National Park Service
U.S. Department of the Interior

Canyonlands National Park
Utah

Canyonlands
Long-Range Interpretive Plan

Canyon Country Outdoor Education field trip to Mesa Arch

Geology talk at Grand View Point

Interpretive Themes

Primary interpretive themes are summary statements of those ideas, concepts, and stories that are central to the nature and significance of the park. Themes will be communicated with the most effective and appropriate methods. Visitors will have access to a variety of means of learning about – connecting with – the meanings identified by the primary themes.

Geology

Canyonlands NP is a place of geologic order. Layers of rock have systematically recorded chapters of the area's geologic and biotic past.

Geologic Change

Water and gravity are the forces of erosion primarily responsible for sculpting the rock layers found in Canyonlands NP into a dramatic and colorful landscape of canyons, mesas, buttes, fins, arches, spires, and other geologic formations.

Wilderness

Traveling into the backcountry of Canyonlands NP can provide an opportunity for solitude in a location where natural systems and the feeling of wilderness predominate.

Desert Ecology

Canyonlands NP preserves a desert environment where the interlocking parts of a rich fabric of geology, climate, and living organisms can be studied and enjoyed. It is a land of contrast and intensity where plant and animal life is diverse, if not obvious.

Prehistoric Cultural Resources

Petroglyphs, pictographs, granaries, towers, pottery, tools, and other traces of ancestral Puebloans are found throughout the park. Preservation of these artifacts and the contexts in which they are found are critical to understanding and fully appreciating the lifestyle and living conditions experienced by prehistoric peoples.

Historic Cultural Resources

Evidence of historic explorations, land uses, inhabitants, and philosophies are apparent throughout the park. This evidence provides a link to past lifestyles and conditions of existence. Its preservation is critical to understanding and fully appreciating how the area's human history has influenced present conditions.

Grand County fifth graders learn about air quality at the Island in the Sky air quality monitoring station.

VISITOR-RELATED RESOURCE PROTECTION ISSUES

Positive and Negative Impacts

Park visitors and neighbors impact park resources both positively and negatively. Visitor use can exacerbate harmful resource impacts. Off-road travel by motor vehicles and bicycles, and the use of social trails by hikers causes erosion and damages vegetation. Theft and graffiti damage archaeological sites. Overcrowding can cause negative impacts to park resources and visitors, especially at scenic viewpoints, on trails, at parking areas, and in facilities.

Conversely, positive visitor use can enhance enjoyment and increase public support for resource protection. Public understanding, appreciation, and support of park goals and the agency mission are vital to the success of park operations.

Resource Management Programs

Park programs such as backcountry and river management plans, bighorn sheep transplanting, exotic species removal, recreation fee demonstration, wilderness designation, and use of alternative energy sources may not be well understood by the public. Quality interpretation and education programs in the park and in neighboring communities are required to minimize deleterious impacts and augment public support.

Water Quality

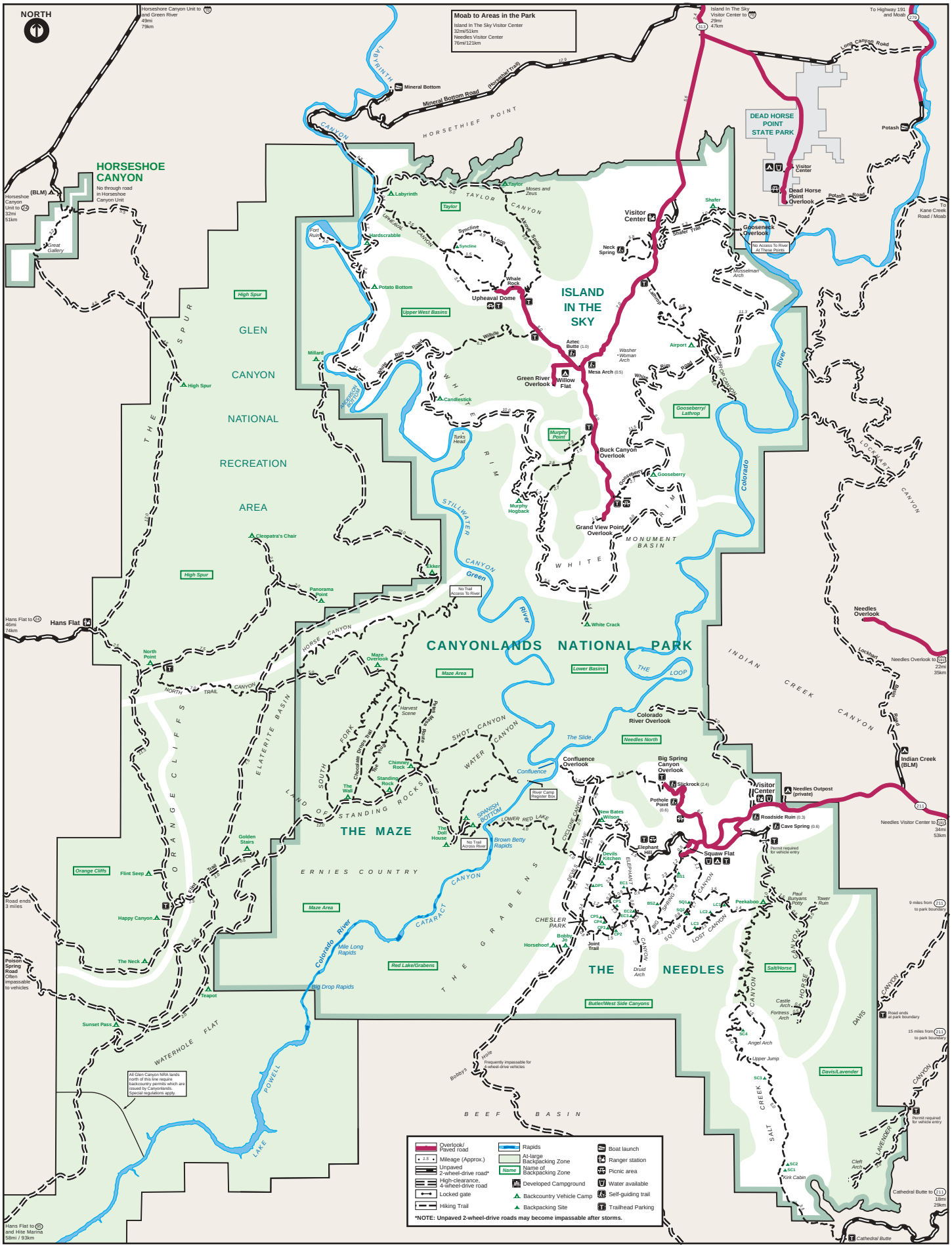
Water quality can be affected by industrial, commercial, and other activities near the park, and by activities in the park. Activities in the park include vehicular traffic in or near riparian areas, and transport of exotic species to riparian areas.

Air Quality

Air quality is a major issue, with pollution coming from power plants on the Colorado Plateau and from major metropolitan areas such as Los Angeles. Canyonlands has traditionally relied on distance from major areas to preserve both vistas and clean air; this may no longer be sufficient.

Natural Sounds

Natural sounds are just beginning to be recognized as a park resource; overflights, primarily


NORTH
Moab to Areas in the Park
Island In The Sky Visitor Center 32mi/51km
Needles Visitor Center 76mi/121km
HORSESHOE CANYON
No through road in Horseshoe Canyon Unit
Horseshoe Canyon Unit to (24) 32mi 51km
(BLM)
Great Gallery
Horseshoe Canyon Unit to and Green River 49mi 79km
Mineral Bottom
Mineral Bottom Road
Horsethief Trail
LABYRINTH CANYON
HORSETHIEF POINT
Labyrinth
Taylor
Moses and Zeus
TAYLOR CANYON
Hardscrabble
Fort Ruin
Syncline
Loop
Potato Bottom
Upheaval Dome
Whale Rock
High Spur
Upper West Basins
GLEN CANYON NATIONAL RECREATION AREA
THE SPUR
Millard
White Rim Trail
Candlestick
Turks Head
WHITE RIM
Cleopatra's Chair
Panorama Point
Hans Flat
Hans Flat to (24) 46mi 74km
North Point
Maze Overlook
NORTH TRAIL CANYON
HORSE CANYON
Maze Area
ORANGE CLIFFS
ELATERITE BASIN
Harvest Scene
Chocolate Drops Trail
Chimney Rock
Standing Rock
The Wall
LAND OF STANDING ROCKS
SOUTH FORK SHOT CANYON
WATER CANYON
Confluence
River Camp Register Box
SPANISH BOTTOM
LOWER RED LAKE
Brown Betty Rapids
The Doll House
No Trail Across River
THE MAZE
ERNIES COUNTRY
Golden Stairs
Orange Cliffs
Flint Seep
Happy Canyon
The Neck
Teapot
Sunset Pass
Road ends 3 miles
Poison Spring Road Often impassable to vehicles
WATERHOLE FLAT
All Glen Canyon NRA lands north of this line require backcountry permits which are issued by Canyonlands. Special regulations apply.
LAKE POWELL
Colorado River
Mile Long Rapids
Big Drop Rapids
Red Lake/Grabens
THE GRABENS
CATARACT CANYON
CHESLER PARK
Horsehoof
Bobbin Jo
Joint Trail
Bobbys Hole
Frequently impassable for 4-wheel-drive vehicles
BEEF BASIN
ISLAND IN THE SKY
Visitor Center
Neck Spring
Upheaval Dome
Whale Rock
Aztec Butte (1.0)
Mesa Arch (0.5)
Washer Woman Arch
Green River Overlook
Willow Flat
Airport
Shafer Trail
Gooseneck Overlook
No Access To River At These Points
Monument Arch
Lathrop
Gooseberry/ Lathrop
Murphy Point
Murphy Hogback
Buck Canyon Overlook
Gooseberry
Grand View Point Overlook
MONUMENT BASIN
White Crack
Colorado River
CANYONLANDS NATIONAL PARK
Lower Basins
THE LOOP
Needles North
Colorado River Overlook
The Slide
Confluence Overlook
Big Spring Canyon Overlook
Slickrock (2.4)
Pothole Point (0.6)
Visitor Center
Needles Outpost (private)
Roadside Ruin (0.3)
Cave Spring (0.6)
Permit required for vehicle entry
Squaw Flat
Elephant Hill
New Bates Wilson
Devils Kitchen
Needles Overlook
Needles Overlook to (211) 22mi 35mi
Lockhart Canyon
INDIAN CREEK CANYON
Indian Creek (BLM)
Needles Visitor Center to (211) 34mi 53mi
DEAD HORSE POINT STATE PARK
Visitor Center
Dead Horse Point Overlook
Potash
Potash Road
To Kane Creek Road / Moab
To Highway 191 and Moab
Island In The Sky Visitor Center to (313) 29mi 47km
Long Canyon Road
Peekaboo
Paul Bunyans Potty
Tower Ruin
9 miles from (211) to park boundary
THE NEEDLES
Druid Arch
Butler/West Side Canyons
Salt/Horse
Castle Arch
Fortress Arch
Angel Arch
Upper Jump
Davis/Lavender
SALT CREEK CANYON
HORSE CANYON
DAVIS CANYON
Road ends at park boundary
15 miles from (211) to park boundary
Permit required for vehicle entry
Cleft Arch
York Cabin
Cathedral Butte to (211) 18mi 29mi
Cathedral Butte
Hans Flat to (95) and Hite Marina 58mi / 93km
Overlook/ Paved road
Mileage (Approx.)
Unpaved 2-wheel-drive road*
High-clearance, 4-wheel-drive road
Locked gate
Hiking Trail
Rapids
At-large Backpacking Zone
Name of Backpacking Zone
Developed Campground
Backcountry Vehicle Camp
Backpacking Site
Boat launch
Ranger station
Picnic area
Water available
Self-guiding trail
Trailhead Parking
*NOTE: Unpaved 2-wheel-drive roads may become impassable after storms.

Above: Chesler Park, a popular hiking destination in the Needles District.

Below: Part of the Great Gallery rock art panel in Horseshoe Canyon.

NEEDLES

The Needles District forms the southeast corner of Canyonlands and was named for the colorful spires of Cedar Mesa Sandstone that dominate the area. The district's extensive trail system provides many opportunities for long day hikes and overnight trips. Foot trails and four-wheel-drive roads lead to such features as Tower Ruin, Confluence Overlook, Elephant Hill, the Joint Trail, and Chesler Park.

Visitors access the district from US Highway 191. About 40 miles (60 km) south of Moab or 14 miles (22 km) north of Monticello, Utah Highway 211 intersects with 191, and heads west roughly 35 miles (56 km) into the district. Highway 211 ends in the Needles, and is the only paved road leading in and out of the district.

The Needles Visitor Center is open year-round from 8:00 a.m. to 4:30 p.m. (except some winter holidays), with extended hours March through October. Exhibits, information and publications are available.

Squaw Flat Campground is an ideal base camp for day hikes to popular destinations like Chesler Park, Druid Arch and the Joint Trail. There are 26 sites available on a first-come, first-served basis. Restrooms, fire grates, picnic tables, tent pads and water are available year-round. The campground typically fills every day from March through May and again from September through October. There are also three group campsites which may be reserved in advance.

THE MAZE

The Maze is the least accessible district of Canyonlands. Due to the district's remoteness and the difficulty of roads and trails, travel to the Maze requires more time, as well as a greater degree of self-sufficiency. Rarely do visitors spend less than three days in the Maze, and the area can easily absorb a week-long trip.

The Orange Cliffs Unit of Glen Canyon National Recreation Area shares Canyonlands' western boundary and is administered under the same backcountry management plan and permit/reservation system.

The Hans Flat Ranger Station is two and one-half hours from Green River, Utah. From I-70, visitors take Utah Highway 24 south for 24 miles. A left hand turn just beyond the turnoff to Goblin Valley State Park begins a drive on a two-wheel-drive dirt road 46 miles (76 km) southeast to the ranger station. From the ranger station, the canyons of the Maze are another 3 to 6 hours by high-clearance, 4WD (more if traveling by foot). Another four-wheel-drive road leads into the Maze north from Highway 95 near Hite Marina (driving time is at least 3 hours to the park boundary).

There are no amenities like food or gas, no entrance fees and no potable water sources in the Maze District.

HORSESHOE CANYON

Horseshoe Canyon contains some of the most significant rock art in North America. The Great Gallery, the best known panel in Horseshoe Canyon, includes well-preserved, life-sized figures with intricate designs. Other impressive sights include spring wildflowers, sheer sandstone walls and mature cottonwood groves along the intermittent stream in the canyon bottom. Horseshoe Canyon was added to Canyonlands in 1971.

A Brief History of the Park

Top: Ancestral Puebloan granary.

Middle: Cowboy camp in the Needles District (circa 1939).

Bottom: Mining activity at the Island in the Sky in the late 1960s, just after Canyonlands was established.

The first humans known to visit Canyonlands were Paleoindians, who searched for large game animals and edible plants as long as 10,000 years ago. Some of their stone projectile points have been found in the park.

It was not until the Archaic period, about 5,000 years ago, that people routinely lived in the area. From about 5000 years ago to A.D. 250, people continued to gather wild plants and hunt animals, utilizing stone tools and the atlatl, a spear-throwing device. The importance of grasses is recorded on many archaic rock art panels, especially those representative of the "Barrier Canyon" style that can be seen in Horseshoe Canyon.

By A.D. 250, farming techniques from Mesoamerica had reached the southwest, and ancestral Puebloans were cultivating corn and constructing storage structures for grains. Initially, these agriculturalists did not have much use for the hot, dry climate of Canyonlands. However, growing populations in nearby Mesa Verde and new techniques of floodwater farming caused people to take advantage of bottomlands and alluvial banks in many canyons of the southwest. By A.D. 1200, there was a major occupation in Salt Creek Canyon in the Needles District. You can see the storage structures or granaries used by the ancestral Puebloans in the Needles District at Roadside Ruin, and at the Island in the Sky on Aztec Butte. Around A.D. 1300, the ancestral Puebloans left the region and moved south to Arizona and New Mexico.

Ute Indians moved into the area as early as A.D. 1300, living without permanent dwellings much like the hunter-gatherers in the Archaic period. Ute, Navajo and Paiute Indians all occupied southern Utah when Spanish explorers entered the area in the late 1700s, though their use of the Canyonlands area appears to have been minimal.

In the 1770s, the Escalante and Dominguez parties circled Canyonlands, looking for a route between Santa Fe, New Mexico and Monterey, California. French and American trappers entered the area in the early 1800s. The US Army sent Captain John N. Macomb on an expedition to explore the Colorado Plateau for a wagon route from New Mexico to Utah in 1859. The Macomb expedition drew the first accurate maps of southeast Utah, and compiled geographical and geological information of the area.

Europeans knew little of the Colorado River and its tributaries until 1869, when Major John Wesley Powell completed his first expedition from Green River, Wyoming through the Grand Canyon. Powell repeated the expedition in 1871-72, continuing his studies of the natural and cultural history of the area. Bert Loper, Charles S. Russell, and E.R. Monett made the first pleasure run down the Colorado River through Cataract Canyon in 1907. In 1937 Norman Nevills started commercial river trips down the Colorado.

In March 1883, the Denver & Rio Grande railroad joined with the Rio Grande Western railroad near Green River, Utah, providing rail transportation to southeast Utah. This, combined with the removal of Native Americans to reservations during the late 1800s and early 1900s, nurtured the growth of communities like Moab, Monticello and Bluff.

From the 1880s until 1975, much of Canyonlands was used for ranching, and features in each district of the park bear the names of cowboys. The Dugout Ranch, outside the Needles District, is still operated by the Indian Creek Cattle Company, under ownership of the Nature Conservancy.

Much of Canyonlands was accessible only by foot or horse until the uranium boom of the 1950s. With the growth of the country's nuclear arms program, the Atomic Energy Commission offered monetary incentives for the discovery and delivery of uranium ore. Certain rock layers in Canyonlands contain uranium, and prospectors built many exploratory roads on public lands in search of radioactive "gold". Many of these routes, including the White Rim Road at the Island in the Sky, are popular four-wheel-drive roads today; others exist as remnants of past human use that are slowly revegetating.

In the 1950s and early 60s, Arches National Monument Superintendent Bates Wilson began advocating for the creation of a "Grand View National Park" in what is now Canyonlands. Wilson first visited the area by horse in 1951, and spent four years working on a National Park Service archeological investigation of the Needles District. The Secretary of the Interior, Stewart Udall, visited the area in 1961, and began lobbying Capitol Hill for a national park on what were then Bureau of Land Management lands.

On September 12, 1964, President Lyndon B. Johnson signed Public Law 88-590 establishing Canyonlands National Park Initially consisting of 257,640 acres, the park was expanded in 1971 to its present 337,570 acres.

Existing Interpretive Facilities, Media & Programs

Top: The Canyon Country Outdoor Education program.

Bottom: Cover of the 2003 Canyonlands Park Guide which is handed out at entrance stations and visitor centers.

PARKWIDE

Southeast Utah Group Headquarters

Headquarters for the Southeast Utah Group (which includes Canyonlands and Arches National Parks, and Natural Bridges and Hovenweep National Monuments) is located about three miles south of Moab on Highway 191. Information services are available for the public.

Off-site Programs and Services

Community outreach programs are an important component of the Canyonlands interpretive program and are offered year-round. Activities include presentations at agency and community organization meetings, senior citizen and community centers, and staffing a booth at county fairs.

Canyonlands National Park Web Site

<www.nps.gov/cany > Overall this is a high-quality and valuable web site, and is frequently used by the public. Information is now more accessible and consistent than in the past. Reservations cannot be made online due to security issues.

Education Program

The Canyon Country Outdoor Education program connects area students with the resources and experiences of Canyonlands National Park, as well as Arches National Park and Hovenweep and Natural Bridges National Monuments. The program employs two permanent Education Specialists (one based in Moab and one in Monticello), as well as seasonal Education Technicians as funding allows.

In Grand County (Moab) the program serves some 750 students from grades one through six. Each student receives classroom visits before and after field trips, and participates in from one to three field trips per school year. Subjects are based on the Utah State Core Curriculum for Science Education, and add a field-based unit of study for required subject matter.

In San Juan County the program is similar however the logistical challenges are great. Unlike Grand County where all county schools are located in a single town, there are five towns in San Juan County with schools. The programs there concentrate on two grade levels each year.

The curriculum-based activities published in the teacher's guide (Red Rock Adventures) is available on the website.

Partnerships

Partnerships with other area organizations and agencies are numerous and invaluable. They include:

- San Juan County Multi-agency Visitor Center (Monticello) – includes San Juan County, National Park Service, US Forest Service, Bureau of Land Management, and Canyonlands Natural History Association, and the City of Monticello.
- Moab Information Center (Moab) – includes National Park Service, US Forest Service, Bureau of Land Management, Moab Area Travel Council (Grand County) and Canyonlands Natural History Association.
- Canyon Country Partnership – a consortium of federal, state, and county land managers; authorized by the Secretary of the Interior; a forum for sharing information and working on common issues.

Publications

Canyonlands offers visitors the following free publications:

- Newspapers: Canyonlands Trip Planner, Canyonlands Park Guide Newspaper
- Unigrid Park Brochures: Canyonlands National Park (translations available in French, Spanish, German and Italian)
- Orientation/Information site bulletins and handouts: Island in the Sky Hiking Trails and Four Wheel Drive Roads, Needles Hiking Trails and Four Wheel Drive Roads, Maze Hiking Trails and Four Wheel Drive Roads, Commercial Tour Operators, Directions to Moab Hospital, NPS Volunteers-In-Parks brochure
- Regulations: Pets & Canyonlands, Rock Climbing, Pack & Saddle
- Natural History/Cultural History: Geology, Cryptobiotic Soils, Desert Varnish, Natural History, Gnats, Bighorn Sheep, Cultural History
- Species Lists: Amphibians, Reptiles, Mammals, Fish

ISLAND IN THE SKY DISTRICT

Visitor Center

The Visitor Center is the primary contact facility for Canyonlands. It is located one mile inside the park boundary. In FY 2002, 103,588 visitors used the facility. It was built in the late 1980's. It includes a lobby, information counter, exhibit area, sales area, small auditorium (which seats about 11), and detached vault toilets. The loca-

Top: Overlook talk at Grand View Point.

Bottom: Island in the Sky Visitor Center

Upheaval Dome
At the end of the road, this site is a trailhead for a popular one-half mile trail and an eight-mile trail, with a parking lot (not large enough) and picnic area. There is an outdated trail brochure. Upheaval Dome provides scenic and scientific interest, since geologists differ as to its origin.

Wayside Exhibits & Trailheads
Some panels exhibit color deterioration from sunlight. Two panels contain errors. There are some gaps in interpretation, and nothing on wilderness.

All wayside panels are 24"x36", horizontal format, low-profile, fiberglass embedment. Frames are metal and are mounted on either freestanding masonry block bases or on horizontal wooden fence railings.

Wayside Titles and Topics:

1. There's Something in the Air - air quality
2. The Neck - explains Island in the Sky name, historic uses of Island in the Sky
3. Anatomy of a Canyon - geology (Note: panel incorrectly states "Indians created pictographs by pecking…")
4. Dropping into the Canyon - cattle ranching and uranium mining activities
5. Track in the Canyon - effects of cattle ranching and uranium mining activities
6. Grand View Point Overlook - identification of topographic features
7. The Three Worlds - geologic history
8. What Shall We Find? - J.W. Powell's first expedition
9. Green River Overlook - identification of topographic features
10. A Salt Dome? - salt dome theory re. formation of Upheaval Dome
11. Ground Zero - meteorite theory re. formation of Upheaval Dome

All trailhead panels are 32"x48" vertical format, fiberglass embedment. Frames are metal and are mounted in freestanding masonry block bases. All panels include a trail description and one other subject.

Trailhead Panel Titles/Locations and Topics:

1. Mesa Arch Trail - resource message re. cryptobiotic soil (Note: uses outdated term "cryptogamic")
2. Aztec Butte Trail - ancestral Puebloans
3. Whale Rock Trail - plant adaptations in a pinyon-juniper woodland
4. Upheaval Dome Overlook Trail - salt dome & meteor impact theories

There are three 32"x 48" vertical plexiglass-covered bulletin cases in Willow Flat Campground that provide seasonal interpretation and ranger-guided activity schedules, orientation, safety suggestions, and fee information.

Four 32" x 48" interpretation/orientation panels and one plexiglass-covered bulletin case are located at the U313/US191 information kiosk. Panels are of fiberglass embedment. Orientation is not especially well done. The site is not overrun by tourists.

Topics addressed by the Interpretation/ orientation panels:

1. Canyon Country
2. Canyonlands National Park
3. Dead Horse Point State Park
4. Island in the Sky

Topics addressed in the bulletin case:

1. Seasonal orientation and safety

Self-guiding Trails
Trail brochures currently sell for a nominal donation at trailheads and in the visitor center. Two are available: Mesa Arch (desert ecology) and Neck Springs (desert ecology).

A self-guiding auto tour booklet for the Island in the Sky is also available from the cooperating association.

Campfire Circle
Located at the southern end of 12-site Willow Flat Campground, the site features a campfire ring and natural rock seats to accommodate an audience of approximately 20 people.

Personal Interpretive Presentations
From March through October, interpreters present evening programs several times a week at Willow Flat campground. Program attendance averages 10 to 15 people.

Twenty minute geology talks at Grand View Point are offered daily in the morning mid-March through October. Spring attendance averaged 10 people per talk during spring FY02. Additional talks and/or guided walks are offered daily in the afternoon mid-March through September. They are conducted at one of several viewpoints or trails (Grand View Point and trail, Green River Overlook, Mesa Arch Trail). Although subjects and themes vary, all walks address and interpret Canyonlands' significant features and primary themes. Spring attendance averaged 6 people per walk during FY02.

Pothole Point
Next to a small parking area, the sandstone is dotted with small depressions called "potholes." These occasionally fill with rainwater, which can then burst into life with tiny crustaceans, insect larvae, snails, and even tadpoles. The trail winds along several potholes, and also affords a good place to see the spires called "the Needles" that gave this district its name.

Roadside Ruin
Just inside the park boundary, this .3 mile loop trail offers visitors an opportunity to see a well-preserved granary built by ancestral Puebloans. A trail brochure explains prehistoric lifeways, concentrating on uses of plants found along the trail.

Other Trails
The Needles district has dozens of hiking options, comprising about 55 miles of trails. They range from easy loops to extremely strenuous and minimally marked.

Wayside Exhibits
A wayside exhibit plan for the Needles District was drafted in 1991 and completed in 1999. A total of 23 waysides for major trailheads and entrances to four-wheel-drive roads have been produced. There is an information/orientation kiosk (installed in 2001) at the junction of Highway 191 and Highway 211 with four wayside panels and a bulletin case. Signs north and south of the junction announce the location. Most of the waysides have been installed and installation of the remainder of them is underway.

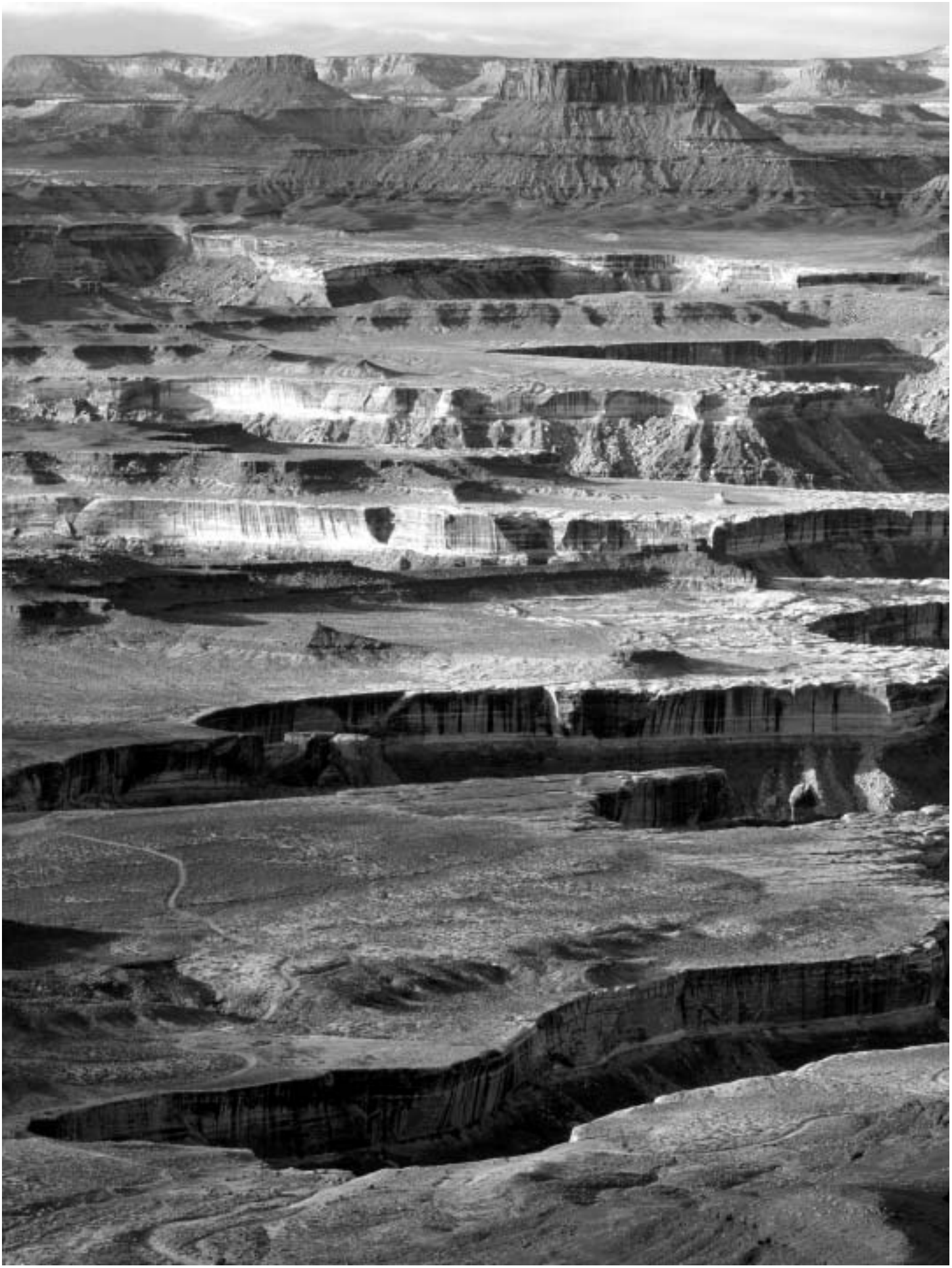
One of the new wayside exhibit panels on how the Needles were formed will be duplicated for use at two locations. This will provide the much-needed opportunity for visitors to identify where the best views of the Needles are available. The first location is off the paved road near the picnic area, and the second is off the gravel surfaced Elephant Hill access road. Some minor road modification is necessary at the Elephant Hill access road which has not been completed. Waysides still await installation at both locations.

One fiberglass-embedded wayside exhibit is in place at Wooden Shoe Overlook along the scenic drive. Two metal photo exhibits are still in use. One is located at the entrance to Salt Creek/ Horse Canyon, and the other is near a rock art panel in Devil's Lane.

Bulletin Boards
1. Visitor Center – 4 standard cases
2. Squaw Flat Campground Loop A – (at comfort station) 3 standard cases
3. Squaw Flat Campground Loop B – (at comfort station) 3 standard cases
4. Squaw Flat Campground Loop B – (at trailhead) wooden case
5. Split Top Group Campsite – wooden case
6. Wooden Shoe Group Campsite – wooden case
7. Squaw Flat Group Campsite – wooden case
8. Cathedral Butte trailhead – 1 standard case (at trailhead, MOU with BLM)

Campfire Circle
Located in Loop A of Squaw Flat Campground, two campfire circles offer the ranger a choice as to whether to present the program under the partial shelter of a large boulder, or up on top of a slickrock outcropping. Both locations provide a traditional campfire talk setting with log benches, fire pit, and no audio-visual equipment. The campfire circles lend themselves well to non-slide illustrated interpretive programs that are consistent with the primitive nature of the area. The capacity of the lower campfire circle is around 50, while the upper can accommodate about 65. Solar-powered stairway and pathway lights provide illumination.

Pothole Point



hikers and the picnic area is little used.
- Install picnic tables at the Green River Overlook.
- Upgrade Willow Flat campground, including campfire and amphitheater area (lighting and seating).
- Improve parking lot and install a picnic area at the White Rim Overlook; produce a brochure or a wayside exhibit interpreting visible geology.

NEEDLES

- The emphasis in this district is on backcountry uses; that will continue. But day hikers, front-country campers, drive-through visitors are a significant group that may not be adequately served. One issue: how to meet the needs of windshield tourists, who often have only a couple hours, but may have driven quite a ways to get here. Needles is mostly designed to be a backcountry area; the questions are how to get orientation information to windshield tourists, help them make choices, give them some enjoyable resource-related experiences, and provide interpretation.
- Front-end research is needed to determine relevant characteristics of one-day visitors (e.g., how many, annual use patterns, types of groups, where do they come from, where else have they visited or will they visit, what are their expectations for experiences, services, facilities?). Both demographic and psychographic data would be useful. A visitor survey would probably provide useful information, similar to Visitor Service Project, but with more emphasis on psychographics (attitudes, expectations, beliefs) in order to design more effective media and facilities.
- Many recommendations should wait for implementation until research is completed. Some, however, may be tried to see how well they work (if there's not a large initial investment).
- Develop one or more universally accessible sites for seeing The Needles. Two possibilities are: Elephant Hill Access Road, and at mile 4.5 past the visitor center, between the picnic area and Pothole Point. The site(s) should have a pullout, parking, and a wayside exhibit.
- Evaluate the exhibits and audiovisual programs at the visitor center for rehabilitation needs (evaluation could include critical appraisal and/or focus groups, tracking studies, and interviews). Consider replacing the "Recreation" exhibit if it proves (as thought by park staff) to be ineffective. Consider replacing with exhibits on a topic such as night sky or wilderness.
- Develop an automobile front country tour guide publication. A trial edition could be prepared and evaluated before investing in a higher quality publication.
- Develop one or more site bulletins for 4WD users. Functions would include interpretation, orientation, safety, and resource protection. Produce trial editions and evaluate. Address possible topics in priority order.
- The following locations and topics will be considered for additional wayside exhibits:
  - Big Spring Overlook – At the end of the proposed new trail to the overlook. This has been funded through the Recreation Fee Demonstration Program.
  - Colorado River Overlook Road – At the beginning of the four-wheel-drive road to provide orientation and resource protection information.
  - Chesler Park Cowboy Camp – For resource protection of the historic site.
  - Devil's Lane – To replace the current metal photo wayside.
  - A set of wayside exhibits along Highway 211 from the turn off of Highway 191 to the park boundary. This would be a cooperative effort involving partners outside the park such as the BLM, Nature Conservancy (Dugout Ranch), private property owners (Marie's Place) and San Juan County. The status of this road as a Scenic Byway, and the natural and cultural history along this 34-mile paved road provide an excellent interpretive opportunity.
- There is one additional location where a bulletin board should be considered.
  - Entrance road to Davis and Lavender Canyons at the side of Hwy. 211.
- The following bulletin boards were made in the park, and need to be replaced with NPS standard metal cases:
  - Squaw Flat Campground Loop B (at trailhead)
  - Squaw Flat Group Campsite
  - Wooden Shoe Group Campsite
  - Split Top Group Campsite
- Big Spring Overlook: Interpret canyon bottoms, erosion, and natural history. At Confluence trailhead, add an interpretive wayside (in addition to trailhead wayside), bench, and restroom. At overlook install unobtrusive barrier; interpret riparian area below with low-profile wayside. Keep largely undeveloped feel.
- Offer evening campfire programs seven nights per week from March through October. (Currently they are offered seven nights per week from late March through the end of May, three nights per week in June and August and five nights per week in September and October. These traditional non-slide campfire talks on a variety of natural and cultural history

RESEARCH NEEDS

Additional research is needed on a variety of social and environmental topics. The need to know more about the numbers, patterns, and expectations of front country visitors to the Needles district was discussed above. The expansion of the Island visitor center should be guided by front end and formative evaluation of media and the facility. Programs and media should be periodically evaluated to confirm effectiveness. The text and graphics for new wayside exhibits can be tested at a formative stage if there are questions about the effectiveness of different approaches or appeal to specific audiences. This is especially important when attempting to influence behavior, such as with resource protection or safety messages. How well the overall mix of facilities, services, media, and programs meets visitor, resource, and agency needs can be periodically tested. Visitor surveys are also necessary to gather socioeconomic and customer satisfaction information for GPRA and other park programs.

LIBRARY AND COLLECTION

The library for the Southeast Utah Group (SEUG) is located at Arches NP. Other sites – Hovenweep and Natural Bridges NM's, Needles and Island VC's, and SEUG headquarters – have small libraries of their own. The SEUG library is still organized on the Dewey Decimal system; the catalog is not on line. Upgrading the library would be an asset. There is also a need for more items for the interpretive collection to use in interpretive programs.

STAFFING

Additional staff are needed for interpretation and education. Not so much because overall visitation has increased over the last 10 years (it has), or because the adoption of Ranger Futures upgraded positions and made work years cost more (it did, just like for most parks), but because the visitor season has expanded. Visitors once arrived largely over a 6-7 month season, now the shoulder seasons (spring and especially fall) are busy. It's now a 9-month season, and even warm weekends in the winter bring local and regional visitors. Staffing is inadequate to keep up with visitation.

Another area where the staffing shows up is insufficient staff to provide oversight and quality assurance over commercial guide services in the park. As noted above, the Park Service is responsible for these services' quality and compliance with policies and guidelines.

Finally, the Southeast Utah Group lacks a geologist on staff. This affects not only research and resource management programs, but limits the subject-matter expertise of interpreters and educators, and hampers the ability of the park to provide content review and guidance on interpretive media.

The park has and will continue to rely heavily on alternate sources of staff, including volunteers, the Student Conservation Association, cooperating association employees, interns, and other partners.

The SCA and VIP programs will continue to be important.

Special Populations: Programmatic Accessibility Guidelines for Interpretive Media

Prepared by the Harpers Ferry Center Accessibility Task Force

Statement of Purpose

This document is a guide for promoting full access to interpretive media to ensure that people with physical and mental disabilities have access to the same information necessary for safe and meaningful visits to National Parks. Just as the needs and abilities of individuals cannot be reduced to simple statements, it is impossible to construct guidelines for interpretive media that can apply to every situation in the National Park System.

These guidelines define a high level of programmatic access which can be met in most situations. They articulate key areas of concern and note generally accepted solutions. Due to the diversity of park resources and the variety of interpretive situations, flexibility and versatility are important.

Each interpretive medium contributes to the total park program. All media have inherent strengths and weaknesses, and it is our intent to capitalize on their strengths and provide alternatives where they are deficient. It should also be understood that any interpretive medium is just one component of the overall park experience. in some instances, especially with regard to learning disabilities, personal services, that is one-on-one interaction, may be the most appropriate and versatile interpretive approach.

In the final analysis, interpretive design is subjective, and dependent on both aesthetic considerations as well a the particular characteristics and resources available for a specific program. Success or failure should be evaluated by examining all interpretive offerings of a park. Due to the unique characteristics of each situation, parks should be evaluated on a case by case basis. Nonetheless, the goal is to fully comply with NPS policy:

"...To provide the highest level of accessibility possible and feasible for persons with visual, hearing, mobility, and mental impairments, consistent with the obligation to conserve park resources and preserve the quality of the park experience for everyone."

NPS Special Directive 83-3, Accessibility for Disabled Persons

AUDIOVISUAL PROGRAMS

Audiovisual programs include video programs, and audio and interactive programs. As a matter of policy, all audiovisual programs produced by the Harpers Ferry Center will include some method of captioning. The Approach used will vary according to the conditions of the installation area and the media format used, and will be selected in consultation with the parks and regions.

The captioning method will be identified as early as possible in the planning process and will be presented in an integrated setting where possible. To the extent possible, visitors will be offered a choice in viewing captioned or uncaptioned versions, but in situations where a choice is not possible or feasible, a captioned version of all programs will be made available. Park management will decide on the most appropriate operational approach for the particular site.

Guidelines Affecting Visitors with Mobility Impairments

1. The theater, auditorium, or viewing area should be accessible and free of architectural barriers, or alternative accommodations will be provided. UFAS 4.1.
2. Wheelchair locations will be provided according to ratios outlined in UFAS 4.1.2(18a).
3. Viewing heights and angles will be favorable for those in designated wheelchair locations.
4. In designing video or interactive components, control mechanisms will be placed in accessible location, usually between 9" and 48" from the ground and no more than 24" deep.

Guidelines Affecting Visitors with Visual Impairments

Simultaneous audio description will be considered for installations where the equipment can be properly installed and maintained.

Guidelines Affecting Visitors with Hearing Impairments

1. All audiovisual programs will be produced with appropriate captions.
2. Copies of scripts will be provided to the parks as a standard procedure.
3. Audio amplification and listening systems will be provided in accordance with UFAS 4.1.2(18b).

the floor to the bottom edge of the sign. (ADAAG 4.4.2)

7. Floors:
   a. Floors and ramps shall be stable, level, firm and slip-resistant.
   b. Changes in level between 1/4" and 1/2" shall be beveled with a slope no greater than 1:2. Changes in level greater than 1/2" shall be accomplished by means of a ramp that complies with ADAAG 4.7 or 4.8. (ADAAG 4.5.2)
   c. Carpet in exhibit areas shall comply with ADAAG 4.5.3 for pile height, texture, pad thickness, and trim.
8. Seating - Interactive Stations/Work Areas: The minimum knee space underneath a work desk is 27" high, 30" wide and 19" deep, with a clear floor space of at least 30" by 30" in front. The top of the desk or work surface shall be between 28" and 34" from the floor. (ADAAG 4.32, Fig.45)

Guidelines Affecting Visitors with Visual Impairments

1. Tactile models and other touchable exhibit items should be used whenever possible. Examples of touchable exhibit elements include relief maps, scale models, raised images of simple graphics, reproduction objects, and replaceable objects (such as natural history or geological specimens, cultural history items, etc.).
2. Typography - Readability of exhibit labels by visitors with various degrees of visual impairment shall be maximized by using the following guidelines:
   a. Type size - No type in the exhibit shall be smaller than 24 point.
   b. Typeface - The most readable typefaces should be used whenever possible, particularly
   for body copy. They are: Times Roman, Palatino, Century, Helvetica and Universe.
   c. Styles, Spacing - Text set in both caps and lower case is easier to read than all caps. Choose letter spacing and word spacing for maximum readability. Avoid too much italic type.
   d. Line Length - Limit the line length for body copy to no more than 45 to 50 characters per line.
   e. Amount of Text - Each unit of body copy should have a maximum of 45-60 words.
   f. Margins - Flush left, ragged right margins are easiest to read.
3. Color:
   a. Type/Background Contrast - Percentage of contrast between the type and the background should be a minimum of 70%.
   b. Red/Green - Do not use red on green or green on red as the type/background color combination.
   c. Do not place body copy on top of graphic images that impair readability.
4. Samples: During the design process, it is recommended that samples be made for review of all size, typeface and color combinations for labels in that exhibit.
5. Exhibit Lighting:
   a. All labels shall receive sufficient, even light for good readability. Exhibit text in areas where light levels have been reduced for conservation purposes should have a minimum of 10 footcandles of illumination.
   b. Harsh reflections and glare should be avoided.
   c. The lighting system shall be flexible enough to allow adjustments on-site.
   d. Transitions between the floor and walls, columns or other structures should be made clearly visible. Finishes for vertical surfaces should contrast clearly with the floor finish. Floor circulation routes should have a minimum of 10 footcandles of illumination.
6. Signage: When permanent building signage is required as a part of an exhibit project, the ADAAG guidelines shall be consulted. Signs which designate permanent rooms and spaces shall comply with ADAAG 4.30.1, 4.30.4, 4.30.5, and 4.30.6. Other signs which provide direction to or information about functional spaces of the building shall comply with ADAAG 4.30.1, 4.30.2, 4.30.3, and 4.30.5. Note: When the International Symbol of Accessibility (wheelchair symbol) is used, the word "Handicapped" shall not be used beneath the symbol. Instead, use the word "Accessible".

Guidelines Affecting Visitors with Hearing Impairments

1. Information presented via audio formats will be duplicated in a visual medium, such as in the exhibit label copy or by captioning. All video programs incorporated into the exhibit which contain audio shall be open captioned.
2. Amplification systems and volume controls should be incorporated with audio equipment used individually by the visitor, such as audio handsets.
3. Information desks shall allow for Telecommunication Devices for the Deaf (TDD) equipment.

visitors with disabilities, list significant barriers, and note the existence of TDD phone numbers, if available.

In addition, informal site bulletins are often produced to provide more specialized information about a specific site or topic. It is recommended that each park produce an easily updatable "Accessibility Site Bulletin" which could include detailed information about the specific programs, services, and opportunities available for visitors with disabilities and to describe barriers which are present in the park. A template for this site bulletin will be on the Division of Publications website for parks to create with ease, a consistent look throughout the park service. These bulletins should be in large type, 16 points minimum and follow the large-print criteria below.

Guidelines Affecting Visitors with Mobility Impairments

1. Park folders, site bulletins, and sales literature will be distributed from accessible locations and heights.
2. Park folders and Accessibility Site Bulletins should endeavor to carry information on the accessibility of buildings, trails, and programs visitors with disabilities.

Guidelines Affecting Visitors with Visual Impairments

1. Publications for the general public:
   a. Text
      (1) Size: the largest type size appropriate for the format. (preferred main body of text should be 10pt)
      (2) Leading should be at least 20% greater than the font size used.
      (3) Proportional letterspacing
      (4) Main body of text set in caps and lower case.
      (5) Margins are flush left and ragged right
      (6) Little or no hyphenation is used at ends of lines.
      (7) Ink coverage is dense
      (8) Underlining does not connect with the letters being underlined.
      (9) Contrast of typeface and illustrations to background is high (70% contrast is recommended)
      (10) Photographs have a wide range of gray scale variation.
      (11) Line drawings or floor plans are clear and bold, with limited detail and minimum 8 pt type.
      (12) No extreme extended or compressed typefaces are used for main text.
      (13) Reversal type should be minimum of 11 point medium or bold sans serif type.
   b. Paper
      (1) Surface preferred is a matte finish. Dull coated stock is acceptable.
      (2) Has sufficient weight to avoid "show-through" on pages printed on both sides.
2. Large-print version publications:
   a. Text
      (1) Size: minimum16 point type.
      (2) Leading is 16 on 20pt.
      (3) Proportional letterspacing
      (4) Main body of text set in caps and lower case.
      (5) Margins are flush left and ragged right.
      (6) Little or no hyphenation is used at ends of lines.
      (7) Ink coverage is dense.
      (8) Underlining does not connect with the letters being underlined.
      (9) Contrast of typeface and illustrations to background is high (70% contrast is recommended)
      (10) Photographs have a wide range of gray scale variation.
      (11) Line drawings or floor plans are clear and bold, with limited detail and minimum 14 pt type.
      (12) No extreme extended or compressed typefaces are used for main text.
      (13) Sans-serif or simple-serif typeface
      (14) No oblique or italic typefaces
      (15) Maximum of 50 characters (average) per line.
      (16) No type is printed over other designs.
      (17) Document has a flexible binding, preferably one that allows the publication to lie flat.
      (18) Gutter margins are a minimum of 22mm; outside margin smaller but not less than 13mm.
   b. Paper:
      (1) Surface is off-white or natural with matte finish.
      (2) Has sufficient weight to avoid "show-through" on pages printed on both sides.
3. Maps:
   a. The less clutter the map, the more visitors that can use it.
   b. The ultimate is one map that is large-print and tactile.
   c. Raised line/tactile maps are something that could be developed in future, using our present digital files and a thermaform machine. Lines are distinguished by lineweight, color and height. Areas are

National Park Service
U.S. Department of the Interior

Canyonlands National Park
2282 SW Resource Blvd.
Moab, Utah 84532