



New Mexico Climate Change Advisory Group

AGRICULTURE & FORESTRY TECHNICAL WORK GROUP CONFERENCE CALL #1

SEPTEMBER 23, 2005



TODAY'S AGENDA

1. **CALL TO ORDER**
2. **INTRODUCTION OF TECHNICAL WORK GROUP (TWG) MEMBERS**
3. **REVIEW OF TWG ORGANIZATION AND LOGISTICS**
4. **REVIEW AND DISCUSSION OF THE DRAFT GHG EMISSIONS INVENTORY AND FORECAST FOR OUR SECTOR**
5. **REVIEW AND DISCUSSION OF LIST OF POTENTIAL STATE ACTIONS**
6. **DISCUSSION OF NEXT STEPS TOWARD IDENTIFICATION OF PRIORITIES FOR ANALYSIS OF OPTIONS**
7. **CALL FOR ADDITIONAL COMMENTS AND INPUT**
8. **PROPOSED AGENDA ITEMS FOR NEXT MEETING**
9. **ANNOUNCEMENTS**

AGENDA ITEMS 1-4

- **CALL TO ORDER**
- **INTRODUCTION OF TECHNICAL WORK GROUP MEMBERS**
- **REVIEW OF TECHNICAL WORK GROUP ORGANIZATION AND LOGISTICS**
- **REVIEW OF GROUND RULES**

AGENDA ITEM 5

- **REVIEW AND DISCUSSION OF THE DRAFT
NEW MEXICO GREENHOUSE GAS
EMISSIONS INVENTORY AND FORECAST
FOR OUR SECTOR**

NEW MEXICO GHG EMISSIONS

- **INVENTORY AND REFERENCE CASE PROJECTIONS**
 - **INITIAL ANALYSIS BY CCS FOR FURTHER DISCUSSION AND REVISION**
 - **INVENTORY OF HISTORICAL EMISSIONS FROM 1990 TO MOST RECENT DATA YEAR (2000-2004, DEPENDING ON SECTOR)**
 - **PROJECTION OF EMISSIONS TO 2020**

COVERAGE

- **SIX GASES PER USEPA AND UNFCCC GUIDELINES**
 - CARBON DIOXIDE (CO₂), METHANE (CH₄), NITROUS OXIDE (N₂O), HYDROFLUOROCARBONS (HFCs), PERFLUOROCARBONS (PFCs), SULFUR HEXAFLUORIDE (SF₆)
 - BLACK CARBON NOT QUANTIFIED FOR NM
- **ALL MAJOR EMITTING SECTORS**
 - ELECTRICITY
 - RESIDENTIAL, COMMERCIAL, INDUSTRIAL FUEL USE
 - TRANSPORTATION
 - AGRICULTURE AND FORESTRY
 - INDUSTRIAL PROCESSES AND OTHER SOURCES
 - WASTE MANAGEMENT

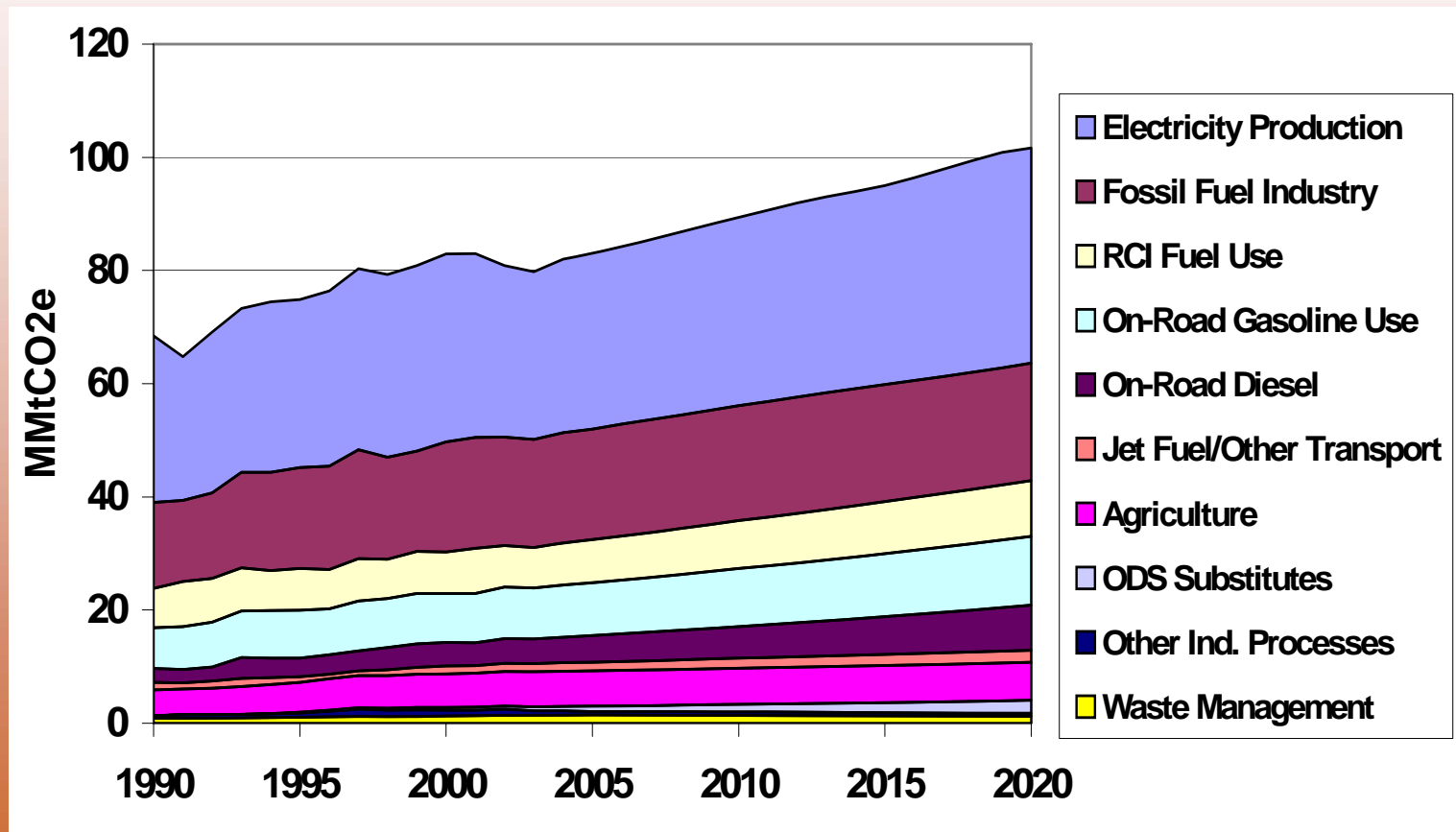
INVENTORY APPROACH

- **STANDARD US EPA AND UN METHODOLOGIES, GUIDELINES, AND TOOLS**
- **EMPHASIS ON TRANSPARENCY, CONSISTENCY, AND SIGNIFICANCE**
- **PREFERENCE FOR NEW MEXICO OR REGIONAL DATA, WHERE AVAILABLE**
- **CONSUMPTION AND PRODUCTION-BASIS EMISSIONS FROM ELECTRICITY GENERATION**
 - **VERY SIMPLIFIED APPROACH USED FOR INITIAL ANALYSIS**

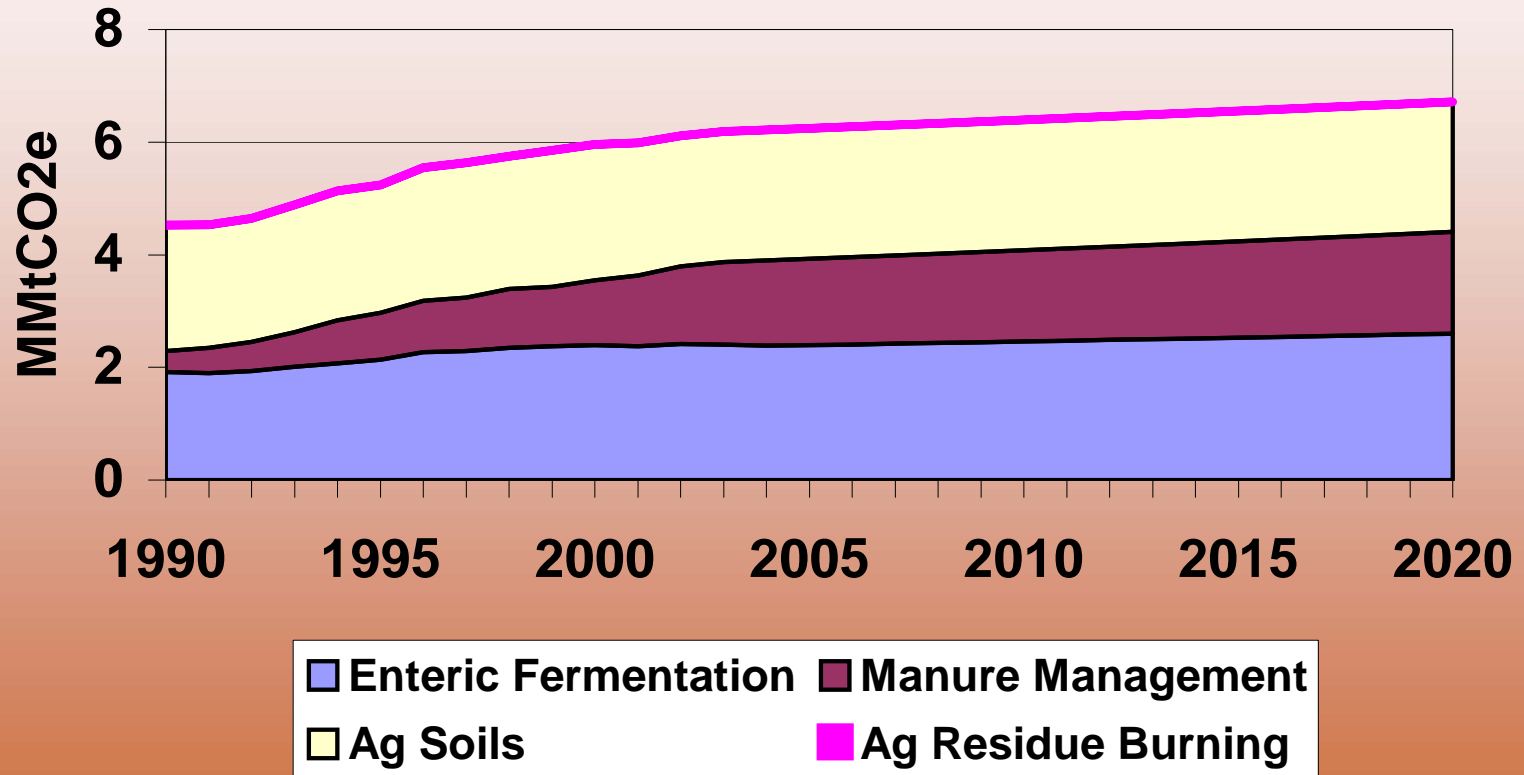
PROJECTION APPROACH

- **REFERENCE CASE ASSUMES NO MAJOR CHANGES FROM BUSINESS-AS-USUAL**
 - INCLUDES APPROVED POLICIES AND ACTIONS TO THE EXTENT POSSIBLE (E.G. ENVIRONMENTAL PORTFOLIO STANDARD)
- **GROWTH ASSUMPTIONS FROM EXISTING SOURCES**
 - ELECTRICITY DEMAND GROWTH FROM NM CORPORATION COMMISSION
 - POPULATION AND ECONOMIC FORECASTS FROM NM DEPARTMENT OF ECONOMIC SECURITY
 - SEVERAL ASSUMPTIONS FROM US DOE'S ANNUAL ENERGY OUTLOOK 2005

NEW MEXICO GHG EMISSIONS



AGRICULTURE



AGRICULTURE

- **DATA SOURCES**
 - USDA DATA COLLECTED BY STATES AND USDA
- **METHODS**
 - GHG CONVERSIONS USING EPA SGIT METHODS
- **KEY ASSUMPTIONS AND UNCERTAINTIES**
 - NO GROWTH FROM 2004 LEVELS

FORESTRY

- **FOREST CARBON STOCK CHANGES**
 - 1987-1997 AVERAGE ANNUAL STOCK CHANGES
 - CARBON ONLY
 - MULTIPLE UPDATES NEEDED

	1990	2000
Live and dead-standing trees and understory	-13.6	-13.6
Forest floor and coarse woody debris	-3.1	-3.1
Soils	-5.9	-5.9
Wood products and landfills	1.8	1.8
Total	-20.9	-20.9

FORESTRY

- **DATA SOURCES**

- **FOREST INVENTORY ANALYSIS (FIA) DATA COLLECTED BY STATES AND USFS**
- **HARVCARB AND SOIL DATA COLLECTED THROUGH FIELD STUDIES**
- **NRI DATA COLLECTED BY STATES AND USDA**

- **METHODS**

- **USFS FORCARB₂ CARBON STOCK CHANGE MODEL**
 - **AUGMENTED WITH FLOW ESTIMATES FROM SOIL CARBON AND HARVCARB DATA**

FORESTRY

- **KEY ASSUMPTIONS AND UNCERTAINTIES**
 - MISSING USFS FIA DATA FROM 1997-2002
 - EFFECT OF CHANGED FOREST DEFINITION (FROM 10% - 5% FOREST COVER)
 - SIZE AND TRENDS OF CARBON STOCKS ON RANGELANDS
 - EFFECTS OF LAND USE/LAND COVER CHANGE
 - NONCONSTANT TRENDS FOR BIOMASS GROWTH, MORTALITY, AND COMMERCIAL USE
 - FOREST HEALTH, COMMERCIAL ACTIVITIES
 - HARVESTED WOOD PRODUCTS IMPORTS/EXPORTS

FORESTRY

- **OPTIONS FOR REFERENCE CASE PROJECTIONS (1997-2020)**
 - HELD CONSTANT FROM 1997 (CURRENT)
 - MODIFICATION THROUGH EXPERT JUDGMENT
 - MODELED FORECAST
- **CHOICE DOES NOT AFFECT QUANTIFICATION OF POLICY OPTIONS**

AGENDA ITEM 6

- **REVIEW AND DISCUSSION OF LIST OF POTENTIAL STATE ACTIONS**
- **(SEE MATRIX OF POTENTIAL ACTIONS)**

DECISION CRITERIA

- **REFERENCE CASE**
- **INCREMENTAL EFFECTS OF POLICY OPTIONS**
 - **GHG REDUCTION POTENTIAL**
 - **COST EFFECTIVENESS**
 - **CO-BENEFITS AND ANCILLARY IMPACTS**
 - **FEASIBILITY ISSUES**

POLICY OPTIONS

- **AGRICULTURE**
 - **PRODUCTION OF FUELS AND ELECTRICITY**
 - **FERTILIZER AND MANURE MANAGEMENT**
 - **SOIL CARBON MANAGEMENT**
 - **LAND USE CHANGE**
 - **FARMING PRACTICES**

POLICY OPTIONS

- **FORESTRY**
 - **BIOMASS PROTECTION AND MANAGEMENT**
 - **WOOD PRODUCTS AND WASTE**
 - **ENERGY PRODUCTION**
- **REVIEW INITIAL LIST OF OPTIONS (“AF STRATEGY MATRIX”)**

AGENDA ITEM 7

- **DISCUSSION OF NEXT STEPS TOWARD IDENTIFICATION OF PRIORITIES FOR ANALYSIS OF OPTIONS**

AGENDA ITEM 8

- **CALL TO THE PUBLIC**

AGENDA ITEM 9

- **PROPOSED AGENDA ITEMS FOR NEXT CALL**
 - **CONTINUED DEVELOPMENT OF PRIORITIES FOR ANALYSIS?**
 - **CONTINUED DISCUSSION OF INVENTORY AND REFERENCE CASE?**

AGENDA ITEM 10

- ANNOUNCEMENTS