

Environmental Assessment for
Bike & Hike Trail Realignment at
Brandywine Road

Appendix G

Ecological Survey Summary & Environmental Constraints Maps

Bike and Hike Trail – Brandywine Connector

Ecological Survey

Executive Summary – August 2006

Metro Parks, Serving Summit County (Metro Parks) manages a 32-mi. bike and hike trail across northeast Summit County. Most of the trail is located on converted railroad bed; however, to get across Interstate 271, a dangerous, one-mile stretch of Brandywine Road must be navigated. Metro Parks is proposing to design and construct a safe trail connection across Interstate 271 (Brandywine Connector).

As part of our due diligence, Metro Parks has completed an ecological survey for a 117-acre study area encompassing possible alternatives for the proposed Brandywine Connector, located in Northfield Center Township, Ohio. Much of the study area is composed of lands owned by National Park Service (NPS) within the jurisdictional boundaries of Cuyahoga Valley National Park (CVNP). The survey was performed as the first phase of National Environmental Policy Act (NEPA) compliance, required by NPS to formalize an alternatives analysis ensuring an attempt to quantify and minimize environmental impacts.

Metro Parks performed an ecological literature review and field inventories between 4 October 2005 and 23 January 2006 in order to identify and protect important environmental features of the landscape. As seen on the attached maps, significant features include wetlands, streams, aquatic buffers, listed species, plant communities (according to Plant Communities of Ohio, Anderson, 1982), and potential habitat for the federally endangered Indiana bat (*Myotis sodalis*).

Utilizing respective protocols, federal/state wetlands were delineated throughout the study area and Cowardin (1979) wetlands were additionally delineated on NPS lands. These two types of wetlands have been conglomerated for evaluation purposes, which were performed using version 5.0 of the Ohio Rapid Assessment Method (ORAM) for wetlands (Mack 2001). Aquatic buffers were based on minimums given in Appendix H of the FINAL Rural Landscape Management Program: Environmental Impact Statement (NPS 2003). Streams were delineated according to federal guidelines and also buffered based on NPS (2003).

Several known state listed species were identified from NPS and the Natural Heritage Database requests, and additionally located during site visits. Three federally listed species are known to occur in Summit County, including the endangered Indiana bat (*Myotis sodalis*), the threatened bald eagle (*Haliaeetus leucocephalus*), and threatened northern monkshood (*Aconitum noveboracense*) (though the Bald Eagle has since been delisted, it still remains a species of concern under other federal and state regulations). Metro Parks initiated coordination with the United States Fish and Wildlife Service (USFWS). The USFWS indicates that the site is within a five-mile radius of several known Indiana bat sites (one at Liberty Park and the second within the Cuyahoga Valley National Park). Data indicates that the Indiana bat is a year-round resident in these areas and extra care is required when planning projects that might impact forested habitats. The USFWS further indicates that bald eagle and northern monkshood are not likely to be impacted as part of this project due to the type, size, and location of the study area.

Because of the crepuscular habits and widespread distribution of the Indiana bat, summering habitat assessments are now widely used to verify possible existence and document impacts. This type of survey is typically done by identifying individual trees that may be suitable for roosting. Because identification of each suitable tree within the study area was time prohibitive, an assessment of approximate suitable tree densities was performed within several habitat types using randomly placed plots. Based on this information, approximations within each habitat were provided for the alternatives analysis. These data will be used to plan various alternatives and reduce impacts to Indiana bats. As a preferred alignment emerges, more detailed surveys will be required to fully characterize the potential to impact this species. Metro Parks will remain in contact with USFWS regarding this aspect of the project.