

A county maintenance management system will provide the framework to plan, set priorities, and schedule and track maintenance by:

- Setting specific maintenance goals and standards for levels of service.
- Developing the necessary maintenance program to provide the level of service it selects.
- Executing the maintenance program by using the most effective combination of resources.
- Controlling and evaluating the effectiveness of the maintenance program in relation to the desired level of service.
- Furnishing cost data from which budgets can be built (activity based costing).

In concert with the design and construction of the trail system, each county will need to develop a maintenance manual. The manual will address the uniqueness of each route relative to its particular need for surfacing, railings, signage, trash removal & sweeping, tree & shrub pruning, mowing of vegetation & edging, drainage control, re-vegetation, snow & ice removal and graffiti control. The manual will include generally accepted standards of care for all elements of the trail system. Several of the issues to be addressed include the following on a continuous, scheduled basis or irregular, as-needed basis:

### To be Performed on a Continuous, Scheduled Basis

1. **Trail user safety.** Safety is central to all maintenance operations and is the single most important trail maintenance concern. Items for consideration include scheduling and documentation of inspections, the condition of railings, bridges and trail surfaces, proper and adequate signage, removal of debris, and coordination with others who may be associated with trail maintenance.
2. **Trail inspection.** Trail inspections are integral to all trail maintenance operations. Inspections should occur on a regularly scheduled basis, the frequency of which will depend on the amount of trail use, location, age, and the type of construction. All trail inspections should be documented.
3. **Trail sweeping.** Trail sweeping is one of the most important aspects of trail maintenance, helping ensure trail user safety. The type of sweeping to be performed depends on trail design and location. Sweeping should be performed on a regular schedule.
4. **Trash removal.** Trash removal from trail corridors is important from both a safety and an aesthetic viewpoint and includes the removal of ground debris and emptying of trash containers. Trash removal should take place on a regularly scheduled basis, the frequency of which will depend on trail use and location.
5. **Tree and shrub pruning.** Tree and shrub pruning should be performed for the safety of trail users. Pruning should be performed to established specifications on a scheduled and as-needed basis.

- 6. Mowing of vegetation.** Trail maintenance personnel should mow vegetation along trail corridors on a scheduled basis.
- 7. Scheduling maintenance tasks.** Inspections, maintenance and repair of trail-related concerns should be regularly scheduled. Inspection and repair priorities should be dictated by trail use, location, and design. Scheduling maintenance tasks is a key item towards the goal of consistently clean and safe trails.



**To be Performed on an Irregular or As-Needed Basis**

- 1. Trail Repair.** Repair of asphalt or concrete trails should be closely tied to the inspection schedule. Setting priorities for repairs is part of the process. The time between observation and repair of a trail will depend on whether the needed repair is deemed a hazard, to what degree the needed repair will affect the safety of the trail user, and whether the needed repair can be performed by the trail maintenance crew or if it is so extensive that it needs to be repaired by contracted services.
- 2. Trail Replacement.** The decision to replace a trail and the type of replacement depends on many factors. These factors include the age of the trail and the money available for replacement. Replacement involves a new crushed limestone surface, completely overlaying a crushed limestone or asphalt trail with a new asphalt surface, or replacement of an asphalt trail with a concrete trail.
- 3. Snow and Ice Removal.** Removal of ice and snow is important for safety reasons and long term life expectancy of the trail system. Particular attention must be paid to those areas where there is a grade change and/or curves. The maintenance under these conditions can utilize removal, ice melt, or gravel; use of gravel necessitates its removal as soon as possible after the snow has melted.

4. **Weed Control.** Weed control along trails can be limited to areas in which certain weeds create a hazard to users. Environmentally safe weed removal methods should be used, especially along waterways.
5. **Trail Edging.** Trail edging maintains trail width and improves drainage. Problem areas include trail edges where berms tend to build up and where uphill slopes erode onto the trails. Removal of this material will allow proper draining of the trail surface, allow the flowing action of the water to clean the trail and limit standing water on trail surfaces. Proper drainage of trail surfaces will also limit ice build-up during winter months.
6. **Trail Drainage Control.** In places where low spots on the trail catch water, trail surfaces should be raised, or drains built, to carry water away. Some trail drainage control can be achieved through the proper edging of trails. If trail drainage is corrected near steep slopes, the possibility of erosion must be considered.
7. **Trail Signage.** Trail signs fall into two categories: safety and information. Trail users should be informed of their location, where they are going, and how to safely use trails. Signs related to safety are most important, thus they should receive the highest priority. Information signage can enhance the trail users experience. A system of trail information signage should also be a high priority.
8. **Revegetation.** Areas adjacent to trails that have been disturbed for any reason should be revegetated to minimize erosion.
9. **Habitat Enhancement and Control.** Habitat enhancement is achieved by planting vegetation along trails - mainly trees and shrubs. This can improve the aesthetics of the trail, help prevent erosion and provide habitat for wildlife. Habitat control involves mitigation of damage caused by wildlife. An example is the protection of trees along waterways from damage caused by beavers.
10. **Graffiti Control.** The key to graffiti control is prompt observation and removal. During scheduled trail inspections, graffiti should be noted and the graffiti removed as soon as possible.