Management of the Dowd Junction Trail from West Vail to Highway 6

Background
In the late 1980’s, the Town of Vail recognized the need for a pedestrian and bicycle connection from Vail to Highway 6 and the Eagle Valley. At the time, the only option for pedestrians and bicycles was the shoulder of Interstate 70 and there were safety concerns with that scenario. The Town of Vail contacted the primary landowner in the Dowd Junction area, the Colorado Department of Transportation (CDOT), to initiate discussions about a potential separated recreation path. CDOT agreed and the process towards design and construction began in the early 1990’s.

Ultimately, three factors dictated the design and future operations of the new path. First, site constraints imposed by the narrow canyon, Interstate 70, Gore Creek and the Eagle River required that much of the path would be located directly adjacent to the Interstate. Second, the path could not impact the general operation and maintenance of Interstate 70. And, third, the path could not disrupt the Mud Springs Gulch wildlife migration route.

The first was accomplished with the construction of numerous retaining walls and other engineering solutions. The second was accomplished through agreement between the property owners and land managers regarding operations and maintenance. The third required engineering solutions and a detailed study of how the migration corridor was used before and after the construction of the path.

Construction of the bridge over the Eagle River occurred in 1993-94, and the remainder of the path was completed in the fall of 1997.

Maintenance, Schedule and Operations
The completed path is owned and operated by the Town of Vail with the exception of the bridge over the Eagle River which is owned by CDOT. From the bridge, the path extends to the west and is owned by Eagle County. The Dowd Junction path is generally opened to the public from April through October, depending on weather conditions. Prior to opening, the path is plowed and swept and the deer screen is installed. Throughout the summer, the path is swept several times per month. The town does not plow the path in the fall, and once significant snowfall has occurred, the path is closed for the season.

The Town of Vail maintains essential portions of the Town recreation path system during the winter. Snow removal on roads and pedestrian areas takes priority over recreation trails as the number of trail users diminishes. The location of the Dowd Junction path, adjacent to Interstate 70, would make winter maintenance of this section of trail extremely difficult due to plowing and sanding of the Interstate. The snowblast created by plow trucks presents a significant safety concern on the path, the abundant snow plowed off of I-70 onto the path would be difficult to remove, and the road sand and sediment washing on to the path would require constant sweeping to ensure a safe route for users.

Wildlife Migration Route
Each spring, deer, elk and other wildlife begin to migrate from winter habitat at lower elevations to summer habitat in the higher elevations. In the fall, the animals move back to lower elevations beginning with the first significant snowfalls. The Mud Springs Gulch wildlife
underpass plays an important role in that migration by allowing wildlife to safely cross I-70, a major barrier to their historical migration route. In order to protect the migration route, the Colorado Division of Wildlife (CDOW) purchased 102 acres of property directly south of the underpass in the 1976 to prevent future development of the site. A wildlife fence that parallels I-70 serves to funnel the animals towards the underpass by preventing them from crossing at other locations and to avoid vehicle/animal collisions.

The effective migration period for the animals was determined to be May 1 through June 20 in the spring, and October 1 through December 1 in the fall, although the fall migration appears to be initiated by significant snowfall. It was agreed that the recreation path would be closed to public use during these periods. Failure to do so could have significant impacts on the migrating animals.

Mud Springs Gulch Deer Underpass Study
Because of public input after the first year's wildlife closure, the Town of Vail commissioned a study to document the use patterns of wildlife in the area and to see if the installation of visual barriers at the underpass could be effective in hiding path users from migrating animals so that the closure periods could be reduced. The study was conducted during migration periods in 1998-2000. Volunteers from the ECO Trails Committee and other citizens participated in the study to ride and walk the path at different hours of the day, alone or in groups, and with and without a visual barrier.

The study concluded that animals were not likely to use the underpass when humans were visible on the recreation path and that the installation of a visual barrier at the underpass would ease the conflict between humans and animals. If the animals could not see humans on the path, they were more likely to use the underpass. The results and recommendations of the study are available for review.

Based on the study, CDOW and CDOT agreed to allow the path to be opened during the migration period if an opaque visual barrier was installed along the path at the underpass. In spring 2003, the “deer screen” was installed and the path was opened during the migration period for the first time. The screen is installed each spring during May and June and then removed for the summer. It is not installed during the fall since the migration period is triggered by significant snowfall and the path is not plowed once this occurs.

Conclusions
- Path use for commuting purposes is significantly lower during the winter months
- Alternative recreational opportunities exist in close proximity to the Dowd Junction Path
- Mass transit bus routes, that allow bicycles, are located in close proximity to the Dowd Junction Path
- Winter maintenance of the Dowd Junction path would require considerable resources that are currently allocated to other priority areas
- Maintenance operations on I-70 would create significant safety concerns for path users
- Installation of the temporary visual screen has allowed the path to be opened two months longer than originally anticipated
- The Town of Vail, Colorado Division of Wildlife and Colorado Department of Transportation, as owners, operators, and land owners in the Dowd Junction Recreation Path jointly agree that the existing operation schedule of the path is in the best interest of the majority of the public and wildlife, which they serve.