

Natural Resources

Natural resources refers to street trees, natural areas, and biodiversity conservation as well as water quality and supply. Climate change may increase heavy precipitation, lead to extreme heat, and shift the life cycle timing of our natural ecosystems. Maintaining and enhancing natural resources can increase natural resilience to climate impacts.

Strategies and Actions

Strategies include supporting urban forests and greenspace. Urban forests and tree management can help cool homes and businesses during extreme heat events. Greenspace supports wildlife, stormwater management, and recreation. Strategies focus on protecting and managing open space as climate change alters ecosystems. Conserving water is also a key way to protect natural resources. The City can update building codes, focus on incentivizing water conserving appliances, and manage roadside vegetation to increase stormwater absorption.

Actions that protect and conserve biodiversity will create a more resilient Columbia. These actions will be supported by educating the community about the benefits of nature in our city and how to incorporate it into their everyday lives through sustainable landscaping, design, and stewardship.

Goal NR-1. Increase climate resilience and carbon sequestration potential of public and private lands.

Strategy NR-1.1: Increase the accessibility and quality of habitat for native plants and animals.

NR-1.1.1	Manage publicly-owned natural areas to enhance and maintain diverse native communities.	Priority
NR-1.1.2	Establish and effectively manage native habitat corridors along trails and utility easement areas to restore and maintain landscape connectivity.	Priority
NR-1.1.3	Create an ordinance that establishes a Transfer of Development Rights program to protect undeveloped lands for land conservation and/or agriculture.	Priority
NR-1.1.4	Support the Urban Forest Master Plan to identify programs and suitable locations to maintain and expand Columbia's urban tree canopy.	Priority
NR-1.1.5	Update current tree preservation requirements to protect tree root systems and large legacy trees during construction.	Priority
NR-1.1.6	Assess whether or not to purchase and preserve greenspace in and surrounding the city by quantifying the equitable, environmental, and economic benefits along with the costs of maintaining and owning the property.	Other
NR-1.1.7	Require the use of climate-adapted plants in landscaping at City-owned properties.	Other
NR-1.1.8	Update current development regulations to recommend or require the use of appropriate climate-adapted trees and plants for new- and re- development.	Other
NR-1.1.9	Identify underutilized paved areas and incentivize conversion to sustainable green space.	Other

Goal NR-2. Reduce per capita water usage.

Strategy NR-2.1: Encourage water conservation.		
NR-2.1.1	Update rate structure to encourage reduced water use.	Priority
NR-2.1.2	Update building code to require water conservation measures (e.g., grey water infrastructure, drought resistant landscaping) in new construction and renovations.	Other
NR-2.1.3	Develop a technical assistance and incentive program to encourage water conservation behavior and upgrades, such as use of drip irrigation and low-flow toilets.	Other

Goal NR-3. Reduce negative impacts from stormwater runoff and flooding.

Strategy NR-3.1: Improve stormwater management.		
NR-3.1.1	Implement strategies to mitigate stormwater impacts due to development and redevelopment of properties currently exempted from stormwater management requirements.	Priority
NR-3.1.2	Build more permeable parking lots and driveways and use more recycled materials with concrete.	Other
Strategy NR-3.2: Minimize risks to flood-prone areas.		
NR-3.2.1	Mine existing data sources (e.g., FEMA Risk Maps) to identify areas prone to flooding.	Priority
NR-3.2.2	Perform detailed studies to identify areas that are at high risk for flooding and may be prospect for property acquisition or mitigation.	Priority
NR-3.2.3	Increase stream buffer requirements to provide additional flood water storage and minimize property damage due to erosion and flooding.	Priority
NR-3.2.4	Perform a flood risk assessment using historical data and future precipitation forecasts to identify areas and critical infrastructure vulnerable to flooding.	Priority