

Update on Fertilizer and Conservation Finance CIGs



Demonstration of a Scalable Nutrient Management Project to Reduce Nitrous Oxide Emissions and Generate Voluntary or Compliance Greenhouse Gas Credits

delta
institute



C-AGG

CLIMATE
ACTION
RESERVE

DNDC-ART



prassackadvisors




CLIMATE SMART
GROUP

Project Objectives

- **Reduce barriers for farmers to participate in voluntary and CA compliance carbon markets**
 - Refine and improve existing nitrogen fertilizer management protocols and quantification tools
- **Create a large-scale nitrogen fertilizer management project**
 - Increase access to environmental market incentives for U.S. corn farmers and CA almond growers
 - Quantify co-benefits associated with increased soil health from optimizing nitrogen application, and reducing losses to air and water

What we have done

- Cost-benefit calculator informed by economic & data flow analyses
 - Assessment paper on N₂O and nitrate leaching
 - White paper evaluating N₂O protocols and tools
 - Summarized feedback collected from 300K target acres through outreach and workshops
 - GHG project under development
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Lessons Learned

Exhausted Pool of Producers

- Recent or current rate reduction practices are hard to find
- Large-scale rate reduction may have occurred several years in the past
- N efficiency > N reduction
- Difficulties with N rate reduction

Insufficient Incentives

- Insufficient financial benefit (50c-\$1/ac)
- Resistance to sharing data
- Increased resistance if similar request received from untrusted institution
- Offset transactions undervalue data

Next Steps

1

Finalize Protocol Updates

- CAR tracking to complete revisions April 2018
- ACR based on DNDC uncertainty and adoption rates

2

Finalize Credits Under Development with Pilot Growers

- Select Verifier through RFP process
- Document thought leadership/key takeaways on work done to develop carbon offset credits for N management practices

3

Training of Ag Partners and Project Developers

- Re-visit draft curriculum based on revised work streams
- Determine approach for 4 training sessions

4

Data Tools Streamlining

- Finalize detailed strategy and share

Jumpstarting Large-Scale Carbon Offset Markets for Working Lands Conservation



Project Objectives

- Break down barriers that prevent agricultural carbon markets from scaling up by targeting both supply and demand.
- Increase supply by providing landowners with guaranteed compensation for implementing conservation measures, and two newly trained project developers to create projects.
- Increase demand by creating a Working Lands Investment Fund (WLIF) to mobilize philanthropic and impact investors into agricultural carbon credits and to function as a buyer of last resort.
- Develop a WLIF and the expressed interest by producers to sell 100,000 carbon credits.

What we have done

- Completed the structural design of the Working Lands Investment Fund
- Investigated financing options for carbon credits including a backstop guarantee and call option

Next Steps

- If interest from producers, execute a call option.
- Identify priorities for supporting the creation of investment vehicles in sustainable agriculture that benefit EQIP producers and provide a return to investors.
- Create a general business case for offset project developers.
- Develop one handbook for an agricultural offset protocol.
- Host one policy workshop to convene stakeholders for panels and discussion to build support for agricultural offsets in Sacramento or Montreal.