Introduction to Agricultural Impacts
Analysis of the Proposed Yolo Bypass
Conservation Measure: Crop Patterns and Scenarios

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Outline

• Yolo Bypass crops: 2005-2009
• Scenarios
  – Inundation end dates
  – Model choice
  – Flow rates and acreage
• Next Steps
• Yolo County Requests
Yolo Bypass Crops 2005-2009: Overview

- Best data available
- Representative of Bypass variation:
  - Covers high and low crop prices
  - Covers wet and dry years
  - Covers years the Fremont Weir did and did not overtop
- Work in progress
Scenarios: Overview

- Five crop years: 2005-2009
- Four inundation end dates:
  - February 15th
  - March 24th
  - April 10th
  - May 15th
- Two flow rates: 2,000 cfs and 5,000 cfs
- One model: HEC-RAS
- Nigiri option: 7,500 acres
- Development of subregions to address variation in length of time needed to drain fields
- Total of 60 scenarios covering a broad range of possible cropping and inundation patterns
Scenarios: Inundation End Date

1. February 15\textsuperscript{th}
   - Avoids impact
   - Fields drain by March 15\textsuperscript{th}
   - Plant by April 15\textsuperscript{th}

2. March 24\textsuperscript{th}
   - Some yield impact
   - Fields drain by April 24\textsuperscript{th}
   - Plant by May 24\textsuperscript{th}

3. April 10\textsuperscript{th}
   - Maximum yield impact
   - Fields drain by May 10\textsuperscript{th}
   - Plant by June 10\textsuperscript{th}

4. May 15\textsuperscript{th}
   - No planting or lose money
Scenarios: Models and Inundation Acreages

- HEC-RAS results publicly available and conservative
- Mike-21 results not public
- Inundation acreages
  - 2,000 cfs (17,421 acres)
  - 5,000 cfs (25,077 acres)
  - Nigiri option (7,500 acres)
Next Steps and Timeline

Next steps:
• Confirm cropping patterns
• Finalize yield data
• Continue stakeholder outreach
• Estimate impacts

Timeline:
• Finalize data (mid-September)
• Preliminary results (end of September)
• Public draft (end of October)
• Comment period (October to mid-November)
• Final draft (end of November)
Yolo County Requests to Planning Team

- Add February 15th as one of the options for an inundation end date
- Ask the Fisheries Technical Team to evaluate the fisheries benefits of all four inundation end dates proposed for the agricultural impacts analysis