State Greenhouse Gas Inventories – Tools for Streamlining the Process

Randall Freed, Joseph Casola, Anne Choate, Michael Gillenwater, and Denise Mulholland

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Why Compile a State GHG Inventory?

- Identify important emissions sources
- Identify emissions abatement strategies
- Develop an institutional capacity for dealing with climate change at the state level

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State Inventory Guidance

- Modeled after US Inventory and IPCC national guidelines
- Methods described in EIIP guidance, covering 14 source/ sink categories

  - Combustion of fossil fuels
  - Industrial processes
  - Natural gas and oil systems
  - Coal mining
  - Municipal waste disposal
  - Domesticated animals
  - Manure management
  - Flooded rice fields
  - Agricultural soils
  - Forest management
  - Burning of agricultural crop wastes
  - Municipal wastewater
  - CH_4 & N_2O emissions from mobile source combustion
  - CH_4 & N_2O emissions from stationary source combustion

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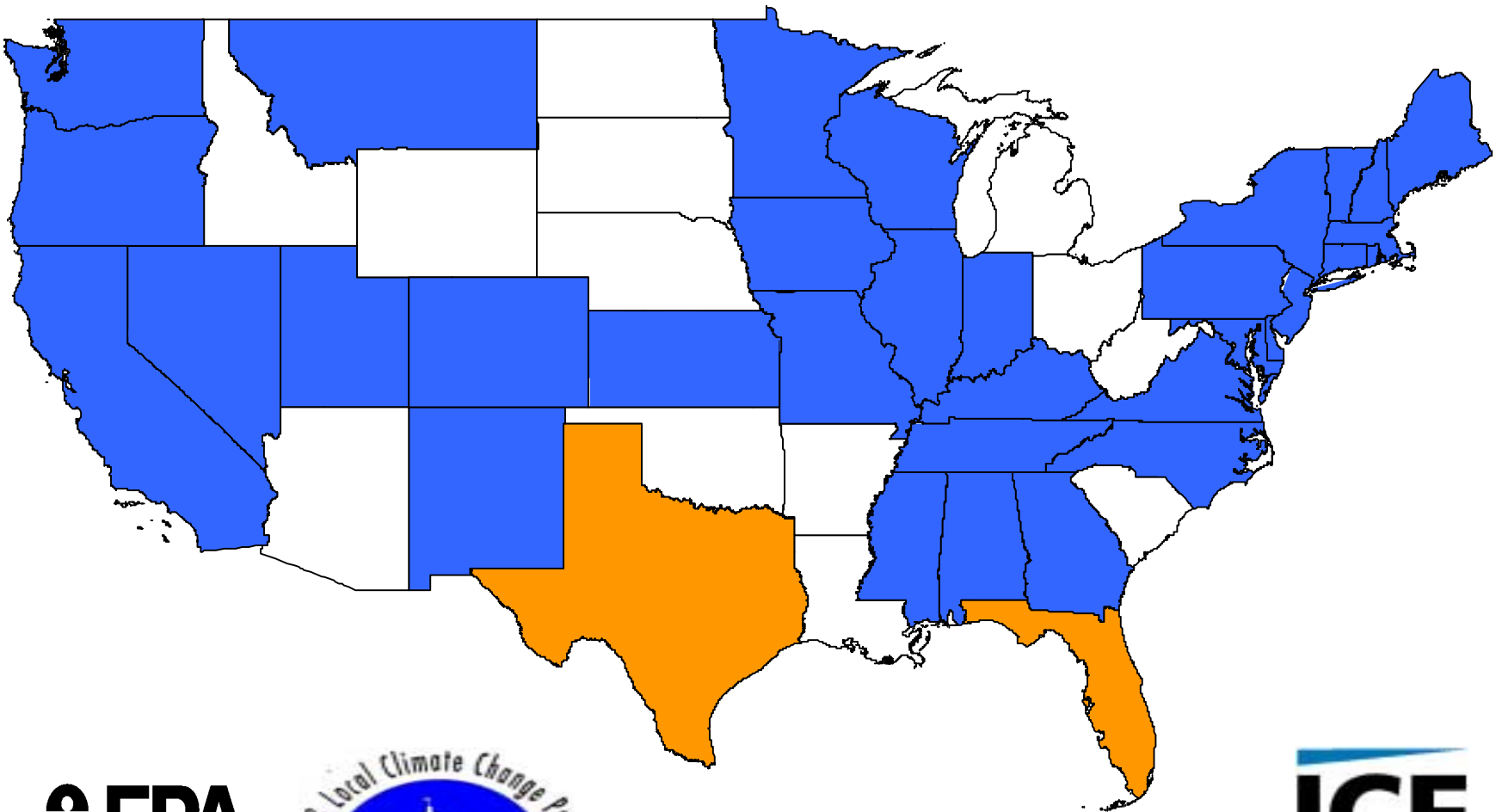
States with GHG Inventories



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Streamlining: The Need for *Speed*

- Workbook methods are complex
- Data gathering takes lots of time and effort

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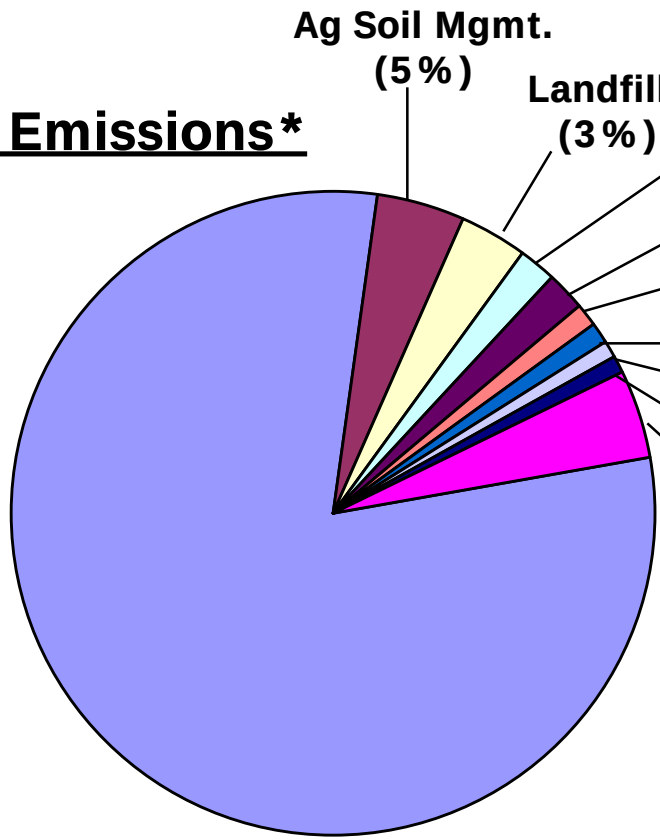
Emissions & Sinks: US Inventory

1997 Gross US GHG Emissions*



*Carbon sequestered by Land Use Change and Forestry is not shown here. In 1997, the LUCF sink offset 12% of gross emissions.

Other Includes 23 Emission Source Categories, none of which accounts for greater than 1% of gross emissions.

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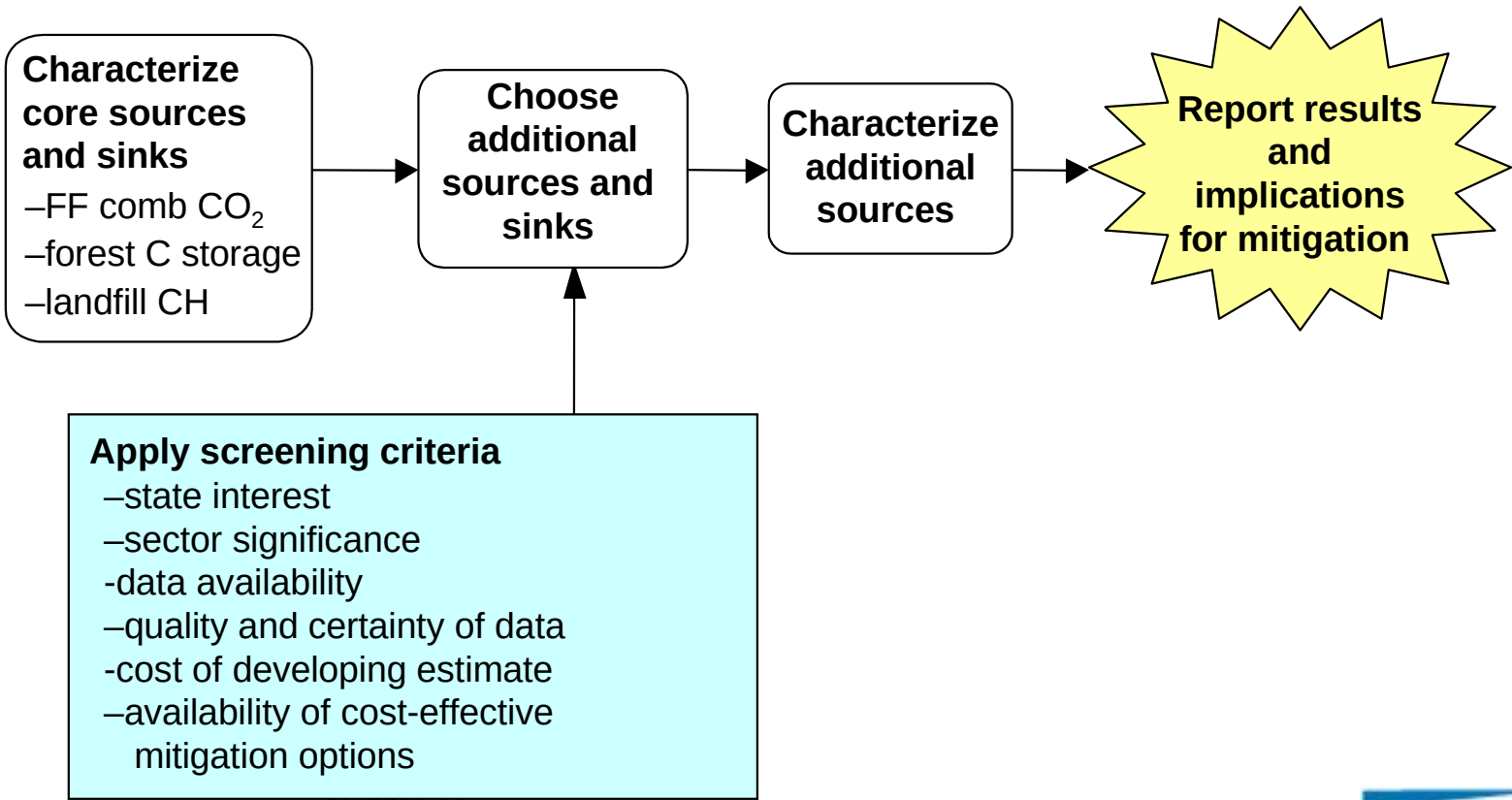
Streamlined Inventory Framework



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The Florida GHG Pilot Inventory

- Work Group
  - FL Dept of Environmental Protection
  - EPA State and Local Climate Change Program
  - Technical Assistance - ICF Consulting, USDA Forest Service

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Additional Sources

- N_2O from Agricultural Soils
- Enteric Fermentation
- Manure Management
- High GWP gases - ODS substitutes

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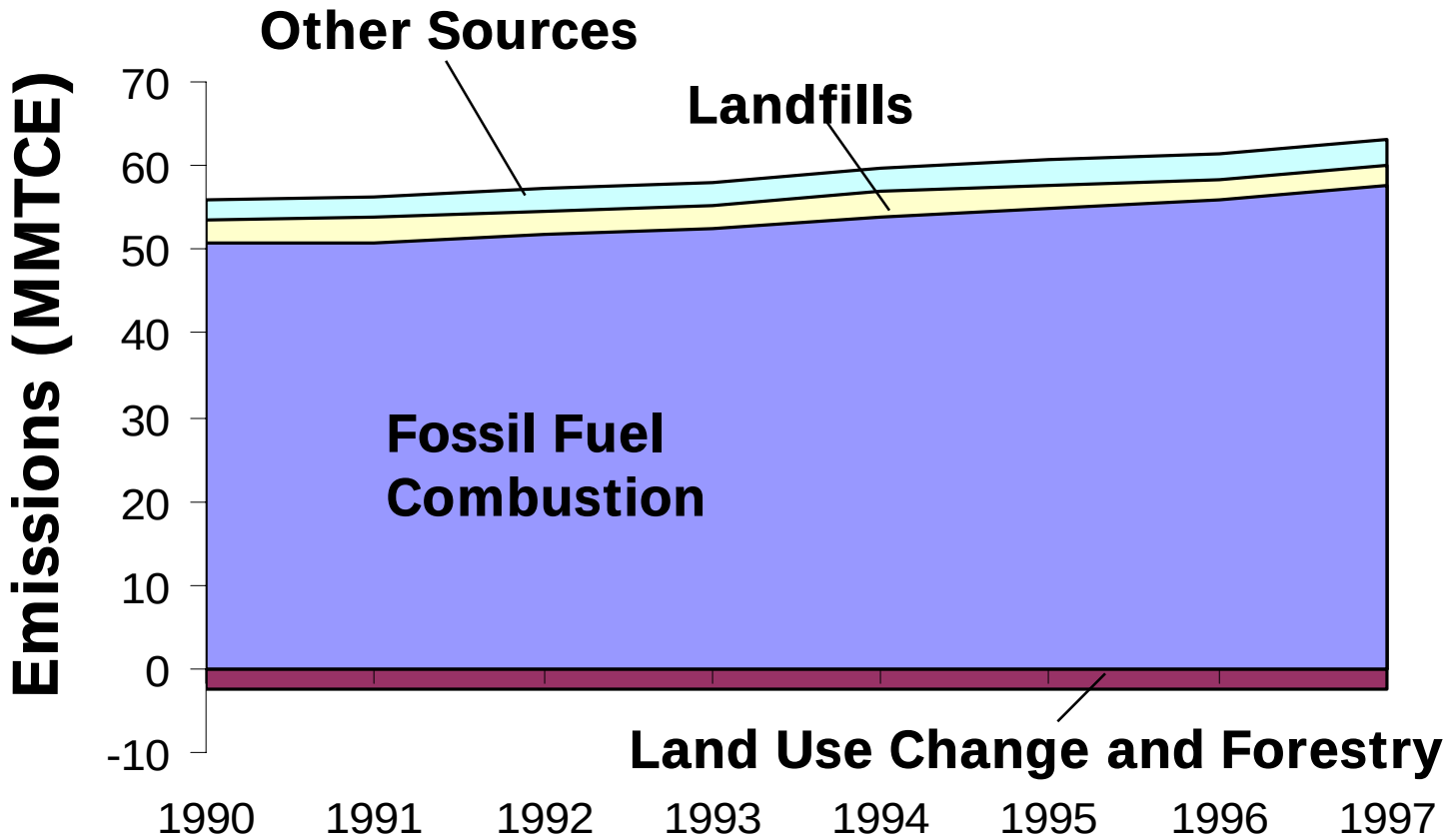
Results: Emissions & Sinks

Florida GHG Emissions, 1990-1997



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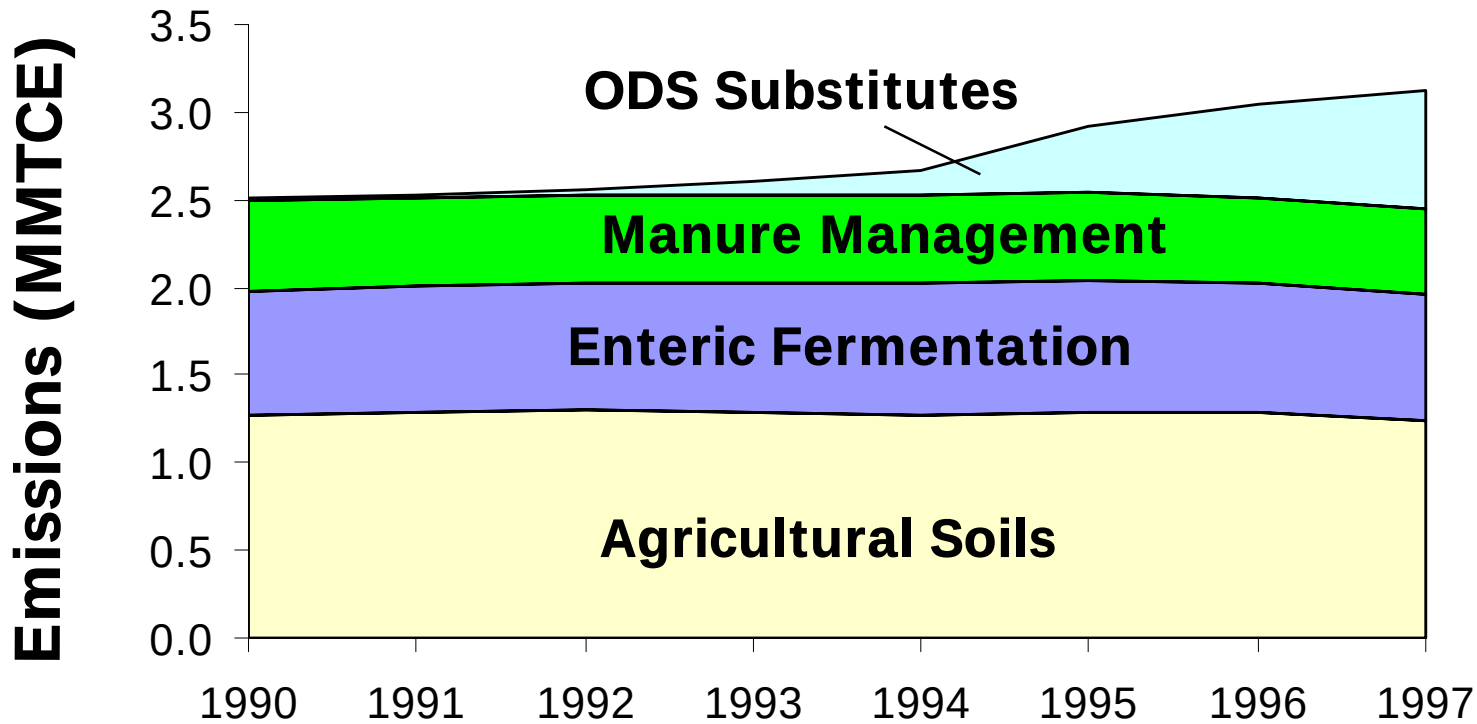
Results: Emissions & Sinks

Florida GHG Additional Source Emissions, 1990-1997



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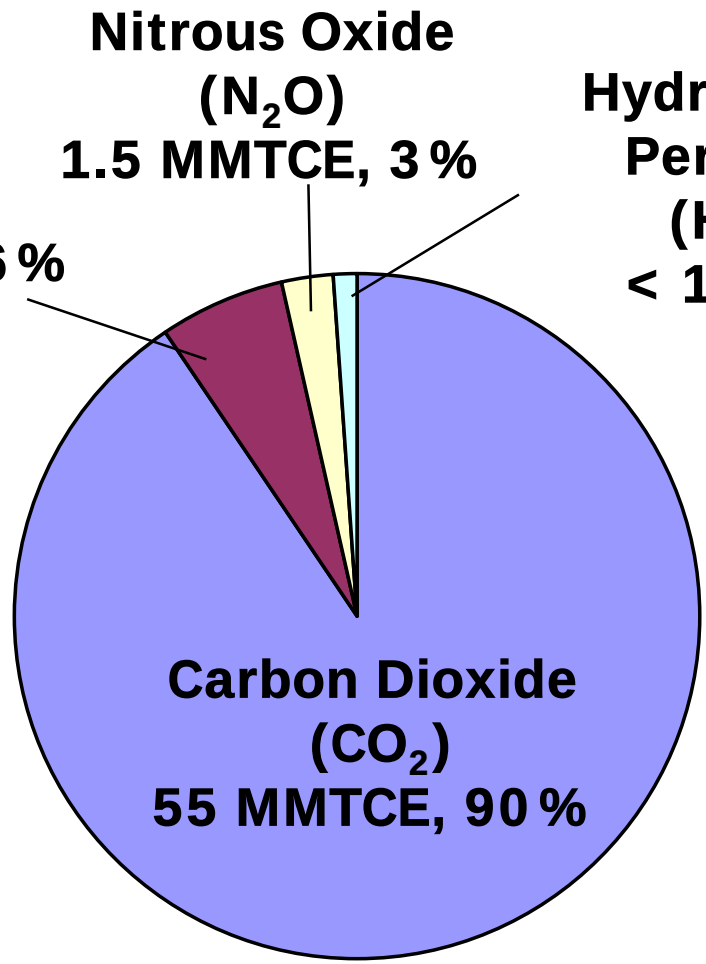
Results: Emissions & Sinks



Profile of Florida GHG Emissions by Gas, 1997

Net GHG Emissions 60.98 MMTCE

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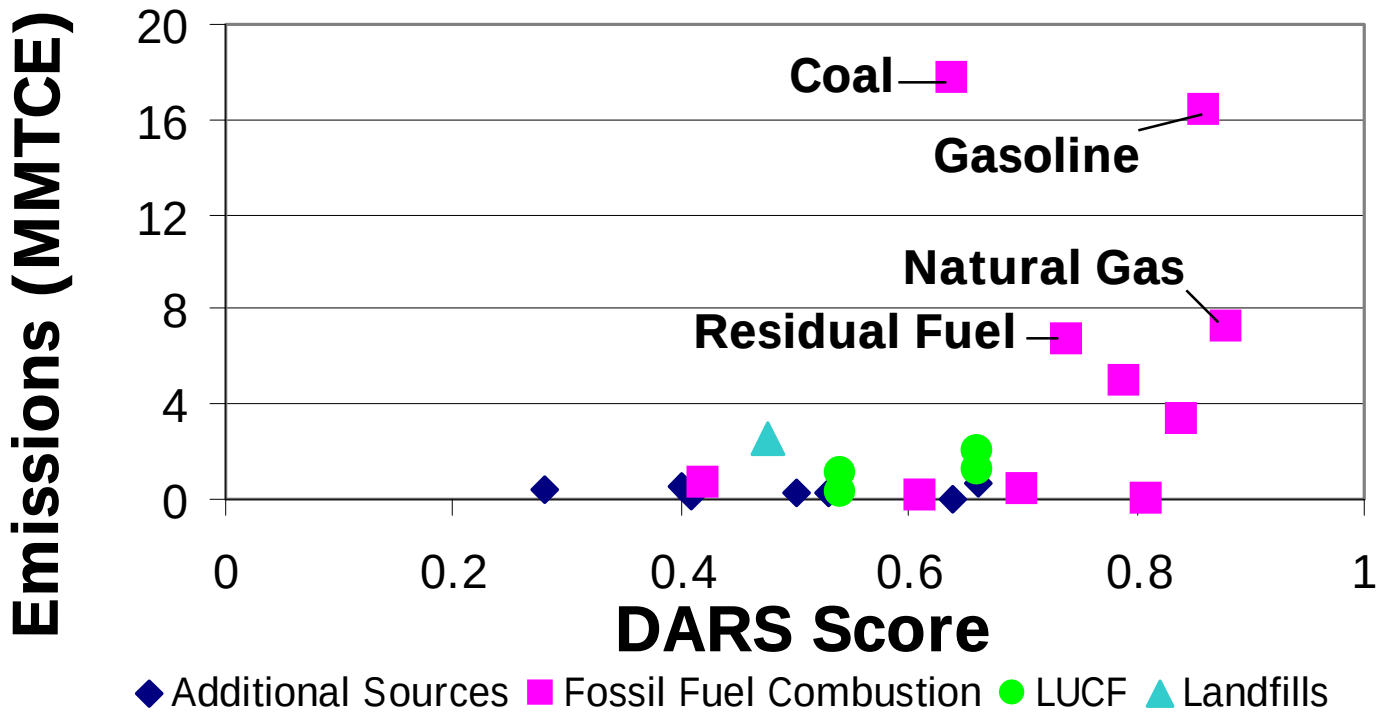
Emissions vs. DARS Scores

Florida GHG Emissions, 1997



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Emissions vs. DARS Scores

- Underscores the importance of fossil fuel combustion as being a high emission, high certainty source
- Confirms the utility of Streamlined Approach
- DARS not necessarily best selection criterion; better for evaluation of Inventory

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Summary

- Covered 8 source / sink categories comprising > 90 % of national emissions
- Comparable uncertainty
- Provides continuous timeline (1990 - 97)
- Reduces cost and timeframe by more than 50 percent
- “Lowers the bar” for inventory preparation

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