



Resource Management and Research Division: Environmental Planning & Compliance Program Projects, 2013



Introduction

The Resource Management and Research Division oversees both natural and cultural resources in Zion National Park (ZION), Cedar Breaks National Monument (CEBR), and Pipe Spring National Monument (PISP). The division includes seven programs: Wildlife Management, Vegetation Management, Physical Sciences, Cultural Resource Management, Environmental Planning and Compliance, Geographic Information Systems and Museum and Curatorials. The resource programs administer numerous research activities that are conducted by outside universities and other agencies. Additionally, we receive support for long-term monitoring by the Northern Colorado Plateau Network. (Visit <http://science.nature.nps.gov/im/units/ncpn/> for more information about what this program is doing in each park.) The resource programs are involved with various outreach projects, including Zion Canyon Field Institute courses. This handout describes the Environmental Planning and Compliance Program and many of the projects on-going this year.

General Management Plan

In 2001 the park completed the General Management Plan (GMP), which describes the path the National Park Service intends to follow in managing Zion National Park over the next 20 years. The plan provides a framework for proactive decision-making on such issues as visitor use, natural and cultural resource management, and park development, which will allow park managers to effectively address future problems and opportunities. The plan identified desired conditions for park resources and visitor experience and strategies for the management and conservation of those resources.

Through the planning process the park was divided into management zones. The zones identify how different areas in the park will be managed to achieve a combination of desired conditions. Each zone has a unique combination of physical, biological, social, and managerial conditions.

The General Management Plan Zones are:

- Frontcountry High Development: 636 acres, 0.4% of park. Includes road corridors (Zion Canyon, eastside), campgrounds and visitor center.
- Frontcountry Low Development: 798 acres, 0.5% of park. Includes road corridors (Kolob Terrace Road, Kolob Canyons) and Lava Point.
- Transition: 1,359 acres, 1% of park. Includes high-use developed trails (Emerald Pools, Riverside Walk, Observation Point).
- Primitive: 16,480 acres, 11% of park. Includes developed backcountry trails (East and West Rim), and some high-use backcountry routes (Subway, Narrows, Forks of Taylor Creek).
- Pristine: 119,446 acres, 81% of park. Includes un-trailed areas and routes (upper Coalpits Wash; many of the technical canyons).
- Research Natural Areas (RNAs): 9,031 acres, 6% of park. See next page for more information.
- Administrative: 267 acres, 0.1% of park. Includes housing area, maintenance yard, and power lines.

A view from the West Rim Trail, which is classified as Primitive under the General Management Plan.



Soundscape Management

Soundscape refers to the total acoustic environment of an area. Both natural and human sounds may be desirable and appropriate in a soundscape, depending on the purposes and values of the park.

The soundscapes in Zion National Park offer an array of rich and diverse natural sounds, as well as an environment relatively free of human-caused sound. These soundscapes are an integral component of what makes Zion a unique place set aside for purposes expressed in both the Organic Act and the Wilderness Act.

An important part of the NPS mission is to preserve or restore the natural soundscapes of parks and provide for enjoyable visitor experiences. Natural soundscapes exist in the absence of human-caused sound. The natural soundscape is the aggregate of all the natural sounds that occur in parks, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive, and can be transmitted through air, water, or solid materials. Some natural sounds in the natural

soundscape are also part of the biological or physical resource components of parks, such that protection of the soundscape also constitutes protection of other resource values directly identified as necessary to the park's purpose.

In order to protect natural soundscapes Zion is in the process of identifying levels of human-caused sound which can be accepted within the management purposes of the park. This is accomplished first by monitoring the acoustic environment. Park staff can then analyze the monitoring data which will help determine if human-caused sound is adversely affecting park soundscapes. Zion management can then take action to prevent or minimize any noise that adversely affects the natural soundscape or other park resources or values, or that exceeds levels that have been identified as being acceptable for visitor use and enjoyment.

Measuring Zion National Park soundscape near Scout Lookout.

