

traditional agriculture-based industries such as cattle ranching. And the amount of “use” by visitors has increased. In the past, use was primarily hiking and low-impact sports of nature (such as fishing), but visitors now bring all the comforts of home—and more—with them. Dan Burgette, chief of the Colter Bay subdivision of the park, states:

The toys people bring to the park have changed. Twenty-five years ago they would have a car and a tent. Now they come with a motor home, a boat, trail bikes, and a car in tow. Parking lots built in the 1960s just aren’t big enough. One of our biggest chores is getting people to turn off their TV sets and gas-powered electric generators at ten o’clock at night (p. 136).⁸

The preceding quotation suggests that the carrying capacity of an area changes when any one or more of capacity’s determining factors change. For example, if a town begins to see an increase in permanent residents, it will not have as high a “visitor” carrying capacity as before because the additional residents “use up” some of the finite carrying capacity of the area. On the other hand, the carrying capacity of a site can be increased by reducing the amount of “use” by each visitor. Constructing visitor walkways allows more foot traffic in a fragile natural area; busing visitors from remote parking lots cuts down on air pollution within a park; and creating viewing platforms allows many more visitors to view the scenery without endangering the pristine site.

Another suggestion that has been mathematically modeled and appears to hold promise for allowing increased use while increasing a sense of solitude is to stagger entry lines. Park managers at the Athabasca Falls site in British Columbia have used all of these means—walkways, buses, and view platforms—to decrease the erosion and vegetation trampling that had threatened its natural beauty.⁹

As you can see, identifying the carrying capacity of an area requires thorough research. The management of a natural attraction demands careful environmental planning and creative carrying capacity design to balance visitor enjoyment and education with the well-being of the flora and fauna of the location.

Environmental Impacts of Tourism

To provide services to visitors, a tourism area must first develop the necessary infrastructure to support these services. This was just like the concerns being raised by the tribal council members in the chapter opener. Infrastructure is the underlying foundation or basic framework for a system or organization. In the case of tourism, infrastructure includes roads, ports and airports, and utilities such as electricity and water and sewage systems. In addition, superstructures will be needed. The superstructures of tourism are the facilities directly associated with serving visitors’ needs such as welcome centers, hotels, restaurants, car rental facilities, tour company offices, and retail establishments.

Obviously, the development of the infrastructure and superstructure necessary for tourism will have an impact on the environment of an area. However, the impact can be minimized with good design and planning. For example, the use of underground lines for utilities can retain the more natural look of vistas, whereas appropriate design of buildings, in terms of colors, height, signage, and landscaping, may even enhance their beauty. Many resort communities have ordinances that require harmony in architecture, color, and signs so that human-made structures blend into the natural setting. For example, in Sedona, Arizona, architecture, color schemes, and signs must follow design restrictions so that the community fits into its awe-inspiring, red-rock formation setting.

Unfortunately, such design foresight does not always occur. In the earlier days of tourism development in Hawaii, hotels were built along the beautiful beaches of Oahu with little regard to the “scenic impact” they would have. Today, these hotels completely block the view of the ocean. Developers of the other islands of Hawaii have learned from the mistakes made, and regional planners and developers are now more careful with their designs.^{3,10}