

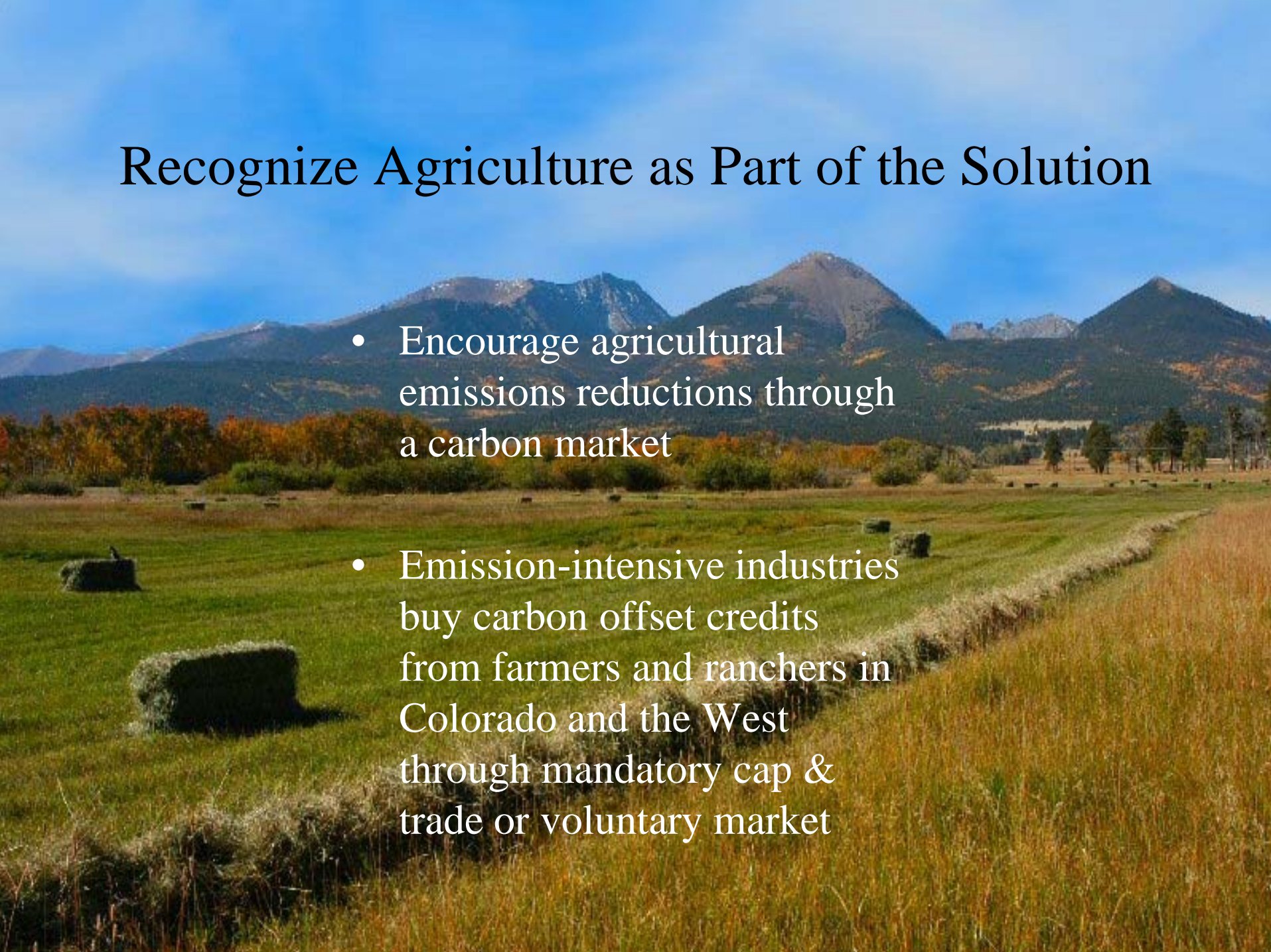
Colorado Department of Agriculture
and Colorado Department of Public
Health and Environment

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Recognize Agriculture as Part of the Solution

- Encourage agricultural emissions reductions through a carbon market
- Emission-intensive industries buy carbon offset credits from farmers and ranchers in Colorado and the West through mandatory cap & trade or voluntary market



Agricultural Offset Market

Changing farm practices to reduce emissions of carbon dioxide:

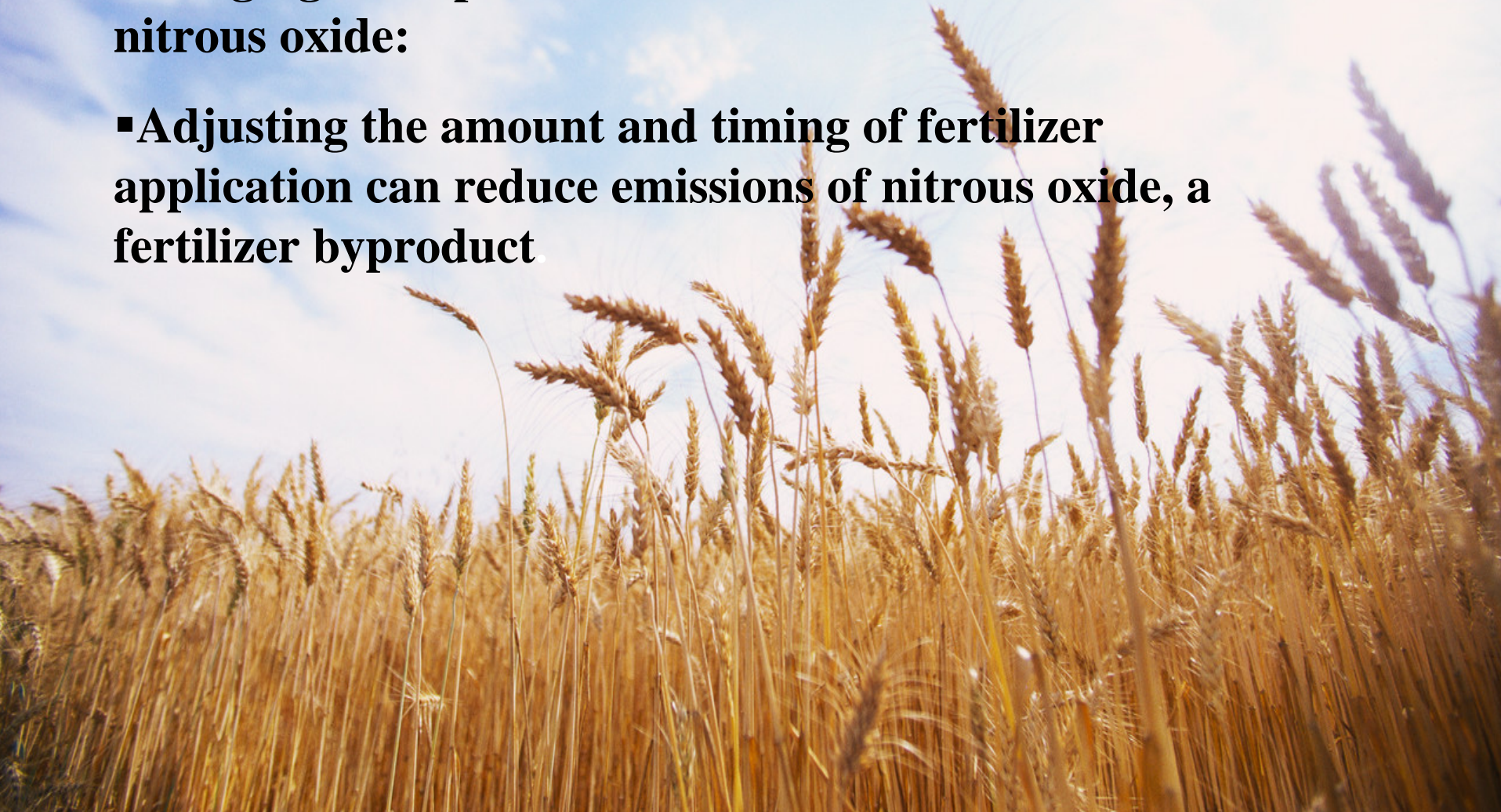
- **Less frequent tilling limits the release into the atmosphere of carbon and carbon compounds stored in the soil, creating less CO₂.**
- **Converting tilled cropland to a permanent vegetative cover provides long-term storage of carbon in the soil. The U.S. Department of Agriculture Conservation Reserve Program actively works with farmers on this practice.**
- **Rotational grazing can increase plant productivity on pasture lands, resulting in more absorption of carbon.**



Agricultural Offset Market

Changing farm practices to reduce emissions of nitrous oxide:

- **Adjusting the amount and timing of fertilizer application can reduce emissions of nitrous oxide, a fertilizer byproduct.**



Agricultural Offset Market

Changing farm practices to reduce emissions of methane:

- **Improving the storage and management of livestock manure reduces methane emissions.**
- **Capturing and using livestock-produced methane as a biogas energy source.**



Agricultural Offset Market



Farmers and ranchers interested in participating choose a carbon sequestration or emissions reduction plan suitable for their property.

Emissions reductions are quantified and verified.

A market brings together carbon offset buyers and sellers.

With measurable greenhouse gas reductions in hand, farmers and ranchers offer carbon credits for sale on this offset market.



Options for Conservation Reserve Program (CRP) Land

Impacts on Carbon Sequestration

CRP Options

- **High “EBI” (Environmental Benefits Index):**
 - **Probably stay in CRP**
- **Low “EBI”**
 - **Probably not renewed by USDA**
 - **Effect of high crop prices?**
 - **What is the transition plan for this land?**

BOTTOM LINE

- **Some CRP will be pushed “out of program”**
- **Some CRP will be withdrawn “out of program” by producers**





SOLUTIONS

- **For land pushed out, sell offsets to keep expired CRP in grass**
- **To enhance revenues for keeping acres in CRP, modify to well managed rangeland**
 - **Layer grazing plan over existing CRP**



Demonstration Project

- Focuses on expired or expiring Conservation Reserve Program (CRP) lands in Baca County to ensure that the acres will continue to serve as carbon sequestering grasslands.
- The Demonstration Project also offers the unique opportunity for CSU to do actual on-site soil sampling over the next five years, which can then be compared to their modeling numbers.



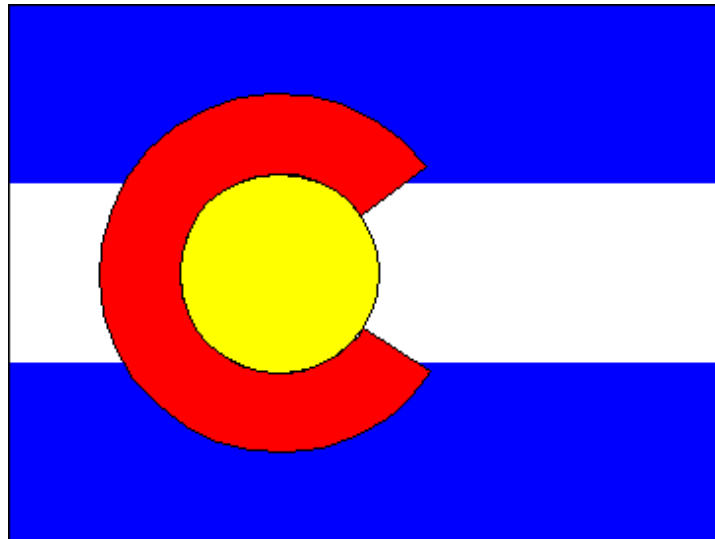
Questions?



Colorado Climate Action Plan

Please view full report on-line:

<http://www.colorado.gov/governor>



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