



# WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS

# **Regional Solid Waste Management Plan**

# 2022-2042 Planning Period

DRAFT SUBMITTED TO WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS FOR BOARD APPROVAL.

**SUBMITTAL DATE: 11/3/2021** 

#### ADOPTION RESOLUTION

A RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS ADOPTING THE REGIONAL SOLID WASTE MANAGEMENT PLAN 2022/2042.

WHEREAS, the Texas Commission on Environmental Quality (TCEQ) has set forth guidelines regarding the writing of a Regional Solid Waste Management Plan (RSWMP); and

WHEREAS, the West Central Texas Council of Governments (WCTCOG) has been designated by the state as the regional planning agency for a nineteen county region; and

WHEREAS, members of the WCTCOG Natural Resources Committee, representing the governmental, private, and civic sectors of each county in the area, were chosen to assist in the development of the plan; and

WHEREAS, public participation and education during the planning process included committee meetings that were open to the public and a public hearing held prior to the adoption of this plan; and

WHEREAS, the attached RSWMP has been writing to support the State Solid Waste Management Plan and it includes a compilation of planning data including the regional description, current solid waste management system, system evaluation, needs assessment, and evaluation of alternatives; and

WHEREAS, the purpose of the plan is to provide guidance regarding solid waste management within the region, including waste reduction, recycling, and disposal for the period 2022-2042, and any local plans and solid waste initiatives that may be developed in the area will be required to conform to this regional plan:

NOW, THEREFORE, BE IT RESOLVED by the Executive Committee of the West Central Texas Council of Governments that the Regional Solid Waste Management Plan 2022-2042 attached be and the same is hereby adopted as the Regional Solid Waste Management Plan 2022-2042 of the West Central Texas Council of Governments on the date of this Resolution.

DULY ADOPTED this the 3rd day of November 2021.

Attest:

Honorable Downing Bolls, President West Central Texas Council of Governments

Honorable Dale Spurgin, Secretary/ Treasurer West General Texas Council of Governments

TCEQ-20880a (09-22-2020)

Form developed by the TCEQ in coordination with the Texas Association of Regional Councils

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2022-2042 Planning Period

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#### **EXECUTIVE SUMMARY**

In accordance with the Texas Health and Safety Code 363, Subchapter D and Texas Administrative Code Chapter 330, Subchapter O, the enclosed report serves as the West Central Texas Council of Governments (WCTCOG) Regional Solid Waste Management Plan. The original plan, adopted by WCTCOG Board of Directors in the fall of 1992, has been updated and amended periodically since its creation. This plan is an update to the previously approved plan from September of 2002.

This plan update details the region's current and planned municipal solid waste (MSW) management procedures, objectives and goals, recommendations, and strategies for achieving goals through the planning period of years 2022 to 2042. The plan update follows TCEQ guidance using the Regional Solid Waste Management Plan Volume I and Volume II forms, revised September 22, 2020, and the plan is divided into four sections;

- Geographic Scope,
- Planning Periods,
- Plan Content,
- Required Approvals.

To aid in gaining accurate and current data for use in this plan, an MSW survey was prepared and submitted to all public and private solid waste generators, collection organizations, and landfills within the WCTCOG region. The survey aimed to gather MSW operations and practices, waste hauler and landfill information, and recycling and scrap operations data. Additional plan data and information were obtained through various sources, which included TCEQ's Municipal Solid Waste in Texas: A Year in Review 2019, Data Summary and Analysis, direct questionnaires, and recent TCEQ annual solid waste reports.

Following the receipt of MSW surveys and data collection, the WCTCOG NRC Advisory Committee discussed the region's results, reviewed plan drafts and revisions, and approved the plan for distribution. The dates of the WCTCOG NRAC during plan development were: April 22, 2021; July 22, 2021; and October 21, 2021. Two public

hearings were conducted on July 22, 2021 and October 21, 2021, to present the plan to the general public and solicit comments for inclusion in the report. The plan was formally adopted by the WCTCOG Board of Directors on November 3, 2021.

Through the planning process, the NRAC and WCTCOG developed a series of regional goals and objectives for the plan. Regional goals and objectives are periodically reviewed and evaluated for effectiveness and sustainability during the planning period. The following are the regional objectives for the full planning period years between the years 2022 and 2042:

- Regionally assure adequate levels of transportation and disposal capabilities
- Develop local source reduction, waste minimization, reuse, recycling, and composting programs to conserve disposal capacity and resources
- Develop programs to assist regional and local entities in controlling and stemming illegal and improper disposal practices
- Develop regional cost-effective, efficient, and environmental suitable solid waste management systems

Volume I Section I outlines the geographic scope of the region, Section II details the regions goals, waste minimization and recycling efforts, and the commitment to the management of MSW facilities, and Section III demonstrates the plan's approval. Volume II and Sections I and II of the plan outline the geographic scope of the region and establish the short, intermediate, and long-range planning period for the full plan between 2022 to 2042. Section III outlines various subsections detailing the status and adequacy of waste management activities as well as recommendations, incentives, and barriers to achieve waste minimization, and reuse, recycling and resource recovery. Section IV includes the plan's approval by the general public, NRAC, and the WCTCOG executive board.

### **ACKNOWLEDGEMENTS**

This Regional Solid Waste Management Plan was funded through grant monies provided by the Texas Commission on Environmental Quality (TCEQ), distributed by the West Central Texas Council of Governments (WCTCOG).

Archer Municipal Consulting was selected to develop this plan on behalf of WCTCOG. Archer Municipal Consulting wishes to acknowledge and thank all the parties involved in developing and planning this regional solid waste management plan. The following are key organizations and participants involved:

#### **West Central Texas Council of Governments**

Tom Smith, Executive Director
P.J. Sumner, Regional Services Coordinator
Doug Burks, <u>my911shop.com</u> Manager

#### **Natural Resources Advisory Committee**

Darwin Archer Kelly Andrus Mike Perez Jim Winward Merle Taylor

#### **Natural Resources Committee**

Comprised of Representative members from the nineteen (19) county West Central Texas Council of Governments region.



# Volume I

# Regional Solid Waste Management Plan Volume I

Regional Solid Waste Management Plans are required by Texas Health and Safety Code (THSC), §363.062, relating to Regional Solid Waste Management Plan (RSWMP). Contents of the RSWMP are described in THSC §363.064 and in 30 Texas Administrative Code (TAC), Chapter 330, Subchapter O.

# Regional Solid Waste Management Plan Volume I

# **Regional Organization Information**

**Table 1. Organization Information** 

Name of Council of Government	West Central Texas Council of Governments
Mailing Address	3702 Loop 322 Abilene, Texas 79602
Website	www.wctcog.org
Phone Number	(325) 672-8544
Email Address	wct@westcentraltexas.org

# Section I. Geographic Scope

Table I.I. Geographic Scope

Names of Member Counties in the Entire Planning Region	Brown, Callahan, Coleman, Comanche, Eastland, Fisher, Haskell, Jones, Kent, Knox, Mitchell, Nolan, Runnels, Scurry, Shackelford, Stephens, Stonewall, Taylor, Throckmorton
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## **Section II. Plan Content**

## II.A. Regional Goals and Objectives

Table II.A. Regional Goals and Objectives

	<b>Objective 1.A.</b> Local governments in each county should assess disposal strategies.		
<b>Goal #1</b> Regionally assure adequate levels of transportation and disposal capabilities.	<b>Objective 1.B.</b> Develop a regional material recovery facility to receive and consolidate recyclable material.		
	<b>Objective 1.C.</b> Develop a plan to accommodate for increases in solar panel and wind turbine disposal.		
Goal #2 Develop local source	<b>Objective 2.A.</b> Provide technical assistance to local governments, businesses, and institutions in identifying and implementing source reduction, waste minimization, re-use, and recycling strategies.		
reduction, waste minimization, reuse, recycling, and composting programs to conserve disposal capacity and resources.	<b>Objective 2.B.</b> Assistance in marketing recyclables and recycled products and development of said market.		
	<b>Objectives 2.C.</b> Implement more aggressive waste reduction programs to meet recycling goals.		
Goal #3 Develop programs to assist regional and local entities in controlling and stemming illegal and	<b>Objective 3.A.</b> Create education/awareness programs for citizens discouraging illegal waste disposal, illegal dumping, and promoting code enforcement.		
improper disposal practices.	<b>Objective 3.B.</b> Create education/awareness programs for citizens on proper disposal of household hazardous waste.		
	<b>Objectives 3.C.</b> Provide technical assistance in identifying and implementing proper management practices for special and problem waste.		
	<b>Objective 3.D.</b> Assistance in development of local and regional plans to deter littering, increase scrap tire abatement, and deter illegal dumping.		

**Goal** #4 Develop regional costeffective, efficient, and environmentally suitable solid waste management systems. **Objective 4.A.** Educational programs should be established to update the region on changes to State MSW laws, regulations, and policies.

**Objective 4.B.** Recycling of electric car batteries program.

## II.B. Efforts to Minimize, Reuse, and Recycle Waste

Table II.B. Waste Minimization, Reuse, and Recycling

Subject	Description
Current Efforts to Minimize Municipal Solid Waste and to Reuse or Recycle Waste	Surveyed municipalities and institutions within the region are currently working to further develop recycling programs that may already be in existence locally. Although a region-wide recycling/reuse program does not currently exist and there is not a MRF within the region, several surveyed municipalities have local programs for recycle/reuse. Those programs include municipally operated programs as well as third-party operated programs.
Recycling Rate Goal for the Region	The region established a goal to increase recycling by 5% by year 2027 and a goal to 10% by year 2032. The goal was established based on previous plan goals and a review of current recycling operations.
Recommendations for Encouraging and Achieving a Greater Degree of Waste Minimization and Waste Reuse or Recycling	Municipalities are to partner with local education systems to increase awareness and increase education on reuse and recycling.  Provide additional drop-off facilities and/or increase drop-off days to collect material.  Develop a region-wide materials recovery facility.  Develop tire processing facilities within the region.  Develop electric car battery processing facilities.
Existing or Proposed Community Programs for the Collection of Household Hazardous Waste	Surveyed municipalities and institutions within the region did not indicate substantial ongoing programs for household hazardous waste (HHW). Small cities operate periodic collection/drop-off days and larger cities have permanent HHW facilities. The region will advocate for increased collection days and increased availability at landfills.

Subject	Description
Composting Programs for Yard Waste	The region intends to increase composting amounts throughout the planning period. Programs for increased education of home composting and its value shall be disseminated to the local governments and coordinated by the region.
Public Education/Outreach	Regional activities will coordinate with local governments throughout the planning period to allow for provision of educational materials that may be used for a variety of applications, including print, web, social media, radio, or television advertising.

#### II.C. Commitment Regarding the Management of MSW Facilities

By checking the boxes below, the Council of Government makes a commitment to the following, regarding the management of MSW facilities:

- $\boxtimes$  (i) encouraging cooperative efforts between local governments in the siting of landfills for the disposal of solid waste;
- $\boxtimes$  (ii) assessing the need for new waste disposal capacity:
- ⊠ (iii) considering the need to transport waste between municipalities, from a municipality to an area in the jurisdiction of a county, or between counties, particularly if a technically suitable site for a landfill does not exist in a particular area;
- ⊠ (iv) allowing a local government to justify the need for a landfill in its jurisdiction to dispose of the solid waste generated in the jurisdiction of another local government that does not have a technically suitable site for a landfill in its jurisdiction;
- $\boxtimes$  (v) completing and maintaining an inventory of MSW landfill units in accordance with Texas Health and Safety Code, §363.064. One copy of the inventory shall be provided to the commission and to the chief planning official of each municipality and county in which a unit is located; and
- ⊠ (vi) developing a guidance document to review MSW registration and permit applications to determine conformance with the goals and objectives outlined in *Volume II: Regional Solid Waste Management Plan Implementation Guidelines* as referenced in 30 TAC §330.643.

# **Section III. Required Approvals**

#### **Table III.I. Required Approvals**

Solid Waste Advisory Committee	10/21/2021
Public Meeting Dates	7/22/2021, 10/21/2021
Executive Committee	11/3/2021





# WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS

**Regional Solid Waste Management Plan** 

2022-2042 Planning Period

Volume II



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# Regional Solid Waste Management Implementation Plan Volume II

# **Regional Organization Information**

**Table 1. Organization Information** 

Name of Council of Government	West Central Texas Council of Governments
Mailing Address	3702 Loop 322 Abilene, Texas 79602
Website	www.wctcog.org
Phone Number	(325) 672-8544
Email Address	wct@westcentraltexas.org

# Section I. Geographic Scope

Table I.I. Geographic Scope

I.A. Names of Member Counties in the Entire Planning Region [Ref. 30 TAC §330.643(a)(1)]	Brown, Callahan, Coleman, Comanche, Eastland, Fisher, Haskell, Jones, Kent, Knox, Mitchell, Nolan, Runnels, Scurry, Shackelford, Stephens, Stonewall, Taylor, Throckmorton
I.B. Geographic Planning Units Used in the Regional Implementation Plan [Ref. 30 TAC §330.643(a)(1)]	<ul> <li>□ Small geographic areas such as census tracts or city boundaries for the most detailed data collection and manipulation.</li> <li>□ Planning areas to be used for the assessment of concerns and the evaluation of alternatives. These planning areas shall be aggregations of small geographic areas.</li> </ul>
	<ul><li>□ County boundaries for the summarization and presentation of key information; or</li><li>⋈ The entire planning region</li></ul>

# **Section II. Planning Periods**

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

II.A.1. Current and Historical Information	2021. Currently and historically, municipalities and institutions within the region have implemented programs based on need and funding availability.		
II.A.2. Short-range Planning Period	2022-2027. Programs to be implemented as they are developed and as funding is available locally, regionally and through granting agencies.		
II.A.3. Intermediate Planning Period	2028-2032. Programs to be implemented as they are developed and as funding is available locally, regionally and through granting agencies.		
II.A.4. Long-range Planning Period	2033-2042. Programs to be implemented as they are developed and as funding is available locally, regionally and through granting agencies.		
☐ Check box if additional details provided in <i>Attachment II.A</i> .			

# **Section III. Plan Content**

## III.A. Demographic Information

**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	.007%	337,144	522,089	8.49	12,363	.20	509,726
2022	.262%	339,048	524,493	8.48	12,420	.20	512,073
2027	.139%	343,045	530,553	8.47	12,563	.20	517,989
2032	.526%	345,883	534,671	8.47	12,661	.20	522,010
2037	.105%	346,825	535,795	8.46	12,688	.20	523,107
2042	.007%	346,881	536,481	8.47	12,704	.20	523,777

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

Year	Description of significant commercial activities affecting waste generation and disposal in the area.	Expected increase or decrease to Commercial Waste Generation
2022	No individual significant commercial activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As population grows and small commercial businesses grow, anticipated growth will increase consistent with those indicators.	1 to 1.5% increase Annually
2027	No individual significant commercial activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As population grows and small commercial businesses grow, anticipated growth will increase consistent with those indicators.	1 to 1.5% increase Annually
2032	No individual significant commercial activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As population grows and small commercial businesses grow, anticipated growth will increase consistent with those indicators.	1 to 1.5% increase Annually
2037	No individual significant commercial activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As population grows and small commercial businesses grow, anticipated growth will increase consistent with those indicators.	1 to 1.5% increase Annually
2042	No individual significant commercial activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As population grows and small commercial businesses grow, anticipated growth will increase consistent with those indicators.	1 to 1.5% increase Annually

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

Year	Description of significant industrial waste activities affecting waste generation and disposal in the area.	Expected increase or decrease to Industrial Waste Generation
2022	No individual significant industrial waste activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As economic development and growth continue throughout the Region, industrial waste growth is expected, consistent with growth.	1 to 1.5% increase Annually
2027	No individual significant industrial waste activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As economic development and growth continue throughout the Region, industrial waste growth is expected, consistent with growth.	1 to 1.5% increase Annually
2032	No individual significant industrial waste activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As economic development and growth continue throughout the Region, industrial waste growth is expected, consistent with growth.	1 to 1.5% increase Annually
2037	No individual significant industrial waste activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As economic development and growth continue throughout the Region, industrial waste growth is expected, consistent with growth.	1 to 1.5% increase Annually
2042	No individual significant industrial waste activity was indicated through survey responses, or otherwise, from municipalities or private institutions within the Region. As economic development and growth continue throughout the Region, industrial waste growth is expected, consistent with growth.	1 to 1.5% increase Annually

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

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

Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year	5-year Projection (tons)	10-year Projection (tons)	15-year Projection (tons)	20-year Projection (tons)
Municipal	4	64.31%	335,755	352,542	370,169	388,678	408,112
Brush	10	0.02%	104	109	115	120	126
Construction or Demolition	15	31.88%	166,442	174,761	183,502	192,677	202,311
Litter	4	0.01%	52	55	57	60	63
Class 1 Non- hazardous	0	0%	0	0	0	0	0
Classes 2 and 3 Non- hazardous	4	0.76%	3,968	4,166	4,375	4,593	4,823
Incinerator Ash	0	0%	0	0	0	0	0
Treated Medical Waste	0	0%	0	0	0	0	0
Municipal Hazardous Waste from CESQGs	0	0%	0	0	0	0	0
Regulated Asbestos- containing Material (RACM)	0	0%	0	0	0	0	0
Non-RACM	0	0%	0	0	0	0	0
Dead Animals	4	0.01%	52	55	57	60	63
Sludge	4	2.48%	12,949	13,596	14,276	14,990	15,740

Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year	5-year Projection (tons)	10-year Projection (tons)	15-year Projection (tons)	20-year Projection (tons)
Grease Trap Waste	0	0%	0	0	0	0	0
Septage	0	0%	0	0	0	0	0
Contaminated soil	0	0%	0	0	0	0	0
Tires (split, quartered, shredded)	4	0.53%	2,767	2,905	3,051	3,203	3,363
Pesticides	0	0%	0	0	0	0	0
Used Oil Filter	0	0%	0	0	0	0	0
Other (identify other types reported as <i>Attachment III.B.</i> )	0	0%	0	0	0	0	0
Total	15	100%	522,089	530,553	534,671	535,795	536,481

☑ Check box if additional details provided in *Attachment III.B.* 

# III.C. Description of Current and Planned Solid Waste Management Activities

Table III.C.I. Current Solid Waste Management Activities in the Region

Activity	Description
Generation	Municipal solid waste (MSW) is managed within the WCTCOG region predominately by cities and/or counties through local ordinance. Waste is generated at the source, which is primarily municipal according to responses from regional surveys, TCEQ Fiscal Year 2020 Annual Solid Waste report, and the Municipal Solid Waste in Texas: A Year in Review 2019 Data Summary and Analysis. MSW provides approximately 63% of the generated waste-type in the region, followed by construction waste which accounts for approximately 32%. Other waste types make up the remaining 5% of waste generated.
Source Separation	No city or county-wide source separation exists within the region according to surveys completed by municipalities within the region. Additionally, there are no indications of plans to develop such plan.
Collection	MSW is managed within the WCTCOG region predominately by cities and/or counties through local ordinance. Collection of MSW begins at residential and commercial collection containers that range in size from polycart (generally 95-gallon) containers to roll-off (20-yard and larger) containers. Municipalities and private institutions indicated through survey response a variety of schedules for collection depending on their needs and quantity generated. The majority of responses showed that single-family, multi-family and living communities have waste collected on a weekly basis. Commercial, industrial, manufacturing, and construction collection depends on source container and size. Smaller cities in the region have opted to contract with private collection companies for their collection. Private companies collect MSW and dispose in the nearest permitted facility. Cities that operate their own MSW facility generally pick up their city's MSW. Survey responses indicate that a majority of cities that contract for MSW services within the region are contracted with Republic Services, but other private contractors used in the region include Waste Connections, Progressive Waste and Allied Waste.
Handling	Surveyed municipalities and private institutions within the WCTCOG region did not indicate any MSW handling facilities.
Storage	Surveyed municipalities and private institutions within the WCTCOG region did not indicate a MSW storage facilities.

Activity	Description
Transportation	The WCTCOG region is made up of primarily small towns and communities. The cities that do not operate a landfill, or only operate Type IV facilities transport waste to the nearest permitted facility, primarily through private hauling companies. Additional information on waste transportation is provided in Attachment III.C
Processing	Surveyed municipalities and private institutions within the region did not indicate a processing facility within the WCTCOG region. Municipal Solid Waste in Texas: A Year in Review also demonstrated no processing facility with the WCTCOG region.
Treatment	Surveyed municipalities and private institutions within the WCTCOG region did not indicate any solid or liquid waste treatment operations.
Resource Recovery	Surveyed municipalities and Private institutions within the WCTCOG region did not indicate any resource recovery operations. As part of the Region plan, the NRC would like to see the development of a MRF.
Disposal of Solid Waste	MSW within the WCTCOG region is primarily handled by the cities and/or counties through local ordinance. Collection begins at the residential or commercial container. Cities that operate their own landfill generally collect their city's MSW and dispose in the city's landfill. Private contract haulers operate with cities that do not operate their own landfill and dispose at the nearest permitted facility. The region has 15 landfills, 11 of which are monofill or AE facilities. The largest landfills are Abilene and Abilene Environmental. Surveyed municipalities and Municipal Solid Waste in Texas: A Year in Review indicated that all Type I facilities within the WCTCOG region have at least 68 years of capacity remaining. Overall, the WCTCOG region has adequate disposal for the planning period. Additional information is contained in Attachment III.C.

Table III.C.II. Planned Solid Waste Management Activities in the Region

Activity	Description
Generation	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of change to waste generation.
Source Separation	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of change to source separation programs. No program development was indicated in survey responses.
Collection	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of change to collection of MSW. Contracts with private companies for hauling will likely expire for municipalities and other small changes may occur.
Handling	Surveyed municipalities and private institutions within the WCTCOG region did not indicate handling programs within the region. The WCTCOG NRC has indicated interest in development of a handling facility within the region and has included such in the plan.
Storage	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of change to waste storage.
Transportation	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of changes to transportation operations within the region.
Processing	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of change to processing within the region. Currently, the WCTCOG region does not have any processing facilities and there was no indication of current plans for one.
Treatment	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of change to MSW treatment. Currently, the WCTCOG region does not have any treatment facilities and there was no indication of current plans for one.
Resource Recovery	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation for change to resource recovery. Currently, the WCTCOG does not have any resource recovery facilities. The WCTCOG would like to develop a materials recovery facility, but currently there are no plans in place.
Disposal of Solid Waste	Surveyed municipalities and private institutions within the WCTCOG region did not indicate significant expectation of

Activity	Description		
	change to disposal of solid waste. MSW disposal should continue in similar methods that are currently in use.		
☑ Check box if additional information of solid waste management activities is provided as <i>Attachment III.C.</i>			

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

**Table III.D.I. Adequacy of Existing Facilities and Practices** 

Program	Facility Adequacy	Practices Adequacy
	□ Yes	□ Yes
Resource Recovery	No, description of facility inadequacy provided in Attachment III. D.	⋈ No, description of practice inadequacy provided in Attachment III. D.
	□ Yes	□ Yes
Storage	No, description of facility inadequacy provided in Attachment III. D.	No, description of practice inadequacy provided in Attachment III. D.
	⊠ Yes	⊠ Yes
Transportation	☐ No, description of facility inadequacy provided in <i>Attachment III. D.</i>	☐ No, description of practice inadequacy provided in <i>Attachment III. D.</i>
	□ Yes	□ Yes
Treatment	No, description of facility inadequacy provided in Attachment III. D.	⋈ No, description of practice inadequacy provided in Attachment III. D.
	⊠ Yes	⊠ Yes
Disposal	☐ No, description of facility inadequacy provided in <i>Attachment III. D.</i>	☐ No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Household	□ Yes	□ Yes
Hazardous Waste Collection	No, description of facility inadequacy provided in Attachment III. D.	No, description of practice inadequacy provided in Attachment III. D.
Household	□ Yes	□ Yes
Household Hazardous Waste Disposal	No, description of facility inadequacy provided in Attachment III. D.	No, description of practice inadequacy provided in Attachment III. D.

# III.E. Assessment of Current Source Reduction and Waste Minimization Efforts, Including Sludge, and Efforts to Reuse or Recycle Waste

⊠ Assessment of current source reduction and minimization efforts, including activities to reduce sludge, and efforts to reuse or recycle waste is provided as *Attachment III.E.* 

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

Table III.F.I Additional Opportunities for Source Reduction and Waste Minimization,
Reuse and Recycling of Waste

Category of Activity (Source Reduction and Waste Minimization, Reuse or Recycling of Waste)	Opportunity Name	Brief Description			
Reuse/ Recycling of Waste	Creation of Materials Recovery Facility	Create and develop a materials recovery facility within the WCTCOG region			
Waste Minimization/ Reuse/ Recycling	Reduce, process, and reuse yard waste	Encourage and educate citizens about composting yard waste into reusable mulch and/or fertilizer			
☐ Check how if additional information of opportunities and source reduction and waste					

<sup>□</sup> Check box if additional information of opportunities and source reduction and waste minimization, reuse and recycling of waste is provided in *Attachment III. F.* 

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

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

- 1. Develop a region-wide MRF (Material Recovery Facility) to aid in collection, separation, and processing for transfer to end-users for resource recovery.
- 2. Municipalities partner with the WCTCOG to engage with school districts within the region to increase education and awareness of reuse, recycling, and reduction of waste.
- 3. Develop additional tire processing capacity within the WCTCOG region to facilitate reduction of illegal disposal. Partner with municipalities that do not have tire processing facilities to accept tires and decrease illegal disposal.
- 4. Continue educational and advertising to inform citizens of options for how to reduce, reuse, and recycle within the region, helping to reduce storage capacity needs.
- ☐ Check box if additional details are provided in *Attachment III.G.*

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

☑ A list of public and private solid waste management agencies and their responsibilities that affect and impact solid waste management in the planning region is provided as *Attachment III.H.* 

# III.I. Identification of Solid Waste Management Concerns and Establishment of Priorities for Addressing Those Concerns

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

Solid Waste Management Concern	Priorities to Address the Concern		
Continued improper disposal of scrap tires within the WCTCOG region	Develop a program to add additional tire processing ability within the region. Partner with municipalities that do not have processing ability to accept tires for processing and transport to a processing facility. Continue to provide grant funds for tire amnesty trailers.		
Continued improper disposal of HHW (Household Hazardous Waste)	Develop a program to aid in education for citizens and business operators on the hazards and dangers of improper disposal of HHW. Develop a program to encourage and support clean-up days within the region that accept HHW.		
Lack of local or regional plan for the disposal of wind turbines, solar panels, and batteries from electric vehicles.	Develop a program for the long-term acceptance and proper disposal of wind turbines, solar panels, and batteries from electric vehicles as those items age out and are in need of proper disposal.		
Lack of region-wide recycling programs	Develop a plan to partner with municipalities and schools to continue education about reduce, reuse, and recycling. Partner with municipalities to encourage and support creation and management of recycling programs within the WCTCOG region.		
☐ Check box if additional details are provided in <i>Attachment III.I</i>			

### III.J. Planning Areas and Agencies with Common Solid Waste Management Concerns that Could be Addressed Through Joint Action

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

Solid Waste Management Concern	Names of Planning Areas and Agencies that Could Address the Concern via Joint Action(s)
Lack of region-wide recycling program	Based on annual distribution of funds from appropriated state funds, the WCTCOG could assist with funding for cities to provide education materials and support distribution of materials to educate citizens and business operators of the need to recycle. WCTCOG to provide grant opportunities for municipalities to add recycling facilities and programs. Longterm goal would be to develop a regional material recovery facility.
Continued improper disposal of HHW (Household Hazardous Waste)	Based on annual distribution of funds from appropriated state funds, the WCTCOG could assist with funding for cities to provide educational materials and support distribution of materials to educate citizens and business operators on the hazards and dangers of improper disposal of HHW.
Continued improper disposal of scrap tires within the WCTCOG region	Based on annual distribution of funds from appropriated state funds, the WCTCOG could assist in funding to develop additional tire processing capabilities with the region. WCTCOG could partner with municipalities to ensure acceptance of scrap tires for proper disposal at a processing facility.

### III.K. Identification of Incentives and Barriers for Source Reduction and Waste Minimization, and Resource Recovery, Including Identification of Potential Markets

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

Source Reduction and Waste Minimization			
Scrap Tire Fee to offset costs to mitigate illegal dumping of scrap tires	State of Texas adds scrap tire fee for particular citations issued by State, County, or Municipal Law Enforcement. Fee is collected by courts upon conviction of certain offenses. Fund is created for the specific use of mitigation and clean-up of illegally dumped tires, and creation of additional processing facilities.		
Lack of education and motivation to recycle, reduce and reuse	A general lack of education on proper methods of recycling, source reduction, and reuse causes lack of motivation to engage in these programs. More education and increase number of programs could improve this area.		
Resource Recovery			
Provide funding aid for a material recovery facility	Planning and funding are needed for the construction of a region-wide material recovery facility. This facility could increase recycling and improve source recovery for the region. No facility currently exists within the WCTCOG region.		
Lack of downstream market for resource recovery	No downstream market currently exists for resource recovery within the WCTCOG region. Currently, the region does not have a MRF. Once the region has a MRF, downstream markets could be developed.		
Potential Markets			
Material Recovery Facility Markets	There is significant potential to attract downstream market partners to the WCTCOG region with the development of a MRF.		
Tire processing facility markets	There is significant potential to attract tire processing partners to the WCTCOG region with increase processing capabilities. With increased partners, illegal disposal and source waste should decrease.		

# III.L. Regional Goals and Objectives, Including Waste Reduction Goals

**Table III.L.I Regional Goals and Objectives** 

	gional douis and Objectives
	<b>Objective 1.A.</b> Local governments in each county should assess disposal strategies.
Goal #1 Regionally assure adequate levels of transportation and disposal capabilities	<b>Objective 1.B.</b> Develop a regional material recovery facility and consolidate recyclable material.
	<b>Objective 1.C.</b> Develop a plan to accommodate for increase in solar panel and wind turbine disposal.
	<b>Objective 2.A.</b> Provide technical assistance to local governments, businesses, and institutions in identifying and implementing source reduction, waste minimization, reuse, and recycling strategies.
Goal #2 Develop local source reduction, waste minimization, reuse, recycling, and composting programs to conserve capacity and resources.	<b>Objective 2.B.</b> Assist in marketing recyclables and recycling products and development of said market.
	<b>Objective 2.C.</b> Implement more aggressive waste reduction programs to meet recycling goals.
Goals #3 Develop programs to assist	<b>Objective 3.A.</b> Create education/awareness programs for citizens discouraging illegal waste disposal, illegal dumping, and promoting code enforcement.
regional and local entities in controlling and stemming illegal and improper disposal practices	<b>Objective 3.B.</b> Create education/awareness programs for citizens on proper disposal of household hazardous waste.
	<b>Objective 3.C.</b> Provide technical assistance in identifying and implementing proper management practices for special and problem waste.
	<b>Objective 3.D.</b> Assistance in development of local and regional plans to deter littering, increase scrap tire abatement, and deter illegal dumping.

Goal #4 Develop regional cost-		
effective, efficient, and		
environmentally suitable solid waste		
management systems.		

**Objective 4.A.** Educational programs should be established to update the region on changes to State MSW laws, regulations, and policies.

**Objective 4.B.** Recycling of electric car batteries program.

### III.M. Advantages and Disadvantages of Alternative Actions

Are alternative actions being	☐ <b>Yes.</b> Provide details in <i>Attachment III.M</i> .	
considered in this plan for the regional		
area?	☑ <b>No.</b> No further action required.	
	_	

# III.N. Recommended Plan of Action and Associated Timetable for Achieving Specific Goals and Objectives

# Table III.N.I Plan of Action and Timetable for Achieving Specific Goals and Objectives

Goal/Objective	Plan of Action	Milestone Dates
Waste Reduction	Increase education to and technical assistance throughout the region on waste reduction. Assist in the marketing of recyclables and give technical assistance on development of the market. Give technical assistance to achieve recycling and reduction goals	Short -term planning period (1-5 years) On-going throughout planning period
Composting Programs for Yard Wastes and Related Organic Wastes	Increased education to citizens and technical assistance to local and county governments on how to promote and motivate composting thereby reducing yard waste at the landfills	Short-term planning period (1-5 years) Ongoing throughout the planning period
Household Hazardous Waste Collection and Disposal Programs	Increase cooperation with cities and counties to encourage and give technical assistance for creation of HHW programs during the entirety of the planning period.	Intermediate planning period (6-10 years)

Goal/Objective	Plan of Action	Milestone Dates
	Have increased number of programs during the intermediate planning period. Develop permanent HHW programs throughout the region in the long-range planning period.	Long-range planning period (11-20 years)
Public Education Programs	Assist with the creation and distribution of educational materials promoting waste reduction, reuse, and recycling during the short-term planning period. Assist in the creation and distribution of HHW educational materials during the intermediate planning period. Assistance to continue for educational materials for program growth and sustainability through the long-range planning period.	Short-term planning period (1-5 years) Intermediate planning period (6-10 years) Ongoing throughout the long-range planning period (11-20 years)
The Need for New or Expanded Facilities and Practices	The WCTCOG will partner with municipalities and counties to become increasingly active in understanding the needs of the region. Long-range planning to include continued monitoring of landfill life projections and development of programs for the long-term acceptance and proper disposal of wind turbines, solar panels, and batteries from electric vehicles as those items age out and are in need of proper disposal.	Ongoing throughout the entirety of planning period.
☐ Check box if addi	tional details are provided in Attachment III.N	J.

#### III.O. Identification of the Process that Will be Used to Evaluate Whether a Proposed Municipal Solid Waste Facility Application Will be in Conformance with the Regional Plan

☑ The process that will be used to evaluate whether a proposed municipal solid waste facility application will be in conformance with the regional plan is identified in *Attachment III.O*.

### **Section IV. Required Approvals**

#### **Table IV.I Required Approvals**

Solid Waste Advisory Committee	10/21/2021
<b>Public Meeting Dates</b>	7/22/2021, 10/21/2021
Executive Committee	11/3/2021

Check box if local government and	jurisdiction	resolutions,	and letters	of support a	ıre
included in <b>Attachment IV.A</b> .					

 $<sup>\</sup>boxtimes$  Public notice, agenda, public comments, and the transcript of the required public meeting are included as **Attachment IV.B**.



APPENDIX III.A. DEMOGRAPHIC INFORMATION



#### **DEMOGRAPHIC INFORMATION**

#### Table III.A.I

Current populations and projections were sourced from the Texas Demographics Center, the Texas Water Development Board's (TWDB) 2021 Regional and 2022 State Water Plan Projections Data. County projections for each county comprising the WCTCOG were used. Totals for individual counties populations for the years 2020, 2030, 2040, and 2050 were used to develop the regional population growth projections. The growth rates were calculated using the Law of Growth equation, P(t)=P(o)\*exp(r\*t). The population at time "t" is equal to initial population multiplied by the product of the growth rate and time between the initial and in Table III.A. final population year.

The base year landfill tonnage and recycling data were determined from the surveyed municipalities responses along with totals listed within the TCEQ's fiscal year 2020 annual report. Waste disposal and recycling amounts were presumed to follow population growth rates for the WCTCOG region. Table III.A.I demonstrates the WCTCOG region population, waste, and recycling projections for planning years 2021, 2022, 2027, 2032, 2037, and 2042.

				Table III.A.I					
Year	Growth Rate per Year	Current Population/ Population Projections	Landfill Disposal (tons)	Landfill Disposal (lbs.)	Disposal Rate (Ibs./Person/Day)	Recycling (Tons)	Recycling (lbs.)	Recycling Rate (lbs./Person/Day)	Residential Waste Generation (Tons)
2020		337,144	522,089	1,044,178,000	8.49	12,363	24,726,000	0.20	509,726
2021		338,101	523,290	1,046,579,609	8.48	12,391	24,782,870	0.20	510,898
2022		339,048	524,493	1,048,986,743	8.48	12,420	24,839,870	0.20	512,073
2023		339,971	525,700	1,051,399,412	8.47	12,449	24,897,002	0.20	513,251
2024		340,792	526,909	1,053,817,631	8.47	12,477	24,954,265	0.20	514,432
2025	0.00230	341,587	528,121	1,056,241,411	8.47	12,506	25,011,660	0.20	515,615
2026		342,368	529,335	1,058,670,766	8.47	12,535	25,069,187	0.20	516,801
2027		343,045	530,553	1,061,105,709	8.47	12,563	25,126,846	0.20	517,989
2028		343,724	531,773	1,063,546,252	8.48	12,592	25,184,638	0.20	519,181
2029		344,354	532,996	1,065,992,409	8.48	12,621	25,242,562	0.20	520,375
2030		344,897	534,222	1,068,444,191	8.49	12,650	25,300,620	0.20	521,572
2031		345,426	534,446	1,068,892,938	8.48	12,656	25,311,247	0.20	521,791
2032		345,883	534,671	1,069,341,873	8.47	12,661	25,321,877	0.20	522,010
2033		346,222	534,895	1,069,790,996	8.47	12,666	25,332,512	0.20	522,229
2034		346,479	535,120	1,070,240,309	8.46	12,672	25,343,152	0.20	522,449
2035	0.00042	346,714	535,345	1,070,689,810	8.46	12,677	25,353,796	0.20	522,668
2036		346,821	535,570	1,071,139,499	8.46	12,682	25,364,445	0.20	522,888
2037		346,825	535,795	1,071,589,378	8.46	12,688	25,375,098	0.20	523,107
2038		346,859	536,020	1,072,039,445	8.47	12,693	25,385,755	0.20	523,327
2039		346,872	536,245	1,072,489,702	8.47	12,698	25,396,417	0.20	523,547
2040		346,867	536,470	1,072,940,148	8.47	12,704	25,407,084	0.20	523,767
2041		346,877	536,475	1,072,950,877	8.47	12,704	25,407,338	0.20	523,772
2042	0.00001	346,881	536,481	1,072,961,607	8.47	12,704	25,407,592	0.20	523,777

NOTE: The growth rate per year was calculated using the law of growth equation, based on cumulative population projections for all counties in the WCTCOG region from the Texas Demographics Center.



## APPENDIX III.B: CURRENT AND FUTURE SOLID WASTE AMOUNTS BY TYPE



#### Table III.B.I

The number of landfills accepting individual types of waste was determined from surveyed municipal responses and totals listed on TCEQ's fiscal year 2020 annual report. Current tons disposed was calculated from the total from each landfill tonnage within the region accepting corresponding waste. If no data was found for a corresponding waste, the value of zero was entered for the table.

			Table III.B.I				
Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year	5-year Projection (tons)	10-year Projection (tons)	15-year Projection (tons)	20-year Projection (tons)
Municipal	4	64.31%	335,755	352,542	370,169	388,678	408,112
Brush	10	0.02%	104	109	115	120	126
Construction or Demolition	15	31.88%	166,442	174,761	183,502	192,677	202,311
Litter	4	0.01%	52	55	57	60	63
Class 1 Non-hazardous	0	0%	0	0	0	0	0
Classes 2 and 3 Non- hazardous	4	0.76%	3,968	4,166	4,375	4,593	4,823
Incinerator Ash	0	0%	0	0	0	0	0
Treated Medical Waste	0	0%	0	0	0	0	0
Municipal Hazardous Waste from CESQGs	0	0%	0	0	0	0	0
Regulated Asbestos- containing Material (RACM)	0	0%	0	0	0	0	0
Non-RACM	0	0%	0	0	0	0	0
Dead Animals	4	0.01%	52	55	57	60	63
Sludge	4	2.48%	12,949	13,596	14,276	14,990	15,740
Grease Trap Waste	0	0%	0	0	0	0	0
Septage	0	0%	0	0	0	0	0
Contaminated soil	0	0%	0	0	0	0	0
Tires (split, quartered, shredded)	4	0.53%	2,767	2,905	3,051	3,203	3,363
Pesticides	0	0%	0	0	0	0	0
Used Oil Filter	0	0%	0	0	0	0	0
Other (identify other types reported as <b>Attachment III.B.</b> )	0	0%	0	0	0	0	0
Total	15	100%	522,089	548,189	575,602	604,381	634,601

NOTE: Survey responses and the TCEQ annual report were used to calculate tonnage information for each corresponding waste type. Waste disposal is projected from region growth rate as depicted in Table III.A.I



## APPENDIX III.C: DESCRIPTION OF CURRENT AND PLANNED SOLID WASTE MANAGEMENT ACTIVITIES

## PLAN CONTENT: DESCRIPTION OF CURRENT AND PLANNED SOLID WASTE MANAGEMENT ACTIVITES IN THE WCTCOG REGION

#### Table III.C.I

Due to the make-up of the WCTCOG region being primarily small towns, a majority of surveyed municipalities indicated the use of private contract haulers for transportation. There are fifteen (15) permitted landfills in the WCTCOG region. Of those 15, only four (4) are Type I facilities. The remaining facilities are comprised of Monofill, 1AE, and 4AE facilities. The majority of surveyed municipalities that do not own and operate their own Type I facility indicated the use of the following private contract haulers: Republic Services, Waste Connections, Progressive Waste, and Allied Waste Services.

				Table III.C.I				
Permit	Site Name	County	Туре	2019 Tons	Remaining Yds	Rate	Remaining Tons	Remaining Years
1652A	Brownwood Regional Landfill	Brown	1	100,570	16,894,711	1,100	9,292,091	92
9008A	City of Cross Plains Abandoned and Nuisance Building Disposal Facility	Callahan	MONOFILL	220	28622	400	6011	NA
9019	City of Baird Abandoned and Nuisance Building Disposal Facility	Callahan	MONOFILL	35	2,529	400	531	NA
9002A	City of Coleman Abandoned and Nuisance Building Disposal Facility	Coleman	MONOFILL	375	100928	400	21195	NA
1604B	City of Haskell Landfill	Haskell	1AE & 4AE	9346	598646	700	209526	1
9011	City of Haskell Abandoned and Nuisance Building Disposal Facility	Haskell	MONOFILL	59	333,037	400	69,938	NA
1469A	Abilene Landfill	Jones	1	180850	87588251	1206	52815715	293
2325	Abilene Environmental Landfill	Jones	1	182839	18027304	1683	15169976	68
9004A	City of Anson Abandoned and Nuisance Building Disposal Facility	Jones	MONOFILL	770	347995	400	73079	NA
420A	City of Colorado City Municipal Landfill	Mitchell	1AE & 4AE	8205	100825	700	35289	1
50B	City of Sweetwater Landfill	Nolan	4AE	3129	68409	400	13682	NA
9005A	City of Winters Abandoned and Nuisance Building Disposal Facility	Runnels	MONOFILL	2133	0	400	0	NA
9013	City of Ballinger Abandoned and Nuisance Building Disposal Facility	Runnels	MONOFILL	946	38,333	400	8,050	NA
1463B	City of Snyder Landfill	Scurry	1	32889	9978762	1000	4989381	152
9000A	City of Breckenridge Abandoned and Nuisance Building Disposal Facility	Stephens	MONOFILL	33	117323	400	37238	NA



APPENDIX III.D: DESCRIPTION AND ASSESSMENT OF THE ADEQUACY OF EXISTING SOLID WASTE MANAGEMENT FACILITIES AND PRACTICES



# PLAN CONTENT: DESCRIPTION AND ASSESSMENT OF THE ADEQUACY OF EXISTING SOLID WASTE MANAGEMENT FACILITIES AND PRACTICES, AND HOUSEHOLD HAZARDOUS WASTE PROGRAMS

#### Table III.D.I

#### Resource Recovery

Surveyed municipalities and private haulers within the WCTCOG region did not indicate any material recovery operations. This information is substantiated with data from Municipal Solid Waste in Texas: A Year in Review. Any current recycling operations collect and transfer material outside of the region for recovery.

#### Storage

Surveyed municipalities and private institutions within the WCTCOG region did not indicate any MSW storage procedures. Current waste generation, collection, and disposal methods do not facilitate the need for MSW storage. MSW storage is not employed in the WCTCOG region but is not considered an inadequacy.

#### **Transportation**

Surveyed municipalities and private institutions within the WCTCOG region did not indicate any transportation procedures outside of collection and disposal at the nearest permitted facility. For small cities that do not own and/or operate their own facility, contract private haulers are used for transportation and disposal at the nearest permitted facility.

#### **Treatment**

Surveyed municipalities and private institutions within the WCTCOG region did not indicate any MSW treatment procedures. Current waste generation, collection, and disposal methods employed do not facilitate the need for MSW treatment. MSW treatment is not employed in the WCTCOG region but is not considered an inadequacy.

#### Disposal

Surveyed municipalities and private institutions within the WCTCOG region did not indicate any disposal operation inadequacies. Based on surveys and TCEQ annual reports, only 2 municipal landfills have a remaining life expectancy less than the planning period, but the availability in the region is adequate well past the planning period with Abilene Landfill and Abilene Environmental Landfill having over 360 years of combined life expectancy. Table III.D.I indicated estimated remaining life of landfills within the WCTCOG region.

Table III.D.I						
S'La Na sa	Remaining					
Site Name	Years					
Brownwood Regional Landfill	92					
City of Cross Plains Abandoned						
and Nuisance Building Disposal	NA					
Facility						
City of Baird Abandoned and						
Nuisance Building Disposal	NA					
Facility						
City of Coleman Abandoned						
and Nuisance Building Disposal	NA					
Facility						
City of Haskell Landfill	1					
City of Haskell Abandoned and						
Nuisance Building Disposal	NA					
Facility						
Abilene Landfill	293					
Abilene Environmental Landfill	68					
City of Anson Abandoned and						
Nuisance Building Disposal	NA					
Facility						
City of Colorado City Municipal	1					
Landfill	1					
City of Sweetwater Landfill	NA					
City of Winters Abandoned and						
Nuisance Building Disposal	NA					
Facility						
City of Ballinger Abandoned						
and Nuisance Building Disposal	NA					
Facility						
City of Snyder Landfill	152					
City of Breckenridge						
Abandoned and Nuisance	NA					
Building Disposal Facility						

Household Hazardous Waste Disposal

Surveyed municipalities and private institutions within the WCTCOG region did not indicate ongoing programs for HHW. Some municipalities indicated accepting HHW at cleanup events during the year, but lack the permanent disposal, storage, or processing available to maintain ongoing programs. Additional programs for processing HHW materials for reuse and/or proper disposal for the region would be beneficial.



APPENDIX III.E. ASSESMENT OF CURRENT SOURCE REDUCTION AND WASTE MINIMIZATION EFFORTS, INLCUDING SLUDGE, AND EFFORTS TO REUSE OR RECYCLE WASTE



## ASSESMENT OF CURRENT SOURCE REDUCTION AND WASTE MINIMIZATION EFFORTS, INCLUDING SLUDGE, AND EFFORTS TO REUSE OR RECYCLE WASTE

The West Central Texas Region does not currently have a Materials Recovery Facility or a region-wide source reduction program. Individual programs for recycling exist in some of the smaller cities, and the larger cities have some recycling facilities, but there is no Region-wide program established at this time. There is currently no sludge reduction program for the WCTCOG Region with no development of a program outlined in the Planning Period. The WCTCOG Region Natural Resources Committee has placed into the Regional Solid Waste Management Plan for the Planning Period 2022-2042 the desire to develop a MRF, which will aid in source reduction. Additionally, the WCTCOG NRC has placed into the RSWMP an outline of educational programs to encourage and educate citizens about composing yard waste in reusable mulch and/or fertilizer.



## APPENDIX III.H: IDENTIFICATION OF PUBLIC AND PRIVATE MANAGEMENT AGENCIES AND RESPONSIBILITIES



## IDENTIFICATION OF PUBLIC AND PRIVATE MANAGEMENT AGENCIES AND RESPONSIBILITIES

#### Waste Collection and Disposal

The region uses a combination of city-owned solid waste crews and private haulers for MSW collection and disposal. In most situations, municipalities and private haulers operate together. Smaller municipalities primarily use private haulers for their disposal operations. Based on surveyed municipalities and private MSW haulers within the region, the following table shows MSW collection and disposal responsibility within the WCTCOG region.

		Table III.H.I			
Management Agency	Collection/Disposal Entities	Responsibilities	Management Agency	Collection/Disposal Entities	Responsibilities
City of Abilene	City of Abilene	Waste collection and disposal for city limits and surrounding areas.	City of Hawley	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Baird	Republic Services	Waste collection and disposal for city limits and surrounding areas.	City of Knox City	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Benjamin	Republic Services	Waste collection and disposal for city limits and surrounding areas.	City of Lorraine	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Blackwell	Citizens contract privately for individual services	Waste collection and disposal for city limits and surrounding areas.	City of Lueders	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Breckeridge	Republic Services	Waste collection and disposal for city limits and surrounding areas.	City of Merkel	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Brownwood	City of Brownwood	Waste collection and disposal for city limits and surrounding areas.	City of Miles	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Buffalo Gap	Republic Services	Waste collection and disposal for city limits and surrounding areas.	City of Moran	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Cisco	Repubilc Services	Waste collection and disposal for city limits and surrounding areas.	City of Putnam	Republic Services	Waste collection and disposal for city limits and surrounding areas.

City of Clyde	Allied Waste	Waste collection and disposal for city limits and surrounding areas.	City of Rising Star	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Coleman	Progressive Waste	Waste collection and disposal for city limits and surrounding areas.	City of Roby	Allied Waste	Waste collection and disposal for city limits and surrounding areas.
City of Colorado City	City of Colorado City	Waste collection and disposal for city limits and surrounding areas.	City of Roscoe	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Comanche	Waste Connections	Waste collection and disposal for city limits and surrounding areas.	City of Santa Anna	Waste Connections	Waste collection and disposal for city limits and surrounding areas.
City of Cross Plains	Republic Services	Waste collection and disposal for city limits and surrounding areas.	City of Snyder	City of Snyder	Waste collection and disposal for city limits and surrounding areas.
City of Early	City of Early	Waste collection and disposal for city limits and surrounding areas.	City of Sweetwater	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Eastland	Waste Connections	Waste collection and disposal for city limits and surrounding areas.	City of Throckmorton	Waste Connections	Waste collection and disposal for city limits and surrounding areas.
City of Gorman	Republic Services	Waste collection and disposal for city limits and surrounding areas.	City of Tuscola	Republic Services	Waste collection and disposal for city limits and surrounding areas.
City of Hamlin	Republic Services	Waste collection and disposal for city limits and surrounding areas.	City of Weinert	Republic Services	Waste collection and disposal for city limits and surrounding areas.
		Waste collection and disposal for city limits and surrounding areas.	City of Westbrook	Republic Services	Waste collection and disposal for city limits and surrounding areas.

#### Private Entities

Based on municipalities surveyed within the WCTCOG region, the following table contains the listing of private entities and their main responsibilities within the region.

	Table III.H.I(a)				
Private Entity	Responsibilities				
Republic Services	Residential and commercial waste collection.  Commercial roll-off management.  Recycling services and collection.				
Allied Waste	Residential and commercial waste collection.  Commercial roll-off management.  Recycling services and collection.				
Waste Connections	Residential and commercial waste collection.  Commercial roll-off management.  Recycling services and collection.				



APPENDIX III.O: IDENTIFICATION OF THE PROCESS THAT WILL BE USED TO EVALUATE WHETHER A PROPOSED MUNICIPAL SOLID WASTE FACILITY APPLICATION WILL BE IN CONFORMANCE WITH THE REGIONAL PLAN



#### PLAN CONFORMANCE

Information presented in this attachment will outline the process through which the West Central Texas Council of Governments will review MSW permits for conformance with the Regional Solid Waste Management Plan. Permittees are required to submit MSW Permit applications, Part I and Part II, to the regional council of governments. The WCTCOG will review applications to determine conformance with the Regional Solid Waste Management Plan by evaluating the information provided and comparing it to the approved plan for the region. The WCTCOG will not approve or deny any MSW permits and will not determine if the application meets TCEQ regulations. All final issuance of MSW permits will be determined by the Texas Commission on Environmental Quality. Applicants requesting a letter from the WCTCOG stating their permit complies with the Regional Plan must submit the following information with their request:

- Current population growth and waste generation rates for the local region or municipality proposing the permitted facility.
- Total population and waste disposal for the local region or municipality proposing the permitted facility.
- Where the applicant is currently disposing of solid waste and the current distance to the nearest permitted MSW facility.
- The current monthly disposal fee and anticipated fee for the proposed permitted facility.
- The anticipated tipping fee of the proposed permitted facility.
- A description of the financial burden of the applicant and denial of a practical waste management alternative availability.
- Whether the applicant will be operating the proposed permitted facility with owned or leased equipment.
- Whether or not the applicant has equipment currently available to operate the proposed permitted facility.
- The applicant's current source reduction programs and/or goals.

Responses to bulleted items are for informational purposes and will not be used in assessing plan conformance and that there is no "correct" answer for these items, but it will assist WCTCOG in future planning.

After the WCTCOG has reviewed a MSW permit application that provides the requested information detailed above and conforms to the practices indicated in the Regional Plan, the WCTCOG will issue the applicant a letter of support for the proposed permitted facility.



APPENDIX IV.B: PUBLIC NOTICE, AGENDA, PUBLIC COMMENTS, AND PUBLIC MEETING TRANSCRIPT

## Abilene Reporter-News

Certificate of Publication

WEST CENTRAL TEXAS C OUNCIL OF GOVT 3702 LOOP 322 ATTN WENDY ALLEN

ABILENE, TX 79602

STATE OF WISCONSIN)

COUNTY OF BROWN)

Before me, the undersigned authority, on this day personally appeared representing the Abilene Reprter-News being duly sworn deposes and says that the following notice(s) published in said newspaper generally circulated in Brown, Callahan, Coleman, Comanche, Eastland, Erath, Fisher, Haskell, Jones, Knox, Mitchell, Nolan, Runnels, Scurry, Shackelford, Stephans, Stonewall, Taylor counties, Texas by:

))

WEST CENTRAL TEXAS C OUNCIL OF GOVT

On the following date(s) to wit:

07/12/2021

On this July 12, 2021, I certify that the attached document is a true and exact copy made by the publisher.:

Legal Notice Clerk

Notary Public, State of Wisconsin, County of Brown

My Commission Expires

Publication Cost: \$267.60 Ad No: 0004805779 Customer No: 1224765 PO #: Mtg.-July 22, 2021 # of Affidavits1 This is not an invoice KATHLEEN ALLEN Notary Public State of Wisconsin

#### Notice of Public Meeting

The West Central Texas Council of Governments (WCTCOG) will hold a public meeting for regional stakeholders on Thursday, July 22, 2021 at 2:00 p.m. in regard to the Regional Solid Waste Management Plan Update and Development of Regional Goals and Obiectives.

Meeting Location:

West Central Texas Council of Governments 3702 Loop 322 Abilene, TX 79602 Large Conference Room

The purpose of this meeting is to allow citizens and interested parties an opportunity to discuss concerns and/or solutions regarding minimization or reduction of solid waste production/disposal throughout the WCTCOG encourages interested parties to participate in this process and to make their views known at this public meeting. Citizens unable to attend this meeting may request a copy of the previously completed Regional Solid Waste Management Plan and Gools and Objectives between the hours of 8:30 cm and 5:00 pm on normal business days by emailling PJ Sumer at psumner@westcentroltexas.

Seating is limited, so please R.S.V.P. to PJ Sumner at psumner@westcentraltexas. org or calling 325-672-8544.

## Abilene Reporter-Aeius PART OF THE USA TODAY NETWORK

Certificate of Publication

WEST CENTRAL TEXAS C OUNCIL OF GOVT 3702 LOOP 322 ATTN WENDY ALLEN

ABILENE, TX 79602

STATE OF WISCONSIN)

COUNTY OF BROWN)

Before me, the undersigned authority, on this day personally appeared representing the Abilene Reprter-News being duly sworn deposes and says that the following notice(s) published in said newspaper generally circulated in Brown, Callahan, Coleman, Comanche, Eastland, Erath, Fisher, Haskell, Jones, Knox, Mitchell, Nolan, Runnels, Scurry, Shackelford, Stephans, Stonewall, Taylor counties, Texas by:

WEST CENTRAL TEXAS C OUNCIL OF GOVT

On the following issue(s) dated to wit:

10/19/2021

Legal Notice Clerk

On this October 19, 2021, I certify that the attached document is a true and exact copy made by the publisher.:

Notary Public, State of Wisconsin, County of Brown

My Commission Expires

Publication Cost: \$262.55 Ad No: 0004960262 Customer No: 1224765 PO #:

# of Affidavits1 This is not an invoice KATHLEEN ALLEN Notary Public State of Wisconsin Notice of Public Meeting

The West Central Texas Council of Governments (WCTCOG) will hold a public meeting for regional stakeholders on Thursday, October 21, 2021 at 1:00 p.m. in regard to the Regional Solid Waste Management Plan Update and Development of Regional Goals and Objectives.

Meeting Location: West Central Texas Council of Governments 3702 Loop 322 Abilenc, TX 79602 Large Conference Room

Large Conference Room

The purpose of this meeting is to allow citizens and interested parties an opportunity to discuss concerns and/or solutions regarding minimization or reduction/ disposal throughout the WCTCOG region. WCTCOG encourages interested parties to participate in this process and to make their views known at this public meeting. Citizens unable to attend this meeting may request a copy of the previously completed Regional Solid Waste Management Plan and Gools and Objectives between the hours of 8:30 am and 5:00 pm on normat business days by emailing PJ Sumner of psu mane@westcentraltexas.org or calling 325-672-8544.

Seating is limited, so please

Seating is limited, so please R.S.V.P. to PJ Sumner at p sumner@westcentraltexas.org or calling 325-672-8544.

## Natural Resource Committee (NRC) Minutes October 21, 2021 1:30 P.M.

#### **NRC Committee Members Present:**

Judge Dale Spurgin, City of Anson Katherine Beeman, City of Abilene

Jim Winward, City of Abilene Darwin Archer, City of Cisco

Merle Taylor, City of Snyder Houston Satterwhite, City of Breckenridge

Kelly Andrus, City of Sweetwater Mayor Harold Fahrlender, City of Santa Anna

Mike Perez, Abilene Environmental Landfill Ethan Kunkel, County Waste Service

Sam Watson, City of Knox City Terry Simmons, City of Eastland

#### Others in Attendance:

Roy Knowles, Abilene Environmental Landfill

Jeremy Essary, City of Early

#### WCTCOG Staff:

Doug Burks, Environmental Project Manager, PJ Sumner, Environmental Program Coordinator, Joe Rogers, Director of Public Safety Programs

#### **NRC Committee Members Absent:**

Lori Higgins, City of Baird; Will Carroll, City of Throckmorton; Jodie Brewster, Texas Metals & Recycling, Brian Bluhm, E'Lisa Smentana, Abilene MPO.

#### I. Call to Order

Chair Merle Taylor welcomed attendees and special guests, then called the meeting to order at 1:30 pm.

#### II. Approval of April 22, 2021, Minutes

Kelly Andrus made a motion to approve the July 22, 2021 minutes as presented and Jim Winward seconded the motion. Motion carried by acclamation.

### III. Update of Regional Activities: Status of Solid Waste Management grants, programs, permit applications, and projects.

Honorable Dale Spurgin, Judge, Jones County: Judge Spurgin introduced himself but had nothing to report.

Mr. Kelly Andrus, Solid Waste Foreman, City of Sweetwater: Mr. Andrus introduced himself and stated the City of Sweetwater has had several cleanup events which is helping the code enforcement department.

Mr. Terry Simmons, Code Compliance, City of Eastland: Mr. Simmons introduced himself and stated not a lot going on except Mr. Simmons has been busy helping with code enforcement.

Mr. Sam Watson, City Administrator, City of Knox City: City Administrator Watson introduced himself and stated that Knox City was redoing the city codes.

Mr. Houston Satterwhite, Assistant City Manager, City of Breckenridge: Mr. Satterwhite introduced himself and stated the Breckenridge was doing their annual brush city wide cleanup.

Mr. Jeremy Essary, Code Compliance, City of Early. Mr. Essary introduced himself and stated that it's business as usual and the city is experiencing growing pans. He also noted the city is looking for a brush chipper.

Mr. Joe Rogers, Director of Public Safety Programs. Mr. Rogers introduced himself but had nothing to report.

Mr. Matthew Pippin, Environmental Investigator, TCEQ: Mr. Pippin introduced himself and stated that it's been awhile since he has attended a meeting and just wanted to say hello to everyone.

Mr. Roy Knowles, Abilene Environmental Landfill: Mr. Knowles introduced himself but had nothing to report.

Mr. Mike Perez, Abilene Environmental Landfill: Mr. Perez introduced himself and stated the landfill is under construction adding two new cells to the landfill.

Ms. Katherine Beeman, Keep Abilene Beautiful: Ms. Beeman introduced herself and stated that the city of Abilene is finishing up the Fall Sweeps. She noted that she was working with code enforcement to help cleanup some areas in the city.

Mr. Harold Fahrlender, Mayor, City of Santa Anna: Mr. Fahrlender introduced himself and stated the city's sales tax is up to about 45% again this month.

Mr. Jim Winward, Public Works Operations Manager, City of Abilene: Mr. Winward introduced himself and stated the city is going to try again to offer recycling.

Mr. Ethan Kunkel, President, County Waste Services: Mr. Kunkel introduced himself and stated that County Waste Services is servicing 14 counties in the Big Country area. They also recently signed a contract with the city of Merkel to start collection in their community.

Mr. Darwin, Archer, City Manager, City of Cisco: Mr. Archer introduced himself and stated nothing new to report.

#### IV. FY 22/23 TCEQ Solid Waste Management Funding Plan (ACTION) - PJ Sumner

Ms. Sumner informed the committee that the funds available for FY 22/23 is \$14,210.50 for 2022 and \$25,000 for 2023. Mr. Archer made a motion to spend \$14,210.00 for FY 2022 on 4 micro grants at \$3,000 each. The grants will be used for projects pertaining to communities and ISD's interested in clean-up events, recycling, composting and food waste programs. Any remaining funds will be spent accordingly by vote of the NRC. Mr. Simmons seconded the motion. Motion carried.

#### V. WCTCOG – Department of Environmental Services Update – Doug Burks

Mr. Burks explained what micro grants are about and what they can be used for.

#### VI. Information on Upcoming Workshops, Conferences & Events – Doug Burks

Mr. Burks informed the committee that there is city-wide clean up event on Saturday, October 23rd in Tuscola. Mr. Kunkel announced that the City of Lawn will have a city-wide clean up on November 13, 2021.

#### VII. Discuss / Review / Approve – 20 Year Solid Waste Management Plan – Darwin Archer

Mr. Andrus made a motion to approve the 20 Year Solid Waste Management Plan and Mr. Kunkel seconded the motion. Motion carried. Mr. Darwin Archer abstained from the vote, due to a conflict of interest.

#### VIII. Adjourn

The Natural Resources Committee was adjourned at 2:00 pm., Honorable Dale Spurgin made a motion to adjourn the meeting and Mr. Andrus seconded the motion. Motion carried.

The next meeting date and time is set for January 20, 2022 at 1:30 pm.



#### West Central Texas Council of Governments Natural Resources Committee

#### West Central Texas Council of Governments Large Conference Room 3702 Loop 322, Abilene, TX 79602

July 22, 2021 1:30 pm

- Call to Order
- II. Approval April 22, 2021 minutes
- III. Update of Regional Activities: Status of SWM grants, programs, permit applications, and projects
- IV. WCTCOG -Department of Environmental Services Update Doug Burks
- V. Information on Upcoming Workshops, Conferences & Events PJ Sumner
- VI. Adjourn

#### **Public Meeting**

West Central Texas Council of Governments Large Conference Room 3702 Loop 322, Abilene, TX 79602

> July 22, 2021 2:00 PM

- I. Darwin Archer Presentation of Regional Solid Waste Plan
- II. Follow up Q & A

Natural Resource Committee (NRC)
Public Meeting Minutes
July 22, 2021 2:00 P.M.

#### **NRC Committee Members Present:**

Judge Dale Spurgin, City of Anson Katherine Beeman, City of Abilene

Jim Winward, City of Abilene Darwin Archer, City of Cisco

Merle Taylor, City of Snyder Houston Satterwhite, City of Breckenridge

Kelly Andrus, City of Sweetwater Mayor Harold Fahrlender, City of Santa Anna

Tim Murray, City of Brownwood Ethan Kunkel, County Waste Service

#### Others in Attendance:

Roy Knowles, Abilene Environmental Landfill

Jeremy Essary, City of Early

Eli Torres, City of Snyder

#### WCTCOG Staff:

Doug Burks, Environmental Project Manager, PJ Sumner, Environmental Program Coordinator

#### **NRC Committee Members Absent:**

Terry Simmons, City of Eastland, Mike Perez, Abilene Environmental Landfill, Sam Watson, City of Knox City, Lori Higgins, City of Baird; Will Carroll, City of Throckmorton; Jodie Brewster, Texas Metals & Recycling, Brian Bluhm, E'Lisa Smentana, Abilene MPO.

#### IX. Call to Order

Chair Merle Taylor welcomed attendees and special guests, then called the meeting to order at 2:00 pm.

#### X. Darwin Archer – Archer Consultant – Presented the 20 Year Regional Solid Waste Management Plan

Mr. Archer presented the 2022 – 2042 Draft Regional Solid Waste Management Plan. A total of thirteen (13) person attended the public meeting. There were no public comments given at this meeting, by mail nor email.

#### XI. Adjourn

The Natural Resources Committee was adjourned at 2:05 pm



West Central Texas Council of Governments (WCTCOG)
Regional Solid Waste Management Plan Public Meeting

Thursday, July 22, 2021

2:00 PM

#### **Transcript Summary**

The West Central Texas Council of Governments (WCTCOG) conducted a public meeting at the WCTCOG main office large conference room on Thursday, July 22, 2021. The Regional Solid Waste Management Plan public meeting began at 2:00pm and concluded at 2:05pm. Archer Consultant presented the 2022-2042 Draft Regional Solid Waste Management Plan overview. A total of thirteen (13) persons attended the public meeting. There were no public comments given at this meeting, by mail nor email.

October 21, 2021

1:00 PM

The West Central Texas Council of Governments (WCTCOG) conducted a public meeting at the WCTCOG main office large conference room on Thursday, October 21, 2021. The Regional Solid Waste Management Plan public meeting began at 1:00pm and concluded at 1:05pm. Archer Consultant presented the 2022-2042 Regional Solid Waste Management Plan overview. A total of nine (9) persons attended the public meeting. There were no public comments given at this meeting, by mail nor email.