



## Timpanogos Cave National Monument Long-Range Interpretive Plan



# Timpanogos Cave National Monument Long-Range Interpretive Plan

December 2010

Prepared by:  
Timpanogos Cave National Monument  
Ecos Environmental Design, Inc.  
Faye Goolrick, Certified Interpretive Planner

National Park Service  
U.S. Department of the Interior

# Table of Contents

## Introduction

The Long-Range Interpretive Plan  
Executive Summary of Recommendations

## Foundation for Planning

Historical Background	5
Legislative Background	6
Purpose and Significance Statements	7
Primary Interpretive Themes	9
Visitor Experience Goals	12
Visitor Data	14
Other Planning Considerations	17

## Existing Conditions

Pre-visit Information	19
Arrival Experience	20
Sites and Facilities for Interpretation	20
Interpretive Programming	21
Interpretive Media	23
Media Assets	26
Partnerships	28
Issues and Influences	28
	30

## Recommendations

Building Interpretation for the Future	33
New Facilities Planning	34
Personal Services	35
Non-Personal/Interpretive Media	39
Partnership and Volunteer Needs	43
Research Needs in Support of Interpretation	46
Staffing Needs	48
Facilities and Equipment Needs for Interpretation	48
Implementation Plan	49
	51

## Appendices

Appendix A: Legislation	55
Appendix B: Planning Team	56
Appendix C: Schematic Drawing of Proposed Interagency Center	57
	59



## Introduction

Timpanogos Cave National Monument, located in American Fork Canyon, Utah, protects and preserves a series of three dramatic limestone caves reached by a strenuous 1,100-foot climb from the canyon floor up the northern slope of Mt. Timpanogos. The caves, joined together by tunnels blasted in the 1930s, contain many types of spectacular, colorful formations such as helictites and anthodites. To access the caves visitors hike a 1.5-mile paved trail through native ecosystems that vary with the elevation. This winding, scenic route offers panoramic views of the Wasatch mountain range and valley at every turn. The 250 acres set aside as the national monument are surrounded by nearly one million acres of the Uinta-Wasatch-Cache National Forest.

In 2009, over 135,000 people came to visit Timpanogos Cave National Monument during its six-month operating season from May to October. Roughly 75% of these visitors made the climb to the caves. The remainder – about 33,750 people – stayed at the visitor center or used picnic facilities in the monument. With the hike to the cave and cave tour typically taking 3.5 hours, the visitors who stayed below (primarily young children, their caregivers, and older adults with health restrictions) had at least that long to explore other aspects of the monument and the surrounding national forest. However, since the monument currently has a “temporary” visitor center (now almost 20 years old), limited parking and grounds, and a limited interpretive staff available for visitors who do not hike to the caves, there are few recreational and/or interpretive opportunities for those who have to wait.

With visitation at the monument increasing by some 10,000 people a year between 2007 and 2009, park management and staff are understandably concerned about visitor safety, crowding and damage to the resource, and optimum visitor experiences reflective of the high standards of a National Park Service site.



Beginning of cave tour

Architectural design for a long-awaited new visitor center began anew in April 2010. Construction of the new facility has been approved for the current NPS five-year funding cycle. The new visitor center, to be located just east of the current temporary facility, could be open for visitor use 2016. In order to maintain a small environmental footprint within the narrow confines of the canyon (and to protect visitors from rock slides), the new visitor center will be smaller in square footage than the existing temporary facility. However, the new design is expected to maximize space and be more efficient and functional for visitor needs.

Concurrently with the planning for a new Timpanogos Cave National Monument Visitor Center, the monument and the Uinta-Wasatch-Cache National Forest are engaged in collaborative planning for a new interagency center to be located in the city of Highland a mile outside the canyon. The interagency center is expected to house both Forest Service and NPS administrative offices and to offer one-stop visitor information and interpretive services for public recreational lands in American Fork Canyon.

Although architectural design planning is underway for both the monument visitor center and the interagency center in 2010, the interagency center has not yet been approved for construction funding. Unless the project is fast-tracked in the next year or so, the facility is unlikely to open its doors until 2017 at the earliest.



Park rangers provide input during the LRIP Foundations Workshop

## **The Long-Range Interpretive Plan**

Within the planning hierarchy of the National Park Service, a Long-Range Interpretive Plan provides guidance for a site's interpretive programming – its key messages, stories, and desired visitor experiences – for the next ten to twelve years. Typically, the plan develops primary interpretive themes, describes visitor experience goals, and recommends a wide array of interpretive services, media, programs, and outreach activities. Together with an Annual Implementation Plan and an Interpretive Database, the Long-Range Interpretive Plan completes a park's Comprehensive Interpretive Plan (CIP). The goal of the interpretive planning process is to guide interpretive staff in developing a cost-effective, tightly focused, high-quality interpretive program that engages all audiences, enhances visitor experiences, and achieves management goals.

Initial long-range interpretive planning efforts for Timpanogos Cave National Monument began almost ten years ago, as the interpretive staff looked ahead to the new visitor center proposal and sought interpretive planning guidance from the NPS Harpers Ferry Center. The first interpretive planning workshop with stakeholders and staff was held in March 2002. However, due to a series of personnel changes at the monument, the planning effort was delayed. A second stakeholder workshop was held in May 2005, and a draft long-range interpretive plan was prepared, though never finalized, by July 2005.

The monument staff renewed the interpretive planning process in spring of 2010, drawing on the services of outside consultants under contract to Harpers Ferry Center. A new stakeholder workshop in March 2010 reviewed and revised the foundational aspects of the 2005 plan, including interpretive themes and desired visitor experiences. Additional stakeholder workshops in August 2010 addressed recommendations for short-, mid-, and long-term interpretive programming and services at the monument, as well as, at the proposed interagency center.

Working with monument staff, the consultant team also developed an Annual Interpretive Plan and Interpretive Database, thus completing Comprehensive Interpretive Plan for Timpanogos Cave National Monument.

Barring legislative changes or major new research, the foundational elements expressed in this plan – purpose, significance, interpretive themes, and visitor experience goals – will remain constant over the life of the plan. Specific recommendations about media and programs may need to be updated as staffing, funding, technology, or resource conditions change. Further design documents will need to be prepared to implement some of the recommendations in this plan.

## Executive Summary of Recommendations

As the interpretive planning team looked toward the future of interpretive programming at Timpanogos Cave National Monument, several key factors were identified that would shape and influence interpretation at the monument in the coming decade. First of all, a new NPS visitor center in the canyon will become a reality – although it will not add significant square footage for interpretive staff, media, or programming. No other facility changes or expansions are anticipated within the monument in the next ten years.

The future of the new interagency visitor center in Highland is less certain, depending upon the level of political and financial support in the coming decade. However, regardless of the status of the monument's facilities, its visitor base will continue to fluctuate based on the local economic, social, and weather conditions. Annual visitation to the cave system will be limited by cave tour group sizes and parking availability, so future growth will need to occur with facilities and programs outside the cave system.

To continue the work of building a unified, comprehensive interpretive program, the planning team proposes the following recommendations for short, medium, and long-term planning.

First, the interpretive team will need to provide planning and supervisory guidance in creating thematic interpretive exhibits within the monument's proposed new visitor center and the exterior spaces immediately adjacent to the visitor center. The plan also recommends creating an innovative interpretive playground for young visitors who do not hike to the caves. In addition, the monument needs an overhaul of its wayfinding signage.

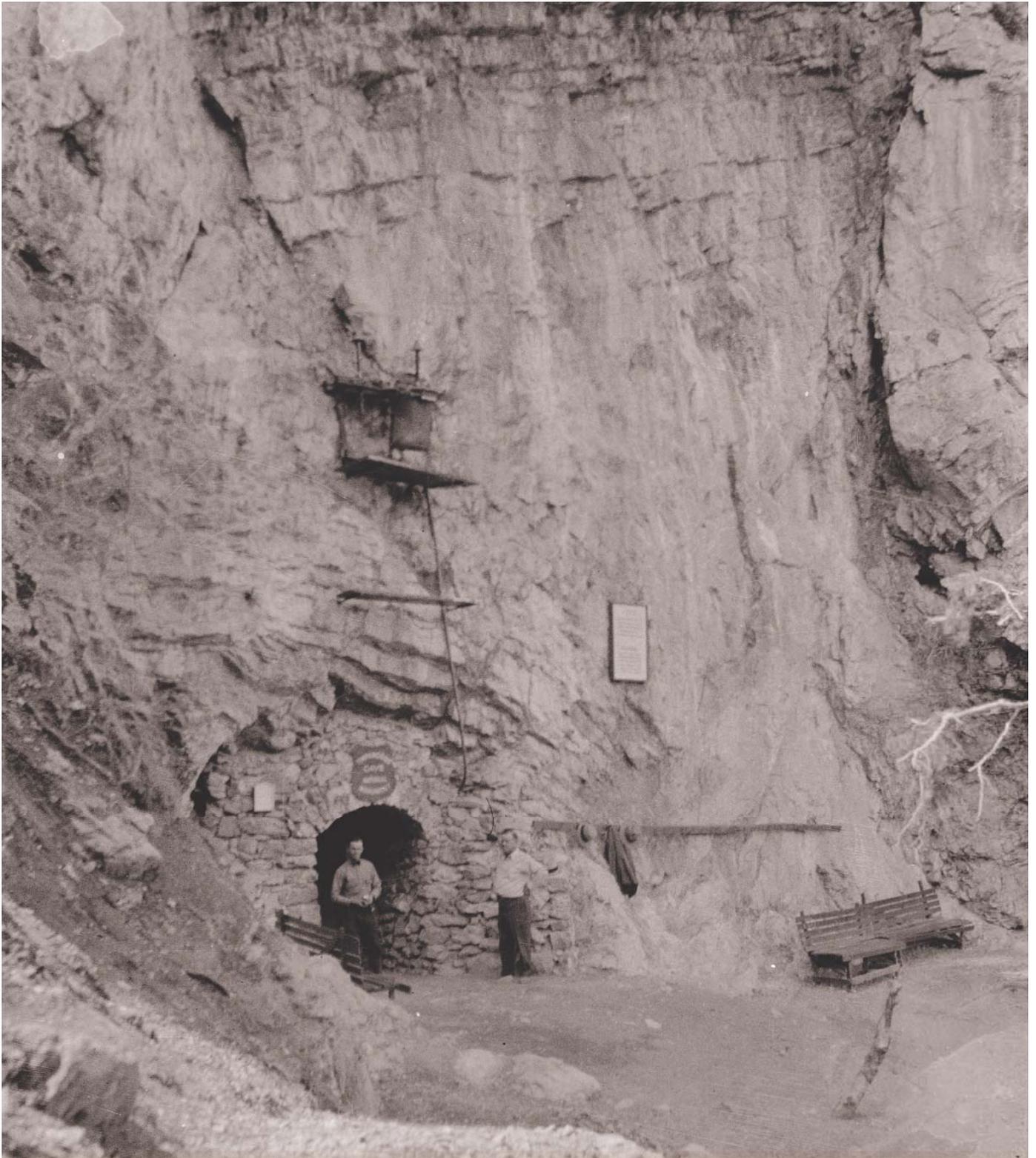
Should the new proposed interagency visitor center become viable, the monument's interpretive team should be prepared to provide planning and supervisory guidance in creating thematic interpretive exhibits and programming at the center. The team should strive to have the current interagency planning process encompass the new center's thematic content, design concepts, and schematic design. The overarching interpretive message of the interagency visitor center was identified as "Stewardship and Sustainability," drawing on the monument's primary theme topics of cultural history, preservation and stewardship, recreation, and personal safety while also integrating sustainability and USDA Forest Service messages as appropriate. The interpretive team will also be charged with providing planning and supervisory guidance regarding visitor experiences on the grounds and within the multipurpose room of the interagency site.

In reviewing personal services at the monument, the planning team recommends prioritizing interpreters' time to enable more outside-the-cave programming (cross-training staff as necessary for greater versatility); committing to increasing interpretive staff in the coming years to provide more monument-wide interpretive coverage as visitation continues to increase. Specific programming should be developed for the upcoming 90<sup>th</sup> anniversary of the monument in the 2012 season, as well as for the NPS Centennial in 2016; and expanding education and outreach. More professional development for interpreters is also recommended.

Non-personal/interpretive media recommendations include creating a comprehensive interpretive wayside plan for the entire monument; upgrading core print materials; and upgrading audiovisuals and exploring new media opportunities.

This plan also recommends several important initiatives in community outreach, including the establishment of a dedicated Friends group for the Timpanogos region.

Regarding staffing, the planning team recommended creating a permanent position for the supervisory interpretive ranger and adding an administrative assistant for interpretation. In addition, the team recommended increasing the number of seasonal employees devoted to interpretation, so as to allow a greater ranger presence, both roving and in programming, at designated sites within the monument. The team would also like to see the staff have use of a CNG vehicle for interpretive outreach and programming.



## Foundation for Planning

## Historical Background

The caves of the Timpanogos Cave System are at least one million years old. But the story of their discovery and protection by concerned local citizens is a strikingly modern example of environmental stewardship that began nearly 100 years ago.

In 1887, a local logger named Martin Hansen discovered an opening into the mountainside, now known as Hansen Cave. Over the next few years, Hansen built a rough trail to the cave and charged a small fee to lead people to its astounding underground formations and hidden pools. During this time another group of men mistook the cave's calcite flowstone for onyx, a valuable building stone – and within a short time, some of the cave's striking formations were removed and carried away for commercial gain. By the early 20<sup>th</sup> century, Hansen Cave's natural beauty was altered by the mining activity.

Around 1913, James Gough and Frank Johnson discovered Timpanogos Cave, although they concealed its whereabouts. In 1921, a group of local explorers rediscovered this cave near Hansen Cave. Fearing destruction by others seeking profitable stone and minerals, the group kept the discovery secret until the preservation of the caves was assured. Around the same time, yet another group of explorers discovered Middle Cave. In record time, President Warren G. Harding signed a Presidential Proclamation establishing Timpanogos Cave National Monument on October 14, 1922.

During its early years, the new monument was administered by the U.S. Forest Service. The Forest Service signed a permit for the local Timpanogos Cave Committee to build a trail from the base of American Fork Canyon to the caves, construct two tunnels linking the three caves, and

run tours through the linked caves. The Timpanogos Cave Committee continued to operate the caves until 1946, nearly 13 years after President Franklin D. Roosevelt transferred management of all the nation's monuments and memorials to the National Park Service in 1933.

## Legislative Background

President Warren G. Harding proclaimed Timpanogos Cave a National Monument on October 14, 1922, under the authority of the Antiquities Act. The proclamation states that Timpanogos Cave “is of unusual scientific interest and importance and it appears that the public interests will be promoted by reserving as much land as may be necessary...” for its protection.

The monument acreage was established from unsurveyed land within the Uinta National Forest in the state of Utah. The 1922 proclamation states that the lands set aside through the establishment of Timpanogos Cave National Monument “shall be the dominant reservation and any use of the land which interferes with its preservation or protection as a National Monument is hereby forbidden.”

On June 10, 1933, Executive Order No. 6166 placed all national monuments under the Department of Interior. On July 1 of the following year, Timpanogos Cave National Monument was placed under the jurisdiction of the National Park Service (NPS). From this point forward, Timpanogos Cave NM has been guided by the NPS authorizing legislation of 1916, known as the “Organic Act,” and all subsequent agency management policies and regulations.

On March 27, 1962, President John F. Kennedy issued Proclamation 3458 to “redefine the external boundaries of the

monument in conformity” with a land survey. The monument’s land area and governance have remained unchanged since that time.

## Purpose and Significance Statements

The National Park Service mission is to preserve natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of current and future generations. The park service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

Before recommending specific actions, long-range interpretive planning addresses fundamentals such as why the park was established and what conditions should exist for visitor enjoyment, understanding, and appreciation of the resource.

## Purpose Statement

Park purpose statements are based on park legislation and legislative history, other special designations, and National Park Service policies. Purpose statements provide the foundation for park management and use.

The purpose of Timpanogos Cave National Monument is:

- To protect the Timpanogos Cave System to assure preservation of natural resources of scientific interest and importance in such manner as serves the public interest; and
- To conserve the natural and cultural resources of the monument and the cave system and to provide for the public use and enjoyment of the resources by current and future generations.



Hansen Cave Lake

## Significance Statements

Park significance statements capture the essence of the park’s importance to the nation’s natural and cultural heritage. Significance statements do not inventory resources; rather, they describe the park’s distinctiveness and help to place it within regional, national, and international contexts. They are the basis for the development of the primary interpretive themes and program.

Drawing on the monument’s earlier interpretive and management planning efforts, the following statements summarize the significance of Timpanogos Cave National Monument as reviewed and refined by the stakeholder workshops in 2010:

- The Timpanogos Cave System consists of three natural caves connected by man-made tunnels and contains a large variety of distinctive cave formations. Cave features include previously unnamed formations, dramatic and rare colors, and unusual combinations of delicate helictites and anthodites in quantities not found in other developed caves managed by the National Park Service.
- The Timpanogos Cave System is a living geological and biological laboratory that holds the allure of new information. The unusual processes that formed the Timpanogos Cave System have led to conflicting theories of its origins.
- The story of the preservation and protection of the Timpanogos Cave System in the early 20<sup>th</sup> century is a unique and remarkable example of visionary, determined efforts by local citizens to preserve an extraordinary natural resource under threat of mining.
- The 1.5 mile-long trail to the cave ascends more than 1,000 feet, providing one of the best exposed, most accessible, and most varied geologic records in the nation, as well as a hiking experience that immerses visitors in the natural setting, wildlife, and vegetation of one of the region’s most scenic vistas.
- Over the centuries many local populations, from early native peoples to present-day communities, have explored, identified with, and sometimes sought to use the resources of the canyon and caves for cultural traditions, resources, retreat, and recreation.



View of American Fork Canyon from cave trail

## Primary Interpretive Themes

Primary interpretive themes are those ideas or concepts about a site that every visitor should understand. Primary themes convey a park's nationally significant resource meanings and values to the public. Primary themes provide the foundation for interpretive programs and media at the park.

Interpretive themes convey the fundamental ideas that are critical to a visitor's understanding of the park's significance. All interpretive efforts should relate to one or more themes, and each theme should be addressed in some manner in the overall interpretive program.

These six primary interpretive themes draw on the monument's earlier interpretive planning efforts and were reviewed and refined by the 2010 workshop stakeholders and planning team. (Although numbered for easy reference, these themes should be viewed as equal priorities for interpretation of the monument as a whole.)

### 1. Primary Theme: Geology

Complex geological forces created and continue to form the jagged peaks, water-eroded limestone, and awe-inspiring living system known as Timpanogos Cave National Monument. This diverse environment provides the opportunity for personal connections through cave science, research, and new discoveries.

#### Sub-themes:

- The caves tell the story of the ancient geologic history of the region, including the stories of geologic faults and plate tectonics, mountain uplift, glaciers, and the formation of the Great Basin.
- Cave development (speleogenesis) and cave formations (speleothems) demonstrate the power of water to erode and shape earth's landscapes over time.
- By walking the cave trail, visitors can observe Pre-Cambrian to Mississippian-aged rocks and view the steep-walled, rapidly eroding canyon.

### 2. Primary Theme: Natural History

Timpanogos Cave National Monument and American Fork Canyon, located along the eastern edge of the Great Basin, illustrate the interconnectedness of natural processes such as the water cycle, carbon cycle, air quality, and climatological and ecological changes. The cave system and the narrow, rocky canyon walls provide habitat for a variety of plants and animals, demonstrating the diversity, adaptability, and complexity of nature.

#### Sub-themes:

- Cave life forms (plants and animals) are fascinating, unique species displaying remarkable adaptability to their surroundings.
- By walking the cave trail, visitors can easily see and experience the different ecozones, plant succession, microclimates, and wildlife of this unique place.
- Caves and their environs are slowly changing due to the effects of water, wind, geological forces, and other natural processes.
- Human consumption of fossil fuels has altered the carbon cycle and is changing the global climate, which in turn affects the caves, the park ecosystems, and the world.

### 3. Primary Theme: Cultural History

American Fork Canyon and the Timpanogos Cave System have provided food, water, shelter, and space for generations of humans, from early native peoples to explorers, trappers, pioneers, miners, loggers, railroad entrepreneurs, and contemporary Americans who continue to choose this area as their home. Our growing awareness of human influences on the region leads to opportunities for understanding our relationship with the land and these fragile resources.

#### Sub-themes:

- Throughout history, many different people lived in and used American Fork Canyon. These people include Paleo-Indians, Archaic peoples, the Fremont Culture, and the Ute tribes. Each of these groups lived in and used the area to support their lives and families.
- Explorers of European descent, from the Spanish expedition of Escalante and Dominguez in 1776 to Frémont’s explorations in the 1840s, played an important role in non-Indian settlers’ migration into this region.
- Early 19<sup>th</sup>-century trappers seeking beaver fur for American and European markets helped open Utah to further settlement by exploring the many trails and mountain passes along the Intermountain West and the Wasatch Front.
- Nearly 70,000 Mormon pioneers arrived and settled in the Great Salt Lake Valley between 1847 and 1869; as Mormon communities grew, residents used the natural resources of American Fork Canyon to build homes and businesses that enabled them to survive and prosper.
- Early exploration and curiosity led to the discovery of the first cave in the Timpanogos Cave System in 1887 and to subsequent discoveries in 1913 and 1921.
- Over the past 150 years, mining, logging, and other modern uses, including recreational visitation, have left their marks on the cave system, the canyon ecosystems, and the surrounding forest.

### 4. Primary Theme: Preservation and Stewardship

Grassroot citizen efforts by Utah Valley residents, spurred by mining impacts in Hansen Cave, led to the establishment and early operation of Timpanogos Cave National Monument to protect Timpanogos and Middle Caves, as well as protect Hansen Cave from further damage. The legacy of these early preservationists is one of foresight, hard work, and dedication to the common good. The Monument, now part of the National Park System, continues this tradition of preservation and shared stewardship of valuable resources.

#### Sub-themes:

- A visit to Timpanogos Cave National Monument offers each individual the opportunity to become a good steward of cave resources, our nation’s natural treasures, public lands, and recreational areas.
- Modern stewardship efforts by the NPS, the Forest Service, and individual visitors help extend the legacy of the monument’s founders.
- Conservation and preservation of natural areas such as the monument and the surrounding national forest offers not only aesthetic and recreational benefits, but watershed and resource protection as well.

- Caves are unique resources that provide opportunities for research of little-known scientific concepts, contributing to our knowledge base for the future protection of these ecosystems.

## 5. Primary Theme: Recreation

Visitors' invigorating physical interaction with this recreational setting, combined with aesthetic response to natural surroundings, encourages a greater appreciation for the immediate environment of the site, as well as the larger natural world.

### Sub-themes:

- The monument and surrounding national forest provide numerous opportunities for many different kinds of recreation.
- This unique site, with its combination of scenic hiking and cave exploration, provides unusual opportunities for personal challenge in an untamed natural environment.
- Recreational use of the monument and the surrounding forest provides visitors an opportunity to practice stewardship through recreation and to teach their children environmentally responsible behavior such as "Leave No Trace" and "Tread Lightly" when they visit public lands.
- The monument and surrounding national forest provide numerous opportunities for parents and children to connect or reconnect with nature, de-stress from their urban environment, and gain a better understanding of the benefits of their natural world.

## 6. Primary Theme: Personal Safety Amid Natural Hazards

Full appreciation of a natural environment requires identification and basic understanding of natural occurrences. Such an approach requires judicious attention to matters ranging from special instructions and equipment needed for hiking to hazards that are different from (but not necessarily more dangerous than) those encountered in urban settings.

### Sub-themes:

- Increasing numbers of visitors arrive at the monument with little experience or knowledge about the routine hazards of natural areas, including rough or steep terrain, cliffs or drop-offs, rockfall hazards, heat exhaustion, wildlife, insects, abrupt weather changes, etc. – and therefore, personal safety information is extremely important.
- Visitors need education in advance of arrival about the rigors of the trail and cave tour, appropriate gear and clothing, and potential stay-below activities for group members who choose not to make the hike.
- Visitors will gain awareness that as visitors to a natural area, they must remember to share their experience with wild creatures from tiny rodents to rattlesnakes, soaring raptors, and the occasional mountain lion.
- Visitors expect NPS rangers and volunteers to educate and inform them on safety matters, but they also come on outings to relax, unwind, and enjoy nature without the "rules" of modern life.
- Visitors need opportunities to learn about cave preservation, safety, and caving techniques in a safe and controlled environment.

## Visitor Experience Goals

What kind of experiences do visitors want when they come to Timpanogos Cave National Monument? When asked, most visitors provide generic answers: they want to have fun, to see the sights, to learn about the area, or simply to enjoy the outdoors. To visitors, having an “experience” at a site refers to what they did – not necessarily what they thought, felt, learned, or took away with them as inspiration for the future.

To interpreters seeking to develop high-quality programs, however, the totality of visitors’ experiences at the site includes all those perceptions: not merely what visitors do on site, but what they learn, feel, and take away from the experience. Visitor experience goals describe the desired intellectual, emotional, experiential, and behavioral outcomes resulting from experiences visitors have when visiting the site.

**Experiential goals** address what we want people to **experience** as they explore the places and stories associated with the monument.

**Cognitive or knowledge goals** describe what we want visitors to **know** about the places, people, and events along the monument.

**Emotional goals** refer to what we want visitors to **feel** about the stories and places associated with the monument.

**Behavioral goals** relate to what we want people to **do** as a result of being inspired by the places and stories associated with the monument.

The following visitor experience goals draw on goals identified in the earlier long-range planning efforts, as well as the workshops in 2010. These goals should apply, with variations as appropriate, to Timpanogos Cave National Monument visitors of all ages and abilities, including those with visual, auditory, mobility, or cognitive impairments.

### Experiential Goals:

- Visitors want to have a “real” cave experience. Even if the experience is provided as a virtual tour, visitors want to explore the caves, experience the wonders of an underground world, and feel that they have had an adventure.
- Visitors want age and ability appropriate visitor activities in and around the visitor center, including opportunities with options to touch, play, and interact with nature, while companions hike the trail.
- Visitors want opportunities to access a variety of interpretive media and to interact informally with park rangers, in addition to listening to rangers’ formal presentations on site.
- Visitors want a year-round experience with some degree of access to the monument, including



Park ranger leading a cave tour



Helictites, cave formation

virtual visits and interactive experiences via the web, media presentations such as podcasts and films, and ranger outreach into the community. Opportunities for these experiences are especially important during the winter months when the cave system is closed.

- Visitors want a monument experience that is safe, well-marked without confusing directions, and reasonably comfortable with adequate facilities (restrooms, waiting areas, concessions, parking, etc.).

- Educational-groups want a curriculum-based experience derived from cave, canyon, and forest ecology both on site at the cave and in their classrooms.
- Visitors want to learn about new cave research.
- Visitors want readily available visitor-oriented public information (including maps) about the cave, park activities, and interpretive programs.
- Visitors want to learn about other recreational activities in the region.

**Cognitive/Knowledge Goals:**

- Visitors want to hear the stories of people in the past who have depended on, used, explored, and protected the canyon.
- Visitors want to learn about the geological and natural history of the caves, the canyon, and the forest, as well as human interventions (mining, tunneling) into the cave system.
- Visitors want to learn about the biological diversity of plants and animals living in and around the caves, the monument, and the canyon.

- Visitors want to learn about what is being done at the monument to reduce the use of fossil fuels and the carbon footprint. Visitors also want to know how they can do the same in their personal lives.

**Emotional Goals:**

- Visitors want to have an inspiration experience in nature, leaving urban settings behind as they enjoy the sights, sounds, and feelings of the canyon, the trails, and the cave.
- Visitors want to feel reassured that the monument and its natural resources are well-managed,



The Great Heart cave formation

without undue crowding or damage to the caves or the surrounding area.

- Visitors want to contemplate, relax, and enjoy monument resources without pressure.
- Visitors want to feel their own personal sense of discovery while visiting the caves.

**Behavioral Goals:**

- Visitors want a monument experience that will inspire and teach them and their children how to be better stewards of the monument, the caves, the forest, and the natural beauty of wild landscapes.
- Visitors want guidance on safe behavior while visiting the monument, especially along the cave trail, in the cave, and along the river.
- Visitors want to understand the mission of the National Park Service, support the preservation of the monument’s resources, and get involved with preservation and interpretation of the monument.

**Visitor Data**

Visitation at Timpanogos Cave National Monument continues to fluctuate with the local economic, social, and weather conditions, as well as construction improvement projects that require closing the caves or cave trail to the public. In 2010, more than 114,000 people came to the monument, a 16% decrease in visitation from 2009 figures. However, from 2005 to 2009 the monument saw a 24% increase in visitation, or an additional 30,000 visitors. Servicewide Interpretive Reports for the period show these total visitor contacts at park visitor centers/contact stations:

**Servicewide Interpretive Reports (SIR) Data:**

- FY 2007: 113,246 Total Visitor Contacts at Visitor Centers/Contact Stations
- FY 2008: 123,221 Total Visitor Contacts at Visitor Centers/Contact Stations
- FY 2009: 133,047 Total Visitor Contacts at Visitor Centers/Contact Stations
- FY 2010: 111,524 Total Visitor Contacts at Visitor Centers/Contact Stations

From early May through mid-October, 75 to 80 percent of the monument’s visitors hike the cave trail and enjoy a cave tour. Due to hazardous hiking conditions created by snow and ice, the NPS closes the cave, the cave trail, and the visitor center for almost six months. The Swinging Bridge picnic area and the Canyon Nature Trail remain open for year-round use but are snowed in much of that time.

The monument’s visitation figures reflect the seasonal use of its primary destination. On summer weekends, monument staff typically has to turn away a number of would-be cave visitors, due to the limited physical capacity of the caves and concerns



Learning about the canyon’s wildlife from waysides along cave trail

about damage to the resource. At present, cave tours run every 10 minutes, seven days a week, accommodating a maximum of 20 people per group. Cave tour tickets may be purchased in advance by phone or in person up to 30 days before a visit. Advance tickets may also be purchased on the morning of the tour if tickets are still available. In 2010, advance tickets cannot be purchased online; however, this service is expected to be available in the future.

Visitor demographics at Timpanogos Cave National Monument largely reflect the comparatively youthful profile of the population of Utah, with some influx from nearby states and caving enthusiasts. According to data from the most recent Park Studies Project Visitor Study (Report 167, University of Idaho, Summer 2005), 64% of visitors surveyed were residents of Utah, and 39% were ages 15 or younger. (For the national park system as a whole, the UI report *Serving the Visitor 2005* found the proportion of visitors aged 17 and under to range from 2% to 60%, averaging 20.5% between 1992 and 2005.)

According to 2005 and 2010 LRIP workshop attendees and staff, visitors to the monument can be grouped anecdotally into the following categories, arranged in perceived order of prevalence or frequency.

### **Multi-generational families**

are the most frequent, visible visitors to the monument, making up 69% of the visitor groups surveyed in the 2005 Visitor Study. Typically, family groups come for day trips from nearby population centers such as Salt Lake City or Provo and outlying suburbs. Many family groups average five to seven people, including several school-aged and younger children. Larger family groups need advance ticket information and sometimes need to be divided into two or more groups if

the group is larger than 20 people and cannot be accommodated on one cave tour. Family groups often have one or more members who remain on the visitor center grounds while the rest of the group tours the caves.

In recent years, the monument staff has noted an increase in large family groups of Hispanic ancestry coming to visit the monument. Typically, someone in the visitor group is fluent in English and can assist with language translation if needed. At present, monument interpretive materials and programming are provided mostly in English, with limited availability in other languages.

Many family groups attend NPS evening programs. In most cases, these family groups are from American Fork and nearby towns, although the programs do attract some campers from the adjacent national forest.

**Family reunion groups** (12% of the 2005 Visitor Study) share many characteristics with smaller family groups but may include as many as 50 people. They often require several cave tours to accommodate the whole group. Some of these groups include multi-generational repeat visitors with a longstanding attachment for the monument or the forest. They enjoy traditional programs, seek to share intergenerational memories and experiences, and are often more interested in a fun group activity than a perceived “educational” program. These groups tend to be loosely organized and benefit from pre-visit information.

### **Local and returning visitors**

have a feeling of local attachment and often bring guests to the monument. These visitors typically prefer traditional tours and possess intergenerational memories and experiences. Many participate in the “Introduction to Caving” tours and evening programs. They have the

potential to become volunteers and advocates for the monument, perhaps as the nucleus of a friends group. According to the 2005 Visitor Study, 30% of visitors surveyed had visited the monument two or three times in their lifetimes, and 15% had visited four or more times.

**School groups (kindergarten – 12<sup>th</sup> grade)** generally require a curriculum-based program or activity. Typically school groups are constrained by time (journey to the monument and length of hike, transportation scheduling, etc.). Sometimes these groups present challenges to the monument staff and to other visitors as well. Problems may include behavior, physical challenges, or ratio of school staff to students.

The monument also attracts a number of non-school youth groups such as church groups, scouts, or other clubs earning an activities badge or patch. Like school groups, these youth require adequate adult supervision, as well as safety and resource protection messages.



Park ranger with family group before cave tour

**Regional visitors** visit the monument seeking experiences and recreational opportunities in the local area, the canyon, and other area/state parks. Often they obtain site information from area tourism bureaus. These visitors are usually destination-oriented, possibly spending more time in the monument than other visitors. They often attend evening programs, participate in the Junior Ranger program, and sign up for “Introduction to Caving” or photo tours.

**Forest Service visitors** to the surrounding Uinta-Wasatch-Cache National Forest frequently come to the monument visitor center for a short time to look for specific forest information or to learn what programming is available. Some of the recreational activities this group enjoys (hunting, ATV, snowmobile, target shooting) are not compatible with NPS objectives, while other activities (hiking, backpacking) are. These visitors like easy-to-find information on the Uinta-Wasatch-Cache National Forest and the local area and are seldom interested in formal interpretive programs. Such “drop-in” stops may encourage these visitors to return for a more in-depth exploration of the monument at a later time.

**“Special Needs” visitors** encompass a wide range of people arriving in organized groups or as individuals with family or friends. Given the monument’s rigorous physical requirements for the cave visit, this category may include seniors, people with heart conditions, asthma, altitude problems, hearing, vision or balance problems, obesity, or pregnancy – or simply a visitor with a bad knee, a baby stroller, or an active toddler.

**Adventure seekers** arrive at the monument looking for an unusual outdoor experience. They typically want “Introduction to Caving” tours, a caving experience rather than a walking

tour, and tend to be impatient with detailed information from interpreters or materials. This group wants local adventure information.

**Virtual website visitors** span all group categories. Web users may access the monument website to get immediate, up-to-date travel information or to find in-depth material for research and study. Many are within driving distance of the site, but others may “visit” only via the web.

Additional visitor types identified by staff and stakeholders fall into a variety of categories. Among these are incidental visitors who reach the monument via the Alpine Loop Scenic Backway, international visitors (less than 2%), organized tour groups and corporate groups (usually traveling by coach/bus), and subject-matter enthusiasts such as scientists, cavers, wildlife observers, and researchers.

## Other Planning Considerations

Two additional plans affect the development and implementation of this Long-Range Interpretive Plan.

### NPS Cave Management Plan

A new Cave Management Plan/ Environmental Assessment, which supplements the General Management Plan, began in 2009 and is in progress for Timpanogos Cave National Monument. The new plan will bring cave resource management in line with 2006 NPS Management Policies requiring that all sites with cave resources “manage caves in accordance with approved cave management plans to perpetuate the natural systems associated with caves.”

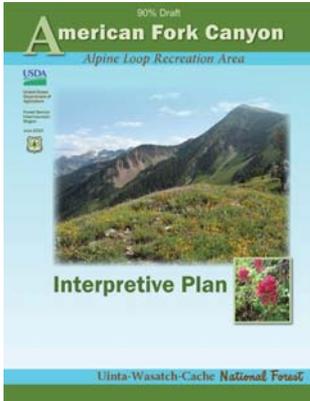
The first public comments for the planning process were solicited at a public open house in September 2009; public engagement will be encouraged periodically throughout the planning process.

Preliminary goals for the management of cave resources and values at Timpanogos Cave National Monument are as follows:

- Protect and conserve the integrity of the monument’s cave system for present and future generations.
- Provide for recreational opportunities in a manner that is consistent with park purposes and protection of resources.
- Promote safety of visitors and employees in and around caves.
- Support interpretive programs to promote a positive visitor experience and facilitate the public’s understanding of cave processes and preservation.
- Encourage and support scientific research of natural and cultural resources that is high-quality and mutually beneficial.
- Inventory and monitor cave resources and strive to increase the knowledge and understanding of these resources.
- Prioritize management directions, projects, and research objectives for NPS staff.

A public review of the draft cave management plan is slated for late 2010, with completion of the plan by 2011.

## USDA Forest Service Interpretive Plan for American Fork Canyon/Alpine Loop Recreation Area/Uinta- Wasatch-Cache National Forest



2010 Interpretive Plan for the Uinta-Wasatch-Cache National Forest

This plan, available in draft form in mid-2010, identifies interpretive goals and objectives for the entirety of USDA Forest Service lands in American Fork Canyon, the Alpine Loop Recreation Area, and the Uinta-Wasatch-Cache National Forest. Theme topics include stewardship, natural resources, heritage resources, diversity of recreation, and wilderness.

The plan offers specific site inventories for several sites that are directly related or in close proximity to Timpanogos Cave National Monument. At this juncture, the Forest Service plan offers brief, general recommendations for interpretive uses at these sites. These recommendations are summarized below.

- At the proposed new interagency office that will serve the Pleasant Grove Ranger District and Timpanogos Cave National Monument in the future:

- Recommendation: Incorporate adequate visitor information space within building. Take advantage of stunning view of canyon by positioning public spaces, such as the lobby, to have picture view of American Fork Canyon. Plan to have space in lobby to accommodate public information for both agencies, interpretative displays, and any administrative work that will occur in this area.
- Outside office building, provide kiosk with orientation and information available for self-serve and after hour visitors. Consider a self-serve fee tube for people wishing to purchase passes. Provide a separate space for temporary messages. Depending on site design, and site function, may be able to incorporate small interpretive trail. Include display for Timpanogos Caves.

- The plan also makes recommendations to improve the existing functional space, including installing self-pay capability, at the fee booth at the mouth of American Fork Canyon leading to the monument.

- The Forest Service plan recommends adapting Power House 2 (the historic power plant building on Highway 92) as a venue for special events or environmental education. In addition, the Forest Service is working with the monument staff to connect the half-mile interpretive trail to this site.

- The plan also recommends upgrading numerous Forest Service wayfinding and interpretive signs throughout the Uinta-Wasatch-Cache National Forest.



Power House 2, the historic power plant building on Highway 92



## Existing Conditions

Recommendations set forth in this Long-Range Interpretive Plan will provide insight on ways to modify and improve the interpretive programming and services at Timpanogos Cave National Monument. The following review of existing interpretation for the site will provide a benchmark for future program development, staffing, and media.

## Pre-visit Information

### Personal Services

The monument receives information requests on a daily basis via letters, phone calls, and e-mail messages. Most requests are for basic information about the monument and/or cave tours. At present, interpretive and/or visitor services staff spend approximately one hour a week responding to these requests. These requests are being handled adequately at present by the visitor center staff.

### Website

Virtual visitors access the NPS website for Timpanogos Cave National Monument ([www.nps.gov/tica](http://www.nps.gov/tica)) to learn about monument resources, history, current research, interpretive programs, operating hours and seasons, fees and driving directions. A virtual tour of the cave trail and cave system is available on the website, as is the most recent edition of *Timpanogos Reflections* newspaper, a partnership project with Uinta-Wasatch-Cache National Forest.



TICA website

## Arrival Experience

Visitors enter the monument through the Uinta-Wasatch-Cache National Forest on Utah State Route 92. The highway cuts through the monument grounds at the bottom of the canyon, running parallel to the American Fork River, and brings visitors directly to the visitor center parking lot. Highway 92 is a heavily traveled road leading into the heart of the Uinta-Wasatch-Cache National Forest. The road bisects the visitor center's two parking lots and poses serious safety concerns for park visitors, both as pedestrians crossing the road and as drivers backing out onto the highway.

The majority of visitors (70%) enter the monument by traveling east on State Route 92 and stopping at a small Forest Service fee station marking the entrance to American Fork Canyon and the Uinta-Wasatch-Cache National Forest. Visitors traveling to the monument from this direction are directed to the site by signs on Interstate 15 and Highway 92. Visitors then travel two miles through the forest on a very winding road to the visitor center. A sign along the route notes the entrance onto monument lands, as well as, several turn-offs for picnic areas, the maintenance yard, and employee housing. The remaining visitors come into the monument "the back way" along State Route 92 traveling west. The staff believes that most of these visitors are local users who have visited national forest areas, Sundance Resort, Provo Canyon, or are driving down from the scenic Alpine Loop.

## Sites and Facilities for Interpretation

### The Visitor Center

In February 1991, the Mission 66 visitor center and administration facility for Timpanogos Cave National Monument burned. A temporary facility consisting of a double-wide trailer was installed on the site shortly thereafter. This “temporary” facility, with some adaptations, continues to serve as the monument visitor center today.

The visitor center is open 7:00 a.m. to 5:30 p.m. from early May to early September. After that time, the hours of operation are 8:00 a.m. to 5:00 p.m. until mid-October, when the monument closes for the winter. More than 70 percent of park visitors use this facility. The interior of the building contains:

- A visitor information desk and an interior ticket sales area;
- A phone sales desk and lead visitor use assistant desk;
- A large touch-screen interactive multimedia presentation that visitors can access to learn more about the monument;
- Several wall-mounted exhibits and a touch box displaying interpretive materials related to the history of the Timpanogos Cave System, geology of the area, formation of caves, and wildlife;



Visitor purchasing tickets for cave tour at the outdoor window located at the visitor center

- A small bookstore and book storage area managed by the Western National Parks Association; and
- A small storage/desk area for interpreters.

In addition, the visitor center houses a small area with seating for about 20 people, where visitor center staff shows a 16-minute orientation video or a 30-minute cave tour video on request. A curtain separates this area from the rest of the facility. Individual audio headsets are available for visitors to use while viewing the video.

An outdoor ticket window opens onto a covered porch, enabling many visitors to buy tickets for the cave tour without entering the visitor center. Restrooms and an open-air patio are located outside the visitor center, with the patio used as an extended programming location by site staff. A concessions area with a covered seating area is adjacent to the visitor center.

Most of the monument’s evening interpretive programs and Junior Ranger activities also occur at the visitor center. Because this visitor center is the only visitor contact station in American Fork Canyon, it dispenses information on national forest campgrounds, hiking trails, horse transfer stations, roads, and off- road opportunities as well.

In addition to providing visitor services, the visitor center staff also ensures that visitors start their hikes to the cave at the appropriate time so as not to overwhelm cave tour staff or cause overcrowding at the entrance shelter. Frequent communication with the cave tour staff allows them to adjust schedules to best accommodate visitors. Communication between the visitor center and cave tour staffs is critical for smooth operation.



Cave Trail

## Trail to the Cave

To reach the Timpanogos Cave System, visitors must hike a paved, 1.5-mile trail that ascends more than 1,000 feet. Staff and volunteers provide information and informal interpretation along the trail while hiking on a daily basis. Visitors can access a detailed cell phone tour along the trail, as well as a series of twelve wayside panels offering site-specific interpretation of the area's history, geology, and animal and plant life. In addition, many visitors acquire various printed interpretive and informational materials in the visitor center prior to their hike. (See Interpretive Media section for detailed lists.)

## Entrance Shelter

A shelter over the entrance to the caves was completed in 2003. The shelter provides benches in a covered area safe from rock fall for visitors waiting for cave tours. Four waysides installed here in 2004 interpret the history of the caves and fossils. The area also has a cave map and a small bulletin board located near the grotto and a cave formation “touch box” under the entrance shelter. Staff provides informal interpretation for visitors while they wait for tours.

## Cave Tour Trail

Monument staff members lead one-hour tours through the caves on a half-mile-long, paved trail. The trail is well-lit and fairly level, although stair-climbing and some bending are required. Stainless steel guard rails assist visitors traversing points in the cave where the pathway narrows and help reduce visitor injuries.

## Canyon Nature Trail and Picnic Facilities

There are two “first-come, first-served” picnic areas in the park.

- The primary facility is the Swinging Bridge picnic area.
- The secondary facility is the Canyon View picnic area located directly across from the visitor center.

Tables, grills, and restrooms are available in the Swinging Bridge picnic area, which is the only picnic area with flush toilets in American Fork Canyon. Tables and grills are available in the Canyon View picnic area, with restrooms available across the street at the visitor center. The picnic areas are very popular for family reunions, large group celebrations, or as an alternate activity area for visitors unable to make the steep climb up to the caves.



Park ranger leading cave tour

Many local users enjoy the facilities by having evening picnics or by having breakfast before a day of recreation at the monument or in the national forest. The Swinging Bridge picnic area is also used occasionally by staff for summer evening programming.

Two access points lead to the easy, quarter-mile Canyon Nature Trail: access from the Swinging Bridge picnic area or from a separate trailhead off State Route 92 a short distance from the visitor center. The nature trail leads through forested areas and provides views of the canyon while paralleling American Fork River for a short distance. A Canyon Nature Trail pamphlet, available at the trailhead and the visitor center, provides interpretation corresponding to numbered posts along the walk. New wayside exhibits are planned for 2011 to replace the self-guided pamphlet and numbered posts.

## Interpretive Programming

### Personal Services

The current interpretive staff consists of one GS-11 chief ranger, one GS-9 term (long-term temporary) supervisory interpretive ranger, two seasonal GS-7 park rangers/lead interpreters, twenty-four seasonal GS-4/5 park guides/rangers (both full- and part-time), one intern, and four Teacher-Ranger-Teachers.

The supervisory interpretive ranger tries to spend at least one day every two weeks in the field during the summer. The seasonal lead interpreters divide their time between coaching/mentoring new employees and auditing cave tours. The park guides/rangers spend most of their time conducting cave tours. Park guides/rangers also conduct evening programs on a weekly basis, present community outreach programs, and complete special projects several times throughout the week.

Since the primary activity in the visitor center is cave tour ticket sales, the visitor center is staffed by seven GS 4/5 Visitor Use Assistants (VUAs) and one Lead VUA. The assistants are



Park ranger leading nature walk along the Canyon Nature Trail

responsible for on-site ticket sales, an advance ticket sales system that allows the public to purchase tickets 30 days in advance of their arrival, and the presentation of films. They also provide visitor information, assistance, informal interpretation, and safety messages prior to the cave trail hike. The visitor center staff also handles such administrative duties as processing educational fee waiver requests and scheduling educational school group visits.

Western National Parks Association provides one full-time seasonal employee to staff the sales area of the visitor center.

### Ranger-led Interpretive Programs

All ranger-led interpretive programs are offered seasonally (mid-May to mid-October) except for outreach, which is available year-round as staffing permits.

**Cave Tours:** The staff conducts cave tours that last approximately one hour. In summer, staffing is scheduled to provide more than 50 tours each day. Tours are limited to no more than 20 visitors at one time. Due to resource

protection and visitor safety concerns, cave tours are very labor intensive and receive 90% of the monument's interpretive staffing.

### Introduction to Caving Tour:

Currently offered daily from Memorial Day through Labor Day, these hands-on, intensive tours are limited to no more than five visitors at a time. The program is intended to introduce visitors to the sport of caving, caving ethics, and caving preservation. Visitors must be at least 14 years old to participate, and are given caving helmets and headlamps to use.

**Evening Programs:** Monument staff offers visitors a rotating schedule of free 45-minute interpretive programs four evenings a week (Friday, Saturday, Sunday, and Monday) during the summer. Topics range from area history to fishing in the canyon to geology. Presenters include Timpanogos Cave rangers as well as special topic experts and guest speakers from the Uinta-Wasatch-Cache National Forest and/or local wildlife organizations. The programs may be presented at the monument visitor center, Mutual Dell Camp amphitheater, or the Swinging Bridge picnic area.

In 2009, evening program selections included:

- Live Birds of Prey
- Nature's Music in the Canyon
- Bats! Flying Creatures of the Night
- The Charm of Ssnakes
- National Parks: America's Best Idea
- Minerals: Part of Your Rock Diet
- Singing in the Canyon (campfire singing)
- One Whoppin' Fish Story
- Let's Make Tracks (animal tracks)
- Reflections: A History of Mining in American Fork Canyon



Park ranger conducting an evening program on visitor center porch

**Junior Ranger Program:** The monument's self-directed Junior Ranger program relies on an on-site activity book, which can also be downloaded from the website, completed, and mailed in. The booklet (last updated in 2009) offers engaging activities specified for children ages eight and under, ages nine and older, and for all ages. Each category has five activities, such as interviewing a ranger, picking up trash, attending an interpretive program, etc. Visitor center personnel review the completed activity book, then fill out the certificate on the last page and present the new Junior Ranger with a monument badge or patch. The staff also conducts special Junior Ranger interpretive programs on Saturdays during the summer.

**Education Program:** Teachers and students are invited to participate in the park's educational fee waiver program. The park accepts fee waiver applications beginning February 1 each year. About 100 schools apply for fee waivers, and more than 5,000 students are granted fee waivers annually. An additional 2,500 students visit the cave as paying groups. Occasionally, when there are fewer than 20 students on a tour, student groups will be mixed with the general public, although this arrangement can present some tour delivery problems.



Junior Ranger program

A limited number of educational fee waivers are available during the cave tour season. In May, September, and October educational fee waivers are available for 60 students per day (3 tours) Monday through Friday. From June through August, 60 fee waivers are available Monday through Thursday. If a school group larger than 60 students applies for a fee waiver, the park advises that they spread their visit over a two-day period or pay for the additional students. Prior to receiving a fee waiver, a teacher must fill out a park fee waiver application and provide a copy of the lesson plan for the chief ranger to review.

**Outreach:** Park staff provides offsite programs for local schools and community organizations such as scouts, as scheduling allows, especially in the winter months when the monument is closed. Due to staff and facility limitations, the monument is unable to offer sustained, regularly scheduled outreach interpretive programming at the present time. When the interagency center is completed, year-round interpretive programming and school group visitation is expected.

Currently, outreach presentations are opportunistic rather than programmatic, in that programming is geared toward answering/meeting specific requests, such as Cub Scouts requiring a speaker on conservation or other topics. Staff also represents the monument and NPS at community events such as local parades and fairs.



Outreach program with Girl Scout day campers



Interactive touchscreen display within visitor center

## Interpretive Media

Timpanogos Cave National Monument uses a variety of interpretive media to deliver programming to visitors.

### Audiovisuals

The monument offers visitors a selection of films upon request, as well as an interactive touch-screen multimedia presentation that is available whenever the visitor center is open.

Using the multimedia touch-screen, visitors can engage in a virtual tour of the cave trail and cave, highlighted by commentary from monument staff.

The films include a 16-minute orientation video, a 30-minute cave tour video, and a 17-minute video, “*Caves: the Wonder Beneath*,” produced in 2005 through a partnership between the National Park Foundation and Discovery Communications, Inc., a Proud Partner of America’s National Parks. This 2005 film is an excellent tool for educating the public on different types of caves, the formation of caves, and their relevance to today’s society.

The monument has also introduced a cell phone tour that visitors may dial at any time during their visit. This audio tour features a park ranger providing overview information about the monument, followed by short (one-minute) interpretive messages about various aspects of the trail and the

caves, including geology, history, plant life, etc. The cell phone tour can be accessed wherever visitors can obtain a cell phone signal; signals for most cell phones are generally available on the upper one-half of the trail.

### Exhibits

Despite limited space, Timpanogos Cave National Monument staff members have worked steadily in recent years to add interpretive exhibits for visitors using the temporary visitor center. As of August 2010, visitor center exhibits included the following:

#### Visitor Center interior exhibits

- Touchscreen introduction panels
- “At Home in American Fork Canyon” panel and interactive touch items on animal life
- Timpanogos Cave System map and show panels
- Timpanogos Cave history and discovery panels
- Touch box on “cave formation”
- “Donationite” donation box

#### Visitor Center exterior exhibits

- American Fork Canyon orientation map
- Cave life zones panel
- Stewardship panel
- Climate Change three-panel series
  - What if There Was No Snow?
  - Our Changing Climate
  - Choice Not Chance
- Water bottle filling station
- Bulletin board



Climate Change panels located on visitor center porch

## Media Outreach

The monument informs the public of upcoming events and special programs through news releases sent to area newspapers, radio stations and television stations, as well as postings on the web site. Seasonal information is also published in the *Timpanogos Reflections* newspaper distributed at the American Fork Canyon entrance station and the visitor center.

## Publications

The park provides several free publications including:

- The “Timpanogos Cave Official Guide and Map” (unigid brochure, last reprinted in 2008), produced by Harpers Ferry Center
- “Planning Your Visit” site bulletin
- Timpanogos Cave NM Recreational Fee Program site bulletin
- *Timpanogos Reflections* tabloid-sized visitor guide (in partnership with Uinta-Wasatch-Cache National Forest)
- A guide to the Canyon Nature Trail (in English and Spanish)
- Geologic site bulletin
- Animal and plant checklists (American Fork Canyon area specific)
- USDA Forest Service information and maps

The following items are available for a small fee:

- The “Timpanogos Cave Visitor Field Guide: Plants, Animals, Caves, Insects” (20-page 4”x9” booklet),

published by Western National (\$2.00)

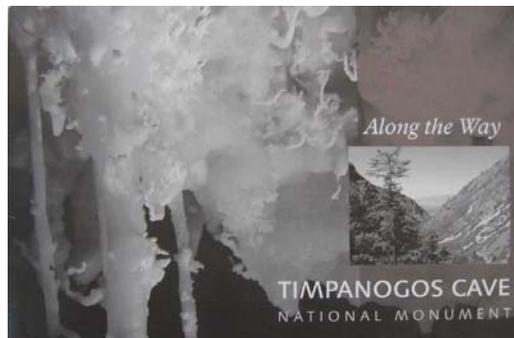
- *Along the Way* cave trail guide (24-page 5”x7” booklet by Robert L. Randall), published by Western National (\$1.00)
- *Heart of the Mountain: The History of Timpanogos Cave National Monument* (112-page 8.5”x11” book by Cami Pulham), published by Western National (\$12.95)

In addition to these materials, the monument visitor center also distributes various trail and campsite information sheets on the surrounding national forest.

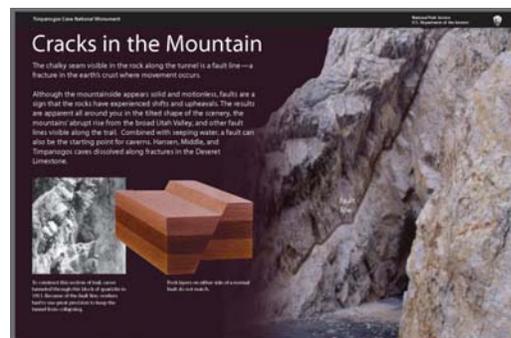
## Interpretive Wayside Exhibits

Monument staff worked with Harpers Ferry Center to develop and install new fiberglass-embedded wayside exhibits for the Cave Trail in 2002 and 2004. The waysides focus primarily on geology and natural history and include the following:

- Timpanogos Cave Trail
- Prepare for the Trail
- Cracks in the Mountain
- Warped Cliffs
- Ancient Cave
- Signs of Wildlife
- Rock Slides
- Earthquake Zone
- Fossils from an Ancient Sea
- Discovery – The First Cave
- Living Caves
- Safeguarding the Irreplaceable



Along the Way cave trail guide



Wayside exhibit along the cave trail

## Media Assets

Media assets include other park resources available for interpretation that support the design of personal services (programs) or interpretive media.

## Artifact Collection

The museum collection currently located in the maintenance building at Timpanogos Cave National Monument documents the establishment and history of the monument and the caves' unusual origin. The collection includes items relating to the creation, discovery, exploration, and development of the caves. Other significant collections include collections of flora and fauna from the canyon area (prehistoric and modern), objects related to the development of the national monument, and objects demonstrating the changing views of human/cave interaction. The museum collection is divided into two separate collections: the natural history collection and the cultural collection. These collections are primarily to aid research. The collection is expected to move to the Utah Museum of Natural History in 2012.

## Archives

The archives include a series of original letters dating from 1921 with the rediscovery of Timpanogos Cave by Vearl Manwill. These include letters to and from various clubs, Manwill, and Forest Service officials. The collection documents the period before and after the cave discovery. The collection also contains historical affidavits written in the 1950s by James Gough, Wayne Hansen, and Manwill, a brief history of Superintendent Thomas Walker's tenure at the monument, and a number of period photographs, including some from Manwill's first trip to the cave. Most time periods are reasonably well documented. An administrative history

of the monument was completed in 2009, with part of the work including the recording of oral history.

## Park Library

The monument's library is located at the Rockhouse. The collection is strong in the natural sciences, being especially well-rounded in geology, caves, and karst. The library also includes material on flora and fauna as well as regional and local history.

## Partnerships

### Cooperating Association

Western National Parks Association operates a small bookstore in the visitor center. Western National donates a percentage of its sales each year to aid the monument's interpretive program. Each year bookstore sales total over \$18,000, and of this revenue, Timpanogos Cave National Monument receives \$2,000 in its interpretive support account. The bookstore has a cross-section of materials but focuses mostly on generalist publications. The store also sells a selection of inexpensive, site-specific interpretive souvenir materials as an important keepsake for visitors and school groups



WNPA Bookstore in the visitor center

## Interagency Recreation Fee Demonstration Project

Timpanogos Cave National Monument is a key partner in a highly successful interagency recreation fee program that currently helps the monument fund interpretative services. Together with the Uinta-Wasatch-Cache National Forest, Utah Department of Transportation, and Utah County government, the monument assists the forest service with management of the American Fork Canyon-Alpine Loop Corridor recreation fee area.

Both Forest Service and National Park Service employees staff the fee stations. National Park Service employees count, verify, and deposit collected funds into a Forest Service account.

Managed under U.S. Forest Service authority, 95% of the revenue is retained and spent within the management area. Since the project began, more than \$6 million dollars has been collected. Funds are made available to Timpanogos Cave National Monument for personnel costs to help run the fee program and complete projects. Revenue is spent on projects selected from recommendations made by all partners and the public. At present, almost all funding the monument receives through this program supports interpretive or maintenance services.



Interagency fee station

## Volunteer Program

The monument's volunteer program is managed by the Supervisory Revenue and Fee Business Specialist who oversees visitor center operations. Volunteer services are spread throughout all divisions and functions within the monument.

Each year over 150 volunteers contribute over 4,500 hours of service in all aspects of monument operations. Volunteer partnerships are maintained with church groups, scout troops, school groups, caving clubs, and other agencies.

Volunteers assist with projects such as Swinging Bridge Picnic Area maintenance, cave cleaning, snow and rock removal from the cave trail, painting the visitor center, and trash pick-up. The successful "early morning hiker" volunteer program continues to be popular, with an average of 50 volunteers a year. These volunteers hike the Cave Trail at first light. They remove litter and report any unsafe trail conditions.

The Behind-A-Tour Specialist (BATS) program recruits youth volunteers to follow rangers on interpretive tours through the cave system, assisting in answering questions, ensuring resource protection and visitor safety, and providing emergency first aid. The program has been very successful and has become an important part of cave operations. In 2010, 94 volunteers donated over 4,000 hours as BATS.



BATS program volunteers with park ranger

## Issues and Influences

### Adequate Space for Facilities

With more than 135,000 visitors a year relying on services housed in an outdated double-wide trailer temporary visitor center, it is not surprising that one of the most pressing concerns at Timpanogos Cave National Monument is lack of space. As has been documented repeatedly in numerous reports and analyses, the monument's interpretive and administrative staff needs more space to perform duties; monument visitors need more space to grasp vital safety information and enjoy valuable interpretive messages; archives and collections need more space for storage and display; maintenance and operations activities need more space for equipment; non-hikers need appropriate spaces to wait while their companions hike the cave trail; and everybody needs more room to park an estimated 180+ cars a day.

Those who care about the future of American Fork Canyon and the Timpanogos Cave System must find smart 21<sup>st</sup>-century adaptations to the unique challenges of life in a canyon. The physical limitations of the canyon, as well as budgetary constraints, mean that the small footprint of the current visitor center will shrink even more in its new, permanent iteration. While expansive space and easy parking would be nice to have, these modern conveniences are simply not feasible or desirable in so fragile a landscape. In fact, construction of the new visitor center and the companion interagency center offers planners a tough but visionary opportunity to take stock and explore the possibilities of eliminating *any* structure or use that is not absolutely essential within the walls of the canyon.

That said, the problems of inadequate space permeate and hinder almost every aspect of visitors' experiences,

interpretive programming, and interpretive services provided by the monument.

The park's 1993 General Management Plan clearly states that the "temporary" visitor center installed after the 1991 fire "lacks sufficient space to properly accommodate current use levels and administrative needs." The 1993 GMP also indicated that a visitor center for Timpanogos Cave was a mission-critical need.

In 2010, plans for a new visitor center are underway, and funding has been secured for design. However, the challenges of adequate space for program delivery, on-site administrative duties (such as computer workstations for creating interpretive programs), materials storage, and audiovisual presentations will remain.

### Visitor Safety

While visitor safety is a primary concern at all public recreational sites, Timpanogos Cave National Monument presents unique safety challenges. The 1.5-mile hike up to the caves is far more strenuous than many casual visitors expect, and the cave tour itself requires warmer clothing, as well as the physical flexibility to bend, climb stairs, and maneuver in dimly lit areas. Along the cave trail, rockfall and cliff drop-off hazards present significant, continual safety concerns.

Many hikers arrive unprepared and uninformed about the requirements for visiting the caves. Other groups arrive with some members who choose to wait below while their companions make the climb and cave tour.

An additional safety concern centers on traffic, parking, and pedestrian circulation at the monument. Highway 92 is a busy route, especially during the summer tourist season. Visitors must

walk across the road from the parking lots in order to reach the visitor center and the cave trail. Additionally, visitor vehicles exiting the parking lots must back into oncoming traffic.

### Interpretive Programs and Services

The monument interpretive team has planned and developed an impressive array of high-quality, modern interpretive materials, including a touchscreen multi-media program and a cell phone tour, in spite of cramped quarters and minimal staffing. These newer interpretive pieces set a high standard for the future and speak to the desires and expectations of future audiences. Recommendations in this plan will build upon this existing foundation of high-quality interpretive media to expand and support interpretation throughout the monument.



Visitor safety wayside

### The Interagency Visitor Center

For almost a decade, the prospect of a new, state-of-the-art interagency visitor center to serve the needs of the visiting public throughout the Uinta-Wasatch-Cache National Forest and the Timpanogos Cave National Monument has influenced long-range interpretive and management planning at the monument. At this writing, the interagency center remains many years in the future and has been significantly downsized from its original vision. While the interagency center will have some space for interpretation related to Timpanogos Cave and the Uinta-Wasatch-Cache National Forest, the primary function will be information and orientation. A multi-purpose room will be available for group activities.

Recommendations in this plan will address specific interpretive functions and activities that should be offered at the interagency visitor center, with emphasis on a “future-proofing” approach that will allow for flexibility and growth. Although far in the future, the interagency facility will offer expanded opportunities for interpretation of Timpanogos Cave National Monument. The interagency facility will be open and available for public access all year round, as opposed to the visitor center in the canyon, which will be open approximately six months a year.

As plans go forward, the visitor service programs between these two facilities – located about four miles apart – need to be carefully planned and coordinated to provide optimal services. This goal will be addressed in the Recommendations section of this LRIP.

## More Popular Every Year – But Without Friends

Timpanogos Cave National Monument has a long and impressive history of local support, but no dedicated Friends group. An organized group of advocates and supporters could benefit the monument in a myriad of ways. Typically, park Friends groups provide not only enthusiasm and renewed community support, but also a range of much-needed support, from increased volunteerism to flexible funding resources to visionary guidance for the future. With forthcoming changes and anniversary milestones at the monument in the near future, the timing is excellent for the formation of a Friends group that can help the monument meet its goals and better serve the constantly increasing number of visitors learning about and coming to the site.



Volunteers repainting the fire cache roof



## Recommendations

## Building Interpretation for the Future

Future interpretive efforts at Timpanogos Cave National Monument will be influenced by several key factors over the next ten years.

- The new NPS visitor center in the canyon will become a reality. Although the new facility will doubtless be more attractive and efficient, it is not expected to add significant square footage for interpretive staff, media, or programming.
- No other facility changes or expansions are anticipated within the monument in the next ten years.
- The new interagency visitor center in Highland may – or may not – be built, depending on the level of political and financial support in the coming decade.
- Whether or not new facilities are built and additional employees are hired, current data indicates that visitation to the monument and the surrounding national forest will continue to grow. Most of this growth will need to occur at new facilities or expanded program areas because of the limited parking and the need to protect cave resources at the monument.
- Because the monument has no permanent, dedicated interpretive position, anticipated leadership changes among key staff members most experienced in interpretation (i.e., retirement and turnover of a long-term temporary position) will leave the interpretive program severely diminished unless and until staffing issues are addressed.

In addition to these influences, several other events or milestones will likely increase attention and attendance at the monument in the coming decade.

- In July 2011, the National Speleological Society (NSS), a caving organization of more than 12,000 members, holds its annual meeting in Colorado. Given the unique characteristics of the Timpanogos Cave System and its relative proximity, the NSS conference can be expected to put Timpanogos “on the map” among caving enthusiasts, inspiring more visits and attention in 2011 and beyond.
- October 14, 2012, is the 90<sup>th</sup> anniversary of the creation of the monument.
- Throughout 2016, the National Park Service will be observing its centennial year with a variety of activities, publicity, and special events.
- In 2022, Timpanogos Cave National Monument will celebrate its 100<sup>th</sup> anniversary.

For Timpanogos Cave management and staff, the challenge will be to continue building a unified, comprehensive interpretive program that

- (1) accommodates and capitalizes on these milestones, and
- (2) avoids a fragmented, events-driven approach focused on short-term or one-time efforts that have no longevity and/or do not contribute significantly to core interpretive needs.



**Recommendation # 2:  
Exterior Interpretation**

*Provide planning and supervisory guidance in creating thematic interpretive exhibits immediately outside and adjacent to the new visitor center.*

- Exterior interpretive content delivered immediately adjacent to the new building, whether via waysides/kiosks, downloadable media, or talks by rangers/partners, should focus primarily on safety, natural history, and cultural history (especially for local residents).

**Recommendation # 3:  
Wayfinding**

*Assess and correct problems in wayfinding as the new building comes online.*

- As part of the new visitor center design, monument staff should continue to assess and correct deficiencies in wayfinding signage, both outside and within the site. Although wayfinding is not generally part of interpretive planning, workshop participants and previous planning efforts cited the issue as a critical need. A number of specific wayfinding recommendations were developed in the draft long-range interpretive plan of 2005 (pp. 63-66).

However, it is unclear how many of these recommendations were implemented or remain viable. A fresh look at wayfinding signage will be required when the new visitor center is completed.

**Recommendation # 4:  
Build an interpretive playground.**

- This plan strongly recommends the creation of an outdoor interpretive playground for the monument’s youngest visitors and their caregivers. Drawing on best practices from children’s museums and science museums, this playground can be designed to illustrate key ideas about the Timpanogos Cave System and to function as a unique and appealing “cave experience” for young children. Such a space would answer a compelling need for the thousands of people who visit the monument but do not hike to the caves. Furthermore, with clever design, this outdoor interpretive area could also serve as a place for storytelling, outdoor classroom activities, and other interpretive uses. This site could be located directly adjacent to the new visitor center, but could possibly be located elsewhere within the monument



USFS and NPS staff at the proposed Interagency Visitor Center site looking towards the canyon

## Interpretive Recommendations for the Proposed Interagency Visitor Center

The interagency visitor center is envisioned as the public part of joint Forest Service and NPS administrative office complex in the city of Highland. This 37-acre site lies about four miles west of the monument on State Road 92, with scenic views of the Wasatch Mountains and their second highest peak, the 11,750-foot Mt. Timpanogos. Current funding allows for architectural and site design, and the site and buildings are being planned as a sustainable design that strives for LEED Gold certification.

As currently proposed, the center will have five primary functions: administrative and management support; region-wide information on public lands; specific monument and forest information; logistical support such as ticket sales, parking, tour departures, etc.; and interpretive programming and exhibits.

### Recommendation # 1: Interior Interpretive Uses

*Provide planning and supervisory guidance in creating thematic interpretive exhibits and programming for the proposed interagency visitor center.*

The 2010 Timpanogos Cave National Monument interpretive planning team discussed thematic concepts for the proposed interagency center in detail, while working concurrently with thematic planning for the monument's new visitor center located four miles away in American Fork Canyon. Participants expressed a strong desire to have the two facilities complement each other and function well together, in order to provide visitors with an informative, engaging experience

that encourages them to explore the monument and the surrounding national forest first-hand.

This plan provides preliminary recommendations for the following elements for interpretation at the interagency visitor center:

- To the extent possible, the first three elements of exhibit planning for this site – thematic content, design concepts, and schematic design – should be developed in this funding cycle for both interior and exterior interpretation, concurrently with the architectural and site design. (With architectural and construction documents not yet finalized, the more production-oriented steps of exhibit planning – actual to-scale design development and first-draft exhibit content – will likely be counterproductive to produce at this early stage.)
- The overarching interpretive message of the interagency visitor center should be “Stewardship and Sustainability.” Permanent and rotating exhibits as well as personal interpretive services at the site should focus on these primary theme topics from the monument, integrating sustainability and USDA Forest Service messages as appropriate:
  - Cultural History
  - Preservation and Stewardship
  - Recreation
  - Personal Safety and Natural Hazards

As noted earlier, this plan recommends that the interpretive exhibit content in the new visitor center within the monument be devoted primarily to geology, natural history, cultural history, and safety.

## **Recommendation # 2: Exterior Visitor Experience**

*Provide planning and supervisory guidance regarding visitor experiences on the grounds of the interagency site.*

- Entrance/reception area interiors and road/parking frontage exterior areas should contain easily accessible wayfinding and information about three key points:
  - public lands for outdoor recreation in the region;
  - visitation information on the monument and the national forest; and
  - current information on programs, exhibits, meetings, etc., scheduled within the interagency visitor center.

This hierarchy of information will give visitors the option to use the interagency center as an information gathering waystation for the region, an introduction to the monument and the forest, or as a destination attraction.

- Media choices for these wayfinding/information stops could be simple freestanding kiosks with permanent panels and a glass fronted, changeable case, or they could be custom designed to be site specific; much will depend upon funding.
  - If the latter course is a possibility, designers should be encouraged to consider and/or future-proof kiosk designs that holds traditional flat panels but also incorporates ADA compatible heights and adequate case depth to allow installation of flat panel touchscreens and web connectivity powered by wireless technology and photovoltaic energy, if these elements are desirable in the future.

- Stakeholders at the workshop expressed concerns that scenic vistas within the interagency center site not be interrupted by too many signs. Proposed walking trails around the interagency center site should be equipped with a carefully considered, limited number of interpretive signs that do not obstruct the viewshed; these signs should focus on the site's sustainable design and water conservation techniques.

## **Recommendation # 3: Multipurpose Room**

*Provide planning and supervisory guidance for interpretive use of the multipurpose room at the proposed interagency visitor center.*

- Make the multipurpose room open to visitors whenever the interagency center's main reception area is open.
  - In the interior schematic diagram of August 2010, the proposed multipurpose room was not connected to the building. LRIP participants felt strongly that the layout should be reconfigured so casual visitors have access to the multipurpose room if it is not otherwise occupied. If this 900-square-foot space is locked except when used for special events, the vast majority of visitors lose a significant space for that could be dedicated to engaging permanent and short-term interpretive exhibits as well as films. If the space is publicly accessible during the day when programming is not in session, it can be used much more intensively for interpretation.
  - Space-saving, wall-mounted exhibits featuring large murals, lenticular and trompe l'oeil graphics (flat but giving the illusion of depth), and motion-activated soundscapes can

make this space a fascinating destination without impinging on the room's other uses for meetings, films, hands-on activities, ranger talks, or storytelling.

- The room could also have an area dedicated to temporary exhibits ranging from national touring exhibits to local science fairs and art shows.

## Personal Services

At present, personal services at Timpanogos Cave National Monument are devoted primarily to cave tours. In summer months, a staff of 31 interpreters is employed to lead groups of 20 through the caves every 10 to 20 minutes, nine hours a day, seven days a week. This essential interpretive activity is the primary component of the interpretive program at the monument.

However, it is important to recognize that most visitors do not see or interact with these interpreters, except when they are inside the caves.

The perception that the monument needs greater ranger visibility and more informal interpretive programming outside the cave system came up repeatedly in the 2010 workshops, as



Park ranger with guest birds of prey presenters

well as in casual conversations with visitors during site visits. Workshop participants proposed that in addition to cave tours, more staff should be assigned as visible safety patrols along the cave trail, within the caves as researchers or water monitors, and as roving rangers doing “pocket programs” – short (3 to 5 minutes) talks – throughout the monument. Participants suggested roving rangers at the cave entrance and exit, along the cave trail, in the picnic areas, outside the visitor center, and on the Canyon Nature Trail. More ranger presentations in close-by areas of the national forest were also recommended.

## Personal Services

### Recommendation # 1: Ranger Programs

*Prioritize interpreters' time to enable more outside-the-cave programming (cross-training staff as necessary for greater versatility), and commit to increasing interpretive staff in the coming years to provide more monument-wide interpretive coverage as visitation continues to increase.*

Specific ways to increase ranger visibility and expand personal services include the following:

#### *First Priority: Within the Monument*

For visitor safety, a ranger needs to be assigned near the cave trailhead to educate people hiking up to the cave and to ensure that all group members receive safety messages/training/interpretation related to the safety issues on the cave trail

- After additional content training (see Professional Development, page 42), assign roving rangers along the cave trail to offer short, variable, site-specific interpretative programs and to act as safety patrols. Currently interpreters providing cave tours are allowed about 1.5 hours to hike up to their assignments; as more GS-5

interpreters are trained to provide a wider range of content, their hike-up time could be extended to include short interpretive encounters with visitors during peak hours.

- After additional content training, schedule short “Ranger Porch Talks” at the visitor center during peak hours for visitors who are waiting or have chosen not to hike the cave trail. Ideally, these talks would consist of a rotating set of theme-based topics, including regular messages on safety. (Currently the only programs presented on the porch are Junior Ranger programs.)
- After additional content training, assign a roving ranger to visit the Canyon Nature Trail and the picnic areas two or more times a week during peak summer months. This part of the monument is especially well-suited to the natural history, recreation, and stewardship themes.

***Second Priority: In the Uinta National Forest***

While continuing to build the partnership with the Forest Service is very desirable, the range of opportunities for greater service in this partnership can be overwhelming. The monument’s interpretive division should ensure that NPS presentations in these locations support the primary interpretive goals of the monument.

- Consider reintroducing the daytime ranger-led walk, “Autumn in the Canyon,” along Alpine Loop and to Stewart Falls.
- Add other ranger-led daytime walks in the national forest as staffing and audience interest allow.
- Review attendance, audience demand, and theme and core-mission appropriateness for evening

programming at forest service sites including Mutual Dell and Mile Rock. (Daytime ranger talks are presented at Cascade Springs and Tibble Fork.)

- Consider expanding evening presentations to new sites such as Aspen Grove Amphitheater within the forest.

**Personal Services**

**Recommendation # 2: The 90<sup>th</sup> Anniversary**

*Plan and coordinate interpretive programming and events for 90<sup>th</sup>-anniversary celebrations throughout the 2012 season, culminating on the actual anniversary weekend in mid-October as the season ends.*

The many activities associated with the 90<sup>th</sup>-anniversary milestone should draw upon the entire monument staff; still, interpretive outreach, publicity, and programming will constitute a major part of the celebrations, especially from the public’s perspective. Any special interpretive activities during the year must be planned strategically for maximum impact, versatility, and longevity, in order to make the best use of limited resources. Although detailed planning of 90<sup>th</sup>-anniversary events is beyond the scope of this document, a number of ideas, events, and plans surfaced during the LRIP workshops, the most viable of which are included here:

- Use the 90<sup>th</sup>-anniversary as a catalyst to build a Friends group to help supply funds and volunteers for interpretive and other programs of the park. (See Partnership Recommendations, page 46).
- Stage an art and photo contest to commemorate the monument.
- Launch a wide-ranging Timpanogos Cave public history initiative (perhaps led by an enthusiastic

volunteer) to solicit historic photos and oral histories, encourage participation from and recognition of founding family descendants, and engender multi-generational interest in the cave system, its past, and its future. This effort would complement the effort to build a Friends group; founding family descendants could be given honorary status as founding members.

- Invite well-known personalities and high-level dignitaries at state and national levels to participate in the anniversary celebrations in numerous ways. Suggestions ranged from the NPS director to President Obama.

- Seek participation from the Ute Tribe Drum and Dance team, professional storytellers, and other regional resources.
- Create souvenir/collector’s item cave tour ticket.

**Personal Services  
Recommendation # 3:  
Education and Outreach**

*Seek ways and funds to enable more interpretive resources devoted to education and outreach, both during the peak season and during the winter months when the monument is closed.*

**On-site:**

- Expand the NPS Junior Ranger program to be more broadly relevant to the large families visiting this site. Such an approach will not only fulfill interpretive goals and enrich visitor experiences for family audiences; it can also encourage lifelong, multi-generational stewardship among local residents.
  - Develop sequential programs and patches for varying ages, from “Timpanogos Tiny Tots” (ages 5 and under) to “Not So Junior Rangers” for ages 13 and up.
  - Age-appropriate Junior Ranger activities should be applicable at several locations on site (picnic areas, forest service locations, and the Canyon Nature Trail), as well as on the web.



Kids in Nature Program



Teacher-Ranger-Teacher Program

- Continue and improve the “Kids and Nature” program developed in partnership with the forest service, state parks, Hutchings Museum, Thanksgiving Point, and Sundance Resort. To accomplish this goal, it is essential that reliable funding be found for school buses to bring children from Title I schools to the monument.
- Continue and improve the monument’s Teacher-Ranger-Teacher program.

*Off-site:*

- Continue development of Utah standards-based educational curricula for applicable grade levels, and launch each packet on the park website as it becomes available.
  - Explore the idea of creating a curriculum-based contest for classes to qualify for fee waivers to visit the monument.
- Seek ways to improve interpretation for and create stronger ties with the growing diverse cultures at the monument and in the region.
- Set goals for greater use of the monument website (perhaps with help from partners or Friends) as an outreach tool to provide pre-visit safety messages, curriculum-based interactivity, and a more robust and interactive virtual experience for distance learning. As of fall 2010, the monument website offered a good selection of reading material in support of several, though not all, of the monument’s primary interpretive themes. Additional content can be achieved by adapting portions of the existing touchscreen multimedia program and the virtual cave tour film (and its proposed upgrade/replacement) for use on the web.
  - Recommend that each division contribute some type of information (in a digital format) to be posted on the website.
- Set specific content/program goals for position levels and provide subject-matter training as needed. For example, set a goal that all GS-5 interpreters will be able to give solid subject-matter presentations on the geology, cultural history, and natural history of the monument, as well as cave tours.
- Spot-check and assess interpreters’ performances regularly and offer training assistance as needed. A 2009 evaluation by Dale Pate of the NPS Geologic Resources Division gave the Timpanogos Cave tour leaders high marks overall but recommended more in-depth interpretation on cave science and less emphasis on the fanciful names of cave features and stories and legends associated with the caves’ discovery.
- Prepare and distribute a training manual (via CD or online) to all new seasonal employees well in advance of the usual mid-April training.
- Prepare a new orientation handbook for the interpretive division.

**Personal Services  
Recommendation # 4:  
Professional Development**

*Enhance and streamline professional development for the monument’s interpreters, so as to make top quality personal interpretive services more available to more visitors throughout the site. This effort should reinforce the career ladder system for interpreters introduced in 2010.*

**Personal Services  
Recommendation # 5: The NPS Centennial**

*Plan and coordinate interpretive programming and events for the NPS Centennial in 2016.*

The monument’s Centennial Strategy document of August 2007 describes goals in resource management, visitor safety, and energy and resource conservation. At this stage, the interpretive division anticipates the following duties:

- Participate in national and regional initiatives for the centennial as these opportunities arise.

- Develop monument-based special programs, displays, and events for the 2016 season.

### **Personal Services Recommendation # 6: The 100<sup>th</sup> Anniversary**

*Begin planning for interpretive programming and events for 100<sup>th</sup> anniversary of the establishment of Timpanogos Cave National Monument.*

As with the 90<sup>th</sup>-anniversary celebrations detailed above, much of the burden of planning and programming the 100<sup>th</sup>-anniversary commemorations will fall to the interpretive division. At twelve years in the future, the 100<sup>th</sup>-anniversary in 2022 lies outside the scope of this long-range interpretive plan; however, it is unlikely that the park will produce another LRIP or reformulate its interpretive themes before the centennial.

The recommendations for enhancing the monument's interpretive programming over the next ten years should help lay the groundwork for the intensive planning and interpretive implementation during the 100<sup>th</sup>-anniversary year. Two recommendations are of critical importance:

- the creation of a pro-active Friends group with volunteer and fund-raising capacity,
- additional staffing recommendations (see page 48), including a supervisory interpretive park ranger and assessment of the need to change the chief ranger position to a chief of interpretation position.

## **Non-Personal Services/ Interpretive Media**

### **Interpretive Media Recommendation # 1: Wayside Exhibit Plan**

*Create a comprehensive but flexible interpretive wayside exhibit plan for the entire monument, including current and future visitor center exteriors and immediate grounds, the Canyon Nature Trail, the picnic areas, the cave trail, and the cave entrance and exit, to insure adequate coverage of all primary interpretive themes and to maintain high-quality signage in good repair.*

Because wayside exhibits are often funded in segments over multiple years, their planning and implementation can be fragmented. When viewed as a unit, however, a site's total wayside investment can be substantial (\$2000 to \$4000 per sign; up to \$80,000 for 20 signs), with individual signs standing (for better or worse) as silent sentries in a park's interpretive program for ten or more years. A master plan for waysides is extremely helpful in making the best use of scarce dollars, tracking or anticipating needed changes, and engaging visitors' attention most effectively.

At Timpanogos Cave National Monument, a formal, written wayside exhibits plan encompassing the entire monument and reflecting its interpretive themes will improve messaging and decrease the likelihood of visual clutter, sign redundancy, outdated information, content omissions, and signs that are off-topic.

A wayside plan could also help address a continuing difficulty at the site: wayfinding and basic information. With good planning, the monument could create cost-effective and unobtrusive identical panel sets to fit into multi-panel settings for daily information and wayfinding at key locations

within the monument. This need will become even more critical as the new visitor center comes on line (see also Interpretive Media Recommendation # 3).

In 2010, several sets of the monument’s wayside exhibits are in various stages of transition, redevelopment, or funding. These include:

- New Canyon Nature Trail wayside exhibits to replace the numbered posts and the printed guide; also develop plant ID markers along trail. (PMIS# 163378, approved for FY 2011)
- Replacement of older cave trail waysides (PMIS request to be submitted in 2011).

**Interpretive Media Recommendation # 3: Publications**

*Upgrade and expand core print materials for monument visitors.*

- Develop and produce a site bulletin on the geology of the cave system and the canyon.
- Develop and produce a site bulletin on the “Legends of Timpanogos,” placing well-known local legends in context and supplementing the stories with scientific accuracy where necessary.
- Revisit the relationship between the WNPCA publication “Along the Way” and the numbers inserted along the trail. To those who have not purchased the booklet, the numbers have no interpretive value; furthermore, the new cell phone tour signs are often placed beside the older numbers and can cause confusion.
- Examine existing publications, including the unigrid brochure and visitor guide, at regular intervals and plan ahead for revisions. For example, both these pieces will need revisions at completion of the new visitor center, if not before.
- Make all free NPS publications easily accessible for visitors, preferably without making them stand in line or search through materials for purchase.

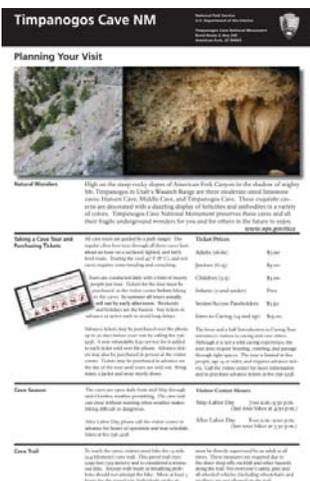
**Interpretive Media Recommendation # 2: Interior Exhibits**

*Explore additional ways to use exhibit materials in support of the interpretive program.*

- Selectively replace and/or upgrade existing exhibit materials within the current visitor center as needed until the new visitor center opens. As existing exhibit panels are phased out, seek opportunities for reuse in office/lobby areas, community settings, or traveling and tabletop exhibits.
- As outreach and forest programs continue to develop, consider creating small traveling exhibit panels such as retractable “window shade” units or folding tabletop displays for use at community festival booths or school presentations.



NPS Recruiting Rangers materials are a good example of small traveling exhibit panels



Planning Your Visit publication currently available on the park website

## Interpretive Media

### Recommendation # 4: New Media

*Expand and upgrade interpretive audiovisuals, multimedia, and “new media” steadily but selectively, focusing on high-quality interpretive content that can be adapted to many different media platforms and accessed by many different audiences.*

“New media” is a catch-all term that unites the instant access and interactivity of the internet and other personal technologies with traditional media such as photos, audio recordings, printed materials, and film. Park visitors increasingly expect and rely on these types of media. Yet for interpreters, the time consuming mastery of multiple technologies can sometimes seem like a full time job, leaving very little time left over to develop an interpreter’s essential product, which is and has always been creating compelling interpretive *content*.

In planning for future audio, video, or computer-based interpretive programs, whatever their ultimate delivery method (smart phone, website, email blast, podcast, DVD, touchscreen multimedia, etc.), the monument’s small staff of professional interpreters should work strategically to devote most of their energy and their specialized professional expertise to the planning and creating audience-appropriate interpretive content and/or guiding outside communications professionals such as filmmakers to develop that content. With this approach, interpreters can provide more high-quality content that can be adapted to more media platforms over time.

These specific new media goals were identified during the 2010 LRIP workshops:

- Create a new 10- to 15-minute introductory film for monument visitors, and make it available for

distribution online or by DVD for class/group previews, as well as onsite at the monument and the proposed interagency center.

- Produce a series of short, high-quality podcasts to entice and prepare visitors to visit the monument. Topics should include planning your visit, safety at the monument, cultural history, plants and wildlife, and basic geology.
- Seek ways to publicize and monitor the cell phone audio tour, perhaps with a laminated, returnable card.
- Explore social media opportunities such as Facebook to publicize events at the park.
- Continue to maintain and improve the monument website to make it a richer experience for virtual visitors and a good content resource for students and potential visitors. At present, the monument’s website offers a great deal of useful information and interpretive material, and the momentum of the interpretive program in this regard should be supported and continued. As inspiration, it is worth noting that larger sites such as Grand Canyon National Park and Yosemite National Park make extensive use of in-depth multimedia webpages featuring video ranger talks, computer fly-through animations, downloadable photos and audio and video podcasts.
- Another web-related issue discussed at length during workshops is logistical: both park staff and visitors would like for people to be able to make online reservations for cave tours. This is one of the park’s top priorities and would help address a number of issues.

- Future web-based Junior Ranger programs should be developed to take advantage of web technology, rather than merely present printable or downloadable copies of existing Junior Ranger booklets.

### **Interpretive Media**

#### **Recommendation # 5:**

#### **Commemorative Items**

*Initiate the planning, design, and production of print and new media materials to support major milestone events for the monument.*

- Create and distribute a special 90<sup>th</sup>-anniversary cave tour ticket throughout 2012, incorporating interpretive and safety messages as part of an attractive design that visitors will want to collect and save in their family scrapbook as a keepsake.
- Consider compiling and publishing a book of historic photographs gathered through the Public History project proposed for the anniversary; proceeds from book sales could help support ongoing public history initiatives at the monument as the 100<sup>th</sup> anniversary approaches.
- A special NPS passport stamp and a commemorative coin could also be introduced.

### **Partnership and Volunteer Needs**

Timpanogos Cave National Monument has a broad-based partnership with the USDA Forest Service, as well as project-related partnerships with other local groups, including some private-sector businesses. Several important additional or strengthened partnerships could assist the monument in its interpretive programming in the coming decade.

#### **Partnership/Volunteer**

#### **Recommendation # 1:**

*Encourage local residents to form a “Friends of Timpanogos” 501(c)3 organization with a target kickoff event at the seasonal opening in 2012.*

Monument employees expressed understandable concerns about the staff time and effort involved in creating and guiding a Friends group. The need for such a sustained, locally viable group working with and for the monument was quite apparent in the course of the interpretive planning process. First of all, no local community members or volunteers attended the planning workshops, and few volunteers are actively involved in interpretation or outreach for the park. Still, given this site’s rich 20<sup>th</sup>-century history, where family names and living descendants of cave discoverers proliferate and where a primary interpretive theme directly addresses the efforts of concerned citizens in saving the caves, a vibrant and committed Friends group could be a tremendous asset to the park. Among these assets are political and environment advocacy, fundraising capability, educational support, and onsite volunteering for programming, maintenance, safety, and administrative tasks.

- One starting point for this endeavor is to seek out a “community champion” or steering committee to lead this effort – perhaps a town leader, a group of regular trail walkers, or other knowledgeable supporters drawn from grotto groups, hiking clubs, founding family descendants, and youth leaders.
- Other suggestions included strengthening interpreters’ stewardship message at the end of cave tours, followed by a Friends sign-up sheet at the cave exit; offering everyone who purchases an annual pass for American Fork Canyon an honorary membership in the newly forming Friends of Timpanogos; and creating an honorary category for named descendants of families who were instrumental in establishing the monument.

### **Partnership/Volunteer Recommendation # 2:**

*Work closely with Western National Parks Association on upcoming issues of mutual interest.*

- Develop an appropriate scope of sales that supports and enhances the site’s interpretive themes. Specific recommendations include
  - Acquiring more site-specific or locally oriented books such as Heart of the Mountain: The History of Timpanogos Cave National Monument by staff resource management specialist Cami Pulham in ample time for the 90<sup>th</sup> anniversary. (The limited initial print run sold out quickly, primarily to local residents.)
  - Researching and stocking a larger selection of relevant and environmentally responsible gift items.



Park ranger with volunteers in honor of National Public Lands Day

### **Partnership/Volunteer Recommendation # 3:**

*Establish regular communications with the Uinta-Wasatch-Cache National Forest regarding interpretation, so as to stay abreast of Forest Service interpretive offerings and capabilities in the canyon and at the planned interagency visitor center.*

- Continue the current practice of developing and presenting summer season evening programs at nearby national forest sites for campers and for local residents who drive in from local communities.
- Work closely with the USDA Forest Service team in creating interpretive messaging for the interagency visitor center as it develops.

## Research Needs in Support of Interpretation Staffing Needs

### Research Recommendation

#### # 1:

*Establish Timpanogos Cave System as an academic research destination.*

- With guidance from the National Cave and Karst Research Institute (NCKRI), monument staff should seek to position the Timpanogos Cave System as a desirable destination for university faculty and graduate students in search of research sites on cave and geology projects. Research personnel and their findings will be valuable additions to the overall cave resource network, as well as engaging and newsworthy assets for interpretive programming and outreach.

### Research Recommendation

#### # 2:

*Commission a Visitor Experience and Resource Protection study.*

- As NPS Geologic Resources Division representative Dale Pate recommended after his visit in May 2010, the monument should seriously consider commissioning a Visitor Experience and Resource Protection (VERP) study to provide definitive guidance in deciding on the appropriate number of cave tours and visitors per tour per day – an issue that relates directly to interpretive division staffing, scheduling, training, and overall capacity throughout the monument. A non-technical overview of the VERP process, subtitled “A Handbook for Planners and Managers,” is available at [www.planning.nps.gov/document/verphandbook.pdf](http://www.planning.nps.gov/document/verphandbook.pdf); Chapters 4 and 5 discuss the relationship between existing visitor use, visitor experience, and resource conditions.

When viewed only by its statistics, Timpanogos Cave National Monument has a small land area, relatively low visitation compared to many other western parks, and a seemingly large interpretive staff totaling 31 people. The monument has no chief of interpretation and no permanent supervisory interpretive ranger position.

But numbers alone do not provide a full picture of the interpretive needs at this site. First, the 31 interpretive staff members are devoted almost entirely to leading the maximum number of cave tours during the monument’s six-month season, eleven hours a day, seven days a week. Second, the cave trail hike and the cave tour are both physically demanding and potentially dangerous, and visitors need to receive and heed safety messages clearly and often. Third, about 30,000 visitors a year do not take the strenuous hike to the caves but stay below for a minimum of three hours, where they currently have very few interpretive offerings or activities and only a small, inadequate visitor center. Finally, and perhaps most critically, visitors to Timpanogos Cave tend to be younger than at other NPS sites and largely local, with correspondingly greater needs for safety concerns, variable and age-appropriate programming, and educational outreach, especially during the winter months when school is in session but the park is closed.

The combination of a younger demographic, a large contingent of non-cave visitors, and no permanent, year-round supervisory interpretive staff, educational specialists, or dedicated administrative support means that Timpanogos Cave National Monument is unable to plan and provide its onsite, potential, and virtual visitors with interpretive programming that fully captures the richness and

significance of this unique place. More ominously, the lack of adequate interpretive staff may leave visitors uninformed and unengaged, inattentive to their surroundings, and therefore more likely to be injured at some of the monument's known danger spots (especially for children): crossing the road, waiting for three hours with little to do near the visitor center, or hiking the higher parts of the cave trail.

### **Interpretive Staffing Recommendation # 1:**

*Create a permanent position for the supervisory interpretive ranger so that the momentum of the current interpretive program will continue without interruption. (Interpretive leadership turnover and vacancies earlier in this decade hampered the program's growth.)*

### **Interpretive Staffing Recommendation # 2:**

*Add an Interpretive Administrative Assistant as a seasonal employee to help with the logistical and communication challenges of an interpretive program heavily dedicated to cave tours.*

### **Interpretive Staffing Recommendation # 3:**

*Add two or three winter seasonal employees whose principle duties would be education and outreach.*

## **Interpretive Staffing**

### **Recommendation # 4:**

*Assess the need for replacing the Chief Ranger position with a Chief of Interpretation position, depending on how the new visitor center, interagency center, visitation, and anticipated personnel changes develop in the next decade.*

## **Interpretive Staffing**

### **Recommendation # 5:**

*Prepare to add seasonal staff in the summer months as visitation increases and as more roving ranger assignments are implemented, as recommended in the Personal Services section of this plan.*

## **Facilities and Equipment Needs for Interpretation**

### **Recommendation # 1: Interpretive Materials**

*Produce/procure a variety of interpretive items/kits for use in programming and outreach.*

- Create a set of interpretive "explorer packs" for families to check out and use during their visit to the monument.
- Create a set of traveling trunks, incorporating existing and/or new interpretive media, for use by schools and youth groups.



Seasonal staff training session

- Create patches and other materials for new Junior Ranger programs as they are developed (“Timpanogos Tiny Tots” for ages 5 and under; “Not So Junior Rangers” for ages 13 and up).

### **Recommendation # 2: New Technology**

*Upgrade the interpretive division’s technological tools as needed to continue producing routine interpretive media inhouse.*

- Purchase a high-resolution digital SLR camera to capture usable, high-resolution images for use in interpretive materials such as waysides and other exhibit panels, the website, print publications, and posters. Often frontline interpreters are in the best position to photograph special events, new installations, and “people” shots throughout the monument in the course of their workdays.
  - Seek guidance from the NPS regional office on obtaining photo releases before photographing visitors at the monument.

- Upgrade computing equipment to provide desktop publishing capability. Within a few years, the interpretive division will need at least two new computers and software upgrades to maintain cyberspace compatibility in doing digital design, podcast production, and video editing.
  - While professional design firms or Harpers Ferry Center should be called in for major projects, the interpretive staff must maintain adequate, up-to-date desktop publishing capability to produce attractive curriculum guides, flyers, PowerPoint presentations, handouts, web graphics, and other necessary interpretive materials.

### **Recommendation # 3: Compressed Natural Gas (CNG) vehicle**

*Use a CNG vehicle for educational outreach and public events.*

- Consider making a CNG vehicle available to the interpretive team for outreach, so as to have interpreters set a good example and avoid using their own vehicles to travel to school and community events.

### **Recommendation # 4: Work and storage space**

*Continue efforts to streamline work and storage space for interpretive needs.*

- Work with the design team to optimize space for interpretive needs in the new visitor center.



TICA’s eco-friendly fleet

## Implementation Plan

The interpretive planning team proposes prioritizing new interpretive services and media to be phased in over the next ten years, with milestones marked for short, mid, and long-range implementation.

This chart prioritizes the implementation of the long-range interpretive plan with suggestions for step-by-step progress toward each major recommendation. Indicators (XX) describe each recommendation as a short-term, mid-term, or long-term goal. Entries with XX across all three timeframes should be considered as continuous, ongoing activities.

The cost projection column provides a rough guide to the estimated costs of each recommendation. The symbol \$ estimates a moderate annual cost (under \$50,000); the \$\$ indicates annual expenditures estimated between \$50,000 and \$100,000; and the \$\$\$ indicates major expenditures, usually capital expenditures such as facilities remodeling, exhibit installations, visitor transportation vehicles, etc.

<b>Timpanogos Cave National Monument: Priorities by Interpretive Service</b>	<b>Short-term (1-3 years)</b>	<b>Mid-term (4-6 years)</b>	<b>Long-term (7-10 years)</b>	<b>Cost Projection</b>
<b>NEW FACILITIES PLANNING</b>				
<b>Proposed Timpanogos Cave National Monument Visitor Center</b>				
<i>Recommendation # 1: Plan and supervise creation of thematic interpretive exhibits for the interior of the new visitor center.</i>		xx		\$\$\$
Use building structure to illustrate and support exhibits on the primary interpretive theme of geology		xx		\$\$
Attempt to offer visitors a cave experience within the exhibits		xx		\$\$\$
<i>Recommendation # 2: Plan and supervise creation of thematic interpretive content for the exteriors immediately adjacent to the new visitor center.</i>				
Focus adjacent exterior interpretation on safety, natural history, and cultural history		xx		\$
<i>Recommendation # 3: Assess and correct wayfinding problems</i>				
Revise wayfinding signage throughout the monument as needed		xx		\$\$
<i>Recommendation # 4: Plan and supervise creation of new outdoor interpretive playground</i>		xx		\$\$\$
Explore options for innovative custom-designed playgrounds on geology or caves themes	xx			\$\$\$
Explore funding options		xx		\$\$
<b>Proposed Interagency Visitor Center</b>				
<i>Recommendation # 1: Plan and supervise creation of thematic interpretive exhibits and programming for proposed interagency visitor center</i>			xx	\$\$\$
Work toward securing thematic content, design concepts, and schematic design during first funding cycle	xx			\$\$\$
Focus on "Stewardship and Sustainability" as overarching theme, focusing on the historic resource use and damage that led to the creation of the National Forest and National Monument through local stewardship efforts. Part of that stewardship today is embodied in the building's sustainable design.			xx	\$\$\$
<i>Recommendation # 2: Provide planning and supervisory guidance regarding visitor experiences on the grounds of the interagency site</i>				
Develop wayfinding/information stops for exterior/parking/drive-by access			xx	\$\$
Plan minimal trail signs, preferably with sustainability/water conservation messaging			xx	\$\$
<i>Recommendation # 3: Provide planning and supervisory guidance for interpretive use of the multipurpose room at the interagency center</i>			xx	\$\$\$
Propose that room be open to public all day, not just for special events/uses.			xx	\$\$
Propose small-footprint wall exhibits that do not obstruct other uses			xx	\$\$
Propose areas dedicated to temporary local and national traveling exhibits			xx	\$\$

<b>Timpanogos Cave National Monument: Priorities by Interpretive Service</b>	<b>Short-term (1-3 years)</b>	<b>Mid-term (4-6 years)</b>	<b>Long-term (7-10 years)</b>	<b>Cost Projection</b>
<b>PERSONAL SERVICES</b>				
<i>Recommendation # 1: Provide more out-of-cave interpretive services and greater ranger visibility throughout the monument.</i>				\$\$\$
<b>Priority 1: Within the monument</b>				
After training, assign roving rangers on cave trail for pocket programs and safety presence	XX			\$
After training, schedule regular Ranger Porch Talks	XX			\$
After training, integrate a roving ranger on the Canyon Nature Trail and picnic areas with other duties		XX		\$
<b>Priority 2: In the national forest</b>				
Reintroduce daytime ranger-led walk "Autumn in the Canyon"		XX		\$
Add other daytime ranger-led walks in the forest		XX		\$
Review data on evening programs in the forest for core mission and theme-based appropriateness	XX			
Consider expansion of evening forest programs as needed		XX		\$
<i>Recommendation # 2: Plan interpretive services and events celebrating the 90<sup>th</sup> anniversary</i>				\$\$\$
Begin work on creating a "Friends of Timpanogos" group	XX			
Start an art and photo contest to commemorate the monument	XX			\$
Launch a community request for historic photos or oral histories of the monument	XX			
Schedule events and invite dignitaries	XX			
Seek regional participation, including from Ute Tribe	XX			
<i>Recommendation # 3: Develop/enable more interpretive resources for education and outreach</i>				\$\$
Expand Junior Ranger program to include wider range of age groups within families	XX			\$
Continue Kids & Nature program for Title I schools	XX			\$
Continue work on educational curricula, revising as necessary	XX			\$\$
Build relationships with diverse communities	XX			\$\$
Set goals for greater use of web in outreach and education	XX			\$
<i>Recommendation #4: Enhance and streamline professional development for the monument's interpreters</i>				\$
Set specific content/program goals for position levels and provide training as needed	XX			\$
Assess interpreters' performance regularly and offer training as needed	XX			
Prepare and distribute a training manual for interpretive team	XX			
Prepare a new orientation handbook for interpreters	XX			
<i>Recommendation # 5: Plan and coordinate interpretive programming for the NPS Centennial in 2016</i>		XX		\$
Participate in national and regional initiatives		XX		\$
Develop monument-based special programs, displays, and events		XX		\$
<i>Recommendation # 6: Begin planning for 100<sup>th</sup> -anniversary of the establishment of Timpanogos Cave National Monument.</i>				
Support pro-active Friends group for volunteering and fundraising			XX	\$
Add staff as needed			XX	\$\$

<b>Timpanogos Cave National Monument: Priorities by Interpretive Service</b>	<b>Short-term (1-3 years)</b>	<b>Mid-term (4-6 years)</b>	<b>Long-term (7-10 years)</b>	<b>Cost Projection</b>
<b>NON-PERSONAL/INTERPRETIVE MEDIA</b>				
<i>Recommendation # 1: Create a wayside exhibit plan</i>				\$
Commission wayside exhibit plan	XX			\$
Create new waysides for Canyon Nature Trail to replace numbered posts and printed guide	XX			\$
Replace older cave trail waysides as required		XX		\$
<i>Recommendation # 2: Explore additional ways to use exhibit materials in support of interpretation</i>				
Selectively replace or upgrade existing exhibits in visitor center	XX			\$
Consider creating small traveling or tabletop exhibits for outreach and education	XX			\$
<i>Recommendation # 3: Upgrade and expand core print materials</i>				
Develop and produce a site specific book on Timpanogos Cave National Monument	XX			
Develop and produce a site bulletin on geology	XX			\$
Develop and produce a site bulletin on the "Legends of Timpanogos"	XX			\$
Review use of "Along the Way" booklet and trail numbers		XX		\$
Examine existing publications plan ahead for revisions.		XX		\$\$
Make all free NPS publications easily accessible for visitors	XX			\$
<i>Recommendation # 4: Expand and upgrade new media</i>	XX	XX	XX	\$\$\$
Create new introductory film		XX		\$\$
Produce podcast series	XX			\$
Publicize cell phone tour better	XX			\$
Explore social media for publicity	XX			\$
Continue to upgrade website	XX	XX		\$
Make online reservations available for tours	XX			\$\$
<i>Recommendation # 5: Plan, design, and produce print and new media materials for milestone events</i>	XX	XX	XX	\$\$
Create commemorative 90 <sup>th</sup> -anniversary cave tour ticket		XX		
Consider publishing a book of historic photographs		XX		
Create commemorative NPS passport stamp and coin		XX		

<b>Timpanogos Cave National Monument: Priorities by Interpretive Service</b>	<b>Short-term (1-3 years)</b>	<b>Mid-term (4-6 years)</b>	<b>Long-term (7-10 years)</b>	<b>Cost Projection</b>
<b>PARTNERSHIP AND VOLUNTEER NEEDS</b>				
<i>Recommendation # 1: Form Friends of Timpanogos group</i>				\$
Seek out potential Friends leaders	XX			\$
Publicize Friends organizational start-up at the monument and in the community	XX			\$
<i>Recommendation # 2: Work more closely with Western National Parks Association</i>				
Develop Scope of Sales	XX			\$
<i>Recommendation # 3: Work more closely with National Forest</i>				
Develop and deliver summer evening programs in the forest	XX			\$
Collaborate on interpretive messaging at proposed interagency center			XX	\$\$
<b>RESEARCH NEEDS</b>				
<i>Recommendation # 1: Establish Timpanogos Cave System as an academic research destination</i>		XX		\$
<i>Recommendation # 2: Commission a Visitor Experience and Resource Protection study</i>		XX		\$\$
<b>STAFFING NEEDS</b>				
<i>Recommendation # 1: Create a permanent position for the supervisory interpretive ranger</i>	XX			\$\$
<i>Recommendation # 2: Add an Interpretive Administrative Assistant (seasonal)</i>	XX			\$
<i>Recommendation # 3: Add two or three winter seasonal employees to focus on educational programming and outreach</i>	XX			
<i>Recommendation # 4: Convert 5 to 7 seasonal GS-4 Interpretive positions to seasonal GS-5 positions</i>		XX		\$\$
<i>Recommendation # 5: Assess the need for a Chief of Interpretation position instead of a Chief Ranger position</i>			XX	\$\$
<b>FACILITIES AND EQUIPMENT</b>				
<i>Recommendation # 1: Produce/procure interpretive items/kits for programs and outreach</i>				
Create and maintain explorer packs for families on-site	XX	XX	XX	\$
Create traveling trunks for school use		XX		\$
Create patches and other materials for new Junior Ranger Programs	XX			\$
<i>Recommendation # 2: Upgrade technology to produce media inhouse</i>				
Purchase high-resolution digital camera	XX			\$
Upgrade computing equipment and software for digital design, podcast production, video editing, and web site development and management		XX		\$
<i>Recommendation # 3: Acquire use of a hybrid vehicle for interpretive use</i>				
Switch to a CNG vehicle for educational outreach and public events	XX			\$\$
<i>Recommendation # 4: Continue efforts to streamline work and storage space</i>				
Work with the design team to optimize space for interpretive needs in the new visitor center	XX			\$\$



## Appendices

## Appendix A: Legislation

Under the authority of the Antiquities Act President Warren G. Harding proclaimed Timpanogos Cave a National Monument on October 14, 1922. The proclamation states that Timpanogos Cave “is of unusual scientific interest and importance and it appears that the public interests will be promoted by reserving as much land as may be necessary...” for its protection.

The monument was carved from unsurveyed land within the U.S Forest Services’ Uinta National Forest in the state of Utah. The 1922 proclamation states that the lands set aside through the establishment of Timpanogos Cave National Monument “shall be the dominant reservation and any use of the land which interferes with its preservation or protection as a National Monument is hereby forbidden”.

On June 10, 1933 all national monuments were placed under the Department of Interior through Executive Order No. 6166. The following year on July 1, 1934 Timpanogos Cave National Monument was placed under the jurisdiction of the National Park Service (NPS). Management of this new unit would be guided by the Service’s 1916 authorizing legislation know as the “Organic Act” and all agency management policies and regulations.

President John F. Kennedy issued Proclamation 3458 redefining the boundaries of the monument on March 27, 1962. The purpose of the proclamation was to “redefine the external boundaries of the monument in conformity” with a land survey.

## Appendix B: Planning Team

### Timpanogos Long-Range Interpretive Plan: 2002, 2005, and 2010 Planning Teams

#### 2002 Timpanogos Cave National Monument Team

Kit Mullen, Superintendent  
 Suzanne Flory, Chief of Interpretation  
 Mike Gosse, Chief of Resource Management and Visitor Services  
 Camille Price, Supervisory Revenue and Fee Business Specialist  
 Jay Allen, Lead Seasonal Interpretive Ranger

#### Other National Park Service Employees

Neil DeJong, Chief of Interpretation, Intermountain Region  
 David Guiney, Interpretive Media Institute Program Coordinator, Harpers Ferry Center  
 Michele Hartley, Producer, Audiovisual Arts, Harpers Ferry Center  
 Lisa Royse, Project Manager, Workflow Management, Harpers Ferry Center  
 Mary Mallen, Park Ranger, Interpretive Planning, Harpers Ferry Center

#### Partner Participants

Tim Brown, Pleasant Grove Public School System  
 Larry Cesspooch, Ute Nation  
 Loyal Clark, Uinta National Forest

#### 2005 Timpanogos Cave National Monument Planning Team

Kit Mullen, Superintendent  
 Lee Werst, Chief of Interpretation  
 Mike Gosse, Chief of Resource Management and Visitor Services  
 Camille Price, Supervisory Revenue and Fee Business Specialist  
 Jay Allen, Lead Seasonal Interpretive Ranger  
 BJ Cluff, Seasonal Interpretive Ranger  
 Samantha Moore, Seasonal Interpretive Ranger  
 Travis Harris, Maintenance Worker

#### Other National Park Service Employees

Neil DeJong, Chief of Interpretation, Intermountain Region  
 Mary Mallen, Park Ranger, Interpretive Planning, Harpers Ferry Center

#### Partner Participants

Charmain Tompson, Uinta National Forest

#### 2010 Timpanogos Cave National Monument Planning Team

Denis Davis, Superintendent  
 Mike Gosse, Chief Ranger  
 Cami Pulham, Chief of Resource Management  
 Rodney Larsen, Administrative Officer  
 Karissa DeCarlo, Supervisory Interpretive Ranger  
 Shannon Stephens, Supervisory Revenue and Fee Business Specialist  
 Jay Allen, Lead Seasonal Interpretive Ranger  
 BJ Cluff, Seasonal Interpretive Ranger  
 Rachael Keske, Seasonal Interpretive Ranger

Sheila Hunt, Lead Seasonal Visitor Use Assistant  
Carole Heslop, Seasonal Visitor Use Assistant  
Kristy Ferguson, Maintenance Worker  
Andy Armstrong, Lead Resource Management Specialist  
Mike Tallon, Volunteer

**Other National Park Service Employees**

Martin Hauch, Contracting Officer, Grand Teton National Park

**Partner Participants**

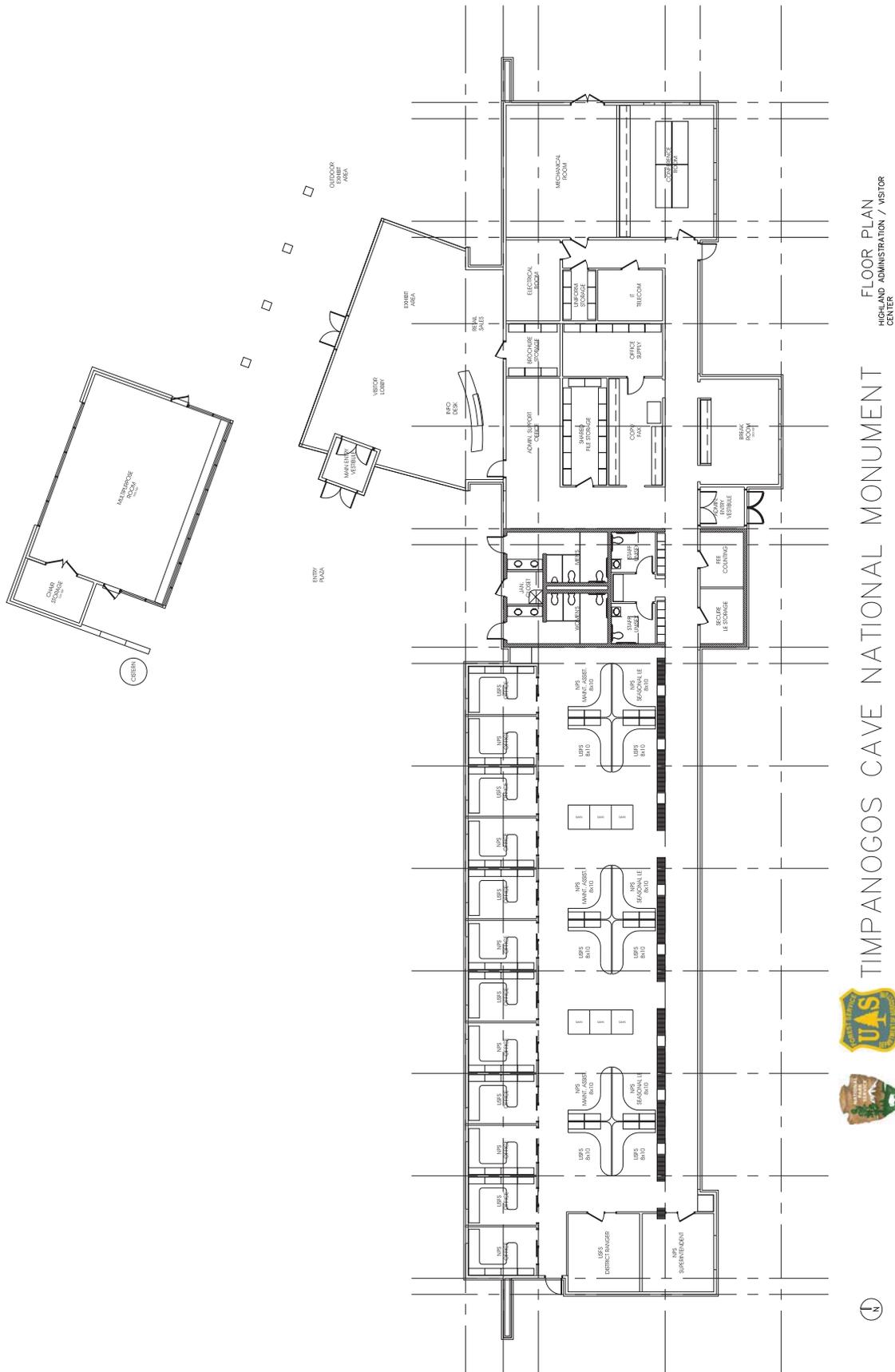
Wendy Wilson, Utah State Parks, Wasatch Mountain  
Becky Menlove, Utah Museum of Natural History  
Cheryl Butler, Uinta-Wasatch-Cache National Forest

**Consultant Team**

Faye Goolrick, CIP, Goolrick Interpretive Group  
Alison Smith, ASLA, AICP, Pond/Ecos

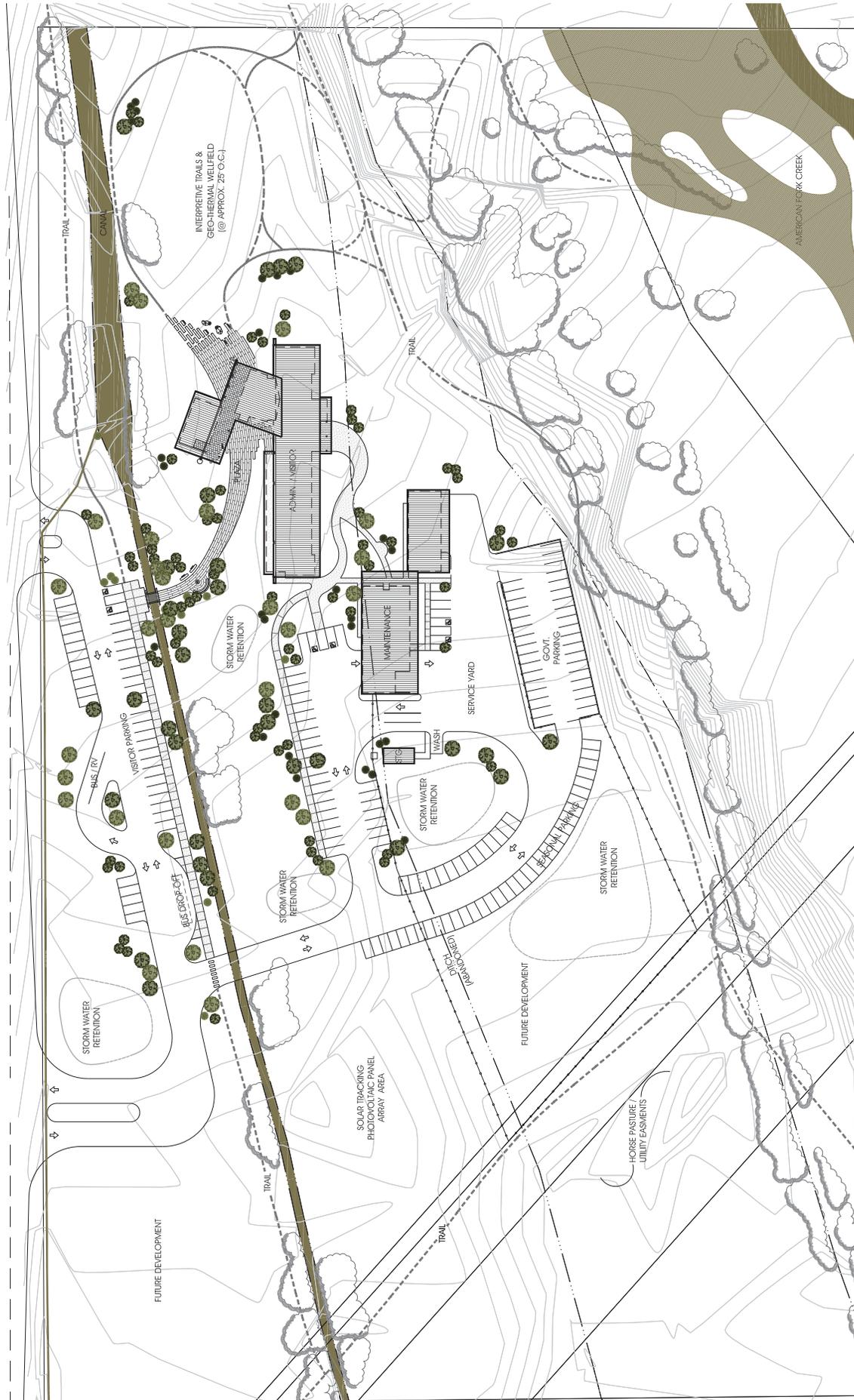
# Appendix C: Schematic Drawing of Proposed Interagency Center

Schematic interior and exterior design of the Proposed Interagency Center by AJC Architects. Current as of July 29, 2010



TIMPANOGOS CAVE NATIONAL MONUMENT





**SITE CONCEPT PLAN**  
 VISITOR CENTER / MAINTENANCE BUILDING

**TIMPANOGOS CAVE NATIONAL MONUMENT**





Harpers Ferry Center  
National Park Service  
U.S. Department of the Interior



## Timpanogos Cave National Monument

R.R. 3 Box 200  
American Fork, Utah 84003

801-756-5239

[www.nps.gov/tica](http://www.nps.gov/tica)