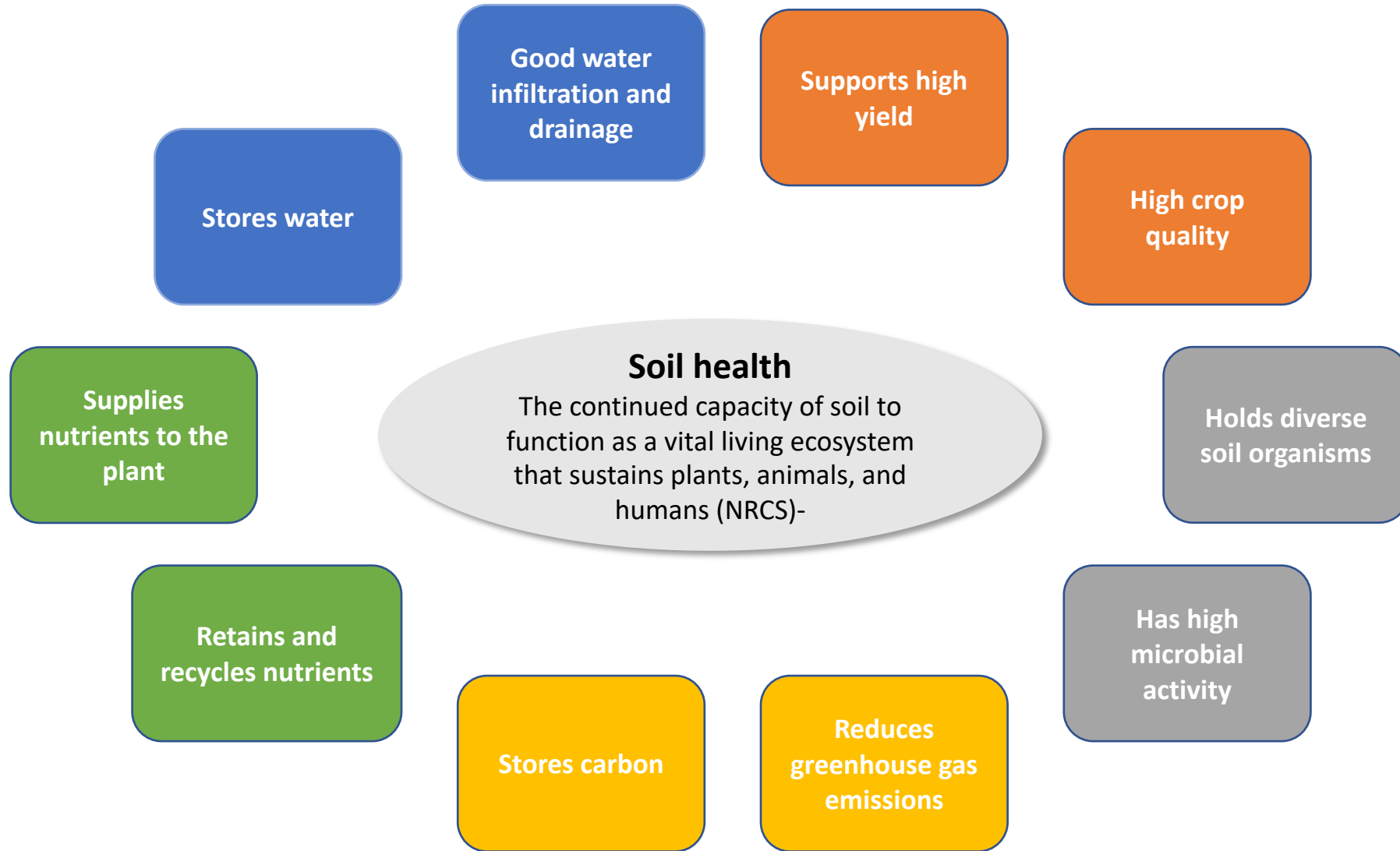


Compost in vineyards

What did we learn from the four projects we discussed?



Supports high yield

High crop quality

Lake county

- Increase in yield at higher rates
- Increased pruning weight at higher rates
- No effect on juice quality

Paso Robles

- No effect on yield
- No effect on grape quality

Supplies nutrients to the plant

Retains and recycles nutrients

Lake county

- Increased petiole N (at higher rates) and increased petiole P at higher rates (10-15ton/acre depending on year)
- Olsen P increased at higher rates
- Soil Ca, K, Mg greater at greater compost application rates

Holds diverse soil organisms

Has high microbial activity

Paso Robles

- No effect on mineralizable C

Stores water

Good water infiltration and drainage

Paso Robles

- Moisture retention curves are under development

Stores carbon

Paso Robles

- No effect on total C
- Active carbon (POX-C) increased to 2 feet depth with increasing application rate in year 2

Sonoma

- Compost significantly increased soil C in 0-10 cm after 2 years
- No effect of tillage

Lake county

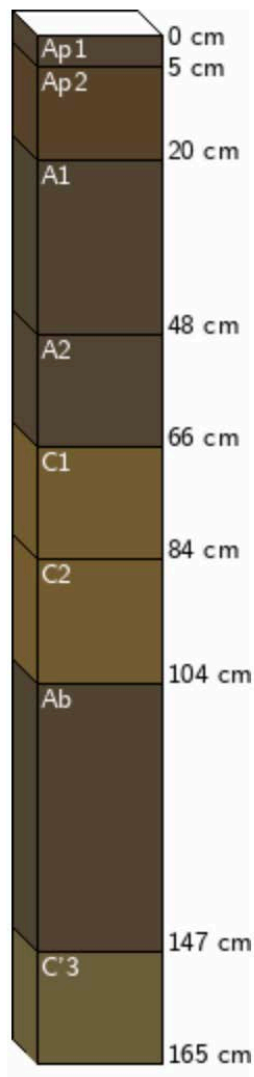
- Increased SOM with higher rates of compost application in year 1 and 2
- Increased pruning weight at higher rates

Reduces greenhouse gas emissions

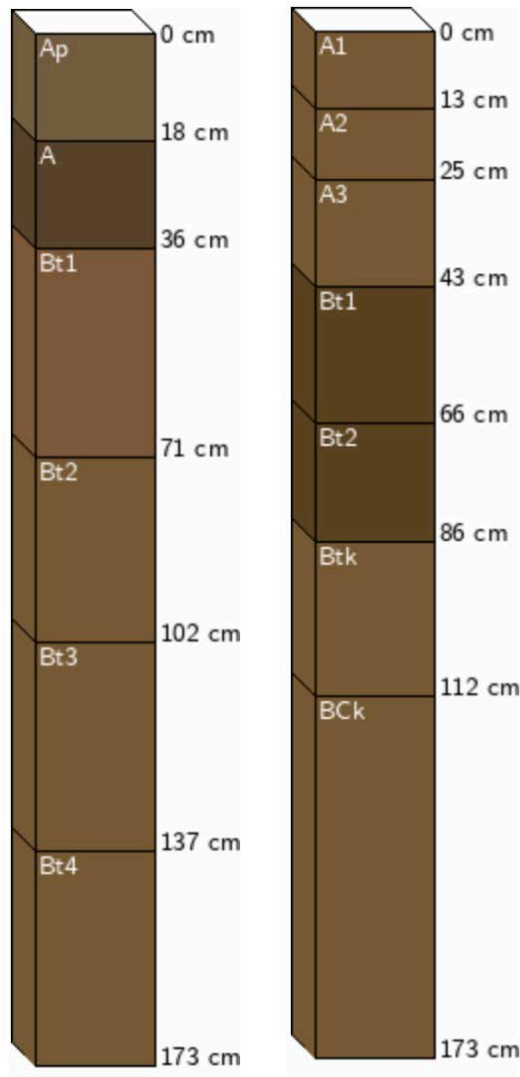
Paso Robles

- No effect on N₂O or CO₂ emissions from soil

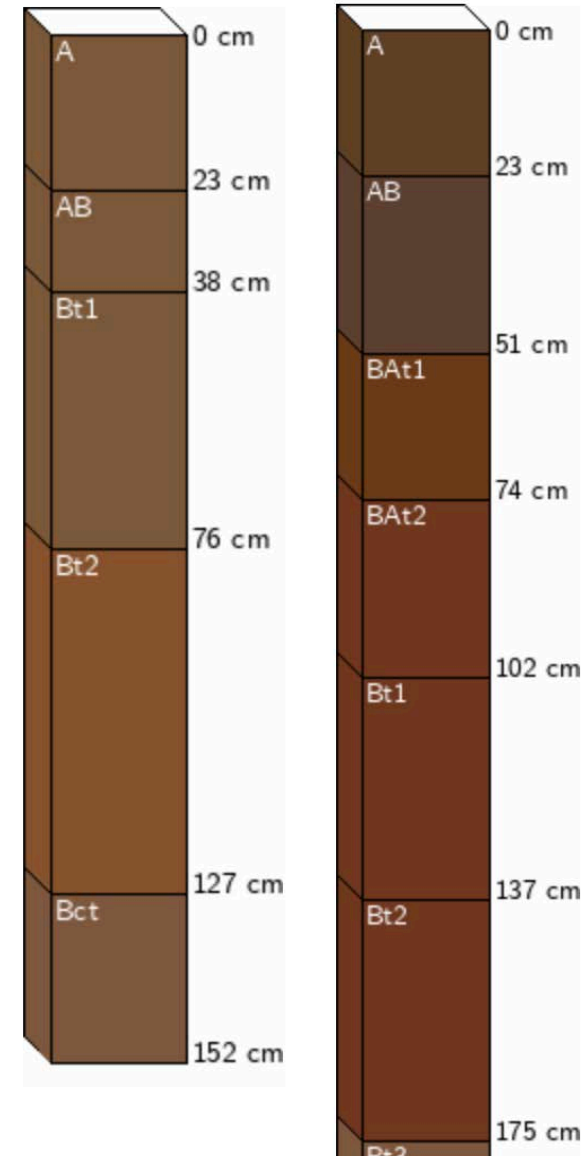
Sonoma County
Yolo loam, 2% SOC



Paso Robles
San Ysidro loam/Arbuckle-San
Ysidro complex, <1% SOC



Lake county
Collayomi/Aiken, ca. 1% SOC
Degraded volcanic soils



Variations in management

- **Compost application rate**
 - Greater rate = greater effect
 - High rates may only be suitable in degraded soils
- **Compost feedstock and quality**
 - Grape pomace itself showed phytotoxicity, but effect disappeared after composting
- **Incorporation or not?**
 - No effect of tillage in Sonoma trial
 - C pools affected to 2 feet deep after surface application in Paso Robles trial
- **Broadcast vs. banding (vine row vs. tractor row)**
 - Sonoma, Paso Robles: C in tractor row > C in vine row
 - Interaction with cover crop
- **Timing of application**
 - May depend on application method and management goals



Join us for a live Q&A

November 20th, 10am

VIRTUAL
SUSTAINABLE AG EXPO
&
**INTERNATIONAL SUSTAINABLE
WINEGROWING SUMMIT**
NOV 9 - DEC 4, 2020

[REGISTER](#)

[PROGRAM](#)

[SPONSOR](#)

[NEWS](#)

[CONTACT](#)

SUSTAINABLE AG EXPO

Nov 9th to Dec 4th 2020 | Virtual