

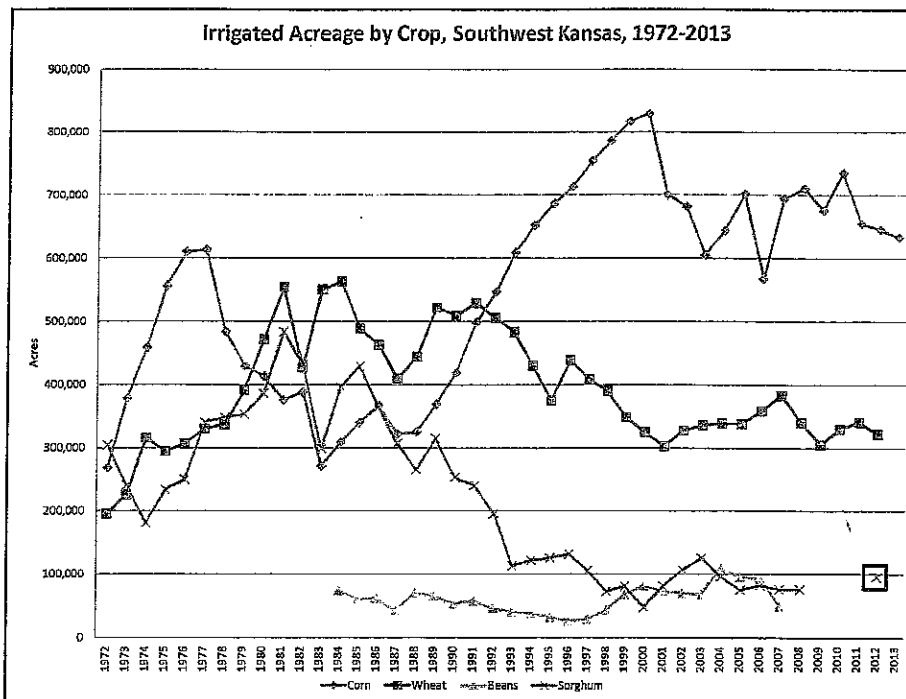
## Value of Groundwater for Irrigation and Livestock & Recreation Impact Summary

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### Kansas Farmland Statistics

| Category                  | Acres      |
|---------------------------|------------|
| Land in Farms             | 46,137,295 |
| Cropland                  | 21,043,596 |
| Irrigated (approximately) | 3,000,000  |
| % of Cropland Irrigated   | 14.3%      |



### Southwest Kansas Corn Production Summary, 2013

**Irrigated Acres** 633,000

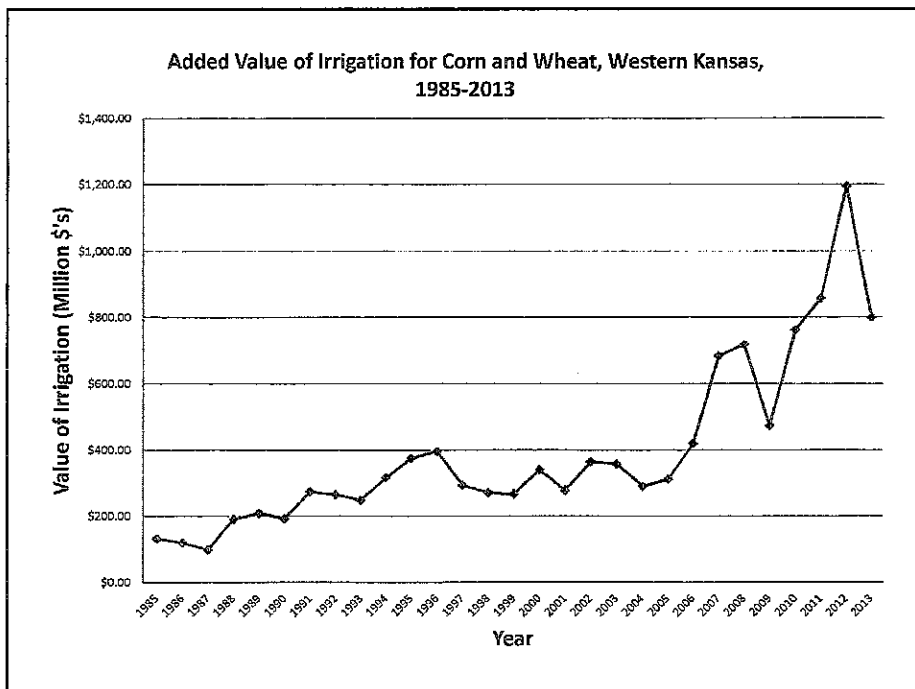
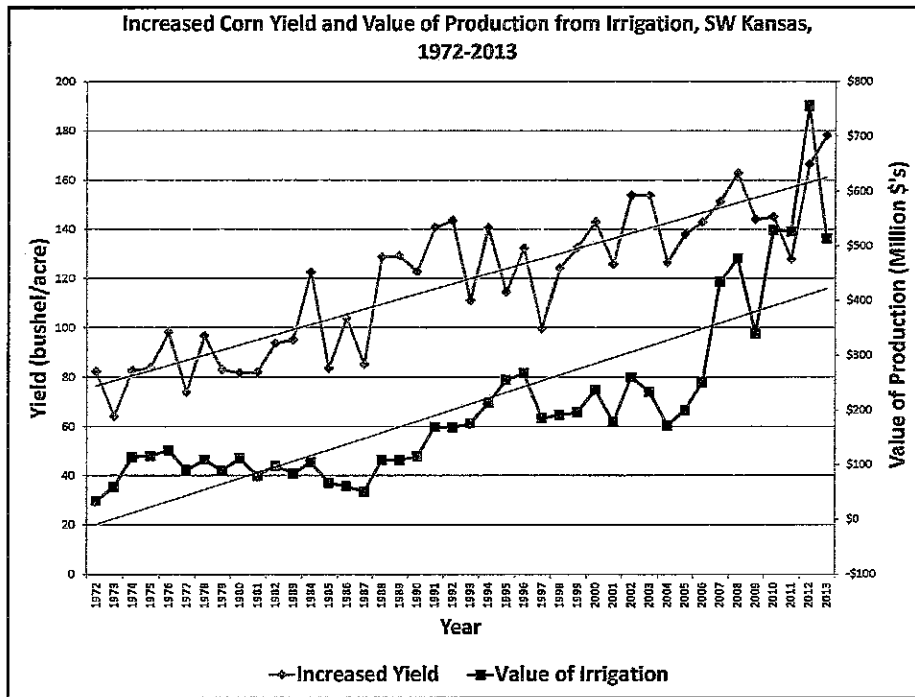
**Average Irrigated Yield** 202 bushels/acre

**Average Dry Land Yield** 24 bushels/acre

**Yield Difference** 178 bushels /acre

**Production from Irrigation** 112,855,833 bushels  
(bushels)

**Production from Irrigation** \$513,494,042  
(\$'s)



## Economic Implications to the Kansas Economy

- Value added from irrigated corn and wheat production is 91% of total crop production for SW KS, \$556,532,840 in 2013.
- Additional production generates income from agricultural producers and input suppliers.
- This income circulates through local and state economies, creating a multiplier effect.

## Impact Beyond the Farm

- Direct: Income from crop production
- Indirect: Local spending from input suppliers
- Induced: Changes in household spending from both the above impacts
- IMPLAN software utilizes local economy trade patterns to estimate these effects

## Terms

- Dollar and employment effects for each impact type
- Value Added= labor income + business taxes + other income
- Output = intermediate inputs + value added

## Impact Summary

| Impact       | Employment   | Output               | Value Added          |
|--------------|--------------|----------------------|----------------------|
| Direct       | 3,715        | \$543,985,280        | \$126,645,414        |
| Indirect     | 1,546        | \$204,925,222        | \$102,157,438        |
| Induced      | 1,263        | \$153,607,146        | \$95,814,643         |
| <b>Total</b> | <b>6,542</b> | <b>\$902,584,949</b> | <b>\$324,617,495</b> |

- \$902.6 M contribution to the economy, ACCOUNTING for value of the crop and inputs
- \$324.6 M contribution to the economy, NOT ACCOUNTING for the value of the crop and inputs

## Kansas Livestock Statistics

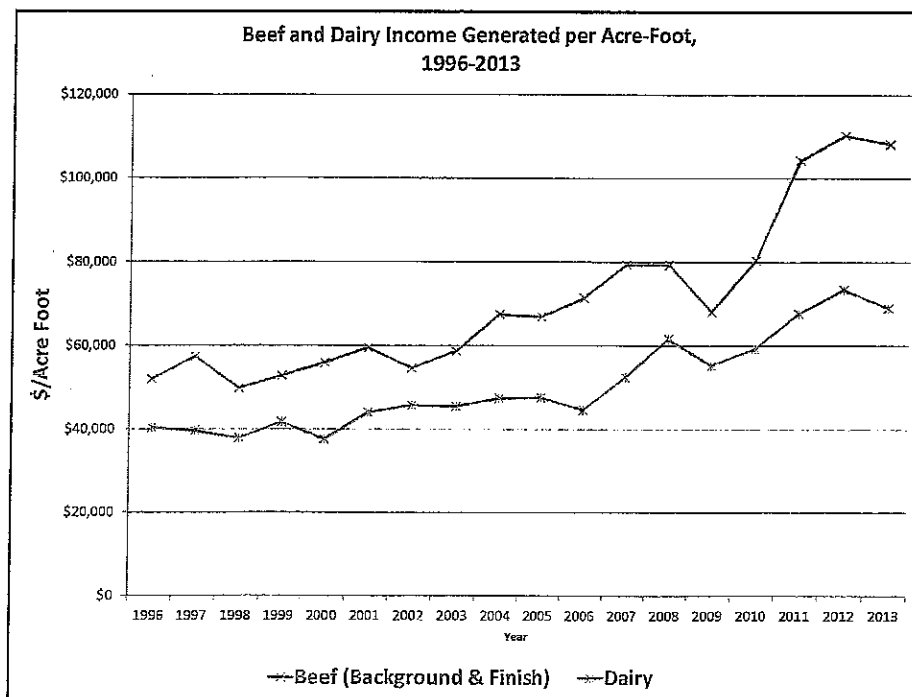
Cattle and Calves, State 5,850,000

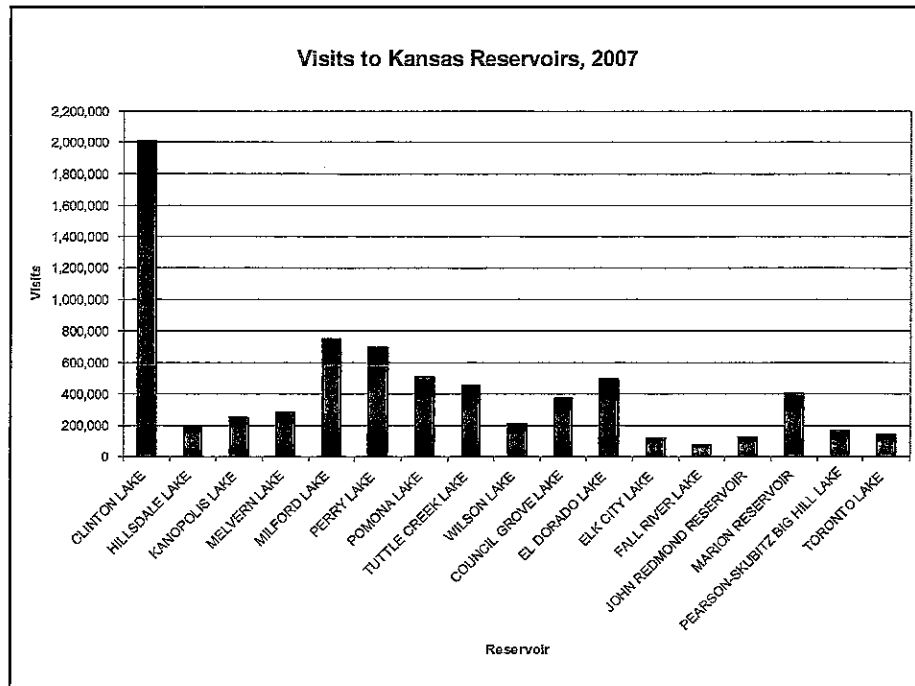
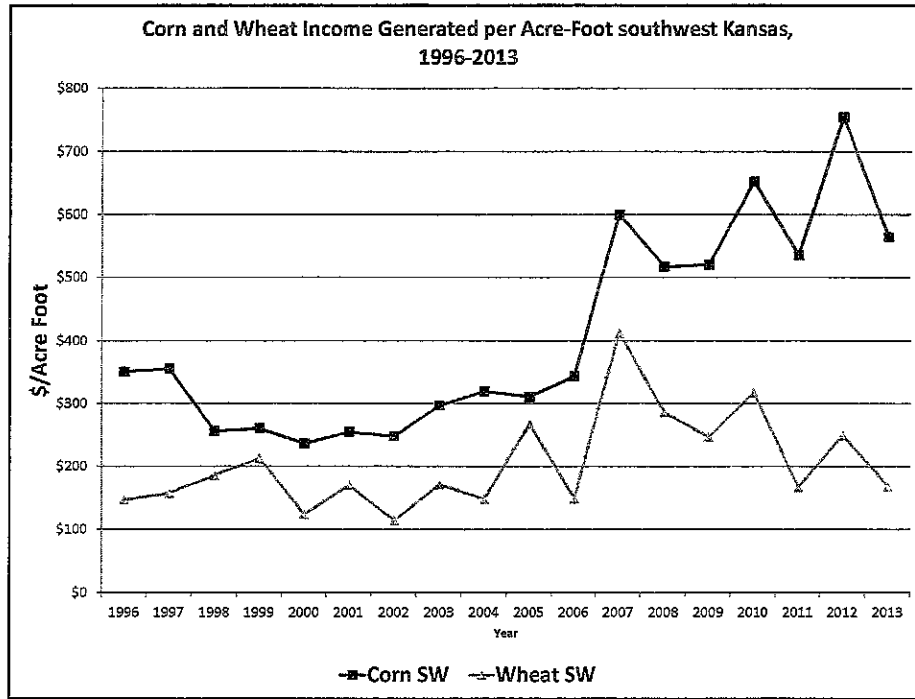
Cattle and Calves, Western KS 2,816,000

Dairy Cattle, State 132,000

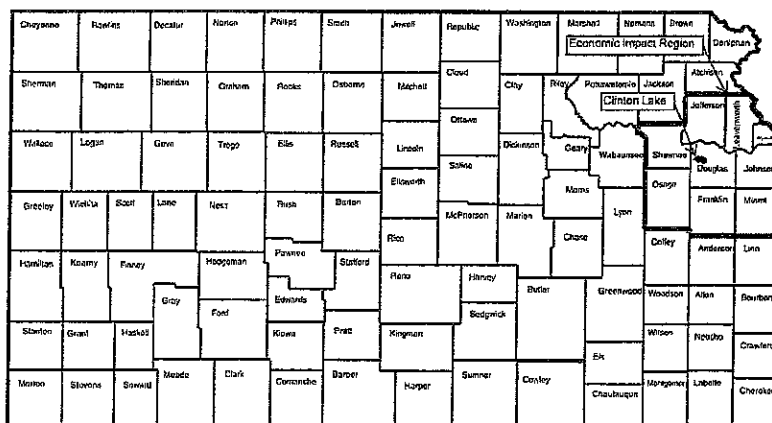
Dairy Cattle\*, Western KS 106,920

\*Assume 81% of dairy cattle in western Kansas.





## Clinton Lake Impact Region



## Clinton Reservoir Economic Impact

- KSU Study from 2008 conducted by Dr. Craig Smith, now with FHSU

| Impact | Employment | Output       | Value Added  |
|--------|------------|--------------|--------------|
| Direct | 325        | \$19,300,000 | \$10,000,000 |
| Total  | 423        | \$30,400,000 | \$16,400,000 |

- \$30.4 M contribution to the economy, ACCOUNTING for value of all spending
- \$16.4 M contribution to the economy, including only incomes and taxes generated