



AMI system cultivates enhanced crop yield and quality for avocado production

AMI RO technology demonstrates tangible benefits by removing impurities and providing a reliable supply of high-quality water.

Challenge

The client was looking to obtain an advanced water treatment solution for their ranch to produce high quality irrigation water for avocado production.

The feedwater source from local well water contained impurities including high chlorides detrimental to crop growth. The system would need to deliver a reliable source of high-quality water to boost crop health and growth.



Solution

Applied Membranes custom-engineered, built, and commissioned a **2 Million Gallons Per Day (MGD) (1400 GPM) (380 m3/h)** brackish water RO (BWRO) system providing high quality irrigation water.

AMI solution included pretreatment filtration with the two (2) RO train system as well as overall engineering design and layout at the project site.

The customized system is powered directly using 5 acres of solar panels, and designed with a grid-tie to float off the grid when sunlight is not present.

The installation is complete with a bank of 8 steel multimedia filters, bag filter skid, chemical injection pre-treatment, and RO unit to supply product water for irrigation.

Key Features:

- Media filtration
- Bag filter skid
- Chemical injection
- Antiscalant
- Clean-in-place system

Results

AMI's custom-engineered water treatment installation effectively treats well water for use in avocado irrigation.

Reliability: AMI system efficiently removes impurities and produces high-quality water that markedly enhances the health and growth of avocados.

Installation, start-up, and support: Applied Membranes provided onsite installation, start-up, and continued support to ensure optimal results.

