Offsets from CA and Midsouth Rice Production

Climate Action Reserve Webinar
February 16, 2012
Conservation Innovation Grant
2011-2014

• First CIG project 2007-2010

• Scope of current CIG: California and Midsouth

Goals of the Project

• Demonstration of aggregation and verification for rice projects
• Economic modeling
• User interface tool development
• Wildlife habitat assessment
• Outreach to the California Air Resources Board
Project Practices

• Eligible practices in CA: Baling, dry seeding, reduced winter flood
  – Early drainage (draining 5-10 days before the normal drain date)

• Potentially eligible practices in the Midsouth:
  – Installation of side inlets, intermittent flooding, early drainage, winter flood management, zero grade and stubble removal, pump and motor enhancements
Economic Model

• Estimates of carbon project profits

• Inputs into the model:
  – Emissions from DNDC model
  – Cost assumptions and yield data for various practices (UC Cooperative Extension data and farmer consultation)
  – Price of rice received (2010 state average from USDA): $17.80/cwt
  – Projected carbon credit value: $10/ton
Potential GHG savings

- Estimates of potential tons in CA; Midsouth forthcoming
- Combination of practices affects emissions
Profit Estimates

- **Field perspective**
  - Very dependent on yield results
  - Switching to a practice may produce some cost savings, but yield decreases would eliminate that practice.

<table>
<thead>
<tr>
<th>Farming Practice</th>
<th>Yield (cwt/ac)</th>
<th>Difference in Yield (cwt/ac)</th>
<th>Difference in Emissions (tCO2e/ac)</th>
<th>Difference in Cost ($/ac)</th>
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<tbody>
<tr>
<td>No Winter Flooding</td>
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<tr>
<td>Residue Incorporation</td>
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<td>Drill Seeding</td>
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<td>-8.29</td>
<td>-0.64</td>
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Area: 127 acres
### Profit Estimates Continued

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Area: 137 acres
Challenges and Opportunities

• Use of DNDC
• Early adopters
• Verification
  – Practices
  – Costs
Questions?

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