

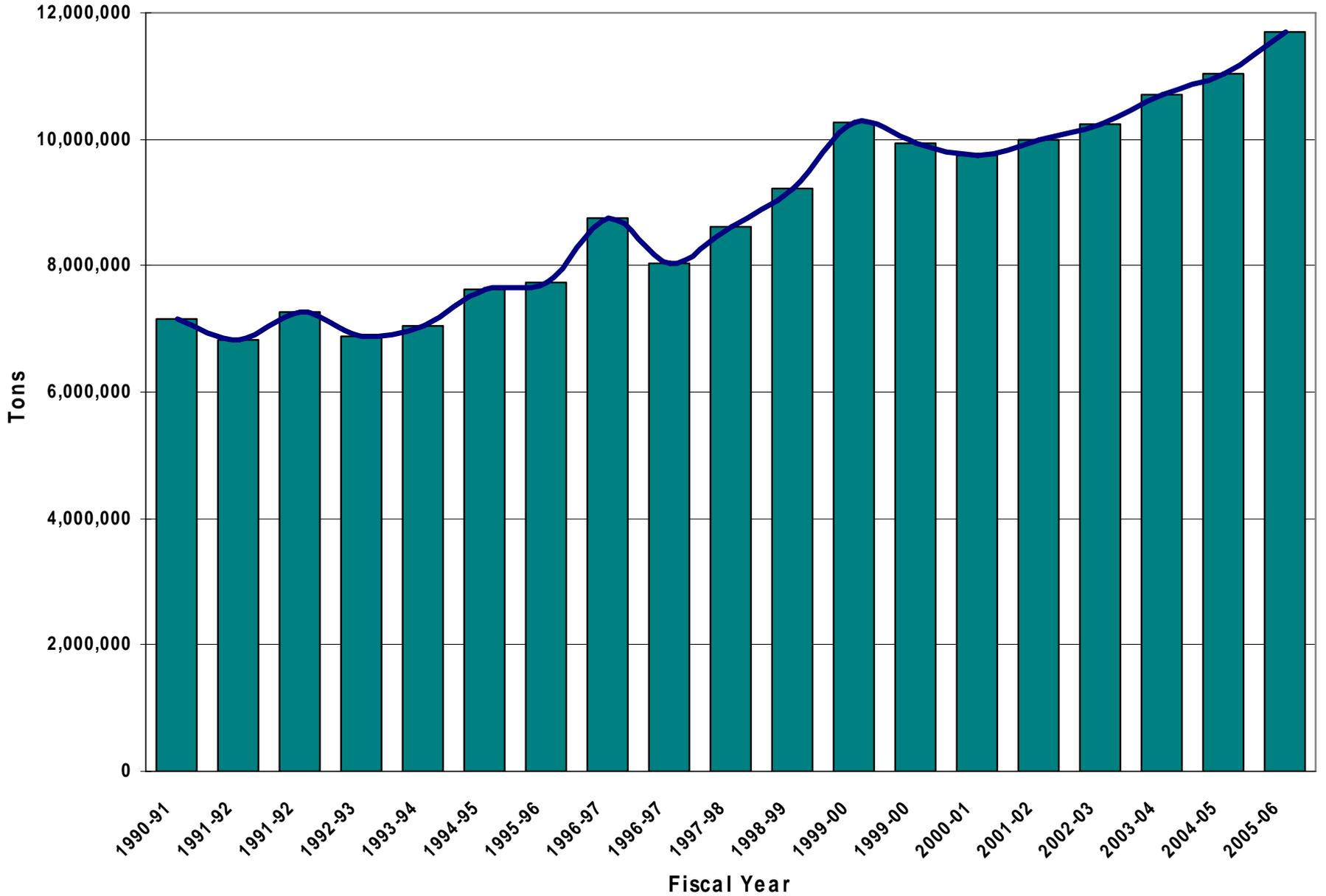
Solid Waste Management Annual Report Environmental Review Commission

June 11, 2007

Paul Crissman, Chief
Solid Waste Section
Division of Waste Management
Department of Environment and Natural Resources

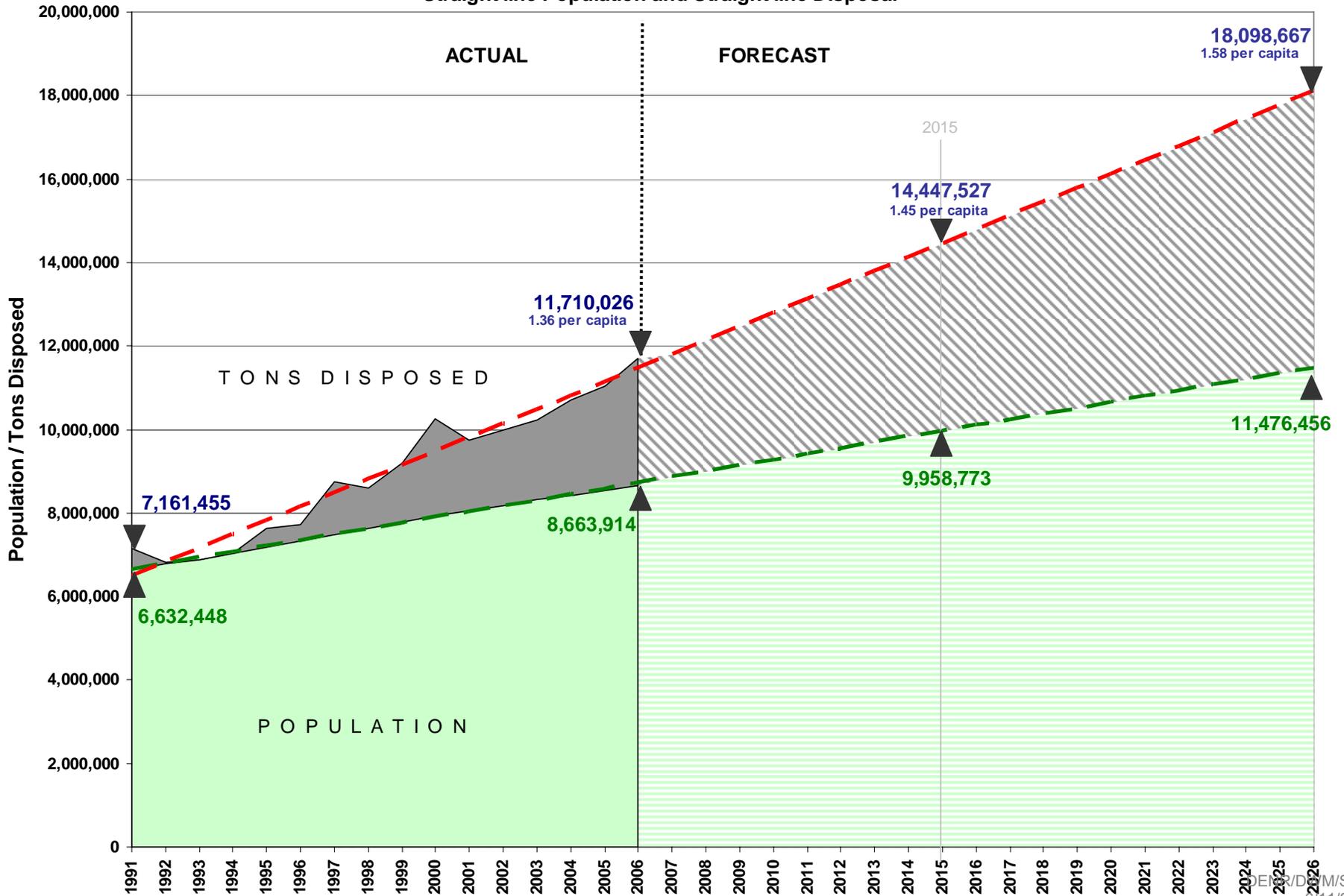


Tons of Solid Waste Disposed of by North Carolina



North Carolina Solid Waste Disposal 20-Year Forecast

Straight line Population and Straight line Disposal









Transfer Station/Treatment and Mixed Waste Processing Facility Growth in North Carolina 1995 and 2005



1995...

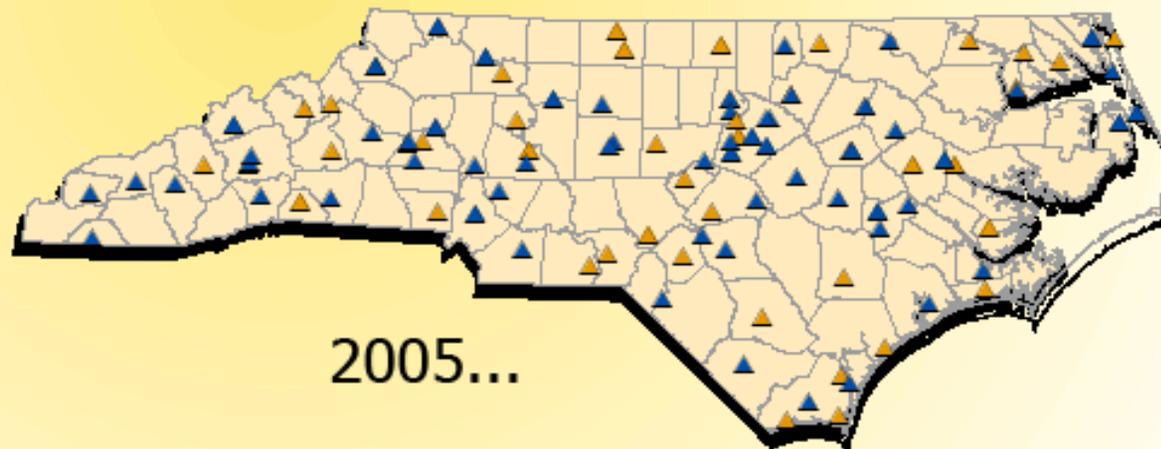
Facility



Receiving Waste in 1995

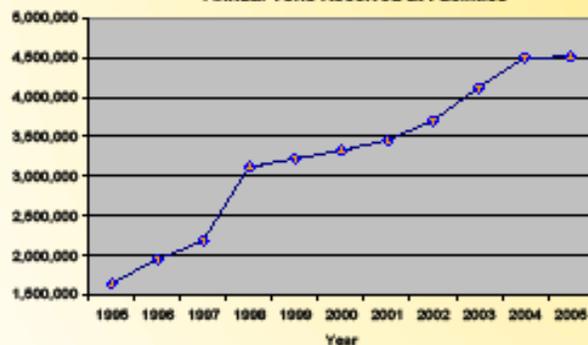


Started Receiving Waste Between 1996 and 2005



2005...

Annual Tons Received at Facilities



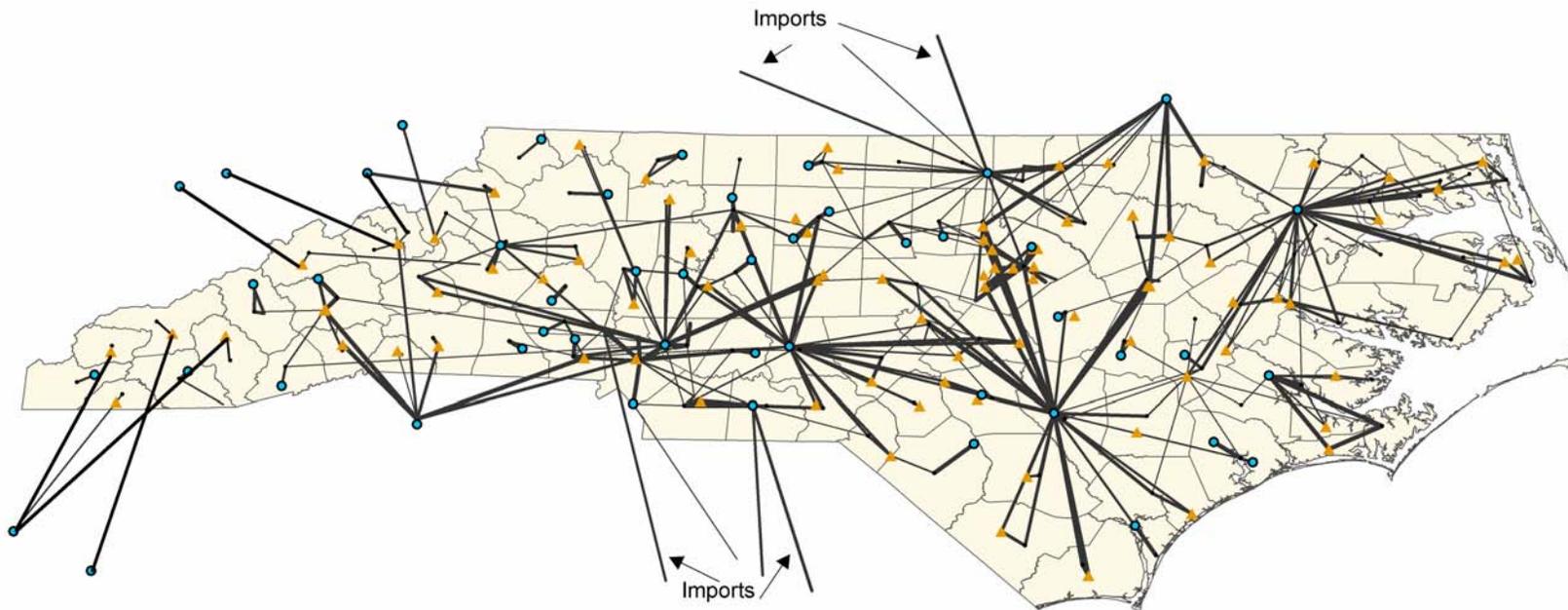
Created - 1-08-07

Data - North Carolina Division of Solid Waste Database

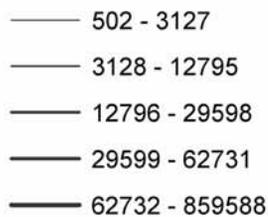
Map by - Garrett Davis and Environmental Finance Center - UNC Chapel Hill

Funding by - NCDENR

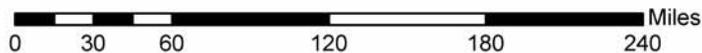
Wasteflows in North Carolina > 500 Tons FY 2005 - 2006



Tons

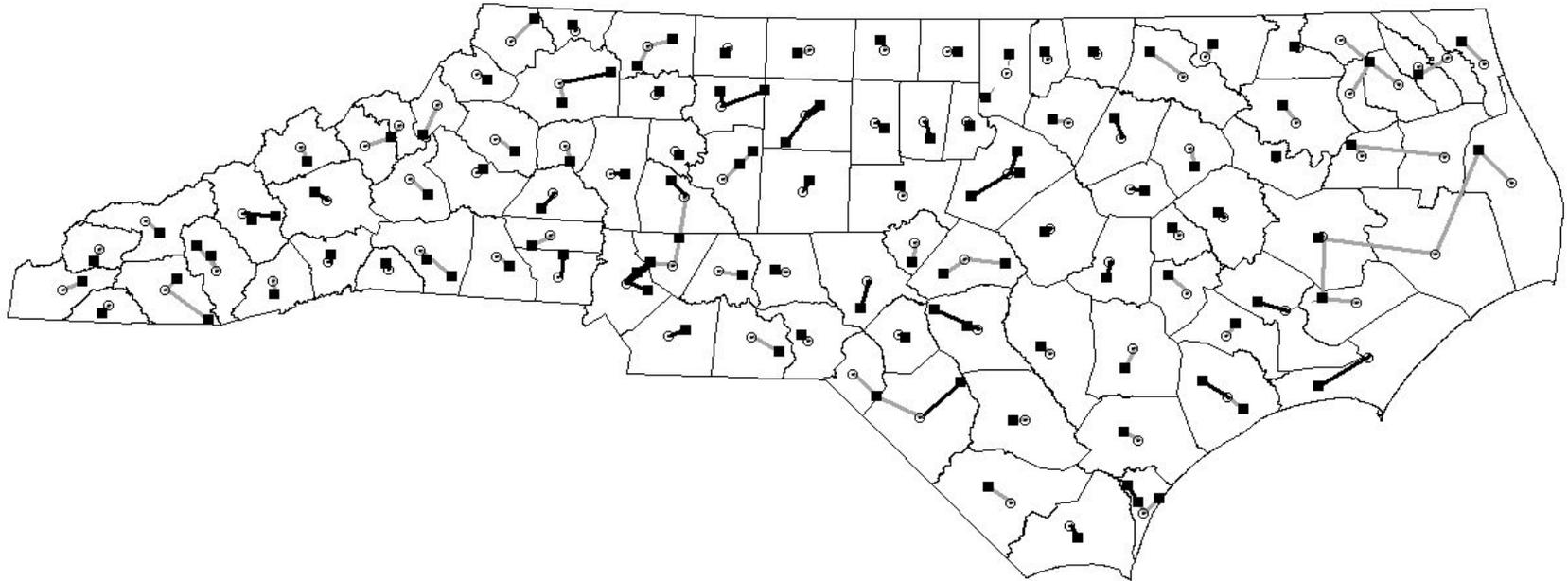


- ▲ Open Transfer Stations
- Open MSW Landfills

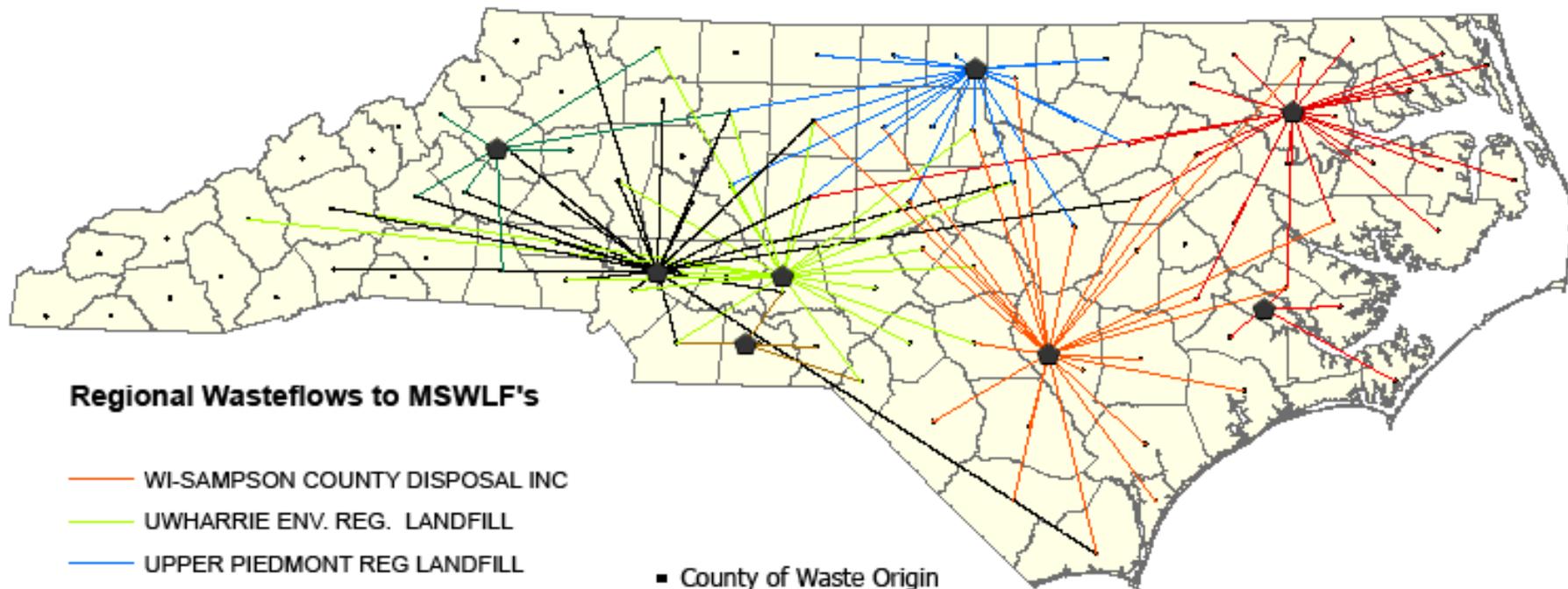


Map Produced March 1st, 2007 by Garrett Davis

Municipal Solid Waste Flow FY 1990-1991



Wasteflows to Regional Landfills in North Carolina For FY 2005-2006



Regional Wasteflows to MSWLF's

- WI-SAMPSON COUNTY DISPOSAL INC
 - UWHARRIE ENV. REG. LANDFILL
 - UPPER PIEDMONT REG LANDFILL
 - FOOTHILLS ENVIRONMENTAL LANDFILL
 - EAST CAROLINA REG LANDFILL
 - CRSWMA - LONG TERM REGIONAL LANDFILL
 - CHAMBERS DEVELOPMENT MSWLF
 - BFI-CHARLOTTE MTR SPEEDWAY LANDFILL V
- County of Waste Origin

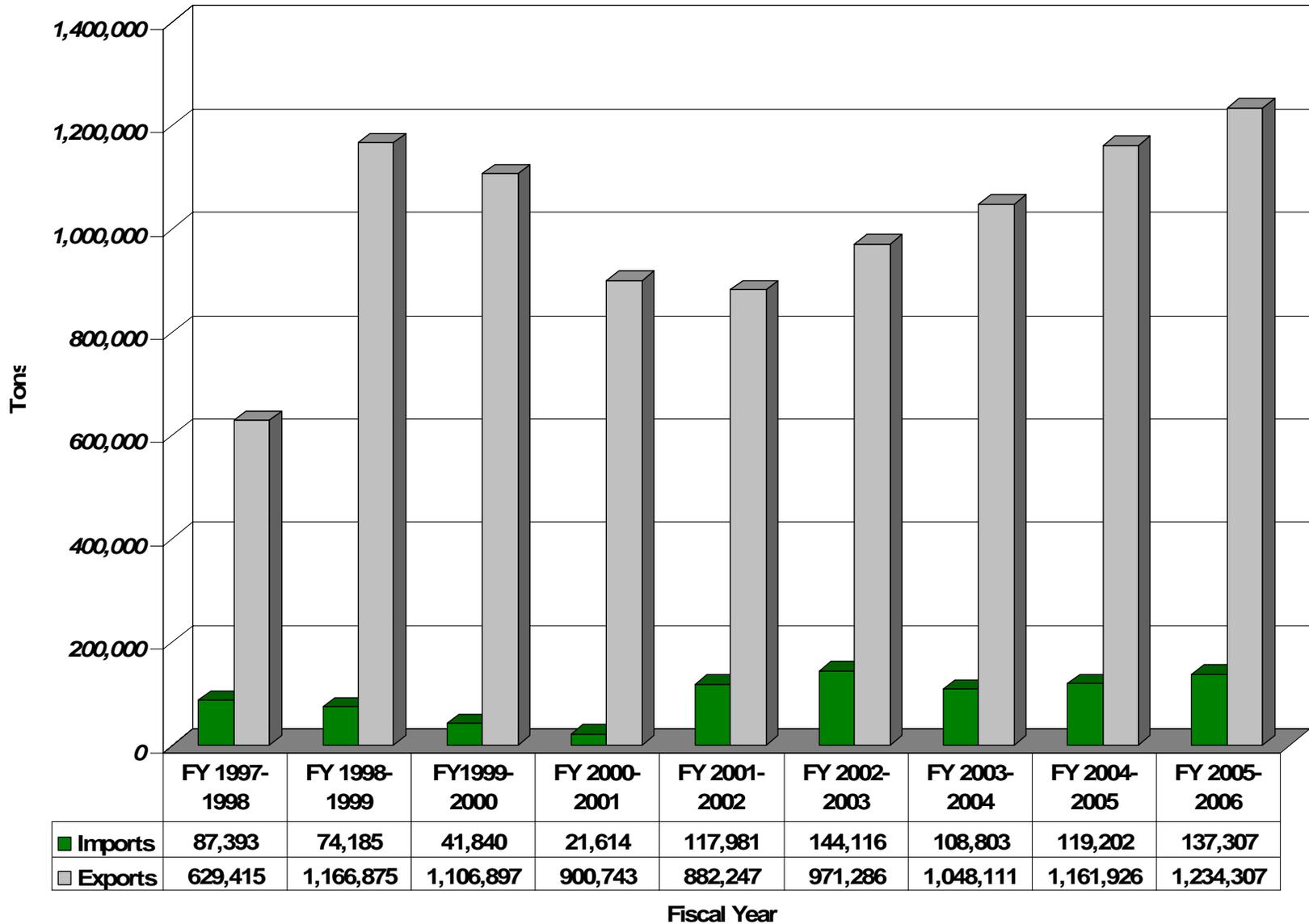
Created - 1-08-07

Data - North Carolina Division of Solid Waste Database

Map by - Garrett Davis and Environmental Finance Center - UNC Chapel Hill

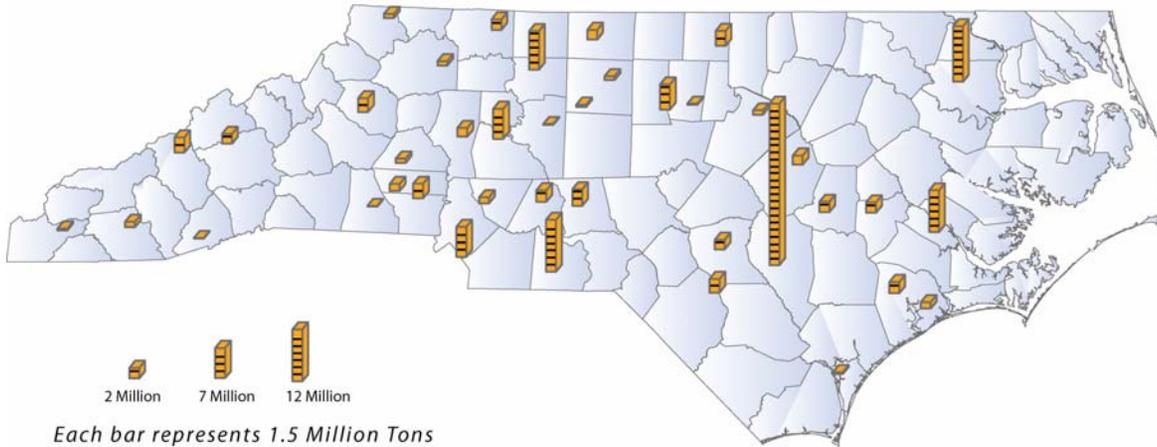
Funding by - NCDENR

Actual Imports / Exports



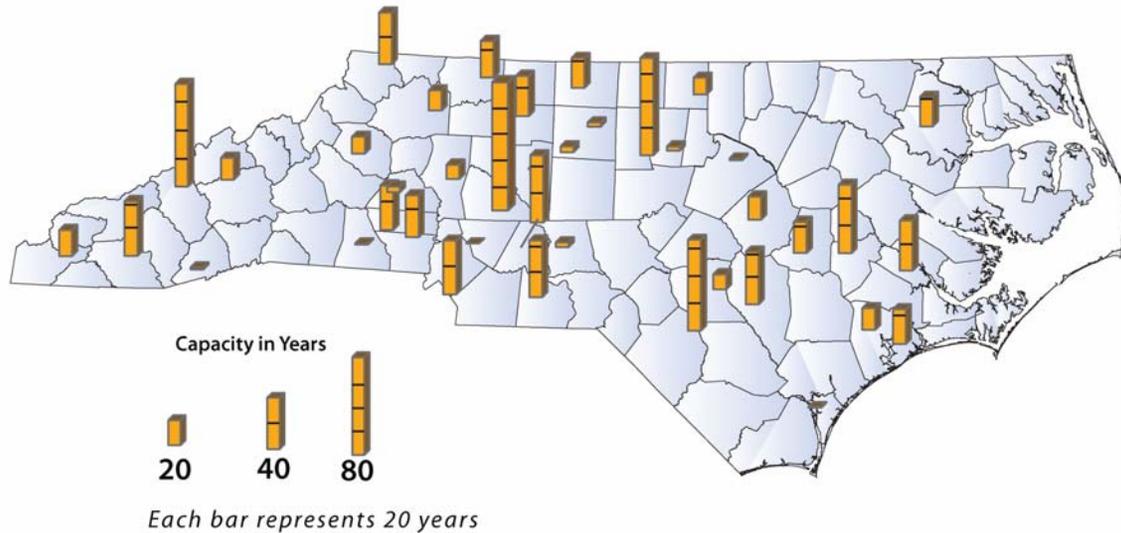
Capacity in North Carolina Landfills as of FY 2005-2006

Total Capacity in Tons



Capacity in North Carolina Landfills as of FY 2005-2006

Total Capacity in Years

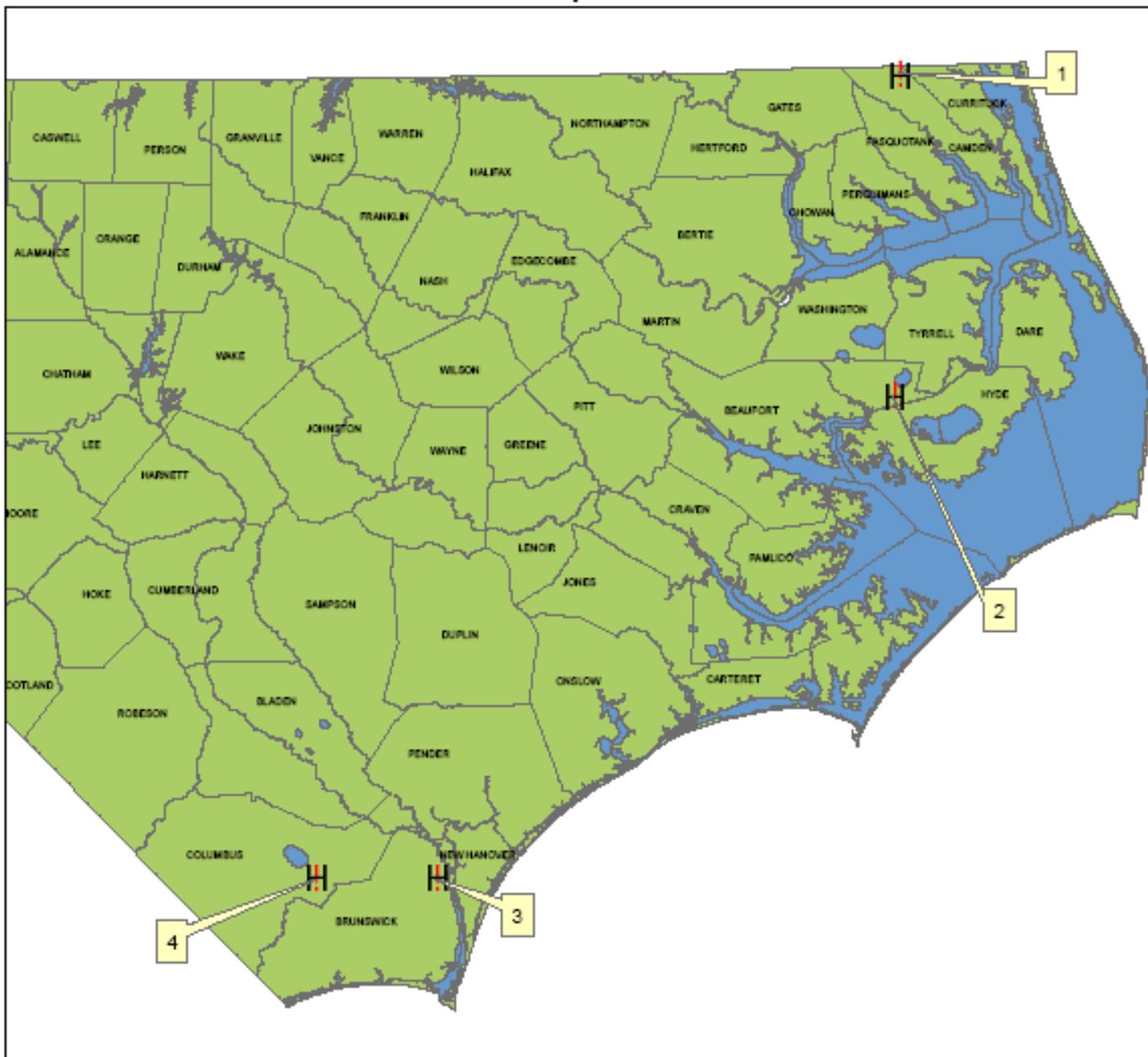


State-wide Municipal Solid Waste Landfills (MSWLF)

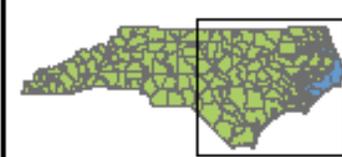
40 MSW Landfills currently operating
 Average facility size: 316.92 acres
 Average waste footprint: 76.48 acres
 Average "tip" fee: \$33.89
 Average utilization factor: 0.58 tons/cubic yard
 Average years in operation: 10.15 years

<u>MSW Disposed (tons)</u>	<u>Average</u> 6,608,556.96	<u>FY2005-2006</u> 7,910,640.27	<u>Total</u> 67,076,853.11
<u>Volume (yd³)</u>	<u>Used</u> 110,647,868.6	<u>Permitted</u> 143,447,772	<u>Planned</u> 372,022,542
Remaining Volume		32,799,903.4	261,374,673.4
<u>Remaining Capacity</u>			
Tons of Waste		19,023,943.97	151,597,310.6
Years (average)		2.89	22.94
Years (FY05-06)		2.40	19.16

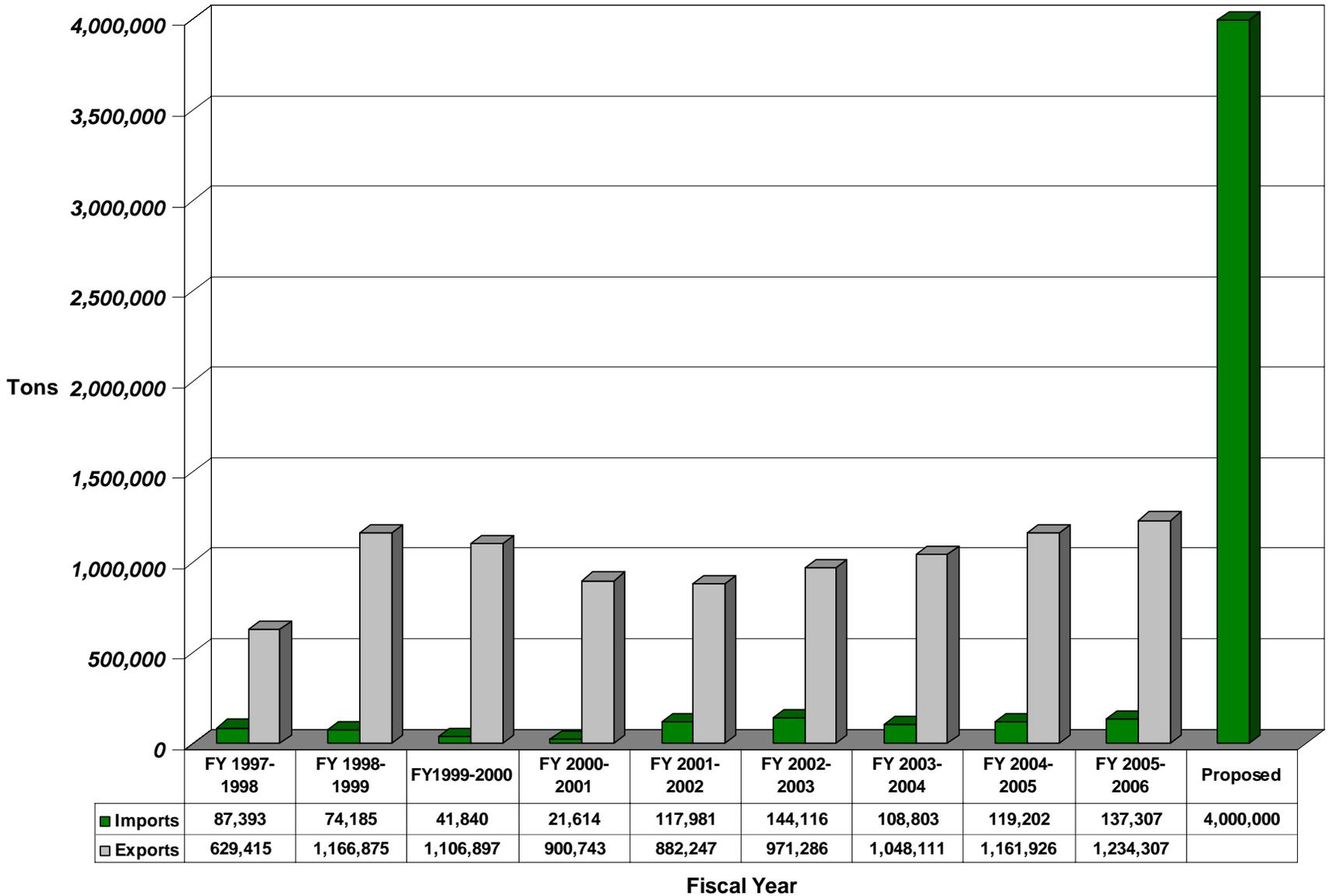
Proposed Landfills in Eastern North Carolina



1. Black Bear, LLC
Waste Industries
(MSW Landfill)
2. Alligator River, LLC
(C&D Landfill)
3. North Carolina Resource
Conservation, LLC
Sims Group USA Corp.
formerly HugoNEU
(Autofluff Recycler)
4. Riegel Ridge, LLC
Waste Management, Inc.
(MSW Landfill)



Forecast Imports / Exports



North Wake MSW Landfill

Borrow pit

Leachate lagoon

Working face

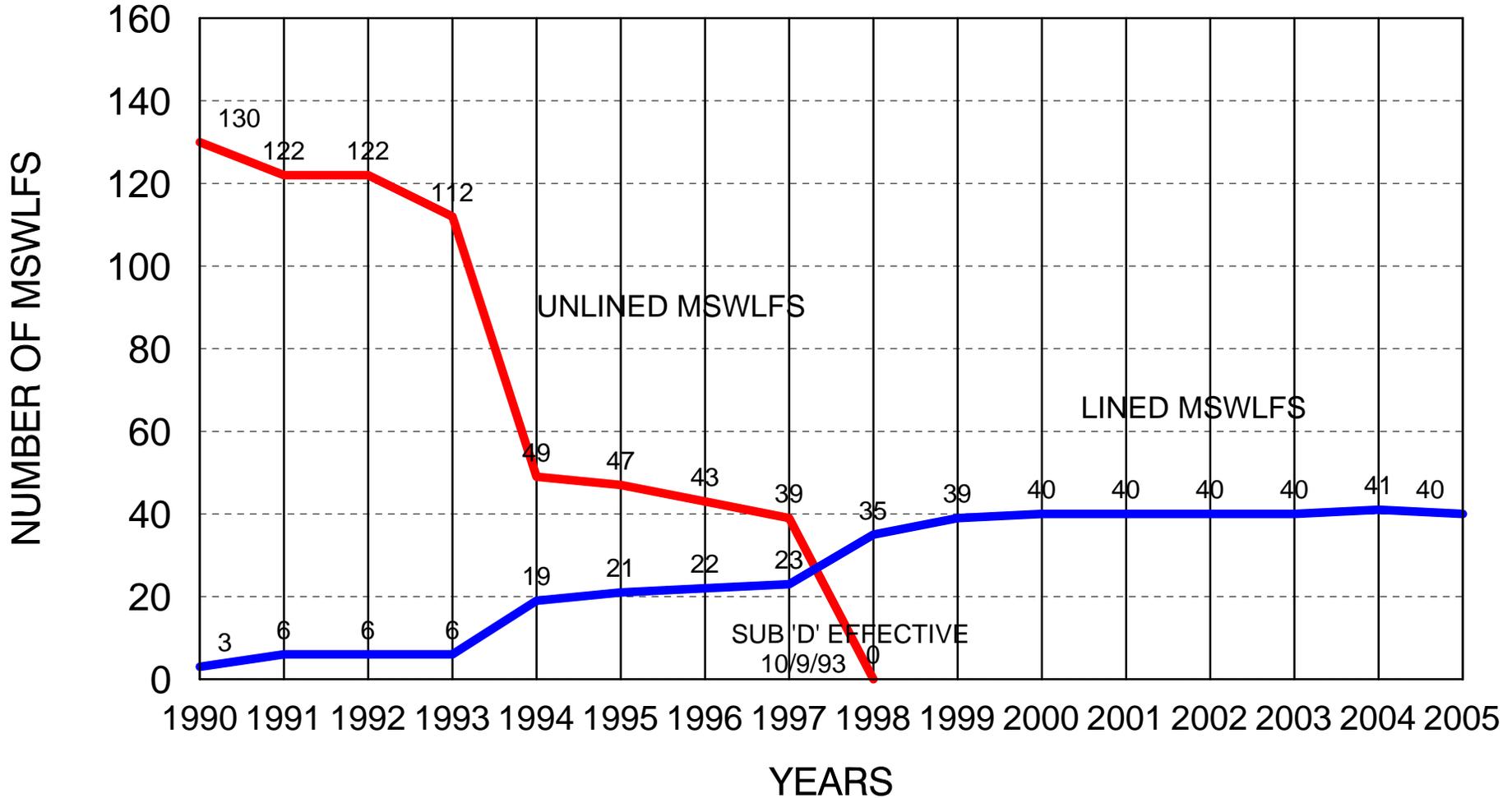
Closed cell



Clay County, 1988



STATUS OF MSWLFS IN NORTH CAROLINA



State lined landfill requirements (the 98 rule)

Federal Sub-title D Landfill requirements (RCRA)



Solid Waste Management Act of 1989

Established:

Reporting requirements

Planning requirements

Landfill bans

New programs

Set goals and policies

garbage barge from New York City



Clay County, 2005



Summary

Issue Identification

- Increasing amount of waste
- Use of new/different facilities
- State regulatory staffing reductions
- Mobility of waste/inter-state movement
- Large in-state regional facilities
- Landfill ownership transfer
- Capacity (distribution & lack of acceptance)
- New landfills proposed for primarily out-of state waste
- Landfills proposed in areas not previously anticipated
- Legacy of old landfills

Proposed legislation for 2007

1. Strengthen **financial/environmental qualifications** review
2. Strengthen **financial assurance** associated with landfill ownership
3. Clarify landfill **owner definition** and **ownership transfer** notification
4. Strengthen **state enforcement** measures
5. Improve/strengthen landfill requirements for the ***next generation*** of landfills
6. Improve/strengthen performance of **current landfills**
7. Require **environmental studies** for large facilities
8. Fund state regulatory **staff expansion** through permit fee
9. Fund **clean up of orphan landfills** through fee on solid waste disposal

*Landfill requirements based on: experience in North Carolina, new technologies, need to provide improved protections to the public



Solid Waste in North Carolina

The Future:

More of the Same

(Probably continue to have more and more waste)

Yet Very Different

(Probably become one of the nation's leading importers of waste)

Paul Crissman

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