IRRIGATION PLANNING EFFORTS IN LOUISIANA AGRICULTURE

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Irrigated Acres by Year in Louisiana

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1,165,105</td>
</tr>
<tr>
<td>2013</td>
<td>1,235,792</td>
</tr>
<tr>
<td>2014</td>
<td>1,307,709</td>
</tr>
<tr>
<td>2015</td>
<td>1,306,944</td>
</tr>
<tr>
<td>2016</td>
<td>1,353,959</td>
</tr>
</tbody>
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Source: Farm Service Agency
Regional Distribution of Irrigated Crops (2016)

Data Source: 2016 Farm Service Agency
MODERATE, SEVERE, AND EXTREME DROUGHT

Source: U.S. Drought Monitor.
Average cost for irrigation water from off-farm supplies, $/ac-ft

- Louisiana, $70
- Mississippi, $58
- Georgia, $42
- Texas, $31
- Oklahoma, $9
- Florida, $65

Fuel expense for irrigation - second highest cost item

Source: 2013 Farm and Ranch Irrigation survey
CAN IRRIGATION...

- Minimize risk
- Stabilize income fluctuation
- Is it worth the investment?
RED BAYOU PROJECT - NORTH CADEO IRRIGATION DISTRICT (NCID)

Water withdrawals, in million gallons

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<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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<tbody>
<tr>
<td></td>
<td>202</td>
<td>658</td>
<td>426</td>
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</table>

- NCID - Operation and maintenance costs recovery, efficiency, and equity
Three phase electric motor, Pic: Biff Handy, NRCS

Surge Valve, Pic: Bruce Garner, LSU AgCenter

Flow meter, Pic: Chris Coreil, NRCS
Adoption of irrigation efficiency practices (83 respondents; more than one response per respondent is possible)

- **Irrigation management plan**: 29% Yes, 71% No
- **Surge valves**: 8% Yes, 92% No
- **Flow meters**: 14% Yes, 86% No
- **Moisture sensors**: 7% Yes, 93% No
- **Lined ditches**: 1% Yes, 99% No
- **Use PHAUCET/Pipeplanner**: 23% Yes, 77% No

Source: LSU AgCenter 2016 Nutrient Management Survey
Cost comparison of pumping plants tested in North Louisiana, Source: Biff Handy, NRCS.

Cost comparison of pumping plants tested in Louisiana, $/ac-in

Cost comparison of pumping systems using demo plots, and USDA data on Louisiana. Source: Adusumilli 2015.

Assumptions: Diesel: $3.0/gallon; Electricity: $7.0c/kwhr; Water applied: average of 14-inches for row crops.
WHAT’S OUT THERE!

- NRCS Cost-share programs
  - Conservation
  - Irrigation efficiency improvements
  - Technical assistance

- LSU AgCenter
  - Fill the research gap
  - Technical assistance
  - Help bring additional conservation dollars through grants
  - Workshops
THANKYOU
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