

Mapping Criteria for the Howard County Green Infrastructure Network

The basic building blocks of a green infrastructure network are hubs, which contain the large natural areas that provide habitat for native plants and animals, and the corridors that connect them. Large areas of interior forest and wetlands are an essential component of the green infrastructure network.

Interior forest is generally defined as forest found at least 300 feet from the forest edge. Forest interior habitat is a higher quality forest habitat, because it is generally more isolated, with a closed canopy that creates moist, shaded growing conditions, with fewer invasive species. Forest interior habitat is a more rare forest environment, because development has fragmented our remaining forest into smaller forest patches.



Initially, a draft Green Infrastructure Network map was prepared for Howard County that presented three options for defining the hubs and two options for defining the corridors.

Each option for the hubs was more expansive in the habitat included. The corridors had minimum widths of 300 and 500 feet. These options were presented for public review and the most expansive option was chosen for the hubs and the wider 500-foot width was chosen for the corridors. The following presents the criteria for mapping the interior forests, wetlands, and protected lands included in the hubs and corridors of the Howard County Green Infrastructure Network.

Hubs

Hubs within the network include:

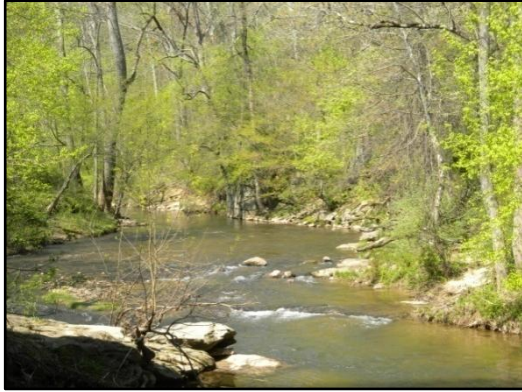
- Interior forests of 50 acres or larger with a 300-foot buffer
- Wetlands of 25 acres or larger, including ponds, lakes and reservoirs, with a 100-foot buffer
- State and County parkland and open space that contain these interior forests and wetlands
- Adjacent forest, parkland and open space

There are 51 hubs within the network. The hubs contain approximately 22,148 acres or 14% of the County, and they range in size from 25 to 2,407 acres. The hubs include major State and County parks, the Patuxent reservoirs, Columbia Association properties such as Lake Elkhorn and Lake Kittamaqundi, and other privately owned forests and wetlands. Approximately 76% of the hubs is protected in parkland and open space.



Corridors

Ideally, corridors should provide connections along the best ecological or natural route, and have habitat similar to the connecting hubs (for example, forested corridors should be used to connect forested hubs). Since corridors are a pathway for species migration, movement and breeding between populations, corridors should connect to another corridor or hub, and not dead end.



There are 48 corridor connections in the network. Corridors generally follow rivers and streams with extensions to include adjacent floodplain, wetlands, parkland and open space. Upland corridor connections across watershed boundaries were often difficult to find, because upland areas between watersheds are often prime locations for roads, housing, businesses and other related development. Thirteen of the corridors are mapped as potential connections, due to problematic street crossings, the proximity of nearby development and/or concerns about the best path to take when crossing agricultural land.

The 500-foot corridor system contains approximately 6,173 acres or 4% of the County. Only 26% of this system is protected in parkland and open space. While the 500-foot corridor width is the preferred width for the network, it is recognized that there may be areas within the network where the 300-foot corridor width is more appropriate. An example could be an upland corridor that crosses actively farmed land, where the farmer prefers to minimize land taken out of production. Until a determination is made on which width is more appropriate in a specific location, more detailed maps of the network include both options.