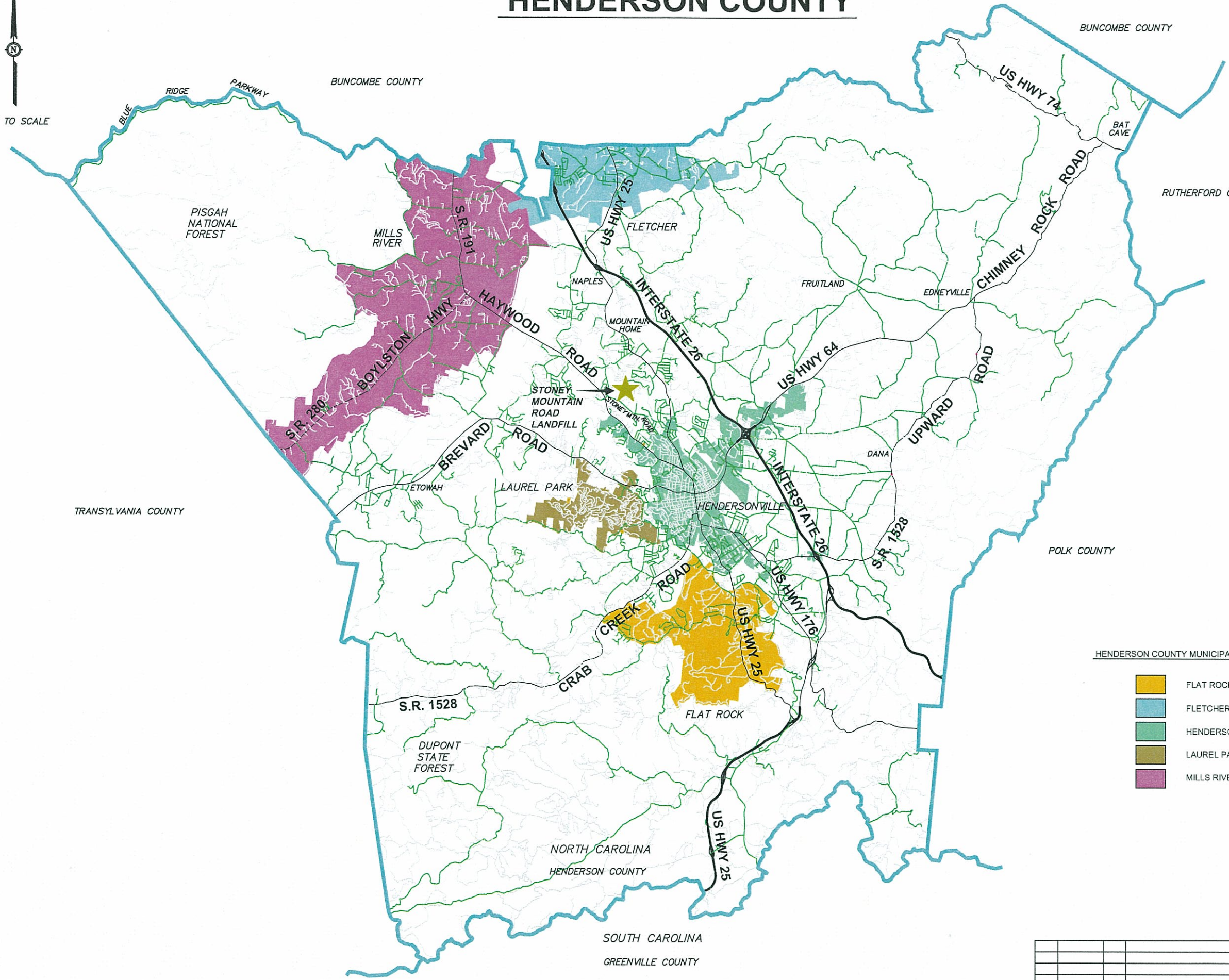
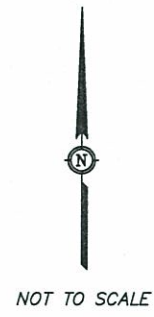


APPENDIX A

**County Map
Solid Waste Advisory Committee By-Laws
2008 Twenty Year Vision Presentation**

HENDERSON COUNTY



HENDERSON COUNTY MUNICIPALITIES LEGEND

- FLAT ROCK
- FLETCHER
- HENDERSONVILLE
- LAUREL PARK
- MILLS RIVER

NO.	DATE	BY	REVISION DESCRIPTION



HENDERSON COUNTY
SOLID WASTE MASTER PLAN
HENDERSON COUNTY
HENDERSON COUNTY, NORTH CAROLINA

JOB NO.: 06.00710
DATE: OCTOBER 30, 2008
DESIGNED BY: KS
CADD BY: KS
DESIGN REVIEW: XXX
CONST. REVIEW: XXX
FILE NAME:
Overall Site
Map_11X17.dwg

HENDERSON COUNTY
OVERALL SITE MAP

SHEET
C-1

O:\2008\06.00710\Henderson County Landfill Solid Waste Master Plan\Coverall Site Map_11X17.dwg 6/29/2008 7:55 AM KELLY

SOLID WASTE ADVISORY COMMITTEE (SWAC)

In order to study and improve recycling and solid waste issues in Henderson County, a Solid Waste Advisory Committee meets regularly. This committee is made up of stakeholders in solid waste, from county staff and commissioners to citizens and private waste haulers.

Current Members

Mr. Stan Kumor, Chair

Mr. Robert R. Delwiche

Mr. James Phelps

Ms. Katie Breckheimer

Ms. Emily Anderson

Mr. David Behun

Mr. Joseph McGuth

Mr. Terry Lee Maybin

Mr. Tom McCullough

Commissioner Chuck McGrady

Meetings

Home

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REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: August 14, 2007

SUBJECT: Annual Report
Solid Waste Advisory Committee

ATTACHMENTS: Current SWAC By-Laws

SUMMARY OF REQUEST:

The purpose of this agenda item is for the Solid Waste Advisory Committee to report to the Board of Commissioners on the Committee's work since the last report. This report will include a proposed By-Law change regarding the Committee's purpose and to provide information on the Household Hazardous Waste / Computer Recycling Event.

The proposed change to the By-Laws is as follows:

-draft- Purpose of the Solid Waste Advisory Committee, By-Laws Article II

Purpose As directed by the Henderson County Board of Commissioners (BOC), the Solid Waste Advisory Committee (SWAC) is to advise the BOC on issues pertaining to present and future solid waste and recycling programs and methods in Henderson County. In so doing, it is to:

- 1) Review and make recommendations to both short and long-term Solid Waste Management Plans prepared by the office of the County Engineer.*
- 2) Review and recommend programs and plans to assist in the control of litter.*
- 3) Provide updates to the BOC on recommended methods for the disposal of solid waste.*
- 4) Recommend programs, and assist in their development, for public education on issues pertaining to the disposal of solid waste and recycling, including the recycling of electronics and household hazardous waste.*
- 5) Continue to study and recommend improvements to county recycling programs, including their costs and possible funding sources.*

BOARD ACTION REQUESTED:

The Board is requested to consider the proposed change to the Committee's By-Laws regarding purpose.

Suggested Motion:

I move that the Board approve the proposed purpose for the Solid Waste Advisory Committee's By-Laws.

**BY LAWS
HENDERSON COUNTY
SOLID WASTE ADVISORY COMMITTEE**

Article I

Name - Henderson County Solid Waste Advisory Committee (SWAC)

Article II

Purpose - As directed by the Henderson County Board of Commissioners (BOC), to advise the BOC on issues pertaining to present and future solid waste programs in Henderson County. To review and approve the 3 Year Updates to the 10 Year Solid Waste Management Plan as prepared by the Office of the County Engineer. To work with the Solid waste Department on the enforcement of litter control programs. To provide updates to the BOC on current technology for the disposal of solid waste. To develop and make recommendations on other Solid Waste Programs as directed by the BOC.

Article III

Membership - Membership shall consist of a minimum of seven (7) residents of Henderson County will serve a three year staggered-term whereby one third of the membership may be appointed or reappointed each year. If for any reason a member must be replaced, the replacement member shall serve for the remainder of the unfilled term of the departing member. Members who miss three consecutive meetings without a good cause or are habitually absent will be subject to the removal and replacement. Each term will expire April 1, of the appropriate year.

Article IV

Officers and Duties - The Chairman will be appointed by the Board of Commissioners. He will chair all meetings and decide all points of order and procedure. A Vice Chairman shall be elected by the members of the committee and shall serve as acting Chairman in the absence of the Chairman and shall exercise the same duties as the Chairman.

Article V

Meetings - Meetings shall be held at the time, place and frequency determined by the Office of the County Engineer. Special meetings may be called by the Chairman at anytime provided a 48 hour notice is given to every member. Notice shall be given to the address or phone number listed on a register maintained by the Henderson County Board of Commissioners.



REQUEST FOR BOARD ACTION

**HENDERSON COUNTY
BOARD OF COMMISSIONERS**

MEETING DATE: May 21, 2008

SUBJECT: 2008 Twenty Year Vision Presentation
Henderson County Solid Waste

ATTACHMENTS: Yes

1. Executive Summary
2. Presentation

SUMMARY OF REQUEST:

The County's Strategic Plan in Strategy 4.4 (Address solid waste management issues including recycling and upcoming pertinent solid waste legislation) and under the leadership of Katie Breckheimer, chairperson, the Solid Waste Advisory Committee and staff have developed the attached twenty year plan for Henderson County Solid Waste. The plan details the importance of investing and developing recycling in Henderson County and developing the partnership with the County's permitted private haulers. While the challenges ahead for Solid Waste are significant, the plan provides a path that meets the challenges and maintains Solid Waste operations as an enterprise fund separate from the general fund.

BOARD ACTION REQUESTED: For the Board's consideration, discussion and direction on the Twenty Year Vision for Solid Waste in Henderson County.

Suggested Motion:

I move that the Board of Commissioners approve the 2008 Twenty Year Vision for Solid Waste (as revised or amended).

A quorum shall consist of 6 members of the SWAC.

Votes of a majority of those present shall be sufficient to decide any matter before the SWAC provided a quorum is present.

No recommendations from a subcommittee shall be taken to the Henderson County Board of Commissioners unless voted on by a majority of properly noticed quorum.

Article VI

Staff to the Committee - The Henderson County staff to this committee shall be the County Engineer.



HENDERSON COUNTY ENGINEERING

Twenty Year Vision for Henderson County Solid Waste

Executive Summary

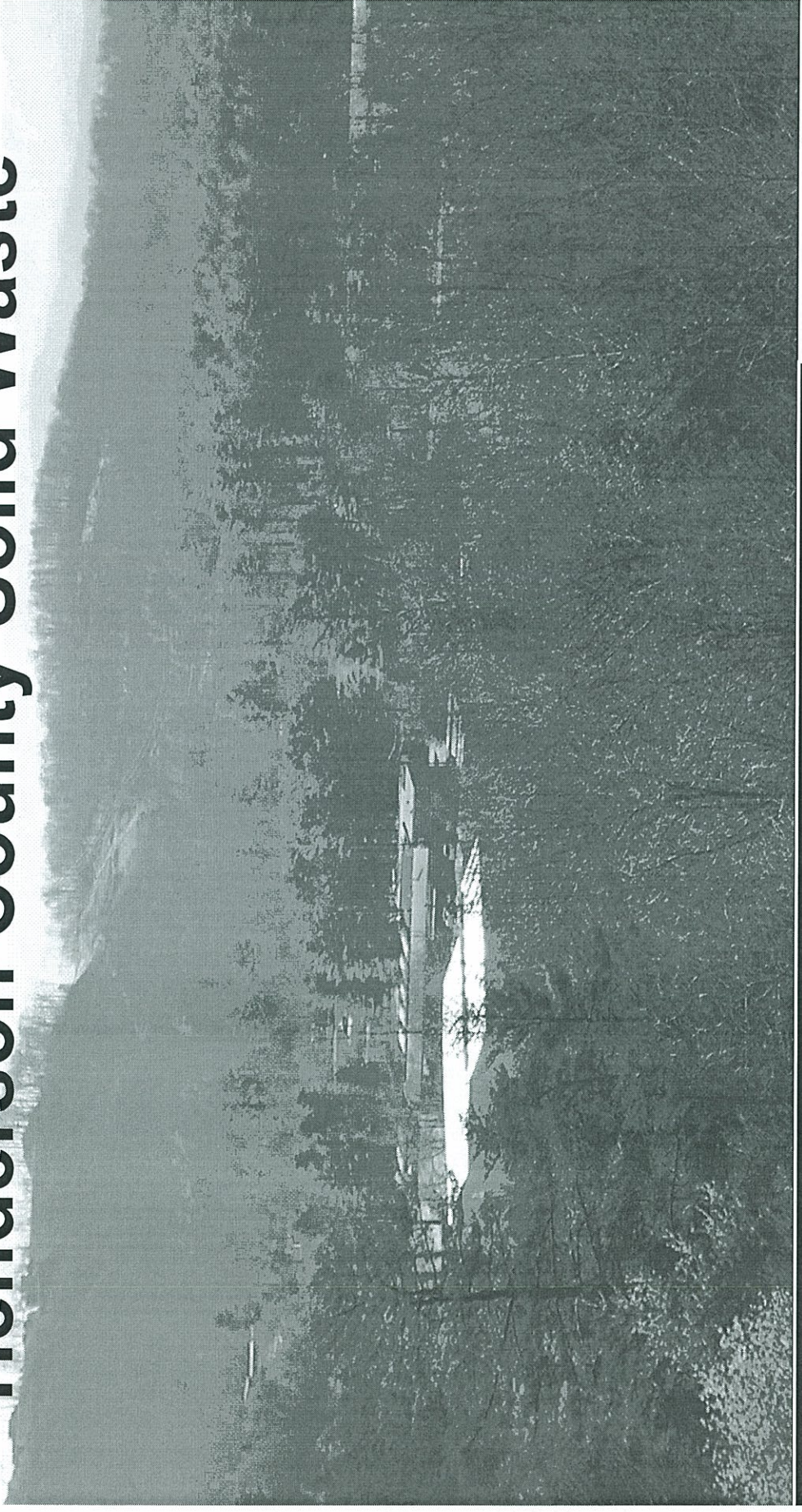
An effective Solid Waste Department is essential to providing a quality standard of living to the Citizens of Henderson County. Without it, we risk health challenges, unmanageable costs, and harm to our environment. Effective Solid Waste Management is a very important part of Growth Management. Henderson County Solid Waste is providing this effectiveness through a focus on the following: Value, Compliance and Environmental Stewardship. The 2008 Twenty Year Vision for Solid Waste outlines the solutions to continue and improve on the Department's focus.

The solution to moving forward over the next twenty years is not a new revolutionary process, but is our current process with a new perspective. Our current operation needs to be refined to create greater efficiencies and cost savings. There is no new technology on the solid waste horizon that is both feasible and proven. Furthermore, the challenges grow every year. We face increasing costs in operation from skyrocketing fuel costs to more aggressive regulation from the State. However, we must still provide excellent customer service and value to our rate payers and the Citizens of Henderson County. The two aspects of our Solid Waste efforts that provide the most potential are the County's private haulers and recycling.

Henderson County Solid Waste is an enterprise fund separate from the general fund and property taxes. The Solid Waste Capital Improvement Plan developed this year indicates that it is possible to continue into the future as a self-supported County function. This is not the case for many solid waste operations and the significant difference between Henderson County and the others is our partnership with the existing network of private haulers. The County's solid waste collection is done largely by private enterprise available to residents as an alternative to transporting their waste to the County facility. Collection of solid waste is expensive and private enterprise and the laws of supply and demand are a potential way to control costs. We need to continue this partnership and help the collection network when possible.

In addition to the private haulers, the most potential for overcoming increasing cost and achieving compliance is recycling. Recycling is no longer just an environmental stewardship opportunity, it is a process that removes material from our waste stream, reduces disposal costs and generates revenue. While the recycling markets fluctuate, there is notable indication recycling will continue to provide an effective means of reducing disposal costs and generating revenue. The recycling markets and number of end users for recycled products have grown into a strong industry. Furthermore, effective recycling efforts are continuing to be a necessary tool in maintaining compliance with current and new State regulations.

Twenty Year Vision Henderson County Solid Waste



Engineering: Solid Waste



Overview

- Solid Waste Team
- Current Process
- Challenges
- Solutions
- Timeline

Engineering: Solid Waste

Solid Waste Team

- Henderson County Citizens
- County Officials, SWAC and Staff
- Municipalities
- Private Haulers
- Land of Sky Regional Council & Regional Solid Waste Group
- DENR Solid Waste Management Division
- Consultants
- Enerdyne (Landfill Gas Contractor)
- Contractors
- Recycling Markets

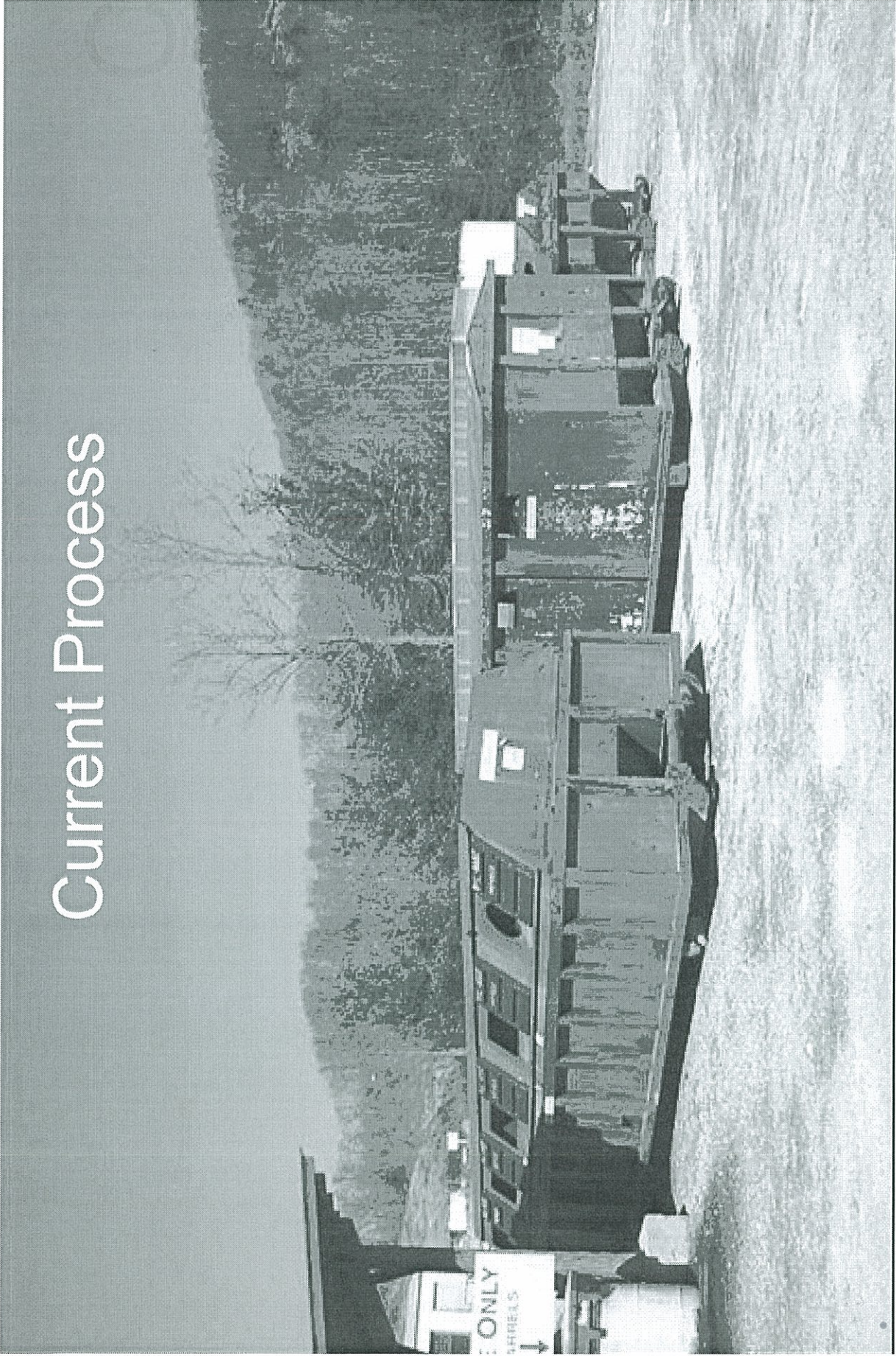
Engineering: Solid Waste

Current Process

- Collections
- Disposal
- Recycling
- HHW / Electronics
- Compliance

Engineering: Solid Waste

Current Process



Engineering: Solid Waste

Current Process



Engineering: Solid Waste

Current Process

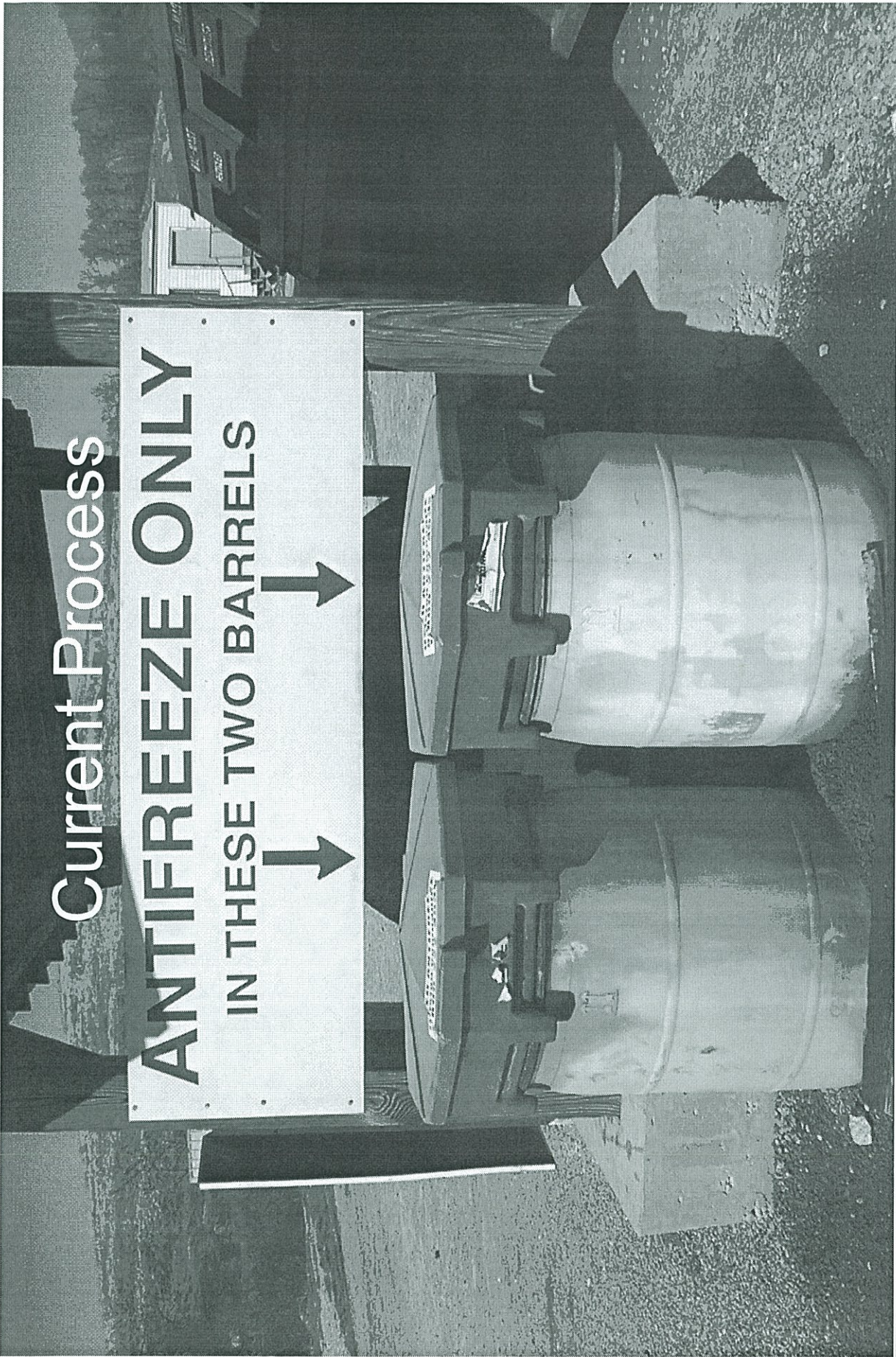
Engineering: Solid Waste



Current Process

ANTIFREEZE ONLY

IN THESE TWO BARRELS



Engineering: Solid Waste



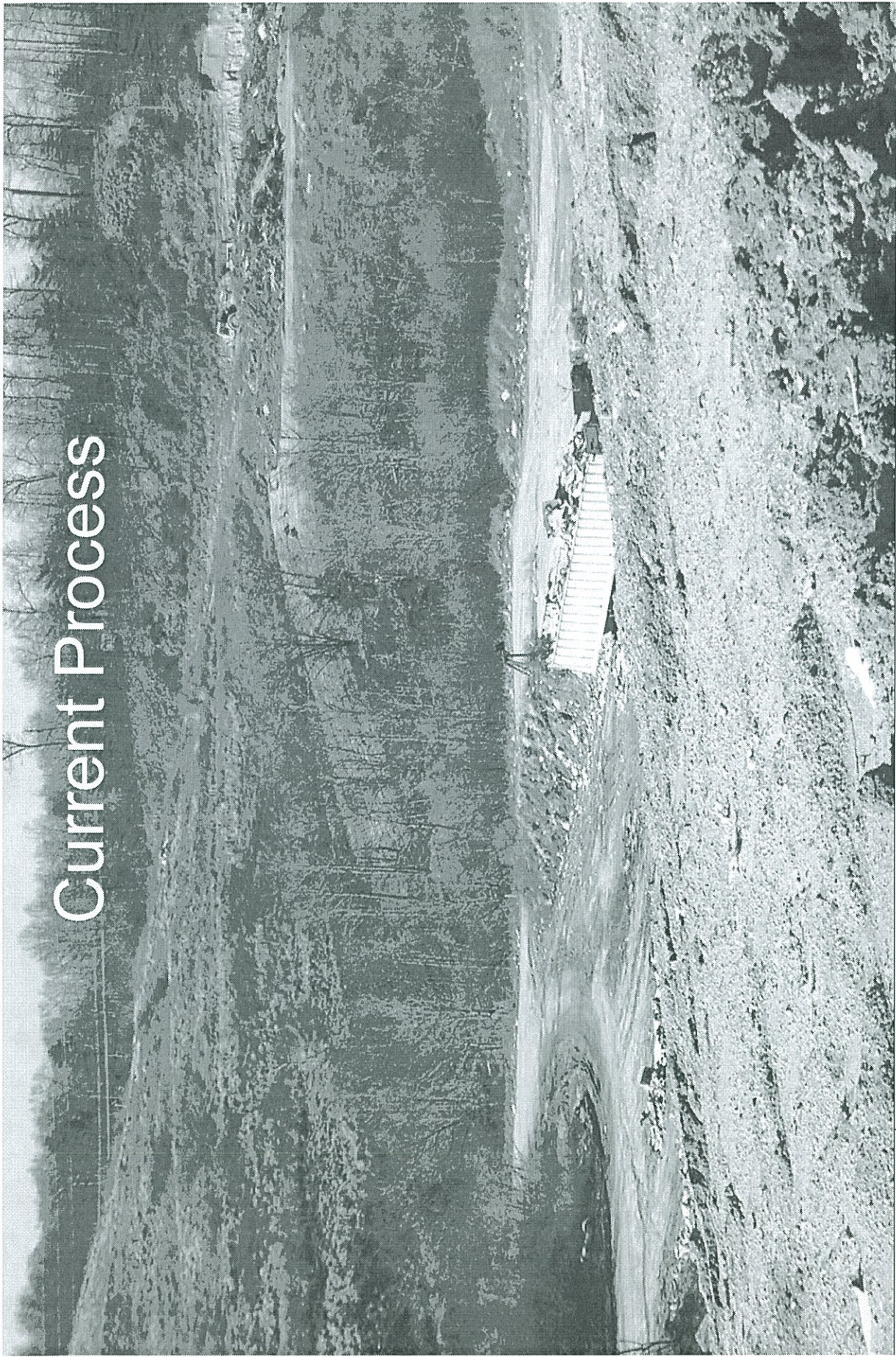
Current Process



Engineering: Solid Waste



Current Process



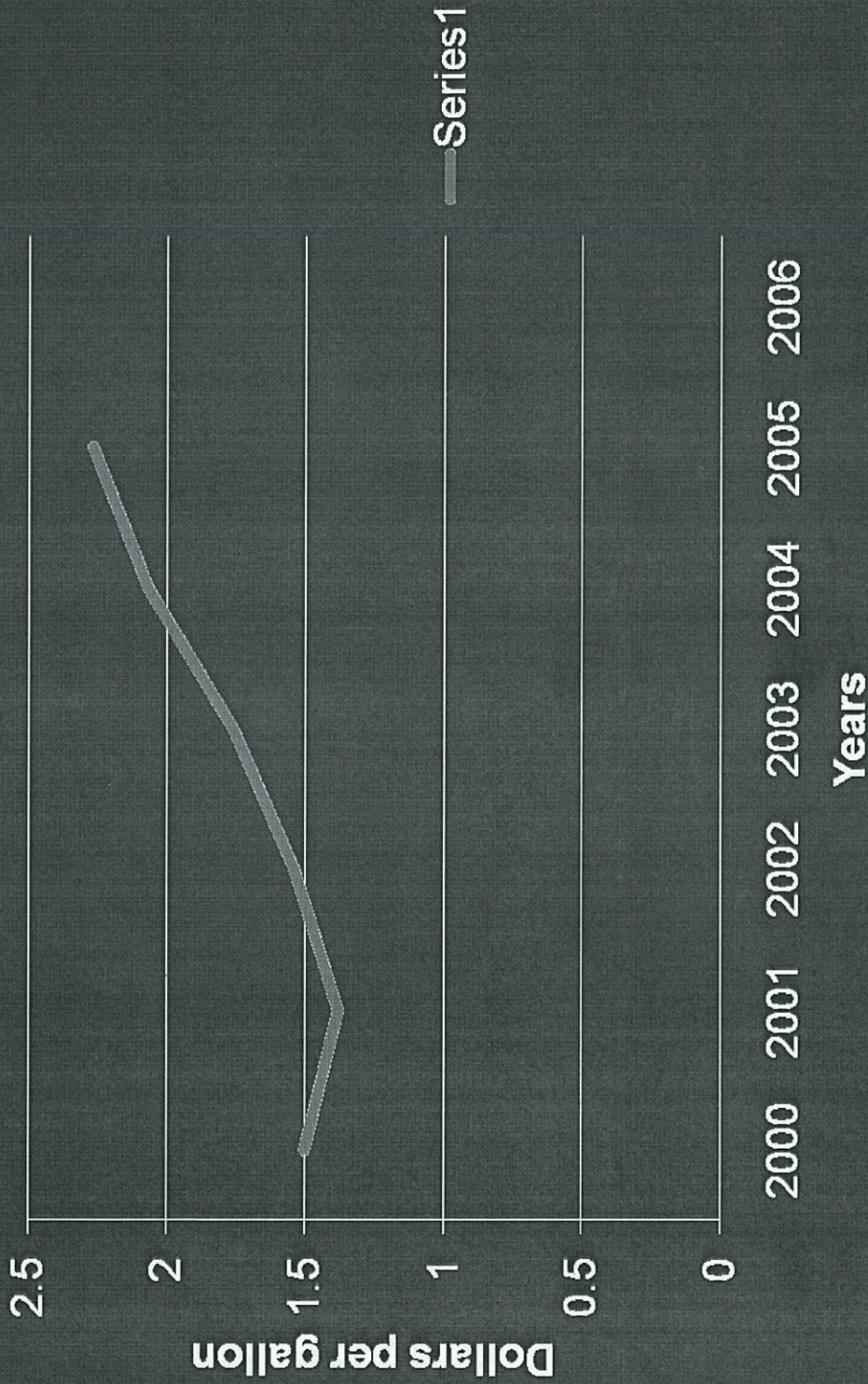
Engineering: Solid Waste

Challenges

- Pre FY08 Landfill Bans on Aluminum & Cardboard
- Fuel Costs, see next slide
- FY09 Construction & Demo Landfill Closure
- FY09 Senate Bill 1492
 - Solid Waste Disposal Tax
 - Significant Increase in Permit Fees
 - State Ban on Plastic Bottles, Oil Filters, Electronics, etc.
- FY10 Contract for Transportation / Disposal

Engineering: Solid Waste

Gasoline Price Trends in Real Dollars Since 2000



Source: US Department of Energy

Engineering: Solid Waste



Solutions

- Currently no “Silver Bullet”
 - Landfill: expensive & location
 - Incinerator: expensive & environmental challenges
- Need New Perspective on Current Processes: Recycling & Collections

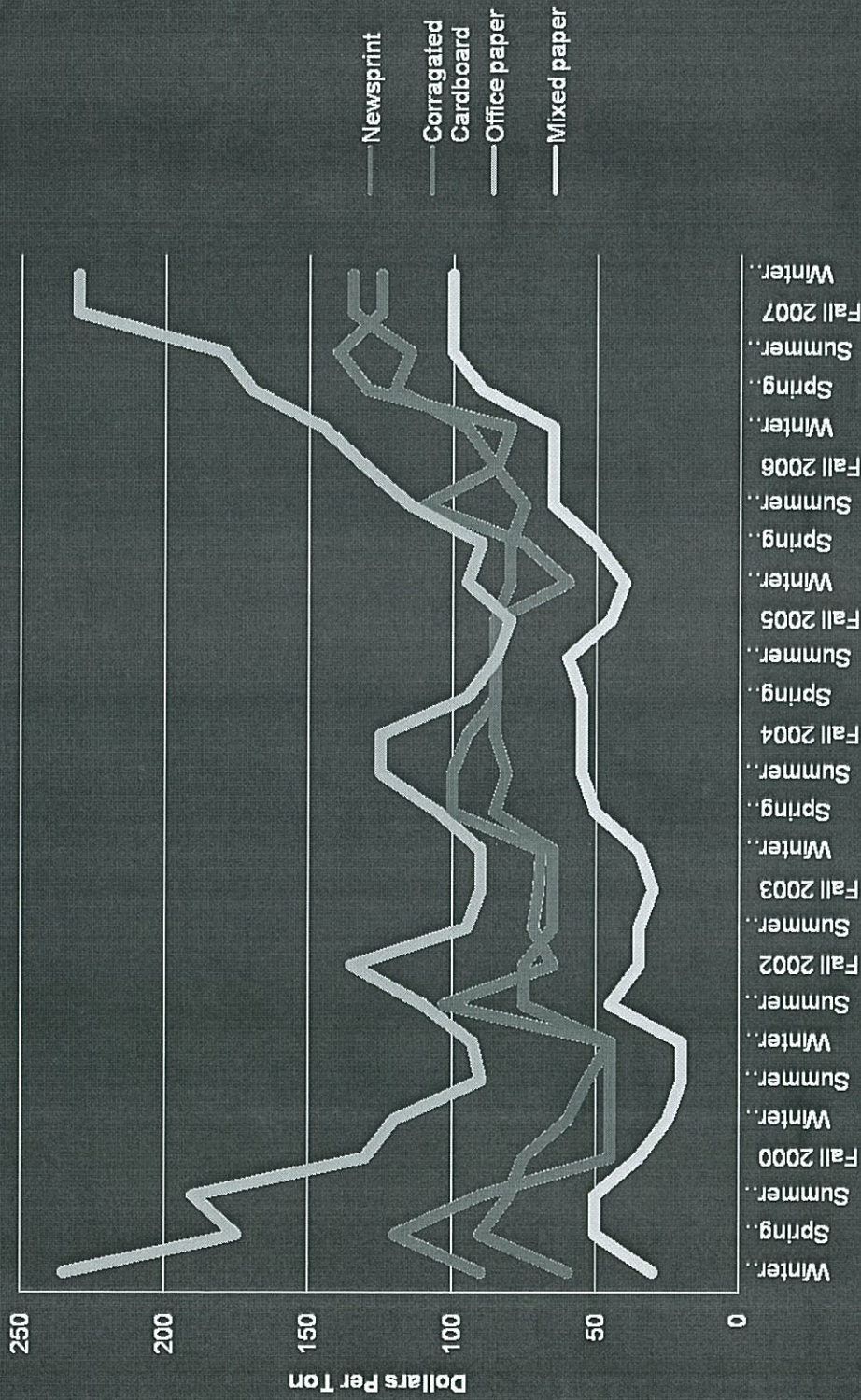
Engineering: Solid Waste

Solution: Recycling

- Solid Waste Transfer Expense:
\$34 / Ton
- Recycling Revenue:
\$100 / Ton for Fiber
\$30 / Ton for Mixed Containers
(less transportation costs, no investment)

Engineering: Solid Waste

Price Trends for Fiber Since 2000



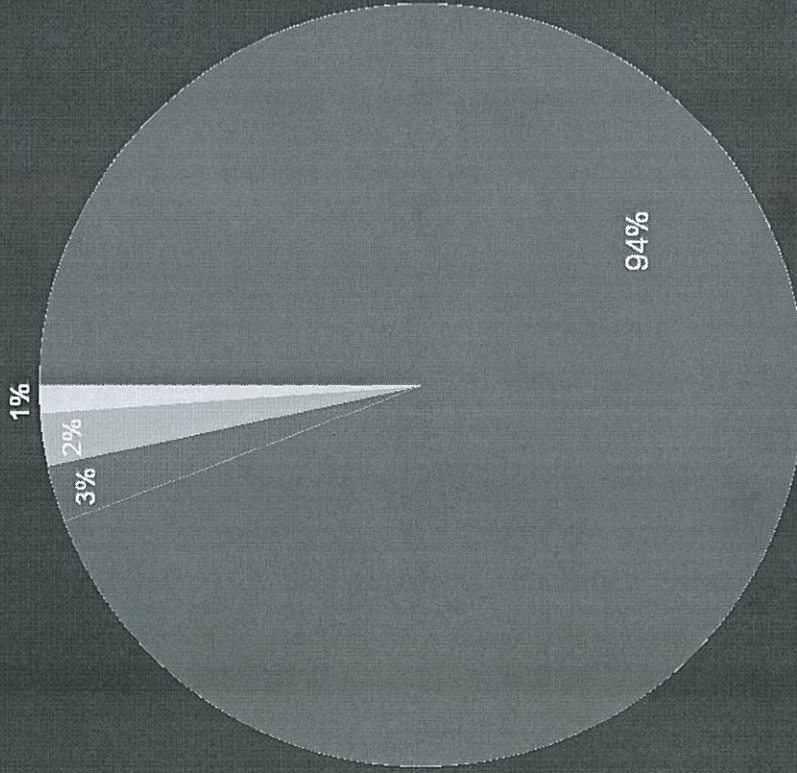
Source: North Carolina Department of Pollution Prevention and Environmental Assistance

Engineering: Solid Waste



Waste Stream Composition in Henderson County for '08 Fiscal Year (incomplete)

■ Solid Waste ■ Recycling ■ Scrap Metal ■ Wood/Yard



Source: North Carolina Department of Pollution Prevention and Environmental Assistance

Engineering: Solid Waste



Solution: Recycling

Compliance

–Landfill Bans on Aluminum, Cardboard, Plastic Bottles, Oil Filters and Pallets

–Implementation of Bans

- Internal Operations
- Permitted Partners

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Solution: Recycling

- Environmental Stewardship
- Recycling Coordinator
 - Maximize Recycling Revenue
 - Education / Outreach
 - Operational Efficiencies
 - Developing Markets

Engineering: Solid Waste

Solution: Collections

Expansion of Collections for Solid Waste and Recycling

- Develop more Convenience Sites and / or
- Develop Partnership with Haulers

Engineering: Solid Waste

Solution: Details

- FY08 Hauler’s Forum
 - Success partially depends on Haulers
 - What can HCSW do to help?
- FY09 Feasibility Study
 - Recycling Technology
 - Collection Options

Engineering: Solid Waste

Timeline

- **FY08: Complete 10 year Capital Improvement Plan**
 - Remain Enterprise Fund
 - Finance Planned Site Improvements
- **FY08: Twenty Year Vision**
- **FY08: Establish Forum with Permitted Haulers**

Engineering: Solid Waste

Timeline

- **FY09 Feasibility Study**
 - Recycling Technology
 - Collection Options
- **FY09 to FY12 Implementation of Collection Option(s)**
 - Develop more Convenience Sites
and / or
 - Develop Partnership with Haulers

Engineering: Solid Waste

Timeline

- FY09 Implement HHW / Electronic Recycling Center
- FY10 Implement Feasible Recycling Technology and Site Improvements
 - School Bus Garage
 - Stoney Mountain Recreation Center
- FY10 Rebid MSW Transportation / Disposal Contract for Transfer Station

Engineering: Solid Waste

Timeline

Future:

- Waste to Energy Technology
- C&D Reclamation
- Composting Operations
- Continue to Survey industry for alternative technology for recycling and disposal

Engineering: Solid Waste

Conclusion

- Improve and Grow Recycling
- Develop Collection System

Engineering: Solid Waste

Questions?

Thank You

Engineering: Solid Waste

