

Steering Committee Presentation

Regional Solid Waste Planning Study The City of Alpine, Texas

Alpine City Hall
100 North 13th Street, Alpine, Texas
April 22, 2008

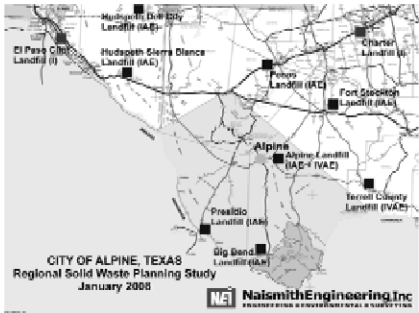
Administrative Items

- Project Contacts
 - City of Alpine – Mr. Chuy Garcia – City Manager
 - Naismith Engineering, Inc. – Mr. Grant A. Jackson, P.E., Project Engineer
- Review of Communication Procedures
- Project Website:
<http://www.neionline.com/Alpine-MSW.files/Alpine-MSW.htm>
- Future Meeting Possibilities
 - Fourth Tues. or Thurs.
 - Second Tues. or Thurs.

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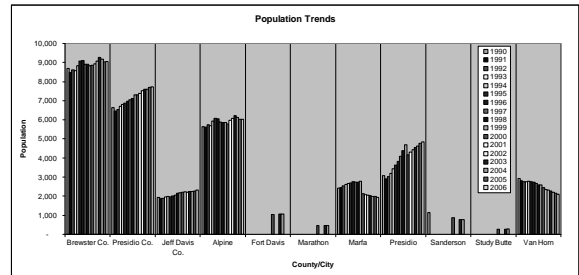
Project Area



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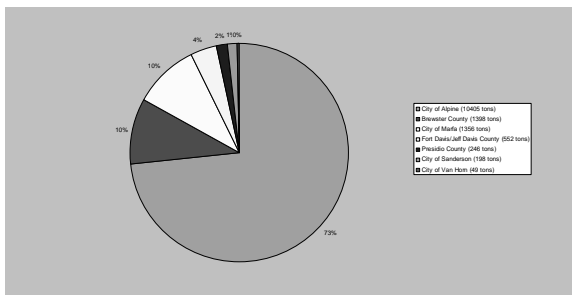
Population Trends in the Region



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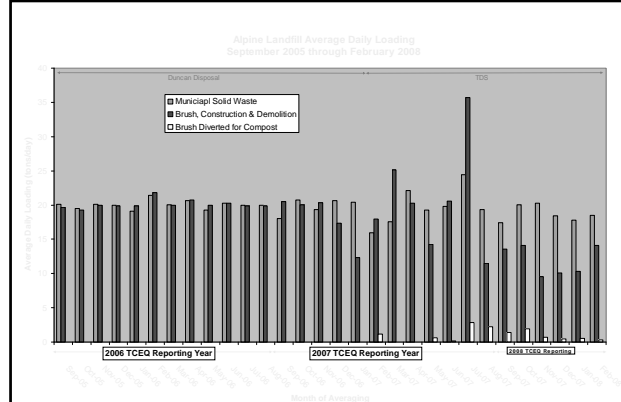
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Waste Sources – Alpine Landfill February 2007 to January 2008



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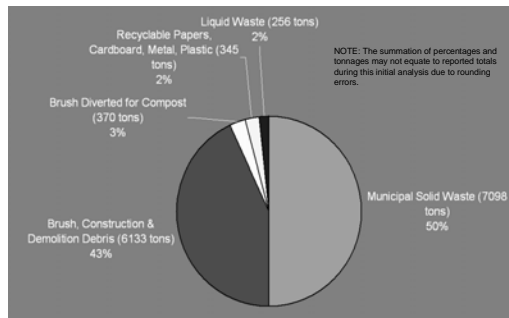
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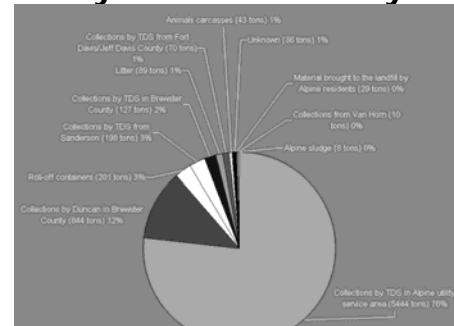
Waste Characterization February 2007 to January 2008



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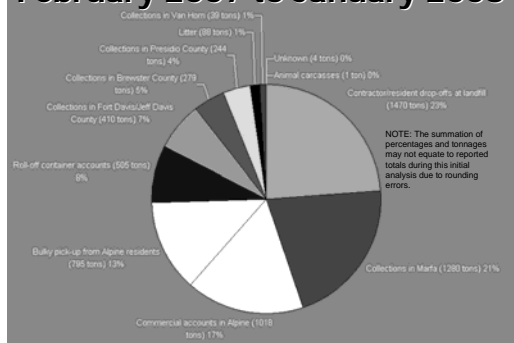
MSW Collection Source February 2007 to January 2008



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Brush, Constr./Demo. Debris February 2007 to January 2008



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Basis for Comparison

- Rates:
 - Residential - \$26.63 per mo.
 - Commercial Rates - \$5/cy-pickup
- Cost of Collection + Disposal
 - FY 2007 - \$96.75/ton (Avg.)
 - At ~1% Pop. Growth + 3% Inflation:
 - FY 2008 - \$99.65/ton
 - 20 Year Avg. - \$132.12

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Alternatives

- **Alternative 1:** Send excess waste to other facilities using collection trucks
- **Alternative 2:** Implement an aggressive recycling program
- **Alternative 3:** Build a transfer station at the Alpine landfill and transport all waste to another facility
- **Alternative 4:** Upgrade the existing landfill to Type I with No Waste Limit
- **Alternative 5:** Construct a New AE landfill to work in concert with existing landfill

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Alternative 1: Excess Waste to Other Facilities Using Collection Trucks

- Once limits of 20 tpd MSW & 20 tpd B&CD exceeded, excess waste transported to other facilities in collection vehicles (Expected 2009)
- Transport Cost is significant factor:
 - Charter landfill - Odessa: 143 mi.
 - Clint landfill - El Paso: 198 mi.
- Estimated Costs
 - Extra Waste: \$134.2/t (20 Yr Avg.)
 - Adjusted Avg. - \$101.83/t (FY 2009)
 - 20 Yr. Adjusted Avg. - \$134.75/t (Addn. \$2.63)

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Alternative 2: Implement an Aggressive Recycling Program

- Existing Recycling Program:
 - Primarily Commercial/Institutional
 - 2008: 936t – 8.74%
- Reduce disposal rates into existing landfills by reusing or recycling certain materials.
 - Cardboard, paper, plastics, metals.
- Public education, support, and participation is critical
- Estimates:
 - Recyclables (Coll/Sort/Transp) \$293.29/t
 - Adjusted Avg. - \$123.93/t (Addn. \$23.03 FY 2009)
 - Adjusted Avg. - \$110.50/t with LF Space Savings

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Alternative 3: Transfer Station

- Construct a transfer station at the existing Alpine landfill facility.
- All waste transported to another facility
- Estimates
 - Adjusted Avg. - \$226.59/t (Addn. \$123.59 FY 2009)
 - 20 Yr. Adjusted Avg. - \$273.54/t (Addn. \$141.42)

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Alternative 4: Upgrade Existing Landfill

- Eliminates restrictions to addn. landfill cells at existing facility
- Estimated Costs:
 - Adjusted Avg. - \$241.99/t (Addn. \$139.35 FY 2009)
 - 20 Yr. Adjusted Avg. - \$252.04/t (Addn. \$119.92)

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Alternative 5: New AE Landfill

- Provides capacity for Addn. 20+20 tpd
- Estimated Costs:
 - Adjusted Avg. - \$170.91/t (Addn. \$68.27 FY 2009)
 - 20 Yr. Adjusted Avg. - \$194.63/t (Addn. \$62.51)

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Preliminary Comparison

Alternative	Base Cost (20 Yr)	Incr. Cost. FY09 (20 Yr)	Total Cost. FY09 (20 Yr)
1 Off-site	\$132.12	\$6.93	\$139.05
2 Recycle	\$132.12	\$14.84 (\$5.90)	\$146.96 (\$126.22)
3 Transfer	\$132.12	\$141.42	\$273.54
4 Upgrade	\$132.12	\$119.92	\$252.04
5 New AE	\$132.12	\$62.51	\$194.63

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Questions



- Naismith Engineering
- Grant A. Jackson, P.E. (gjackson@naismith-engineering.com)

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