

Agricultural Conservation, Productivity and Transfers



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Agriculture in the Colorado River Basin

- Approximately 2.8 million irrigated acres (not including Mexico)
- Annual consumptive use by Ag ranges from 8-10 MAF or ~70% of total consumptive use in the basin
- Annual livestock production receipts almost equals crop production receipts
- Basin produces 15% of all crop receipts and 13% of all livestock in the USA.



Agricultural Conservation, Productivity and Water Transfer Workgroup

- Over 40 workgroup members
 - *All states, NGO's represented*
- Three main focus areas
 - *Agricultural uses*
 - *Conservation practices*
 - *Transfer methods*



Next Steps Ag Conservation, Productivity & Water Transfers Workgroup



Co-Chairs

Tina Shields, Imperial Irrigation District

Ken Nowak, Bureau of Reclamation

Reagan Waskom, Colorado Water Institute

Phase I

Prepare a report that quantifies current ag conservation efforts and transfers (both in and out of the basin)

Document programs that have been successful to date

Document future plans of conservation and transfer activity

Estimate potential savings from existing plans

Basin Study Next Steps for Agriculture

Can we conserve one million acre feet of irrigation water?

How much Ag water can we conserve and how would we do it?

How will conserved water be transferred to other uses?



What does Ag Water Conservation include?

- Decreased crop consumptive use
- Improved irrigation application efficiency
- Increased crop water use efficiency
- Increased irrigation water diversion and delivery efficiencies
- Reduced water use or evaporation through adoption of conservation measures and new technologies
- Increased capture and utilization of precipitation

Ag Water Conservation: Challenges and Opportunities

Challenges

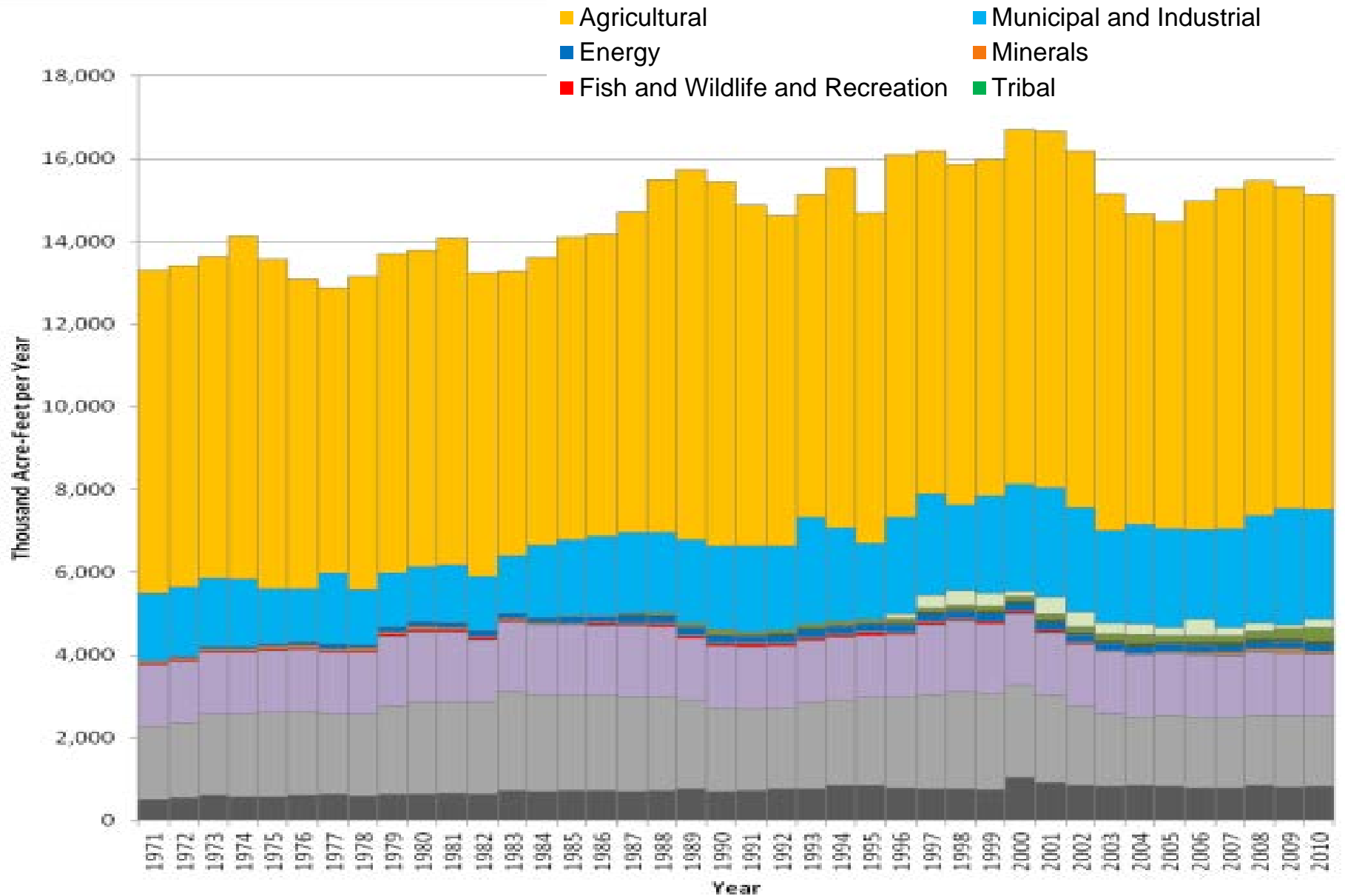
- Legal
- Economic
- Environmental
- Institutional
- Social

Opportunities

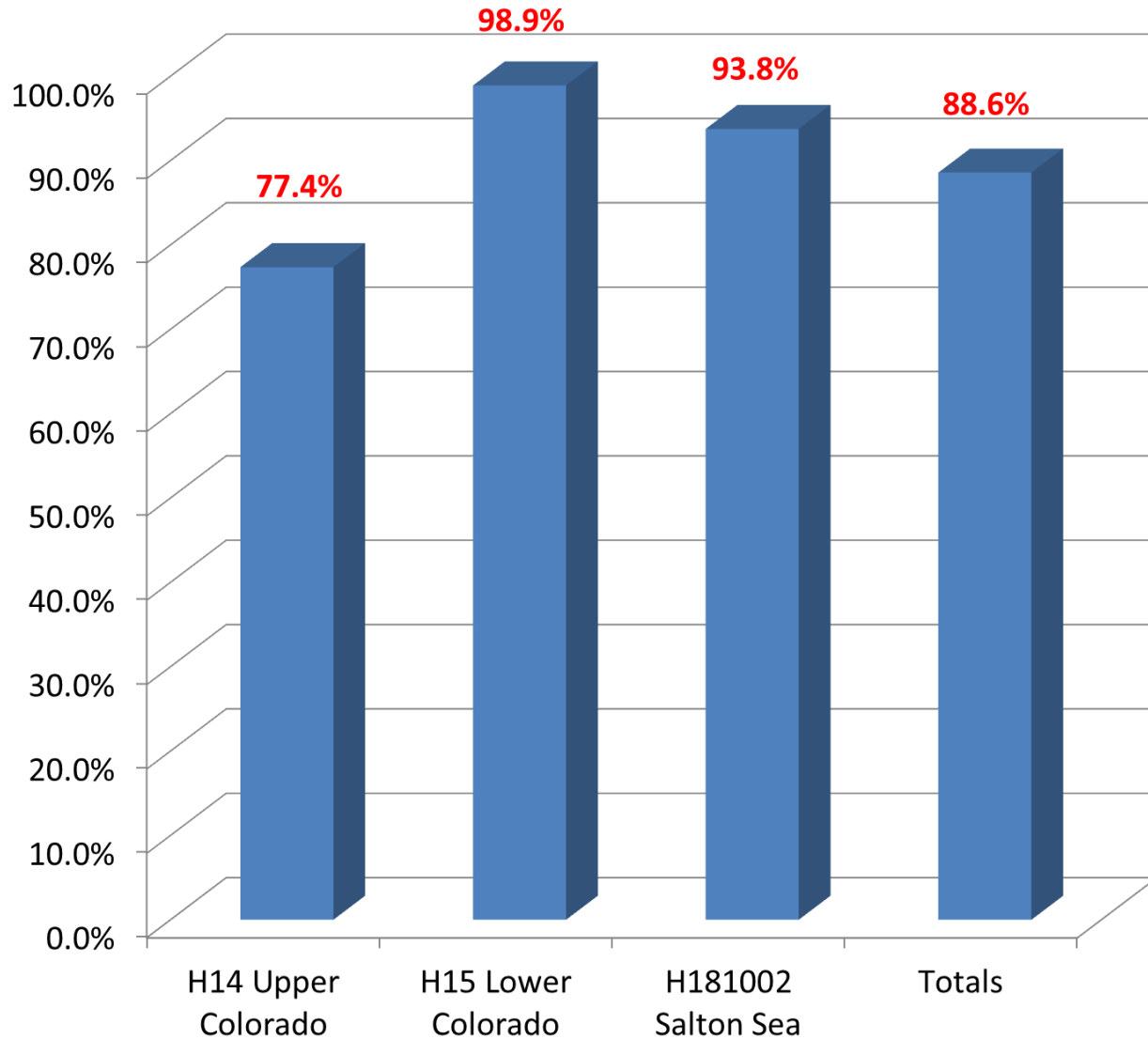
- Improved crop production
- Conserved water for additional beneficial uses
- Partnerships
- Financial incentives



Colorado River Historical Consumptive Use 1971 - 2010

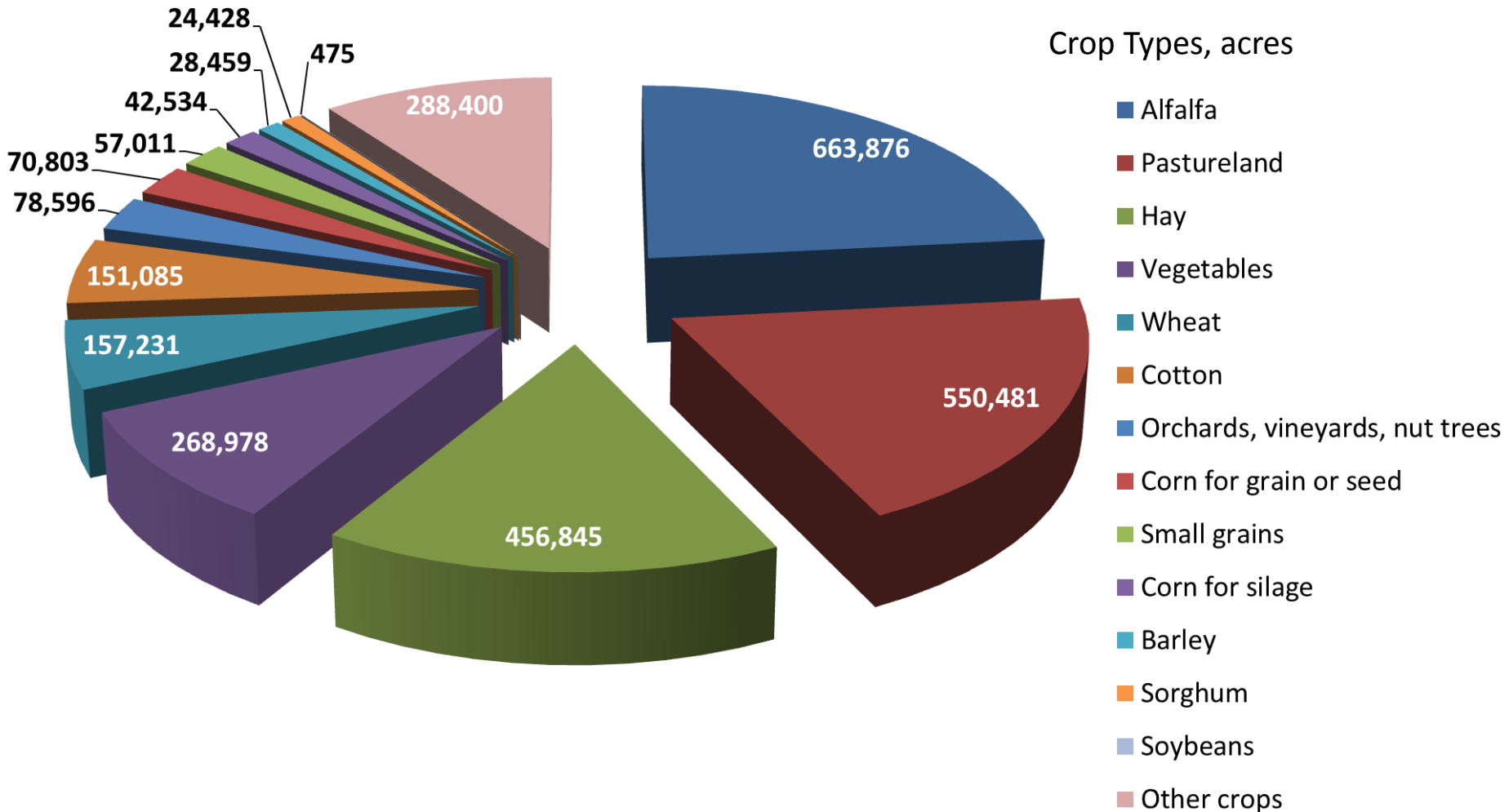


Percent Basin Cropland Irrigated - HUC Data



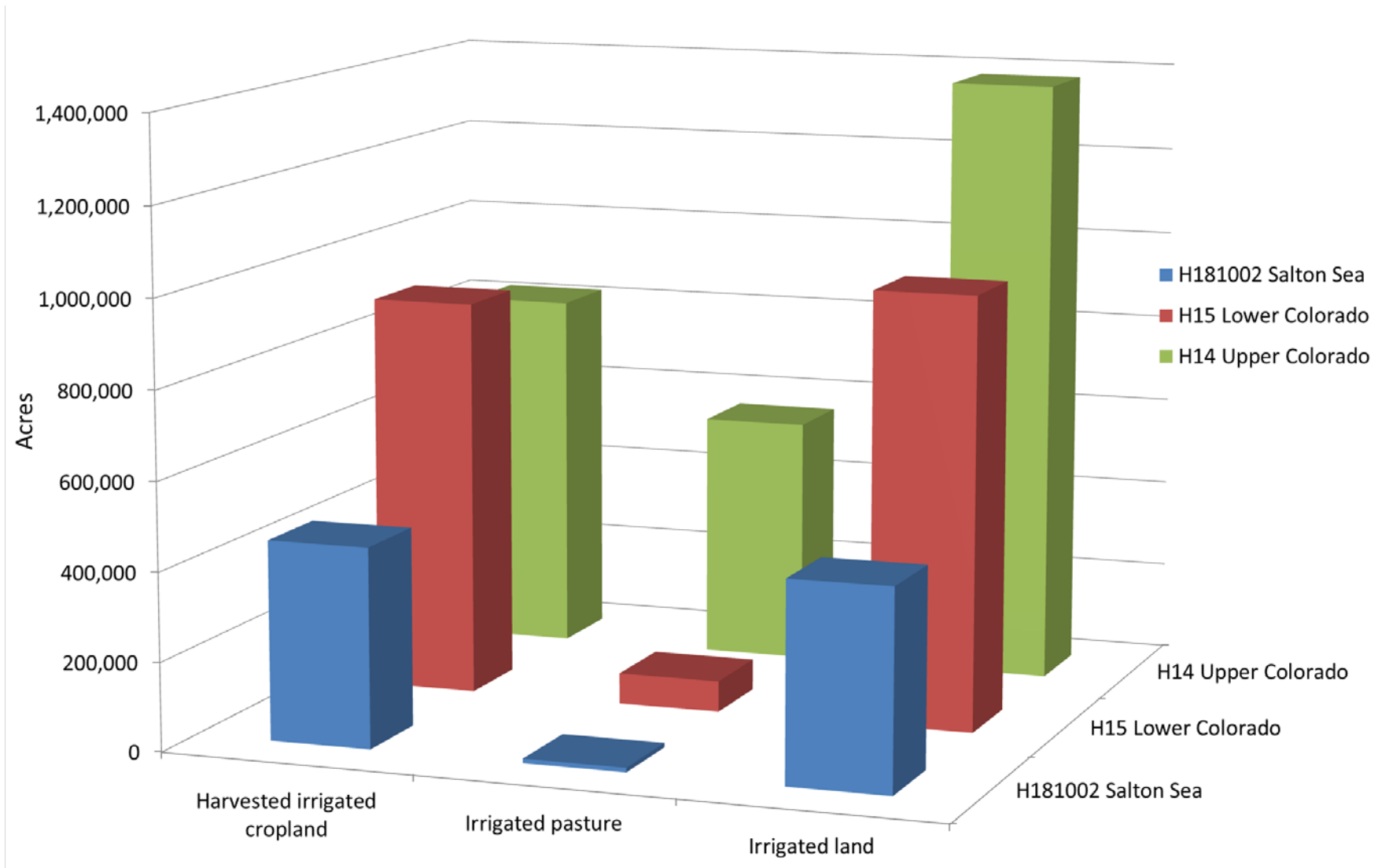
Source: 2007 Census of Agriculture.

Crop Distribution Across Basin (Irrigated Acreage Only)



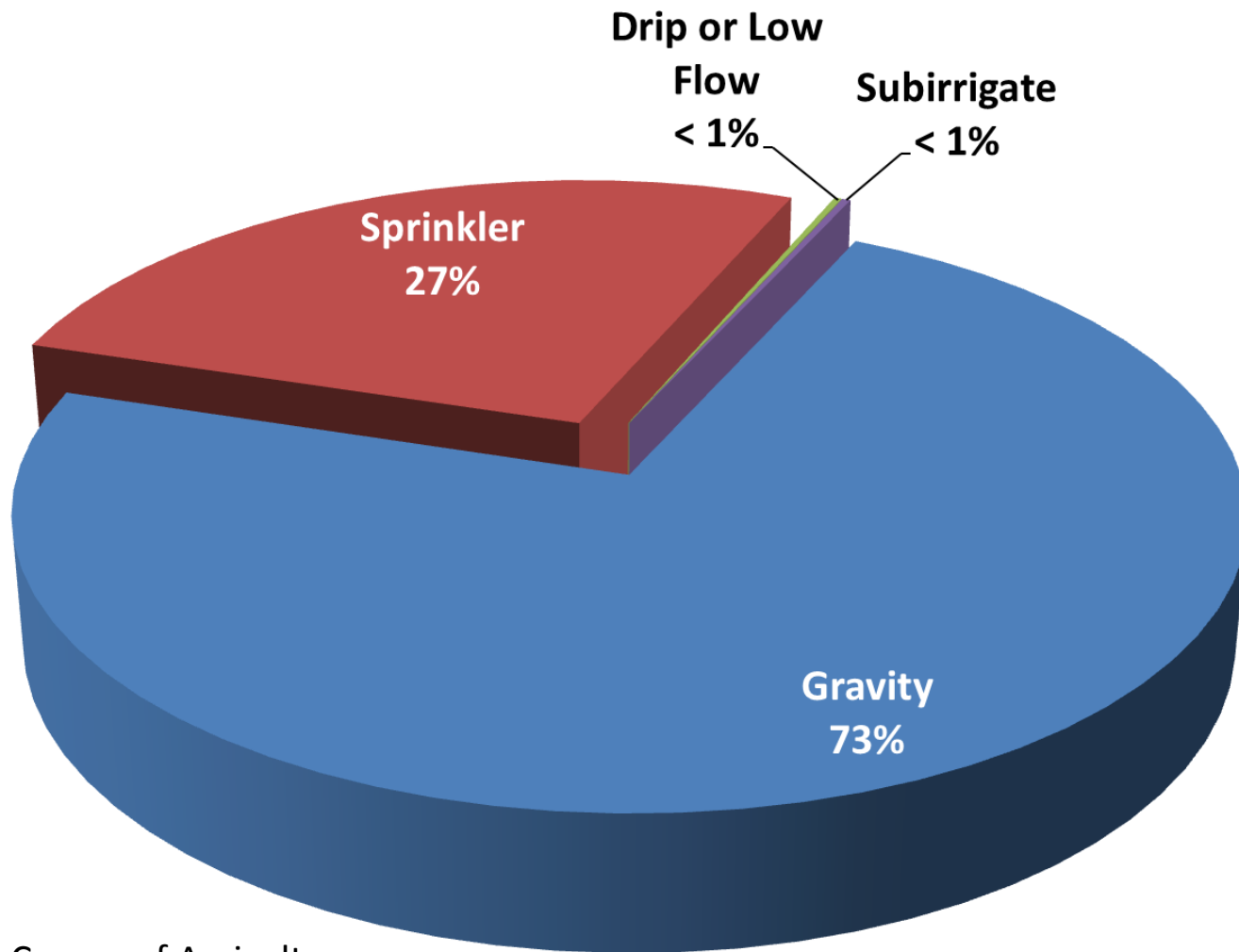
Source: 2007 Census of Agriculture.

Irrigated Basin Acreage - HUC Data



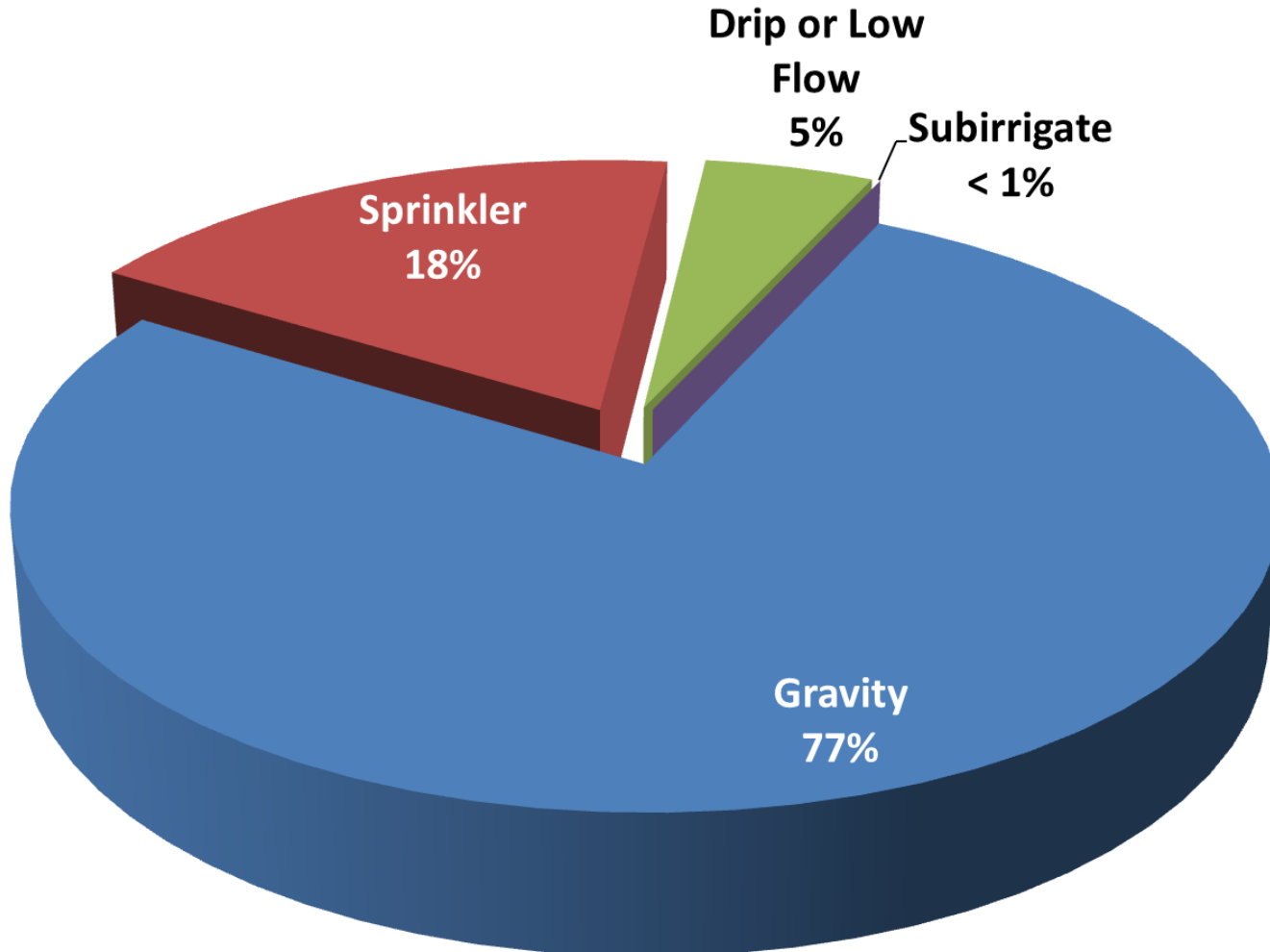
Source: 2007 Census of Agriculture.

Irrigation Application Methods in the Upper Basin



Source: 2007 Census of Agriculture.

Irrigation Application Methods in the Lower Basin



Source: 2007 Census of Agriculture.

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Phase 1 Tasks:

- **Baseline** of agricultural efficiency projects, conservation, and transfers of Colorado River water
- Outcomes of efficiency projects, conservation, and transfer programs that have been implemented to date (e.g. fate/amount of conserved water, positive/negative impacts, etc.).



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Phase 1 tasks:

- Describe future conservation plans, agreements or potential opportunities
- Define potential impacts, costs of implementation, and funding/incentive programs



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Phase 1 tasks:

- Document issues related to conservation and transfers for each Basin state
- Third party impacts of conservation and transfers on agriculture and communities in the Colorado River Basin and those areas that receive Colorado River water



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