Environmental Conditions Affecting Pathways

A preliminary review of environmental conditions pertinent to trail development reveals several potential environmental factors:

- Erosive soil types
- & Drainage patterns
- & Steep slopes
- Visibility of trail scars on hillsides
- Notential for the spread of noxious weeds
- Mabitats for large animal species
- A potential threatened/endangered species

The available mapping of these factors is not very detailed at this point. However, observation suggests that there are soils in the region, especially on the west side of the Eagle Valley, that are highly erodable when their vegetative cover is disturbed. Recent heavy rains in Carson City created significant erosion patterns in areas where trails were located on erosive soils on steep slopes. This was even more pronounced within ravines that tended to channel rainfall. There appear to be soil types that, when found on steep slopes, are more susceptible to erosion than when the same soils are found on shallow slopes and in areas less susceptible to channeling runoff.

Some of Carson City's mountain backdrop have scars that are visible for long distances. This is particularly apparent in the burn area of the 2004 Waterfall fire on the west side of the Eagle Valley. Some of these scars have been caused by off-highway motorized vehicles (OHVs), and some by mountain bikes that have the ability to scale steep slopes. Regardless of the cause, the visual impact is severe once a scar is created and there is little evidence that vegetation will reestablish itself.

Another environmental consideration is wildlife, such as the bear and mountain lion population, that is found especially on the west side of Carson City. The Nevada Division of Wildlife will be doing radio collaring of mountain lions to verify the extent and movement patterns of the animals. The presence of wildlife habitat may have an impact on trail usage.



Erosion on an existing trail.



Some trail use is not only unlawful but also unsightly and environmentally damaging.

Finally, like many western cities Carson City has experienced infestations of noxious weeds such as Russian Knapweed and Star Thistle. These species invade the native vegetation and are extremely difficult to eradicate. Human interaction appears to be one factor in spreading seeds. The seeds can apparently attach themselves to clothing and vehicles and then are dropped in new locations.

All of the above suggests that the design of trails in the area around Carson City needs to take into account environmental factors: avoiding steep trails on steep slopes, in or near drainages, in special wildlife habitats and areas of noxious weeds need to be avoided. In some areas the numerous volunteer trails need to be closed and revegetation programs initiated.

4.1 Environmental Policies

1. Trails will be located or relocated in areas, and with trail design standards and construction specifications that will avoid environmental and visual impacts and will be consistent with sound, scientific environmental stewardship.

4.2 Environmental Actions

- 1. Collect available data and mapping of environmental factors. Augment with site-specific observations. Create suitability maps for trail types and conditions. Refine data and mapping as resources permit.
- 2. Develop standards for various trail and user types to ensure environmental sustainability and minimize visual impacts.
- 3. With the Open Space Manager, develop management programs for trails and adjacent areas. Reclaim areas subject to erosion and highly visible visual degradation.



In many communities, including Carson City, access to scenic backcountry is an important aspect of the quality of life.