Concourse Lake Native Plant Park

KEY GOALS

TRANSFORM the Concourse Lake area into a vibrant resource that connects visitors and community residents both to nature and to the rich cultural resources of the Centennial District.

RESTORE native plant material, using the developing standards for sustainable landscaping, to restrict storm water run-off and create habitat.

EDUCATE visitors about the role of plant material in improving water quality and providing appropriate habitat for fish, birds, and small creatures.

Academic Standards for Environment and Ecology

4.1 Ecology

3RD GRADE

A. Differentiate between the living and nonliving components in an environment

D. Identify organisms that are dependent on one another in a given ecosystem. Define habitat and explain how changes in a habitat affect an organism

4TH GRADE

A. Explain how living things are dependent upon other living things and nonliving things for survival. Explain what happens to an organism when its food supply, access to water, shelter, or space is changed

B. Identify how matter cycles through an ecosystem

E. Explain that ecosystems change over time due to natural and/or human influences

5TH GRADE

C. Describe different food webs

6TH GRADE

D. Identify reasons why organisms become threatened, endangered, and extinct

4.2 Watersheds and Wetlands

3RD GRADE

C. Identify plants and animals that live in (or near) lakes, ponds, streams, and wetlands

5TH GRADE

C. Identify physical, chemical, and biological factors that affect water quality

6TH GRADE

C. Identify natural and human-made factors that affect water quality

4.5 Humans and the Environment

3rd GRADE

A. Identify resources humans take from the environment for their survival

4th GRADE

A. Identify how people use natural resources in sustainable and non-sustainable ways

C. Describe how human activities affect the environment

6th GRADE

A. Examine how historical events have shaped the sustainable use of natural resources

Academic Standards for Science and Technology

3.4 Abilities for a Technological World

3rd GRADE

D. Identify people's needs and wants and define some problems that can be solved through the design process

4th GRADE

D. Investigate how things are made and how they can be improved

5th GRADE

D. Identify ways to improve a design solution

6th GRADE

D. Apply a design process to solve problems beyond the laboratory classroom

Next Generation Science Standards

3rd GRADE

Interdependent Relationships in Ecosystems
Students who demonstrate understanding can:

3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change

Core Idea: LS4D: Biodiversity and Humans. Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

4th GRADE

Energy
Students who demonstrate understanding can:

4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment

Core Idea: ESS3A: Natural Resources. Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time and others are not.

5TH GRADE

Matter and Energy in Organisms and Ecosystems
Students who demonstrate understanding can:

5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment

Core Idea: LS2A: Interdependent Relationships in Ecosystems. Organisms can survive only in environments in which their particular needs are met. Newly introduced species can damage the balance of an ecosystem

Core Idea: LS2B: Cycles of Matter and Energy Transfer in Ecosystems

Earth's Systems
Students who demonstrate understanding can:

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the earth's resources and environment.

Core Idea: ESS3C: Human Impacts on Earth Systems. Human activities have had major effects on the land, vegetation, streams, etc. But individuals and communities are doing things to help protect Earth's resources and the environment.

MIDDLE SCHOOL

Matter and Energy in Organisms and Ecosystems
Students who demonstrate understanding can:

MS-LS2-1 Analyze and interpret data to provide evidence for effects of resource availability on organisms and populations of organisms in an ecosystem

MS-LS2-4 Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations

Core Idea: LS2A: Interdependent Relationships in Ecosystems
LS2B: Cycles of Matter and Energy Transfer in Ecosystems
LS2C: Ecosystem Dynamics, Functioning, and Resilience