

## Vineyard Year 3 Audit Checklist

**In Year 3, all criteria marked essential must be met. Additionally, a minimum of 30% compliance must be achieved in each chapter with an overall compliance of at least 50%. When totalling your compliance, add numbers from the weight column (excluding all Essential criteria) and divide by total points available.**

ID	Criteria	Weight	Comments
<b>CHAPTER A: SETTING THE SUSTAINABILITY FOUNDATION</b>			
A.6	<p>Growers develop and implement a training plan for all their staff members that:</p> <ul style="list-style-type: none"> <li>a. includes information about sustainability practices, environmental safeguards, and requirements for different tasks, functions and areas;</li> <li>b. ensure that sales and other front-facing staff correctly understands and efficiently communicates what it means to be a certified sustainable, and how it contributes to resource conservation and efficiency management; and</li> <li>c. includes task-related procedures and instructions, and general and task-related occupational health and safety information.</li> </ul> <p>The plan approaches training on a continual basis to refresh staff knowledge and check for learning and to update content and include new topics as needed.</p>	4	

CIC

E	A.8	Growers prepare a map of their farm using an aerial photograph, topographic map, a photocopy of a road map or a tax map as a base. The map must include the following elements and information: a. Parcel boundaries and vineyard blocks. b. Waterways on or adjacent to the property, including manmade ditches and irrigation ponds. c. Riparian areas and their associated buffer areas, including areas impacted by production activities or otherwise degraded. d. Primary and internal roads and any stream crossings. e. Buildings, well heads, pumps and other infrastructure. f. Ecosystems and other conservation areas that are or may be habitat for any endemic, endangered or vulnerable species.	Essential	
	A.9	Growers calculate their approximate annual GHG emissions and identify opportunities to reduce them. Calculation methods can be defined and documented by the Growers or depend on computer-based modeling tools (such as COMET Farm Voluntary Carbon Reporting Tool and Cool Farm Tool ).	3	
	A.11	Growers update their vineyard management plan at least once every three years, or when there are changes in production operations or infrastructure that affect compliance with this standard, to improve its results and accurately reflect the reality of their operations, workforce and productive systems.	Essential	
			TOTAL 7	
CHAPTER B: WATERSHED MANAGEMENT AND CONSERVATION				

CIC	B.8	Where applicable, growers install and maintain water bars or other runoff control structures during the fall season to divert water away from vulnerable areas and reduce runoff water velocity downslope in avenues.	3	
CIC	B.9	In headlands where applicable, growers plant non-tilled vegetative cover to protect soils from erosion and disturbance. Cover crops can be permanent or annually disked and seeded.	3	
CIC	B.10	Growers maintain native vegetative cover on ditch banks and bottoms. Herbicides are not used to control such covers at any time.	2	
CIC	B.11	Growers maintain highly erodible areas, such as steep slopes or locations with unstable soils, with a continuous vegetative cover or covered with straw, crop residues, mulch, or geotextile fabric.	2	
CIC	B.12	Growers implement measures to protect, maintain, and assure that spillways, pipes, open channels, and other drainages are stable (not eroding) and/or are properly lined/armored to prevent erosion, and disperse water and protect and maintain outlets, such as: - installing energy dissipaters prior to water streams re-entering the downstream waterway; - installing properly sized culverts to accommodate high flows; and/or - harden water inlets and outlets.	3	
CIC	B.13	Growers implement measures to ensure that drainage does not directly enter the waterways for all road lengths that potentially drain to a water body crossing.	2	

E	B.18	Growers are aware of how water extraction from streams can impact fish and other aquatic life and implement measures to minimize such impact.	<b>Essential</b>	
CIC	B.19	Growers ensure that work on diversions, including installing and servicing pumps and intakes, is only done when salmon are not present in streams, during approved in-stream work periods and in accordance with federal, provincial, state and local government regulations and permits.	<b>2</b>	
CIC	B.20	Growers keep riparian zones or cultivation setbacks of perennial waterways (year-round flow) and seasonal waterways potentially harboring salmonids that are an average of 20-30 meters wide.	<b>3</b>	
CIC	B.21	Growers have removed unnatural in-stream barriers to fish and wildlife. If barriers still exist, plans are in place to remove these barriers where feasible.	<b>3</b>	
CIC	B.22	Growers implement specific actions to eliminate non-native vegetation species from existing protection zones, replacing them with native species through planting or natural regeneration. The amount of effort is commensurate with the level of non-native invasion and the feasibility of eliminating certain species. Non-native species are never used to re-vegetate or establish protection zones.	<b>3</b>	
CIC	B.23	Where riparian buffer zones are already established, growers give high priority to establishing tree canopy cover over salmonid-bearing and potentially salmonid bearing streams in ways comparable to undisturbed local reference conditions.	<b>2</b>	

CIC	B.24	Growers install and maintain fish screens to avoid fish loses. Maintaining activities take into account the presence of debris and sediment, temperature changes and other damaging factors.	3	
E	B.28	Growers establish hedgerows or vegetated buffer strips, or both, around natural ecosystems and aquatic ecosystems (See also C.15), protected areas within or adjacent to the vineyard, and around any other sensitive habitat areas or strategic places previously identified (including frost pockets within the vineyard). These areas are designed to: a. include flowering plants that encourage beneficial insect populations near crops and fields; b. provide critical wildlife habitat; c. improve or expand existing riparian buffers; d. reduce soil erosion and provide slope stabilization; and e. uptake nutrients and intercept sediment and other pollutants that may emanate from fields, developed areas, or roadways.	Essential	
CIC	B.29	Growers incorporate non-crop vegetation that is composed of native or xeriscape plants around housing and infrastructure, such as: border plantings and barriers, live fences, shade trees, and permanent agroforestry systems.	3	
CIC	B.30	Growers incorporate and maintain insectary hedgerows every five to ten rows.	3	
CIC	B.31	Where feasible, growers maintain existing non-crop vegetation and keep at least 10% of the total property as biodiversity areas, for example, native and naturalized grasslands, small forest patches, and flowering plants, shrubs and trees in corners, and along vineyard edges and property boundaries.	2	

CIC	B.32	Growers establish and protect biological infrastructure that offer habitat, refuge and food for bats, birds, pollinators or other wildlife, such as: - wild native bird nest boxes, nesting platforms and nest perches. - bee blocks; and/or - ponds.	3	
	B.33	Growers develop and implement a conservation plan to organize and detail all the actions necessary to comply with all the essential criteria of this standard related to the conservation of natural ecosystems and resources and make progress towards achievement of the Continuous Improvement Criteria in that area (see Criterion A.10). The plan must include: a. Objectives of the actions to be implemented. b. Quantitative targets and parameters. c. Time-bound management actions. d. Resources and responsible personnel to be assigned. e. Actions for: i. No intervention and conversion of forests and ecosystems. ii. Conservation of non-pest or non-invasive plants or animals. iii. No contamination. iv. Natural restoration and succession of native vegetation and ecosystems, if applicable. This plan must be included as part of the Vineyard Management Plan (see criterion A.10).	Essential	
E			TOTAL 42	
	CHAPTER C: SOIL AND NUTRIENT MANAGEMENT			

E	C.4	Growers select cover crops and vegetation (see criterion C.9) according to soil properties and characteristics, nutrient and water requirements, climate, and erosion and runoff concerns.	Essential	
E	C.5	In areas with nutrients deficiencies, growers implement practices to increase soil nutrients, for example: - plant nutrient enhancing species as cover vegetation, such as nitrogen fixating plants; - minimize tillage; - incorporate organic matter; and - implement a differentiated fertilization plan.	Essential	
CIC	C.6	Growers use soil and water analysis results to update their soil management plan at least once every five years, adjusting and incorporating further measures as necessary.	2	
CIC	C.7	Growers incorporate organic matter into vineyard soils if required and as per their nutrient management plan (see Criterion C.9.). If organic matter is applied: a. it is managed to prevent pests, pathogens, weed species propagation and nutrient leaching. b. it is not made of or contains untreated human sewage. c. it is not applied as a top dressing during high-precipitation periods when the chance of run-off is higher; and d. the carbon-nitrogen ratio is considered to avoid over-vigorous soils.	3	
E	C.11	Growers collaborate with the winery to conduct test fruit quality parameters (including at least Brix, pH, TA and YANC).	Essential	

E	C.12	Growers demonstrate overall and progressive reductions in the use of synthetic nitrogen fertilizers by applying organic fertilizers and establishing of cover crops (See Criterion D.11)	Essential	
	C.13	If feasible, growers increase progressively the organic matter content of their vineyard soils through practices such as: - incorporation of crop residues (materials pruned and thinned) into the vineyard soil; and/or - application of compost.	2	
CIC			TOTAL 7	
<b>Chapter D: INTEGRATED PEST MANAGEMENT</b>				
E	D.19	D.19. Growers rotate pesticide mode of action by target pest, excluding herbicides, sulfur, oil, and bio fungicides, to avoid increasing pest resistance to pesticides.	Essential	
	D.20	Growers evaluate the results of the IPM program and pest control activities after every growing season. The evaluation includes a review and analysis of: a. Pest monitoring activities. b. Pest or disease damage. c. Weather conditions when the pest or disease outbreak occurred. d. Prevention and control measures applied, including pesticide application data. e. Crop yield and grapes quality. f. Any other relevant information as necessary.	Essential	
E				
CIC	D.21	Growers use low-smoke agricultural burning to burn diseased vines and/or other wood if necessary. Burning permits may be required based on venting index.	1	
			TOTAL 1	
<b>CHAPTER E: IRRIGATION OPTIMIZATION</b>				



E	E.9	Growers optimize pump efficiency by one or all the following options: a. ensuring that the correct impeller is used; b. improving friction loss in fittings at pump discharge; and/or c. Replacing old pumps with more efficient models.	Essential	
	E.10	Growers implement a system to monitor the irrigation system during irrigation events to identify leaks and other maintenance issues and repair them quickly. Field personnel should be trained on how and what to communicate as soon as possible so any issues affecting the irrigation systems performance can be addressed.	Essential	
E	E.11	Growers monitor and keep records irrigation of soil moisture, rainfall, and other soil and weather conditions to make and document decisions about irrigation needs. Soil moisture is at least reviewed via the “shovel test” method, and plant water status by visually assessing shoot tips and tendrils.	Essential	
E	E.12	Growers document all irrigation events. Records include data for: a. date of irrigation event; b. amount of water and total area irrigated; c. type of irrigation mechanisms; d. basis for irrigation decision based on information collected according to Criterion E.6.	Essential	
CIC	E.13	Growers demonstrate that the maximum amount of water applied has not exceeded the soil water holding capacity.	2	

CIC	E.14	If feasible, growers schedule irrigation events during nighttime to reduce losses by evaporation.	2	
CIC	E.15	Growers use support tools for monitoring soil moisture to track soil moisture depletion and adjust irrigation events timing and amounts of water applicator. Support tools include but are not limited to: tensiometer, conductivity block, TDR, soil moisture probe.	3	
CIC	E.16	Growers quantify plant moisture stress by using a plant-applied method to determine irrigation event start and timing throughout the growing season. Plant-applied methods include but are not limited to pressure chamber and evapotranspiration.	3	
CIC	E.17	Growers use advanced monitoring systems for weather, plant and soil moisture conditions in the vineyard to support their irrigation timing and quantity decisions.	3	
CIC	E.18	Growers implement measures to avoid over-irrigation of their blocks.	2	
CIC	E.19	Growers ensure their vineyard pumps are properly sized for the acreage and consider equipping them with variable frequency drives.	2	
CIC	E.20	Growers demonstrate that electric pumps in their vineyards are powered by renewable energy.	2	
			<b>TOTAL 19</b>	
<b>CHAPTER F: SOCIAL EQUITY</b>				

E	F.2	Growers develop and implement an emergency response protocol that includes: a. written procedures to address emergency situations within the farm facilities; b. information about handling of hazardous substances (see Criteria D.14 and D.16); and c. preparedness for disasters and extreme weather events.	<b>Essential</b>	
CIC	F.6	Growers encourage workers to attend training seminars or other educational programs, and the company pays for the training costs or allows workers paid time off from work to attend, or both, in accordance with the continuous training plan (Criterion A.6).	<b>3</b>	
CIC	F.7	Growers require their management team to regularly attend regional and provincial meetings, seminars, and symposiums that are related to sustainability, winemaking, or any other topic related to vineyard practices, goals, and objectives and that benefits and improves their work.	<b>3</b>	
CIC	F.8	Growers implement at least one formal recognition program for workers, and have some recognitions related to sustainability.	<b>2</b>	
CIC	F.9	Growers organize field trips for their staff members at least twice a year, to learn about environmental stewardship and overall sustainability.	<b>3</b>	
CIC	F.10	Growers have a current membership in the local growers' associations and the management team attends their meetings and participates in their events.	<b>2</b>	

E    CIC  CIC  CIC	F.13	<p>Growers develop and implement a health and safety plan that:</p> <ul style="list-style-type: none"> <li>a. is developed according to industry standard resources and is based on a risk analysis of production activities and tasks;</li> <li>b. includes all the requirements of applicable law and regulations; and</li> <li>c. is adjusted to the operations size and type.</li> </ul> <p>This plan must be included as part of the Vineyard Management Plan (see criterion A.10).</p>	<b>Essential</b>	
	F.14	The management team conducts employee health and safety meetings at least once a month, and record attendance and document all the issues discussed, and actions agreed. Employees should be able to express concerns about working and safety conditions without fear of repercussions.	<b>2</b>	
	F.15	Growers have a planned and documented schedule for maintaining all equipment, machinery, and infrastructure.	<b>2</b>	
	F.17	Growers offer additional benefits to their workers and document such benefits. Additional benefits may include but are not limited to private or supplementary medical insurance, transportation, additional vacation or personal leave, and dental care.	<b>3</b>	

CIC	F.18	F.18. Growers offer family support services to all their workers. Examples of family support services include but are not limited to the following [at the discretion of the employer]: • Flexible work schedules; • Housing opportunities, referral information, and resources; • Community resources information; • Childcare or childcare referral program; • Nutrition, health and wellness resources and/or referrals; • Employer participation in groups dedicated to increasing housing opportunities; and • Employer involvement in improving access to housing, health care, and childcare programs.	3	
CIC	F.19	Growers track data about the costs of sustainability actions related to this standard, and any perceived additional income or cost reduction. Vineyards use this information as part of their annual management system review to decide on continued or new actions and improvements and adjust the management system and related policies and procedures accordingly.	2	
CIC	F.20	Growers have a long-term plan that encompasses the key issues for their future. This plan is periodically reviewed based on their operations' financial, sustainability, and production information. The plan should include or consider, among other issues: - future production, sales, and income scenarios and goals; - ideas and plans for vineyard expansion; - infrastructure and equipment improvements and needs; - a long-term staffing and recruiting strategy based on projected staff needs; - a succession plan for renewing or new leadership, or renewing ownership on smaller properties; and - possible resource—economic, human, and natural resources—constraints and ways to address them, including future sustainability actions and improvements.  This plan must be included as part of the Vineyard Management Plan (see criterion A.10).	3	

E	F.23	Growers implement a procedure for making information regarding upcoming changes in relevant operations available to neighbors, community members, and other relevant stakeholders in a consistent and timely fashion.	Essential	
E	F.24	Growers have a written procedure to follow up on complaints made by neighbors and local communities. Winery workers understand how to receive any of these complaints or concerns.	Essential	
CIC	F.25	Growers analyze the ways that light, noise, fumes, and traffic from operations may impact neighbors and implement mitigation measures.	2	
CIC	F.26	Growers seek opportunities to host events at their facilities to showcase their operations and best practices and build better relationships with local people.	2	
CIC	F.27	Growers reduce light pollution by minimizing site lighting and incorporating in winery design technologies such as DARK SKY approved lighting, downward facing directional lighting, low-angle spotlights, and low reflectance surfaces.	2	
			TOTAL 34	