DEPARTMENT OF RECREATION, PARKS AND CULTURAL ACTIVITIES

Fact Sheet on Natural Resources & Climate Change

1108 Jefferson St., Alexandria, VA 22314 | 703.746.5411

City of Alexandria's
Natural Resources

Energy

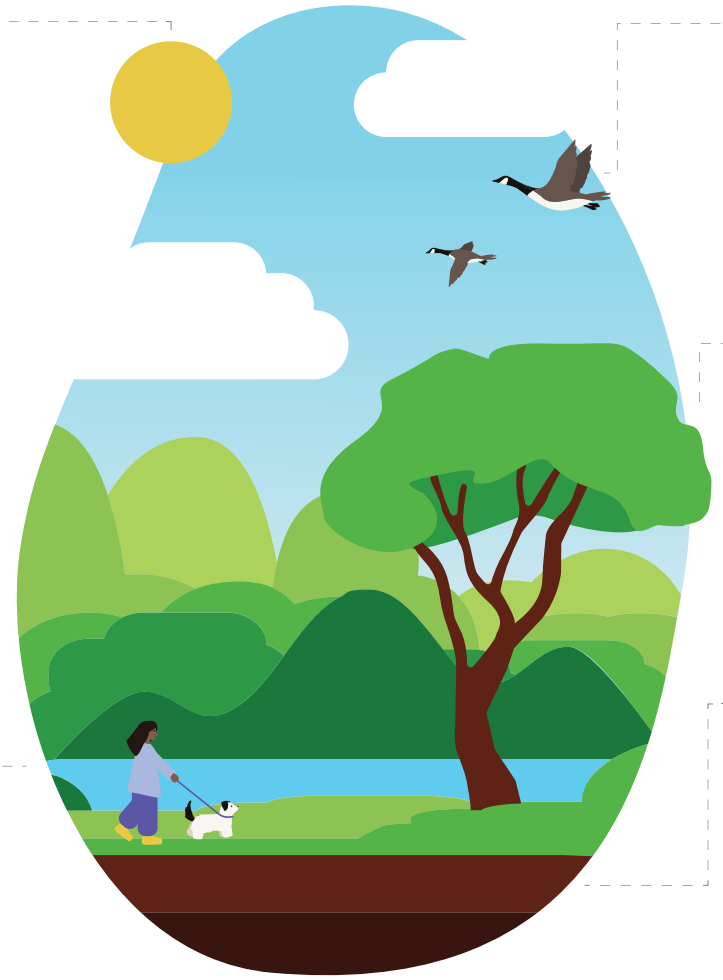
Sunlight provides energy through solar panels

Air

Clean air supports community health and helps regulate climate

Water

Freshwater and groundwater reserves support ecosystems and communities



Wildlife

Aquatic and terrestrial species can pollinate flowers, clean water, and bring joy to see

Vegetation

Plants such as grasses, trees, and vines make up our forests, meadows, and wetlands

Land

The soil, rocks, and landscape make up our parks, hiking trails, and scenic views

CLIMATE CHANGE & OUR PARKS

Temperatures

Climate change increases summer highs and increases heat stress on forests. It can also lead to climate migration, where plants and animals distribution moves towards the poles, where the temperature matches its needs. This leads to more invasive species, and makes it harder for native plants to thrive here.

Increased natural areas can help mitigate temperatures by absorbing CO_2 (lessening the greenhouse effect) and by providing shade and cooling areas that can spillover into adjacent urban areas.

Visit the City of Alexandria Urban Forestry page to learn more.

CLIMATE CHANGE & OUR PARKS

Drought

Climate change can also bring drought, with long periods of insufficient rain or snow. This can impact all natural areas that need precipitation to help their plant communities thrive, especially wetlands. However, wetlands can also help mitigate drought. Wetlands mitigate the impacts of drought by absorbing and storing excess water during wet periods and returning it to the water table during dry periods.

Visit the Council of Governments Drought Coordination Technical Committee page to learn more.

CLIMATE CHANGE & OUR PARKS

Storms

Climate change brings an increase of storm activity, from hurricanes to blizzards. These hazards can damage trees from heavy winds, cause damage to local ecosystems from debris, and require increased salt to manage snow, which increases salt entering local streams. Natural areas such as riparian zones and floodplains next to streams can help buffer the effect of extra waterflow from storms, and prevent bank erosion and sediment pollution.

Visit the City of Alexandria Severe Storm page for more information.

CLIMATE CHANGE & OUR PARKS

Flooding

Flooding is already present in City of Alexandria, but the increased sea level rise can affect rivers like the Potomac, too. Increased flooding leads to stress on species that aren't meant to experience water logged conditions, as well as damage from water velocity and debris. Living shorelines, like the ones present at Windmill Hill Park, can help slow velocity of water and protect the shoreline from erosion and damage.

The City of Alexandria is in the process of developing its first Flood Resilience Plan.

CLIMATE CHANGE & OUR PARKS

Allergies

Climate change can extend the pollen season of ragweed and other allergy-inducing pollens, therefore extending (and sometimes intensifying) allergy seasons in the spring and fall. In addition, increased levels of CO2 can increase the quantity and size of pollen, making it more potent.

Curious about other factors that impact the air you breathe? Visit the City of Alexandria Outdoor Air Quality page.

CLIMATE CHANGE & OUR PARKS

Diseases

Did you know climate change can increase incidences of disease? That goes for plant and animal diseases too. From root pathogens to Lyme disease, climate change stressors increase risk of disease in natural areas.

Visit the City of Alexandria Environmental Health Services page for more information.

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