

Water Resources Council (WRC)

April 15, 2021



North Central Texas Council of Governments
**Environment
& Development**

www.nctcog.org/WaterResources

Procedures for Online Meeting

- ▶ Today's presentation is posted on the WRC website at: <https://www.nctcog.org/envir/committees/water-resources-council>
- ▶ Roll call today in lieu of sign-in sheet.
- ▶ Please state your name and entity you are representing when you ask a question or provide a comment.
- ▶ Please keep your microphone on mute when not speaking.
- ▶ Approval of action items will still be done by a voice vote. Please only vote if you are a member of the WRC.

Water Resources Council

1. Welcome and Introductions

2. Service Recognition, Farewell, and Best Wishes

Wayne Owen, Planning Director

Tarrant Regional Water District

Outgoing Chair, Water Resources Council

Member of Water Resources Council for 27 Years

Action Items

3. Meeting Summary

The [January 13, 2021 meeting summary](#) will be presented for approval.

4. Nominations for Vice-Chair Vacancy

Stacy Walters, Regulatory Environmental
Administrator,

City of Fort Worth

Discussion

8. Greenhouse Gas Emissions Inventory.

Jenny Narvaez, Program Manager
NCTCOG Transportation Department



North
Texas
RISE
Coalition

North Texas Regional Integration of Sustainability Efforts (RISE) Coalition Purpose

- Align regional partner initiatives
- Leverage regional resources and share best practices
- Provide networking and capacity building opportunities
- Identify funding opportunities for projects
- Provide mentorship
- Collaborate as a group on regional sustainability projects and initiatives

Fiscal Year 2021 Work Plan establishes regional collaborative efforts and foster peer exchange on key topics, including, but not limited to:

- Regional Emissions Assessment
- Emissions Impact Analysis and Mitigation/Adaptation Strategy Development
- Urban Heat Island Reduction Strategy Analysis
- Food Diversion and Waste Reduction Programs

Membership in the RISE Coalition

- Local government members in North Central Texas are invited to join the RISE Coalition.
- Quarterly in-person meetings are posted on the **NCTCOG Environment & Development Events Calendar** and on the RISE Coalition website.
- The Coalition is guided by Bylaws.
- A **Frequently Asked Questions** (FAQ) has been developed to clarify membership options and participation opportunities.
- Please visit the **RISE Membership** page to learn more.
 - <https://www.nctcog.org/envir/development-excellence/rise-coalition/rise-membership>

NCTCOG Regional Greenhouse Gas Emissions Inventory Program

Part 1: Regional Call for Cities to Participate in a Regional Cohort

Licenses will be available for member cities to utilize ICLEI software (ClearPath) to produce their own Greenhouse Gas (GHG) Emissions inventory using the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions.

Call for Interested Cities:

www.nctcog.org/trans/quality/air/local-regional-greenhouse-gas-emission-inventory

Opens: March 1, 2021

Closes: April 16, 2021

Requirements: NCTCOG Member City

(preference provided to RISE Coalition member cities)

For more information: Jenny Narvaez,
jnarvaez@nctcog.org, 817-608-2342

Regional Integration of Sustainability Efforts Coalition

www.nctcog.org/envir/development-excellence/rise-coalition



Regional Greenhouse Gas Emissions Inventory (GHG) Program

Part 2: NCTCOG is also conducting a Regional GHG Inventory for the 12-county Metropolitan Planning Area

- Initial step to conducting a GHG Inventory is collecting emissions sources in the region
- NCTCOG is Initiating Data Collection related to Energy, Waste, Water, and Wastewater
 - NCTCOG will be working through existing Federal, State, and Regional data
 - NCTCOG will contact individual cities, counties, special districts to provide needed data to fill gaps

Data Collection to begin March/April 2021

For reference and information, the data points for the regional GHG inventory are included on the next slide. NCTCOG will identify what is already available for the region and will be working to collect the data needed to fill the gaps.

Data Inputs for Individual City GHG Inventories (Part 1) and Regional GHG Inventory (Part 2)

No specific action is requested at this moment. The data points below are for information only. NCTCOG will be determining the appropriate process to collect this data, members who need to respond, and the process to issue surveys to fill identified data gaps for the region.

WASTE	WATER/WASTEWATER	WASTEWATER TREATMENT
Waste Sent to Combustion Facility (per facility) <ul style="list-style-type: none"> Tons of Waste Fossil CO2 (metric tons) N2O (metric tons) CH4 (metric tons) Biologic CO2 (metric tons) 	Electricity Usage and Units	Emissions from Wastewater Treatment Energy Use <ul style="list-style-type: none"> Electricity Used and Units Natural Gas Used and Units Volume of Water Treated and Units (optional) Population Served (optional)
Waste Sent to Landfill (per facility) <ul style="list-style-type: none"> Tons of Waste Landfilled 	Natural Gas Usage and Units	Emissions from the Combustion of Digester Gas – Site Specific <ul style="list-style-type: none"> Calculation Type Population Served Gas Production (scf/day) Is energy recovered from combustion? Gas Composition (%CH4) (if applicable) Do you have gas composition or heat content? Heat Content (btu/scf) Wastewater generation and treatment location
Waste Sent to Compost Facility (per facility) <ul style="list-style-type: none"> Tons of Waste Composted 	Indicators <ul style="list-style-type: none"> Water Consumed (million gallons per year) (optional) Population served (optional) 	Emissions from the Combustion of Digester Gas – Population Based <ul style="list-style-type: none"> Calculation Type Is energy recovered from combustion? Population Served Wastewater generation and treatment location
Waste Transportation <ul style="list-style-type: none"> Tons of Waste Round Trip Distance to Facility (miles) Transport Fuel 	Allocation from Treatment System	Emissions from Flaring of Digester Gas <ul style="list-style-type: none"> Digester Gas Produced Destruction Efficiency Population Served Fraction of CH4 in Digester Gas Wastewater generation and treatment location
Landfills (per facility) <ul style="list-style-type: none"> CH4 (metric tons) 	Process Intensities <ul style="list-style-type: none"> Water Consumption Water Gallons per Day per Capita 	Nitrification/Denitrification Process N2O from Wastewater Treatment <ul style="list-style-type: none"> Nitrification/Denitrification as a step in the treatment process Population Served Wastewater generation and treatment location Industrial Commercial Discharge Multiplier
Waste Combustion Facilities (per facility) <ul style="list-style-type: none"> Fossil CO2 (metric tons CO2) CH4 (metric tons CH4) N2O (metric tons N2O) Biologic CO2 (metric tons CO2) Indicators - Waste Combusted (tons)/Electricity Generated (kWh) 	Energy Use <ul style="list-style-type: none"> Water Source (ground, surface, etc) Percent of total gallons from source Gallons from source Distribution kWh/million gallons Extraction kWh/million gallons Total kWh/million gallons Conveyance kWh/million gallons Total kWh Treatment kWh/million gallons 	Process N2O from Effluent Discharge to Rivers and Estuaries <ul style="list-style-type: none"> Do you have daily N load data from your effluent discharge? Daily N Load (kg N/day) Population Served Wastewater Generation and Treatment Location
Composting Facilities (per facility) <ul style="list-style-type: none"> Amount of Waste Composted Waste Type 		Fugitive Emissions from Septic Systems – Population Based <ul style="list-style-type: none"> Calculation Type Population Served

Discussion

5. 87th Legislative Session

NCTCOG will be tracking water-related bills. The WRC is invited to share any pertinent water resource issues, topics, news, or bills of interest to date.

The full [Water Quality Legislative Matrix is available online](#) for review.

Discussion

5. 87th Legislative Session

Bill Number	Author	Topic
<u>HB 348</u>	Zwiener	Relating to a requirement to make certain environmental and water use permit applications available online.
<u>HB 605</u>	Collier	Relating to the adoption of a healthy and safe school water plan by public schools.
<u>HB 1866</u> Public Hearing, reported favorably	Lucio III	The Texas Water Development Board (TWDB) shall make publicly available the most recent data relating to statewide water usage.
<u>HB 1904</u> Public Hearing, reported favorably	Harris	Relating to the use of the Water Infrastructure Fund. TWDB may make transfers from the fund to the Texas Water Development Fund II.

Discussion

5. 87th Legislative Session

Bill Number	Author	Topic
<u>HB 1949</u> Duplicate/ Related Bills (<u>HB 1956</u> , <u>HB 2017</u> , <u>HB 3246</u> , <u>HB 4178</u> , <u>SB 306</u>)	Crockett	Relating to information on projected changes in weather, water availability and climate variability in strategic plans of certain state agencies.
<u>HB 2275</u> Similar bills: <u>SB 1682</u> - Creates State Utilities Reliability Fund, also to be approved by voters.	Zwiener	Creation of a Water Infrastructure Resiliency Fund. Creation of Critical Infrastructure Resiliency Fund for the electrical grid. Enabled by constitutional amendment approved by voters.

Discussion

5. 87th Legislative Session

Bill Number	Author	Topic
<u>HB 2350</u> Public Hearing, reported favorably	Zwiener	Relating to financial assistance provided by TWDB for nature-based water quality enhancement projects under a new Water Resource Restoration Program.
<u>HB 2619</u> Public Hearing held on 4/8/21	Wilson	Relating to the creation and administration of the On-The-Ground Conservation Program by the State Soil and Water Conservation Board.
<u>HB 3096</u>	Burrows	Relating to the creation and activities of the Texas Produced Water Consortium.

Discussion

5. 87th Legislative Session

Bill Number		
SB 582	Lucio	Relating to the sale of a water or sewer utility system by a municipality without an election.
SB 905 Public Hearing, reported favorably	Perry/ Springer	Relating to guidance on regulations applicable to the potable reuse of wastewater.

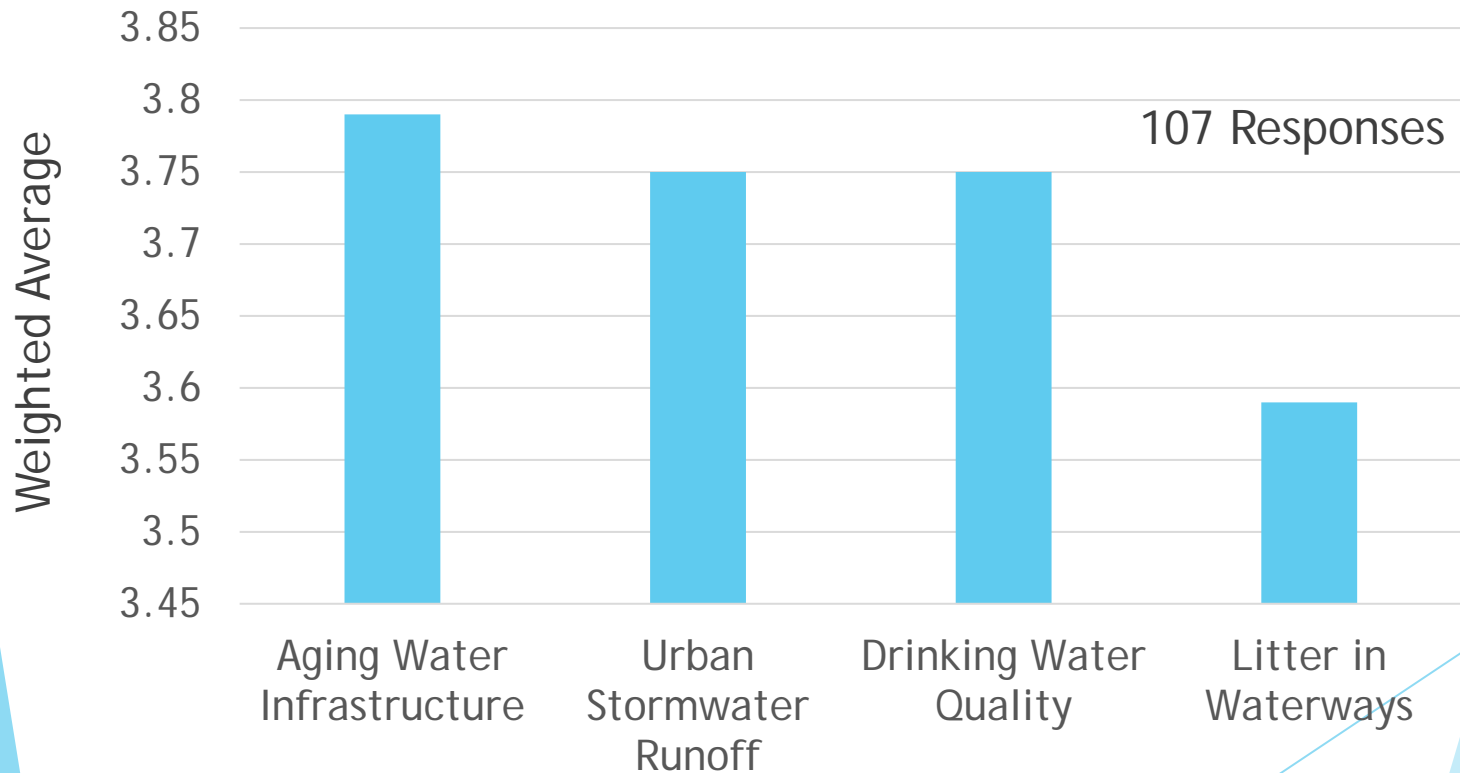
Discussion

6. Water Resources Questionnaire Results

- January 26, 2021 - March 8, 2021
- Distributed to water resource professionals in NCTCOG region
- 118 Responses

2021 NCTCOG Water Resources Questionnaire

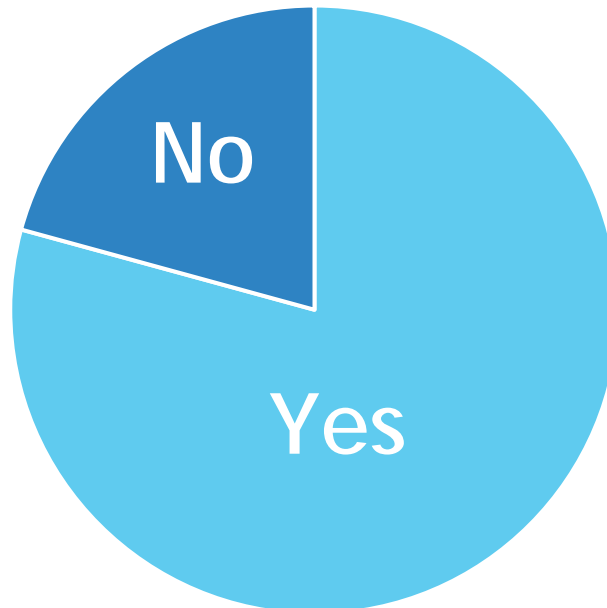
Please rate your level of concern for the following water resource topics.



Top 4 Topics out of 12 Topics Total

2021 NCTCOG Water Resources Questionnaire

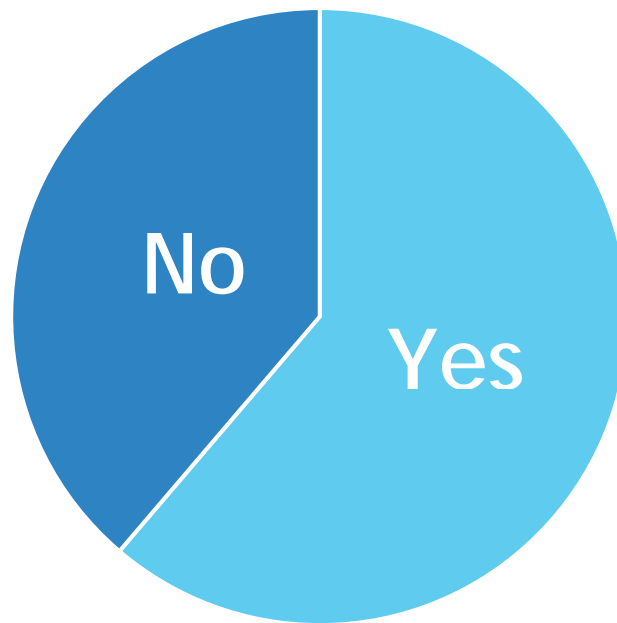
Does your entity engage in outreach on water resource topics?



106 Responses

2021 NCTCOG Water Resources Questionnaire

Has the COVID-19 pandemic impacted your water outreach efforts?



80 Responses

2021 NCTCOG Water Resources Questionnaire

If yes, then how was water outreach impacted?

“All in-person education programs had to be adapted into virtual programs.”

“Increased print and digital media outreach.”

“Youth education and school events were canceled.”

2021 NCTCOG Water Resources Questionnaire

What public perceptions of water resources are a challenge to your outreach efforts?

Common Themes:

- ▶ Lack of understanding about effort needed to supply clean water.
- ▶ Residents think the cost of water is too high.
- ▶ Residents underestimate how much water they use, especially outdoors.
- ▶ Most residents use more water than they need.

Discussion

7. 2021 Update to the Water Quality Management Plan.

- **Early May 2021** - Draft of 2021 Update to the WQMP completed.
 - Compiling new data, updating information, and maps
- **Late May 2021** - 30-day public comment period begins
- **July 14, 2021** - WRC considers 2021 WQMP for approval.

Other Business and Roundtable Discussion

9. NCTCOG Updates

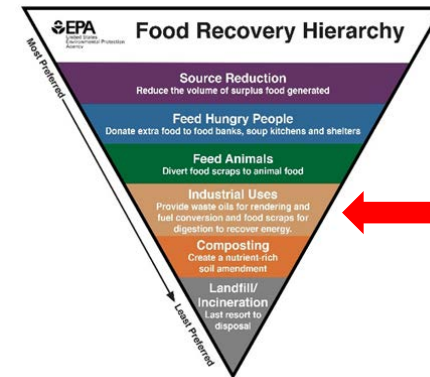
- a. Organic Waste to Renewable Natural Gas Feasibility Study.

North Central Texas Organic Waste to Fuel Feasibility Study

Why is NCTCOG interested in this Topic?

Challenges and Opportunities for North Central Texas

- Retain and Improve Landfill Capacity
 - 36 years of remaining capacity left
- Divert Food Waste and Other Organics
 - 50% of NCT waste stream is organic waste (31% food waste)
- Improve Biosolid Management
- Produce Biogas and Renewable Fleet Fuel
 - Support transition to RNG vehicles
- Reduce Greenhouse Gas and Other Emissions
- Meet zero-waste and other goals



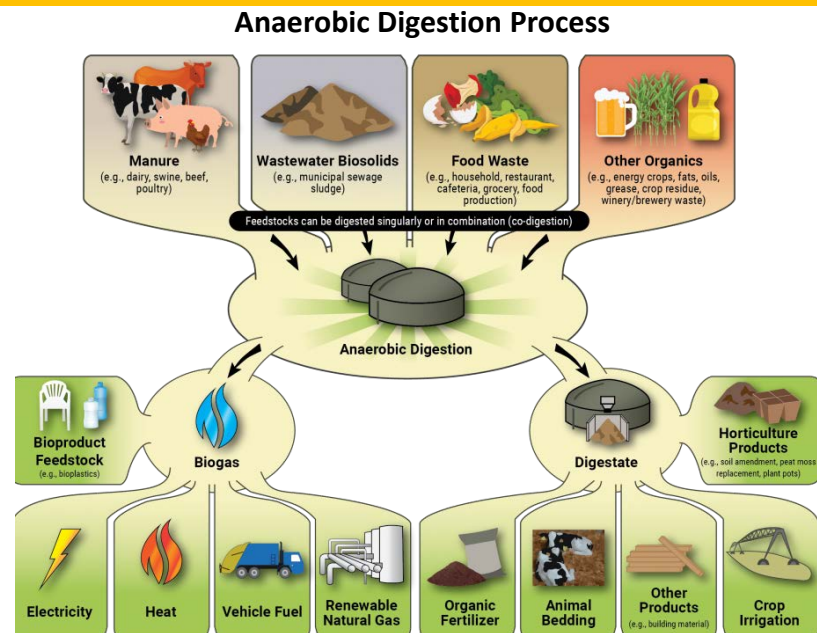
EPA Food Waste Recovery Hierarchy (Source: EPA)



EPA Non-Hazardous Waste Management Hierarchy (Source: EPA)

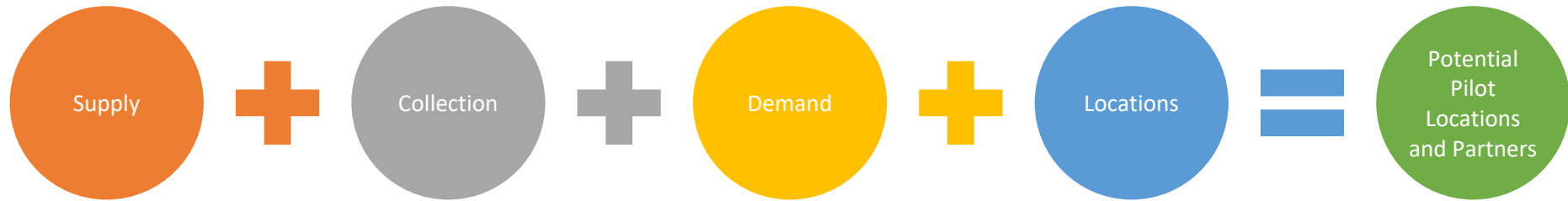
Regional Study Goals

- Advance regional efforts to divert food waste, and other organics, from landfills to preserve landfill capacity
- Increase regional renewable energy opportunities
- Evaluate the potential to reduce fleet emissions
- Identify pilot projects and partnerships to advance those projects



NCTCOG Continued Efforts

North Central Texas Organic Waste to Fuel Feasibility Study



Supply



Collection



Demand



Locations



Potential
Pilot
Locations
and Partners

Evaluate pre- and post-consumer food waste, resulting in a Market Assessment and evaluation of available regional feedstocks.

Regional Feedstock Collection Network Assessment that identifies opportunities and models for regional approaches to feedstock collection.

Evaluate existing and future demand for renewable natural gas (RNG) fuel vehicles and other energy sources.

Identifying regional anaerobic digestion location scenarios using Food/Flora to Fleet Fuel (F4) Model; documenting energy, emissions, and cost/benefit analysis of each location scenario.

North Central Texas Organic Waste to Fuel Feasibility Study Updates

- Adjusted the name of this effort to better reflect that all organics, including biosolids from WWTPs, as well as other organic sources will be assessed in a Feedstock Market Assessment and included in scenarios.
- North Central Texas **Organic Waste to Fuel Feasibility Study**
 - Award and initiation of work March 2021
 - Partnership between NCTCOG, DFW Clean Cities, and University of Texas at Arlington
 - Will hire a contractor in the Spring
 - Goal: Identify pilots and partnerships to move projects forward
- **Past Regional Webinars:**
 - December 9, 2020 - Food Waste, Anaerobic Digestion, and RNG Regional Efforts Roundtable ([recording and presentations available here](#))
 - March 24, 2021 – Organic Waste to RNG Regional Roundtable (recording and presentation to be posted here: <http://conservenorthtexas.org/event-archive>)

Next Steps: Establish and Convene Advisory Group with Diverse Stakeholders to Guide Study (March-May 2021)

- Municipalities
- Wastewater Provider
- School District
- Private Sector
- Industry
- Non-profit
- University (UTA) and others as appropriate

Other Business and Roundtable Discussion

9. NCTCOG Updates

- b. Solid Waste Implementation Program Call for Projects.

FY22-23 Solid Waste Grant Call for Projects

- ▶ The NCTCOG allocates a portion of the funding received from TCEQ toward solid waste implementation grants.
- ▶ Opened April 7, 2021 and closes May 26, 2021 at 5PM
- ▶ Solid Waste Grant webinar will be held on April 8, 2021 at 2PM
 - ▶ The recorded webinar will be posted to the Solid Waste Grant Website
- ▶ [NCTCOG Solid Waste Grant Website](#)
- ▶ [Grant Application Guidelines](#)
- ▶ [Call for Projects Timeline](#)
- ▶ Contact Cassidy Campbell at ccampbell@nctcog.org or 817-608-2368 for more information.

All funding for these projects is subject to sufficient funds in the Municipal Solid Waste Disposal Account and to the receipt and availability of funds appropriated by the Texas Legislature for the purposes of this call for projects. In the event funding is not available, NCTCOG has no obligation to provide funding to any projects that may be selected in association with this call for projects.

Funding & Eligibility

- **Estimated** Funding Available: **\$1.1 to 1.3 Million**
- Eligible Applicants:
 - Cities
 - Counties
 - Public and Independent School Districts (excludes Universities and other post-secondary educational institutions)
 - General and special law districts created in accordance with state law and having the authority and responsibility for water quality protection or MSW management, to include river authorities
 - Councils of Governments

Project Categories

- ▶ The following project categories are eligible for grant funding:
 - ▶ Local Enforcement
 - ▶ Source Reduction and Recycling
 - ▶ Household Hazardous Waste
 - ▶ Litter and Illegal Dumping Programs
 - ▶ Citizens' Collection Stations and "Small" Transfer Stations
 - ▶ Local Solid Waste Management Plans
 - ▶ Technical Studies with a Regional Scope/Impact
 - ▶ Educational and Training Projects

Other Business and Roundtable Discussion

9. NCTCOG Updates

- c. Wastewater and Treatment Education Roundtable (WATER).
 - i. Next Meeting - July 8, 2021 at 10:00 a.m. via Microsoft Teams. [Add to Calendar](#)
 - ii. Educational Videos
 - [Why Your Sink Isn't a Garbage Can](#)
 - Being finalized - *Always Trash Your Personal Care Items*
 - Next Video Topic: Proper Usage and Disposal of Home Cleaning Products
 - iii. NCTCOG Webinar: Municipal BMP "Show and Tell" on May 11, 2021 at 9:30 a.m. [RSVP Here](#)
- d. Public Listening Sessions and Roundtables on Lead and Copper Rule Revisions. U.S. EPA announcement can be found [here](#).

Other Business and Roundtable Discussion

10. Future Agenda Items

The WRC can request future agenda items.

11. Roundtable

The WRC is invited to share what is happening in their communities.

Other Business and Roundtable Discussion

12. Schedule for the next meetings

The next WRC meetings are scheduled for:

- ▶ **Wednesday, July 14, 2021**

[Add to Calendar](#) - Location TBD

- ▶ **Wednesday, October 13, 2021**

[Add to Calendar](#) - Location TBD

13. Adjournment

Staff Contacts

▶ Elena Berg

Environment and
Development Planner

Eberg@nctcog.org

817-608-2363

▶ Cassidy Campbell

Senior Environment and
Development Planner

Ccampbell@nctcog.org

817-608-2368

▶ Tamara Cook

Senior Program Manager
of Environment and
Development

Tcook@nctcog.org

817-695-9221

▶ Edith Marvin

Director of Environment
and Development

Emarvin@nctcog.org

817-695-9211