



Governor's Action Team on Energy and Climate Change
State of Florida

Governor's Action Team for Energy and
Climate Change
Phase II Process

*Agriculture, Forestry, and Waste
Technical Working Group (TWG)
Meeting #6
June 10, 2008*

June 10, 2008

Agenda

1. Introductions
2. Meeting Purpose and Goals
3. Approval of Summary of Prior Call/ Meeting
4. Review of FL Climate Action Team Meeting - May 29, 2008
5. Review of Policy Option Template
6. Discussion of FL GHG Inventory and Forecast
7. Review of Next Steps
8. Agenda, Date and Time for Next Meetings
9. Public Comments
10. Announcements

Approval of Call #5 Summary

- Review draft meeting summary for AFW TWG meeting #5
- Consider any corrections or additions to meeting summary
- Accept meeting summary with agreed upon changes

Review of Action Team Meeting

- See document:
 - “FL AFW TWG Options Approved by FLAT” (FL Action Team)



Stepwise Planning Process

- Get organized
- Review and refine inventory & forecast of emissions
- Identify a full range of possible actions
- Identify initial priorities for analysis
- *Develop straw policy design proposals*
- Quantify initial GHG reductions and costs/savings
- Fully develop policy option templates, including externalities, feasibility issues
- Develop alternatives to address barriers as needed
- Aggregate and integrate results
- Finalize and report recommendations

Priority Policy Options – What Next?

- TWG members volunteer to work on one or more policy options to develop Straw Proposals.
- Craft Straw Proposals (outside experts and research can be used).

Policy Option Template

- *Policy Description (Concept)*
- *Policy Design (Goals, Timing, Coverage)*
- Implementation Methods
- Related Programs and Policies (BAU)
- Estimated GHG Savings and Costs Per MMTCO_{2e}
 - Data Sources, Methods and Assumptions
 - Key Uncertainties
- Additional (non-GHG) Benefits and Costs, as Needed
- Feasibility Issues, if Needed
- Status Of Group Approval
- Level of Group Support
- Barriers to Consensus, if any

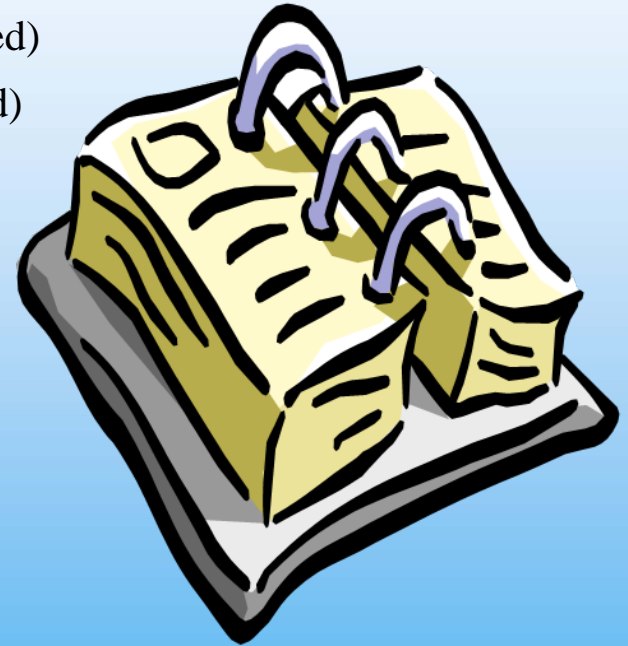
Next Steps

- TWG begins Straw Proposal Development
- TWG forwards information to FL Climate Action Team for Meeting #4
- Action Team reviews, modifies, and approves basic straw proposals
- TWG refines straw proposals for quantification and cost/benefit analysis.
- Continue discussion of FL GHG Inventory-Forecast

Next TWG Meeting

- Upcoming Calls:

- Thursday, June 19th, 10 a.m. – 12 p.m. (if needed)
- Monday, June 23rd, 10 a.m. – 12 p.m. (if needed)
- Tuesday, June 24th, 10 a.m. – 12 p.m.
 - Tuesday, July 1st, 10 a.m. – 12 p.m. (if needed)
- *(Action Team: Wed-Thu, July 9th-10th)*
- Tuesday, July 15th, 10 a.m. – 12 p.m.
- Tuesday, July 29th, 10 a.m. – 12 p.m.
- Tuesday, August 12th, 10 a.m. – 12 p.m.
- Tuesday, August 26th, 10 a.m. – 12 p.m.

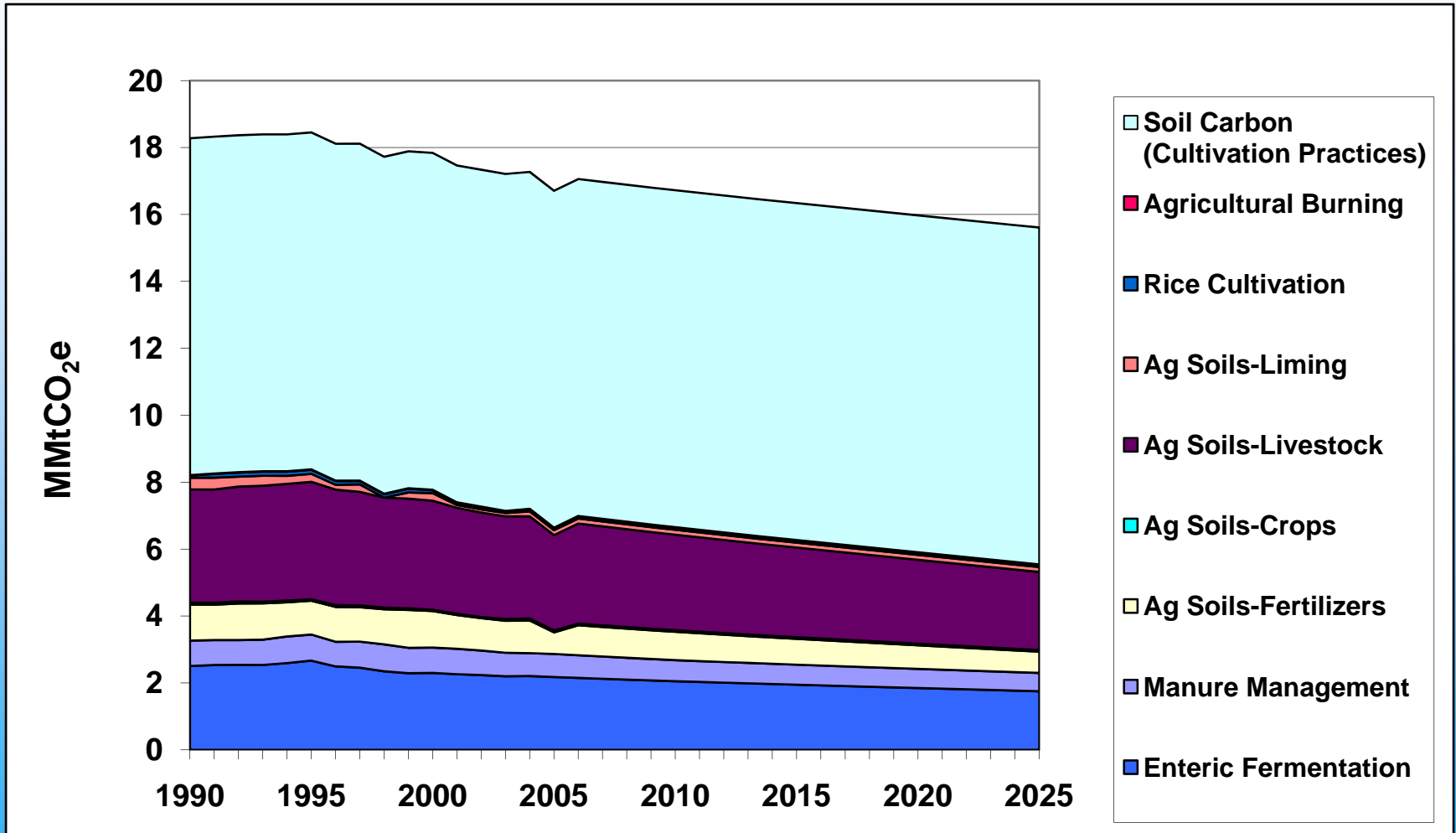


Public Input, Announcements

GHG Inventory and Forecast; Preliminary Results for Agriculture, Forestry, and Waste Sectors

June 10, 2008

Agriculture



Agriculture

- Data sources
 - Crop production: USDA/NASS
 - Livestock: USDA/NASS
 - Fertilizer: Florida Department of Agriculture and Consumer Services; Fertilizer Institute
- Methods
 - Crops: SGIT emission factors and crop production data
 - Livestock: SGIT emission factors and livestock populations
 - Fertilizer: SGIT fertilizer consumption
 - Livestock population projections based on Food and Agricultural Policy Research Institute (FAPRI) & historical growth
 - Projections for other categories based on historical growth trends

Agriculture

- Key Assumptions
 - Future growth for agricultural soils will follow historical trends
 - Livestock population growth will follow state-level FAPRI projections & historical trends
- Key Uncertainties
 - Manure management emission factors derived from limited data sets
 - Livestock numbers based on point estimates for each year to represent populations that fluctuate throughout the year
 - Projection assumptions

Forestry

Forestry and Land Use Flux and Reference Case Projections (MMtCO₂e)

	1990	2000	2005	2010	2020	2025
Forested Landscape (excluding soil carbon)	0.96	-24.5	-24.5	-24.5	-24.5	-24.5
Urban Forestry and Land Use	-14.4	-5.65	-6.23	-6.23	-6.23	-6.23
Forest Wildfires	1.35	1.15	0.16	0.16	0.16	0.16
Sector Total	-12.1	-29.0	-30.6	-30.6	-30.6	-30.6

Based on national sources (except wildfire data).
Working to get state-specific data.

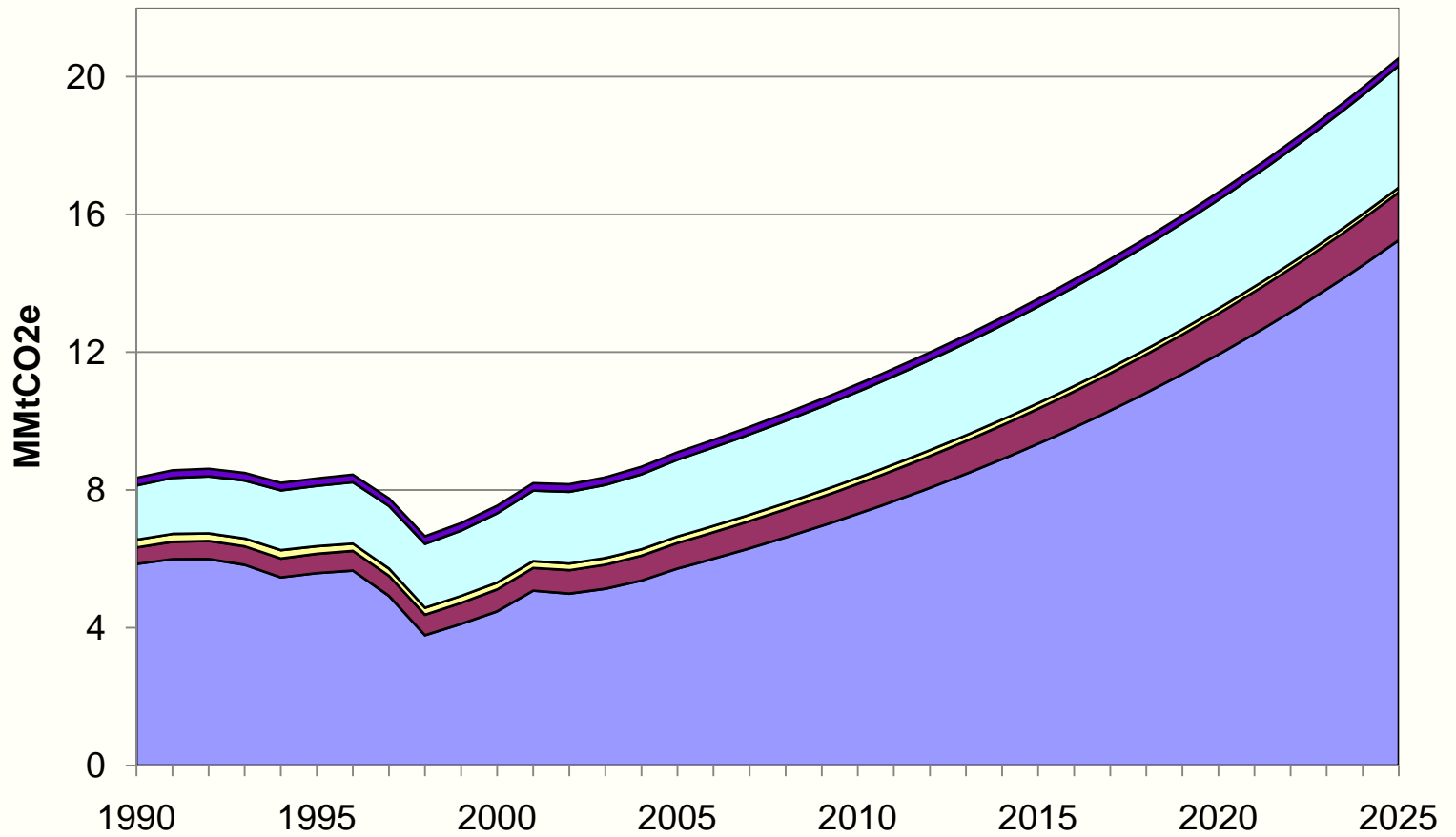
Forestry

- Data sources
 - USFS carbon stock data for 2001-2005 based on FORCARB2 model
 - USFS also provides modeled estimates for harvested wood products
- Methods
 - Forestry: USFS FORCARB2 carbon stock change model provides carbon pools for each inventory cycle
 - Flux calculated for each pool based on difference in time between inventory cycles

Forestry

- Key Assumptions
 - 1980-1993 and 1993-2004 carbon fluxes represent forest carbon flux prior to 2005
 - Current flux estimates are based on 2005 sample year stock
 - For 2005-2025 projections forest area and carbon densities assumed to remain at 2005 levels
 - Average wildfire acres burned from 1990-2005 assumed to calculate historic emissions. Projected emissions held constant at 2005 levels.
- Key Uncertainties
 - High level of uncertainty associated with soil carbon pool estimates
 - Methodological differences in forest inventory cycles can produce different estimates of forest area and carbon density
 - Effects of future development on forested acreage

Waste



Waste Management

- Data sources
 - EPA Landfill Methane Outreach Program Database
 - FL DEP combustion/incineration data (note: waste-to-energy combustion inventoried under Electricity Sector appenix)
 - State population and SIT default data for municipal wastewater treatment and residential open burning
- Methods
 - SIT with data sources above and corresponding growth rates

Waste Management

- Key Assumptions
 - Growth Rates
 - based on historic emissions growth
- Key Uncertainties
 - Do not account for future controls applied to landfills due to triggering requirements
 - Industrial wastewater
 - Default data not available for fruits & vegetables and pulp & paper