“Legislation currently being considered will change the cost of water. We may soon be paying the real value of water. It’s the fastest I’ve ever seen legislation move.”

“Irrigation conservation will be a critical skill.”

“We need to save water in California. It’s going to be very important to have technicians to operate and maintain equipment and learn new technologies”.

“Agriculture policy starts in California and moves east. Texas farmers study California and implement policies because they will come there in 5 years.”

(Quotes from the Stanislaus Irrigation Advisory Committee)

The irrigation industry needs:
- Better pumping systems
- Variable frequency drives (pumps that can deliver at different rates)
- More efficient sprinklers and systems – better emitters
- Better PVC pipe (less friction, saves electricity – aluminum pipes leak)
- Better timing
- Technology that identifies what the plant needs (infra-red, drones)
- Water resource management

Good training would:
1) Identify better equipment that can apply water more efficiently
2) Increase the skills of workers to be able to analyze water needs
3) Teach workers when, where and how much water is needed

Equipment & Technology:
- Variable rate technology (neutron probes) $5,000
- Pumps and a portable pump trailer $200,000 - $300,000
- Handheld GIS tools $?

Incumbent training needed for growers and operators
Farmers are sending their employees to Cal Poly for their irrigation short course.

Jobs:
- On-farm Manager
- Irrigation Manager
- Service Worker
- Pump & Electrical Worker
- Designers/Drafters (low-tech design)
- Irrigation Sales
Skills Needed:

- Real-time monitoring
- Pumps & filters & distribution
- Advanced Excel skills
- Technical Writing skills (record keeping)
- How to deal with "Pressure Bombs"
- Problem solving
- Communication
- GIS
- Excel
- Auto Cad
- Flow Measurement/devices
- Canal Simulation
- Tensiometers
- Monitor System Performance
- Developing software (new)
- Water law
- Wells, water quality, well quality
- Some electricity
- Fertigation – (need chemistry: soil/water/plant relationship)

Certified Irrigation Designer Test (CID) – Irrigation Association