

**NORTEX REGIONAL PLANNING COMMISSION**

**REGIONAL SOLID WASTE MANAGEMENT  
IMPLEMENTATION PLAN**

**VOLUME II**

**ADDITIONAL INFORMATION**

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**Attachment II.A**

**Planning Periods**

## Attachment II.A – Planning Periods

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Specific information on implementation activities for the current and short-range planning periods and general descriptions of planned activities for the intermediate and long-range planning periods are described in Attachment III.N – Recommendation Plan of Action and Timetable for Achieving Specific Goals and Objectives, and in Attachment III.L – Regional Goals and Objectives.

**Table II.I**  
**Planning Periods**

II.A.1. Current and Historical Information	2020 / 2021 <ul style="list-style-type: none"><li>Establish system to determine waste reduction rate for region</li></ul>
II.A.2. Short-range Planning Period	2022 – 2027 <ul style="list-style-type: none"><li>Identify regional recyclable markets</li><li>Determine reasonable regional waste diversion rate goal</li></ul>
II.A.3. Intermediate Planning Period	2028 – 2032 <ul style="list-style-type: none"><li>Increase waste diversion and recycling rate</li><li>Increase composting efforts</li><li>Increase source-separated recycling</li><li>Evaluate remaining disposal capacity</li><li>Establish re-use of recyclable and re-usable materials from construction and demolition waste</li></ul>
II.A.4. Long-range Planning Period	<ul style="list-style-type: none"><li>2033 – 2042</li></ul> Evaluate and establish system to manage HHW

Notes:

1. The current and historical information was obtained from demographic and waste generation records from 2020.

**Attachment III.A**  
**Demographic Information**

## **Attachment III.A - Demographic Information**

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Population projections for the 11-county Nortex region were obtained from the Texas Water Development Board at [www.twdb.texas.gov](http://www.twdb.texas.gov) and the Texas Demographic Center at <https://demographics.texas.gov>. These two sources of information were reviewed and evaluated to determine which population projection for the 11-county region were most appropriate to be used for the Nortex Regional Solid Waste Management Plan. Based on review of these two sources, the Texas Water Development Board population projections prepared for the 2022 State Water Plan, adopted by the Texas Water Development Board in July 2021, was selected.

The population projections for each county for 2020 through 2050 are included as Table A. As shown, the population increases slightly for the overall 11-county region. Based on this data, total population and growth rate for each year from 2020 through 2050 was determined to serve as the basis for a growth rate to project waste and recycling quantities for the 20-year planning period for the RSWMP. These waste and recycling projections are included as Table B. From this table, the population projections from the base year to the end of the long-term planning period in 5-year increments is determined.

The current disposal and recycling quantities were obtained from the FY 2020 MSW Annual Reports available on the TCEQ website for the active municipal solid waste facilities within the Nortex planning area. The quantity of waste disposed of within the region for each active municipal solid waste disposal facility are included as Table C. Based on additional information obtained from the City of Wichita Falls, the quantity of municipal solid waste and construction and demolition waste disposed were adjusted from the FY 2020 MSW Annual Report documentation. The quantities represent the amount of municipal solid waste disposed at the Wichita Falls Landfill and Buffalo Creek Landfill that was generated within the state of Texas. Waste from out of state is not included in these quantities. The waste quantities diverted from landfill disposal included in Table D are based on the FY 2020 MSW Annual Reports for the active waste disposal facilities, transfer stations, and processing facilities. A listing of the municipal solid waste facilities located within the Nortex planning area is included as Table E.

Based on the above evaluations, the Residential Waste Generation table was completed. A copy of Table III.A.1 Residential Waste Generation is included in this attachment. In addition, a copy of Table III.A.II Commercial Waste Generation and Table III.A.III Industrial Waste Generation is included in this attachment. Footnotes have been added to Table III.A.II and Table III.A.III which provide background information used in the development of these tables.

**Table A**  
**Population Projections**  
 2020 to 2050  
 Texas Water Development Board

<b>County</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Archer	9,409	9,845	9,960	9,960
Baylor	3,726	3,726	3,726	3,726
Clay	11,154	11,503	11,503	11,503
Cottle	1,552	1,552	1,552	1,552
Foard	1,389	1,401	1,401	1,401
Hardeman	4,274	4,383	4,420	4,507
Jack	9,751	10,409	10,817	11,033
Montague	20,507	21,260	21,600	21,979
Wichita	135,627	140,573	144,448	147,171
Wilbarger	14,465	15,252	15,728	16,208
Young	3,904	4,119	4,274	4,437
<b>TOTAL</b>	<b>215,758</b>	<b>224,023</b>	<b>229,429</b>	<b>233,477</b>

Notes:

1. Source: TWDB website at <https://www.twdb.texas.gov>.



**Table B**  
**Disposal/Recycling Projections**  
2020 to 2050

Year	Total	Growth Rate Per Year	Growth Rate Per Period	Waste Generated (Tons)	Disposal Rate (lbs/person/day)	Recycling Diverted (Tons)	Recycling Rate (lbs/person/day)	Residential Waste Generation (Tons)
2020	231,190	0.0394%	-	318,465	7.5480	22,525	0.534	340,990
2021	232,101	0.0394%	-	319,720	7.5480	22,613	0.534	342,333
2022	233,015	0.0394%	0.3940%	320,979	7.5480	22,702	0.534	343,682
2023	233,933	0.0394%	-	322,244	7.5480	22,792	0.534	345,036
2024	234,855	0.0394%	-	323,514	7.5480	22,882	0.534	346,395
2025	235,780	0.0394%	-	324,788	7.5480	22,972	0.534	347,760
2026	236,709	0.0394%	-	326,068	7.5480	23,062	0.534	349,130
2027	237,642	0.0394%	0.3940%	327,353	7.5480	23,153	0.534	350,506
2028	238,578	0.0394%	-	328,643	7.5480	23,244	0.534	351,887
2029	239,518	0.0394%	-	329,937	7.5480	23,336	0.534	353,273
2030	240,304	0.0394%	-	331,237	7.5529	23,428	0.534	354,665
2031	240,905	0.0025%	-	332,065	7.5529	23,486	0.534	355,552
2032	241,507	0.0025%	0.2500%	332,896	7.5529	23,545	0.534	356,441
2033	242,111	0.0025%	-	333,728	7.5529	23,604	0.534	357,332
2034	242,716	0.0025%	-	334,562	7.5529	23,663	0.534	358,225
2035	243,323	0.0025%	-	335,399	7.5529	23,722	0.534	359,121
2036	243,931	0.0025%	-	336,237	7.5529	23,781	0.534	360,019
2037	244,541	0.0025%	0.2500%	337,078	7.5529	23,841	0.534	360,919
2038	245,152	0.0025%	-	337,920	7.5529	23,901	0.534	361,821
2039	245,765	0.0025%	-	338,765	7.5529	23,960	0.534	362,725
2040	246,321	0.0025%	-	339,612	7.5547	24,020	0.534	363,632
2041	246,789	0.0019%	-	340,257	7.5547	24,097	0.535	364,354
2042	247,258	0.0019%	0.1900%	340,904	7.5547	24,174	0.536	365,078
2043	251,518	0.0019%	-	346,778	7.5547	24,877	0.542	371,654
2044	251,996	0.0019%	-	347,437	7.5547	24,956	0.543	372,393
2045	252,475	0.0019%	-	348,097	7.5547	25,036	0.543	373,132
2046	252,955	0.0019%	-	348,758	7.5547	25,115	0.544	373,874
2047	253,435	0.0019%	-	349,421	7.5547	25,196	0.545	374,616
2048	253,917	0.0019%	-	350,085	7.5547	25,276	0.545	375,361
2049	254,399	0.0019%	-	350,750	7.5547	25,357	0.546	376,106
2050	254,883	0.0019%	-	351,416	7.5547	25,437	0.547	376,854

**Table C**  
**Nortex Landfills - 2020 Tons Disposed - State**

Waste Type	Wichita Falls LF 1428A	Buffalo Creek LF 1571A	City of Quanah LF 9003A	Jacksboro LF 2332	Total	Percent of Total
Municipal	134,249.00	123,506.81	7.00	-	257,762.81	80.94%
Brush	-	-	-	-	-	-
Construction or Demolition	22,142.00	32,471.28	-	-	54,613.28	17.15%
Litter	-	-	-	-	-	-
Class 1 Non-hazardous	-	-	-	-	-	-
Classes 2 and 3 Non-hazardous	-	1,319.68	-	-	1,319.68	0.41%
Incinerator Ash	-	-	-	-	-	-
Treated Medical Waste	-	-	-	-	-	-
Municipal Hazardous Waste from CESQGs	-	-	-	-	-	-
Regulated Asbestos-containing Material (RACM)	-	83.02	-	-	83.02	0.03%
Non-RACM	-	129.15	-	-	129.15	0.04%
Dead Animals	-	462.54	-	-	462.54	0.15%
Sludge	-	4,088.76	-	-	4,088.76	1.28%
Grease Trap Waste	-	-	-	-	-	-
Septage	-	-	-	-	-	-
Contaminated soil	-	6.20	-	-	6.20	-
Tires (split, quartered, shredded)	-	-	-	-	-	-

Pesticides	-	-	-	-	-	-
Used Oil Filter	-	-	-	-	-	-
<b>TOTAL</b>	<b>156,391.00</b>	<b>162,067.44</b>	<b>7.00</b>	<b>-</b>	<b>318,465.44</b>	<b>100.00%</b>

**Table D**  
**Nortex Landfill / Transfer Stations / Processing Facilities**  
**2020 Tons Diverted**

Waste Type	Wichita Falls LF 1428A	Buffalo Creek LF 1571A	Seymour TS 40144	Wichita Falls TS 1429	Vernon TS 40059	IMC Liquid Waste 2229A	Total
<b>Diverted Materials - Landfills</b>							
Yard Waste or Brush	7,810.00	-	-	-	-	-	7,810.00
Metal	53.20	63.60	-	-	-	-	116.80
Tires	41.40	12.40	-	-	-	-	53.80
Other	14,000.00	-	-	-	-	-	14,000.00
<b>Total Diverted - Landfills</b>	<b>21,904.60</b>	<b>76.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21,980.60</b>
<b>Diverted Materials - Transfer Stations</b>							
Yard Waste or Brush	-	-	100.00	-	-	-	100.00
Metal	-	-	-	373.40	-	-	373.40
Glass	-	-	-	39.10	-	-	39.10
Paper/Cardboard	-	-	-	31.20	-	-	31.20
Tires	-	-	-	0.20	8.00	-	8.20
<b>Total Diverted - Transfer Stations</b>	<b>-</b>	<b>-</b>	<b>100.00</b>	<b>443.90</b>	<b>8.00</b>	<b>-</b>	<b>551.90</b>
<b>TOTAL DIVERTED</b>							<b>22,532.50</b>
Chipping/Grinding	-	-	100.00	-	-	-	100.00
Liquid Waste	-	-	-	-	-	27,528.00	27,528.00
Composting	13,925.00	-	-	-	-	-	13,925.00

**Table E  
Nortex MSW Facilities**

<b>MSW Disposal Facilities</b>		
<b>Facility</b>	<b>Permit</b>	<b>Status</b>
Wichita Falls Landfill	MSW Permit No. 1428A	Active
Buffalo Creek Landfill	MSW Permit No. 1571A	Active
Quanah Landfill	MSW Permit No. 9003A	Active
Jacksboro Landfill	MSW Permit No. 2332	New Not Operated
<b>MSW Transfer Stations / Processing Facilities</b>		
<b>Facility</b>	<b>Permit</b>	<b>Status</b>
Seymour Transfer Station	MSW Registration No. 40/44	Active
Bowie Transfer Station	MSW Permit No. 2295	Active
Wichita Falls Transfer Station	MSW Permit No. 1429	Active
Vernon Transfer Station	MSW Permit No. 40059	Active
IMC Liquid Waste Processing Facility	MSW Permit No. 2229A	Active

**Table III.A.I  
Residential Waste Generation**

Year	Growth Rate per Year	Current Population/ Population Projection	Landfill Disposal (Tons)	Disposal Rate (lbs./Person / Day)	Recycling (Tons)	Recycling Rate (lbs./Person/ Day)	Residential Waste Generation (Tons)
Current	-	231,190	318,465	7.548	22,525	0.534	340,990
2022	0.39%	233,015	320,979	7.548	22,702	0.534	343,682
2027	0.39%	237,642	327,353	7.548	23,153	0.534	350,506
2032	0.25%	241,507	332,896	7.553	23,545	0.534	356,441
2037	0.25%	244,541	337,078	7.553	23,841	0.534	360,919
2042	0.19%	247,258	340,904	7.555	24,174	0.536	365,078

Notes:

1. The current population, population projection, and growth rate per year was developed from the county population projection for 2021 - 2070 as presented in the 2021 Regional Water Plan, published by the Texas Water Development Board. Reference provided on the TWDB website at <https://www.twdb.texas.gov>.
2. The landfill disposal quantity, recycling quantity, and total residential waste generation (all in tons) was determined from existing available information for MSW FY 2020 included in the MSW Annual Report for each disposal, transfer, or processing facility.

**Table III.A.II**  
**Commercial Waste Generation**

<b>Year</b>	<b>Description of Significant Commercial Activities affecting waste generation and disposal in the area.</b>	<b>Expected increase or decrease to Commercial Waste Generation</b>
<b>2022</b>	City of Wichita Falls actively promotes the area for commercial/business growth. Not anticipated to result in significant waste generation and disposal.	None anticipated.
<b>2027</b>	City of Wichita Falls actively promotes the area for commercial/business growth. Not anticipated to result in significant waste generation and disposal.	None anticipated.
<b>2032</b>	City of Wichita Falls actively promotes the area for commercial/business growth. Not anticipated to result in significant waste generation and disposal.	None anticipated.
<b>2037</b>	City of Wichita Falls actively promotes the area for commercial/business growth. Not anticipated to result in significant waste generation and disposal.	None anticipated.
<b>2042</b>	City of Wichita Falls actively promotes the area for commercial/business growth. Not anticipated to result in significant waste generation and disposal.	None anticipated.

Notes:

1. Commercial solid waste includes solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing or industrial activities.
2. The overall Nortex region is anticipated to remain constant in terms of additional or significant commercial activities that would affect waste generation and disposal.
3. The City of Wichita Falls and the Wichita Falls Metropolitan Statistical Area (MSA) continues to actively promote the area and pursue diverse economic growth. This includes promoting the low cost of living and business friendly environment for various business support services and the health care community. The Wichita Falls Chamber of Commerce is actively recruiting new commercial and business activities for the area.
4. There is opportunity for commercial development in the Wichita Falls area to result in some commercial waste generation; however, it would not result in a significant increase across the Nortex planning area.

**Table III.A.III**  
**Industrial Waste Generation**

<b>Year</b>	<b>Description of Significant Industrial Waste Activities affecting waste generation and disposal in the area.</b>	<b>Expected increase or decrease to Industrial Waste Generation</b>
<b>2022</b>	Recent industrial growth in the Wichita Falls area is not anticipated to affect industrial waste generation and/or disposal in the area.	None anticipated.
<b>2027</b>	Recent industrial growth in the Wichita Falls area is not anticipated to affect industrial waste generation and/or disposal in the area.	None anticipated.
<b>2032</b>	Recent industrial growth in the Wichita Falls area is not anticipated to affect industrial waste generation and/or disposal in the area.	None anticipated.
<b>2037</b>	Recent industrial growth in the Wichita Falls area is not anticipated to affect industrial waste generation and/or disposal in the area.	None anticipated.
<b>2042</b>	Recent industrial growth in the Wichita Falls area is not anticipated to affect industrial waste generation and/or disposal in the area.	None anticipated.

Notes:

1. Industrial solid waste includes solid waste generated from or incidental to any process of industry or manufacturing, or mining, or agricultural operations.
2. The City of Wichita Falls and the Wichita Falls Metropolitan Statistical Area (MSA) actively promotes the area for industry and manufacturing growth. In addition, the state of Texas promotes this area of Texas for potential relocation of industries.
3. Industrial/manufacturing areas that are currently being promoted include aerospace and aviation, and diverse manufacturing plants. Recent new industries in the Wichita Falls MSA include Pamlico Air, Panda Biotech, and Vexus Fiber.
4. There has been recent new industries that have established location in the Wichita Falls area, but these are not anticipated to result in a significant change to industrial waste generation and disposal in the area.



## **Attachment III.B**

Estimates Of Current And Future Solid Waste Amounts By Type

## **Attachment III.B - Estimates of Current and Future Solid Waste Amounts by Type**

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The estimate of current municipal solid waste amounts by type was developed from the FY 2020 MSW Annual Reports available on the TCEQ website. There are two primary municipal solid waste disposal facilities located in the Nortex region; the Wichita Falls Landfill, TCEQ MSW Permit No. 1428A and the Buffalo Creek Landfill, TCEQ MSW Permit No. 1571A. The City of Quanah Landfill, TCEQ MSW Permit No. 9003A is a limited facility that accepts only waste generated within the City of Quanah from abandoned building demolition and removal projects. There is one landfill that is permitted but at this time has not opened to accept waste, the Jacksboro Landfill TCEQ MSW Permit No. 2332.

Refer to Table A for the current (FY 2020) municipal solid waste amounts by type that were generated and disposed of in the two existing landfill disposal facilities. The Buffalo Creek Landfill accepts waste imported from Oklahoma, which amounts are not included in the estimate of current municipal solid waste amounts.

The municipal solid waste amounts by type were then projected to the end of the long-range period in 5-year increments using the estimated population growth rate per year factor included in Attachment IIIA Demographics Information.

Based on the above evaluations, the Estimates of Current and Future Solid Waste Amounts table was completed. A copy of Table III.B.1 – Current and Future Solid Waste Amounts by Type is included in this attachment.

**Table A**  
2020 Tons Disposed - State

Waste Type	Wichita Falls LF 1428A	Buffalo Creek LF 1571A	City of Quanah LF 9003A	Jacksboro LF 2332	Total	Percent of Total
Municipal	134,249.00	123,506.81	7.00	-	257,762.81	80.94%
Brush	-	-	-	-	-	-
Construction or Demolition	22,142.00	32,471.28	-	-	54,613.28	17.15%
Litter	-	-	-	-	-	-
Class 1 Non-hazardous	-	-	-	-	-	-
Classes 2 and 3 Non-hazardous	-	1,319.68	-	-	1,319.68	0.41%
Incinerator Ash	-	-	-	-	-	-
Treated Medical Waste	-	-	-	-	-	-
Municipal Hazardous Waste from CESQGs	-	-	-	-	-	-
Regulated Asbestos-containing Material (RACM)	-	83.02	-	-	83.02	0.03%
Non-RACM	-	129.15	-	-	129.15	0.04%
Dead Animals	-	462.54	-	-	462.54	0.15%
Sludge	-	4,088.76	-	-	4,088.76	1.28%
Grease Trap Waste	-	-	-	-	-	-
Septage	-	-	-	-	-	-
Contaminated soil	-	6.20	-	-	6.20	-
Tires (split, quartered, shredded)	-	-	-	-	-	-
Pesticides	-	-	-	-	-	-

Used Oil Filter	-	-	-	-	-	-
<b>TOTAL</b>	<b>156,391.00</b>	<b>162,067.44</b>	<b>7.00</b>	-	<b>318,465.44</b>	<b>100.00%</b>

**Table III.B.1**  
Estimate of Current and Future Solid Waste Amounts by Type

Waste Type	# Accepting Waste Type	% Total Tons Disposed	Current Year	2021	2022	5-year Projection (tons)	10-year Projection (tons)	15-year Projection (tons)	20-year Projection (tons)
Municipal	2	80.94%	257,763	258,781	259,800	264,960	269,446	272,831	275,928
Brush	-	-	-	-	-	-	-	-	-
Construction or Demolition	2	17.15%	54,613	54,832	55,048	56,141	57,092	57,809	58,465
Litter	-	-	-	-	-	-	-	-	-
Class 1 Non-hazardous	-	-	-	-	-	-	-	-	-
Classes 2 and 3 Non-hazardous	1	0.41%	1,320	1,311	1,316	1,342	1,365	1,382	1,398
Incinerator Ash	-	-	-	-	-	-	-	-	-
Treated Medical Waste	-	-	-	-	-	-	-	-	-
Municipal Hazardous Waste from CESQGs	-	-	-	-	-	-	-	-	-
Regulated Asbestos-containing Material (RACM)	1	0.03%	83	96	96	98	100	101	102
Non-RACM	1	0.04%	129	128	128	131	133	135	136
Dead Animals	1	0.15%	463	480	481	491	499	506	511
Sludge	1	1.28%	4,089	4,092	4,109	4,190	4,261	4,315	4,364
Grease Trap Waste	-	-	-	-	-	-	-	-	-
Septage	-	-	-	-	-	-	-	-	-
Contaminated soil	1	-	6	6	6	6	6	6	6
Tires (split, quartered, shredded)	-	-	-	-	-	-	-	-	-

Pesticides	-	-	-	-	-	-	-	-	-
Used Oil Filter	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>2</b>	<b>100%</b>	<b>318,465</b>	<b>319,726</b>	<b>320,985</b>	<b>327,359</b>	<b>332,902</b>	<b>337,084</b>	<b>340,910</b>

## **Attachment III.C**

### Description of Current and Planned Solid Waste Management Activities

## **Attachment III.C.I - Description of Current Solid Waste Management Activities in the Region**

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### **Generation**

The types of waste generated and disposed in the region include municipal solid waste, special waste, and Class 2 and 3 industrial wastes. Included in these are wastes resulting from or incidental to municipal, community, commercial, institutional, and recreational activities, including putrescible wastes, rubbish, ashes, brush, construction-demolition debris, and inert materials. However, the amount of waste disposed of in the region by category is estimated; residential and commercial waste is included as municipal solid waste in estimating the amount of waste disposed in the region.

The major classifications of solid waste disposed of in the region include municipal solid waste, Class 2 and 3 industrial wastes, construction and demolition wastes, and special wastes. Special wastes disposed in the region include regulated asbestos containing material (RACM), non-regulated asbestos containing material (non-RACM), dead animals, sludge, and contaminated soil. The Buffalo Creek Landfill included a breakdown by type of waste disposed in its FY 2020 MSW Annual Report which included wastes generated outside of Texas in Oklahoma. The Wichita Falls Landfill included only the category of municipal waste in its FY 2020 MSW Annual Report and also accepted construction and demolition wastes which were included in the municipal solid waste category. In addition, liquid wastes are processed at a liquid waste processing facility located in the region.

The waste disposal rate as reported in the Municipal Solid Waste in Texas: A Year in Review – 2020 Data Summary and Analysis reported a statewide total disposal rate of 6.82 pounds per person per day. The 2020 waste disposal rate determined for the Nortex region is 7.55 pounds per person per day.

### **Source Separation**

Source separation activities within the region include the following:

#### **City of Wichita Falls**

The City of Wichita Falls conducts a “Choose to Reuse” program that diverts source separated materials including grass clippings, tree trimmings, food waste, and paper goods to its Compost Facility located at the City of Wichita Falls Landfill.

The City of Wichita Falls conducts a “Choose To Drop It” program that accepts glass, newspaper, and aluminum at multiple drop-off locations across the City. Currently the City does not accept plastics. Materials collected are sold and transported to a private material recovery facility based on market conditions. In addition, metals and appliances



are accepted at the Transfer Station and Landfill for recycling and re-use when the market allows.

### **Sheppard Air Force Base**

Sheppard Air Force Base conducts the Sheppard Recycling Program for collection of source-separated recyclable materials and sale to private material recovery facilities based on market conditions. Source-separated materials accepted include paper, cardboard, plastic containers (No. 1 & 2 only), tin, aluminum, glass, brushy waste, yard waste, scrap wood, and scrap metals.

### **Community Recycling Events**

A number of municipalities conduct community recycling events based on receiving Nortex RPC grants for conducting these programs.

## **Collection**

The City of Wichita Falls provides for municipal solid waste collection for the City of Wichita Falls and some areas within Wichita County.

Waste Connections provides for municipal solid waste collection for the remaining counties and municipalities across the Nortex region.

Liquid waste is collected by private haulers for transport to the IMC Liquid Waste Processing Facility.

## **Handling**

Handling of municipal solid waste is limited to the City of Wichita Falls Sanitation Department through its waste collections operations, operation of the Wichita Falls Landfill, and the Wichita Falls Transfer Station. Waste Connections conducts operations that include handling of municipal solid waste through its waste collections operations, operation of several transfer stations in the region, and at its Buffalo Creek Landfill. Transfer Stations in the region include the Seymour Transfer Station, Bowie Transfer Station, and Vernon Transfer Station.

Handling of liquid waste is limited to the IMC Liquid Waste Processing Facility and private liquid waste haulers.

## **Storage**

There is limited storage of municipal solid waste required across the region. Storage of municipal solid is limited to the four transfer stations, and the various citizen's collection stations located across the region.

## **Transportation**

Transportation of municipal solid waste is provided by the City of Wichita Falls Sanitation Department through its collection operations and transfer operations between the Transfer Station and the Landfill. Transportation of municipal solid waste is also provided by Waste Connections with its collection and hauling operations and transportation of waste from the three other transfer stations to the Buffalo Creek Landfill.

## **Processing**

There is one processing facility in the Nortex region, the IMC Liquid Processing Facility.

## **Resource Recovery**

There are no resource recovery activities within the Nortex region.

## **Disposal of Solid Waste**

Disposal of municipal solid waste is provided by two Type I landfill facilities.

Wichita Falls Landfill, TCEQ MSW Permit No.1428A, with a remaining waste disposal capacity of approximately 200 years.

Buffalo Creek Landfill, TCEQ MSW Permit No.1571A, with a remaining waste disposal capacity of approximately 86 years.

## **Attachment III.C.II - Description of Planned Solid Waste Management Activities in the Region**

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### **Generation**

There are no planned changes related to municipal solid waste generation in the region.

### **Source Separation**

There are no planned changes to the source separation activities in the region. As markets for recyclables change, there may be opportunity to expand the existing source separated activities currently conducted across the region with the City of Wichita Falls, Sheppard Air Force Base, or other municipalities in the region.

#### **Community Recycling Events**

There may be opportunity to expand on conducting community recycling events based on receiving Nortex RPC grants for conducting these programs.

### **Collection**

There are no planned changes in the collection activities across the region.

### **Handling**

There are no planned changes related to handling of municipal solid waste across the region.

### **Storage**

There are no planned changes in storage of municipal solid waste across the region.

### **Transportation**

There are no planned changes in the transportation of municipal solid waste across the region.

## **Processing**

There are no planned changes to the processing of municipal solid waste (liquid waste processing facility) in the region.

## **Resource Recovery**

There are no known planned resource recovery activities within the Nortex region.

## **Disposal of Solid Waste**

There are no planned changes in disposal of municipal solid waste currently conducted at the Wichita Falls Landfill or the Buffalo Creek Landfill.

There is one Type I municipal solid waste disposal, the Jacksboro Landfill, TCEQ MSW Permit No. 2232 that has not opened. This facility may open in the future increasing the disposal capacity available. At that time, waste may be imported into the Nortex region for disposal at this facility.

## **Attachment III.D**

Description and Assessment of the Adequacy of Existing Solid Waste Management Facilities & Practices and Household Hazardous Waste Programs

## **Attachment III.D - Description and Assessment of the Adequacy of Existing Solid Waste Management Facilities & Practices, and Household Hazardous Waste Programs**

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The various programs identified in Section III.D were evaluated to assess the adequacy of existing solid waste management facilities and practices, and the region's household hazardous waste programs. The following programs were evaluated and their facility and practices were determined to be adequate.

- Storage
- Transportation
- Treatment
- Disposal

The following provides a description of the municipal solid waste programs that are found to be inadequate across the Nortex region.

### **Resource Recovery**

#### **Facility Adequacy**

There are no resource recovery facilities located within the Nortex region. There are two Type I municipal solid waste disposal facilities located in the region, the Wichita Falls Landfill and the Buffalo Creek Landfill that may either be required or choose to implement an active landfill gas collection and control system in the future. At that time, either facility may consider seeking an opportunity to recover landfill gas for electric plant generation or other resource recovery option.

#### **Practices Adequacy**

As noted above there are no resource recovery facilities with the Nortex region. The Wichita Falls Landfill and Buffalo Creek Landfill are both conducting operations and practices as related to the potential for resource recovery in accordance with TCEQ rules and regulations. Should either facility implement an active landfill gas collection and control facility and seek an opportunity to recover landfill gas, future facility practices would be implemented.

## **Household Hazardous Waste Collection**

### **Facility Adequacy**

There are no permanent household hazardous waste collection programs available in the Nortex region. Past activities have included participation in annual state of Texas household hazardous waste collection events. The Nortex counties and municipalities have not initiated a household hazardous waste collection program due to its cost to conduct individual programs.

### **Practices Adequacy**

Current practice is to encourage Nortex region residents to buy and consume their household hazardous waste products. Some household hazardous waste products could be donated to charitable organizations for reuse.

## **Household Hazardous Waste Disposal**

### **Facility Adequacy**

There are no designated household hazardous waste disposal facilities in the Nortex region. Current practice is to dispose of these products in the existing Type I municipal solid waste disposal facilities, the Wichita Falls Landfill or the Buffalo Creek Landfill. There is no commercial management facility for hazardous and nonhazardous industrial waste in the Nortex region.

### **Practices Adequacy**

Household hazardous waste disposal is currently provided by the Wichita Falls Landfill and the Buffalo Creek Landfill in accordance with TCEQ rules and regulations. There are no separate household hazardous waste disposal facilities with the region.

## **Attachment III.E**

### Assessment of Current Source Reduction and Waste Minimization Efforts



## **Attachment III.E - Assessment of Current Source Reduction and Waste Minimization Efforts**

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Source reduction and waste minimization efforts in the Nortex region include source separated recycling efforts the City of Wichita Falls (“Choose to Drop It”) program and the Sheppard Air Force Base program. In addition, some of the smaller communities have conducted source separated recycling activities at drop-off locations within their communities and at citizen’s convenience stations located throughout the region. Several communities have also conducted annual recycling events sponsored by Nortex through the TCEQ Grants program. Recyclable materials diverted through these programs include paper, glass, aluminum, and metals.

The City of Wichita Falls also conducts a “Choose to Reuse” program which encourages diversion of grass clippings, tree trimmings, food waste, and paper goods to its compost facility located at the Wichita Falls Landfill. Wastewater treatment plant sludge is also accepted at the compost facility. Many of the smaller communities have yard waste and wood waste diversion programs at their citizen’s convenience station, many of which have chippers that are used to generate landscaping mulch for re-use. These chippers are also used to mulch storm debris to divert this material from landfill disposal.

The City of Wichita Falls quantifies and tracks the materials diverted for recycling or composting from disposal. Sheppard Air Force Base also tracks the materials diverted through their recycling program however, it does not appear these quantities are reported for inclusion in a regional recycling effort. There does not appear to be a requirement for the smaller communities to report the quantity of diverted materials through the citizen’s convenience centers.

Public entities, including school districts are required to develop and conduct recycling programs within their facilities, however, quantities of these recycling programs are not available to include in evaluating an overall regional effort to reuse or recycle.

Most of the private enterprise recycling collection and processing are limited to Wichita County, where population density, commercial/industrial density, and transportation infrastructure make recycling efforts more feasible. There are several private companies that collect scrap metal, cans, aluminum, copper, brass, insulated wire, stainless, alloy, and wrecked cars for recycling and diverting these materials from disposal.

The current source reduction and waste minimization efforts for the Nortex region appear to be consistent with the overall population density and geography of the region. An overall assessment of the regional impact these activities have on source reduction or waste minimization is difficult due to the lack of available information, both from private entities and the region’s local governments.

**Table III.E**  
**Current Efforts and Recycling Goals**

<p>Current Efforts to Minimize Municipal Solid Waste and to Reuse or Recycle Waste</p>	<p>Small community citizen’s convenience centers for recyclable collection and to divert yard waste and wood waste</p> <p>Small community recycling events conducted periodically</p> <p>City of Wichita Falls source-separated recycling program and collection of recyclables at the landfill and transfer station</p> <p>City of Wichita Falls diverting waste materials to composting program including yard waste, wood wastes, sludge, and other acceptable waste materials to generate mulch and composted materials for re-use</p> <p>Sheppard Air Force Base conducts on-base recyclable collection program</p> <p>Public entities, including public schools and universities, conduct recycling and purchasing programs as applicable</p> <p>Commercial and industrial facilities conduct recycling programs as applicable</p>
<p>Recycling Rate Goal for the Region</p>	<p>The Regional Solid Waste Management Plan (2002-2022) stated goal is to attempt and maintain a 40% waste reduction / recycling goal by the year 2015 which was not achieved</p> <p>The population and geographic conditions of the Nortex planning area contribute to difficult conditions to achieve the stated recycling goal</p> <p>Other than the Wichita Falls area, achieving consistent recycling programs is difficult</p> <p>There is not a consistent system that allows an accurate accounting of recycling rate for local governments, commercial, or industrial concerns</p> <p>An attempt to reach the 40% waste / reduction goal should remain</p>

## **Attachment III.F**

Additional Opportunities for Source Reduction, Waste Minimization,  
and Reuse or Recycling Waste

## Attachment III.F - Additional Opportunities for Source Reduction, Waste Minimization, and Reuse or Recycling Waste

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The demographic and geographic makeup of the Nortex region make it difficult to identify new or additional opportunities for source reduction and waste minimization, and reuse or recycling of waste. The City of Wichita Falls, surrounding urban areas in the Wichita Falls MSA, including Sheppard Air Force Base have established urban area recycling and have the most opportunity to increase waste diversion quantities. Several of the smaller rural communities have existing citizen's convenience centers that potentially could be developed to provide as a recyclables collection location. In addition, existing transfer stations in Seymour, Vernon, and Bowie could also serve as a recyclables collection location. A primary obstacle is the cost for transportation of recyclable materials collected and a reliable market to purchase these materials. A basic need for the area is a program that provides for understanding the quantities of the materials diverted from disposal and a regional program to provide a more accurate percentage of recycling within the Nortex region.

Category of Activity	Opportunity Name	Brief Description
Reuse or Recycling of Waste	Urban Area Recycling	Continued source separation of recyclables at City of Wichita Falls/Wichita Falls MSA/Sheppard AFB. Add recyclable materials as applicable.
Reuse or Recycling of Waste	Small Rural Community Recycling	Small rural community source separated recycling programs to collect recyclables at existing citizen's convenience centers.
Reuse or Recycling of Waste	Public Entity Recycling	Expand public entity (governments/public school districts) recycling and recyclable material purchase programs
Reuse or Recycling of Waste	Private Entity Recycling	Expand private entity (commercial businesses/offices/industry) participation in recycling and recyclable material purchase programs.
Source Reduction and Waste Minimization	Small Rural community wood waste chipping	Expand use of wood chippers for landscaping mulch and compost programs.
Source Reduction / Recycling of Waste	Regional Recycling Goal	Develop a program to quantify waste diversion / recycling rate for region.
Reuse or Recycling of Waste	Reusable Materials Plan	Expand public and private entities to develop a reusable materials plan for reuse of C&D waste and inert materials.

Source Reduction / Recycling of Waste	Public Education	Assist with developing public education programs to support increasing waste diversion / recycling rate for region.
Reuse or Recycling of Waste	Recycling Market Development Plan	Support and participate at regional level with statewide RMDP

## **Attachment III.G**

Recommendations for Encouraging and Achieving a Greater Degree  
of Source Reduction and Waste Minimization and Reuse or Recycling  
of Waste

## **Attachment III.G - Recommendations for Encouraging and Achieving a Greater Degree of Source Reduction and Waste Minimization and Reuse or Recycling of Waste**

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The regional area's previous goals in general were developed to ensure adequate disposal capacity, establish attainable recycling goals, and to address solutions related to household hazardous waste, illegal dumping, and disposal of tires. The following provides a review and assessment of the regional area's previous goals.

### **Goal 1: Identify solid waste management needs for the region and develop a cohesive solid waste management organization.**

This was achieved through the organization of a Solid Waste Advisory Committee and development of a Grant's Funding Plan that directed grant funding to member cities over the past 20 years to assist with programs directed at reducing illegal dumping and waste minimization.

### **Goal 2: Promote Source Reduction and Waste Minimization**

The Nortex region implemented its Grant's Funding Program to assist member cities with funds to purchase wood chippers for Landscape mulch and diverting wood waste to the City of Wichita Falls composting program and development of citizen's convenience centers to provide access to rural area and smaller communities to also reduce illegal dumping. In addition, grant funding was also made available for community wide recycling events.

### **Goal 3: Market Development**

This goal was not achieved at the regional level and is more appropriate to be addressed at the state level.

### **Goal 4: Establish Attainable Recycling Goals for Nortex Region and Develop programs for the effective use of existing and proposed solid waste facilities.**

This goal included an objective to encourage entities to conduct waste stream sampling to determine recyclable components. This objective was not realistic as it relates to member cities conducting waste stream sampling which is not cost effective. A recycling goal for the Nortex region was established to achieve a 40% reduction rate by 2015. This was not achieved. The actual waste reduction rate is difficult to determine based on limited waste reduction activities and lack of adequate information from member cities, commercial and industrial facilities. The goal also included establishing public education programs with the region to promote the purchase of recycled goods for office use, information on this suggested program is not known.

**Goal 5: Develop programs for the effective use of existing and proposed solid waste facilities.**

The Nortex region effectively uses the existing solid waste facilities for collection, transfer, and disposal of municipal solid waste. Several smaller communities established citizen’s convenience station for the collection of municipal solid waste and were used for diversion of wood waste from disposal. The Nortex RPC is supportive of the existing approach to regional solid waste management facilities.

**Goal 6: Develop a Household Hazardous Waste Management Program.**

This goal was not achieved.

**Goal 7: Develop programs to provide solutions to other solid waste problems, such as illegal dumping.**

The support to smaller communities through the Nortex Grant Funding program provided opportunities for establishment of citizen’s convenience centers which have reduced illegal dumping across the region.

**Goal 8: Provide tire recycling center for region in strategic locations.**

This goal was not achieved.

The following provides recommendations for encouraging and achieving a greater degree of source reduction and waste minimization, and reuse or recycling of waste across the region.

**Table III.G.I**  
**Recommendations for Greater Source Reduction and Waste Minimizations, and Reuse or Recycling of Waste**

Identify recyclable materials markets to provide for cost effective delivery and purchase of recyclables collected in the Nortex region.
Develop a regional program to collect and maintain the quantities of recyclable materials and other wastes diverted from landfill disposal to allow a more accurate determination of the Nortex regions waste diversion percentage.
Develop a public education program to re-emphasize to the public the importance of source reduction and waste minimization, and waste reuse or recycling.
Provide continued support to smaller communities use of citizen’s convenience centers and recycling events.
Establish an attainable and realistic waste reduction / recycling goal for the region.
Expand reusable materials plan for reuse of construction and demolition debris and inert materials in local public works and private facility construction.



## **Attachment III.H**

Identification of Public and Private Management Agencies and  
Responsibilities

## **Attachment III.H - Identification of Public and Private Management Agencies and Responsibilities**

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The Texas Solid Waste Disposal Act authorizes the regional Council of Governments to serve as the regional planning agency for development and implementation of regional solid waste management plans. Further, the Texas Solid Waste Disposal Act states that all cities and county governments have the responsibility of providing solid waste removal or having a contract with an outside or private entity.

There are two existing municipal solid waste disposal facilities within the Nortex planning area, the City of Wichita Falls Landfill which is owned and operated by the City of Wichita Falls and the Buffalo Creek Landfill which is owned and operated by Waste Connections. In addition, there is one permitted municipal solid waste disposal facility, the Jacksboro Landfill which is owned by Waste Connections which has not opened. There are several municipal solid waste transfer stations and one processing facility within the Nortex planning area. The majority of the smaller communities within the area contract with Waste Connections for collection and transportation of waste to a municipal solid waste disposal facility within the area. Some of these smaller rural communities have existing citizen's convenience centers for public drop-off of waste.

The Federal and State agencies with responsibilities related to solid waste management include the following:

### **Federal Agencies**

- Environmental Protection Agency  
Regulation development and enforcement

### **Texas State Agencies**

- Texas Commission on Environmental Quality  
Solid waste regulatory agency responsible for solid waste management, water and air quality including permitting, enforcement, plan development, grant funding, and policy

### **Regional Agencies**

- Nortex Regional Planning Commission  
Development and Implementation of Regional Solid Waste Plans and distribution of Solid Waste Grants

## **Local Governments and Agencies**

- **City Governments**  
Responsibility of providing solid waste removal or having a contract with private entity
- **County Governments**  
Responsibility of providing solid waste removal or having a contract with private entity

## **Private Entities**

- **Waste Connections**  
Waste collection, transportation and disposal
- **IMC Liquid Waste Processing**  
Processing of liquid waste

## **Sheppard Air Force Base**

- **Sheppard Air Force Base Environmental Division**  
Provides solid waste removal or having a contract with private entity

## **Attachment III.I**

Identification of Solid Waste Management Concerns and  
Establishment of Priorities for Addressing those Concerns

## **Attachment III.I - Identification of Solid Waste Management Concerns and Establishment of Priorities for Addressing those Concerns**

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The following is a summary of the concerns and priorities for the Nortex region.

### **Waste Minimization / Diversion Rate**

The region does not appear to be achieving the 40% waste reduction goal. Nortex's local governments and private sector waste generators should, whenever economically feasible, consider increasing their efforts to minimize waste through recycling, composting and source reduction.

Priorities for addressing this problem or need:

- The region should establish a system for local governments and for the private sector that will quantify the amount of waste that is diverted from landfill disposal. There is no system currently in place, evaluating a current waste reduction rate is not feasible.
- The region should continue to support local and shared programs designed to reduce waste through recycling or composting.
- The region should use an educational approach to encourage local governments and residents to employ source reduction options.
- The region should attempt to achieve and maintain a 40% waste reduction rate.

### **Recycling Programs – Public and Private Businesses**

Many of the Nortex region's local units of government (counties, cities, schools, and universities) and private business maintain in-house recycling programs where feasible. Many of these governmental entities should also give preference to products made of recycled materials when making routine purchases where feasible. More efforts should be made to encourage and facilitate the region's local governments and private businesses active participation with in-house recycling programs and preference purchasing.

Priorities for addressing this problem or need:

- The region should use an educational approach to remind and encourage local governments and residents to employ recycling programs.
- The region should encourage public / private partnerships to identify and develop recyclables markets.
- The region should encourage more governmental entities to implement in-house recycling programs.

- The region should continue to encourage use of citizen’s convenience centers and expand to include recyclable material drop-offs.
- The region should consider the possibility of implementing a cooperative purchasing program as a means of promoting the purchase of recycled content products.

## **Marketing and Transportation of Recyclables**

Continued consolidation and marketing of recyclables will help to overcome the distance barriers in the region and increase the feasibility of recycling in the region.

Priorities for addressing this problem or need:

- The region should develop a Regional Marketing & Transportation System to market and transport the recyclable commodities being generated by the region’s local governments.
- The region should continue to encourage local governments to work together to support shared recycling endeavors.
- The region should evaluate and participate in the Recycling Market Development Plan recently issued by TCEQ to identify recyclable markets.

## **Scrap Tire Management**

Illegal disposal of tires continues to be an issue in the region. Recycling opportunities and cost-effective and safe opportunities to shred, split or quarter tires, as well as educational initiatives, are needed to increase the proper disposal, or ideally, recycling of scrap tires.

Priorities for addressing this problem or need:

- The region should increase its efforts to educate the public on the illegality of improperly disposing of scrap tires.
- The region should consider undertaking a shared program that will facilitate the proper disposal of scrap tires.
- The region should consider additional enforcement on illegal dumping of tires.

## **Waste Handling**

Local governments need to ensure there is reasonable access to collection services within their jurisdictions (either publicly or privately provided) as a means of controlling unauthorized burning and improper disposal. The majority of smaller rural communities contract with Waste Connections for waste collection and disposal.

Priorities for addressing this problem or need:

- Local governments should continue to encourage their residents to take advantage of private sector collection services when those services are not being provided by the local government.
- Local governments should continue the use of citizens' convenience centers as a means of making waste collection more accessible to their residents.

## **Illegal Dumping and Littering**

Illegal dumping and littering continue to be of concern across the region. Efforts should continue to be made to control the problem.

Priorities for addressing the problem or need:

- Public education should be used to make residents aware of the social and environmental consequences associated with illegal dumping and littering.
- Local governments should consider undertaking law enforcement measures to control illegal dumping and littering within their jurisdictions.
- Citizen's convenience centers should continue to be used and enhanced to provide waste drop-off locations for rural areas.

## **HHW Management**

Currently, there are no programs or facilities in place to ensure the proper disposal of the household hazardous wastes being generated in the region.

Priorities for addressing this problem or need:

- The region should educate the public on the proper personal management of HHW so that the waste can be reduced at its source.
- When economically feasible, local governments should consider the possibility of working together to cooperatively implement periodic or permanent programs for the proper management of HHW Wastes.
- When economically feasible, individual local governments should consider the possibility of implementing a periodic or permanent program for the proper management of HHW wastes.

## **Disposal**

Continued long-term disposal capacity needs to be ensured for all waste generators in the region.

Priorities for addressing this problem or need:

- Landfill operators in the region should monitor their annual disposal rates to determine when the state permitting process should be initiated.

- To the extent possible, landfill operators in the region should use an integrated waste management system to extend the life of their facility.

Refer to Table III.I.I Solid Waste Management Concerns and Priorities for a summary of the regional concerns and priorities.



**Table III.I.1**  
**Solid Waste Management Concerns and Priorities**

Solid Waste Management Concern	Priorities to Address the Concern
Waste Minimization – Diversion Rate	Establish a system to account for current waste minimization / diversion / recycling rate at public and private facilities / entities
Recycling Programs	Increase waste diversion / recycling efforts across region
Markets & Transportation of Recyclables	Identify recyclables markets and support a shared approach
Scrap Tire Management	Identify scrap tire management facilities and develop regional collection transportation program
Waste Handling	Continue to support the use of citizen’s convenience stations across the region to provide accessible waste collection options
Illegal Dumping and Littering	Continue to support the use of citizen’s convenience stations across the region and develop and implement public education program on illegal dumping and littering
HMW Management	Develop and implement public education program on proper management of household hazardous waste
Adequate Disposal Capacity	Evaluate waste disposal capacity in 5-year increments to determine need for additional facilities

## **Attachment III.J**

Planning Areas and Agencies with Common Solid Waste Management  
Concerns that could be addressed through Joint Action

## **Attachment III.J - Planning Areas and Agencies with Common Solid Waste Management Concerns that could be addressed through Joint Action**

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The following table identifies the planning areas and agencies with common solid waste management concerns. The solid waste management concerns are identified in Attachment III.I. The planning areas and agencies that could address these concerns through joint action are also identified. It should be noted that these public and private entities currently work together across the region.

**Table III.J.I**  
**Planning Areas and Agencies**  
**with Common Solid Waste Management Concerns**

<b>Solid Waste Management Concern</b>	<b>Names of Planning Areas and Agencies that Could Address the Concern via Joint Action(s)</b>
Waste Minimization / Diversion Rate	Nortex RPC / Local Governments / Private Business
Recycling Programs	Nortex RPC / Local Governments / School Districts / Private Business
Marketing and Transportation of Recyclables	Nortex RPC / TCEQ / Public and Private Haulers
Scrap Tire Management	Nortex RPC / TCEQ
Waste Handling	Local Governments / Public and Private Haulers / Public and Private Facilities
Illegal Dumping and Littering	Nortex RPC / Local Governments
HHW Management	Nortex RPC / TCEQ / Local Governments
Adequate Disposal Capacity	Public and Private disposal facilities (Wichita Falls Landfill / Buffalo Creek Landfill)

## **Attachment III.K**

Identification of Incentives and Barriers for Source Reduction and  
Waste Minimization and Source Recovery

## Attachment III.K - Identification of Incentives and Barriers for Source Reduction and Waste Minimization and Source Recovery

The following table identifies the incentives and barriers for source reduction and waste minimizations, and resource recovery. Also identified are potential markets that support source reduction and waste minimization, and resource recovery.

**Table III.K.I**  
Incentives and Barriers for  
Source Reduction and Waste Minimization, and Resource Recovery

<b>Source Reduction and Waste Minimization</b>	
Identify incentives for source reduction and waste minimization	Reduce quantity and types of waste disposed, extending landfill site life. Financial savings may be achieved by Local Government with reusable material programs for inert materials. Generate landscaping mulch or compost for local use / sale.
Identify barriers to source reduction and waste minimization	Significant landfill disposal capacity available in the region. Significant costs associated with collection and transportation of recyclable materials to end use market. Lack of recyclable markets in proximity to region.
<b>Resource Recovery</b>	
Identify incentives for resource recovery	Reducing quantity of landfill gas released to atmosphere, reducing the NMOC emission rates for the disposal facilities. Potential revenue generation for landfill disposal facilities operating a resource recovery facility to convert landfill gas to electric or gas generation.
Identify barriers to resource recovery	Significant cost associated with installation of an active landfill gas collection and control facility. Private or public enterprise to use energy generated from a landfill gas to energy facility.
<b>Potential Markets</b>	
Energy Market	Landfill gas to energy market.
Reuse of Materials	Reusable materials market for local streets, roadways, drainage facilities.
Recycling Materials	Marketing of recyclable materials.

Reuse of Materials

Landscaping mulch and compost for use by landscape contractors and the public.

## **Attachment III.L**

### Regional Goals and Objectives

## Attachment III.L - Regional Goals and Objectives

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The Nortex Regional Goals and Objectives are included in the table below. These goals and objectives match the goals and objectives provided in Volume I. In addition, a timetable for achieving each goal and objective is identified using the established planning periods:

<p><b>Goal #1</b> Measure regional waste reduction efforts (short-range)</p>	<p><b>Objective 1.A.</b> Encourage smaller communities and rural areas to maintain and increase where possible efforts related to waste reduction and recycling and encourage tracking waste reduction and recycling quantities on an annual basis.</p> <p><b>Objective 1.B.</b> Encourage public entities, including school districts and Sheppard Air Force Base, to track and report waste reduction and recycling quantities on an annual basis.</p> <p><b>Additional Objectives</b></p> <p><b>Objective 1.C.</b> Encourage commercial and industrial private enterprise to provide information regarding waste reduction and recycling efforts.</p> <p><b>Objective 1.D.</b> Research recyclables market to identify end use for recyclables.</p> <p><b>Objective 1.E.</b> Establish attainable and realistic recycling goals for the region.</p>
<p><b>Goal #2</b> Promote waste minimization, waste reduction, recycling and composting programs (intermediate)</p>	<p><b>Objective 2.A.</b> Encourage smaller communities and rural areas to participate in waste reduction and recycling efforts through the use of existing citizens' convenience centers and recycling drop-off events.</p> <p><b>Objective 2.B</b> Encourage smaller communities and rural areas to divert yard waste, brushy waste, and other wood waste to citizens' convenience centers for chipping/mulching. Encourage re-use of wood chips/mulch within communities or divert material to composting programs within the area, including the Wichita Falls Landfill.</p> <p><b>Additional Objective</b></p> <p><b>Objective 2.C</b> Encourage source-separated recycling efforts conducted by City of Wichita Falls.</p>
<p><b>Goal #3</b> Maintain adequate levels of transportation and disposal capacities throughout the region (intermediate)</p>	<p><b>Objective 3.A.</b> Encourage public/private partnerships for collections, transportation, and disposal throughout the region.</p> <p><b>Objective 3.B.</b> Evaluate remaining disposal capacity at existing municipal disposal facilities and confirm adequate remaining capacity available.</p> <p><b>Additional Objectives</b></p>



	<p><b>Objective 3.C.</b> Encourage MSW disposal facilities to divert recyclable and re-usable materials from waste disposal. Consider implementing re-useable material plan for construction type wastes as applicable.</p> <p><b>Objective 3.D.</b> Encourage use of small community and rural citizens' convenience centers to control and stem illegal dumping.</p> <p><b>Objective 3.E.</b> Maintain process to evaluate if proposed MSW applications will be in compliance with the regional solid waste plan.</p>
<p><b>Goal #4:</b> Support and encourage new municipal solid waste programs to address ongoing municipal solid waste regional systems improvement (long-range)</p>	<p><b>Objective 4.A.</b> Evaluate options that provide solutions to removing household hazardous waste from waste disposal stream.</p> <p><b>Objective 4.B.</b> Evaluate options that provide solutions to address improper tire disposal.</p>

## **Attachment M**

Advantages and Disadvantages of Alternative Actions

## **Attachment III.M - Advantages and Disadvantages of Alternative Actions**

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There are no alternative actions proposed for the Nortex Regional Solid Waste Implementation Plan.

## **Attachment III.N**

Recommendation Plan of Action and Timetable for Achieving Specific Goals and Objectives

## Attachment III.N - Recommendation Plan of Action and Timetable for Achieving Specific Goals and Objectives

The following table identifies the plan of action and milestone dates for the goals and objectives as identified in Section III.N. It is anticipated that the items identified as a “plan of action” may be pursued as individual projects through the Nortex RPC Solid Waste Grants Funding Program funded through the TCEQ disposal fee program. Attached is the Nortex RPC Grants Funding Plan which identifies its project selection process and describes the grant agreements and requirements between the Nortex RPC and recipients.

**Table III.N.I**

### Plan of Action Timetable for Achieving Specific Goals and Objectives

Goal/Objective	Plan of Action	Milestone Dates
Waste Reduction	Establish system to determine waste reduction rate at public and private facilities	Short Term
	Identify regional recyclable markets	Short Term
	Identify additional recyclable materials that could be collected through citizen’s convenience centers	Short Term
	Identify construction/demolition materials that could be re-used	Short Term
Composting Programs for Yard Wastes and Related Organic Wastes	Support expansion of the City of Wichita Falls composting program	Short Term
	Support collection of wood waste and other wastes from citizen’s convenience centers for transport to City of Wichita Falls composting program	Short Term
	Adopt Don’t Bag It Program for entire region	Short Term
Household Hazardous Waste Collection and Disposal Programs	Determine need for HHW collection programs	Mid Term
	Develop HHW collection and disposal public education program	Short Term
Public Education Programs	Importance of determining materials and amounts of materials diverted from landfill disposal	Short Term
	Identification of recyclable materials for public	Short Term
	Waste reduction efforts / buying recyclable materials	Short Term
	HHW collection and disposal program	Mid Term
	Evaluate need for expansion of disposal facilities	Long Term

The Need for New or Expanded Facilities and Practices	Evaluate need for expanded collection of recyclables	Short Term
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## GRANTS FUNDING PLAN

The following information will dictate how these grant funds will be allocated for the Nortex RPC region. It is important to note that in accordance with Section 361.014(b) of the Texas Health & Safety Code, a project or service funded under this program must promote cooperation between public and private entities and may not be otherwise readily available or create a competitive advantage over a private industry that provides recycling or solid waste services.

In accordance with Section 361.014(b) of the Texas Health & Safety Code, the grant funds are authorized for use by local governments and regional planning commissions. These guidelines and criteria are subject to change at the direction and agreement of the SWAC. Accordingly, the following types of entities located in Texas are eligible to receive grant funding:

- Cities
- Counties
- Public schools and school districts (not including universities or post-secondary education institutions)
- Other general and special law districts with the authority and responsibility for water quality protection or MSW management, to include river authorities; and
- Councils of Governments

### Project Selection Process

#### How Proposals Will Be Considered

Proposals will be reviewed by the Solid Waste Advisory Committee of the Nortex RPC, using screening and selection criteria developed in cooperation with the TCEQ. The committee consists of representatives of various interests involved in solid waste management in the region, according to TCEQ guidelines.

**Screening Criteria.** In order for any proposed project to be considered, the following screening criteria must be met. If these screening criteria are not met, the proposed project will receive no further consideration for grant funding.

1. The application must be complete and all application requirements and procedures followed, including requirements to notify private service providers of the proposed project, when applicable.
2. The proposed project must conform to eligible category standards, eligible recipient standards, and allowable expense and funding standards, as established by the TCEQ and the Nortex RPC and under all applicable laws and regulations.
3. The applicant must agree to document the results of the project as required by Nortex.

4. The proposed project must be technically feasible, and there must be a reasonable expectation that the project can be satisfactorily completed within the required time frames.
5. The proposed project activities and expenses must be reasonable and necessary to accomplish the goals and objectives of the project. One factor in determining reasonableness of expenses shall be whether comparable costs are proposed for comparable goods and services.
6. The proposed project must be consistent with applicable goals, objectives, and recommendations of the adopted regional solid waste management plan.

**Selection Criteria.** If a proposed project meets all of the applicable screening criteria, it will be evaluated by the Solid Waste Advisory Committee of the Nortex RPC, using the following selection criteria. There are four sets of selection criteria, each worth up to 25 points, for a possible total score of 100 points.

A. PROJECT DESCRIPTION (25 Points)

- Is there an adequate explanation as to why the proposed project is needed?
- Is the overall goal or objective of the proposed project clearly stated?
- Is there an estimate of the number of people who would be served or benefited by the proposed project?
- Is the geographic area affected by the proposed project clearly described?
- Is the specific waste stream targeted by the project identified?
- Does the project include adequate levels of customer incentives, public education, or public input, as appropriate to the particular project?
- Are all aspects of the proposed project described in sufficient detail to ensure its overall feasibility or workability? If the proposed project includes equipment, has the applicant shown that the specified equipment is appropriate for the work to be performed?
- Are the expected benefits of the proposed project adequately described?

B. WORK PROGRAM (25 Points)

- Are all of the major steps or tasks involved in the proposed project clearly presented and adequately described?
- Are responsible entities for accomplishing each step or task identified?
- Is each step or task described in terms of its effect on the total project budget?
- Is a specific timeframe for completing each step or task provided?

C. PROJECT COST EVALUATION (25 Points)

- Are the total related costs of the proposed project (not just grant expenditures) adequately considered?
- Are the costs of the proposed project presented in unit terms, such as cost per ton, cost per customer, or cost per capita, as applicable?
- Are the costs of the proposed project compared to any established averages, or to normal costs for similar projects?



- Will the proposed project result in a measurable cost savings, or are the costs of the proposed project otherwise reasonably justified?

D. LEVEL OF COMMITMENT OF THE APPLICANT (25 Points)

- Is the applicant providing any level of matching funds or in-kind services?
- To what extent is the applicant requesting funding for salaries or operational expenses?
- If an ongoing service is proposed, to what extent has the applicant demonstrated ability to sustain the program beyond the term of the grant?
- To what extent do the appropriate governing bodies support the proposed project? Are formal resolutions of support attached?
- Has the applicant previously demonstrated a commitment to preferred solid waste management practices, such as implementing other solid waste management projects, being involved in a local or subregional solid waste management plan or study?
- If the proposed project has received previous grant funding under this program, to what extent does the proposal involve expansion of current services or operations? Has the applicant presented quantifiable documentation of the success of the project in order to warrant further funding? Does the applicant have a good record of past grant contractual performance?

**Grant Agreements**

Grant recipients will be required to enter into standard legal agreements with the Nortex RPC, to ensure that the approved work program of the project is followed. Among other provisions, the legal agreements will include the following:

- Grant funding will be provided on a reimbursement basis only, and all requests for reimbursement must be handled through the Nortex RPC.
- Grant recipients must agree to provide data related to the results of the project to the Nortex COG and/or TCEQ. As appropriate to the project, the grant recipient will also be asked to commit to monitoring the results of the project beyond the grant term, and periodically provide the Nortex RPC and/or TCEQ additional reports on the status of the project.
- Grant recipients must agree to allow staff of the Nortex RPC and/or TCEQ to perform on-site visits to monitor the progress of projects.

## **Attachment III.O**

Identification of Process to Evaluate if a Proposed Municipal Solid  
Waste Facility Application will be in Conformance with  
The Regional Plan

## **Attachment III.O - Identification of Process to Evaluate if a Proposed Municipal Solid Waste Facility Application will be in Conformance with The Regional Plan**

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The process to evaluate if a proposed municipal solid waste facility will be in conformance with the Nortex Regional Solid Waste Management Plan will be consistent with 30 TAC §330.643(a)(3)(O) which requires the identification process used to evaluate whether a proposed municipal solid waste facility will be in conformance with the plan and is consistent with 30 TAC §330.61(p), which states that the owner or operator shall document that Parts I and II of the application were submitted for review to the applicable council of governments for compliance with regional solid waste plans. This process is not a regulatory technical review of the application, that Nortex Regional Planning Commission does not approve or deny permits, and that approving MSW permit applications is the responsibility of TCEQ. A review letter is not a prerequisite to final determination on a permit or registration application.

### **Evaluation Process**

1. The Solid Waste Advisory Committee (SWAC) shall receive Parts I and II of a permit or registration application as submitted by an owner or operator (applicant) on a proposed municipal solid waste facility in the Nortex planning area.
2. The applicant shall notify the SWAC of the proposed permit or registration application and request a conformance review of the proposed permit or registration application. The owner or operator shall include the following information with the conformance review request:
  - a. Applicant's contact information
  - b. Facility location
  - c. Permit or registration proposed as a new facility or amendment
  - d. Type of facility
  - e. Types of waste to be accepted
  - f. Summary of information included as required in 30 TAC §330.59, Part I – Site and Applicant Information and 30 TAC §330.61 , Part II – Existing Conditions and Character of the Site and Surrounding Area
  - g. Conformance with the Nortex Regional Solid Waste Management Plan and its Goals and Objectives
3. The SWAC will review the submitted information and schedule a presentation by the applicant of the proposed permit or registration application.

4. The SWAC will discuss the application and provide the applicant an opportunity to respond to any questions the SWAC may have on the application.
5. The SWAC will vote and make recommendations to the Nortex Executive Board on the proposed facility's conformance to the Nortex Regional Solid Waste Management Plan.
6. The Executive Committee will vote to approve the SWAC recommendation. A letter stating the Nortex Executive Committee's final conformance determination will be submitted to the Texas Commission on Environmental Quality and a copy will be sent to the applicant.

## **Section IV**

### Required Approvals



**Attachment IV.B**

Public Notice, Agenda, Public Comments, and Transcript  
of the Required Public Meeting

## **Attachment IV.B - Public Notice, Agenda, Public Comments, and Transcript of the Required Public Meeting**

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**<include if applicable>**