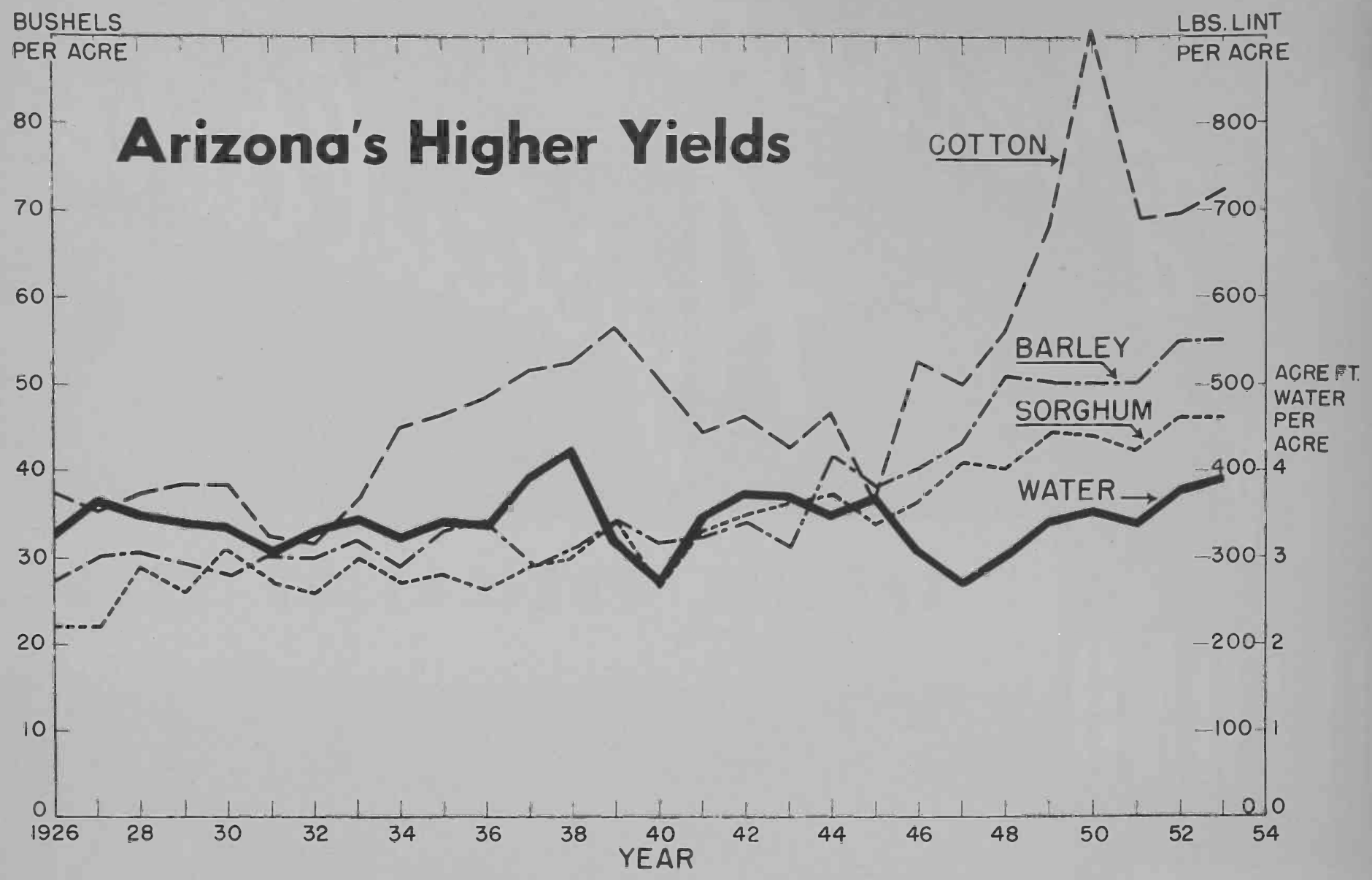

Higher Yields

Arizona's Production of Cotton, Barley, and Sorghum plus water use for the period 1926 to 1953. (The heavy line shows the amount of water which the Salt River Water Users reported delivered to farmers in the project, with adjustments for private pumping since 1946.)

The PLANT-SOIL-MOISTURE relationship can make or break a farmer, depending on how he manages it. Arizona farmers must have done a good job, for this state now leads the nation in acre yields of cotton, sorghums, and barley.

These records have been held for several years and are indicative of the exceptional abilities of our growers. Arizona farmers have quickly accepted improved cultural methods and new strains and varieties developed through research. The graph above shows the successful results obtained through the combined efforts of growers and those connected with the research and educational programs of our Land-Grant College of Agriculture and the U. S. Department of Agriculture.

It is encouraging to note that the highest crop yields per acre were made during the last eight years. During this period water usage per acre did not vary appreciably from pre-war years, as indicated by the Salt River Valley Water Users' deliveries, even though the shift from alfalfa and grain to cotton is an acknowledged factor. Improved irrigation practices, varietal improvements and more effective use of fertilizers and insecticides have had direct bearing on the increased crop returns. Obviously, these factors become of paramount importance with our limited water supplies.

This issue of *Progressive Agriculture in Arizona* is devoted to topics related to the effective use of irrigation water.

These Improved Practices Aid in Water Efficiency

1. Timely irrigations
2. Pre-planting irrigation
3. Levelling land
4. Minimum working of soil
5. Proper use of fertilizers
6. Proper use of insecticides
7. Improved varieties
8. Pure seeds
9. Weed control
10. Overcoming detrimental effects of saline soil and water

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