

Workshop on Proposed Compliance Offset Protocol for Rice Cultivation Projects and Update to Existing U.S. Forest Protocol

California Air Resources Board

February 20, 2015

California Air Resources Board
Staff Proposal for Discussion

Workshop Materials and Comments Submittal

- Presentation is posted at:
<http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm>
- Written comments may be submitted at:
http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=feb20-offsets-ws&comm_period=1
by 5 p.m. March 6, 2015 (PDT)
- During the workshop, E-mail questions to:
auditorium@calepa.ca.gov

Agenda

- Verification Training/Accreditation Update
- Staff recommendations for updates to the existing U.S. Forest Projects Protocol
- Staff recommendations for updates to the Proposed Rice Cultivation Protocol
- Timeline

Verifier Training Update

- Most recent training held first week of June 2014 included 24 participants in the MMC training
- Future trainings:
 - Planning July 2015 in Sacramento for the Rice Protocol
 - Will post more information as it becomes available at:
<http://www.arb.ca.gov/cc/capandtrade/offsets/verification/verification.htm>

Verifier Accreditation Update

- 18 Verification Bodies accredited
- 94 Offset Verifiers accredited
 - 80 Lead verifiers
 - 43 Livestock project specialists
 - 37 US Forest project specialists
 - 34 ODS Destruction project specialists
 - 31 Urban Forest project specialists
 - 12 MMC project specialists
- For more information, see:

<http://www.arb.ca.gov/cc/capandtrade/offsets/verification/verification.htm>

U.S. Forest Protocol Common Practice

- No changes from 45-day language presented at the December 2014 Board hearing
- Existing 45-day language is consistent with the regulatory requirements for a conservative business-as-usual baseline
 - 45-day language reflects the most current data
- Not able to look back further than most recent FIA data because older data may not use the same volume and biomass equations
 - Cannot average data using different equations

U.S. Forest Protocol Minimum Baseline

- No changes from 45-day language presented at the December 2014 Board hearing
- Consistent with voluntary programs
 - The existing 45-day language is consistent with the latest version (3.3) of the Climate Action Reserve's Forest Protocol
 - Equation 6.7 for the *Standardized Adjusted Baseline* for Above-Ground Live Carbon Stocks Where Initial Stocks Are Above Common Practice

U.S. Forest Protocol Even-Age Management

- Staff goal is 100% harmonization with the California Forest Practice Act
- Proposed updates (CA-FPRs Sec. 913.1 and 912.7)
 - Adjacency requirement - minimum of harvested stand area or 20 acres, whichever is less, and 300 feet in all directions
 - Five feet/Five year requirement – on a minimum of 150 points worth of trees
 - 1 point – countable tree up to 4 inches dbh
 - 3 point – countable tree between 4 and 12 inches dbh
 - 6 point – countable tree greater than 12 inches dbh
 - Rely on common definitions of even-age practices for trigger

U.S. Forest Protocol Alaska Wood Products

- Development of Mill Efficiency and Wood Product values consistent with approach used in the Lower 48
 - Berg, et al. 2011. Alaska's timber harvest and forest products industry, GTR PNW-GTR-903
 - Mill conversion efficiency
 - Softwood - Saw logs - 0.628
 - Softwood - Pulp wood - 0.582
 - Default Wood Product Classes
 - 7.6% Softwood Lumber
 - 2.2% Paper
 - 90.2% Exported (China, Japan, South Korea)

U.S. Forest Protocol Alaska Wood Products (2)

- Assumptions
 - Exported logs are converted into wood products with the same efficiency as the U.S. average – 0.655
 - All exported chips will be used for paper production; conversion efficiency to paper is the same as U.S. production weighted average for conversion of pulpwood - 0.582
 - Most conservative assumption
 - Treat logs for log homes as lumber
 - USFS and ARB are still evaluating Long-Term Carbon Storage factors for exported wood
 - Proposing to use IPCC default values

Questions?

Rice Protocol Early Action

- Update from 45-day language presented at the December 2014 Board hearing
- Early Action projects using American Carbon Registry's Rice Protocol with modifications will be eligible
 - No offset credits for emission reductions due to soil organic carbon or N₂O
 - No offset credits for emission reductions from rice straw removal after harvest
 - No offset credits for energy efficiency
 - Must use a Field Specific Baseline

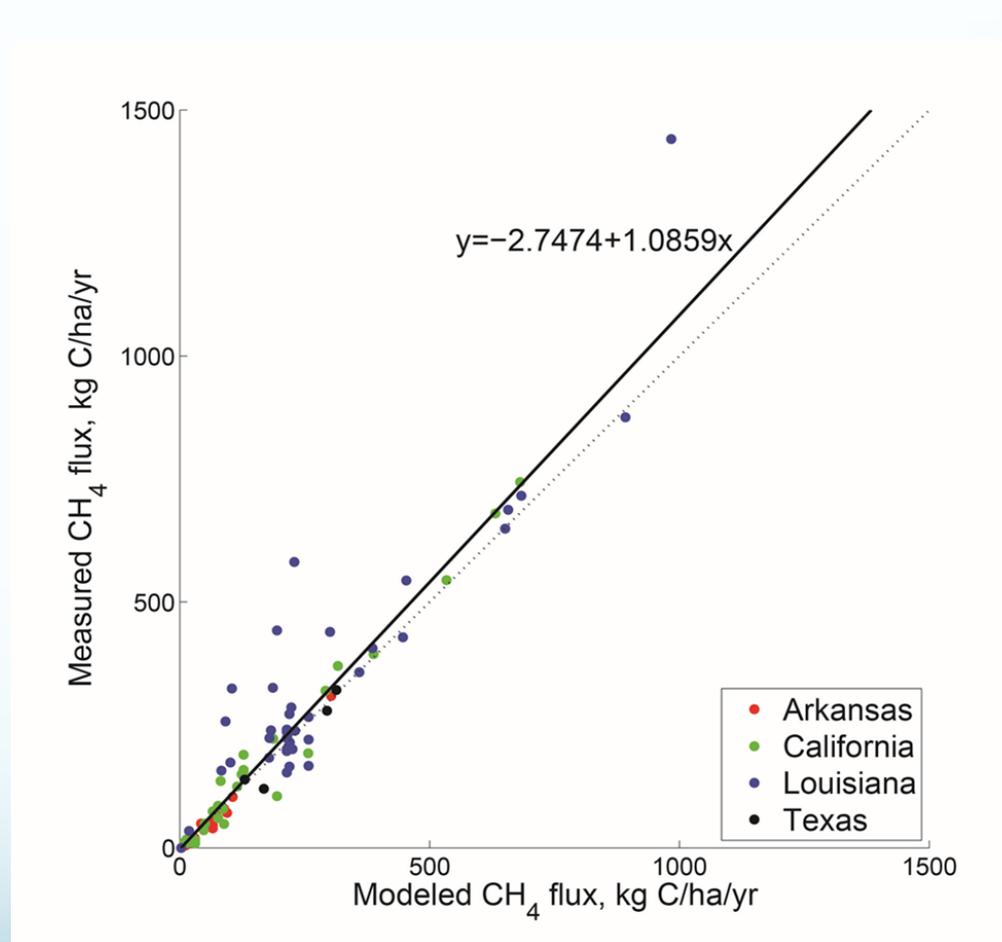
Rice Protocol Straw Removal (Baling)

- No changes from 45-day language presented at the December 2014 Board hearing
- Not addressed in the original Environmental Assessment
- No conclusive data indicating there would not be an adverse impact to bird population
- Continued commitment to review new data as it becomes available
- Open to considering in the future

Rice Protocol Additional Items

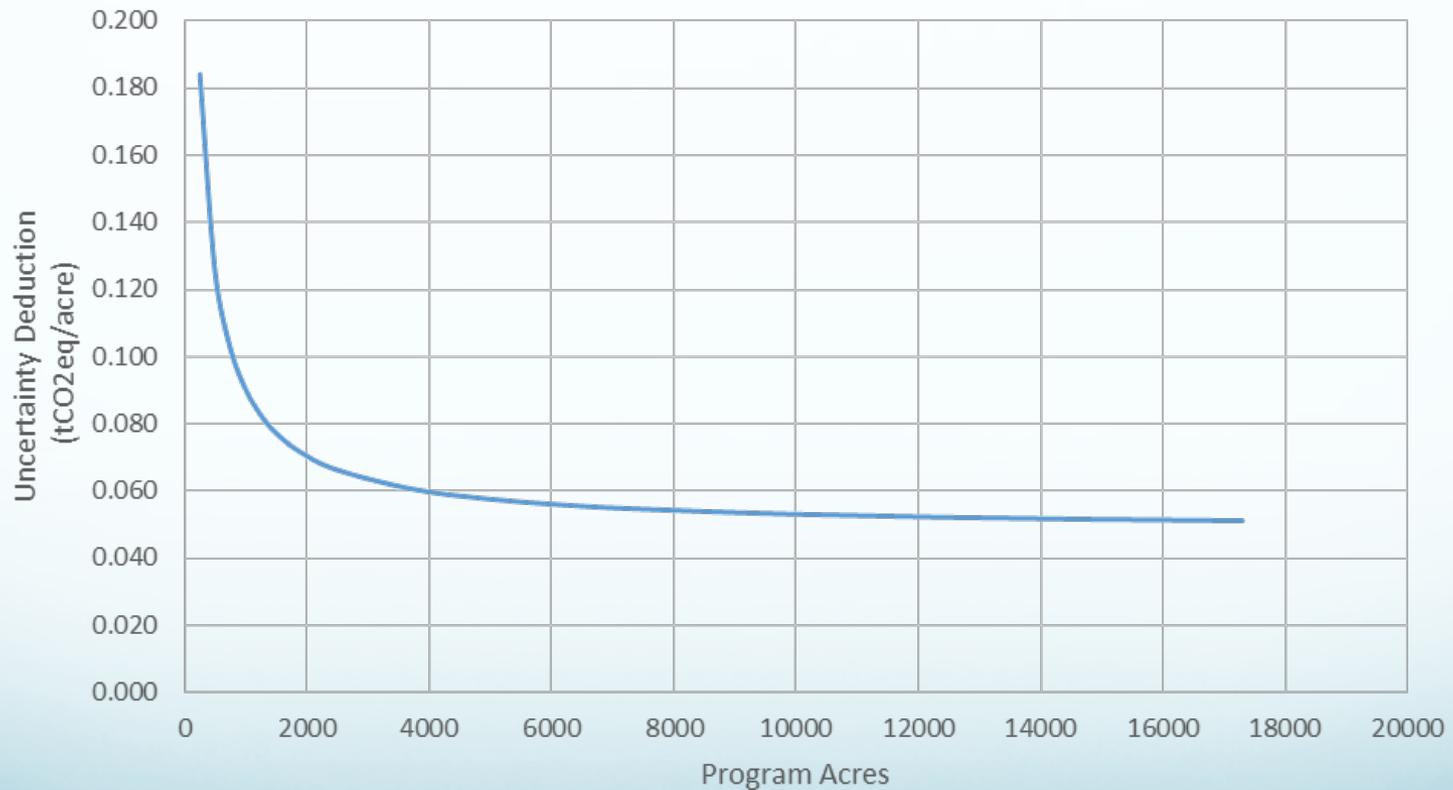
- Require the usage of the latest version of DNDC
 - No indication of bias in model
- Based on the latest structural uncertainty results set a fixed value of 0.052 metric tons/acre
 - Expect more than 5000 acres of participation
- Clarification to:
 - Language on early drainage
 - Baseline practices
 - Several definitions
 - Shared boundaries for late broods
 - Homogeneous fields

DNDC Independent Validation: 87 Methane datasets



DNDC Structural Uncertainty Calculations

DNDC Structural Uncertainty
(tCO₂eq/acre)



ARB Contract Rice Quantification Tool

- Contractor: Michigan State University
 - Subcontractor: Applied GeoSolutions
- Expect completion before potential protocol effective date
- Easy compliance with record keeping and quantification requirements
- Simplify data input
- Project quantification calculator
- Project record keeping file

Verification Pilot Program

- First proposed compliance offset protocol to rely entirely on modeled calculations, not tied to direct measurement
- In collaboration with California Department of Food and Agriculture
- \$200,000 available to support evaluation of alternative means of verification

Questions?

Protocol Timeline

- Unofficial Workshop comments until March 6 at 5pm
- Release 15-Day Comment protocols: May 2015
- Board consideration: June 2015

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