UTAH'S STATE PARKS
Geographic Locations

GOBLIN VALLEY STATE PARK
EMERY COUNTY, UTAH
I. EXECUTIVE SUMMARY

Planning Approach
A chartered and selected team of nine local citizens and division staff was assembled—meeting on a scheduled basis from early Spring 1998 through December 1998. Field trips, public meetings (Green River, Hanksville and Salt Lake City), and seven resource management plan team (RMPT) meetings were held to explore current and future park needs, issues and solutions to the development of Goblin Valley State Park (GVSP) and the immediate environs of the San Rafael Swell.

Goblin Valley and the Southern San Rafael Swell Area
The 3014.4 acre GVSP joining the 30 by 75 mile, >1.44 million acre San Rafael Swell, and high desert public domain (BLM) lands surrounding the park, is an important scenic, outdoor recreation, wildlife and geologic area. Purportedly discovered in 1940s, and established as a park in 1970, GVSP was once a rarely visited, natural park used mainly in the spring and fall for recreational activities such as hiking, camping and day use—mostly by residents of Green River, Price and Hanksville, Utah.

Access Road
With the current Emery County initiative to realign and pave the county road to the GVSP entry station. GVSP will become an easily accessed recreation site, surrounded by heavily used public domain lands. GVSP and Bureau of Land Management (BLM) lands share more than 60% of their visitors. GVSP struggles with the level of use and issues associated with providing energy, water, recreation information and public safety services in one of the most remote areas of Utah. It is anticipated that the average annual visitation of 70,000 will increase sharply with the completion of the paved road into GVSP—even shifting the type of visitors and duration of visitation. Easy access will increase day use, encourage bus tours, displace some local visitors, and increases out-of-state and foreign visits.

Location
GVSP is immediate to the south and east of the “Crack Canyon Wilderness Study Area” (UT-060-028A). BLM land south of GVSP is also included in a recent wilderness study area that surrounds the park on the north and west. Located between Green River and Hanksville 12 miles off State Route 24, the park has a 21-unit campground, modern rest room, hot showers, and visitor observation shelter at the Goblin Valley overlook. Water is available from one 844 foot deep well. Power is generated by photo voltaic panels supplemented by diesel generators.
Major Findings and Recommendations--Summary:

- Study, protect and sustain the goblins
- Provide more information about the park and Swell for park visitors
- Provide interpretive materials and programs for visitors
- Protect and manage ecological resources of the park
- Improve campgrounds in the park--improve setting and separability

- Consider future expansion of the campground by at least 24 units
- Reduce road grades, widen overlook parking, add shelters and turnaround
- Improve the existing energy system and its reliability
- Redesign and reestablish park trails--orient to vistas and features
- Fund a visitor contact station--multiple-use for office, storage, maintenance

- Provide on-site housing for visitor and resource protection
- Improve and install signage to inform public and simplify management
- Promote GVSP--closely with communities, county and tourism agencies
- Increase park staff and budget
- Explore collaborative BLM and Emery County area planning and management
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III. INTRODUCTION

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“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed it is the only thing that ever has.”

---Margaret Mead.
B. PREFACE

Planning for an outstanding natural resource such as the Goblin Valley State Park (GVSP) is required for the protection of this unique area and to ensure the efficient and effective expenditure of State and private funds. It is necessary for the long-term protection and public enjoyment of GVSP’s unique geology and land forms that are of great interest to the recreating public in Utah, and for our out-of-state and international guests.

This Resource Management Plan (RMP) is required by the Utah State Legislature and the Board of the Utah Division of Parks and Recreation to guide short and long term site management and capital development. The planning process recommends limits of acceptable change or modification, and a future vision for the park; i.e., (1) recognizes impacts will result from use and enjoyment of the site; (2) questions how much and what types of impacts may be accommodated while providing reasonable protection of the resources for future visitors; (3) seeks sustained quality and value; and (4) seeks to determine the conditions under which this can be attained.

C. GVSP MISSION STATEMENT

A Team of citizens, local and federal officials, and park staff was assembled early in 1998. Public meetings, site visits, special site studies and team planning meetings were held to legitimize and generate this plan. In addition, over 450 park visitors responded to a 22 item questionnaire between March and the end of May, 1998. From this process, recommendations have been formulated that will influence GVSP development and management. Descriptive information about the GVSP was also gathered.

The Mission of Goblin Valley State Park is to protect and interpret this unique natural feature through proactive and participatory planning, resource management, public education, necessary but minimal site development, and conservation for current and future generations, while enhancing appreciation, health, enjoyment, and increased regional economic activity in rural Utah and Emery County.
The Goblin Valley Resource Management Plan Team produced this fun Graphic, that represented major issues and conditions relating to the Park. Notable, is the attempt to balance park use and enjoyment with the need to sustain the qualities and resources of the park; the need for park users to escape urban noise and pollution; damage occurring to the Goblins from park use; the need to secure access for all park users, including persons with physical challenges; and the growing numbers of larger vehicles and groups attracted to the park because of recent access road improvements.
IV. ABOUT THE PARK

A. GVSP Brief History:

Discovery and Designation—First evaluated as a candidate for National Park status in 1950s, then established as a “State Reserve” and finally as a state park in the 1974, Goblin Valley is one the most isolated areas in Utah. Although the area has been known since 1880, it was “re-discovered” by P.W. Tompkins, a chemical engineer from San Francisco, and by Wayne County Commissioner Arthur L. Chaffin in 1949. It was considered for National Monument Status in 1954. Obviously the area had outstanding scenic values. At the same time, many delicate “goblins” or “hoodoos” were at risk to being easily toppled. The area needed protection, interpretation and management.

Early Candidate for State Park Status—Property Acquired—GVSP was identified as one of the premier natural park sites in the 1957-58 inventory conducted by the new “Utah State Park and Recreation Commission”. It was considered one of the most spectacular geological and scenic features in southern Utah by the Blue Ribbon Committee (Fabian, 1959). Some 2,240 acres were acquired from the BLM by Emery County in 1964 as a state reserve. Emery County and the BLM remain interested and concerned about the disposition and management of this entire geological area. Another contiguous 774.4 acres were transferred in December, 1998 under the Recreation and Public Purposes Act to the Division, totaling 3,014.4 acres in GVSP. Several episodes of planning and development occurred through the 1970s and 1980s. However, limited funding has constrained the development of GVSP. With the 1999 paving of the GVSP access road by Emery County, it will become much more convenient and accessible for automobiles, recreation vehicles and tour busses.

B. General Park Setting:

Park Location—The goblin features are located primarily in southwestern Emery County, 12 road-miles west of State Route 24. The valley is situated at the base and along the southeastern flank of the San Rafael Swell. Part of the park and some contiguous BLM land drains into the Muddy and Dirty Devil drainage through the Goblin Valley area. The park is in a remote area, nearly 30 road miles from permanent human habitation. Vistas are dramatic. The slickrock ridges of the San Rafael Reef tower above.
The Henry Mountains loom on the horizon, while Big Wild Horse Mesa occupies the foreground. The Swell is a dramatic geological feature containing numerous archeological sites. It attracts many for dispersed camping and hiking. GVSP is on a major access corridor to the Swell.

High, cold desert is a an apt description for GVSP, punctuated with recurring strong northeasterly winds. The park lies at 5200 feet above mean sea level, in the upper Sonora vegetative zone. Vegetation is relatively sparse, often found in in protected areas with adequate moisture. Rapid erosion cuts new rills and fills others through the Goblins—with Goblins emerging from geological features, while some topple—victims of erosion and occasional vandalism. Microbiotic and mechanical crusts develop and harden the surface. This protects underlying soil against wind and water erosion. Crusts are easily disturbed by hikers and mechanized equipment. While a regional inventory of mammals, birds, reptiles and amphibians found in the San Rafael cold desert has been made, a specific inventory species in GVSP is needed.

C. Relationship to communities and the surrounding area:

The Goblins and the San Rafael Swell have long been utilized by the local population from Green River, Hanksville and other towns in Carbon and Emery County. Currently, > 60% of the visitors to the GVSP are from the Wasatch Front-->90% from outside the local area. Primary access from local communities and the Wasatch Front is off of State Route 24, I-70, U.S. Routes 6 and 191. Just south of GVSP, State Routes 95 and 24 are components of the Bicentennial Highway, running from Loa, Utah, through Capitol Reef National Park, Hanksville, to Lake Powell and Glen Canyon National Recreation Area.

Demographics and Socioeconomic Impacts: As noted, most visitors reside outside the Emery County area—mostly from the Wasatch Front. About 60 percent of these visitors are from the Wasatch Front. Many GVSP visitors are simultaneously visiting other recreation areas such as Capitol Reef National Park or Glen Canyon National Recreation Area. Information from the 1998 GVSP Visitors Survey appears to indicate the communities of Green River and Hanksville benefit from the additional visitation and subsequent economic activity that GVSP supplies the area. Survey information shows that over 71 percent of park visitors stopped in Green River or Hanksville. They spent an average of $47.00 per party. This suggests the positive economic contribution that GVSP provides to these economies.
More research on “average expenditures per visitor” is needed to determine an accurate estimate of the job and income impacts GVSP has on the economies of Hanksville and Green River. However, estimates can be made using existing studies. Research about the impact of visitor expenditures on local economies shows that for many recreation areas, for every dollar expended by a visitor, local revenue can be expected to increase by about $.30 to $.50. (Goldman, et al, 1994) If these estimates are reasonable, the 70,860 GVSP visitors would be responsible for up to $1.7 million in revenues for Green River and Hanksville during 1998.

Clearly, more research in the form of community-based economic impact analysis will be needed to verify the impact on local communities. However, given the fact that Green River and Hanksville are virtual “gateways” to the park, it is highly likely that park visitors will make travel-related expenditures within these two towns. Even if only a portion of the visitor’s total expenditure will find its way into Hanksville and Green River, the impact may still be significant. Even two jobs created in a town such as Hanksville as a result of GVSP visitation would be of considerable importance to such a small and fragile economy. (Dalton, 1999)

Partnerships Important—Partnerships are an increasingly common and successful way to accomplish tourism and recreation objectives. The “Canyon Country Partnership” is a good example of a multi-agency partnership: established in 1994, it formed to address growing issues and concerns on a regional basis--issues common to all partners. There are collaborative partnership opportunities at GVSP between the Division of State Parks, BLM, and Emery County. Potential collaborative efforts can include joint management and development of programs to better serve people and protect resources.
D. Natural Resources:

The following is a brief discussion of the natural resources of GVSP. More extensive technical reports are found in the Appendix of this report.

1. Geology: GVSP lies within the Colorado Plateau physiographic province, an area of broad regional uplift dissected by deep canyons exposing layer upon layer of nearly flat lying beds of sedimentary rock. Rock layers in GVSP follow this regional pattern: ascending in order, the Entrada, Curtis, Summerville, and Morrison formations outcrop within the park boundaries. “Goblins” form exclusively within the Entrada Formation, in continuous horizontal, fine sandstone beds interbedded with and underlain by shale. Particularly important may be the visitor impact on both mechanical (mineral) and microbiotic crust that stabilize the clay covered slopes on the Entrada Formation. These crusts can be crushed by foot and vehicle traffic, allowing wind to blow away the underlying clay and silt size particles.

The Curtis Formation unconformably overlies the Entrada, forming the greenish gray cap rock on the buttes above the park’s valley: the color coming from minor amounts of the mineral glauconite. The Morrison Formation unconformably overlies the Summerville formation on top of Wild Horse Butte. It consists of varicolored mudstone, stream channel sandstones and conglomerates. The Morrison is famous for its deposits of dinosaur bones; however, no fossil bones have been reported on Wild Horse Butte. Understanding the geology of the park is helpful in evaluating stability of structure foundations, roads, trail alignments, potential road alignments, and evaluating water sources and water quality. (Milligan, 1998)

Goblin development: Joint fracture patterns within the Entrada’s sandstone beds play an important role in goblin development by creating initial zones of weakness. Unweathered joints intersect to form sharp edges and corners. These edges and corners are more susceptible to weathering because they have a greater surface area to volume ratio than the faces. Therefore, they weather more quickly producing spherical shaped goblins through a process called spheroidal weathering. Combined with spheroidal weathering of the sandstone beds, interbedded and underlying softer shale and siltstone beds give the goblins their often elongated shapes, flat bottoms, stacked appearance, and the pedestals upon which they are displayed.
The **RMP Team suggests a special study** be developed to measure and evaluate park visitor impacts on the soils and goblins, with the assistance of the Utah Geological Survey (UGS). Some means of monitoring the natural erosion consequences in the valley should be designed and implemented; e.g., comparative photographic analysis over time (past, present and future), measuring erosion rates, and other appropriate and effective analysis that could be used to sustain park resources.

2. **Biology:** (flora) a botanical inventory for selected species of special concern was conducted in May, 1998, by the Utah Natural Heritage Program (UNHP) botanist. A full report is in the Appendix section of this RMP. **“Wright’s fishhook cactus”** is federally listed as an endangered species: found in isolated areas of the park and near the north end and south of the overlook parking area (a high use area). Future development should avoid this cactus. **Heil’s beaver-tail cactus** is on the UNHP’s “Tracking List”. It is located in areas away from development. Future development should avoid this cactus as well. **“Ruth’s milkweed”** is secure throughout its range. A reevaluation will be needed in the future. No management recommendation was made by UNHP. **(Franklin, 1998)**

**The Team suggested that visitors to GVSP be educated as to the presence of unique flora and the plan communities that surround them.** Other flora include Fremont cottonwood trees, Utah juniper, sage, joint fir (Mormon tea), wild onions, Russian thistle, Indian rice grass, shade scale, winterfat, larkspur. Flowering species include soapweed yucca, sulphur flower, lupine, locoweed, pale evening primrose, and goldenweed.

**Fauna:** there has never been a complete survey of GVSP fauna. While characterizations can be made utilizing survey information from the San Rafael region of southeastern Utah, such information is tenuous. While various species of reptiles, mammals and birds have been documented in the park, a survey is required to ascertain precisely, fauna occurrence and utilization of GVSP. The park management recommended cliff walls of Goblin Valley and Wild Horse Mesa should be of particular interest in providing nesting or roosting habitat for both birds and bats. **The Team recommends collaboration with DWR to initiate an inventory of habitat and wildlife within GVSP.**

3. **Archeology:** a full park-wide archeological inventory has not been accomplished due to cost limitations; however, on September 29, 1998, William R. Latady, an archeologist from Anasazi State Park, and Lisa Petersen, a volunteer, conducted an archeological inventory of the proposed alignment for a new access road into Goblin Valley State Park. A formal file search at the Utah Division of
State History, and an intensive pedestrian survey of about one mile was conducted. There were no significant archeological (cultural) sites noted in the file, nor were any sites observed along the road alignment. Future development sites will be assessed. (Latady, 1998) The “compliance archeologist” reported that “no historic properties will be impacted by the project, as specified in Utah Code Annotated, Title 9-8-404.” (Dykmann, December 2, 1998)

4. Water and climate: summertime temperatures in the Green River and San Rafael cold desert range from highs in the 100°F range and lows in the 50°F; wintertime temperatures range from highs in the mid-30°F to below 20°F at night. The temperature is usually 20 degrees warmer on the desert than higher in the San Rafael Swell. Annual precipitation is about 7 inches; storms are often short intensive downpours that flood and scour soft clay and sandy soils.

<table>
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<th>Min. average temp.:</th>
<th>Average Total Precip.:</th>
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<tr>
<td></td>
<td>40.4°F (Jan)</td>
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<tr>
<td>Green River</td>
<td>97.7°F (July)</td>
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<td>6.25 inches/year</td>
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<tr>
<td>Fruita</td>
<td>91.3°F (July)</td>
<td>62.0°F (July)</td>
<td>6.85 inches/year</td>
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<tr>
<td></td>
<td>40.5°F (Jan)</td>
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An 844 foot deep potable water well provides water for the park at a recharge rate of about 10 gallons per minute. A gravity system and 40,000 gallon water tank stores and distributes the well water. The development of an additional water well may be necessary to meet growing demand resulting from improved and more convenient access to the park. An additional 4.75 acre foot water right may also be needed to meet increasing day use consumption. (Division of Water Rights, recommendation, 1998)
V. PURPOSE AND PROCESS FOR THE RESOURCE MANAGEMENT PLAN (RMP)

A. Purpose of the Plan

Fundamentally, RMPs express intelligent forethought and informed expectation about the future uses and management of the park and its resources. Planning is required and authorized under Title 63-11-13 of the Utah Code. The Plan is both a decision-making tool and an authoritative source document to anticipate and legitimize future action and expenditure. Future actions and programs may be considered “stewardship” or protection to sustain outstanding resource qualities and values of a park for future generations.

RMP Objectives: RMPs make extensive use of collaboration and partnering with stakeholders—communities, institutions, park users, business, law enforcement and other state, local and government entities. The process generates solutions and opportunities that often transcend political boundaries and jurisdictions. The RMP:

- Helps guide public, private and federal expenditures;
- Anticipates public needs for recreation in state parks;
- Protects and preserves (sustainability) state park natural resources—providing minimal but adequate development for safety and enjoyment;
- Identifies issues and trends—unique problems and opportunities;
- Implements enhanced statewide and local economic activity, facilitates tourism and a spectrum of leisure activities;
- Ultimately provides for the health, education, recreation and general welfare of citizens and guests; and
- Should help guide, justify, and prescribe the budget for the park.

Park RMPs Are An Implementation of the Division System Plan—Frontiers 2000: In 1996, the division successfully completed Frontiers 2000, a system plan for Utah State Parks. The plan called for establishing RMPs for each State Park (Frontiers 2000, p. 7) including specific management purposes and actions to implement responses to specific issues in each State Park. Frontiers 2000, also, was the result of a broad based participative planning process involving over 200 stakeholders and 5 committees addressing 15 major issues, each under one of the heading of “parks, people, and programs”. This RMP is an important implementation of that system plan.

The Mission for the Utah State Park System was to enhance the quality of life in
Utah through Parks, People and Programs. A primary value and attribute of Goblin Valley is "the Goblins" and the wonderful resources, and view shed that surround it.

Utah State Park System Principles: these guiding principles for the entire state park system are incorporated and implemented in each state park RMP to accomplish State Park system goals and mission:

- Protect and sustain the natural resources of a state park
- Provide quality customer service, protection and satisfaction
- Complement the quality of life and economy in Utah through outstanding state park facilities and services
- Ensure State and community satisfaction with State Parks
- Ensure employee satisfaction
- Achieve park operation and development efficiency and effectiveness

B. The Planning Team Was Crucial to the Planning Process

The nine member GVSP Resource Management Team (Team) of local citizens, professionals, and State Park staff, was chartered to develop a plan of how GVSP should look and be managed in the future. The Team was composed of qualified park users and stakeholders: a motel operator and Emery County Travel Council member, a physician, a professional geologist, a federal land manager, a county sheriff, the park manager, a program administrator, the regional park manager, and an environmental engineer. The project enjoyed support from the Emery County Commission and Road Department, and the Price District of the Bureau of Land Management. Special studies were provided by the Natural Heritage Program in the Division of Wildlife Resources, the Division of Water Rights, the Division of State History, the Utah Geological Survey, the Office of Energy and Resource Planning (OERP), and a GVSP visitor survey.

Team Mission: the Team established a "mission" that included: (1) ensuring valuable park resources are protected; (2) ensuring public input and participation through visitor surveys, local and regional informational "open houses"; (3) assessing the current GVSP situation; (4) identifying and prioritizing issues through a "strengths, weaknesses, opportunities and park threats" analysis; (5) recommending criteria for future park improvements, interpretation of resources, resource management and program development; (6) providing data-based recommendations for park development and management; and (7) improving local and state economic development efforts.
C. Planning Process and Public Involvement

Early in 1998, park staff initiated the RMP process by preparing a planning process outline for the GVSP RMP. It provided a tentative structure and schedule for important planning phases that relied heavily on public input through (1) an initial meeting of staff; (2) then a meeting with stakeholders (park users, local citizens, fed land managers, tourism interests, law enforcement, etc.); and (3) a series of 4 public meetings in Green River, Castle Dale, Hanksville and Salt Lake City; and (4) 7 GVSP RMP Team meetings to develop the plan.

GVSP Visitor Opinion Survey Completed, June 1998: During the Spring and Summer of 1998, a random sample survey was conducted by state park personnel at Goblin Valley; 454 responses were received for a 76% response rate. This was objective public input to the RMP process. The study was conducted on site March 13 through May 25, 1998 (busiest season) on random days and hours of the day (over 51% of the annual visitation occurs during these three months).

The purpose of the study was to provide a better understanding of current visitors and their satisfaction with existing facilities and services at the park. The information could also be used as a standard or guideline for park development and management. The survey instrument queried for three main topics: (1) park visit information--activities; (2) park issues and improvements needed; and (3) demographic information about the park visitor. A full summary of the survey is found in the Appendix section of this RMP. While it does not necessarily represent responses from visitors during other seasons of the year, it is the period of highest visitation, during which the major resource impacts occur. At least 300 responses were necessary to achieve an overall sampling error of no more than 5 percent at the 95 percent confidence level. The sample enjoyed a 76% return rate, or 454 responses out of 596. It is both valid and reliable.

Important Basic Findings of the 1998 Visitor Survey: Several implications for GVSP were revealed, and suggest that follow up surveys should be conducted regularly--by season, every three years:

1. Average expenditure by visitors to GVSP, stopping in Green River and Hanksville; is $47.
2. The communities of Green River and Hanksville enjoy additional visitation and economic activity as a result of GVSP;
3. The park is a recreation component of a larger regional system, including public domain or BLM lands surrounding the park, extending easterly to
Canyonlands National Park, and westerly to Capitol Reef National Park and the Swell;
4. 89.2% of survey respondents visited the park in the last year once or twice- 
49.6% made GVSP their primary destination; those not making GVSP their 
primary destination, made National Parks (49.7%) or BLM (37.4%) their 
primary destination;
5. 25% of survey respondents stayed over night; 71.2% were day users;
6. The majority of park patrons are day users that enjoy hiking and sightseeing 
(77%), and prefer the park to be maintained in it’s natural setting (86%), 
with site development limited to basic facilities (76%);
7. Of park visitors, from March through May, 1998, 65% are from Utah; 56% 
are from within 60 miles of Salt Lake City;
8. Park visitors want more information available about the park, and the region 
in which it is located (high importance [4.6], but low satisfaction index 
[3.8]; i.e., interpretive and informational materials;

D. Potential Impacts of Paving the County Access Road into GVSP

Emery County has funded and re-engineered the access road from the paved Temple 
Mountain junction to the northwest boundary of GVSP--about 7 miles. Improved grades, 
widths, drainage and eventual paving will speed park visitors conveniently to the park and 
to favorite BLM resource sites at Little Wild Horse Canyon, Wild Horse Creek, Crack 
and Chute canyons by June, 1999. At the new north GVSP property line, the division has 
collaborated with the county and funded a new park entry road: about 5800 feet at an 
estimated cost of $450,000. Culverts will be installed and two 12-foot lanes with 3.2 foot 
shoulders will be graded and paved. The old entry road will be utilized for future 
camping/day use access, trails and paths. It is anticipated:

- The road will attract new clientele--RVs, tour busses, BLM land visitors
- Exert additional pressure on the park infrastructure: water, parking, roads, rest 
rooms, interpretive services, programs, public safety, and day use
- Need for additional efficient and reliable power; an additional water right
- Additional seasonal and full time staff--ranger, interpreter/naturalist, and 
maintenance help
- Increased budget to accommodate additional uses and demand
E. Future Trends and Impacts of the New Access Road

Trends and Expectations for the Future: The GVSP RMP Planning Team initiated a “visioning process”—looking 3 to 10 years into the future and responding to apparent trends. Trends may include increased park use by a broader range of users and use of newer technologies. State parks are being subjected to changing land management guidelines enforced by at least two adjoining land management agencies. Parks are being influenced by federal wilderness management policy; responding by management and facility development to improved Goblin Valley and Swell access. Brief comments below outline a range of future possibilities as expressed by the Team. These should be given consideration and thought.

• Facilities in the Future:

  1. A wilderness/back country experience may require a reservation or permit;
  2. There may be a demand for new recreation sites near Temple Mountain--near popular canyons in the San Rafael reef
  3. Users may prefer a regional visitor center
  4. Users have recommended an upgrade in campground/day use area--away from Goblins
  5. Road widths, grades, and main parking need re-engineering, renovation; restrooms and water availability need improvement

• Future Cooperation and collaboration:

  1. Political and economic conditions may dictate serious evaluation of joint management with BLM
  2. Vulnerability of the goblins and increased visitation require active resource monitoring to preserve Goblins and other resources
  3. Increasing demand may require utilization of concessions and
  4. Local and state policies will continue to encourage managed “conservation area” or State Park designation to increase protection of protection of resources with reasonable multiple uses and public access

• Future Customers:

  1. The profile of park users has changed, resulting in a broader geographic representation—and possibly a higher percentage of senior citizens
2. We may see more sons, daughters and family of past visitors--middle class: 20-50 years major users, with good past park and outdoor experience
3. Those, once afraid of dirt and gravel roads, or concerned with road damage to their vehicles--will now visit the park and Swell
4. Users will be, or demand to be, better-informed--better read and well-apprised about area
5. More park users will be seeking personal enrichment (intellectual/spiritual), guidance, education, and fitness

Future Management Options:

1. Expanded and improved day use and parking areas
2. On-site ranger residences for safety purposes
3. Park becomes more important to total management of the region;
4. Encourage “mass transit” out of Green River, Price and Hanksville
5. Improve energy system--efficiency and reliability
6. Provide interpretive information about the area--educate visitors
7. Provide passive and active protection of the goblins, microbiotic soils, avoidance of the “Wrights Fishhook Cactus, Heil’s beaver-tail cactus, and Ruth’s milkweed”--species of special concern
8. Utilize more site volunteers to guide and instruct visitors--how to use, not abuse the park and public domain
ISSUES & RECOMMENDATIONS

MORE

THE WHOLE FAM DUN

EURO

WHAT THE GOAL

CITY WISE

USE ENJOYMENT

SUSTAINABILITY PRESERVATION

CITY BUST
VI. ISSUES AND RECOMMENDATIONS

The Team first identified, evaluated and then prioritized the following issues, (A) natural resource management; (B) infrastructure and development; (C) education and information; (D) staffing and budget; and (E) public safety. Recommendations were evaluated and given a priority—ranging from a "1st Priority" (highest) to a "3rd Priority (lesser).

A. Natural Resource Management

1. Preservation of the Goblins—a 1st Priority: without the Goblins and other natural features, the purpose and value of this scenic park and natural area would not exist. Therefore, protection and conservation of park resources is crucial.

However, as expressed through the visitor survey and open houses, park visitors cherish the current level of nearly unrestricted pedestrian access to the goblin areas. The Team recommends research be undertaken to determine visitor impacts on rates of erosion and the stability of the goblins and other natural features. While any and all natural features found within the park and on surrounding lands are worthy of protection, this proposed research should focus on the goblins themselves and areas of high goblin concentrations, i.e., extreme south and westerly valleys beyond the main valley.

Directions for research include:

a. A review of historic photo archives to assess the loss or rate of loss of goblins since the historic discovery of the park.

b. Analytical measurement of rates of erosion could be measured by constructing small scale sediment yield basin and catchment systems or using survey stakes. Measured rates in high impact areas would be compared with low impact or control areas.

c. The role of microbiotic and mechanical crusts in stabilizing soil and reducing wind and water erosion in areas of varying degrees of visitor impact.
d. **Ongoing observation of a high impact or sacrifice area versus a low impact or control area.** Ongoing (after any initial studies) research is important as visitor impact may increase with the increased visitation expected from the newly paved county entrance road.

**Potential Management Options**

If research demonstrates that visitor impacts are negligible (not significantly accelerating erosion or destabilizing the goblins) then the goblins and other areas of the park should remain open to the public for nearly unrestricted hiking, climbing, touching, etc.

If research demonstrates the current level of pedestrian access is having adverse effects on rates of erosion and stability of the goblins, then steps must be taken to mitigate all identified problems. Steps to reduce accelerated erosion and stabilize the goblins might include:

   a. Developing interpretive information that will educate visitors about their impacts
   b. Restricting visitor to designated trails (possible hard surfaced or elevated)
   c. Designating a “hands-on sacrifice area”, but limit access elsewhere in the park
   d. Establishing park management zones with different levels and types of use
   e. Closing part or all of the main goblin area (first or main valley)
   f. As a last resort, constructing pseudo, artificial or stabilized goblins in a playground setting with no access to real goblins

The severity of any restriction imposed should be commensurate with the severity of the identified threat to the goblins. Over 55% of surveyed park visitors favored restricting activities in the goblins if the goblins are being impacted seriously.
Goblin Valley State Park
Recreational Zones

Potential Recreational or Management Zones to Facilitate Resource Protection & Park Management

State Park Zones

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BLM ROS Classifications

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GOAL--Protect the Goblins
Recommendations:
▲ Initiate erosion research in the Goblins
▲ Determine extent of visitor impacts on the Goblins and their stability--develop educational materials
▲ Based on research findings, restrict access to the Goblins, but only as necessary: monitor effects
▲ Educate park visitors to respect and preserve the Goblins--prepare interpretive materials
▲ Establish designated trails, and handicapped accessibility.
▲ Perform photographic and video recording of impacts for future analysis and documentation

2. Park-wide Erosion Problems--a 1st Priority: Erosion can be accelerated by roads, parking areas, trails and other structures. Such facilities and infrastructure must be carefully evaluated and engineered to prevent damage to other structures and natural features. Unnecessary or problematic erosion produced by visitor impact and site development should be carefully assessed and mitigated.

GOAL--Mitigating Unnecessary and Problematic Erosion in the Park
Recommendations:
▲ All proposed development should include erosion impact analysis and mitigation proposals
▲ Contract with UGS/universities to set up erosion monitoring stations and procedures
▲ Any unnecessary or problematic erosion produced by visitor impacts or site development should be carefully assessed and mitigated
3. **Protection of Wildlife Species—a 1st Priority:** wildlife remains an important attribute of the park, and of the total park experience. Although a cold desert environment, there are subtle pockets of habitat, and considerable unseen nocturnal activity by many wildlife species. The Team expressed concern for any federally listed species that might frequent the area, and for all forms of wildlife, federally listed or not, which they strongly consider as a state park asset. A wildlife inventory should be accomplished for the park

**GOAL—Protecting Park Wildlife Recommendations:**

- Identify and protect important pockets of habitat
- Inventory the fauna in the park
- Identify, analyze and evaluate habitat prior to any site or facility development in the park
- Develop interpretive information that will educate visitors and thereby protect critical habitat
- Utilize Division of Wildlife Resources experts for wildlife and habitat management determinations

4. **Impacts from park facilities and infrastructure—a 2nd Priority:** the 1998 visitor’s survey documented a desire to see the park’s natural setting stay as it is, with some support for expanding camping and picnicking facilities. As further addressed in the Infrastructure and Development section of this plan, impacts from park facilities and infrastructure should be limited as much as possible.
GOAL--Limit Impacts from Park Facilities and Infrastructure

Recommendations:

▲ Other than pedestrian trails and handicapped access, no facilities or infrastructure should be located within the areas of concentrated goblin development

▲ Limit park facilities and infrastructure to those deemed necessary

▲ Limit the footprint of necessary facilities and infrastructure to existing footprints plus <3 acres

▲ Design necessary facilities and infrastructure to blend with the natural qualities and setting of the park (size, scale, color, texture, geometry, use of natural materials)

▲ Adopt a “park management zones system” to guide placement of necessary facilities and infrastructure

5. Protect Native Park Vegetation—a 2nd Priority: Most of the park is considered Salt Desert Scrub and Desert Grassland, with smaller stands of Greasewood and Blackbrush. The goblin areas are very sparsely vegetated due to soil type. An inventory of particularly “sensitive species” was performed by the Utah Natural Heritage Program (UNHP) in 1998 (see Appendix). Three sensitive plant species were observed in the park: Wright’s fishhook cactus, Heil’s beaver-tail cactus, and Ruth’s milkweed. Invasive plant species were not addressed in the inventory.
GOAL--Protection and Enhancement of Park Vegetation

Recommendations:

▲ Utilize the 1998 botanical inventory prepared by the Utah Natural History Program (Franklin)
▲ Wrights Fishhook Cactus is a U.S. Fish & Wildlife Endangered Species--management will review it’s status and take protective action if necessary
▲ No development of trails shall impinge on threatened, endangered or monitored species
▲ All sensitive species immediate to a development site will be flagged and protected
▲ Identify and address potential problems associated with invasive plant species
▲ Information on sensitive species will be included in the education and interpretive material for the park
▲ Vegetation, not native to the park, will not be introduced

6. Management of OHVs and Equestrian Activity—a 3rd Priority: In the survey, several visitors complimented the park for not allowing OHVs. Conversely, during public open houses, the team received requests for OHV and equestrian trails in the park. The team felt that OHV and equestrian activities are not suited to areas within the park, but may be more appropriate on some adjacent or nearby land.
GOAL--Manage OHVs and Equestrian Activity
Recommendations:
▲ Continue prohibition of OHVs and equestrian activity in the park
▲ Bicycles should be restricted to paved roads
▲ OHV and equestrian activity prohibitions should be included on key signage in the park
▲ Informational maps of the area should include OHV proscriptions, and areas outside the park, where OHVs are allowed on roads and trails
B. Infrastructure and Park Development—Visual Compatibility

1. Campgrounds
   a. **Upgrade extant campground units—a 1st Priority:** extant camp sites received numerous complaints in terms of privacy, lack of physical and visual separation, poor parking and site demarcation, noise, and generally down graded facilities. The 1998 visitor survey affirmed the public attitude about these substandard sites. Park management has requested funds for years to upgrade these camp units. Demand may increase with improved access to the park.
   
   b. **Relocate and improve the Group Site—a 2nd Priority:** the visitor survey and Team strongly recommended a greater separation of the group area from the camp and day use sites, and improvements to the site. Park management reports a heavy demand for group camp or day use activities; i.e., for companies, families, and civic organizations. A shelter is necessary.
   
   c. **Evaluate and plan for additional camp units—a 3rd Priority:** depending on the renovation of the existing camp sites and the physical separation associated with site structures, additional area exists to the north that could accommodate another campground circle. Most 1998 visitor survey respondents (65%) were neutral or disagreed with an increase in campsites. Improvements in site quality, screening structures at extant camp units and paved park access may encourage demand for more campsites and park services. The cost for managing a campsite is most economical and cost efficient at approximately 25-30 units. An additional camp area should contain approximately this number of units to be economically feasible.
GOAL--Improve the Park Campground Recommendations:

- Respond to demand for campground improvements, separated for privacy
- Evaluate current siting, modify, provide separation, xeric planting (if feasible), walks and paved parking
- As a third level priority, evaluate design and construction of an additional 24 camp sites north of the existing campground
- Roof and structure geometry, materials, colors, textures, should complement site or park theme design at the overlook
- Evaluate the well to determine if additional water (or well sizing) will be made: 4.25 ac. ft. may be needed; increase pump capacity and storage if necessary

2. Day-Use Facilities
   a. Re-engineer and construct the Overlook area--a 1st Priority: the GVSP visitor survey contains numerous complaints and requests for improved rest rooms, water, signs, parking (especially for larger vehicles/RVs), the steep grade to the lot, need for a larger parking lot, the need for adequate turn around for larger vehicles (busses and RVs) and so on. Users seem to appreciate the design quality of the overlook shelter. Aside from the campground, this is the area of greatest visitor impact; and is a staging area for hiking experiences into the Goblin Valley. Current estimate for full renovation of the overlook are $398,000 (Jenn, 1999 estimates).
b. **Upgrade overlook rest rooms--a 2nd Priority:** as noted, the lack of potable water and a higher quality rest room was mentioned numerous times in the visitor survey. This may require an additional well and water line for the level of use this rest room may receive, as well as paved access and adequate signs. Estimated new rest room would be >$100,000--this included in the $398,000 for the overlook renovation. A new well could exceed $65,000 for drilling, casing, testing, and pumping equipment--depending on site conditions, depths and water quantity/quality.

c. **Develop an amphitheater--a 3rd Priority:** a well-sighted amphitheater is an appropriate response for additional information and education about the goblins and the “Swell”. This would allow an interesting interpretive program for park visitors, and a means of entertaining and apprising larger parties of visitors to the park. Seating for about 80 people is estimated at about $15,000--benches, walks, electrical (could be covered, partial cover or incorporated into a visitor center structure). A “naturalist” could be employed (seasonal or full time position) or volunteers organized to provide this service. About 30% of the park visitors wanted more picnic areas, and larger, more convenient parking--most want shade (June 1998).
3. **Contact Station/Visitor Center and Amenities**
   a. **Design and Construct a Visitor Contact Station--a 2nd Priority:**
      for efficiencies, this would serve multiple purposes providing park
      information, park management, emergency assistance, and storage.
      The park visitor survey documented numerous requests for more and
      improved information about the park and the Swell area.
      Information could be disseminated from the facility--personally and
      with brochures and displays. Evaluate similar park facilities at other
      park sites for potential applications at GVSP. The structure could be
      a double-wide trailer or an individually designed structure: either
      should meet visual standards of color, textures, geometry, setting,
materials and function—or modular design. It should “fit” its surroundings as much as possible.

GOAL—Provide Visitor Contact Station
Recommendations:
▲ Evaluate and design a ~ 1,000 sq. ft. office-visitor center to provide basic information, emergency services, office and storage for the park
▲ Incorporate rest room, indoor/outdoor lighting, first aid station, swamp cooler, refrigerator, computer station, and LP gas-heating (~ 3700 Kwh per year)
▲ Incorporate a cluster-concept for various buildings and services to save development and operational costs and reduce site impacts
▲ Utilize modular building process as one consideration for economical and expedited construction at this remote site
▲ Submit park capital development projects on the State Building Board (DFCM) priority list; prioritize in the division capital development list

4. Roads and Park Trails
   a. Site and construct an ADA trail into the goblins—a 1st Priority: park management and respondents to the 1998 visitor survey commented on the need to have ADA compliant campground and Goblin Valley access. Even with compacted soils in many areas, moisture can create very slippery and hazardous conditions for wheelchair and ambulatory persons. There are concerns erosion and sudden downpours will wash out pavement or hardened trails and
paths. Badlands National Park (>232,000 acres) utilizes partially elevated boardwalks over sensitive soils and erosional areas. They are relatively expensive to maintain, but very functional for wheelchairs and others that may be physically challenged. Landscape architects also suggest well-bedded paved paths (natural materials, exposed aggregate or brushed) with “v” crossings for drainage flows for ADA-compliant paths. Preliminary design calls for a loop trail--1400 linear feet of at least 5 foot width from the pavilion to the Goblin Valley floor in proximity to the Goblins.

b. Construct pedestrian paths--a path from the campgrounds to the overlook--a 2nd Priority: several comments were made about the absence of a path or trail from the campground to the overlook area. Management has also expressed a desire for such a path.

In April of 1999, the following estimate for total park renovation and expansion was estimated by the division: $2.26 million It includes estimates for design fees, contingencies and material testing. It incorporates the renovation and expansion discussed in this section.
GOAL--Site and Construct ADA Trail Into Goblins--Construct Path from Campground to Goblin Valley Overlook

Recommendations:

▲ Meet federal “Americans with Disability Act” (ADA) facility standards
▲ Study and adopt, if feasible and suitable, a boardwalk trail into the goblins; >1,400 ft. looped
▲ Utilize psychological trail design principles for park trail alignment and design (legibility, mystery, prospect and refuge--see study in Appendix)
▲ Include trail maps and description in the info packet for the park; and trail vista information at the scenic views along the trail
▲ Establish and use a “GVSP Trail User Team” to locate, site, evaluate, and establish quality trails
▲ Correct confusing and difficult trail alignments in the park, such as the Carmel Trail

There have been concerns about hikers and walkers on the road--conflicting with motorized traffic and presenting a hazard. A proposed alignment is found in the technical appendices of this RMP on a GIS trail map. The alignment may have technical difficulties due to the terrain and grades--especially the last 1,000 feet approaching the overlook parking area. Any alignment must be carefully established to reduce risk and tort liability for the state of Utah. See the Goblin Valley State Park Trails Analysis, Appendices. (Barry, 1999)

c. Build Trail Connection from GVSP to BLM Lands--Non-Motorized Hike/Bike, and Upgrade Internal Roads--a 2nd Priority: the major problems with the internal roads are inadequate line-of-sight, extreme grades and narrow width. A preliminary alignment proposal is in the Appendices. Physical restrictions may
limit widths that could otherwise allow a striped path or close separated grade path. If management were to allow OHV staging out of the park, an alignment could be established along the vacated road into GVSP.

GOAL--Trail Connection from GVSP to BLM Lands Non-mechanized Hike/Bike--Possible Motorized Access to BLM Lands; Upgrade Roads
Recommendations:
▲ Utilize the old park entry road as an access corridor for non-motorized trail
▲ Evaluate the old entry road for low speed motorized OHV traffic out of the park to BLM
▲ The old road should not be scarified until the GVSP trail team evaluates the corridor
▲ Utilize about .20 mile of the old road as access to a future campground
▲ Study, design and improve park road alignments, grades and widths to improve safety and utility

5. Utilities and Administration
a. Upgrade Utilities--Water and Power--a 1st Priority: because of increased park visitation following the completion of paving and road realignments, it is reasonable to expect a significant demand for potable water in the park and a proposed new rest room, faucets near or in camping units, visitor station, and additional irrigation for native xeric plantings (trees and beds in the camp ground/day use areas). The park is one of the few potable water sources in the entire area.
GOAL--Upgrade of Water System--New Well, Storage, Pumps and Distribution System

Recommendations:

△ Acquire an additional 4.75 ac. ft. water right needed for an additional 250 daily visitors, and park staff
△ Evaluate the need for expanded water storage (20,000 gallon tank), tank upgrading, and modified distribution for residences and rest room
△ Evaluate the need for a new well (>60,000), or improvements to the existing well (an additional 800 gallon storage is required for each 10 camp unit)
△ Evaluate storage tank costs (may be of steel, concrete or fiber glass) and well drilling (about $19,000 for a 20,000 gallon tank; about $75 per foot for drilling and developing/casing a new)

Realize energy efficiency and reliability--to achieve energy efficiency and control costs, the division entered into a Memorandum of Understanding with the DNR Office of Energy and Resource Planning (OERP) in September, 1996. The purpose was to provide technical assistance to the division and provide cost-sharing funding for energy efficiency retrofits and installation of cost-effective renewable energy systems in Utah’s State Parks, particularly at remote parks with wind and solar resources, and high costs for energy. These parks, including GVSP, were identified as prime candidates for experimental and demonstration alternative energy projects.

Upgrade reliable power: Park managers have voiced concerns for years about the troublesome energy systems at the park--high maintenance, low reliability, and difficulties with technical systems. Adequate and upgraded reliable power is crucial to providing effective management and visitor services at the park. In order to recognize park manager concerns, the system must be low maintenance, reliable and aesthetically compatible.
GOAL—Upgrade Power
Recommendations:

▲ Achieve energy reliability, efficiency and reduced
cost—key objectives for the Department and
Division, especially in remote park locations
▲ Minimize visual impacts, and protect the natural
qualities of the park
▲ Utilize passive solar concepts in the orientation of
buildings, insulation of structures, operation of
utilities, winter heat absorption, and summer
shading
▲ Collaborate and cooperate with the Utah Office of
Energy and Resource Planning to secure special
technology grants, system maintenance support,
going consultation, and advice for securing and
managing reliable power at the park

c. Provide Park Ranger Housing—a 1st Priority: two “condemned” trailers
on site are scheduled to be removed when housing is provided. The major
objectives of on-park housing are visitor safety, resource and facility
protection, and providing timely and effective park visitor services
(maintenance, interpretation, education, public safety and conviviality).
GOAL--Provide Park Ranger Housing
Recommendations:
△ Evaluate optimal sites for housing
△ Consider a consolidated location(s) for housing, visitor contact building, and maintenance building to improve visitor services, minimize utility costs, and reduce visual and physical impacts on the park
△ Remove condemned trailers as soon as feasible
△ All structures should fit the site in terms of scale, geometry, natural materials, textures, thermal efficiency, colors and durability (low maintenance)

C. Education and Information

1. Improve and Increase Information for Park Visitors—a 1st Priority:
   themed signage and logo a 2nd Priority: State Park opinion surveys, both in (1998) and out of GVSP (1996), identified a strong desire for “more information for visitors.” In this regard, the Team believes the major objective is to protect park resources while educating visitors about the park and adjacent areas. Information and education topics need to include:

   ▪ GVSP resources, e.g., geology (soils and rock), biology (flora and fauna) and archeology (petroglyphs and historic mining north of the park)
   ▪ Visitor impacts and resource conservation
   ▪ Park regulations--how they protect the resources, ensure visitor safety and enhance the visitors experience
   ▪ Research being undertaken in the park
   ▪ Trail, park and area maps
   ▪ Hazards--health and safety for enjoying the desert environment
   ▪ Outdoor recreation opportunities (in and out of the park)
- Services and facilities available (in and out of the park)

The Team envisions education on these topics being accomplished through:

- Hands on experiences
- Visual displays and exhibits included in a visitor center, and on kiosks and signage throughout the park
- Printed materials—brochures, booklets and maps
- Ranger and volunteer walks, talks and presentations

To provide recognition and visual continuity, the Team recommends a park logo be designed for use on signs, interpretive panels and publications. All information should be presented in a manner that is easily understood by the general public. Accurate and comprehensible information will help mitigate costs associated with park and resource management and emergency services. All park information should be reviewed for accuracy and relevancy on a regular basis.
GOAL--Improve and Increase Information for Park Visitors
Recommendation:
▲ Develop an Interpretive Plan for the park
▲ Create a coordinated sign plan to facilitate visitor travel and circulation through the park, while reducing hazards and confusion
▲ Develop displays, exhibits, signage, printed materials, and naturalist/volunteer walks and talks
▲ Signs should be low cost, easy to replace and maintain, and fit the natural qualities of the park
▲ Collaborate with UDOT and the County Travel Council to install additional directional and promotional signing on State Highway 24, I-70, mile marker 129, and other suitable locations
▲ Ensure legibility, function, message, scale, contrast and color for park signs and info panels--using professional graphics and design--design a park logo

2. Establish Effective Regulations to Minimize Operational Costs and Minimize Impacts On the Park Ecosystem--a 1st Priority: the division has well-established park regulations for the state park system. Unique regulations or rules are necessary to preclude specific activities that are destructive. The major objective is to protect the park resources. Specific language addressing the park ecosystem is absent; however, current regulations protect wildlife, vegetation and water quality. They ensure proper disposition of garbage, human waste, location of outdoor recreation activity, and generally govern state park management.
GOAL--Establish and Maintain Regulations To Minimize Costs and Impacts On the Park Ecosystem

Recommendations:

▲ Review and prepare guidelines for resource management in the park

▲ Regularly report on the effectiveness of park regulations

▲ Reduce frequency of search and rescue by installing a “pass at your own risk” regulatory sign at accesses to most distant, hazardous and disorienting park features

▲ Prioritize the most needed regulations in terms of frequency of incidents, severity of problems, and highest costs in terms of budget, equipment and staff time

3. Encourage Safety and Enjoyment--Educate Visitors for High Desert Conditions: economic and personal losses from search and rescue situations are significant, especially costs for specialized equipment and services--helicopters, ambulances, towing, night time operations and medical assistance.
GOAL--Encourage Safe and Enjoyment--Educate Park Visitors for High Desert Conditions
Recommendations:
△ Incorporate health and safety considerations and instructions in park information
△ Ensure adequate, safe and convenient drinking water for staff and park
△ Analyze types, frequencies and locations of public safety incidences from 1995 to the present
△ Prepare and incident response plan for the park
△ Conform to all “Risk Management Guidelines” and annual assessment recommendations for the park

4. Advertise and Market to Promote Park Use, and Off-Season Use--a 3rd Priority: Park visitors are split on whether or not the park should be promoted beyond the current effort (GVSP Visitor Survey, 1998). However, to strengthen and sustain local economies, the Team recommends additional park promotion targeting shoulder and off-seasons. This should offset potential crowding at the park, while enhancing economic activity in Emery County, Green River and Hanksville. As an aspect of marketing, the Team also recommends additional signs on state and federal highways to promote the location of, and direct people to the park.
GOAL--Promote Park for Shoulder and Off-Season Use

Recommendations:

▲ Prepare a marketing plan, targeting shoulder and off-seasons

▲ Participate in statewide, regional, local tourism, park promotion, and marketing programs

▲ Increase the following: the total (1996-1998) transient room tax generated by the park was $4,262--Sales tax was $8,169. Increase the total annual operating budget for the park which is $244,300

▲ Include demand for improved maps of the area and area information, in promotional efforts--partnership and share costs where possible

▲ Utilize the DNR and Division Web Site: prepare and update information on the park and region

D. Staffing and Operations

1. Need for Adequate Park Staffing--a 1st Priority: adequately communicate and inform the public, and provide reasonable public safety for park guests. The park should have law enforcement, site management, maintenance, and a park naturalist. The park currently has one full time ranger, a seasonal assistant, and a part time manager out of Green River. Most of the manager’s time (>75%) is spent at Green River State Park. Current operation does not allow for effective interpretive services, resource management, trail development, maintenance, nor off-park services required occasionally on the public domain. As visitation increases to surrounding areas, off-park demands and call-outs have risen dramatically.
2. **Secure an Adequate Operating Budget—a 1st Priority:** Park management indicates the current operating budget is inadequate for full operation of the park. Past experience indicates improvements to the access, rehabilitation of the overlook, paved roads and rehabilitated campgrounds will increase park use, increase park revenues and operational costs.

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**GOAL—Secure An Adequate Operating Budget**

**Recommendations:**

▲ Increase the operating budget to adequately fund interpretive and resource management functions, and keep pace with increasing park visitation and service expectations (>245,000 annually)

▲ Seek partnership funding with the Utah Department of Natural Resources, Office of Energy and Resource Planning for solar power maintenance funding and upgrading—to reduce costs and increase reliability of energy systems.
3. **Improve Interagency Coordination and Procedures—a 1st Priority:** the public expects “governmental” cooperation. Interagency “coordination” is required by state statute, political dogma, and National Environmental Policy Act (NEPA), Federal Land Management Federal Land Policy and Management Act (FLPMA) and other federal agency management and planning regulations and procedures. Collaboration can bring mutually beneficial cost and program savings: a good place to start.

**GOAL—Improved Interagency Coordination and Procedures**
**Recommendations:**
- Involve division and park management in BLM wilderness and other land management studies around GVSP and the Swell
- Study and evaluate Sections 9, 16, 21 and 22 for GVSP expansion
- Form a collaborative study team with Emery County, BLM, SITLA, state parks, local government, and other entities to assess, analyze and evaluate shared, broader management options for GVSP and Swell area—meet quarterly or as needed
- Utilize documents, outlines, and procedures used successfully in other collaborative planning, development and management efforts at Yuba, Coral Pink Sand Dunes and other state parks

4. **Retail Sales in GVSP—a 2nd Priority:** no retail marketing or vending is performed on site due to absence of a visitor contact station. When facilities are funded and built, vending and retail sales will be an important service and revenue source for the park.
GOAL--Retail Sales in GVSP
Recommendation:
△ As space and facilities become available, a retail sales program and inventory will be developed and implemented to meet customer needs.

5. Collaborative Management Evaluation—a 2nd Priority: collaborative planning, development and management has been successful at several Utah state parks. This speaks to the importance of looking at recreational systems or regions, rather than jurisdictional boundaries that mean little to the recreating public. Park management have concerns about shouldering additional costs and responsibilities associated with collaborative efforts, without adequate staff and funding.

GOAL--Collaborative Management Evaluation--BLM and Emery County
Recommendations:
△ Continue cooperative and collaborative efforts with BLM and Emery County in relation to GVSP and managing emergency incidents in the area
△ Explore and evaluate joint management, and visitor contact facilities in GVSP, Temple Mountain, or West of State Highway 24
△ Participate in resource management planning on BLM land if the opportunities arise
6. **Increase Management Presence --a 3rd Priority:** the Team, and respondents in the 1998 park visitor survey, requested additional management presence at the park and other areas of the Swell. Specifically, they requested more information, public safety and interpretation of the area’s resources. Management presence also helps maintain decorum, enjoyment and satisfaction with the visit, and enforcement of park and resource regulations. Park employees often are the only management presence in the area. They have a multiplicity of responsibilities, and cannot be available at all times to the public for all needed services.

Park management is concerned that increased capital development (access, park capacity increases, new facilities for maintenance) will not be accompanied with increases in operational funds. New facilities will require additional expenses to operate the park and current expenses critically needed to operate the improved facility. To ensure the sustainability of a quality state park, funding must be forthcoming, combined with collaborative management agreements, volunteerism, and effective management practices.

**GOAL--Increase Management Presence**

**Recommendations:**

- Study and assess increased visitor impacts on GVSP as a result of the new access road
- Increase staff presence in the park--explore staff rescheduling, reassignment, and securing more full time equivalents (FTEs) or positions
- Be apprised of BLM and Emery County project and staff assignment schedules near GVSP and around the Swell area--coordinate activities where possible
- Arrange for interns and volunteers to supplement on-site management presence
- Install, maintain, and replace accurate traffic meters: calibrate quarterly for values and party size
E. Public Safety Considerations

1. Improve Park Communications--2-way Radio and Telephone--a 1st Priority: park management has made improvements over the years; however, park management has been attempting to establish a more reliable and convenient communication system into and from the park. An improved public telephone system was also identified as a priority in the 1998 GVSP Visitors Survey.

   GOAL--Improve Park Communications--2-way Radio and Telephone
   Recommendations:
   ▲ Study and evaluate phone installation and 911 direct service if feasible
   ▲ Seek match-funding (grants or collaboration) from BLM, Emery County or other entities to upgrade park communications

2. Establish A Helicopter Landing Site in GVSP--a 1st Priority: as discussed in the development section, a prepared, painted helicopter landing site(s) should be established in the park for emergency extraction of injured patrons. State Aeronautics should be involved to determine legal and technical requirements. The park has been used several times for helicopter extraction of injured hikers or vehicular accident victims.
GOALS--Establish A Helicopter Landing Site in the Park

Recommendations:

▲ Utilize state aeronautical standards and requirements of UDOT to determine location and site requirements
▲ Provide landing and takeoff instructions for park employees in the park emergency procedures plan

3. Provide Adequate Staff Training--First Aid, and Search and Rescue—a 1st Priority: State Parks, especially remote areas such as GVSP, need staff with training in First Aid and basic emergency medical procedures. Eight medical incidences occurred in 1998, and at least 7 search and rescue incidents since 1995. EMT training is approved on a case by case basis where it is in the best interest of the division. The Division participates in joint training with the U.S. National Park Service, U.S. Forest Service.

GOAL--Provide Adequate Staff Training--First Aid, and Search and Rescue

Recommendations:

▲ Park staff will continue to receive Search and Rescue, and First Response training—to EMT level if feasible
▲ Meet twice annually with Emery County, BLM, and health providers regarding training schedules, procedures, funding for search and rescue operations, and analysis of problematic situations occurring in the field
F. Collaborative Partnerships

Geographic reasons: Goblin Valley State Park lies within a rich community of natural landscape, with distinct boundaries based on legal descriptions rather than natural landform. And yet, the Park is also part of a much larger community. The San Rafael Swell lies immediately to northwest; and the Henry Mountains (the “Little Alps”) are located to the south of the Park. Except for two parcels of State Institutional Trust lands (SITLA) at the northeast and southwest corners of the park, the Bureau of Land Management (BLM) manages the area surrounding the park.

All land managers impacted: It is clear visitors to the Park impact BLM land. Conversely, visitors to the Swell and surrounding areas, impact the Park. Goblin Valley provides the only source of drinking water and hot showers, and is a consistent management presence in the area. It would be short sighted not to consider how the new developments at the Park will affect the surrounding area, and in turn, be affected itself.

Collaborative partnerships between the State Parks, BLM, Emery County and SITLA must be encouraged and developed. For purposes of this plan, the Team focused its discussion on the following geographic areas:

- Lands west of the park
- Lands north to the paved Temple Mountain road
- The Temple Mountain area of the Swell

Cost savings: Opportunities exist to save money on staffing, managing and maintenance--this to preserve the area and educate the public as to “human impacts” on the land, and to help generate additional funding and resources for the area. Each of the four land managing entities has a self interest. Conflicts have and will arise. However, the potential benefits outweigh the threats.

From the Emery County perspective, it is important to manage and minimize costs and impacts visitors have on the county infrastructure, public safety services and the area in general. BLM understands visitors to BLM land impact the Park. BLM currently does not collect fees for public use of this area. Thus it has limited revenues and available funding. The BLM is in a “Catch 22”. If they collect fees, their Congressional appropriation may be decreased--unless the area is designated an “experimental fee
collection site” allowing reinvestment of collected fees. Overflow camping from Goblin Valley often end up on BLM land.

In analyzing the situation, the Team recognized the following strengths and weaknesses inherent in collecting fees and establishing collaborative resource management:

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Better use of limited resources &amp; more</td>
<td>● Don’t know the workload; is</td>
</tr>
<tr>
<td>cost effective</td>
<td>there adequate staff?</td>
</tr>
<tr>
<td>● Improves law enforcement</td>
<td>● Facilities and utilities</td>
</tr>
<tr>
<td>● Effective on-site management</td>
<td>● Increased liability</td>
</tr>
<tr>
<td>● Partnerships look &amp; work good</td>
<td>● Increasing expectations of</td>
</tr>
<tr>
<td>politically--popular concept</td>
<td>visitors</td>
</tr>
<tr>
<td>● Fees tend to reduce vandalism</td>
<td>● Joint visitor center may be too</td>
</tr>
<tr>
<td>● Can identify and prevent problems</td>
<td>far away from GVSP</td>
</tr>
<tr>
<td>earlier--thus less damage</td>
<td>● Spread out infrastructure too</td>
</tr>
<tr>
<td>● Better understanding of the big picture</td>
<td>expensive, less efficient</td>
</tr>
<tr>
<td>● Interagency understanding &amp; training</td>
<td>● Where would fee area start/end?</td>
</tr>
</tbody>
</table>

**Actions:** The first step we must take is to begin collaborative planning. State park personnel need to meet consistently with various entities, invite their involvement in state planning and offer state assistance in federal and local planning efforts. It is critical that each partner contribute equitable resources to the collaborative planning process, and its ultimate implementation; i.e., financial resources, grants, equipment, training, personnel and research. **It is important in all our planning that we strive to do no harm to neighbors or the environment (intentionally or unintentionally).** The Team hopes this process will be a model for other collaborative planning efforts.
GOAL--Initiate A Collaborative Planning Process for the Park and Its Surrounding Area

Recommendations:

△ Develop a realistic plan for interagency cooperation
△ Devise a joint visitor center and fee station for the area located where it would serve BLM and the State Park System--possibly on Highway 24

“...our comparatively underdeveloped areas are a resource which, instead of depleting like minerals, actually with help of this department plus cooperation of citizens, will thrive and grow like the ‘sleeping giant’ it is, making Utah a world-wide recreation center of unique, unlimited and unequaled scenic attractions.”

VII. Conclusions and Summary

The activities of this planning process have revealed needs and opportunities for Goblin Valley State Park. It is clear we must protect and preserve the natural resources of the park. A key to achieving this goal will be to provide more accurate and interesting information to the park visitors. Data received from the visitor survey and the public open houses were conflicting. Visitor survey data represented a more global or broad population of park visitors—international, out-of-state, in-state and local users. Open house attendees tended to be more regional and local park users. The remote location of the park configured responses that were different from those of a more urban setting. It was the task of the Planning Team to review this information from the perspective of how best to serve the Park and its visitors.

**Important Impacts:** the park will be impacted by three important conditions: 1) the reconstruction and paving of the existing county road that accesses the park and the Swell; 2) demographic trends in visitation—the numbers of visitors, their equipment and outdoor recreation activities; and 3) the availability and timing of capital development and operational funding. Paving will encourage and facilitate more visitation via a modern access road. In the past, visitors were discouraged by the less than desirable road conditions. Also, the trend is for more senior visitors in larger recreational vehicles and tour busses to visit the park. The first two will increase visitation and allow for broader demographic representation in the park. Adequate funding will ensure accommodation and a pleasant experience. However, the lack of funding will discourage visitation and potentially degrade the natural resources and facilities in the park.

**Elements Considered in the RMP:** the Team looked closely at future trends and threats. It looked at preservation issues, education and public relations. It analyzed infrastructure needs, alternative energy options, operations and staffing in developing this plan. The plan strives to enhance the visitor’s experience by improving trails and campsites, while providing more information on the park and surrounding leisure opportunities. It recommends upgrading utilities and improving public safety and visitor education. It recommends upgrading utilities, improving park residences, roads and management facilities. It concluded the beauty and fragile splendor of the Park will be maintained through continued research, careful and skilled development, and establishing limits to access when necessary. The balance between a joyful visitor experience and absolute preservation of the land will be maintained.
By implementing this plan, it is hoped the following benefits will ensue:

- **Protection of the Goblins and sensitive ecosystems**
- **Increased customer satisfaction and visitation**
- **Improve the rural economy**
- **Increased park revenues; improved park management**
- **Maintain successful cooperative planning and management for the area**
- **Long term political, marketing and financial support for the park**

This planning document will be a living and developing document. The Plan must adjust with the changes that will come, while maintaining the integrity of the park. The GVSP RMP Technical Appendices that accompany the Plan will contain current and forthcoming empirical information about the park that will be a scientific basis for decision-making; e.g., a wildlife inventory of the park; a visitor impact study under the auspices of the division and the state Geological Survey; a natural hazards report by Comprehensive Emergency Management; a trail analysis by doctoral candidate Rebecca Barry; the 1998 Visitor Survey and other useful information for park management and development. The Plan should be reviewed on a regular basis to ensure its viability, relevance and usefulness. It will be a seminal document for budget preparation, management, development, and marketing. Two objectives will remain constant: 1) the need to care for the park—to sustain its resources for future generations; and 2) to meet the needs of our customers, the park visitors. How this is done will shift and evolve—but the objectives remain.
VIII. BIBLIOGRAPHY


____________. (1999). “Trails At Goblin Valley,” (an analysis of extant trails in GVSP), (Salt Lake City: University of Utah, Department of Parks, Recreation and Tourism), pp. 11.


____________. (1998). “Compilation: Plant List, Goblin Valley State Park,” (partial inventory of plant species), (Salt Lake City: Utah DNR, Utah Natural Heritage Program, Division of Wildlife Resources); pp. 4.


Robison, Hank, Ph.D. (1999). "Consultation with the division regarding socio-economic impacts and values of Utah State Parks," (Salt Lake City: OERP, Economic Modeling Specialists, Inc.).

Southwest Technology Development Institute. (September 18, 1998). Performance of an independent life cycle cost (LCC) for a proposed photo voltaic hybrid upgrade for GVSP--utility and cost estimate) (Las Cruces, NM: New Mexico State University), pp. 4.


(1999) 1999 Economic Report to the Governor, (Salt Lake City: Governor’s Office of Planning and Budget); pp. 212.


MORE

THE WHOLE FAM DANK

DON'T FEED THE SQUIRREL

CITY ANISE

USE ENSOYMENT

SUSTAINABILITY PRESERVATION
IX. APPENDICES

ARCHAEOLOGICAL SURVEY FOR PARK ACCESS ROAD
Archeological Surveys Required for All Project Sites--1998
(Assisted by Bill Latady, Archeologist, Anasazi State Park)

On September 29, 1998 William R. Latady from Anasazi State Park and Lisa Petersen, volunteer, conducted an archaeological inventory of the proposed access road to Goblin Valley State Park. Investigations included a file search at the Utah Division of State History and an intensive pedestrian survey of about one mile of the proposed road alignment. The survey was initiated at the request of the Division of Parks and Recreation to identify cultural resources that could be impacted by road construction.

The proposed road right-of-way is marked by orange pin flags and begins at the present access about 300 yards north of the entrance station. The project area proceeds southeast for about one mile crossing gently rolling low stabilized sand dunes and interdunal silt flats interspersed with ephemeral washes. The proposed road then intersects the present Park access road 200 yards east of the camp ground loop entrance.

No Cultural Materials Found
No cultural materials were located within the proposed Goblin Valley State Park road right-of-way. (Latady, 1998) Thus no direct impact will occur as a result of construction activities
PUBLIC OPEN HOUSES (NOTES) 
HELD IN CASTLEDALE, GREEN RIVER, HANKSVILLE, AND 
SALT LAKE CITY 

REPORT OF QUESTIONNAIRE RESULTS AND COMMENTS 
FOR THE GOBLIN VALLEY STATE PARK RESOURCE 
MANAGEMENT PLAN--14 PAGES 

June, 1998 

- Goblin Valley Management Planning Team “Charter” 
- Qualities and characteristics park will possess (vision) 
- What would you like the Park to be known for in five years? 
- Benefits of Park and good planning 
- What steps could be taken? 
- Other comments 
- Open house evaluation and attendance 
- SWOT analysis--strengths, weaknesses, opportunities and threats
TEAM CHARTER

GOBLIN VALLEY MANAGEMENT PLANNING TEAM

April 22, 1998

THE CURRENT SITUATION

Goblin Valley State Park and surrounding area is a significant scenic and geologic area. What used to be a quiet, natural park used mainly in the spring and fall for a recreational experience has become an easily accessed developed recreation site surrounded by heavily used public lands. Adjacent lands are known for their natural beauty and recreation values. The State Park along with its natural setting is the central location to many peoples experiences as it is the only regularly staffed site with water, restrooms and showers.

It is anticipated that improvements to the county road, which is the only access to the park, will increase use well beyond the already high level. The park development was completed and dedicated in 1974. The park continues to struggle with the level of use and issues associated with providing energy and water. The Goblins themselves are very erodible and the Division is without complete knowledge of how they might be impacted by human use to ensure enjoyment by tomorrow’s generation. Additionally, park staff is often relied upon by other agencies and visitors to adjacent lands for search and rescue, first aid, and law enforcement.

Goblin Valley is adjacent to the San Rafael Swell which has been proposed as a National Heritage and Conservation Area. This National designation would again increase attention on the area with concomitant impacts to the park. A management plan would help insure the parks long term future.

THE MISSION

The Division of Parks and Recreation hereby creates the Goblin Valley Resource Management Planning Team and charters the team to develop a plan of how the park should look and be managed in the future. This includes outlining specific management guidelines; creating criteria for park improvements, interpretation, resource management, and program development. This will be done through assessing the current situation, evaluating visitor and public surveys, soliciting and analyzing community and professional perspectives and then developing a plan and establishing procedures for the plan’s implementation. The final plan must be implementable.
TEAM GOALS

- To develop a management plan that works on many different levels including:
  - Insuring that valuable park resources are protected.
  - Directing future development.
  - Evaluating park capacity.
  - Helping to coordinate future management of park and adjacent BLM properties.
  - Preserving cultural and natural resources.
  - Providing a process which is customer driven, team directed and resource based.
  - Improving local economic development efforts.

DELIVERABLES

The team will be responsible for the following deliverables:

- Regularly keep the parks board, director, and stakeholders abreast of the team's progress through updates and meetings.
- Hold a minimum of two public meetings.
- Make a presentation to the parks board at the July Board meeting in Moab.
- Complete a draft of the plan by October, 1998.
- Present the draft plan to the parks board at their November meeting.
- Complete the final plan by December of 1998.

POLICIES AND PROCEDURE:

- In conducting its business, the team will comply with all of the policies, guidelines, rules and laws that govern the Division.
- The team will make recommendations based on what is best for the customers of today and tomorrow's generation.
- The focus will be on performance and not personalities.
- The team will recommend both a plan and procedures for implementation.
- Success of the team will be measured in terms of the plan.
SIGNATURES:

Steering Committee
Donald Miller
Director

Deputy Director

Project Leader

Facilitator
William T. Parelle

Team Members
Kaanon Fergan

Patrice Hillage

Val Stanier

Blaine Luke

Valerie Newlund

Terri Hope
GOBLIN VALLEY STATE PARK

Questionnaire Results and Comments

From the Public Open Houses held in

Castledale
Green River
Hanksville
Salt Lake

JUNE 1998
QUALITIES AND CHARACTERISTICS IT WILL POSSESS:

-more picnic areas
-A good quality approach (gateway).
-less trash and garbage
-pay phones
-larger
-additional, spread out campgrounds
-more hiking trails
-more campsite and parking at pavilion
-increase park size
-create more campsites
-amphitheater in main campground with fireside ranger lectures.
-clean restrooms
-It will have rocks, it will be brown, there will be some wildlife.
-a chance to mingle with goblins - hands on
-Information - guidance of areas (SIGNS)
-communication between visitors, park service, EMS
-Access for all people
-clean, designated picnic areas
-safe and fun for family
-full time staff
-limited camping/hiking as in present(?)
-Low amount of development
-Better parking lot at point (stripped).
-pay phones
-Nice parking spaces
-More picnic tables
-restrooms
-People are able to hike in Goblins
-Large campground with good restrooms and showers
-good paved road to park and surrounding canyons
-clean = extra garbage cans
-more visitor parking
-clean - lacking litter
-More shaded pavilions (family reunions, groups, etc.)
-Ability to have enough rangers to keep track of hikers
-Bike trails into secluded areas
-Leave it natural as possible

-schedule tours for groups, guided with some one knowing history and geology
-natural beauty
-public access to water, parking, camping
-public accessibility
-natural beauty
-tours/educational /public (schools)
-public access to showers, parking & camping areas
-Hopefully the formations will stay the same
-More visitors be able to see the park & its beauties
-more parking, camping sites & facilities
-Beautiful campsites with trees with running water
-Field trips for school age children
-Natural
-User friendly
-Maintain openess - children able to play with and around the Goblins
-Paved foot paths, shaded (artificial) small pavilions along the paths
-evening entertainment, possible light and shadows displays, campfire gatherings
-More bus tours by foreign visitors
-It will be a place you can explore freely and feel like you are discovering it for the first time.
-Still emphasize natural landscape
-Improved campsites
-It will not be over crowded
-road improve
-Large campground sites
-An environmental/preservation outlook: conservative plan for development
-It will still be a quiet, peaceful REMOTE spot to visit. (Hopefully)
-Small developments that accomplish a lot for the increase of visitors.
-It will have easy access. No rippled roads.
-It will have more picnic sites
-It will have nicer bathrooms
WHAT WOULD YOU LIKE GOBLIN VALLEY TO BE KNOWN FOR IN FIVE YEARS?

- Unusual rock formations, PERIOD!
- The awesome looking rock formation and the freedom to walk among them.
- Goblin Valley is a great place to take the family
- A beautiful family recreation spot.
- An Accessible, yet pristine, natural wonder.
- A clean family fun place
- Geological structures. Rock formations. The beauty of the park.
- I would like it to be known as a safe, unique place where children and adults can enjoy a wonderful experience with nature.
- A beautiful, well kept special park for both tourists and locals alike.
- Goblin Valley should be known for it's beauty and intrinsic/neat/original/unique rock sculptures and solitude.
- Fun place to go
- A fun place for kids and family
- User friendly!
- Natural beauty - educational knowledge and freedom to roam!
- A great picnic area limit camping, more restrictions on length of stay by mobile with large families and ATV's.
- One of Utah's most beautiful resources, a wonderful place to take your family and learn about nature.
- A great, interesting, fun place to go.
- Fun place for kids and families
- As close to natural as today
- It's beautiful valley and hiking areas.
- To be known for the Goblins, they look a lot different at night.
- National landmark for Southern Utah i.e. Capitol Reef, Monument Valley, etc
- A convenient, accessible and interesting natural resource experience for short term visitation - not primary visitation.
- That you can go out and wander anywhere you want in the goblins with out restrictions, such as designated trails to stay on.
- It's unique landscape. It should always be know for its goblins.
BENEFITS:

- nice, happy, fun
- acknowledgment of it's beauty
- More family visitors
- better experience for school groups
- better work of mouth advertisement
- A favorite place to visit
- a different type of place to take friends
- a job site for neighbors
- Enjoyable experience for my children
- A safe place to picnic
- Seeing unique sights that will remember and want to see again
- More tourist traffic
- more useable friendly park
- special places for reunions, group, entertainment
- ATV- Hiking - Biking trails
- more entertainment, family outing etc. closer to home (Hanksville)
- Making our area better known
- knowledge of a beautiful park
- keeping park in its natural state
- Kids have a great experience with nature
- It will be an attractive place to enjoy a family outing
- more people can enjoy the natural formation
- easier access to park
- can stay longer an enjoy surrounding area such as swell also.
- Goblin Valley will continue to be enjoyed by more than just those who have time to hike in.
- More usage
- better facilities
- more visitors without congestion
- increased awareness of the world we live in
- More revenue for surrounding towns,

Hanksville and Green River
- More people knowing about and enjoying the park
more activities, and more time spent in park
- more knowledgeable visitors
- Less number of people lost and injured
- faster response and availability to injured and sick
- people all ages and physical ability able to enjoy area
- adequate staffing
- More visitors
- a safe place for children
- a great place to picnic
- a fun hiking place
If more visitors come to see the park the community will benefit.
- Teach kids how to respect the environment
- Teach that we can use and maintain our resources
- Teach geology
- Limited long term impacts from over stays using facility for central family operations
- Will curtail premature artificial erosion form human impacts (climbing, touching pushing, hugging, OHV impacts)
- Resource preservation from over exploitation by tourism
- A good experience
- a relaxed experience
- Sustained Beauty
- Environmental Conservation
- Human impact without extensive degradation
- prolonged life of the park
- better enjoyment for families
- limit length of camping
**STEPS:**

- Post information signs, maps of area
- More phones, radios, etc for communication, emergencies
- Better trails and access for less physical people
- User fees, deposits for hikers
- Enlarge campground
- Improve roads
- Improve restrooms and shower and build more
- Make water available elsewhere in area
- Higher fees for out-of-state visitors because they are usually higher impact
- Low keyed marketing ploy
- Don't increase the size
- Signs where god hiking trails are more tables
- Maintain facilities already in place.
- Extend park to beyond canyons at base of Wildhorse Butte (to the south west)
- Create more campsites in canyons SW of Wildhorse Butte
- Improve road
- Keep campgrounds, but don't add any.
- May need to limit the number of visitors in each season
- Suggest visits to travelers going through Green River City.
- Creating more parking (if possible without doing damage to the park area itself.
- Have employees monitoring the park frequently to provide a safe (or at least fairly safe) environment.
- Have large fines or other "stiff" penalties for littering.
- Increase in Budget
- Increase in ranger coverage
- Surveys for trails
- Expand campsite to accommodate influx of people and to spread out the campground related impact.
- Provide good interpretive hiking trails around and within Goblins (esp. Inside to reduce impact inside).
- Do Not build more roads (i.e. reuse the old road (when the new is in) for a campground road.
- Come to meetings concerning these matters. Keep informed.
- Advertising
- Don't advertise!! The "work of mouth" process works great!
- Don't building things in excess.
- Work to keep Goblin Valley in natural state.
- Correlate educational program with Utah Core Curriculum
- More funding, staffing, better facilities (grant writing?)
- Keep people off formations
- No ATV's
- More public interest, local interest
- More funding
- Better advertisement
- Keep a good planning team with some foresight and keep local people involved
- Develop campsites with showers
- Establish information center
- Maintain high quality - informed staff
- Limit promotional information. Word of mouth preserves moderate visitation aspects - ecosulture too critical.
- Educational information or onsite volunteer guides to promote preservation by visitors
- Perhaps promote day type tourism, very successful in South Dakota visit several sites people kept in clusters in control situations.
- Do not make trails in park
- Do not restrict where people can go in park
- Provide information about fragile areas so people will be careful where they need to.
- Better literature available, such as maps of the park, surrounding areas, and a detailed map of the goblins.
- Expand the park to include area Southwest of Wildhorse Butte etc.
- Improve access Road
- We had a wonderful time with our family playing in the "Valley of the Goblins" but we removed at least 5 cigarette butts while we were there. What a shame that people have no qualms about littering in such a beautiful place. We were grateful that there were beautiful places to camp outside of the park.

- Don't expand more than is necessary! Be careful of destroying habitat for Antelope, frogs, birds, snakes etc. Make more habitat to compensate for new road - i.e. remove fragments of the old one and re-seed it. Work in conjunction with the BLM to provide a full time ranger or volunteer to work in highly used areas of the San Rafael swell. Get rid of vandalism in/on Goblins (get a ranger in there on busy days). Put pit toilets further away from pavilion (they stink). **** Provide more pull-offs with picnic tables on way to Pavilion. (Heidi has some good ideas as to where in some < impact areas. Let Michelle and Heidi give more input (they live there.) More staff, MAPS!!! A Visitor Information Center (small one).

- I realize erosion is a real concern, but the joy of Goblin Valley is the hands-on fund that kids can have at the park. I would like to see this continue to be a fun place to visit as a family. The last measure taken would be to make Goblin Valley a spot only accessible by foot or pedal bike. It is a treasure to be enjoyed by many.

- Please, please, please don't change too much try and keep it in it's natural state! The last thing the park needs is overpopulation! More campsites but build on behind Ranger station but not further into the park. Plus not a lot more camping sites just enough for overflow. Maps!

- Phone service for emergencies (I'm an EMT on Hanksville ambulance)

- There needs to be a way to keep track of hikers, back packers, cyclists, etc. The reason is to help with searches, medical coverage etc. As well as an accurate record of visitors - type of use etc. Needs to be medical training for Rangers and helpers to know when to advise calling - helicopter, ambulance, or suggest private transport. Workers and visitors alike should be well informed of their medical options.

- Directions in many languages

- It is nice how it is, you shouldn't change it too much.

- Let's not follow what the NPS has done with Canyonlands. Lock it up so only a few will enjoy it. Goblin Valley is a nice resource. Let's preserve it but also use it.

- Does the general citizen populace understand this resource, its value as local resource or tourism potential? Visits with others from outside the area find it interesting but generally a couple of hours satisfies the curious visitor.

- I love Goblin Valley it just needs more picnic area and maybe more parking.

- The ability for individuals to comment and make suggestions pro- and con for all is great. Voice our concerns for present and future at least lets us feel a part of the planning and implementing of changes.

- My main concern is the oiling of the road. I flagged there for Brown Brothers this spring and couldn't believe the amount of money spent on road improvement and no plans to oil in the future. That road in off of Temple Mountain is so dusty.
<table>
<thead>
<tr>
<th>What worked?</th>
<th>What would you change?</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-Relaxed, informal atmosphere, conducive to questioning and getting answers and information</td>
<td>-nothing (some joked for refreshments)</td>
</tr>
<tr>
<td>-one on one conversations</td>
<td>-I would like to have been more familiar with Goblin Valley today. Been awhile since I have been there.</td>
</tr>
<tr>
<td>-I liked the informal setting. The posters were effective.</td>
<td>-get more people</td>
</tr>
<tr>
<td>-People to answer questions</td>
<td>-Nothing</td>
</tr>
<tr>
<td>-Very good</td>
<td>-Perhaps have handout on some the comments presented on 4 sheets of paper.</td>
</tr>
<tr>
<td>-informal atmosphere, brought a small informed group together to visit</td>
<td>What policies exist presently? What privileges are lacking at the facility? What is current operations status? Info from park management and what they feel is realistic for Goblin Valley.</td>
</tr>
<tr>
<td>-cookies</td>
<td>-diet coke instead of punch</td>
</tr>
<tr>
<td>-food</td>
<td>-Nothing</td>
</tr>
<tr>
<td>-Everything</td>
<td>-more information on what's going on.</td>
</tr>
<tr>
<td>-food</td>
<td>Make survey more understanding.</td>
</tr>
<tr>
<td>-good survey</td>
<td>-a presentation would have been more informative with examples of plans and a map for example.</td>
</tr>
<tr>
<td>-Food</td>
<td>-I think you need more information. Survey was kind of confusing.</td>
</tr>
<tr>
<td>-nice dots</td>
<td></td>
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<tr>
<td>-sticker charts</td>
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### ATTENDANCE

<table>
<thead>
<tr>
<th>Hanksville:</th>
<th>Green River:</th>
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<tbody>
<tr>
<td>RaeLene Ekker</td>
<td>Cheryl Kenner</td>
</tr>
<tr>
<td>Carolyn Hatch</td>
<td>Joanne Ekker</td>
</tr>
<tr>
<td>Stan Alvey</td>
<td>Kaye Nelson</td>
</tr>
<tr>
<td>Blair and Gladys Tanner</td>
<td>Robert Nelson</td>
</tr>
<tr>
<td>Sam &amp; Jill Brown</td>
<td>Destiny Florz</td>
</tr>
<tr>
<td>Jess &amp; Barbara Ekker</td>
<td>Breanna Henry</td>
</tr>
<tr>
<td>Leroy Smalley</td>
<td>Michelle Brown</td>
</tr>
<tr>
<td>Sheila Albrecht</td>
<td>Marcy Thayn</td>
</tr>
<tr>
<td>Ranae Albrecht</td>
<td>Sindy Bell</td>
</tr>
<tr>
<td>AC Ekker</td>
<td>Julie King</td>
</tr>
<tr>
<td></td>
<td>Heidi Blankenship</td>
</tr>
<tr>
<td></td>
<td>Dorothy Nelson</td>
</tr>
<tr>
<td></td>
<td>Jeremy Luke</td>
</tr>
<tr>
<td></td>
<td>Adam Luke</td>
</tr>
<tr>
<td></td>
<td>Julie Steuer</td>
</tr>
<tr>
<td></td>
<td>Loni Shorts</td>
</tr>
<tr>
<td></td>
<td>Robert C. Steuer</td>
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<table>
<thead>
<tr>
<th>Castledale:</th>
<th>Salt Lake:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doris Quinn</td>
<td>Shannon Hansen</td>
</tr>
<tr>
<td>? Funk</td>
<td>Rod Hansen</td>
</tr>
<tr>
<td>L. Fillmore</td>
<td>T. E. Green</td>
</tr>
<tr>
<td>Bevan Wilson</td>
<td>Mary Jane</td>
</tr>
<tr>
<td>Kent Peterson</td>
<td></td>
</tr>
<tr>
<td>Mary Ann Luke</td>
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Total number of people attending the public open houses: 37
## ANALYSIS OF GOBLIN VALLEY OPEN HOUSE SITES - SORTED BY SITE

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Salt Lake</th>
<th>Green River</th>
<th>Hanksville</th>
<th>Castledale</th>
</tr>
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<tbody>
<tr>
<td><strong>Strengthening</strong></td>
<td>Dots</td>
<td>%</td>
<td>Dots</td>
<td>%</td>
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<tr>
<td>Touching and moving about the Goblins</td>
<td>2</td>
<td>22.2%</td>
<td>Natural setting</td>
<td>13</td>
</tr>
<tr>
<td>Friendly and helpful staff</td>
<td>2</td>
<td>22.2%</td>
<td>Hiking</td>
<td>9</td>
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<tr>
<td>Showers &amp; Hot Water</td>
<td>1</td>
<td>11.1%</td>
<td>Touching and moving about the Goblins</td>
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<tr>
<td>No Outdoor Recreational Vehicle use</td>
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<td>Friendly and helpful staff</td>
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<tr>
<td>Natural setting</td>
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<td>11.1%</td>
<td>No Outdoor Recreational Vehicle use</td>
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<tr>
<td>Drinking Water Available</td>
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<td>11.1%</td>
<td>Drinking Water Available</td>
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<tr>
<td>Campsites</td>
<td>1</td>
<td>11.1%</td>
<td>Restrooms</td>
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<tr>
<td>Well developed</td>
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<td>Sightseeing</td>
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<td>Signs and Directions</td>
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<td>-</td>
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<tr>
<td>Hiking</td>
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<td>Signs and Directions</td>
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<td>Handouts and maps explaining the geologic formations</td>
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<td>-</td>
<td>Campsites</td>
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<tr>
<td>Allowing dogs on the trails</td>
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<td>-</td>
<td>Natural setting</td>
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<p>| Total | 9 | 100.0% | 56 | 100.0% | 36 | 100.0% | 25 | 100.0% |</p>
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<thead>
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<th>Weaknesses</th>
<th>Salt Lake</th>
<th>Salt Lake</th>
<th>Green River</th>
<th>Green River</th>
<th>Hanksville</th>
<th>Hanksville</th>
<th>Hanksville</th>
<th>Hanksville</th>
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<tbody>
<tr>
<td>Dots %</td>
<td>3</td>
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<td>9</td>
<td>18.8%</td>
<td>9</td>
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<tr>
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<tr>
<td>No separate picnic area for day use</td>
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<td>26.6%</td>
<td>7</td>
<td>14.6%</td>
<td>4</td>
<td>11.8%</td>
<td>3</td>
<td>16.7%</td>
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<tr>
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<td>14.3%</td>
<td>6</td>
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<td>16.7%</td>
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<tr>
<td>Lack of signage on the trails</td>
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<td>No separate picnic area for day use</td>
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<td>1</td>
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<td>Difficulty comm. with park serve emergencies</td>
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<td></td>
</tr>
<tr>
<td>Campsites too close together, no privacy</td>
<td>0.0%</td>
<td>0%</td>
<td>2</td>
<td>4.2%</td>
<td>2</td>
<td>5.9%</td>
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<td>5.6%</td>
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<tr>
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<td>0%</td>
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<td>4.2%</td>
<td>2</td>
<td>5.9%</td>
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<td>5.6%</td>
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<td>0.0%</td>
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<tr>
<td>Information for the Public - geo, maps, not advertising</td>
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<td>0%</td>
<td>1</td>
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<td>0.0%</td>
<td>1</td>
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<tr>
<td>Difficulty comm. with park serve emergencies</td>
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<td>Allowing domestic pets</td>
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<td>Hanksville</td>
<td>Dots</td>
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<td>Expand the size of the park</td>
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<td>9</td>
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<td>Back-country Camping Sites</td>
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<td>More Solar Energy Projects</td>
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<td>Visitors to stay around the area longer</td>
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<td>Recycle Program</td>
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<td>Provide Pay Phone</td>
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<td>Provide Doggie Waste Station</td>
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<td>Horse Trail</td>
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<td>Family Home Evening</td>
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<tr>
<td>Educational tours for school groups (k-6 &amp; 6-12)</td>
<td>0.0%</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
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<tr>
<td>Convenience Store nearby</td>
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<td>0</td>
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<td>0</td>
<td>0.0%</td>
<td></td>
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<tr>
<td>ATV Trail</td>
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<td></td>
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**ANALYSIS OF GOBLIN VALLEY OPEN HOUSE SITES - SORTED BY SITE**

Page 3
<table>
<thead>
<tr>
<th>Threats</th>
<th>Salt Lake</th>
<th>%</th>
<th>Green River</th>
<th>%</th>
<th>Hanksville</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining the present balance between natural and development as more facilities are added</td>
<td>3</td>
<td>33.3%</td>
<td>8</td>
<td>22.2%</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td>ATV use</td>
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<td>33.3%</td>
<td>7</td>
<td>19.4%</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td>Vandalism &amp; Robbery</td>
<td>1</td>
<td>11.1%</td>
<td>6</td>
<td>16.7%</td>
<td>2</td>
<td>14.3%</td>
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<tr>
<td>Litter</td>
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<td>11.1%</td>
<td>4</td>
<td>11.1%</td>
<td>2</td>
<td>14.3%</td>
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<tr>
<td>Erosion of the Site</td>
<td>1</td>
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<td>8.3%</td>
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<td>7.1%</td>
</tr>
<tr>
<td>Unsupervised children and teens</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>5.6%</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>Too many people visiting</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>5.6%</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>People walking on the Goblins/ No supervision around the Goblins</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>5.6%</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>Paving the road</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>5.6%</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>Noise</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1</td>
<td>2.8%</td>
<td>0.0%</td>
<td>Any Advertising</td>
</tr>
<tr>
<td>Inaccurate information - internet</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1</td>
<td>2.8%</td>
<td>0.0%</td>
<td>Any Advertising</td>
</tr>
<tr>
<td>Graffiti</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>Noise</td>
<td>0.0%</td>
<td>Noise</td>
</tr>
<tr>
<td>Developing the park more - Just leave it</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>Inaccurate information - internet</td>
<td>0.0%</td>
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</tr>
<tr>
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</tr>
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<td><strong>Total</strong></td>
<td>9</td>
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<td>36</td>
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## Strengths

<table>
<thead>
<tr>
<th>Strength</th>
<th>Salt Lake</th>
<th>Hanksville</th>
<th>Green River</th>
<th>Castledale</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touching and moving about the Goblins</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>18</td>
<td>14.3%</td>
</tr>
<tr>
<td>Natural setting</td>
<td>1</td>
<td>4</td>
<td>13</td>
<td>4</td>
<td>18</td>
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</tr>
<tr>
<td>Friendly and helpful staff</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>15</td>
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</tr>
<tr>
<td>Hiking</td>
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<td>2</td>
<td>9</td>
<td>3</td>
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</tr>
<tr>
<td>Drinking Water Available</td>
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<td>5</td>
<td>5</td>
<td>3</td>
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</tr>
<tr>
<td>Restrooms</td>
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<td>3</td>
<td>2</td>
<td>2</td>
<td>9</td>
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</tr>
<tr>
<td>No Outdoor Recreational Vehicle use</td>
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<td>5</td>
<td>2</td>
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</tr>
<tr>
<td>Showers &amp; Hot Water</td>
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<td>2</td>
<td>1</td>
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</tr>
<tr>
<td>Handouts and maps explaining the geologic formations</td>
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<tr>
<td>Sight-seeing</td>
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<tr>
<td>Campsites</td>
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<td>3</td>
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</tr>
<tr>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>Allowing dogs on the trails</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>Parking</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
<td>Signs and Directions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
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</tr>
<tr>
<td></td>
<td>9</td>
<td>36</td>
<td>56</td>
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## Weaknesses

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<tr>
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<th>Hanksville</th>
<th>Green River</th>
<th>Castledale</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of shade</td>
<td>1</td>
<td>9</td>
<td>7</td>
<td>1</td>
<td>18</td>
<td>16.8%</td>
</tr>
<tr>
<td>Campsites too close together, no privacy</td>
<td>3</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>17</td>
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</tr>
<tr>
<td>Lack of signage on the trails</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>9</td>
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</tr>
<tr>
<td>Lack of visitor parking</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>9</td>
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</tr>
<tr>
<td>No separate picnic area for day use</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>8.4%</td>
</tr>
<tr>
<td>No Pay Phone</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>8.4%</td>
</tr>
<tr>
<td>No Maps with hiking trails</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td>7.5%</td>
</tr>
<tr>
<td>Lack of signage for trails</td>
<td>3</td>
<td>3</td>
<td></td>
<td>6</td>
<td>6</td>
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</tr>
<tr>
<td>Fees</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Allowing domestic pets</td>
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<td>3</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Visitor Information</td>
<td>2</td>
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<td></td>
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<tr>
<td>Difficulty comm. with park serve emergencies</td>
<td>2</td>
<td></td>
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<td>3</td>
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</tr>
<tr>
<td>Showers</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Lack of Paved Road</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
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<tr>
<td>Information for the Public - geo, maps, not advertising</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Allowing smoking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Wind</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td>Lack of law enforcement comm.</td>
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|                                                | 7         | 34         | 48          | 18         | 107   | 100.0%     |
### OPPORTUNITIES

<table>
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<tr>
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<th>Salt Lake</th>
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<th>Green River</th>
<th>Castledale</th>
<th>Total</th>
<th>% of Total</th>
</tr>
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<tr>
<td>Educational tours for school groups (k-6 &amp; 6-12)</td>
<td>13</td>
<td>6</td>
<td>1</td>
<td>20</td>
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<td></td>
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<tr>
<td>Interpretive Center</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>13</td>
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<tr>
<td>More geologic information and history of the area</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td>9.6%</td>
</tr>
<tr>
<td>ATV Trail</td>
<td>9</td>
<td>2</td>
<td></td>
<td>11</td>
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</tr>
<tr>
<td>Improved Road</td>
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<td>10</td>
<td>8.8%</td>
<td></td>
</tr>
<tr>
<td>Recycle Program</td>
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<td></td>
<td>9</td>
<td>9</td>
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<td>Expand the size of the park</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>9</td>
<td>7.9%</td>
<td></td>
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<tr>
<td>More developed trails</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>5.3%</td>
</tr>
<tr>
<td>Provide Pay Phone</td>
<td>2</td>
<td>3</td>
<td></td>
<td>5</td>
<td>4.4%</td>
<td></td>
</tr>
<tr>
<td>More Solar Energy Projects</td>
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<td>3</td>
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<td>4</td>
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</tr>
<tr>
<td>Horse Trail</td>
<td>3</td>
<td></td>
<td>1</td>
<td>4</td>
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<td></td>
</tr>
<tr>
<td>Back-country Camping Sites</td>
<td>2</td>
<td>2</td>
<td></td>
<td>4</td>
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</tr>
<tr>
<td>Weather hotline for the park</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>2.6%</td>
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</tr>
<tr>
<td>Visitors to stay around the area longer</td>
<td></td>
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<td>2</td>
<td>1.8%</td>
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</tr>
<tr>
<td>Provide Doggie Waste Station</td>
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<td></td>
<td>1</td>
<td>2</td>
<td>1.8%</td>
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</tr>
<tr>
<td>Family Home Evening</td>
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<td>1</td>
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</tr>
<tr>
<td>Convenience Store nearby</td>
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<td></td>
<td>0</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>33</strong></td>
<td><strong>49</strong></td>
<td><strong>23</strong></td>
<td><strong>114</strong></td>
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### THREATS

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<th>Green River</th>
<th>Castledale</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining the present balance between natural and</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>15</td>
<td>20.0%</td>
</tr>
<tr>
<td>development as more facilities are added.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Litter</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>13</td>
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<tr>
<td>Graffiti</td>
<td></td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>10</td>
<td>13.3%</td>
</tr>
<tr>
<td>ATV use</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>10</td>
<td>13.3%</td>
</tr>
<tr>
<td>Vandalism &amp; Robbery</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
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<td>8.0%</td>
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<tr>
<td>Erosion of the Site</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>8.0%</td>
</tr>
<tr>
<td>Too many people visiting</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>5.3%</td>
</tr>
<tr>
<td>Paving the road</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>4</td>
<td>5.3%</td>
</tr>
<tr>
<td>People walking on the Goblins/ No supervision</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4.0%</td>
</tr>
<tr>
<td>around the Goblins</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Unsupervised children and teens</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1.3%</td>
</tr>
<tr>
<td>Developing the park more - just leave it</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1.3%</td>
</tr>
<tr>
<td>Noise</td>
<td></td>
<td></td>
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<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Inaccurate information - internet</td>
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<td></td>
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<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>14</strong></td>
<td><strong>36</strong></td>
<td><strong>16</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Major Issues and Recommendations List--Expanded

1. Primacy will be given to protecting the Entrada formation goblins
2. Study, monitor visitor impacts and erosion in the goblins; no mechanical activities/OHVs; contract for study with UGS or other entity
3. Threatened and Endangered species will continue to be protected; a full faunal inventory of the park will be made; contract with DWR or others
4. Establish functional management and activity zones--similar to the USFS ROS (recreation opportunity spectrum), recognizing some access and activity restrictions will be necessary
5. Pursuant to public opinion and local sentiment, protect and maintain the natural, uncluttered vistas; only develop basic, important facilities for visitor services will be evaluated and considered
6. Very spartan and basic camping facilities are poorly differentiated, have no privacy and sense of place. Windscreen, sun shading, tent pads, and site separation is preferred--propose preliminary design options, costs
7. Evaluate and fund visitor contact station, maintenance, possible on-park housing; estimated $2.2 million for rehabilitation, buildings, roads, parking, signs, water and alternative energy systems, etc.
8. ADA and other trail alignments need to be improved and expanded; e.g., boardwalk in Badlands NP; utilize an experienced committee of trail users to site and evaluate trails (plan) in the park and 1400 ft. ADA trail in goblins
9. Encourage use of alternative energy where analysis, design, policy, cost, and scope of project support alternative energy applications. After professional analysis, and budget considerations, instal photo voltaic, diesel, and propane system as the least expensive and efficient alternative
10. Inadequate water supply requires an additional 4.75 acre foot water right; geology and drilling sites should be evaluated; and provide additional storage and distribution lines--prepare budget; do preliminary siting
11. Safety, convenience and expanded park visitation from the upgraded access road requires improved internal park road alignments, modified grades and wider pavement with bike lanes to handle busses, RVs, cars
12. With expanding visitation, there is need for in-park management presence; and in park or near park housing (evaluate the current trailer site, Hanksville, joint management facility or area management hub elsewhere)
13. Develop an interpretive plan and product package (maps, brochures, panels, signs); expand interpretation (displays, tours) and improve signs
14. Organize collaborative planning, management and development stakeholder team utilizing County, BLM, division, SEUALG (Southeastern Utah Association of Local Governments) and others
15. Improve highway signs in the park, and frequency/location outside of the park on highways and major intersections; the collaborative planning and management team will formulate a sign location plan and schedule.

16. Acreage additions should be considered to protect park features; i.e., Sec. 16, 32, & 2, referencing the collaborative planning and management effort.

17. The RMP process should advance the objectives of “EnLibra”--balance and stewardship to find solutions, science based fact and consensus.

18. Conduct seasonal visitor surveys; ensure accurate visitation recording and seasonal calibration methodology to determine visitation and user needs.

19. Establish emergency service plan and protocol; e.g., establish a heliport near the goblin overlook; collaborate with Emery County and BLM on search and rescue procedure; complete the annual “risk management inventory and review” by May 1st of each year; budget for mitigation.

20. Separate GVSP from the Green River accounting and reporting processes; i.e., don’t co-mingle data; facilitate accurate individual park analysis, evaluation, budgeting and accountability.

22. Maintain strong community and park user involvement in planning, management and development of GVSP; continue to involve the RMP Team as deemed appropriate; form special study/project committees as needed.

23. Increase staff budget: full-time manager, ranger, 3 seasonals (naturalist, maintenance); evaluate management needs over time and forecast.

24. Maintain a separate Technical Appendix as a data base with more extensive reports and studies for future planning and management; e.g., trail study, wildlife inventory, natural hazard study, impact procedures to study visitor and natural impacts on the goblins.
DIVISION OF PARKS & RECREATION:

Some Key Values:

- Provide a clean, safe and enjoyable park experience
- Protect the resources—ensure a sustainable, maintainable state park
- Provide a full range of leisure services: recreation, education, scientific inquiry, physical and mental fitness and play
- Support and enhance the local and state economy—including tourism
- Manage and protect park ecosystems (flora and fauna)
- Minimize development impacts on the park: keep as natural as possible

Challenges and visions:

- Develop the park to a useable and economically viable standard
- Be energy and water efficient; utilize alternative forms of energy where it is economic and practical; i.e. wind and photo voltaics
- Manage and develop as part of a regional recreational asset; collaborate with BLM, School Trust and mining/agricultural interests
- Manage site for additional visitation resulting from road improvements and sign improvement in and near the park
- Establish a mutually beneficial partnership with BLM to pay for and meet demands of increasing regional public domain and park use
- Ensure adequate capital development funding and operational funds to safely and efficiently operate GVSP; i.e., by general funds, increased fees, and collaborative management with Agencies and Emery County.
BRIEF HISTORY OF STATE PARKS IN THE U.S. AND UTAH
(T.E. Green, Jr., AICP, Planning Manager)

The “Utah State Park and Recreation Commission” was created by the Utah State Legislature. C.J. Olsen was named the first director. The Utah State Park system was the last to be established in the lower 48 states on May 14, 1957. Stephen T. Mather, the first director of the National Park Service had called for the formation of “state park systems” throughout the U.S. in 1921. Even then, too many less-than-eligible National Parks were coming into the national system. Mather felt a state park system could more appropriately protect sites and reduce pressures on the NPS; i.e., “...fill in the gaps...”.

In 1939, NPS sponsored a “national fiscal assistance program” for all states to inventory and study park, parkway and recreational areas” in their respective states to determine the need for additional facilities--state, local and federal. Utah’s study was completed in April, 1939. Utah’s population was not expected to increase much beyond its 500,000 citizens(?). USFS, NPS, and Fish & Game provided most of Utahn’s recreation at that time. But WWII and the Korean War interrupted implementation of this study until the landmark Outdoor Recreation Resources Review Commission (ORRRC--1958) studies of the 1960's.

Caught up in the enthusiasm of the ORRRC study, the burgeoning tourism industry, and the potential tourism revenue for the state of Utah, the State Park Commission was formed and a statewide inventory was conducted by a “Blue Ribbon Committee” to identify potential state park sites between 1957 and 1959. Of some 118 potential sites, 26 or 22% became Utah State Parks. The first few “state parks” were in place; i.e., Camp Floyd/Stagecoach Inn, Pioneer Monument State Park, Dixie State Park (Snow Canyon); Old State House (Territorial State House). GVSP was one of the resources recommended for “immediate
acquisition and development”. Nearly 1500 people were reported to have visited the GVSP during 1958. Emery County acquired the core properties of 2,240 acres (Property I.D. 227-1), with an additional 774.4 acres being conditionally transferred to the Division in December, 1998--for recreation purposes. (State Park Commission, 1959) (NPS, 1939)
DISCUSSION OF POTENTIAL MANAGEMENT AREAS OR ZONES FOR GVSP--GEOGRAPHIC AND SPATIAL APPROACH TO PARK MANAGEMENT (Utilization of GIS analysis, Zarekarizi)

State Park Management Areas or Zones In the GVSP)— “DR” or developed recreation zones (<2% of the park total acreage) include paved roads, parking areas, two unpaved service roads, a camp ground/day use area, two photo voltaic installations for the residences and water pumping, a major overlook and staging area for hiking into the goblin valley zones, a high quality rest room, pit toilet, signs, and two minor trails; e.g., Carmel and the Curtis Bench, both of which have major problems in terms of function, location and alignment. A well and 40,000 gallon storage tank serve park visitors and seasonal residents.

A very primitive and sandy “Molly’s Castle” road connects directly to State Route 24, five miles to the east. The County road from State Route 24 passes the northern boundary of GVSP where it splits into the park; the other branch runs westerly to the Little Wild Horse Trail head on BLM land. Most of the park is “PR” or a primitive zone that disallows mechanized equipment, equestrian activities, capital development, no improved trails, has very limited signage, and protects threatened and endangered species (T&E).

The “SP” or semi-primitive zone, primarily the first goblin valley, disallows any mechanized or equestrian activities, protects T&E species, has limited signage and has improved or developed trails. (See potential Management Areas or Zones on map in Technical Appendices).
Goblin Valley State Park
Recreational Zones

Potential Recreational or Management Zones to Facilitate Resource Protection & Park Management

<table>
<thead>
<tr>
<th>State Park Zones</th>
<th>NM</th>
<th>SP</th>
<th>PR</th>
<th>BLM ROS Classifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVELOPED RECREATION</td>
<td>NON-MOTORIZED</td>
<td>SEMI-PRIMITIVE</td>
<td>PRIMITIVE</td>
<td>Roaded Natural</td>
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<td>Recreational Infrastructure</td>
<td>Mechanical Trails</td>
<td>Non-Motorized</td>
<td>Primitive Non-Motorized</td>
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<tr>
<td>Roads</td>
<td>Non-Motorized Trails</td>
<td>Non-Equestrian</td>
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<tr>
<td>Facilities</td>
<td>Non-Equestrian</td>
<td>T &amp; E Species Protection</td>
<td>T &amp; E Species Protection</td>
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</tr>
<tr>
<td>Utilities</td>
<td>Interpretive Programs</td>
<td>Limited Signage</td>
<td>Limited Signage</td>
<td></td>
</tr>
<tr>
<td>Future Development</td>
<td>Signage</td>
<td>Developed Trails</td>
<td>Semi-Primitive Motorized</td>
<td></td>
</tr>
</tbody>
</table>
FAUNA OF GVSP AREA--MUDDY CREEK

DRAINAGE (Inventory)

The publication, Fauna of Southeastern Utah and Life Requisites Regarding Their Ecosystems (Publication No., 90-11, 1990) was prepared to provide a method for assessing inhabitation of vertebrate wildlife for a project area; i.e., the Muddy Creek drainage that includes GVSP and areas immediately surrounding the park. NO park specific inventory of fauna has occurred, but should be completed within a year. This data is generalized to the southeastern ecosystem.

Ecosystems are identifiable areas in which nonliving elements are assimilated by living organisms, then exchanged between plants and/or animals, and finally released back into the physical environment to be recycled again. They provide habitat for wildlife—a setting in which an animal is most likely to survive and reproduce. Habitat may also provide attractive and functional recreation space and resources, for which the presence of park visitors may or may not be beneficial for animals. Habitat is considered an amenity to a park setting, especially if animals may be seen, studied, interpreted or otherwise enjoyed.

Fishes (Piscinian Species)
While there are 42 species of freshwater fish inhabiting southeastern Utah, no known fishes inhabit the arid, Sonora desert area in the park (cold desert).

Amphibians (Amphibian Species)
Thirteen amphibian species inhabit the ecosystems of southeastern Utah. Five are commonly found in the San Rafael cold desert:

- Tiger salamander (Ambystoma tigrinum)
- Northern Leopard frog (Rana pipiens)
- Great basin spadefoot (Scaphiopus intermontanus)
- Great Plains toad (Bufo cognatus)
- Stripe chorus frog (Hyla arenicolor)

Reptiles (Reptilian Species)
There are 36 species inhabiting southeastern Utah. Most are concentrated in the submontane zones, and 13 are commonly found in the San Rafael desert:

- Collared lizard (Crotaphytus collaris)
× Long-nosed leopard lizard (Gambelia wislizenii)
× Short-horned lizard (Phrynosoma platyrhinos)
× Sagebrush lizard (Sceloporus graciosus)
× Eastern fence lizard (Sceloporus undulatus)
× Tree lizard (Urosaurus ornatus)
× Side-blotched lizard (Uta stansburiana)
× Teiidae western whiptail (Chromidophorus tigris)
× Night snake (Hypsiglena torquata)
× Striped whipsnake (Masticophis taeniatus)
× Pine snake (Pituophis melanoleucus)
× Western terrestrial garter snake (Thamnophis elegans)
× Viperidae western rattlesnake (Crotalus viridis)

Southeastern Utah Birds (Avian Species)
Approximately 285 avian species inhabit southeastern Utah. The California condor has been reintroduced in the southeastern portion of Utah in the last two years. Approximately 30 commonly found species may be seen that are yearlong, winter or summer residents, include:

× Sharp-shinned hawk (Accipiter striatus)
× Golden eagle (Aquila chrysaetos)
× Red-tailed hawk (Buteo jamaicensis)
× Ferruginous hawk (Buteo regalis)
× Northern harrier (Circus cyaneus)
× Prairie falcon (Falco mexicanus)
× American kestrel (Falco sparverius)
× Mourning dove (Zenaida macroura)
× Long-eared owl (Asio otus)
× Common nighthawk (Chordeiles minor)
× Common poorwill (Phalaenoptilus nuttallii)
× White-throated swift (Aeronautes saxatalis)
× Black-whined hummingbird (Archilochus alexandri)
× Broad-tailed hummingbird (Selasphorus platycerus)
× Say’s phoebe (Sayornis saya)
× Ash-throated flycatcher (Myiarchus cinerascens)
× Horned lark (Eremophila alpestris)
× Cliff swallow (Hirundo pyrrhonota)
× Bank swallow (Riparia riparia)
× Scrub jay (Aphelocoma coerulescens)
× Common raven (Corvus corax)
× Bushtit (Psaltriparus minimus)
× Bewick’s wren (Thryomanes bewickii)
× Rock wren (Salpinctes obsoletus)
× American robin (Turdus migratorius)
× Loggerhead shrike (Lanius ludovicianus)
× European starling (Sturnus vulgaris)
× Rufous-sided towhee (Pipilo erythrophthalmus)
× Brewer’s Blackbird (Euphagus cyanocephalus)
× Western meadowlark (Sturnella neglecta)

Southeastern Utah’s Mammals (Mammalian Species)
There are 105 mammalian species in southeastern Utah. Approximately 25 species are common to the San Rafael cold desert area in and near GVSP:

× Montane shrew (Sorex monticolus)
× Pallid bat (Antrozous pallidus)
× California myotis (Myotis californicus)
× Little brown bat (Myotis lucifugus)
× Big free-tailed bat (Nyctinomops macrotis)
× Coyote (Canis latrans)
× Gray fox (Urocyon cinereoargenteus)
× Kit fox (Vulpes macrotis)
× Ringtail (Bassariscus astutus)
× Raccoon (Procyon lotor)
× Long-tailed weasel (Mustela frenata)
× Badger (Taxidea taxus)
× Striped skunk (Mephitis mephitis)
× Pronghorn (Antilocapra americana)
× White-tailed antelope squirrel (Ammospermophilus Leucurus)
× White-tailed prairie dog (Cynomys leucurus)
× Rock squirrel (Spermophilus variegatus)
× Botta’s pocket gopher (Thomomy’s talpoides)
× Ord’s kangaroo rat (Dipodomys ordii)
× Plains pocket mouse (Perognathus flavescens)
× Desert woodrat (Neotoma lepida)
× Brush mouse (Peromyscus boylii)
× Deer mouse (Peromyscus maniculatus)
× Black-tailed jack rabbit (Lepus californicus)
× Desert cottontail (Sylvilagus audubonii)
PLANT SPECIES OF SPECIAL CONCERN
A botanical inventory for selected species of special concern that might be found within the boundary of Goblin Valley State Park was performed 19 May through 22 May, 1998. The following species with known locations in the vicinity of the study area were the focus of that inventory:

- Wright’s fishhook cactus (*Sclerocactus wrightiae*)
- Rush-like desert parsley (*Lomatium junceum*)
- San Rafael globe mallow (*Sphaeralcea psoraloides*)
- Heil’s beaver-tail cactus (*Opuntia basilaris var. Heilii*)

Two of the above plus one additional species of special concern were observed in the park:

- Wright’s fishhook cactus (*Sclerocactus wrightiae*)
- Heil’s beaver-tail cactus (*Opuntia basilaris var. Heilii*)
- Ruth’s milkweed (*Asclepias ruthiae*)

The table below documents the species, distribution of the species, and general management recommendations made by the researcher. Essentially, calls for awareness of “endangered” or possible “sensitive species” within and near the park. The report calls for avoidance of the species for any future proposed developments within the park; e.g., road widening, parking enlargements, campground—day use expansions, new structures and solar panels, etc.
# SPECIES & DISTRIBUTION:

**WRIGT'S FISHHOOK CACTUS:** Listed as "endangered" by the USFWS; is on the "Tracking List" of the Utah Natural Heritage Program (UNHP); has a very narrow distribution in Emery, Wayne and Sevier counties (UT); known from Castle Valley, west of the San Rafael Swell, south around the periphery of the Swell to the vicinity of GVSP, and south several miles south of Hanksville, on the east, and Totam on the west. Throughout its range it grows on barren, alkaline soils with widely scattered shrubs, perennial herbs, bunch grasses or scattered pinon-juniper at 1460 to 1865 m (4790 to 6119 feet amsl) elevation. Soils vary from clay, sandy silts to fine sands with high gypsum content to little or no gypsum. Soil crusts are usually present and the ground surface is usually littered with sandstone or basalt gravels, cobbles and boulders (BCD, 1998)

**HEIL'S BEAVER-TAIL CACTUS:** Listed on the "Tracking List" of the UNHP, it is now under review for placement on the BLM "Sensitive Species List". It has a very narrow distribution in Emery, Wayne and north-central Garfield counties (UT). It is known from the southern end of the Swell, from GVSP on the east to Keesle County (CO?) along the Muddy River on the west, and south, to the lowlands of the Henry Mountains and into Capitol Reef National Park. It grows on barren, alkaline soils with salt desert shrub communities with occasional perennial herbs and bunch grasses at 1460 to 1680 m (4450 to 5120 feet amsl) elevation. (Welsh, et al, 1993).

**RUTH'S MILKWEED:** Not currently a species of concern to any fed agency, it is on the "Watch List" of UNHP. It is endemic to the Navajo Basin, Utah and northern Arizona, with distribution in Emery, San Juan, Sevier and Wayne counties (UT) at 1400 to 1800 m (4593 to 5905 feet amsl) elevation. Throughout its range it grows in mixed desert shrub, salt desert shrub and pinion-juniper communities on sandy, clay, and hard packed loam soils (Welsh, et al, 1993; Cronquist, et al, 1984)

# MANAGEMENT RECOMMENDATION:

**WRIGT'S FISHHOOK CACTUS:** Federally listed as "endangered", it occurs in isolated areas of the park where use is very low; at the parks north end, where prior impacts have been removed due to closures; and south of the overlook parking area along the west ridge of the main Goblin Valley--a high use area. High mesa tops (on eastern boundary) were not surveyed due to access problems, and infrequent visitor use or potential development. A relatively dense occurrence of the cactus was found along the trail heading south out of the overlook parking area; i.e., >30 plants scattered on the main ridge. Recommendation: in planning future projects within the park, this species should be avoided. Traffic along the ridge trail south of the overlook parking area be tightly channeled to reduce current impacts to the species and its habitat.

**HEIL'S BEAVER-TAIL CACTUS:** Within GVSP it was always observed on soils similar to those on which Wright's Fishhook cactus was observed; i.e., clay, and sandy silts and fine sands. This cactus ranges from northern to the southern boundaries of the park: observed at 10 separate locations. It was not searched along the eastern boundary of the park due to extreme elevations and visitor access difficulty. It has the narrowest overall range of the 3 species discussed. Distribution with GVSP places it beyond areas of high use. It is recommended this species be avoided in any future development.

**RUTH'S MILKWEED:** Ruth's milkweed was observed at only six locations along the northern park boundary. This species appears to be sufficiently secure throughout its range, though, a reevaluation is needed. No recommendations are made at this time.
General Recommendations
GVSP is part of a botanically unique area of the Colorado Plateau: two of the these three plant species (and others) occur only within the greater San Rafael Swell and Desert area of which Goblin Valley is a part. It is recommended, the park in its planning process, provide for the means by which its visitors can be educated to the presence of a unique flora and the plant communities which surround them (Franklin, 1998)

ESA-Listed Species for Emery County

<table>
<thead>
<tr>
<th>Name:</th>
<th>Species</th>
<th>Listing Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado Sqawfish</td>
<td>Fish</td>
<td>Endangered</td>
</tr>
<tr>
<td>Humpback Chub</td>
<td>Fish</td>
<td>Endangered</td>
</tr>
<tr>
<td>Bonytail</td>
<td>Fish</td>
<td>Endangered</td>
</tr>
<tr>
<td>Razorback Sucker</td>
<td>Fish</td>
<td>Endangered</td>
</tr>
<tr>
<td>Wright Fishhook Cactus</td>
<td>Plant</td>
<td>Endangered</td>
</tr>
<tr>
<td>Despain Pincushion Cactus</td>
<td>Plant</td>
<td>Endangered</td>
</tr>
<tr>
<td>Barneby’s Reed-Mustard</td>
<td>Plant</td>
<td>Endangered</td>
</tr>
<tr>
<td>Winkler Pincushion Cactus</td>
<td>Plant</td>
<td>Proposed Endangered</td>
</tr>
<tr>
<td>Maguire Daisy</td>
<td>Plant</td>
<td>Threatened</td>
</tr>
<tr>
<td>Jones Cycladenia</td>
<td>Plant</td>
<td>Threatened</td>
</tr>
<tr>
<td>Last Chance Townsendia</td>
<td>Plant</td>
<td>Threatened</td>
</tr>
<tr>
<td>Bald Eagle</td>
<td>Bird</td>
<td>Threatened</td>
</tr>
</tbody>
</table>

Summary: (12 species in Emery County, Listed)
5 vertebrates
7 invertebrates
7 Endangered
4 Threatened
1 Proposed
Endangered
GEOLOGY OF GOBLIN VALLEY STATE PARK
(Assistance from the Utah Geological Survey, Mark Milligan, 1999)

Goblin Valley State Park lies within the Colorado Plateau physiographic province, an area of broad regional uplift, dissected by deep canyons that expose layer upon layer of nearly flat lying beds of sedimentary rock. The rock layers within the park follow this regional pattern and are horizontal to sub-horizontal.

The San Rafael Swell is an exception to this flat lying stratigraphy. The southern end of this prominent topographic feature stands about a mile northwest of the park entrance. The San Rafael Swell is an asymmetric anticline (a convex upward fold), roughly 75 miles long (extending northeast-southwest) and 30 miles wide. As seen from the park, the eastern limb, called the San Rafael Reef, is steeply inclined to nearly vertical, in contrast to the more gently inclined western limb.

In ascending order, the Entrada, Curtis, Summerville, and Morrison Formations outcrop within the current park boundaries. The goblins form exclusively within the Entrada Formation. The goblins are found in continuous horizontal, fine sandstone beds interbedded with and underlain by shale. These sandstones and shales were deposited in a marginal marine environment such as a tidal flat. The approximately 0.5 to 2 meter thick sandstone beds appear to be massive (without internal structure) although some beds do reveal faint horizontal and cross lamination. At least one non-goblin forming sandstone bed, north of the day-use parking area, exhibits planar cross-bed sets suggestive of beach sand dunes. Gypsum veinlets appear locally within the shale beds.

Many of the slopes on the Entrada are covered with a self-derived clay. On near vertical to vertical rock outcrops a thin coating of this clay effectively obscures internal structures contributing to the sandstone’s massive appearance. On gentle slopes thick accumulations of this clay exhibit a "popcorn" texture indicative of expansive soils. This clay cover effectively buries continuous sandstone beds, leaving protruding goblins that look like isolated nodules or concretions.

Entrada formation: Weathering and erosion carve the goblins from the sandstone beds. Joint or fracture patterns within the sandstone beds play an important role in goblin development by creating initial zones of weaknesses. Unweathered joints intersect to form sharp edges and corners. However, these edges and corners are more susceptible to chemical weathering because they have a greater surface area to volume ratio than the faces. Hence, they weather more quickly giving the goblins their spherical shape through a process called spheroidal weathering.
The interbedded and underlying shale beds are less resistant to weathering and erosion. In conjunction with spheroidal weathering of the sandstone beds, these softer shale beds give the goblins their often elongated shapes, flat bottoms, stacked appearance, and the pedestals upon which they are displayed. Minerals precipitated in the tiny spaces between individual sand grains give the sandstone beds their hardness. Variations in the amount and/or type of cement may also contribute to the unusual shapes of specific goblins.

**Impacts on Goblins:** Erosion created the goblins and erosion will eventually destroy the existing goblins and exhume new ones. Visitor impact may affect rates of erosion, and goblin construction and destruction. Particularly important may be visitor impact on both mechanical (mineral) and microbiotic crust that stabilize the clay covered slopes on the Entrada Formation. The role of these crusts in the park has not been studied. In general the mechanical crust is formed when the clay desiccates after rainstorms. The microbiotic crust enhances this mechanical crust with sheaths of cyanobacteria that bind soil particles together. Undisturbed microbiotic crust should be more resistant to erosion by running water than the mechanical crusts. However, both crusts can be crushed by foot traffic, allowing wind to blow away the underlying clay and silt size particles. In some low relief areas disturbed sediments may be compacted by foot traffic to the point of increased stabilization.

**Other Geologic Formations:** The Curtis Formation unconformably overlies the Entrada, forming the greenish gray cap rock on the buttes above the park’s valley. Fossils in locations outside of the park indicate that the sandstones and siltstones comprising the Curtis are marine in origin and Late Jurassic in age. The greenish color comes from minor amounts the mineral glauconite. Good examples of several sedimentary structures, including ripple marks and cross-bedding, can be found within the park.

The Summerville Formation conformably overlies the Curtis Formation on the highest buttes at the north end of the park. The Summerville consists of distinctive thin beds of chocolate colored shales, siltstones, and sandstones. Thin beds and veinlets of gypsum are found within the shale. Sediments were deposited in a marginal marine, perhaps tidal flat, environment.

The Morrison Formation unconformably overlies the Summerville formation on the top of Wild Horse Butte in the northeast corner of the park. The Morrison consists of varicolored mudstone, stream channel sandstones, and conglomerates. The sediments are continental in origin, deposited in streams and flood plains or playas. The Morrison Formation is famous for the dinosaur bones found within it. No dinosaur bones have been reported on Wild Horse Butte, but they do exist west of the park.
Younger unconsolidated sediments (loose clay, silt, sand, and gravel) cover the older bedrock formations in parts of the park. These Quaternary age (less than 1.6 million years) sediments include: (I) talus consisting of blocks, boulders, and smaller angular rock fragments at the bases of cliffs and steep slopes deposited by gravity fall, (ii) colluvium consisting of loose masses of soil material at the base of and on gentle slopes deposited by by unconfined surface water runoff, (iii) alluvium consisting of sediments deposited by intermittent streams, and (iv) eolian deposits consisting of active and inactive sand dunes that dominate the low lying areas at the north end of the park. (Milligan, 1998)

This information is valuable for evaluating structure foundations, trail alignments, potential road alignment or widening, developing interpretive programs, calculating construction costs and equipment needs, evaluating water sources and water quality, and general engineering considerations.
### BRIEF OVERVIEW OF THE PUBLIC INVOLVEMENT PROCESS FOR THE GVSP RMP--1998-99

<table>
<thead>
<tr>
<th>Public Involvement Activities:</th>
<th>Planning Purposes and Accomplishments:</th>
</tr>
</thead>
</table>
| - Preliminary meetings with Division staff, and park/regional management  
- Hold meeting with “stakeholders” | - Structure and agree on process;  
- include staff and board members;  
- identify “stakeholders”;  
- establish criterion for committee;  
- outline the process; and  
- meet with stakeholders to glean names for “planning team”; review processes |
| - Establish Planning Team,  
- schedule 4 public meetings;  
- meet monthly--5 to 7 team meetings as needed | - Set ground rules;  
- outline planning process with the team;  
- tour of park and area facilities;  
- set sideboards for conduct and effort;  
- perform SWOT analysis and values discussion;  
- vision out to 20 years;  
- review data and public input; make mission and vision recommendations;  
- relate recommendations to priority issues |
| - Team and staff develop drafts of plan and sections;  
- public meeting to review recommendations and plan;  
- develop final plan and seek Board approval | - Team may develop for long-term park involvement;  
- will comment on draft; make changes and modifications;  
- review this planning process;  
- team dialectic to bring best recommendations and consensus;  
- public review of final plan draft;  
- seek approval by State Parks Board;  
- publish and implement |
1998 Goblin Valley State Park Visitor Survey
Report Summary—for GVSP RMP
(Planning Section, Bruc Strom)

This summary presents only a portion of the results from the Goblin Valley State Park (GVSP) Visitor Survey. It is necessary to read the complete report to properly use the results and to understand the processes and limitations of the survey.

This report describes the results of the visitor survey at GVSP during March 13-May 25, 1998. A total of 596 questionnaires were randomly distributed to visitors during this time period. Four hundred fifty-four questionnaires were returned for a 76% response rate.

Over 70% of the respondents were day use visitors and 33% had a group size of 1-2 people.

More than 65% of the respondents were from Utah and 56% were from within 60 miles of Salt Lake City.

The average age of the respondents was almost 37 years old and 89% of them had been to GVSP 1-2 times during the last twelve months, including their current visit.

GVSP was the primary destination of about 50% of the respondents. Of the 50% that indicated that GVSP was not their primary destination, about half identified a National Park Service site as their primary destination.

The satisfaction and importance of GVSP facilities and services were rated. Sixty percent of the respondents rated their satisfaction with hiking opportunities as high and 63% rated the importance of hiking opportunities as high.

Over 75% of the respondents either agreed or strongly agreed that development should be limited in GVSP, and more than 85% either agreed or strongly agreed that a natural setting should be maintained at GVSP, similar to the way it is now.

Adjacent Bureau of Land Management areas were visited by 60% of the respondents.

The most popular activities in GVSP were identified as hiking, sight-seeing, and photography.

The communities of Green River and/or Hanksville were visited by 71% of the respondents.

Many of the general comments revolved around the need for more information to be available on the area, a need to change the campground layout, and concerns about the condition and future of the access road to GVSP.
1998 Visitor Survey for Goblin Valley State Park: Summary

| PARK VISIT INFO: | ☐ 596 surveys were randomly distributed; 454 were returned for a 76% response rate;  ☐ 70% were day use visitors--33% had a groups size of 1-2 persons;  ☐ The park was the primary destination for 50% of respondents; the other 50%, about half identified a National Park as their primary destination (25%);  ☐ 89% of the respondents had visited the park 1-2 times in the last 12 months--including the current visit;  ☐ In terms of satisfaction and importance of park facilities and services, 60% rated their satisfaction with “hiking opportunities” as “high”; 63% rated the “importance of hiking opportunities” as “high”. |
| PARK USE AND IMPROVEMENTS: | ☐ Most popular activities are hiking, sight-seeing and photography  ☐ 60% of respondents stage out on to BLM lands  ☐ Generally, respondents need “more information to be available” on the area; a need to change the campground layout; and concerns about the condition and future of the 14 mile access road into the park;  ☐ 75% of respondents agreed or strongly agreed that development should be limited in the park;  ☐ 85% agreed or strongly agreed that a natural setting should be maintained in the park—similar to what is there currently |
| DEMOGRAPHIC INFO ABOUT PARK VISITORS: | ☐ 65% of the respondents were from Utah; 56% were from within 60 miles of Salt Lake City (Wasatch Front and back valleys);  ☐ Average age of respondents was 37 years;  ☐ 71% of the respondents visited Green River and/or Hanksville, coming and/or going from Goblin Valley State Park;  ☐ Actual counts of vehicle occupancy rates March 13 to May 25, 1998 revealed an average “mean” of 3.3 persons per vehicle; an average “median” of 3.0 persons per vehicle; and an average “mode” of 2.0 persons per vehicle; most frequent occurring was “mode” or 2 persons per vehicle; “median” the point above and below which 50% of the occupancy occurred; the “mean being the average” (this is an “average” of six (6) 2 hour time periods during the day, beginning at 8 AM and terminating at 8 PM). |

Data is limited to GVSP visitors during 1998. Sampling frame was visitation during period of March 13, 1998 through May 25, 1998. Randomness was ensured during this heavy visitation period, but not for the entire year; however, this period represents over 51% of the total visitation occurring in the park during an entire year--the heaviest use season.

Less than 1% of the park acreage has been altered by man-made development. Respondents of a GVSP park visitor survey generally want to keep it that way; i.e., 75% agree or strongly agree “development” (not defined in survey) should be limited; 45% agreed or strongly agreed visitor impacts should be reduced; and 85% agreed or strongly agreed the natural setting should be maintained at GVSP. Greater than 70% of park visitors stop in Green River, Hanksville, or both. Major activities in the park are sight-seeing and hiking (>77%).
Minor activities are camping (24%), photography (14%), picnicking (6.6%), and geologic study (3.7%): other activities are 12%. Greater than 70% of park visitors stop in Green River, Hanksville, or both. (State Parks, June, 1998) GVSP provides economic benefits for Emery County, Green River and Hanksville. The average expenditure per visitor was approximately $47 spent in Green River and/or Hanksville.
PARK DELINEATIONS AND DISCUSSION

〇 **Park Roads—current conditions:** there are 2.1 miles of interior paved roads; 4.2 miles of interior gravel/sand or dirt roads; >16,798 square feet of campsite parking (0.38 acres); 1.34 acres of paved parking, and 0.25 acres of gravel/dirt parking.

A new access road into the park will be 5800 feet or 1.098 miles, at an estimated cost of $450,000 for preparation, culverts and paving--two 12 ft lanes with 3.2 foot shoulders--conditional on final design. The current road to the Goblin overlook is poorly aligned and too narrow. The final grade to the parking lot is excessive; the lot has limited turning radii and parking area.

**DELINEATION:** a proposed modification and preliminary design is attached to this RMP,

➔ lowering the elevation of the overlook parking, widening the parking area and establishing reasonable turning radii for large RV and busses;

➔ Preliminary improvements-- >58 auto parking spaces; 6 bus parking spaces and 11 smaller picnic shelters with an improved rest room.

➔ Separate walking paths are proposed to keep bike and walking traffic off the main road, reducing vehicle/pedestrian conflicts.

The new access road will isolate the current and proposed camping areas from higher frequency, and often hazardous through traffic for day use between the park entry and the Goblin Overlook. The current access road will either be partially or totally obliterated: to be used as a bike path or access to camp ground expansion.

〇 **Additional development—additional energy demands**—Two proposed on-site residences, a contact or visitor center/adm office and entry station will impact energy consumption on site. All facilities should be as energy efficient as possible; e.g., passive solar heating and appropriate shading and cooling for the warm climate; and nominal utilization of electrical appliances and equipment.

Studies verify high costs of “line electrification” versus advanced “Photo voltaic” technology—two engineering studies or analyses were conducted to document and verify costs and alternatives; i.e., one by the Utah Office of Energy and Resource Planning (Poynter, 8.13.98) and the Southwest Technology Development Institute at New Mexico State University (Rosenthal, 9.18.98).
Basic assumptions:
(1) overhead lines across the unbroken high desert from Hanksville to GVSP are unacceptable, being a significant environmental and visual impact on the region and park;
(2) GVSP is surrounded to the south and east by HR1500 “wilderness study lands” (BLM, 10/98);
(3) therefore, no direct route for overhead lines or trenched/buried lines is available on the 14 miles of line-of-site from Hanksville to GVSP; any buried line would be required to follow the road shoulder alignment from Hanksville along State Route 24 to the Temple Mountain/GVSP turnover—about 34 miles under the purview of a NEPA EIS process;
(4) cost for underground lines is approximately $18,000 per mile plus $5/ft for trenching and backfilling;
(5) actual cost comparisons were achieved utilizing NPS operational units for comparisons; e.g., Pinnacles National Monument, and Needles Campground in Canyonlands National Park; and
(6) maintain the agreement with the Office of Energy and Resource Planning to create and implement a partnership with OERP to establish energy efficiency as a programming objective for all capital improvement projects; provide cost sharing for these projects; assist engineers in studies and design; and participate in performance reports for OERP funded projects in the state park system (MOU, 1997, pp. 5).

DELINEATION:

Electrical Loads Used for Analysis:

<table>
<thead>
<tr>
<th>Electrical Load</th>
<th>Annual energy (kWh)</th>
<th>Peak Demand (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance Station</td>
<td>1500</td>
<td>1.5</td>
</tr>
<tr>
<td>Rest Room</td>
<td>300</td>
<td>0.5</td>
</tr>
<tr>
<td>Maintenance Shed</td>
<td>500</td>
<td>0.5</td>
</tr>
<tr>
<td>Visitor’s Center</td>
<td>3700</td>
<td>7.0</td>
</tr>
<tr>
<td>Duplex Residence</td>
<td>8000</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>14,000 kWh/year</strong></td>
<td><strong>Average: 2.9 kW</strong></td>
</tr>
</tbody>
</table>

20-Year Life Cycle Cost Comparison: Line Extension versus PV Hybrid System

<table>
<thead>
<tr>
<th>Project Components</th>
<th>Line Extension</th>
<th>PV Hybrid System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Investment</td>
<td>$621,600 ($1.2 million/34 mi)</td>
<td>$121,000 (less grants)</td>
</tr>
<tr>
<td>Annual &amp; Non-annual Recurring Costs</td>
<td>0</td>
<td>$10,399</td>
</tr>
<tr>
<td>Energy-Related Costs</td>
<td>$20,288</td>
<td>$16,497</td>
</tr>
<tr>
<td>Capital Replacements</td>
<td>0</td>
<td>$34,210</td>
</tr>
<tr>
<td><strong>Net Present Value:</strong></td>
<td><strong>$641,888 ($1.17 million/34 mile route along roads)</strong></td>
<td><strong>$182,106 (less $4500 grant from DOE, 8.12.98)</strong></td>
</tr>
</tbody>
</table>
Using these professionally prepared estimates (conservative) the direct buried line would be at least 3.5 times more expensive than the PV system—if "wilderness study status" were removed. If the long route (34 miles) is required by BLM and NEPA, the cost for the buried line would be even greater; i.e., >6.42 times more expensive. Also, park visitor opinion survey documented the fact that 85% visitor agreed and strongly agreed the natural setting should be maintained; 75% similarly, want development limited in the park (GVSP Survey, 6/98, p. 15).

○ Potential land acquisitions—current conditions: a reconnaissance of the park area by a botanist from the Utah Natural Heritage Program, and park staff, suggested inclusion of portions of Sec. 16 and some areas south of Sec. 15. This would be in addition to over 700 acres in Sec. 3 that is being transferred to the state park under the Recreation and Public Purposes Act (RPPA) at this time. The current boundary incorporates all or parts of Sections 3, 4, 9, 10 and 15. Sections 32, 2 and 16 (contiguous sections in Township 26 South, Range 11 East, SLB&M) are State Institutional Trust Lands that could be traded or purchased in the future.

DELINEATION: BLM has expedited the transfer of approximately 700 acres in Section 3. This is consummated. The proposed GVSP boundaries in 1960s included all of Sections 9, 10, 16, 15, 21, 22, 28 and 27. All require information should be provided BLM for this transfer per fed regulations; e.g., the archeological survey of the proposed new road alignment.

→ State Institutional Lands (SITLA) should be approached regarding potential land trades or sale of Sections 16 and 2.
→ Sections 21 and 22 (BLM Public Domain) should be studied for inclusion into the state park. This will require analysis to determine management costs, and necessary budget adjustments for such an expansion. These sections of public domain fall totally and partially under the aegis of a "wilderness study area" designation (HR 1500—should be verified by BLM). There are Entrada goblin features in these sections deserving protection.
→ RPPA stipulations must be followed and enforced; i.e., BLM must approve any third party or commercial concession activity on RPPA/BLM lands.

○ Staffed Entrance Station, Contact Station, Housing and camp ground—fee collection and services: current conditions: the current design of the new GVSP entry road has a widened section in the road to accommodate an entry station. Tubing beneath the pavement will be installed to accommodate future utility connections when needed. Emery County has expressed concern about any fee station or control over the county road. The entry station has been located south of the county road and park entry road intersection. Provision of a fee station (on the county road) would generate area management funds to offset county, BLM and State Park management and emergency management costs. It would not only assist in management of GVSP, but also the BLM areas west of the park. Solar PV could provide energy for nominal operations of the station. Extension of water would be costly.
DELINEATION: the proposed entry station location is consistent with current county and county policy and concerns. DFCM and park development staff sited the park entry station 2/99 near the new north boundary with adequate line-of-site. It will be designed for portability—adapted for relocation to alternative sites if necessary in the future.

→ Color, materials and scale should “fit” and complement the site  
→ The entry station will serve to educate visitors, collect fees, provide some general control for the park area and establish a “division presence” on the park; and has only nominal energy needs—solar adequate  
→ A more formal “contact or visitor station” could be located on the north side of the entry road prior to the turnoff to the camping area, or clustered within the park with other buildings—residences. This could be a combined adm office, small retail sales, visitor info area, and emergency care and bunking area—< 1000 square feet (NPS has a similarly sized structure for comparison).  
→ An on-site manager duplex, approximately 1100 square feet per unit, will provide on site management for camping and day use. Federal rental units could be secured in Hanksville to reduce site impact and energy demands on site. Current management prefers on site residences Size, cost, and scope of functions will be factors.  
→ First phase campground (extant) upgrade with sun shade/wind screen with tent pad for ten pads—one ADA elevated pad; separate group site from individual sites per design.  
→ Second phase (new) in unit of 25 to 30 sites—also with ten tent pads and an ADA elevated pad. Location on northerly loop off old (decommissioned) road.  
→ Theme materials, design, colors and texture—at functional scale for natural site; no power to sites; provide shared hydrants and centralized garbage containers. Minimal visual impact in park, but functional for users.  
→ Consider an area for a “hike in only” camping area; but evaluate management costs and prescriptive guidelines; e.g., carry in/carry out garbage, sanitation, rescue.

Table A. Goblin Valley - Green River State Park

<table>
<thead>
<tr>
<th>Year</th>
<th>Visitation</th>
<th>Revenue ($)</th>
<th>Expenditures ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>97,885</td>
<td>$46,896</td>
<td>$140,998</td>
</tr>
<tr>
<td>1986</td>
<td>109,056</td>
<td>$52,566</td>
<td>$151,612</td>
</tr>
<tr>
<td>1987</td>
<td>114,886</td>
<td>$59,908</td>
<td>$157,909</td>
</tr>
<tr>
<td>1988</td>
<td>110,170</td>
<td>$69,989</td>
<td>$173,264</td>
</tr>
<tr>
<td>1989</td>
<td>120,502</td>
<td>$80,200</td>
<td>$187,242</td>
</tr>
<tr>
<td>1990</td>
<td>118,585</td>
<td>$82,121</td>
<td>$184,232</td>
</tr>
<tr>
<td>1991</td>
<td>134,940</td>
<td>$86,961</td>
<td>$193,880</td>
</tr>
<tr>
<td>1992</td>
<td>148,304</td>
<td>$103,663</td>
<td>$208,599</td>
</tr>
<tr>
<td>1993</td>
<td>157,846</td>
<td>$117,388</td>
<td>$209,773</td>
</tr>
<tr>
<td>1994</td>
<td>162,154</td>
<td>$128,619</td>
<td>$223,517</td>
</tr>
<tr>
<td>1995</td>
<td>163,886</td>
<td>$121,368</td>
<td>$245,978</td>
</tr>
<tr>
<td>1996</td>
<td>180,193</td>
<td>$195,547</td>
<td>$369,444</td>
</tr>
<tr>
<td>1997</td>
<td>255,966</td>
<td>$227,224</td>
<td>$431,607</td>
</tr>
</tbody>
</table>

○ Preservation management: current conditions—the budgeted work program for (FY‘98) is $244,300 (Green River campground and Goblin Valley); $183,000 for personal services—about 75% for personal services (full time and seasonal employees). Management of Goblin Valley is shared out of Green River; i.e., 1 full time manager/ranger who does not stay on park (comes in several times a week to the park from Green River), but utilizes on trailer for adm purposes and bunking; and one or two 8 month seasonals who stay in the second trailer. Combined budget and revenue reports for the two parks—confound statistical analysis for the most part. This has been the practice for several years.
DELINEATION:


<table>
<thead>
<tr>
<th>Year</th>
<th>Day Use</th>
<th>Camping</th>
<th>Total Revenues</th>
<th>Sales Tax*</th>
<th>Transient Room Tax**</th>
<th>Total Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$22,580</td>
<td>$23,161</td>
<td>$45,741</td>
<td>$2,630</td>
<td>$1,372</td>
<td>$4,002</td>
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<tr>
<td>1997</td>
<td>$28,567</td>
<td>$21,665</td>
<td>$50,232</td>
<td>$2,888</td>
<td>$1,507</td>
<td>$4,395</td>
</tr>
<tr>
<td>1998***</td>
<td>$29,659</td>
<td>$16,433</td>
<td>$46,091</td>
<td>$2,650</td>
<td>$1,383</td>
<td>$4,033</td>
</tr>
<tr>
<td>Total, 1996-1998</td>
<td>$80,806</td>
<td>$61,258</td>
<td>$142,065</td>
<td>$8,169</td>
<td>$4,262</td>
<td>$12,431</td>
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</table>

* = Sales Tax of 5.75% paid on all fees collected
** = Transient Room Tax of 3% paid on camping fees only
*** = Estimates based on annualized data from 1/98 - 4/98

Table A provides some discriminate data about Goblin Valley, alone, indicating revenues and various taxes paid by the park operation for three years (1998 annualized). Table B describes the visitation, revenues and expenditures for both Green River and Goblin Valley. There has been a proportional increase in park expenditures for the parks since FY’96--associated with the new golf course operation in Green River.

- Management costs and budget should be separated to allow analysis and evaluation of park management activity. GVSP may merit a full-time manager if the influx of visitation and capital development funds are provided by the Legislature and collaborative funding with BLM, Emery county, and others.
- Current expense should be increased by at least 50% of the current budget; and an additional 8 month seasonal provided to meet visitor demand for park services.
Department of Natural Resources
Parks & Recreation
Goblin Valley State Park Campground Renovation/Expansion

DESCRIPTION

- Reconstruct the campground to include individual sites, shade shelters, tent pads, and add additional campsites. The project would also include a new rest room, visitor contact station, bunkhouses, expanded roads, group areas, trails, fences, view points, and upgraded solar power capabilities.
- The project will include:
  * Renovation of the roads, campsites, pavilions and restrooms.
  * Facilities will be brought up to accessible standards.
  * Utilities and infrastructure will be updated.
  * The size and quality of the campsites will be improved.
  * Additional visitor education and service facilities will be added.
  * Hiking trails and accessibility trails would be constructed.
  * Upgraded solar power generating facilities to operate the park.

JUSTIFICATION

- Visitation at Goblin Valley has increased three fold in the past fifteen years. The original construction of the park was never completed and the park remains as it was originally started in 1974. The increased use has begun to show its signs on the meager facilities and on the fragile landscape of the park. Protection of the resource at Goblin Valley is of the utmost importance and providing developed and hardened areas for the visitors and control of the visitors through development is necessary.
- There is currently a small solar power generating system at the park that runs the well pump and some of the buildings, there is also a generator on site to supplement the electrical needs. This is one aspect of the development that needs
Campground

to be expanded and up graded. The closest electrical power is at the Hanks ville airport which is too far to be economic to run power from.

The Photovoltaic system—to be expanded

Entry Station—on old road alignment

Maintenance facility
Goblin Valley State Park
Campground Renovation/Expansion
January 13, 1999

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>PRICE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>6000 sq ft</td>
<td>$324 per sq ft</td>
<td>$1,945,440</td>
</tr>
<tr>
<td>Add. construction costs</td>
<td>1 lump sum</td>
<td></td>
<td>$0</td>
</tr>
<tr>
<td>Site Costs</td>
<td>1 lump sum</td>
<td></td>
<td>$0</td>
</tr>
<tr>
<td>Total Est. Construction costs</td>
<td>13000 sq ft</td>
<td>$150 per sq ft</td>
<td>$1,945,440</td>
</tr>
<tr>
<td>Design Fees</td>
<td>5.62% x subtotal</td>
<td></td>
<td>$109,342</td>
</tr>
<tr>
<td>Property Purchase</td>
<td></td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Furnishings &amp; Equip.</td>
<td></td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Info Technology</td>
<td></td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Testing &amp; Surveys</td>
<td></td>
<td>$25,000</td>
<td></td>
</tr>
<tr>
<td>Other (insurance/legal/etc.)</td>
<td></td>
<td>$61,000</td>
<td></td>
</tr>
<tr>
<td>Construction Contingency</td>
<td>5.95%</td>
<td></td>
<td>$115,754</td>
</tr>
<tr>
<td>Total Estimated Project Cost</td>
<td></td>
<td></td>
<td>$928,958.298</td>
</tr>
</tbody>
</table>

*Capital Budget Presentation—4/99 (Collins)
MAPS & STUDIES

MORE

THE WHOLE FAMILY

DO NOT FEED
THE BEARS

CITY NOISE

USE ENJOYMENT

SUSTAINABILITY PRESERVATION
MEMORANDUM OF UNDERSTANDING

Between

THE DEPARTMENT OF NATURAL RESOURCES
OFFICE OF ENERGY AND RESOURCE PLANNING

And

THE UTAH DEPARTMENT OF NATURAL RESOURCES
DIVISION OF PARKS AND RECREATION

ARTICLE I
Background

WHEREAS, The Office of Energy and Resource Planning’s (hereinafter referred to as OERP) mission is to provide energy engineering, economic analysis, and technical information services to public agencies on the subject of energy efficiency, renewable and non-renewable energy systems and the development, use and conservation of our states natural resources; and

WHEREAS, the Division of Parks and Recreation’s (hereinafter referred to as the Division) mission is to enhance the quality of life in Utah through parks, people and programs. The Divisions vision is that by operating an effective and efficient customer-driven organization, where each employee is well-trained and empowered, Utah State Parks and Recreation will act as the State’s “Park and Recreation Authority” in coordinating the recreation and heritage needs of Utah now and in the future; and

WHEREAS, personnel from the OERP and Division have previously worked cooperatively on energy efficient design projects for new visitor centers: weatherization, lighting, and energy system retrofits of existing park facilities; and economic feasibility analyses of power and natural gas systems for state parks; and

WHEREAS, each party deems it desirable to continue to coordinate and share technical expertise in an effort to undertake energy efficiency projects to maximize efficient use of energy resources and minimize park expenditures for energy;

Now therefore, both parties do mutually understand and agree as follows:

ARTICLE II
Parks Energy Program

OERP and the Division agree to create a partnership the purpose of which is to demonstrate the substantial economic and environmental benefits associated with the adoption of energy efficient design, use of energy efficient technologies, and deployment of renewable energy systems in Utah state parks.
and conduct of work associated with nomination of projects, design specifications, selection of contractors, site preparation, construction, installation and commissioning of energy equipment, systems and other items as may be reasonably appropriate in accordance with this agreement.

4. Agree to operate and maintain energy equipment and systems provided under this agreement and provide payment for all reasonable costs of repair and maintenance during the functional life of the installed equipment.

5. Assist engineers from the OERP in the implementation of a program to monitor and evaluate the performance of installed energy efficiency measures and renewable energy systems. At a minimum the collection of complete monthly records of energy use shall be maintained by the Division.

6. Coordinate all public information activities (press conferences, news interviews, preparation and release of press notices, advertisements and brochures) with OERP in which the energy projects implemented under this agreement are discussed.

7. Cost-share with the OERP on the design and production of interpretive displays related to projects under this agreement. Text, design, size, location, and installation shall be approved by the director of the Division of Parks and Recreation or his designee.

8. In cooperation with OERP, prepare an annual report covering the work performed under this agreement. The report will convey significant information about the program and projects undertaken. The report shall contain a title sheet, a table of contents, an introduction which will describe the purpose of the program, a listing of projects and discussion covering the technical approach for each project, work completed, analysis of costs incurred in relation to amount budgeted, performance of the installed energy equipment or systems, and conclusions.

ARTICLE V
Work Plan and Program Implementation

The OERP and the Division will jointly develop a work plan to implement this MOU. The work plan will list program objectives and tasks to be undertaken under this agreement; identify financial resources available to the Program and sources of funding; establish selection criteria for projects eligible to receive PEP funds; identify energy projects and staff assigned to work on projects; specify the scope of work to be undertaken for each project; develop a budget; and list time schedules and milestones for each project.

Quarterly progress meetings will be held and utilized to review work completed and planned in
relation to project schedules, and to discuss delays, unusual conditions, actual costs incurred in relation to project budget, and to identify critical items which could affect the timely completion of work in progress.

ARTICLE VI
Financial Management

Financial transactions involving OERP funds pledged as a result of this MOU shall be conducted through an account established by the budget officer for the Department of Natural Resources. OERP funds will be disbursed from this account to pay for services of vendors and procurement of equipment, materials and other approved items necessary to perform the work in accordance with this agreement.

The Division may submit invoices for expenses incurred under this program once each month to OERP. Invoices shall include a detailed listing of specific vendors, amounts paid, invoices for equipment and materials of equipment and/or other evidences of completion of work or material procured. Upon review and approval, a request for cash reimbursement (interagency transfer?) will be forwarded to the accounting officer at the Department of Natural Resources.

ARTICLE VII
Other Activities

Other activities not specified in this memorandum as being the responsibility of OERP or the Division of Parks and Recreation shall be assigned with mutual consent.

ARTICLE VIII
Effective Date and Termination

This agreement shall take effect on September 1, 1996 and shall be reviewed annually.

______________________________
Courtland C. Nelson, Director
Division of Parks and Recreation

______________________________
Jeffrey S. Burks, Director
Office of Energy and Resource Planning
MEMORANDUM

TO: Goblin Valley Planning Team

FROM: Mary Jane Poynter

DATE: August 13, 1998

RE: Results of Economic Analysis Comparing Solar with Line Extension

An economic analysis was completed comparing solar energy (photovoltaics or PV) with a utility line extension. Several estimations were made since specifics on facility expansion or visitor use is not known at this time. The following are my assumptions:

PV System Size and Cost
A comparative PV system at Canyonlands National Park was used for sizing and cost estimation. The system installed at the Maze District provides power to a visitor center, a maintenance shop, a fourplex, and two mobile homes. Assuming the greatest amount of expansion at Goblin including a double wide visitor center/office, duplex, entrance station and additional restroom; the load would be similar or less than the Maze District. All estimates are conservative.

The water pumping system would need to increase proportional to the increase in visitation. If the visitation were to increase by 50%, an additional 9 panel tracking system would be required. The following costs were used in the analysis:

- Installed PV system cost = $80,000 (from Maze District cost data)
- Added water pumping capacity = $4,200 (installed)
- Annual PV Maintenance = $2,000 (contracted out)
- Annual Generator Maintenance = $1,614 (in-house or contracted out)
- Annual Diesel Fuel Costs = $605

The annual maintenance for the PV systems could be done through a service contract with the National Park Service. They employ electricians and maintenance people who are trained in
maintenance and trouble shooting PV systems. Their staff is located in southeastern Utah and would be able to respond to the park’s needs in a reasonable amount of time.

The existing generator would be used for backup power. It is estimated that the generator would run about 800 hours or about 20% of the load.

**Utility Line Extension**

Garkane Power estimated that the cost of extending a utility line from Hanksville to the park, about 13.5 miles, would cost $15,000 per mile for above ground line and $18,000 per mile for underground line. Garkane does not trench or backfill, a contractor would dig, lay the line and backfill for about $6/ft. One mile of underground line would cost $31,680. Garkane does not charge an added end of the line fee like Utah Power. They would charge the park the regular rates of $0.055/kWh and $6/kW. It is estimated the park would consume about 63,634 kWh/yr and have load of about 7 kW. The following costs were used in the analysis:

- Installed utility line (1 mile into park underground, remaining line above ground) = $205,500
- Installed utility line (13.5 mile all underground) = $243,000
- Trenching and Backfill (per mile) = $31,680
- Energy consumption per year = $3,594

**Life Cycle Cost Analysis**

The analysis was calculated over the life of the PV panel, 20 years using DOE discount rates.

- LCC of Utility Line Extension (all underground) = $474,650
- LCC of Utility Line Extension (1 mile underground) = $286,556
- LCC of PV System = $145,704
- Saving over 20 years = $141,384

Therefore the most economical solution would be to increase the capacity of the existing PV systems and upgrade the controls. This solution would save tax payers $141,384 over a 20 year period.

Attachment: Description of Maze District PV System
CANYONLANDS NATIONAL PARK
Maze District
Photovoltaic Project

The Hans Flat Ranger Station is located in the Maze District of Canyonlands National Park. The remote ranger station is accessed by 46 miles of dirt road from the nearest paved highway, Utah Hwy. 24. The facilities consist of a visitor center, maintenance shop, a four-plex, and two mobil homes. Electricity is provided by diesel generators which operate 24 hours a day consuming over 6,000 gallons of fuel annually. The National Park Service spends over $18,000 each year to generate electricity at Hans Flat at a cost of $0.80/kilowatt-hour (kwh). A partnership between the National Park Service and the Utah Department of Natural Resources (DNR) was created to provide financial resources, technical engineering assistance, and project management expertise necessary to install a photovoltaic/diesel hybrid power system at the Hans Flat Ranger Station.

Project Description

- Installation of a seven kilowatt photovoltaic system with a 180 kwh battery bank and two 10 kilowatt (kw) inverters was completed in October 1995. Project cost was $80,000 and funded through a cost-share between the state of Utah’s Department of Natural Resources and Department of Community and Economic Development ($40,000) and the National Park Service ($40,000).

- A 1995 energy audit conducted by engineers from DNR identified additional cost-effective energy efficiency measures to reduce electricity, propane and water use. The measures include a lighting retrofit, energy efficient appliances, building envelope upgrades to the maintenance shop, a 10 kw wind turbine and a rainwater collection system. The estimated cost to install all of the measures is $55,400.

Expected Results

- Installation of photovoltaic/diesel hybrid power system is expected to reduce diesel run time to 900 hours annually. The savings in diesel fuel and maintenance costs associated with operating the diesel generators is estimated to be $13,500 per year.

- Estimated annual electric savings if energy efficiency measures are installed is 13,100 kwh. The estimated annual cost savings of the electric, propane and water energy efficiency measures is $9,200.

Annual savings due to energy efficiency measures:

<table>
<thead>
<tr>
<th></th>
<th>Electric</th>
<th>Propane</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>$4,500</td>
<td>$1,400</td>
<td>$3,300</td>
</tr>
</tbody>
</table>

- Environmental benefits include a significant reduction of air and noise pollution from the diesel generators.

Contacts:  
Walt Dabney, Superintendent, Southeast Utah Group, NPS, (801) 259-3911.  
Jeff Burks, Director, Office of Energy and Resource Planning, (801) 538-5428
September 8, 1998

Andy Rosenthal
Southwest Technology Development Institute
Dept. 3SOL
PO Box 30001
Las Cruces, NM 88003-8001

Dear Andy:

As we discussed, OERP would like Southwest Technologies to perform an independent LCC analysis to compare adding PV and a utility line extension for added capacity at the park. Currently the Division of Parks and Recreation is working on a 20-year plan for the park. One of the biggest changes is that the road into the park is going to be paved which will drastically increase the number of visitors. They also plan to add some facilities and replace the existing trailers. The planning team would like to know what is the most cost effective solution to their problem of having to add capacity. The team is not yet clear as to what facilities will be added to the site. However, they were able to come up with a worst case scenario (greatest amount of expansion). The following are details on the worst case scenario.

**ADD**

Entrance Station - small entrance station with a radio, fan, indoor light, outdoor light, swamp cooler, calculator (see attached load estimation spreadsheet)

Office/Visitor Center - Double wide trailer ~ 1,000 sq. ft. which would include three computers, a copier, refrigerator, indoor and outdoor lights, radio, swamp cooler and other office equipment. This building would be heated with gas forced air and have a small restroom with a 20/30 gallon LP gas water heater. A comparable sized visitor center at Starvation State Park uses approximately 3700 kWh per year with about 7kW of demand. See attached utility bill.

Maintenance Shed - no more than 1,000 sq. ft. which would house the generator, cleaning supplies, tools, etc.

Restroom - indoor, outdoor and mechanical chase lighting, mechanical venting

**REPLACE**

Duplex - 900 sq ft per side which would house a full time resident and a seasonal employee. The house would include all of the standard appliances including an LP gas stove,
refrigerator, clothes drier and water heater. The heating system would be an LP gas
forced air system or LP gas hydronic system. A comparable home at Red Fleet
State Park uses approximately 15,000 kWh/yr however, this is an all electric home.
Two other fish hatchery homes use 24,000 and 18,000 kWh/yr.

Their existing facilities include:

Restroom - indoor and outdoor lighting and chase lighting

Trailers (2) - for season housing (will be replaced by duplex unit)

A load inventory of their current facilities has been done and is attached. In your analysis, please
take into consideration the value of the existing PV system. See attached documentation on existing system.
Assume that the maintenance on the PV system would be covered by an outside contractor for $2,000 per
year.

I have researched the possibility of extending a utility line. The line would be coming from the town
of Hanksville which is approximately 14 miles if you go straight across BLM land and 34 miles if you follow
the road. There is a good possibility that trenching a utility line across BLM land would not be approved.
Therefore, 34 miles of buried ground would be required. Garkane Power out of Hanksville quoted me
$18,000 per mile of underground line. Garkane does not do trenching or backfilling of lines. The Division of
Parks and Recreation would have to contract out the job for about $5/ft. (Salt Lake City contractor price
quote.)

In the LCC analysis, please use a 20-year study period, DOE escalation rates and emission cost
factors. (We use the NPS emission cost factors.) If possible, we need this analysis by September 23 to
distribute to the planning team members prior to their next meeting. Please call me if you have any questions,
801-538-5420. Thanks for your assistance.

Sincerely,

Mary Jane Poynter, Energy Engineer

Attachments

cc: Terry Green, Planning Manager
| PV: 30.74047 | 9.0 | 7.0 | 120.0 | 24.0 |
| 24 | 9.0 | 7.0 | 120.0 | 24.0 |
| 24 | 6.9 | 7.0 | 120.0 | 24.0 |
| 8.9 | 7.0 | 120.0 | 3.0 |
| 8.9 | 7.0 | 120.0 | 3.0 |
| 8.9 | 7.0 | 120.0 | 3.0 |
| 11.375 | 24 | 9.0 | 7.0 | 6.0 | 3.0 |
| 12.0 | 4.0 | 3.0 |
| 12.0 | 4.0 | 3.0 |
| 12.0 | 4.0 | 3.0 |
| 12.0 | 6.0 | 3.0 |
| 12.0 | 6.0 | 3.0 |
| 12.0 | 6.0 | 3.0 |
| 24.0 | 24.0 | 24.0 | 24.0 | 24.0 |

Exhaust fan
Outdoor lights
Indoor lights
Refrigerator
Swamp cooler
75 Watt Flood (1)
Radio
Indespensable (1)
Fan
Adding machine
Cash register

Future estimated load for entire station + kitchen
## Existing Load Estimations for 1 trailer at the park

This Spreadsheet is based on the sizing worksheets found in the Sandia manual.

<table>
<thead>
<tr>
<th>Load description</th>
<th>dc amps</th>
<th>ac Volts</th>
<th>Load watts</th>
<th>Duty Cycle hrs/day</th>
<th>days/week</th>
<th>conversion efficiency</th>
<th>system voltage</th>
<th>amp-hr load AH/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Pump</td>
<td>120.0</td>
<td>120.0</td>
<td>300.0</td>
<td>1.0</td>
<td>7.0</td>
<td>0.9</td>
<td>24.0</td>
<td>13.9</td>
</tr>
<tr>
<td>Swamp</td>
<td>8.0</td>
<td>120.0</td>
<td>960.0</td>
<td>18.0</td>
<td>7.0</td>
<td>0.9</td>
<td>24.0</td>
<td></td>
</tr>
<tr>
<td>Cook Shack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microwave</td>
<td>120.0</td>
<td>1000.0</td>
<td>0.5</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>18.5</td>
<td></td>
</tr>
<tr>
<td>Blender</td>
<td>120.0</td>
<td>250.0</td>
<td>0.3</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Stereo/CD</td>
<td>120.0</td>
<td>75.0</td>
<td>0.3</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>9.9</td>
<td></td>
</tr>
<tr>
<td>Fan</td>
<td>120.0</td>
<td>150.0</td>
<td>0.3</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>19.8</td>
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<tr>
<td>Coffeemaker</td>
<td>120.0</td>
<td>1200.0</td>
<td>0.3</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>9.9</td>
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</tr>
<tr>
<td>Lights (4 high efficient)</td>
<td>120.0</td>
<td>100.0</td>
<td>0.3</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>13.2</td>
<td></td>
</tr>
<tr>
<td>Bunkhouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan</td>
<td>120.0</td>
<td>150.0</td>
<td>4.0</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>19.8</td>
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<tr>
<td>Stereo/CD</td>
<td>120.0</td>
<td>75.0</td>
<td>0.3</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>9.9</td>
<td></td>
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<tr>
<td>Computers (3x)</td>
<td>120.0</td>
<td>700.0</td>
<td>2.0</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>46.3</td>
<td></td>
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<tr>
<td>TV</td>
<td>120.0</td>
<td>150.0</td>
<td>3.0</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>14.9</td>
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<tr>
<td>Hair dryer</td>
<td>120.0</td>
<td>1200.0</td>
<td>0.2</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>7.9</td>
<td></td>
</tr>
<tr>
<td>Lights (4 high efficient)</td>
<td>120.0</td>
<td>100.0</td>
<td>0.3</td>
<td>5.0</td>
<td>0.9</td>
<td>24.0</td>
<td>13.2</td>
<td></td>
</tr>
</tbody>
</table>

Total load: 5473.2 watts
Total Amp-hrs/Day: 997.9
23.9 kW-hrs/day
<table>
<thead>
<tr>
<th></th>
<th>Address</th>
<th></th>
<th>Address</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>555 Fish Hatchery Road</td>
<td>662750987001</td>
<td>515 Fish Hatcher</td>
<td>674090339</td>
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<tr>
<td></td>
<td>43856436004001</td>
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<td>43856436003</td>
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</table>

<table>
<thead>
<tr>
<th>Residence</th>
<th>kWh</th>
<th>Residence</th>
<th>kWh</th>
</tr>
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<tbody>
<tr>
<td>Jan</td>
<td>2,175</td>
<td></td>
<td>1,749</td>
</tr>
<tr>
<td>Feb</td>
<td>2,378</td>
<td></td>
<td>1,862</td>
</tr>
<tr>
<td>Mar</td>
<td>2,162</td>
<td></td>
<td>1,571</td>
</tr>
<tr>
<td>Apr</td>
<td>2,295</td>
<td></td>
<td>1,788</td>
</tr>
<tr>
<td>May</td>
<td>1,861</td>
<td></td>
<td>1,457</td>
</tr>
<tr>
<td>Jun</td>
<td>1,870</td>
<td></td>
<td>1,475</td>
</tr>
<tr>
<td>Jul</td>
<td>1,716</td>
<td></td>
<td>1,318</td>
</tr>
<tr>
<td>Aug</td>
<td>1,855</td>
<td></td>
<td>1,301</td>
</tr>
<tr>
<td>Sep</td>
<td>1,463</td>
<td></td>
<td>1,234</td>
</tr>
<tr>
<td>Oct</td>
<td>1,747</td>
<td></td>
<td>1,217</td>
</tr>
<tr>
<td>Nov</td>
<td>2,103</td>
<td></td>
<td>1,565</td>
</tr>
<tr>
<td>Dec</td>
<td>2,400</td>
<td></td>
<td>1,684</td>
</tr>
<tr>
<td>Total kWh</td>
<td>24,025</td>
<td></td>
<td>18,221</td>
</tr>
</tbody>
</table>
Existing System at Dobbin Valley State Park

Photovoltaic Array Average Electrical Output

* 28 PANELS
  Peak Watts
  Panel - 47 Watts per (Typical)
  Array - 1,000 Watts (24 Volts * 42 Amps)
  Output
  Panel - 12 Volts, 2.94 Amps
  Array - 24 Volts, 42 Amps
  Size
  1' high, 4' wide, 12 lbs.
* 4 BATTERIES
  C&D Charter Power Systems, manufacturer
  Model
  6-C75-23
  Storage
  850 Amp Hours per Battery
  1,700 Amp Hours System (24 Volt)
  20,400 Watt hours of useable
  or 2 Days supply @ 10.2 kWh per Day
  Size
  8" wide, 36" long, 24" tall, 600 lbs. each

CONTROLLER
  Photocomm Power Control Unit II, manufacturer
  Capacity
  50 Amps @ 24 Volts
  2 INVERTERS
  Trace 2024, manufacturer
  Output
  4 Kilowatt (kW) nominal
  6 Kw Surge
  w/ Turbocharger (cooling fan)
  May use diesel to charge batteries
  Standby load, 1 watt/inverter
  Idle load, 16 watts/inverter

UPDATED CONTROLLER AND INVERTER (6/98)
* CONTROLLER
  APT - POWERCENTER 48
  APT4B-2250-24
  DOUBLE 250 AMP MAIN DISCONNECT
* INVERTER
  TRACE SW4048 INVERTER
SOUTHWEST TECHNOLOGY DEVELOPMENT INSTITUTE

MSC 350L
New Mexico State University
P.O. Box 30001
Las Cruces, NM 88003-8001
Telephone: (505) 646-1846
Telefax: (505) 646-2962

Andrew Rosenthal
Southwest Region Experiment Station
Phone (505) 646-1323
Fax (505) 646-3841
e-mail anoenthal@NMSU.edu

September 18, 1998

Mary Jane Poynter
State of Utah, Department of Natural Resources
Office of Energy and Resource Planning
1595 West North Temple, Suite 3610
Box 146480
Salt Lake City, UT 84114-6480

Dear Mary Jane:

Southwest Technology Development Institute has performed a life cycle cost (LCC) analysis for a proposed PV hybrid system upgrade for Goblin Valley State Park (GVSP). This work was done with support from Sandia National Laboratories and the US Department of Energy.

The key to designing a successful off-grid PV hybrid is accurate knowledge of the electrical loads. To model the loads for the proposed additions to GVSP, measured electrical loads from other parks in Utah were used. For example, to estimate the annual energy requirements for the proposed duplex residence, recorded meter readings from a similar residence in the Needles Campground area of Canyonlands National Park were used. The electrical loads used for this analysis are presented in Table 1.

<table>
<thead>
<tr>
<th>Electrical Load</th>
<th>Annual Energy (kWh)</th>
<th>Peak Demand (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance Station</td>
<td>1500</td>
<td>1.5</td>
</tr>
<tr>
<td>Rest Room</td>
<td>300</td>
<td>0.5</td>
</tr>
<tr>
<td>Maintenance Shed</td>
<td>500</td>
<td>0.5</td>
</tr>
<tr>
<td>Visitor’s Center</td>
<td>3700</td>
<td>7.0</td>
</tr>
<tr>
<td>Duplex Residence</td>
<td>8000</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Based on these values, the site will use 14,000 kWh of electricity per year. This will make GVSP very similar in size and operation to a park facility SWTDI has recently studied. This is the PV hybrid power system in the Pinnacles National Monument. Before presenting LCC for the GVSP system, it may be of value to review the economics of the Pinnacles PV hybrid since this is a fielded system with a two-year service history.
The Chaparral area of Pinnacles National Monument is comprised of residence trailers, maintenance shop, visitor's center, comfort station, and well pumps. Annual energy use is 15,100 kWh and the site is powered by a PV hybrid power system installed in 1996. The PV hybrid system at Pinnacles has a 9.6 kW PV array, 4200 Ah battery, six 4-kW Trace inverters, and a 20 kW generator. The solar resource from this area of central California is only slightly less than the resource in central Utah.

The installed price for the Pinnacles PV hybrid system was $135k. Over a year, the generator runs less than 800 hours and uses 1265 gallons of propane. Based on these costs and the assumption of replacing the batteries every eight years, the PV hybrid system at Pinnacles has a 20-year LCC of $211,207. This does not include the costs that are associated with emissions which, as shown below, add favorably to the economics of the hybrid over conventional generation.

For this analysis, the proposed PV hybrid for GVSP will be similar in design the one at Pinnacles but using slightly smaller inverters.

For GVSP, it is proposed that the electrical service be segmented into two independent circuits (a practice done at Pinnacles). This allows off-the-shelf hardware to be used to power each single-phase circuit separately. The proposed PV hybrid is identical in design to the Pinnacles hybrid except that smaller inverters are required. The duplex, entrance station, and maintenance shed can be on one circuit with the visitor's center, and rest room on the other. The first circuit would be powered by two Trace Technologies SW4048, 4 kW inverters in parallel. The second circuit would receive power for one Trace Technologies SW5548, 5.5 kW inverter. This reduces the capital cost of the original Pinnacles system by $14,000 to a total installed price of $121,000. In addition, the smaller load at GVSP will mean that in comparison with the Pinnacles system, the generator will run less often and need less fuel and maintenance. The complete LCC is presented below in Table 2.

For comparison, the LCC for a utility line extension is provided. This cost is based on the quote you provided of $18,000 per mile for underground line plus $5/ft for trenching and backfilling. The distances involved are 14 miles line-of-sight or 34 miles following the road. The figure of 14 miles was used in Table 2. For the case of the utility line extension, annual purchase of electricity was based on $0.12/kWh.

Based on these estimates, the 20-year LCC of the PV hybrid system is less than one-third the cost of the line extension alternative. The energy related costs shown for the line extension case reflect the purchase of electricity from the utility; in the case of the PV hybrid, energy cost is for the purchase of propane to fuel the generator. The high cost of extending the utility line make the PV hybrid an economically favorable alternative.
TABLE 2. 20-Year Life Cycle Cost Comparison: Line Extension versus PV Hybrid System

<table>
<thead>
<tr>
<th></th>
<th>Line Extension</th>
<th>PV Hybrid System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Investment</td>
<td>$621,600</td>
<td>$121,000</td>
</tr>
<tr>
<td>Annual and Non-Annual Recurring Costs</td>
<td>$0</td>
<td>$10,399</td>
</tr>
<tr>
<td>Energy-Related Costs</td>
<td>$20,288</td>
<td>$16,497</td>
</tr>
<tr>
<td>Capital Replacements</td>
<td>0</td>
<td>$34,210</td>
</tr>
<tr>
<td>Net Present Value</td>
<td>$641,888</td>
<td>$182,106</td>
</tr>
</tbody>
</table>

In addition to these cost advantages, the PV hybrid produces less emissions than conventional utility generation of electricity. Table 3 shows the yearly emissions expected from the two alternative power sources. The costs associated with these emissions are also presented. These costs are based on National Park Service guidelines and are as follows: $14/ton for CO2; $0.75/lb for SO2; $3.40/lb for NOx. The PV hybrid will produce half the CO2 emissions and far less of the other pollutants. The costs associated with these emissions amount to $590/yr for the line extension case compared with $177/yr for the PV hybrid system.

TABLE 3. Annual Emissions from the Two Alternative Power Systems

<table>
<thead>
<tr>
<th>Emission</th>
<th>Line Extension</th>
<th>PV Hybrid System</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>14.9 tons</td>
<td>7.3 tons</td>
</tr>
<tr>
<td>SO2</td>
<td>100.5 lbs</td>
<td>0.0 lbs</td>
</tr>
<tr>
<td>NOx</td>
<td>90.0 lbs</td>
<td>22.0 lbs</td>
</tr>
<tr>
<td><strong>Annual Cost</strong></td>
<td><strong>$590</strong></td>
<td><strong>$177</strong></td>
</tr>
</tbody>
</table>

These are initial estimates of LCC and system size. All of these values represent worst-case costs. Wherever assumptions needed to be made, the most conservative estimates were always chosen.

Sincerely,

Andrew L. Rosenthal
Program Manager
November 17, 1997

Mr. Mark Jensen, Risk Coordinator
Utah Division of Parks and Recreation
1594 West North Temple,
Salt Lake City, Utah 84114-5610

Dear Mark,

RE: SAFETY ISSUES AT GOBLIN VALLEY STATE PARK

Thank you for requesting assistance from the Division of Risk Management with regards to safety issues at Goblin Valley State Park. It was pleasurable to tour the facility with the Southeast Regional manager Max Jensen, Park manager Blaine Luke, with landscape architect Maw Jenn, and with yourself. I think we were able to arrive at some substantive ways to both upgrade safety as well as ADA issues at the park. Following are my recommendations regarding safety issues at the park.

Recommendations:

- A 42" high guardrail should be provided where the park is highly developed and is receiving high visitor usage, such as at the overlook picnic shelter.

- Designers and managers must determine which of the elements at the site are “basic to the recreational experience being offered”, and provide a degree of accessibility appropriate for the nature of the experience. Not all parts of the park must be accessible, but a representative trail of “moderate accessibility” in keeping with the “Natural setting” or even semi-primitive “back-country” could be constructed down into the valley. Such a trail would provide greater accessibility for the disabled and at the same time serve to channel visitors safely from the overlook down into the valley.
Mark Jensen, Div of Parks & Rec
Goblin Valley, Nov. 17, 1997
Page Two

- The south and east sides of the overlook should be backfilled and have the slope stabilized so as to prevent further undercutting erosion beneath the concrete pad.

- The mansard shingles on the overlook picnic shelter should be raised to prevent head injuries.

Thanks again for your assistance and for the cooperation of your agency’s staff. If you have any questions regarding the above please contact me at 538-9586

Sincerely,

[Signature]
Robert Binns, CSP, ALCM
Risk Management Specialist

CC: Max Jensen, Southeast Division Manager
    Blaine Luke, manager of Green River & Goblin Valley State Park
    Maw Jenn, Parks and Recreation landscape architect
December 15, 1998

Dear Risk Management Client:

The activities and exposures of the clients we serve are varied and unique. Risk Management welcomes the opportunity to focus training on the unique problems and issues of individual clients. Attached is a list of Risk Management training programs which can be individualized for each client. We also continue to sponsor quarterly seminars and programs about court decisions, laws, and other risk issues of general interest.

A team of Risk Management Risk Control Consultants has been assigned to each client. This team will consist of one person from our physical liability unit, one person from the non-physical liability unit and one person from the Worker's Compensation/Americans with Disabilities Act unit. This team will provide the primary risk control contact between your agency and the Division of Risk Management. As your needs for training and consultation arise, these individuals will be able to provide resources to meet your needs. A list of the individuals currently assigned to your agency is attached.

In the next few months, this group will request an opportunity to meet with your internal Risk Coordinator and Risk Control Committee. The purpose of this meeting will be to begin the process of determining with you your risk control training needs. The team will also work with you to create your Risk Control Committee or help make it more active and effective. In the meantime, please feel free to contact any of these individuals if you need assistance.

The self inspection survey is an annual report that is due this year on May 1, 1999. We are requesting that each agency summarize the "no" responses by location number, question number, problem identified, action plan, responsible person and estimated completion date. Submission of the summary report will qualify for the premium credit. For your convenience, attached is a summary sheet format that you may use. The criteria for premium credits are as follows for FY 1999:
1. 7% credit will be given for completion and submission of the self inspection summary report by May 1, 1999.

2. 5% credit will be given for having 3 or more Risk Control Committee meetings during FY 1998-99.

3. 3% credit will be given for completed & submission of the Utah Special Security Facilities survey to Risk Management by May 1, 1999.

We hope that, by making these changes, we will be able to better meet your needs and help you reduce the number and cost of losses.

Sincerely,

Alan Edwards
State Risk Manager
NOTE: THIS PACKET CONTAINS SELF INSPECTION FORMS FOR A VARIETY OF OCCUPANCIES. RISK MANAGEMENT ENCOURAGES THE USE OF EACH TYPE OF FORM WHERE APPLICABLE. THE APPROPRIATE FORMS SHOULD BE FILLED OUT FOR EACH SITE OR LOCATION. AGENCIES MAY MODIFY THE FORMS IF SUCH MODIFICATION ADDRESSES THE NEEDS OF THE FACILITY MORE EFFECTIVELY. THE FOLLOWING BASIC FORMS ARE ATTACHED:

GENERAL SURVEY
LIABILITY AND ADA
VEHICLE MAINTENANCE GARAGE
WORKSHOP
LABORATORIES
CAFETERIA/KITCHEN
PLAYGROUND
ATHLETIC PROGRAM
SEISMIC
SECURITY
GOBLIN VALLEY STATE PARK
VISITOR SURVEY

This survey has been given to you as a part of the Goblin Valley State Park Resource Management Plan. The information obtained will be used to better manage and operate this park in the future.

Section 1 - Park Visit Information

This section will provide us with information on your stay and the activities you enjoy in the park.

(1) Including this visit, how many times have you been to Goblin Valley State Park in the past twelve months?

☐ 1-2  ☐ 3-4  ☐ 5-6  ☐ 7-10  ☐ More than 10

(2) How many people were in your group on this visit?

☐ 1-2  ☐ 3-5  ☐ 6-8  ☐ 9 or more

(3) Was Goblin Valley State Park your primary destination?

☐ Yes  ☐ No

If YES, go to #5

(4) If No, what was your primary destination? (Please Specify)

(5) On this visit, how much time did you and your group spend in Goblin Valley State Park?

☐ Fewer than 2 hours  ☐ Overnight - 1 night
☐ 2 to 4 hours  ☐ Overnight - 2 nights
☐ 4 to 8 hours  ☐ Overnight - 3 nights or more

(6) Referring to the map on the next page, please check below any other areas you have visited or are planning to visit on this trip.

☐ Does Not Apply  ☐ Wild Horse Creek Area
☐ Little Wild Horse Canyon Area  ☐ Chute Canyon Area
☐ Temple Mountain Area  ☐ Molly's Castle
☐ Crack Canyon Area

(20) Please indicate your highest level of education completed.

☐ 8th grade or less  ☐ Some College  ☐ Bachelor Degree
☐ High School  ☐ Associate Degree  ☐ Graduate Degree

(21) What was the pre-tax income for your household in 1997? (Include spouse or significant other)

☐ Under $10,000  ☐ $50,000-$59,999
☐ $10,000-$29,999  ☐ $70,000-$99,999
☐ $30,000-$49,999  ☐ More than $100,000

(22) Please comment on how you think your park experience and satisfaction could be improved.

Please place the survey in one of the boxes provided in the park or use the attached postage paid envelope to mail it to us. Drop boxes are located near the overlook parking area, the campground restrooms, and at the entrance station. Individual responses from this survey will remain anonymous.

Thank You for participating in this survey! The Utah Division of Parks and Recreation mission is to "enhance the quality of life in Utah through parks, people, and programs". Your input will enhance the efforts of the state park system to better serve your needs. If you are interested in participating in or receiving information on the planning process, please write your name and address below.

Name___________________________
Address_________________________
City_________________ State_______ Zip_______
(16) Utah State Parks often faces the challenge of balancing visitor use & development with resource conservation for future generations.

Using the scale below, please rate your level of agreement or disagreement with each of the following statements by circling the appropriate number.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel development should be limited in Goblin Valley State Park (GVSP)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I feel a natural setting should be maintained, similar to the way it is now, in GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I feel that visitor impacts should be reduced in GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I support restrictions on activities near the Goblins in GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I support the development of designated trails in GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I support a larger parking area for day visitors in GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I feel the number of campsites should be increased in GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I feel more picnic areas should be developed in GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I believe that more visitors should be encouraged to come to GVSP</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

Section 3 - Demographic Information

This information will help us understand who visits Goblin Valley State Park.

(17) Age
(18) Gender  □ Male  □ Female
(19) Where do you reside?

City __________________________  State __________________________

(7) During this visit, did you camp in any of the areas referred to in the vicinity map below? Please check all that apply.

- □ Does Not Apply
- □ Little Wild Horse Canyon Area
- □ Temple Mountain Area
- □ Crack Canyon Area
- □ Wild Horse Creek Area
- □ Chute Canyon Area
- □ Mollly's Castle
(8) What was your primary reason for visiting Goblin Valley State Park today? (CHECK ONLY ONE)

☐ Camping  ☐ Mtn Biking  ☐ Off-Highway  ☐ Geologic  
☐ Picnicking  ☐ Photography  ☐ Vehicle Use  ☐ Study  
☐ Hiking  ☐ Sight-seeing  ☐ Nature Study  
☐ Other (Please Specify):

(9) What types of recreational activities did you participate in during your visit to Goblin Valley State Park? (Check all that apply)

☐ Camping  ☐ Mtn Biking  ☐ Off-Highway  ☐ Geologic  
☐ Picnicking  ☐ Photography  ☐ Vehicle Use  ☐ Study  
☐ Hiking  ☐ Sight-seeing  ☐ Nature Study  
☐ Other (Please Specify):

(10) What types of recreational activities would you like to participate in at Goblin Valley State Park but are not currently available? Please Specify Below:

(11) Did you stop in Green River or Hanksville, Utah for any services, supplies, or information? If YES, please check the appropriate box(es).

☐ Green River  ☐ Hanksville

If NO, go to Section 2 on the next page.

(12) About how much money did you spend in either of these towns on the following items:

Lodging (camping, motel, etc.) .................................. $ __________
Food and Beverage (restaurants, fast food, mini-marts, etc.) .................................. $ __________
Travel (gas, bus, etc.) .................................. $ __________
Recreational Equipment (rentals, etc.) .................................. $ __________
Other (specify) .................................. $ __________
Total .................................. $ __________

(13) From the list below, please circle the appropriate number rating your satisfaction and the importance of each item during this visit.

<table>
<thead>
<tr>
<th>SATISFACTION</th>
<th>IMPORTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

a) Picnic Area .......... 1 2 3 4 5 .......... 1 2 3 4 5
b) Restrooms .......... 1 2 3 4 5 .......... 1 2 3 4 5
c) Showers .......... 1 2 3 4 5 .......... 1 2 3 4 5
d) Parking .......... 1 2 3 4 5 .......... 1 2 3 4 5
e) Employee Helpfulness .......... 1 2 3 4 5 .......... 1 2 3 4 5
f) Visitor Information .......... 1 2 3 4 5 .......... 1 2 3 4 5
g) Directional Signs .......... 1 2 3 4 5 .......... 1 2 3 4 5
h) Availability of Shade .......... 1 2 3 4 5 .......... 1 2 3 4 5
i) Hiking Opportunities .......... 1 2 3 4 5 .......... 1 2 3 4 5
j) Lack of Litter .......... 1 2 3 4 5 .......... 1 2 3 4 5
k) Campsite Condition .......... 1 2 3 4 5 .......... 1 2 3 4 5
l) Campsite Location .......... 1 2 3 4 5 .......... 1 2 3 4 5

(14) Please tell us how we could improve your satisfaction with any of the items above. Please specify the item(s).

(15) We are interested in the areas, other than those on the vicinity map on page 2, that you have visited on this trip. Please tell us of any other places you have visited or are planning to visit on this trip.
Emery County
Personal Income and Earnings

- Total Personal Income
- Total Earnings
Emery County - Major Economic Sectors

**Employment**
- Government (18.10%)
- Agriculture (10.99%)
- Mining (19.25%)
- Construction (5.47%)
- Manufacturing (1.39%)
- Trade (13.92%)
- TCPU (16.72%)

**Earnings**
- Government (13.36%)
- Agriculture (2.88%)
- Mining (35.51%)
- Construction (4.08%)
- Manufacturing (1.57%)
- Trade (5.37%)
- TCPU (28.93%)
Modification Proposal for Main Goblin Valley Overview

4,400 cu cut and fill--lowering and expansion of parking area grade
11 new concrete pads; 11 picnic shelters, grills, and tables
Remodel or replace existing restroom--extend water supply
Improved turn-around and bus parking; ADA paved trail; new signage

GOBLIN VALLEY

SCALE: 1" = 100' = 0"