

Environment

Goal and Work Plan Priorities

Goal Statement

Preserve, enhance, and encourage a culture of conservation that will help protect Duncan's natural environment, promote greening efforts and beautification for future generations through education and stewardship and encourage social and economic opportunities that are compatible with nature and builds community resilience and social responsibility within the community.

Work Plan Priorities

General Environment Priorities

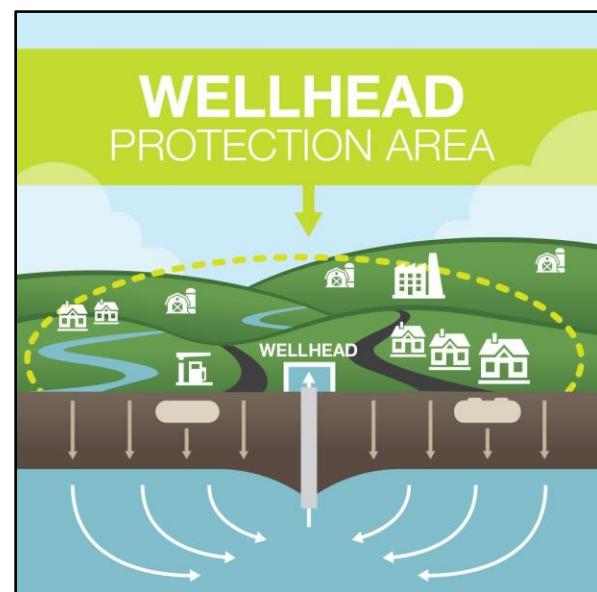
Continue to identify and protect floodway and floodplain area

The City of Duncan was audited by FEMA in 2024 regarding floodplain and floodway development practices and was found to be in very good standing with only one property that was discussed for review to minimize flood damage from occurring within the community. The positive review and discussion are because of city efforts to regulate the floodplains and floodways of the community and the measures being taken to safeguard areas near creeks and streams running throughout Duncan. FEMA has encouraged Duncan to build a database of identified properties, with and without structures, that can be used as a tool for future community and economic development purposes.



Ensure that future access to clean water and sanitation are protected and provided

Access to clean water and sanitation is considered a fundamental human right and is essential for maintaining good health and preventing disease. Across the United States, it is estimated that 2.2 million Americans and because of aging infrastructure and failing septic systems, tens of millions more lack adequate sanitation facilities for the safe disposal of human waste and wastewater treatment. These conditions are also being observed throughout the City of Duncan, and it is prudent that a capital improvement plan be developed that identifies and evaluates our local infrastructure with a repair/replacement plan. It is equally important that local leaders take steps to identify additional sources of water that can be used for human conception as the community grows and becomes more sustainable.



When feasible, invest in green technology and infrastructure

Green technology and infrastructure is a growing market for community and economic development to consider as more federal and state regulations are passed with the intent to preserve the environmental future. A common form of infrastructure that has really reembraced green technology is that of stormwater management with the use of rain gardens, green roofs, and permeable pavements that not only slow the rate of water runoff but also serve as filters for contaminants before these particles can migrate to our clean water sources. Duncan is encouraged to utilize green technology and infrastructure, when feasible, to meet the future needs of the community and environment.



Promote green economic growth and development

Green economic growth is a model of economic progress that aims to balance economic growth with environmental sustainability. The process looks to reduce environmental impacts, create new markets, free up resources, create jobs, and reduce business costs – all which are important components to consider when attracting new businesses and residents to the community. During the public forums of this planning process, the up-and-coming generation that is beginning to enter the workforce have indicated that the environment policy and action is an important component that they are considering when they choose their path into the future. Duncan needs to set policies, and act on those policies when economically feasible, to not only work towards a more sustainable environment but also a community that is attractive to our future employers and workforce.



Environmental Identity and Designations Priorities

Grow and promote Duncan as the Crapemyrtle Capital of Oklahoma

In 2008, the City of Duncan was designated as the Crapemyrtle Capital of Oklahoma when the Resolution passed both chambers unanimously. This designation was set in motion by work done during Dream Duncan's Destiny, a planning effort much like this Destination Duncan: A Quality-of-Life Plan, to help promote tourism, economic development, and promoting the community. The community needs to now move forward to the next phase in installing and maintaining crapemyrtles throughout the community, in public spaces, and along the Heritage Trail to serve as a greater catalyst for tourism and economic growth.

Promote and grow Highway 81 as an Alternative Fuel Corridor

The U.S. Department of Transportation Federal Highway Administration (FHWA) has been designating a national network of electric vehicle (EV) charging and hydrogen, propane, and natural gas fueling infrastructure along the national highway corridors. Highway 81, running through Duncan, is currently designated as a “pending corridor” for EV and hydrogen vehicles and as such the City of Duncan needs to be positioned to support future development that includes charging these charging stations. Duncan also should be a future leader in the discussion of transportation corridors for liquified natural gas,

liquefied petroleum gas, and compressed natural gas – alternatives not yet designated throughout the State of Oklahoma but are designated in our neighboring states. By establishing Duncan as a part of the Alternative Fuel Corridor, the community can capture future transportation funding and economic development opportunities that other communities will be seeking to attract as future corridors come online at part of this FHWA project.

Promote Wildflower Habitat designation

Wildflowers provide food sources to pollinators, birds, and other small animals that are necessary for an encompassing biodiversity that is native to this region of Oklahoma. Duncan is encouraged to seek certification with the National Wildlife Federation's Wildlife Habitat program and the Oklahoma Wildscapes Program. Not only will striving to obtain these designations benefit our local pollinators, overall soil health, and low maintenance and cost savings of common areas but can also serve to attract tourism, new businesses, and job opportunities to Duncan. To obtain these designations, Duncan will need to set policies for public spaces to include at least 50% native plants, food and water sources for local wildlife, and natural shelter settings for wildlife year-round.



Become a designated Tree City

To be designated a Tree City, a community needs to have a tree board (parks board often serves in this capacity), has adopted a tree ordinance, has an annual budget of at least \$2.00 per capita, and observes and proclaims Arbor Day each year. At first glance, the \$2.00 per capita investment may seem a bit of a challenge, but with a bit of investigation it can be quickly realized that the community is already spending this on planting, care, and removal of public trees in our parks and public spaces. This designation can cultivate civic pride while committing to a healthier, happier, and more livable community. To begin this process, the City of Duncan will need to work with the Oklahoma Forestry Services.



Encourage butterfly, bee and pollinator habitats

Pollinators are responsible for about one-third of the food we consume, and having established pollinator habitats, areas that provide food, water and shelter for bees, butterflies, moths, beetles, and birds, are essential for the reproduction of flowering plants and production of most fruits and vegetables. As the City of Duncan strives to be designated at a Wildflower Habitat community and a Tree City, local leaders need to support and encourage residents and local businesses to set up their own butterfly, bee and pollinator habitats. The use of native plants is both important to our local ecosystem and can reduce costs for maintenance (less frequent mowing and minimized or eliminated use of pesticides and herbicides) and can have a positive economic impact to our local farmers, community gardens, farmer's markets and family-owned gardens.



Environmental Education and Stewardship Priorities

Grow educational programs with Duncan Public Schools Agricultural Department

Agriculture and forestry continue to be leading industries within the State of Oklahoma and prepare future generations to be competitive in a broad sector of crop production, livestock, aquaculture, and forestry. Duncan High School also has a Future Farmers of America (FFA) program which helps prepare students for careers in agriculture and leadership. Though Duncan's FFA program is very active with its students, in general this valuable resource is underutilized by the community and there is great potential for public/private partnerships to be formed that will help in preparing our future community leaders in the field of agriculture, leadership, and other community interests.



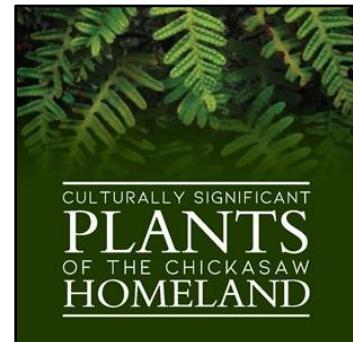
Utilize Oklahoma State University resources for future projects and programs

Not only does the Oklahoma State University Extension Office help Oklahomans solve local issues and concerns, promotes leadership, and manage resources wisely but they also provide a host of programs and services that benefit our community. OSU Extension offers educational information, expertise related to human and animal health, 4-H Youth Development, and assistance in community and rural development that continue to raise the overall quality of life of our citizens. Historically, local leaders have not fully utilized the offerings of the OSU Extension in Duncan in local projects and proposal and a priority should be given to do so when moving forward with the implementation process of this, and future, plans for the community.



Develop educational opportunities and stewardship programs that partner with the Chickasaw Nation

In 2024, the Chickasaw Nations signed a memorandum of understanding with the U.S. Environmental Protection Agency (EPA) to establish a framework for cooperation and coordination in the effort to help ensure sustainable management of water, land, and other natural resources. This partnership, along with the Chickasaw Nation's leadership in environmental issues, should serve as a catalyst for future research, development, and assessment of our locally rich environment and setting policies that not only protect and enrich our local natural settings but also drive future community and economic growth that benefits both the Chickasaw Nation and the City of Duncan.



Work Plan Priorities Matrixes

| General Environmental Priorities | Start | Timeframe | Key Stakeholders |
|--|---------|------------|---|
| Continue to identify and protect floodway and floodplain areas | Ongoing | Ongoing | Community Development, City Council |
| Ensure that future access to clean water and sanitation are protected and provided | 2025 | Long-Range | Public Works, Community Development, City Council |
| When feasible, invest in green technology and infrastructure | 2025 | Long-Range | Public Works, Duncan Power, City Council |
| Promote green economic growth and development | 2025 | Long-Range | Community Development, DAEDF, City Council |

| Environmental Identity and Designations Priorities | Start | Timeframe | Key Stakeholders |
|--|---------|-------------|---|
| Grow and promote Duncan as the Crapemyrtle Capital of Oklahoma | Ongoing | Ongoing | Community Development, DETA, City Council |
| Promote and grow Highway 81 as an Alternative Fuel Corridor | 2025 | Short-Range | Community Development, ODOT, City Council |
| Promote Wildflower Habitat designation | 2025 | Short-Range | Community Development, DETA, City Council |
| Become a designated Tree City | 2025 | Mid-Range | Community Development, DETA, City Council |
| Encourage butterfly, bee and pollinator habitats | 2025 | Mid-Range | Community Development, DETA, City Council |

| Environmental Education and Stewardship Priorities | Start | Timeframe | Key Stakeholders |
|---|-------|-----------|--|
| Grow educational programs with Duncan Public Schools Agriculture Department | 2025 | Mid-Range | Community Development, Duncan Public Schools, City Council |
| Utilize Oklahoma State University resources for future projects and programs | 2025 | Mid-Range | Community Development, OSU Extension Office, City Council |
| Develop educational opportunities and stewardship programs that partner with the Chickasaw Nation | 2025 | Mid-Range | Chickasaw Nation, Community Development, City Council |

