



The Irrigation System

I hope you have completed your deep watering. The irrigation system probably has many clogged or partially clogged drip emitters. Turn on each block of your vineyard, take a walk. Replace or clean all the emitters that are not working. Check to see that there is even coverage down each row. Look for damaged drip hose. Baby coyotes may have used your hose as a teething ring. Small tooth marks work as spray emitters. You may have to replace portions of the hose and reinstall emitters. These faults may be the most prevalent sources of erosion here in San Diego County.

The last couple feet of each row's drip hose have probably filled with stagnant water throughout the year. Mold and grime have collected there, and it is not pretty. While the system is running, open the end of each hose until clear water flows out. Yuck! Don't let it spray on you while you are trying this. The last emitters on the hose may also be clogged. Finally, drain the line for the winter to avoid more water stagnating after you've cleaned it.

Nets

Make sure all of your nets are securely stored for the year. A good winter storm may blow nets around the vineyard. Try to avoid losing track of which row each net is designed for. If you are planning to buy new side netting next year, this is an excellent time to add a new net wire 10" below the cordon wire.

Line Posts, End Posts & Wire

Check all your line posts. Make sure they are securely in the ground. Wooden posts may have rotted, steel posts may have rusted out at the ground level. Mark any broken posts. Wait for the first good rain to replace the posts.

The end posts may have gotten loose or started to lean inward. A slight side wind with hundreds of pounds of grapes on the vines can easily exert enough pressure to move the posts. Pull your loose posts as tight as possible and re-secure them with a support post or tension wire.

Hand tighten all the fruiting wires. (this may have to wait until after pre-pruning in December and January).

Water has a 200 IQ - it is smarter than all of us

This week's winterization webinar, sponsored by the Sustainable Winegrowing Alliance (CSWA) was clearly targeted to Northern California vineyards. It was focused on protecting the soil in your vineyard from winter rain erosion and protecting the surrounding ecosystem from the resulting runoff. Most of the talk of cover crop is wasted money here, our winter rains are not sustained enough to grow

most anything but wild mustard - which isn't all that useful.

Even though we don't get sustained rains over the winter, we certainly can get heavy rain events (I dimly recall some in the distant past). These rules still apply:

- 1) Keep runoff as a sheet if possible - don't channel it, split the channel into smaller and smaller rivulets, use gravel to slow it down and disperse the flow.
- 2) use seeding and mulch to secure soil between the rows. We'll have a separate discussion of applying mulch soon.
- 3) prepare access roads to avoid channeling runoff, make sure culverts are clear and adequately sized.
- 4) watch out for roof runoff - a roof can concentrate flow by 100 times in a small area - plan for it.
- 5) ditches should be rock lined not rock filled.
- 6) on bare slopes - fiber waddles should be placed in shallow trenches with extra soil piled on the top side of the waddle. The County of San Diego actually has the most highly recommended YouTube video of this - look it up.

Finally - plan ahead for the worst event you can imagine. Emergency fixes will break down quickly and may make matters worse. The water will show you where it wants to go - it is smarter than you are; listen to it. "When you control water, you control nature; and that usually doesn't end well."