *(Category 2)*
Winery Water Management	**10-2**	**Source Water Quality Planning, Monitoring, Goals, and Results**	Winery	The water quality used in winemaking operations was tested according to the schedule set out in permit requirements or as needed by water system user (boiler feed, bottling, etc.) And Results from the testing were used for making decisions on capital improvements, maintenance, and employee training. *(Category 2)*
Winery Water Management	**10-3**	**Water Supply**	Winery	Meters were installed on wells or water use was measured but water use was not regularly monitored throughout the year And Total water use was estimated. *(Category 2)*
Winery Water Management	**10-8**	**Crush Operations**	Winery	Crush operations were outside and uncovered And Pre-cleaning of equipment surfaces was done with appropriate tools (e.g., a stiff brush) to loosen and remove large material before wash-down And Water for cleaning equipment was applied as needed from a high pressure/low volume nozzle fitted with a shut-off valve. A broom and squeegee were nearby and workers were encouraged to use to clean up spills And Cleaning procedures were developed for crush operations. *(Category 2)*
Winery Water Management	**10-9**	**Presses**	Winery	Presses were outside and uncovered* And Pre-cleaning of equipment surfaces was done to loosen and remove large material before wash-down And Water for cleaning equipment was applied as needed from a high pressure/low volume nozzle fitted with a shut-off valve And Cleaning procedures were developed for press operations. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Material Handling	**11-1**	**Planning, Monitoring, Goals, and Results**	Vineyard & Winery	The total amount of hazardous materials onsite and hazardous waste generated was monitored And Measures for implementing Pollution Prevention (P2) and hazardous waste reduction were investigated (e.g., reducing or eliminating waste at the source, using non-toxic or less-toxic substances, reusing materials) And Local, state, and federal regulatory agencies were considered potential resources for P2 information. *(Category 2)*
Material Handling	**11-3**	**Hazardous Material Storage and Replacement**	Vineyard & Winery	The total amount of hazardous materials was known And Hazardous materials were stored away from storm drains And Research was conducted into hazardous material replacement And Legal requirements were reviewed periodically. *(Category 2)*
Solid Waste Management	**12-1**	**Planning, Monitoring, Goals, and Results**	Winery	The winery conducted a solid waste audit within the last 5 years* And The total solid waste generation was monitored throughout the year And Information about reducing, reusing, and recycling solid waste was easily accessible to all employees. *(Category 2)*
Solid Waste Management	**12-7**	**Cardboard**	Winery	Cardboard was recycled in a designated recycling container And The amount of cardboard recycled was estimated. *(Category 2)*
Solid Waste Management	**12-11**	**Metals**	Winery	Metals were separated from the waste stream for reuse or recycling. *(Category 2)*
Solid Waste Management	**12-14**	**Capsules**	Winery	All aluminum and tin capsules were separated out of the solid waste stream and recycled And All other capsules were disposed of in a solid waste container. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Solid Waste Management	**12-15**	**Landscape Residuals**	Winery	Some landscape residuals were left on the ground And Some landscape residuals were disposed of in solid waste containers And Some landscape residuals were picked up for off-site composting or were composted onsite. *(Category 2)*
Environmentally Preferable Purchasing	**13-1**	**Planning, Monitoring, Goals, and Results**	Vineyard & Winery	Purchasing decisions were based on defined supplier criteria And The vineyard and/or winery operation had an informal purchasing policy And Environmental considerations were included in some purchasing decisions And Research into alternative materials and products was undertaken. *(Category 2)*
Environmentally Preferable Purchasing	**13-15**	**Packaging - To Customers**	Winery	Primary factors in purchasing packaging material were quality, dependability, and lowest bid And Suppliers of packaging material were asked about their products' environmental attributes And Requirements for packaging material included some environmental considerations And Packaging material from suppliers was sometimes reused at the winery. *(Category 2)*
Human Resources	**14-5**	**Safety Training**	Vineyard & Winery	The vineyard and/or winery operation conducted employee safety and training meetings annually (unless required more often by law) And We conducted safety audits and investigations as needed. *(Category 2)*
Human Resources	**14-8**	**Promoting Sustainability in the Workplace**	Vineyard & Winery	Employees relevant to the successful adoption and implementation of sustainability concepts and practices were occasionally informed about the vineyard and/or winery operations sustainability efforts (e.g., group meetings, internal postings). *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Neighbors & Community	**15-1**	**Neighbors and Community Relations**	Vineyard & Winery	Neighbors who may be affected by our operations had appropriate contact information for the vineyard and/or winery (i.e., name, telephone number, email, emergency contact, etc.) And The vineyard and/or winery had a process for receiving, considering, and acting upon neighbor/community comments, questions, and concerns. *(Category 2)*
Neighbors & Community	**15-2**	**Awareness of Potential Neighbor and Community Issues**	Vineyard & Winery	We knew the attitudes and perceptions of our neighbors on key issues* that involved the vineyard and/or winery And We understood how vineyard and/or winery operations may have affected neighbors and community stakeholders. *(Category 2)*
Neighbors & Community	**15-3**	**Mitigation of Light, Noise and Traffic Impacts**	Winery	The winery operation's potential effect on light, noise, and/or traffic impacts to neighbors was known And Neighbors who may be affected by light, noise, and/or traffic had appropriate contact information for the winery (i.e., name, telephone number, email, emergency contact, etc.) And Mitigation options* to reduce light, noise, and/or traffic impacts (e.g., shields for lighting, soundproofing or timing of specific operations or events, speed limit signs, etc.) were researched. *(Category 2)*
Air Quality	**16-1**	**Planning, Monitoring, Goals, and Results**	Vineyard & Winery	There was awareness of some sources of air emissions associated with the vineyard and/or winery And There was a general idea of the difference between and sources of PM10 and PM2.5 particulate matter And Sources and impacts of emissions from the vineyard and/or winery were being assessed. *(Category 2)*
Air Quality	**16-3**	**Unpaved Surfaces – Roadways and Traffic and Equipment Staging Areas**	Vineyard & Winery	There was awareness of practices for mitigating airborne dust and PM10 from unpaved surfaces And A conservation strategy was implemented that included effectively timed applications of water or regulatory compliant anti-dust materials* and/or layering gravel, chipping, mulching, sanding, paving, or seeding Or Speeds and travel were restricted during high use periods on and around the operation. *(Category 2)*

Chapter	Criteria	Criteria Title	Vineyard and/or Winery	Prerequisite Practice - Minimum Requirement
Air Quality	**16-10**	**Winery Refrigerants**	Winery	The type and amount, but not the global warming potential (GWP)*, of the current refrigerant(s) were known And An audit of the refrigeration system was completed. *(Category 2)*