

Habitat Map

Oak Creek Watershed



- Natural channel with vegetative cover, pools and riffles.
- ▲ Natural channel but lacking vegetative cover, pools and riffles having silt/sediment deposits.
- Concrete lined or artificially straightened channel, lacking vegetative cover and/or having excessive silt/sediment deposits.



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 begin 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. 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.

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.**



Mainstem of Oak Creek with steel sheet pile weir.



Steel weir on North Branch Oak Creek and concrete channel.

Habitat Stats

Habitat in Oak Creek Watershed has been altered in many areas due to human intervention. The lower portion of the Oak Creek in the City of South Milwaukee has been concrete lined to prevent flooding. Other areas in Oak Creek have steel sheet pile weirs that limit fish movement up and down stream. These weirs are currently being removed by the US Army Corp of Engineers and the Milwaukee Metropolitan Sewerage District to improve water quality and aquatic habitat.

Past attempts to manage flooding in the Oak Creek Watershed led to stream beds and banks being channelized (straightened and deepened) and lined with concrete especially in the lower portion of Oak Creek in South Milwaukee. This process eliminated habitats within and along waterways.

However, recent efforts have been initiated to reduce flooding in Oak Creek and many flood management projects are under way that include regional stormwater runoff rules to limit the amounts of runoff reaching Oak Creek from development and preservation of open land and floodplains.