

**DISCLAIMER:** This is our first webinar ever - thank you for your patience and please let us know what worked and didn't work for you so we can improve! <mailto:stephanie@lodiwine.com>

**Hosts:**

**Dr. Stephanie Bolton**, Sustainable Winegrowing Director, Lodi Rules Program/Lodi Winegrape Commission

**Warren Bogle**, President, Bogle Vineyards and Lodi Rules Committee Member

**Today we will cover the only three *fail chapter* management plans:**

**Human Resources Plan (LR 2.1)**

**Ecosystem Management Plan (LR 3.3)**

**Nutrient Management Plan (LR 4.1)**

Other Management Plans will be covered in future webinars this month.

**General Tips:**

- If this is your first year in the Lodi Rules program, keep your plans simple.
- Add the corresponding LR Standard and Title at the top for easy filing.
- List visions and goals, describe the current situation in detail, then list overall management strategies.
- Use the headings in the Standard and organize the plan around those.
- If you haven't written anything longer than an email for years, don't worry - bullet points work too!
- Always include a section at the end for "plan review and update" with lines for dates and signatures
- Review Management Plans at your annual Manager's Meeting (LR 1.3)
- Every year, focus on one area to improve for each plan
- Share your plans with employees and ask for input - retention is EXTREMELY difficult and important these days, and you will be surprised at how effective creating a teamwork environment is at employee satisfaction!

**Human Resources Plan (LR 2.1)**

**2.1 Human Resources Plan**

The farming operation has a written and implemented <b>human resources plan</b> containing the following components: company mission, vision, and values; company strategy for human resources; staffing and recruiting procedures; training and development protocols; employee performance management and employee relations strategies; compensation and benefits; record keeping policies; and a plan review and update schedule.	<b>YES = 6</b>
	<b>NO = Fail Chapter</b>

*Example (Lodi Rules Program):*



## **Lodi Rules 2.1: Human Resources Plan**

*Written 5.23.2011, Updated 3.1.2017*

**MISSION:** To demonstrate environmental stewardship through efficient resource utilization and attentive management of agro-ecological processes in vineyards, to promote social equity, and to enhance long-term viability through increased crop value and reduced risk.

**VISION:** To be the preeminent sustainable winegrape certification program and to promote sustainable vineyard practices, informed consumer decision making, and economic viability for winegrape growers.

**VALUES:** Vineyard management competency, operational efficiency, sustained profitability, environmental stewardship.

**HUMAN RESOURCES STRATEGY:** We strive to foster a true teamwork effort utilizing the Lodi Winegrape Commission Staff, the volunteer Lodi Rules Committee, and the Lodi Rules Winegrowing Community.

**STAFFING & RECRUITING:** We seek to create a positive, supportive working environment for all Lodi Winegrape Commission Staff with exceptional leadership coming from the Board of Directors and from the Lodi Rules Committee. The Sustainable Winegrowing Director should possess strong leadership and communication skills, as well as general viticulture knowledge, and efforts will be made to retain the Director in place long-term. Lodi Rules Committee Chairperson and Members are chosen on the basis of dedication to sustainability, history with the program, farming intelligence, and innovative leadership.

**TRAINING & DEVELOPMENT:** Opportunities abound for Lodi Winegrape Commission Staff, Lodi Rules Committee Members, and the Lodi Rules Winegrowing Community to receive training and education to foster professional development. All entities are strongly encouraged to seek relevant educational experiences and to take ownership of their lifelong learning in sustainable viticulture. The Lodi Winegrape Commission is committed to aiding in that process.

**EMPLOYEE PERFORMANCE MANAGEMENT:** New employees receive a formal performance review after 6 months. Thereafter, all employees receive performance reviews on an annual basis. These performance reviews are conducted to provide supervisors and employees the opportunity to discuss job-related tasks, to identify and correct weaknesses in a positive manner, to encourage and recognize strengths, and to discuss positive approaches for meeting employment goals.

**EMPLOYEE RELATIONS STRATEGIES:** There should be an open, respectful line of constant communication between the Sustainable Winegrowing Director and the Lodi Rules Committee Chairperson and Members, as well as the Lodi Rules Winegrowing Community. Lodi Rules growers should be able to easily get in touch with the correct contact person, and all communications between Lodi Rules Program Management (Lodi Winegrape Commission, Protected Harvest, SureHarvest, Heather's Technical Wine Service - Auditing) and growers should be polite, friendly, and encouraging.

**COMPENSATION & BENEFITS:** Salaries are commensurate with training, education and experience, as well as industry standards as verified through appropriate channels. The importance of employee retention to the success of the program is acknowledged, and the Lodi Winegrape Commission strives to maintain quality leadership, a healthy workplace culture, and a competitive salary & benefits program.

**RECORD KEEPING:** The Bookkeeper will maintain organized employee records and stay current on federal, state, & local employment regulations.

**PLAN REVIEW & UPDATE SCHEDULE:** This plan will be reviewed and updated annually at the January Lodi Rules Committee Meeting, prior to the Year-End Recap Event.



General Example:



### LR 3.3: Ecosystem Management Plan

Written 2.24.2008, Updated 3.14.2017

**ENVIRONMENTAL SURVEY:** The following environmental survey was conducted during the summer of 2007 and is still relevant to the current farming operation. Include environmental survey results (photos from Google Earth or aerial images, etc.) and state who conducted the survey. Use cardinal directions in descriptions.



PHOTO: Google Earth, June 2007 Created by Stan Grant

#### DESCRIPTION OF VINEYARD BLOCK:

**VEGETATION:** Include a brief description of any riparian habitats (or lack thereof), cover crops, trees and woodlands, landscaped plants, buffers for roads, grasses, etc.

**WILDLIFE:** Include relevant birds, squirrels, moles, deer, coyotes, beavers, bears, sheep if used for grazing, etc.

**SOIL:** Describe soil types and erosion potential (water, wind, slope).

**SURFACE WATERS:** Include a description of any wetlands (or lack thereof), ditches, groundwater recharge basins, rivers, streams, creeks.

**ADJACENT INFRASTRUCTURE:** Include very brief descriptions of any sheds, homes, shops, wineries or other businesses, power lines, pumps, and roads.

**ADJACENT NEIGHBORING PROPERTIES:** Briefly describe the number and types of neighboring properties - residences, schools, daycares, other agricultural land, etc. Possibly list contact information if known.

**OTHER ENVIRONMENTAL FEATURES:** Anything relevant to the farming operation not described above (weather stations, owl/bird/bat boxes, aquifer, etc.).

**GOALS:**

- To create an optimal environment for premium, sustainable viticulture while remaining profitable
- To consider and conserve natural resources to the best of our ability, educating our children to respect the environment and be proud of how we farm
- To improve the local ecosystem, including soils, air, living organisms, and water sources, through our farming practices
- To create a healthy, vibrant vineyard block which is visually appealing to both growers and the general public

**CHALLENGES:**

- Maintaining riparian areas near vineyards
- Neighbor relations
- Erosion
- Rodent control

**MANAGEMENT STRATEGIES:**

- Enhance the biodiversity of the vineyard block by maintaining healthy trees, cover crops, and riparian areas
- Test the soil profile as-needed to promote active beneficial microbes
- Get vertebrate populations under control so that owl boxes are effective alone
- Attend local watershed stewardship meetings to stay informed
- Educate employees on reasons ecosystem management is important to us

**PLAN REVIEW & UPDATE SCHEDULE:** This plan will be reviewed and updated annually at the January Management Meeting, with input from all relevant employees.

Review Date: \_\_\_\_\_

Signatures and Written Names of All Present:

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**QUESTIONS???**

**Nutrient Management Plan (LR 4.1)**

**4.1 Nutrient Management Plan**

The farming operation has a written and implemented comprehensive <b>nutrient management plan</b> containing the following components: field parameters and vineyard design specifications; vine nutrient demand considerations (growth, recent yields, and target yield); mineral nutrient supply considerations (soil analysis, water analysis); planned mineral nutrient applications (form, rate, timing, placement); monitoring activities (visual observations, tissue analysis); and a plan review and update schedule.	<b>YES = 6</b>
	<b>NO = Fail Chapter</b>

General Example:



#### LR 4.1: Nutrient Management Plan

Written 4.12.2011, Updated 2.4.2017

**FIELD PARAMETERS & VINEYARD DESIGN SPECIFICATIONS:** This vineyard block is 235 acres on San Joaquin Loam, a soil type with moderately well drained soils formed in alluvium derived granitic rock sources. The land is nearly flat with 0-1% slope. The wind direction is generally W/NW and the block is on a drip irrigation system. Leaching potential is low while run-off potential is moderate. Fertilization management is a blend of nutrient replacement and needs-based.

#### GOALS:

- Balanced vine growth and high quality fruit production
- Right source, right rate, right time, and right place

#### VINE NUTRIENT DEMAND CONSIDERATIONS.

**GROWTH:** Nutrient needs are calculated based on the removal of 3 lbs. nitrogen and 6 lbs. potassium per ton of grapes harvested. Vigor is generally high for this block.

**RECENT YIELDS:** 11 tons/acre (2016), 8 tons/acre (2015)

**TARGET YIELD:** 10 tons/acre

#### MINERAL NUTRIENT SUPPLY CONSIDERATIONS.

##### SOIL ANALYSIS:

- Nitrogen, potassium, sulfur, and boron are deficient
- pH is suitable
- Nitrogen is 12.4# / acre ft
- Base saturation in acceptable range

##### WATER ANALYSIS:

- Nitrogen contribution = 7.67#/acre ft
- No toxic issues with salinity, EC, chlorides, or boron
- Bicarbonates will require treatment to prevent emitter clogging
- The amount of nitrogen added through irrigation is calculated and deducted from total nitrogen added throughout the season

#### MINERAL NUTRIENT APPLICATIONS.

**FORM:** Nutrients are applied as a blend of liquefied urea, ammonium thiosulfate, and potassium chloride. Boric acid is blended with nitrogen and potassium.

**RATE:** Low rates are used for pre-harvest and moderate rates are used post-harvest.

**TIMING:** About 2/3 of the seasonal requirements are applied in three equal applications between May and July, then the last 1/3 is applied post-harvest. Applications are made during a 6-8 hour window.

**PLACEMENT:** Nutrients are applied through the drip irrigation system with back-flow prevention and check valves in place.

#### MONITORING ACTIVITIES.

**VISUAL OBSERVATIONS:** Canopy leaves will be monitored by trained employees for typical nutrient deficiencies.

**TISSUE ANALYSIS:** Occurs at least twice per year. Petiole analysis (taken at early veraison & full bloom) indicates that nitrogen, potassium, and sulfur levels are low.

**PLAN REVIEW & UPDATE SCHEDULE:** This plan will be reviewed and updated annually at the January Management Meeting, with input from all relevant employees.

Review Date: \_\_\_\_\_



Signatures and Written Names of All Present:

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## QUESTIONS???

Here is the topic schedule for the next three Webinars:

**Sunday, April 9th 5-6pm:** Soil Conservation Plan (LR 4.2, 6 pts) | Water Management Plan (LR 5.1, 6 pts)

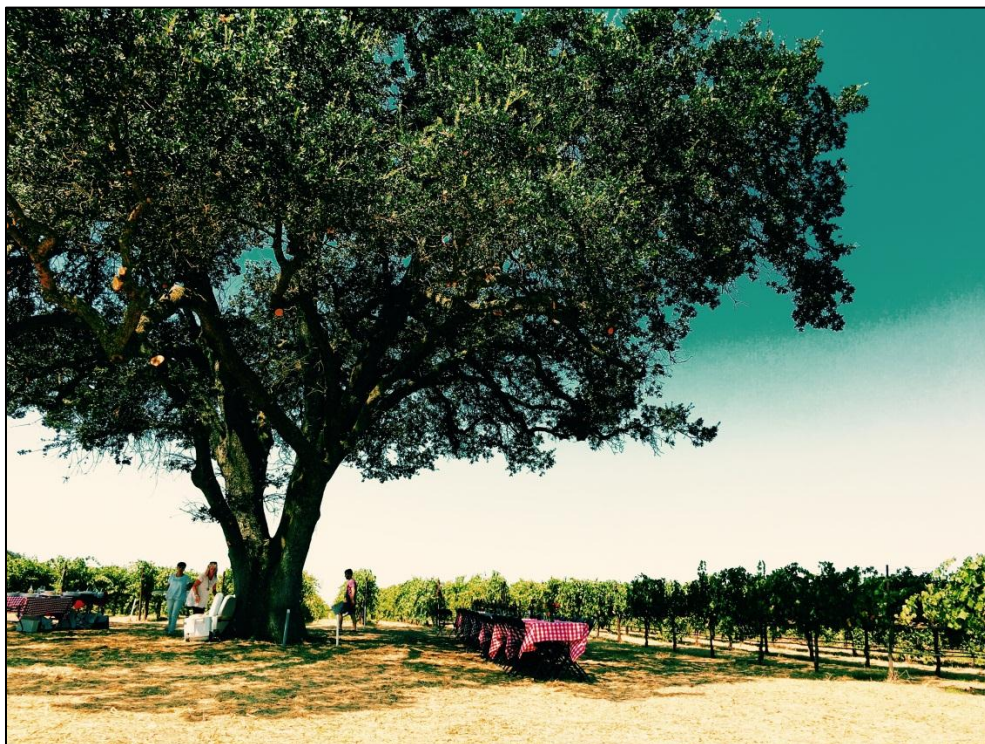
**Friday, April 21st 9-10am:** Insect & Mite Pest Management Plan (LR 6.1, 6pts) | Monitoring Records (LR CH 6, 1-8 pts) | Powdery Mildew Management Plan (LR 6.11, 4 pts) | Soil Borne Pest Management Plan (LR 6.17, 4 pts)

**Wednesday, April 26th 1-2pm:** Weed Management Plan (LR 6.19, 4 pts) | Vertebrate Management Plan (LR 6.21, 4 pts) | Spray/Dust Drift Management Plan (LR 6.27, 4 pts)

Please register for these sessions individually at the following website:

<https://attendee.gotowebinar.com/rt/4582072153939863811>

## Questions??



*Pictured: Bokisch Vineyards picnic area*