# CHAPTER VI ENVIRONMENTAL IMPACT ANALYSIS

Consistent with the intent of the New York State Environmental Quality Review Act (SEQRA), consideration of environmental impacts are required to evaluate project plan alternatives and select a preferred plan. This chapter presents the potential adverse impacts associated with the preferred plan for the Black Diamond Trail.

# **INTRODUCTION**

With a history dating back to the early 1970s, many iterations of the Black Diamond Trail have been studied, presented, refined and advanced through the years. Through these multiple efforts, significant financial investments have been made by New York State agencies and local municipalities to advance the project. These investments have set the course for the trail's location and as a result focus the alternatives discussion to a specific area in Tompkins County. The alternatives for the present development scenario of the Black Diamond Trail are presented and discussed in Chapters IV and V.

Woven throughout Chapters III to V are discussions about the natural and cultural resources located within the Black Diamond Trail corridor and the significance they have in developing the trail. Overall the benefits of developing the Black Diamond Trail are expected to outweigh the adverse impacts of construction and operation of the multi-use, multi-purpose trail. The impacts that are expected will be mitigated through design and operation recommendations.

The following sections summarize the short- and long-term adverse environmental impacts of the two primary alternatives for the trail - Status Quo and Preferred Draft Master Plan.

# **IMPACTS OF ALTERNATIVES**

The core reason or goal to pursue the Black Diamond Trail project through the years has been to develop a dedicated bicycle and pedestrian facility to link state parks, community resources and neighborhoods in Tompkins County. It has long been envisioned by all the groups involved in progressing the Black Diamond Trail that the facility would be separate from the area road system to encourage people with a wide range of skills and physical abilities to use alternate means of travel to reach multiple destinations within the county. As such, on-road alternatives for the main line of the Black Diamond Trail will not be considered viable for the trail and have not been included in this plan.

Two primary options are presented as alternatives for the trail.

- ♦ Status Quo
- ♦ Preferred Draft Master Plan

# **Status Quo Alternative**

This alternative consists of the current situation, no off-road, bicycle and pedestrian dedicated facility linking the four state parks, community resources and neighborhoods in Tompkins County. While this alternative would not result in any new additional adverse environmental impacts, long-term indirect adverse impacts will continue to exist. Many municipalities, governmental agencies and groups in Tompkins County have committed time and money to expand transportation options to residents including bicycle and pedestrian facilitites and to provide programs that improve the quality of life and health of county residents. Generally, the Black Diamond Trail could help decrease traffic volumes and air pollution by reducing the need to travel by automobile to or between community resources. The trail will also encourage healthy lifestyles by providing an alternate way for residents and visitors to move between popular trip destinations and a trail-based recreational resource dedicated to bicycles and pedestrians.

Additionally, the approximately 226 acres that will be acquired specifically for trail use and placed under public ownership would be subject to other types of private development that could impact the natural and cultural resources that exist within the corridor.

# **Preferred Draft Master Plan Alternative**

The preferred alternative presented as the Draft Master Plan for the Black Diamond Trail is the combination of the recommended design elements to develop an off-road bicycle and pedestrian dedicated facility linking the four state parks in Tompkins County. While there are many positive benefits that will result from building and operating the trail, there are recognized short- and longterm adverse impacts that will result. The draft master plan, presented in Chapter V, considered the impacts on the natural and cultural resources located within the corridor recommending ways to avoid them when possible and when the resources could not be avoided proposing development and management options to mitigate impacts to the greatest extent practical.

As presented in Chapter IV, three distinct landscapes are proposed for trail development that equate to the three separate trail segments – Robert H. Treman to Buttermilk Falls through the Cayuga Inlet Valley, Buttermilk Falls to Allan H. Treman/ Cass Park through the City of Ithaca, and Allan H. Treman/Cass Park to Taughannock Falls following the abandoned Lehigh Valley Railroad corridor. Each segment can exist alone, but together provide a network that connects a significant number of destinations within Tompkins County.

The following sections summarize the anticipated short- and long-term adverse impacts by resource category anticipated to result from implementing the Draft Master Plan.

## The Natural Landscape

For the majority of the trail, the corridor selected is landscape that was previously used or disturbed for other uses such as managed lawn, flood control channel and railroad corridor. The choice to use these areas minimizes or eliminates the potential to impact plants and animals that are rare or locally significant or represent a native natural setting that is in danger of being compromised by residential and commerical development.

With respect to the natural resources present in the corridor selected for the Black Diamond Trail, the permanent conversion of a vegetation ground cover to trail surfacing is an adverse impact. The two main categories of the natural landscape that will experience impacts from the conversion are ecological communities with the attendant plants and animals and surface-water resources.

The area proposed to host the trail that will change most is between Robert H. Treman and Buttermilk Falls state parks. This is the only area for a trail segment where a previously disturbed property is not available for trail development and includes ecological communities that historically have been eliminated or impacted by development.

Table VI-76, on the following page, summarizes the ground surface alterations that will occur to develop the Black Diamond Trail. Over the course of the 15-mile trail, approximately 16.3 acres of vegetation ground cover will be permanently altered to trail surface.

# TABLE VI-7Ground Surface Changes

Trail Segment	Acres To Be Converted	Existing Ground Cover	Future Trail Surface
Robert H. Treman to Buttermilk Falls Main Line 0+000 to 12+300	2.8	Second-growth Herbaceous and Shrub Species	2.2 acres to compacted limestone dust .6 of an acre to asphalt
Robert H. Treman Spur Trail	0.4	Managed Lawn	Asphalt
Buttermilk Falls Spur Trail, South	0.5	Managed Lawn & Grass Trail Surface	Aphalt
Buttermilk Falls Spur Trail, North	0.4	Second-growth Herbaceous and Shrub Species on Abandoned Rail Corridor	Asphalt
Buttermilk Falls to Allan H. Treman/ Cass Park Main Line 12+300 to 15+000	0.6	Second-growth Herbaceous and Shrub Species on Abandoned Rail Corridor	Asphalt
Buttermilk Falls to Allan H. Treman/ Cass Park Main Line 15+000 to 21+000	1.4	Managed Lawn Along Flood Control Channel	Asphalt
Buttermilk Falls to Allan H. Treman/ Cass Park Main Line 21+000 to 23+000	0	Asphalt	Asphalt
Allan H. Treman/Cass Park to Taughannock Falls 23+000 to 67+500	10.2	Second-growth Herbaceous and Shrub Species on Abandoned Rail Corridor	Compacted Limestone Dust

#### Flora and Fauna

While there are no rare, threatened or endangered plant or animals that will be impacted by the conversion of ground covers, some native species of wildlife may be displaced by the short- and long-term removal of vegetation. To mitigate the short-term impact of vegetation removal for trail construction, vegetation removed or cut back will be allowed to regenerate where it does not pose a hazard to trail users.

In addition, wildlife may be impacted by an increase in noise generated by people traveling

along the trail. Selection of replacement plantings to supplement existing vegetation will be included in areas where a denser buffer will be a benefit to mitigating visual and sound impacts on wildlife.

#### Floodplain Forest

Within the trail corridor between Robert H. Treman and Buttermilk Falls, pockets of federallydesignated wetlands occur. While the wetland pockets will be avoided, trail construction will occur within two areas of floodplain forest. Longterm impacts are expected to occur through the alteration of the ground cover of approximately .5 of an acre of this community type. However, total impacts will be minimized by careful route placement determined by the consultant botanist.

#### Water Resources

The impact of converting natural ground covers to stonedust and asphalt will result in rain and snow-melt water sheeting off the trail treadway. For a significant portion of the trail, 10.7 miles, the choice of a compacted limestone-dust surface will mimimize sheeting of surface run-off. Though compacted, the limestone dust surface allows water to be absorbed into the surface. For trail sections that will be paved, a courser, more porous asphalt surface that allows water to move through the asphalt through larger pores can be installed to minimize sheeting. In addition, a minimum 2-footwide grass shoulders along the treadway will be maintained to slow run-off and serve as a filter for the run-off.

Construction recommendations for the Robert H. Treman to Buttermilk Falls segment through the Cayuga Inlet Valley include placing the trail at as close to existing grade as possible to maintain the existing natural flow of surface water through the area. In areas where fill may be necessary due to wetter conditions, construction practices and techniques to minimize or eliminate the affects of fill are recommended throughout the corridor including culverts and drainage swales.

# The Cultural Landscape

Cultural resources in and along the trail corridor will provide a significant benefit to the Black Diamond Trail through an integrated interpretive/ educational program. Historic and present-day landscapes will be a part of the trail corridor, either directly or within the viewshed of the trail.

#### Archaeological Resources

An archaeological resource sensitivity study of the corridor identified the Cayuga Inlet Valley between Robert H. Treman and Buttermilk Falls as having a moderate to high probability of the presence of prehistoric resources. Prior to construction of the trail, a sub-surface inspection will be required to ensure that no relics are present and impacted.

#### Agricultural and Community Resources

In the present-day cultural landscape of the proposed trail, the issue that was raised most in the public, one-on-one, and stakeholder group meetings was the conversion of the abandoned railroad corridor that will be used for the trail segment linking Allan H. Treman/Cass Park to Taughannock Falls. This former transportation corridor has had little use for over forty years. The conversion to an actively travelled route will result in changes in the landscape for adjacent landowners. In particular, adjacent property owners are concerned about their potential lose of privacy and trail users trespassing on their property. These concerns were expressed by private homeowners and farmers.

As outlined in Chapter V, several design techniques can be employed to mitigate the impact of the conversion of the former railroad corridor to a steadily travelled trail. At a minimum they include fencing, as illustrated below; property boundary posting; enhancing existing vegetation buffers between adjacent homes and farms; and orientation signs at all trailhead facilities.



Fencing matching an adjacent landowner's fence installed along the Finger Lakes Region's Catharine Valley Trail, in Schuyler and Chemung Counties, to separate trail and private property.

In addition, OPRHP will need to employ important operational policies including maintaining accessible and responsive communications with adjacent property owners, establishing a trail patrol (volunteer and staff), and installing orientation signs giving information about the location of services and assistance for trail users.

#### Tax Base

The acquisition of property by the State of New York for the Black Diamond Trail will permanently remove the lands from the property tax roles of the towns and county hosting the trail project. Several acquisitions have occurred during the life of the trail project, starting in the early 1980s. As a result of the slow progression of the project, the area's tax base has not been significantly impacted in any one fiscal year. In addition, positive support of the trail project has been expressed by the Towns of Ithaca and Ulysses, City of Ithaca and Tompkins County, all noting the positive benefits the trail will bring to the health of residents, reduction in traffic and increase tourism appeal of the area. These positive outcomes of the trail can help offset the reduction in the property tax assessment role.

#### **Unavoidable Adverse Effects**

Of the adverse effects that will result from developing the Black Diamond Trail the long-term permanent loss of vegetation that will be replaced with compacted limestone dust and asphalt is the primary unavoidable effect of the project.

Short-term unadvoidable adverse effects will occur during construction of the trail. Noise from construction equipment and dust emissions are the two main areas that will be present during construction. With respect to dust, if weather conditions are excessively dry, the trail corridor can be watered down to minimize dust emissions.

# Irreversible and Irretrievable Commitments of Resources

Implementing the Master Plan for the Black Diamond Trail will result in committing public resources, including money, labor and materials, to construction and long-term operation and maintenance of the trail facility.

## **Growth Inducement**

Communities across the country now include the presence of bicycle and pedestrian dedicated trails in their list of attributes to encourage and entice industry and commerical business to locate or expand facilities to their geographic region. The Black Diamond Trail is viewed by governmental officials and tourism professionals in Tompkins County as a facility that will contribute to the appeal of the area as a place to live and visit.

While the trail will not be the sole reason business leaders and people choose to locate or remain in the area, it will build upon other initiatives underway in the County. As such, the Black Diamond Trail is expected to contribute to Tompkins County's appeal for business expansion and recreational visitation to Tompkins County and the Finger Lakes State Parks Region.

The trail has been listed as a component or project in many other plans proposed in Tompkins County. As such, growth inducement impacts will continue to be weighed and studied as other projects are proposed along the trail corridor.

# Supplemental Environmental Review

Overall, the Draft Master Plan/EIS for the Black Diamond Trail outlines specific trail locations and development details and the environmental impacts expected for the trail's construction, operation and maintenance. Two of the three trail segment locations are clearly defined, the third - the leg between Robert H. Treman and Buttermilk Falls, will require further field analysis with respect to potential impacts to archaeological resources. If the outcome of the field investigation requires trail relocation which would change impacts to the natural resources, a site-specific additional or supplemental environmental impact analysis will be conducted by OPRHP.

Spur trail proposed by OPRHP and other public and private entities will require supplemental environmental impact analysis by the sponsoring entity.