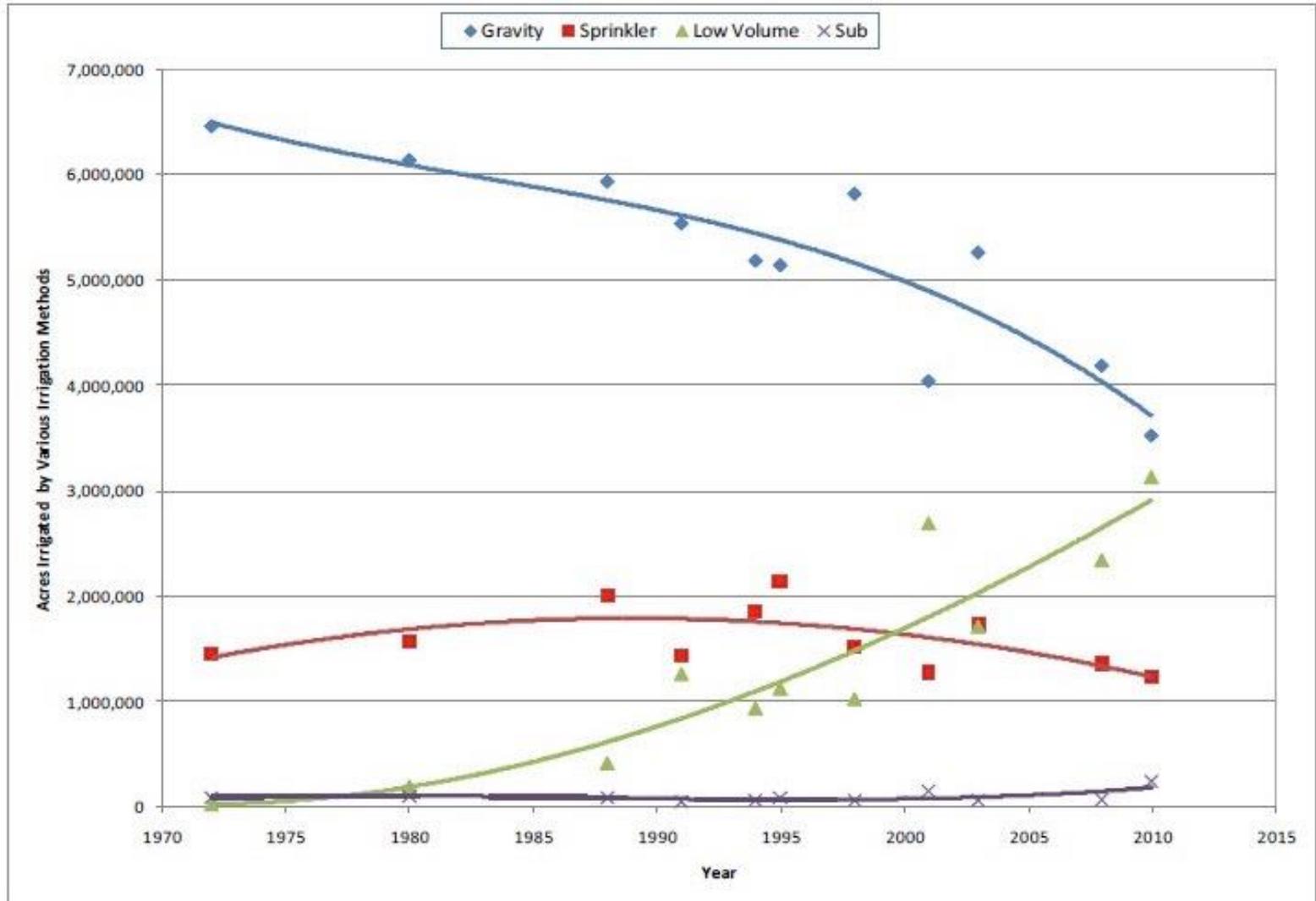


# Today's Discussion on Ag Technology

- × What Technologies have been Successfully Deployed and to What Scale?
- × What New and Promising Technologies are not yet Commercialized?
- × What Challenges Exist to Expanding or Improving Technologies for Ag Irrigation?

# What Technologies have Successfully Deployed and to What Scale?

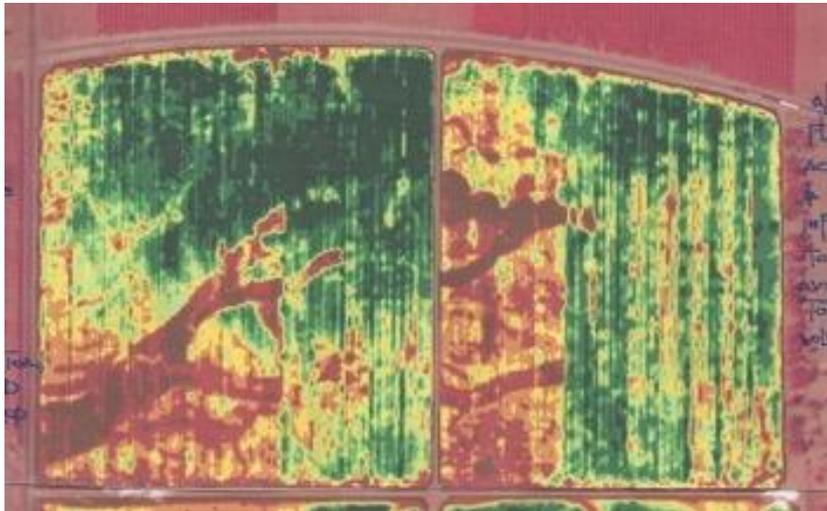
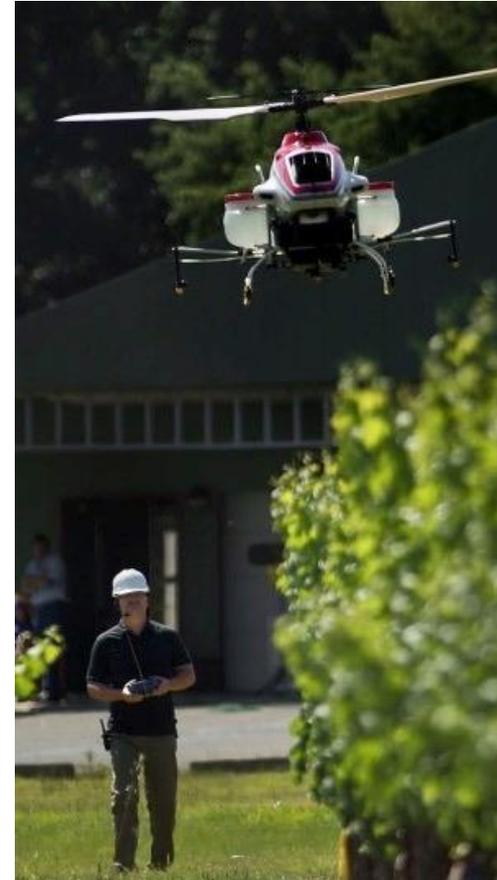
## Irrigation Methods in California 1977-2010



# What Technologies have been Successfully Deployed and to What Scale?

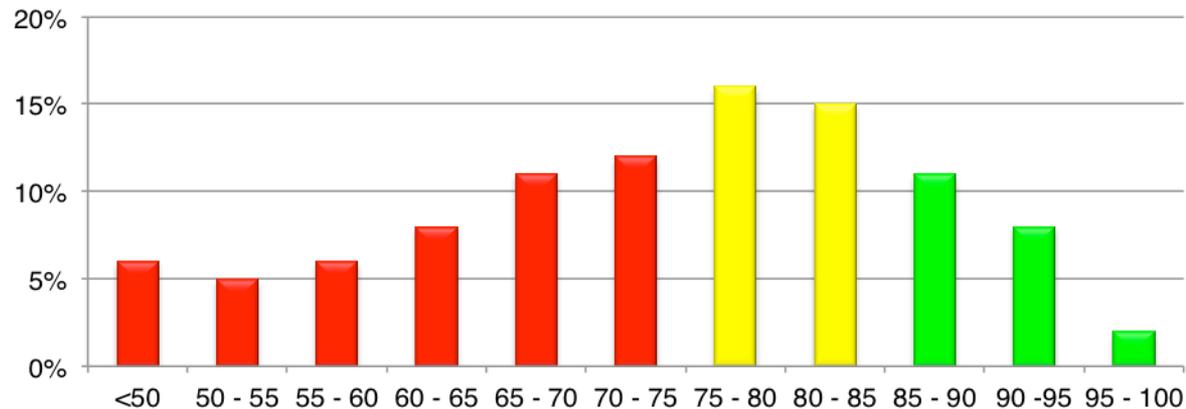


# What New and Promising Technologies are not yet (fully) Commercialized?



# What Challenges Exist to Expanding or Improving Technologies for Ag Irrigation?

## Systems Distribution Uniformity



"An Analysis of Mobile Laboratory Irrigation System evaluation Data: Agricultural Systems"

Blain Hanson, Wil Bowers: Department of Land, Air and Water Resources, University of California, Davis, CA

Bayohay Davidoff: State Department of Water Resources, Sacramento CA

Arturo Carajol: Mobile Laboratory, State Department of Water Resources, Sacramento, CA



# What Challenges Exist to Expanding or Improving Technologies for Ag Irrigation



# What Challenges Exist to Expanding or Improving Technologies for Ag Irrigation?



## Irrigation Scheduling



For Week Ending	Average Year Rain		This Year ETo	This Year Rain	Averages for Week			Change This Yr vs Avg Yr %	Total ETC to Date	
	In/Day	In/Wk			Kc	ETC	Root Zone			Runtime
3/8/2013	0.09	0.27	N/A	N/A	0.57	0.05	4.00	16:35	N/A	0.35
3/15/2013	0.10	0.01	N/A	N/A	0.60	0.06	4.00	19:29	N/A	0.76
3/22/2013	0.11	1.71	N/A	N/A	0.63	0.07	4.00	22:40	N/A	1.24
3/29/2013	0.12	0.46	N/A	N/A	0.66	0.08	4.00	26:44	N/A	1.81
4/5/2013	0.14	0.35	N/A	N/A	0.69	0.09	4.00	30:53	N/A	2.46
4/12/2013	0.15	0.47	N/A	N/A	0.72	0.11	4.00	35:43	N/A	3.21
4/19/2013	0.17	1.13	N/A	N/A	0.74	0.12	4.00	40:26	N/A	4.07
4/26/2013	0.18	0.06	N/A	N/A	0.77	0.14	4.00	45:41	N/A	5.03
5/3/2013	0.20	0.04	N/A	N/A	0.80	0.15	4.00	51:17	N/A	6.12
5/10/2013	0.21	0.03	N/A	N/A	0.83	0.17	4.00	57:44	N/A	7.34
5/17/2013	0.22	0.13	N/A	N/A	0.86	0.19	4.00	64:03	N/A	8.69
5/24/2013	0.24	0.00	N/A	N/A	0.89	0.21	4.00	70:22	N/A	10.18
5/31/2013	0.25	0.02	N/A	N/A	0.92	0.23	4.00	76:44	N/A	11.80
6/7/2013	0.26	0.55	N/A	N/A	0.95	0.25	4.00	83:21	N/A	13.57
6/14/2013	0.28	0.00	N/A	N/A	0.98	0.27	4.00	89:48	N/A	15.46
6/21/2013	0.29	0.00	N/A	N/A	1.01	0.29	4.00	95:31	N/A	17.48

# Summary

- ✘ Educate the Grower
- ✘ Information/data needs to be available and actionable to the grower
- ✘ Incentivize corrective actions/verify
- ✘ Continue to Educate the Grower