



# Habitat

According to the U.S. EPA, a typical city block generates seven times more runoff than a woodland area of the same size, for the same rainfall. "Hard surfaces" (impervious) such as roadways, parking lots, roof tops, etc... prevent water from naturally penetrating (infiltrating) into the ground.

An important element of a waterway is the condition of the *habitat*. Good quality habitats are necessary to achieve balance and diversity in the aquatic ecosystem. Your fishing days will be numbered if the habitat quality of the small plants and animals that fish eat begins to disappear.

Unfortunately, the breakdown or loss of many habitats is caused by human activities. Determining any single factor that influences the populations and habitats of animals within our waterways is difficult. However, multiple activities that affect our waterways include: urbanization (the construction of residential, commercial and industrial developments, roadways and supporting infrastructure), the loss or filling of wetlands, removal of forested land cover, poor agricultural practices and water diversions such as damming and channelizing. Of these, urbanization (the physical growth of cities, towns and villages) within the watershed appears to be one of the greatest contributing factors that affects water quality and quantity and aquatic habitat.

## Characteristics of Good Habitat

- Stable natural banks.
- Natural vegetative cover and tree canopy that provides stream shading.
- Streambed not heavily covered over with silt and muck.
- Diverse stream structure that has riffle areas and pools for fish refuge.
- Wide vegetated buffer area along waterway that filters out polluted stormwater runoff.



*Kinnickinnic River eroding stream bank.*



*Kinnickinnic River concrete-lined channel, 9th Street.*

With human activity comes an increase in hard (impervious) surfaces (i.e., rooftops and roadways). Hard surfaces increase runoff, pollutants, and the risk of flooding. Flooding can damage streambeds and banks, causing the river's natural channel to become unstable. As a heavily urbanized watershed, the Kinnickinnic River Watershed contains many streams that have been straightened, deepened and routed into concrete channels. Past attempts to manage flooding in the Kinnickinnic River Watershed eliminated habitats within and along its waterways. However, recent efforts have been initiated to study the removal of the concrete from portions of the Kinnickinnic River, yet still provide flood protection. New stormwater runoff rules are helping curb the amount of new runoff reaching the Kinnickinnic River and its tributaries.

## Habitat Stats

Habitat is severely limited throughout the Kinnickinnic River Watershed. The Kinnickinnic River mainstem between 43rd Street and 6th Street and many of its tributary streams have been channelized or concrete lined for flood management purposes. Substantial sections of Wilson Park Creek and 43rd Street Ditch are also contained in buried concrete conduits. Current efforts are underway to study the feasibility of removing concrete from portions of the Kinnickinnic River and still maintain flood protection.