



Comprehensive Environmental & Climate Action Plan Fiscal Year 2021 Implementation Work Plan

I. Introduction

This Implementation Work Plan (IWP) provides an overview of efforts planned under the Comprehensive Environmental & Climate Action Plan (CECAP), during the fiscal year 2020-21 (FY 21). With equity and inclusion as core values, the CECAP proposes solutions that will improve our natural environment, our educational and economic outcomes, the affordability of our housing stock, and our transportation systems. The IWP outlines efforts that collectively maintain the City of Dallas as a leader in reducing emissions, and sets the path forward towards addressing climate and environmental risk with effective, equitable, and common-sense solutions.

II. Background

The CECAP was passed unanimously by Dallas City Council on May 27, 2020, and serves as a comprehensive roadmap to outline the specific activities that the City plans to undertake to improve quality of life for all residents, to reduce greenhouse gas emissions, to prepare for the impacts of climate change, and to create a healthier and more prosperous community. The Council has provided the staff direction to continue to develop and maintain programs that improve regional air quality, reduce carbon emissions and otherwise address climate change, as a common-sense approach that is good for our residents, our businesses and our planet.

III. Plan Goals and Targets

The goals and actions set forth in the CECAP are determined to build coalitions and strengthen communities, and are determined to significantly reduce carbon emissions and improve the quality of life for residents. The plan proposes 97 actions across eight sectors. The suite of actions in the plan have been carefully selected to include mitigation, adaptation, and environmental quality activities, all under an equity lens, to start Dallas on a good path towards achieving carbon neutrality by 2050. Each action was evaluated for the potential to deliver a robust range of co-benefits, including social equity, economic, public health, mitigation, sustainability over time, environmental quality, and adaptation. The CECAP commits to reaching net zero carbon by 2050, with an interim goal of a 43 percent reduction in greenhouse gas emissions from 2015 levels by 2030. All goals and objectives determined to meet this end goal per the Paris Agreement have measurable targets as summarized by Table III.1 on the following page.



Table III.1 - Summary of CECAP Goals per Sector

Goal	Target	2030 Metric	2050 Metric
Buildings(B#)	<ul style="list-style-type: none"> ▪ Net Zero Energy New Construction ▪ Residential energy use reductions for existing buildings 	100% 10% reduction	Continue 100% 25% reduction
Energy (E#)	<ul style="list-style-type: none"> ▪ Solar Power Installed* ▪ Renewable Electricity Plans 	739,000 KW 20% residents & businesses enrolled	3,695,000 KW 50% residents & businesses enrolled
Transportation (T#)	<ul style="list-style-type: none"> ▪ Publicly Available EV Charging ▪ # local Electric Vehicles ▪ Electric Fleets <ul style="list-style-type: none"> ○ City Fleet ○ Dallas ISD/ DART bus fleet ▪ Single Occupancy Vehicle Travel Mode Shift 	1,500 outlets 39,000 vehicles All new fleet purchases All new fleet purchases Reduce from 88% to 78%	3,000 outlets 70,000 vehicles 100% fleet 100% fleet Reduce from 78% to 62%
Waste Management (SW#)	Organic Waste Diversion Paper Waste Diversion Land-filled Waste Reduction	35% 60% 35%	80% 90% 45%
Water Resources (WR#)	Water Conservation Indirect Water Reuse Impaired Water Body reduction GHG Emissions from Treatment Facilities	1 percent (per capita annually); 10% by year 2030 5% 30% 45%	1 percent (per capita annually) 30% by year 2050 10% 100% 100%
Green Space/Urban Environment (EG#)	Increase Canopy Cover Heat Island Reduction Park or Trail Access	33% 20% 80%	40%+ 75% 95%
Food & Urban Agriculture (FA#)	Healthy Affordable Food Access Increase Acres of Urban Gardens Local Food Sources, % Market Share	50% 20% 10% increase	75% 75% 50% increase
Air Quality (AQ#)	Ground Level Ozone Attainment NAAQS ** attainment	Meet NAAQS Maintain attainment for all pollutants	Maintain NAAQS Maintain attainment for all pollutants
Notes: Source: CECAP. 2020. Summary of Targets, pp37 and 38 *Value reflects corrected number from CECAP Document **NAAQS = National Ambient Air Quality Standards			

Per Section VII of this plan concerning Adaptive Management, the City will perform regular updates to the baseline 2015 Greenhouse gas inventory to assess progress towards achieving emissions reductions. It is anticipated that the annual reporting under this CECAP may include recommendations for additional actions and targets based upon a review of trends in the GHG Inventory.



IV. Year One Focus Area – Building Capacity

Consistent with the goals of the 2017 Paris Agreement, the City's adoption of the CECAP accomplishes two goals under that agreement: setting a 2050 carbon neutrality goal and having a plan towards that goal in place by 2020. The CECAP is also centered on educational programs and incentives to inspire action and allow time to expand institutional scope, develop and build public-private partnerships, and build and grow community support to create momentum while also laying the groundwork for other transformational actions. The initial year of CECAP will focus on building this capacity in the following areas:

1. **Education and Outreach** is one of the foundational steps in the CECAP's progressive implementation approach. Committing resources to educating the public on what is in the CECAP, why these actions are right for Dallas and how they can help the City accomplish the environmental goals is a low-cost high-impact way to build the momentum to get CECAP off to a great start.
2. **Expanding Partnerships** - the CECAP acknowledges that it will take all of us working together to reduce harmful emissions and protect our environment. In year one, we plan to actively engage business, community organizations, subject matter experts and other interested parties to leverage resources that advance CECAP actions.
3. **Amplify Ongoing Actions** - the CECAP builds on the success of the Cities' long history of environmental stewardship. Staff resources in this fiscal year will be dedicated to supporting and elevating the current actions. We also plan to apply the environmental lens to ongoing planning efforts to ensure alignment with CECAP goals.
4. **Explore Funding Opportunities** - CECAP implementation has been prioritized to allow a sustainable strategy utilizing existing budgets, and maximizing external grants, loans, and partnerships, to the degree practicable to minimize the need for additional general funds.
5. **Pilots and Proof of Concept projects** - Another year one exercise will be to determine the feasibility and ideal application of actions in the plan. Many of CECAP's actions have been proven as national best practices and will be calibrated to our local application before being replicated on a larger scale.
6. **Tracking and Accountability** - is critical in securing the public trust. During the first year of CECAP we will develop a transparent system to track and report the plan's progress. This infrastructure could include an online presentation, regular Council updates, clear milestones and annual reporting.

V. Stakeholder Engagement

The CECAP was developed based upon a robust community outreach and engagement effort that included both an Environmental Planning Task Force formed of internal City staff, and an external Stakeholder Advisory Group, formed of public agencies, education, business, public health and social and environmental advocacy groups. Building on these initial efforts, moving forward, three stakeholder groups are convened to advise the City on outreach, trajectory, and milestones for the plan. City staff are also working with other local cities through related efforts at the North Central Texas Council of Governments (NCTCOG). Stakeholders continue to support implementation of the CECAP through the following groups:



- **Environment and Sustainability Council Committee (ENVS)** was established by Mayor Johnson as the first-ever environmental committee comprised of Dallas City Councilmembers, with the tasks of: (1) ensuring the Dallas is a global climate leader; and (2) creating and implementing the City's Comprehensive Environmental & Climate Action Plan.
- **Environment and Sustainability Task Force (EAS-TF)** resulted from City Council Resolution #20-688 adopting the CECAP, that includes a requirement for *"the City Manager identify and convene an Environment and Sustainability Advisory Committee, under guidelines established by the City Manager, comprised of professionals and community members to advise on environment, sustainability, and CECAP implementation."* This interim advisory taskforce is comprised of 15 community members.
- **Leading Environmental Actions Forward (LEAF)** the Office of Environmental Quality & Sustainability (OEQS) established an internal CECAP implementation coordination group with key departments, with rolls in implementing various actions and goals within the CECAP. The group was formed to facilitate a collaborative implementation, and coordination with other related ancillary efforts. The LEAF members serve as subject matter experts to aid in the implementation of CECAP action items, facilitate communication between the OEQS-CECAP team and other city departments, and assist in collecting related performance measures from their respective areas of the plan.
- **Regional Integration of Sustainability Efforts (RISE) Coalition** is a collaboration of North Texas governmental and quasi-governmental organizations working together to reduce harmful emissions, share best practices, lessons learned and resources to support collaboration on regional sustainability and environmental initiatives.

VI. Actions and Activities

Under the identified year 1 focus area, the FY 21 IWP focusses primarily on building capacity and setting the groundwork that supports more widespread actions. Beginning on the following page, this section provides a brief overview of each of the eight goals of the plan, with 46 identified actions and 141 milestones to be implemented this year.



Goal 1: Dallas buildings are energy-efficient and climate resilient.

The combined building and energy sectors account for the highest percentage of GHG emissions in Dallas (64%). In FY 20-21, five actions from this sector will be initiated, with 19 identified milestones. These actions include expansion of existing programs and efforts, as well as updates to existing codes and ordinances. Interdepartmental collaboration will include Building Services, Aviation, Office of the Bond Program, Housing & Neighborhood Revitalization, and the Office of Environmental Quality & Sustainability.

Table 1: FY 20-21 Goal 1 Actions and Milestones

Action	FY 20-21 Milestones
<p>B1: Demonstrate leadership in developing a carbon neutrality plan for municipal operations.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Cost savings, education</i></p>	<ol style="list-style-type: none"> 1. Conduct energy benchmarking for City facilities 2. Establish an inter-departmental energy committee 3. Establish an educational program to reduce energy consumption in the workplace 4. Identify retrofit opportunities 5. Implement retrofits and efficiency improvements 6. Initiate renewable energy development
<p>B2: Achieve Level 3+ Airport Carbon Accreditation at Love Field for carbon neutral operations, maintain accreditation for DFW and pursue for Dallas Executive Airport</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Cost savings</i></p>	<ol style="list-style-type: none"> 1. Maintain Level 2 accreditation 2. Establish emissions from third-party operators 3. Engage with third-party operators to reduce emissions 4. Evaluate feasibility of installing solar panels on airport garages
<p>B7: Increase participation and scope of the Dallas Green Business Certification Program</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Cost savings, education, resource consumption</i></p>	<ol style="list-style-type: none"> 1. Evaluate existing program for participation and effectiveness 2. Partner with Chambers of Commerce to increase awareness and participation in the program 3. Develop and post short case studies of successes achieved by members' businesses 4. Increase scope to include more sustainable practices
<p>B11: Update the Building Code to require wiring conduits for solar photovoltaics and electric vehicle charging infrastructure in new construction</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Adaptation</i></p>	<ol style="list-style-type: none"> 1. Develop a list of building codes related to solar photovoltaics and EV charging 2. Adopt updated building codes in parallel with the NCTCOG 2021 Code Update Committee
<p>B15: Evaluate potential city-owned properties for the creation of "resilience hubs"</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Public health, cost savings, inequality</i></p>	<ol style="list-style-type: none"> 1. Develop a criteria rubric for resilience hubs 2. Identify potential resilience hubs 3. Evaluate viability of potential resilience hubs



Goal 2: Dallas generates and uses renewable, reliable, and affordable energy.

The combined building and energy sectors account for the highest percentage of GHG emissions in Dallas (64%). While the City has committed to using 100 percent renewable energy, there is a desire to convert from using renewable energy credits to local on- and off-site generation. In FY 20-21, six actions from this sector will be initiated, with 13 identified milestones. These actions include expansion of existing programs and efforts, as well as updates to existing codes and ordinances and will involve interdepartmental collaboration of the Office of Environmental Quality & Sustainability, Building Services, Sanitation Services, Office of the Bond Program, and the Office of Government Affairs.

Table 2: FY 20-21 Goal 2 Actions and Milestones

Action	FY 20-21 Milestones
<p>E3: Continue partnership with public utility companies on an intensive program on renewable energy options.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Employment, cost savings, education</i></p>	<ol style="list-style-type: none"> 1. Develop educational programs focused on commercial, industrial, and institutional sectors 2. Partner with stakeholders (local utilities, PACE program, educational institutions, etc.), to participate in public information program 3. Explore new financing opportunities such as grants and subsidies 4. Develop Community Solar Program for Low-income Communities
<p>E5: Build a regional strategic partnership to promote adoption of renewable energy.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Employment, education</i></p>	<ol style="list-style-type: none"> 1. Identify potential partners (counties, school districts, universities, etc.) 2. Develop strategic partnerships to increase investment in renewable energy projects
<p>E6: Establish and invest in renewable energy hubs through partnerships with the private sector.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Employment, cost savings, adaptation</i></p>	<ol style="list-style-type: none"> 1. Establish criteria rubric for renewable energy hubs 2. Identify institutional and contractual requirements to form partnership for joint development of renewable projects 3. Evaluate funding opportunities
<p>E7: Extend city efforts to develop more renewable energy projects on city facilities.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Cost savings, adaptation</i></p>	<ol style="list-style-type: none"> 1. Identify suitable locations for solar panels on City facilities
<p>E8: Continue to implement Green Energy Policy for city facilities.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Cost savings</i></p>	<ol style="list-style-type: none"> 1. Continue to implement Green Energy Policy 2. Identify opportunities for partnerships that can facilitate implementation of renewable energy projects
<p>E10: Advocate for renewable energy policies at the state and federal levels</p> <p><i>Primary benefit: Mitigation</i></p>	<ol style="list-style-type: none"> 1. Advocate through U.S. Climate Mayors for policies that facilitate decarbonization of the power sector 2. Work with Texas mayors to advocate the state legislature to increase the Texas Renewable Portfolio Standard to 90% zero-carbon electricity by 2050.



Goal 3: Dallas' communities have access to sustainable, affordable, transportation options.

The transportation sector forms the single largest contribution of GHG emissions in Dallas (34%), of which 98 percent is attributed to on-road transportation. The majority (78%) of Dallas residents drive to work alone, while another 23.2 percent carpool, telework (4.8%), and use transit (3.8%), and other modes of transportation. In FY 20-21, six actions from this sector, with 23 milestones will be initiated. These actions include implementation of the Connect Dallas Mobility Plan, along with expansion of existing programs and efforts, as well as updates to existing codes and ordinances. This sector will involve Transportation, Equipment & Fleet Management, Office of the Bond Program, Economic Development, the Ad Hoc COVID Recovery Committee, Sustainable Development & Construction, Planning & Urban Design, as well as external partners such as DART and DISD.

Table 3: FY 20-21 Goal 3 Actions and Milestones

Action	FY 20-21 Milestones
<p>T1: Work with City of Dallas, DISD, and DART to transition the bus and light duty fleet to 100% electric by 2040.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Air quality, cost savings</i></p>	<ol style="list-style-type: none"> 1. Continue converting fleet to 100% electric vehicles 2. Conduct a fleet electrification study 3. Determine locations for EV charging stations 4. Explore funding opportunities for EV charging and fleet electrification 5. Install public and semi-public EV charging infrastructure as feasible
<p>T2: Work with private and public intrastate transport operators to expand transit services between major super commuting cities.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Air quality</i></p>	<ol style="list-style-type: none"> 1. Work with DART to incentivize and expand current offerings in the city for transit commuting services 2. Continue to work on development of high-speed rail 3. Work with partners to identify businesses that utilize short-haul air travel 4. Work with transit commuting services to create awareness campaigns and benefits to shift away from short-haul air travel
<p>T5: Support and expand recommended Travel Demand Management strategies identified in the Strategic Mobility Plan.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Air quality, public health, cost savings</i></p>	<ol style="list-style-type: none"> 1. Adopt Strategic Mobility Plan 2. Work with business community to educate on benefits of travel demand, including, but not limited to, work at home, and shifting office schedules
<p>T11: Develop a new comprehensive land use strategy in the upcoming comprehensive plan update to pair with the SMP and CECAP goals, adopt policy to reduce transportation related GHG emissions.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Air quality, employment, public health, cost savings</i></p>	<ol style="list-style-type: none"> 1. Coordinate with DART's long-range transit plan and the TOD plan in T12 2. Review land use strategy's relationship with the bus system, regional job growth, and density and ensure alignment with CECAP goals 3. Review land use strategy for alignment with other relevant plans such as the Strategic Mobility Plan, Economic Development Plan, and Comprehensive Housing Policy 4. Establish policy requiring conformity with land use strategy for staff approval 5. Establish policy requiring non-conforming developers to demonstrate how they will mitigate negative impacts
<p>T14: Adopt a revised parking ordinance strategy that supports new mode split goals and land use strategy that minimizes available parking in transit-oriented districts.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Air quality, cost savings</i></p>	<ol style="list-style-type: none"> 1. Establish parking maximums in areas with mature transit infrastructure 2. Establish parking management districts as needed 3. Pilot a parking district in a Dallas PID, as feasible
<p>T16: Convert all traffic lights and streetlights to LEDs.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Cost savings</i></p>	<ol style="list-style-type: none"> 1. Initiate conversion of streetlights to LEDS, where feasible 2. Continue conversion of traffic lights to LEDS, where feasible



Goal 4: Dallas is a zero-waste community.

Because of good landfill management practices that entail aggressive gas collection and re-sale, the emissions from the waste sector in Dallas are very minimal. However, during the public engagement part of developing the CECAP, there was significant public interest in additional actions within this sector. In FY 20-21, five actions from this sector, with 14 milestones will be initiated. These actions include developing an update to the 2013 Local Solid Waste Management Plan (AKA Zero Waste Plan), along with expansion of existing programs and efforts, as well as updates to existing codes and ordinances. Implementation of these milestones will involve collaboration between the Office of Environmental Quality & Sustainability, Office of Procurement Services, and Sanitation Services.

Table 4: FY 20-21 Goal 4 Actions and Milestones

Action	FY 20-21 Milestones
<p>SW1: Actively promote source reduction, recycling, and composting to the Dallas community.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Resource consumption, emissions reduction, employment</i></p>	<ol style="list-style-type: none"> 1. Expand current education efforts to inform residents and business owners of their options to refuse, reduce, reuse, and recycle 2. Develop an education campaign centered on waste reduction in the commercial sector, including reduction of single use products
<p>SW2: Develop a comprehensive green procurement plan for city operations and establish a sustainable procurement policy.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Resource consumption, resource conservation, emission reduction, employment, cost savings</i></p>	<ol style="list-style-type: none"> 1. Establish criteria for products or service selection, best practices, and suppliers 2. Adopt new plan and policy 3. Develop a staff training program for new purchasing and procurement policies
<p>SW3: Improve solid waste, recycling, and brush/bulky waste collection efficiency.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Cost savings, air quality</i></p>	<ol style="list-style-type: none"> 1. Evaluate benchmarks for service frequency 2. Evaluate collection routes for efficiency 3. Evaluate need for additional transfer stations
<p>SW5: Update and implement the Zero Waste Management Plan.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Resource consumption, air quality</i></p>	<ol style="list-style-type: none"> 1. Update the Local Solid Waste Management Plan 2. Formally adopt Local Solid Waste Management Plan 3. Monitor and evaluate waste to energy alternatives for feasibility
<p>SW8: Continue to capture gas and expand capacity from landfill for reuse and evaluate for city operations.</p> <p><i>Primary benefit: Mitigation</i> <i>Co-benefits: Resource consumption, air quality, cost savings</i></p>	<ol style="list-style-type: none"> 1. Annually evaluate need for gas collection system expansion 2. Expand program as needed to increase methane recovery 3. Market program as a renewable resource or use to meet City's energy needs



Goal 5: Dallas protects its water resources and its communities from flooding and drought.

The water and wastewater sectors together comprise less than 1 percent of the Dallas' GHG emissions; however, climatic variation from flooding to drought forms the largest single risk posed by climate change. Dallas Water Utilities has proactively planned for future conditions as a part of standard operations for years. This plan builds upon these ongoing robust plans and related actions. In FY 20-21, ten actions from this sector, with 29 milestones will be initiated. These actions include expansion of existing programs and efforts, as well as updates to existing codes and ordinances. Implementation of Goal 5 milestones will fall primarily on Dallas Water Utilities and the Office of Environmental Quality & Sustainability, but will also include Sustainable Development & Construction as well as Planning and Urban Design.

Table 5: FY 20-21 Goal 5 Actions and Milestones

Action	FY 20-21 Milestones
<p>WR1: Continue investment in public awareness campaigns to increase knowledge of the value of water and importance of conservation.</p> <p><i>Primary benefit: Adaptation Co-benefits: Stewardship, resource conservation, education</i></p>	<ol style="list-style-type: none"> 1. Continue to offer rebate and incentive-based programs to promote water conservation and reduce costs 2. Continue to offer educational campaigns to promote water conservation and reduce costs 3. Continue public awareness campaigns 4. Continue "Defend Your Drains" public awareness campaign 5. Continue North Texas Regional unified education and outreach campaign 6. Continue "Wholesale Customer Outreach Program" to support wholesale customer cities
<p>WR2: Continue investment in leak detection and expand programs to reduce overall water loss through the conveyance systems.</p> <p><i>Primary benefit: Adaptation Co-benefits: Stewardship, education</i></p>	<ol style="list-style-type: none"> 1. Continue existing leak detection programs 2. Expand leak detection programs, as feasible 3. Work with customer cities to establish an annual reduction target over the next ten years
<p>WR4: Encourage businesses and residents to plant drought-tolerant and native vegetation or xeriscape to reduce irrigation water use.</p> <p><i>Primary benefit: Adaptation Co-benefits: Stewardship, resource consumption, emissions reduction, cost savings</i></p>	<ol style="list-style-type: none"> 1. Continue to offer irrigation assessments and outreach programs 2. Develop additional resources to promote reducing outdoor irrigation 3. Continue ongoing education and outreach programs to promote and recognize landscape design that reduces water consumption
<p>WR5: Continue to monitor and protect water quality and implement improvement projects in the watershed.</p> <p><i>Primary benefit: Environmental quality Co-benefits: Water quality, public health</i></p>	<ol style="list-style-type: none"> 1. Continue to collaborate with other agencies within the Trinity Watershed 2. Update current Stormwater Quality Monitoring Program to include other surface water bodies and expand upon parameters monitored 3. Explore feasibility of a Watershed Protection Plan for White Rock Creek to protect public health

Continued



Table 5: FY 20-21 Goal 5 Actions and Milestones (Continued)

<p>WR6: Continue to protect and monitor water quality by tracking emerging contaminants that may impact public health.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Public health</i></p>	<ol style="list-style-type: none"> 1. Enhance monitoring plan for emerging contaminants, including PFAS, as needed
<p>WR7: Use FEMA community rating system to educate and protect communities from flooding.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Cost savings</i></p>	<ol style="list-style-type: none"> 1. Evaluate feasibility for undertaking additional initiatives to qualify for Class 4 rating 2. Use rating system to educate flood-prone communities
<p>WR8: Complete the implementation of major planned and ongoing drainage infrastructure projects to improve community resilience to flooding.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Cost savings</i></p>	<ol style="list-style-type: none"> 1. Continue to fund and implement ongoing drainage infrastructure projects 2. Implement Mill Creek Drainage Relief Tunnel 3. Implement Dallas Floodway/Dallas Floodway Extension
<p>WR9: Initiate a comprehensive storm drainage system assessment and planning process.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Public health</i></p>	<ol style="list-style-type: none"> 1. Initiate comprehensive storm drainage system assessment 2. Identify critical projects to be funded through long-term CIP 3. Evaluate funding mechanisms to implement critical projects
<p>WR11: Continue monitoring, evaluating, and updating the drought contingency plan.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Public health, resource conservation</i></p>	<ol style="list-style-type: none"> 1. Continue to monitor and evaluate effectiveness of the Drought Contingency Plan 2. Update Drought Contingency Plan as necessary
<p>WR12: Continue contingency planning to protect and maintain service of key water infrastructure facilities from extreme weather events.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Cost savings, emissions reduction</i></p>	<ol style="list-style-type: none"> 1. Assess vulnerability of drinking water facilities to extreme weather events and identify ways to mitigate impact 2. Conduct vulnerability assessments for wastewater and stormwater facilities and evaluate results for implementation 3. Evaluate potential to install secondary power sources for critical infrastructure



Goal 6: Dallas protects and enhances its ecosystems, trees, and greenspaces that in turn improve public health.

In Dallas, there are 388 parks totaling over 27,000 acres, plus the approximate 6,000-acre Great Trinity Forest. However, these green spaces are not evenly distributed, and only about 60 percent of Dallas residents have access to a park within ½ mile walk of their home. Additionally, the City of Dallas is second only to Phoenix, Arizona relative to the size of the urban heat island. In FY 20-21, five actions from this sector, with 16 milestones will be initiated. These actions include implementing an Urban Forest Master Plan, along with expansion of existing programs and efforts, as well as updates to existing codes and ordinances. Goal 6 actions and milestones will involve collaboration between Dallas Water Utilities, Sustainable Development & Construction, Office of Environmental Quality & Sustainability, Parks & Recreation, Planning & Urban Design, and Public Works.

Table 6: FY 20-21 Goal 6 Actions and Milestones

Action	FY 20-21 Milestones
<p>EG2: Assess opportunities for blue-green infrastructure in the public realm to reduce flood risk.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Emissions reduction, air quality, water quality, public health, resource conservation</i></p>	<ol style="list-style-type: none"> 1. Identify areas prone to current and future flood risk 2. Evaluate effectiveness of green infrastructure to mitigate flood impact
<p>EG3: Increase tree canopy in both private and public realm to complete implementation of recommendations from the Urban Forest Master Plan.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Emissions reduction, air quality, water quality, public health</i></p>	<ol style="list-style-type: none"> 1. Adopt Urban Forest Master Plan 2. Begin implementation of actions in the Dallas Urban Forest Master Plan 3. Establish protocols for assessing canopy loss 4. Establish protocols for managing debris 5. Establish protocols for replanting and monitoring, including after storms and droughts that result in loss
<p>EG4: Continue ongoing programs to collaborate with community organizations to promote tree planting efforts, protection of trees and prairies, and drought tolerant landscapes.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Emissions reduction, air quality, water quality, public health, employment</i></p>	<ol style="list-style-type: none"> 1. Work with community-based organizations on land stewardship programs that educate residents and businesses and that plant and maintain trees in areas subject to heat island impacts 2. Develop educational resources on best practices for maintaining mature trees 3. Support partnerships and initiatives that protect and expand Blackland Prairies, as feasible 4. Continue Branch Out Dallas, Branching Out Dallas, and Reforestation Program
<p>EG5: Update city park operations and maintenance procedures to include comprehensive ecofriendly and sustainable best management practices.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Education, air quality</i></p>	<ol style="list-style-type: none"> 1. Update park operations and maintenance procedures to include ecofriendly and sustainable practices 2. Train City parks maintenances staff on the updated sustainable practices
<p>EG9: Support public and private partnerships using nature-based solutions to address public health challenges.</p> <p><i>Primary benefit: Environmental justice</i> <i>Co-benefits: Education, public health, employment</i></p>	<ol style="list-style-type: none"> 1. Provide technical assistance with grant writing 2. Provide informational resources on funding opportunities and financing options to nonprofits 3. Work with the Nature Conservancy, Re-tree, and Texas Trees on Breathe Easy Dallas, post-tornado reclamation and Cool-Schools Programs



Goal 7: All Dallas’ communities have access to healthy, local food.

Access to healthy food for vulnerable communities in southern and western Dallas is a significant challenge. It has been documented that over 36 percent of Dallas’ residents live in census tracts that meet the uSDA definition for food deserts. Additionally, the food supply chain is heavily dependent upon food suppliers outside of Texas and the United States. Rising temperatures, changing precipitation patterns and more frequent droughts may result in losses to crops and livestock, and could lead to supply chain issues and increased food insecurity. This is also an area with significant community concern. In FY 20-21, five actions from this sector, with 16 milestones will be initiated. These actions include developing an Urban Agriculture Plan to guide efforts forward as well as updates to existing codes and ordinances. Departments involved in Goal 7 activities include Office of Environmental Quality & Sustainability, Office of Innovation, Economic Development, Office of Procurement Services, and Convention & Event Services.

Table 7: FY 20-21 Goal 7 Actions and Milestones

Action	FY 20-21 Milestones
<p>FA1: Increase access to information on sustainable agriculture, best practices, and the benefits of healthy and local foods.</p> <p><i>Primary benefit: Adaptation</i> <i>Co-benefits: Public health, cost savings, education</i></p>	<ol style="list-style-type: none"> 1. Create a multi-faceted campaign aimed at a range of audiences 2. Provide technical assistance on urban farming in North Texas to stakeholders 3. Identify opportunities to increase consumer awareness of food origins
<p>FA2: Create a Food Advisory Council.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Stewardship, education, resource consumption, emissions reduction, adaptation</i></p>	<ol style="list-style-type: none"> 1. Identify potential members including farmers, advocates, nonprofits, restaurants, chefs, public health experts, and community members 2. Establish the Food Advisory Council
<p>FA3: Develop a Dallas Comprehensive Food and Urban Agriculture Plan.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Water quality, employment, education, public health, resource consumption</i></p>	<ol style="list-style-type: none"> 1. Initiate development of a Dallas Comprehensive Food and Urban Agriculture Plan 2. Perform a comprehensive review of policy and regulatory barriers to growing local food for personal consumption or economic development 3. Develop a plan to remove aforementioned barriers 4. Evaluate demographic and community-specific needs
<p>FA9: Establish a local food procurement plan to encourage local food purchasing at city-sponsored events.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Employment, public health, adaptation</i></p>	<ol style="list-style-type: none"> 1. Develop a food procurement policy that emphasizes healthy, local food 2. Set geographic and nutritional standards for all City-sponsored events 3. Formally adopt policy
<p>FA14: Adopt a special events ordinance that encourages procurement of locally sourced food, recycling of waste generated, and compost bins at special events.</p> <p><i>Primary benefit: Environmental quality</i> <i>Co-benefits: Education, public health, stewardship</i></p>	<ol style="list-style-type: none"> 1. Create ordinance for special events that requires multiple waste management options 2. Formally adopt ordinance 3. Develop informational resources to help provide context for the ordinance 4. Develop a program to help event organizers donate surplus food, compost, and recycle organics



Goal 8: All Dallas’ communities breathe clean air.

While air quality in Dallas is generally improving, in north Texas, 10 counties including Dallas, do not consistently meet the 2008 Federal Air quality criteria for ground level ozone; nine counties consistently do not meet the 2015 federal ozone standard. This is also an area with significant community concern. In FY 20-21, we will be working on 11 milestones under the four actions from this sector. These actions include implementing both regulatory and non-regulatory monitors, along with expansion of existing programs and efforts. Departments working towards these efforts include the Office of Environmental Quality & Sustainability, Transportation, Planning & Urban Design, and Sustainable Development & Construction.

Table 8: FY 20-21 Goal 8 Actions and Milestones

Action	FY 20-21 Milestones
<p>AQ1: Work with the Texas Commission on Environmental Quality to install additional air quality monitoring stations across the city.</p> <p><i>Primary benefit: Environmental justice Co-benefits: Air quality, public health</i></p>	<ol style="list-style-type: none"> 1. Work with TCEQ to identify location for installation of a new monitoring station 2. Install new monitoring station as approved 3. Continue to make data available to the public
<p>AQ2: Partner with nonprofits and schools to develop and implement non-regulatory monitors in neighborhoods.</p> <p><i>Primary benefit: Environmental justice Co-benefits: Air quality, public health</i></p>	<ol style="list-style-type: none"> 1. Work with non-profits to site and install non-regulatory monitors in neighborhoods based upon appropriate public health and other data 2. Select locations in coordination with stakeholders 3. Use neighborhood level data to track progress for air quality improvement
<p>AQ3: Continue to support and expand on the Air North Texas campaign to raise public awareness and improve air quality.</p> <p><i>Primary benefit: Environmental justice Co-benefits: Air quality, public health, education</i></p>	<ol style="list-style-type: none"> 1. Continue to support Air North Texas Campaign 2. Expand on Air North Texas Campaign 3. Tailor communication to suit needs of each community
<p>AQ4: Ensure new industries are an appropriate distance away from neighborhoods.</p> <p><i>Primary benefit: Environmental justice Co-benefits: Air quality, public health</i></p>	<ol style="list-style-type: none"> 1. Develop a map of all environmentally-impacted parcels 2. Review and amend zoning standards as needed to separate residential and industrial uses



VII. Adaptive Management

The CECAP commits to regular review of performance towards meeting the emissions reduction goals set forth in the 2017 Paris Agreement, per the U.S. Climate Mayors commitment. This review is based upon performing regular updates of the greenhouse gas (GHG) inventory and assessment of data trends towards reductions in emissions. The CECAP includes a minimum three-year GHG inventory interval.

The CECAP was based upon the most GHG inventory available to the department. This baseline inventory was completed using the International Local Governments for Sustainability (ICLEI) methodology in 2019, using data for the 2015 calendar year.

While sufficient for initial planning, the OEQS climate staff will begin updating this inventory this year to reflect data from 2019, to allow an assessment of where the City currently stands relative to GHG emissions, and to guide future planning, identify any necessary CECAP plan updates and help guide the overall focus for implementation.

Because of the government shutdown, and other related anomalous data excursions during 2020, the data from 2019 will be used to support this effort, and the ICLEI methodology, using the Clearpath tool will be used to support this inventory (consistent with the 2015 effort).

Depending on trend analyses, additional actions may be recommended for implementation to improve performance towards meeting the goals of the 2017 Paris Agreement.

VIII. Workplan Schedule

Upon finalization of actions and milestones for FY 20-21, a summary schedule will be developed through collaboration with our participating partner departments. This schedule will be appended to this IWP to reflect the initial approach guiding the implementation of the CECAP for this year.