



# COMPREHENSIVE INTERPRETATION AND EDUCATION PLAN *2014–2020*





National Park Service  
U. S. Department of the Interior

## **Yellowstone National Park**

Division of Resource Education and Youth Programs

P.O. Box 168

Yellowstone NP, WY 82190

307 344-7381

**[www.nps.gov/yell](http://www.nps.gov/yell)**

Cover Photo: Ranger at Old Faithful Geyser, Upper Geyser Basin. NPS/Neal Herbert 2014.



# COMPREHENSIVE INTERPRETATION AND EDUCATION PLAN *2014–2020*





# CONTENTS

<b>Foreword</b> .....	<b>1</b>
<b>Executive Summary</b> .....	<b>3</b>
<b>Vision</b> .....	<b>5</b>
<b>Foundations</b> .....	<b>7</b>
Foundations of the Plan .....	<b>9</b>
Primary Interpretive Themes .....	<b>12</b>
Visitor Experience Goals .....	<b>16</b>
Summary: Visitor Surveys .....	<b>18</b>
Division Overview .....	<b>20</b>
Challenges, Opportunities, and Issues .....	<b>22</b>
<b>Recommendations</b> .....	<b>29</b>
General Recommendations .....	<b>32</b>
Facilities.....	<b>35</b>
Youth Programs .....	<b>37</b>
Web Program/Electronic Communications/Social Media .....	<b>40</b>
Distance Learning/Webinars/Lifelong Learning .....	<b>42</b>
Webcams, Mobile Devices.....	<b>43</b>
Publications Program .....	<b>44</b>
Exhibits Program .....	<b>45</b>
Personal Services, Ranger Programs .....	<b>46</b>
Community Outreach Program .....	<b>47</b>
Volunteer in Parks (VIP) Program .....	<b>48</b>
Long Term, Ongoing .....	<b>49</b>
<b>Bibliography</b> .....	<b>50</b>
<b>Acknowledgements</b> .....	<b>52</b>
<b>Appendices</b> .....	<b>55</b>



# FOREWORD

## A MESSAGE FROM THE SUPERINTENDENT



Yellowstone National Park is a place of beauty and incomparable natural wonders—Old Faithful and the majority of the world’s geysers are preserved here. They are the primary reason the park was established in 1872 as America’s first national park—an idea that spread worldwide. A mountain wildland, home to grizzly bears, wolves, bald eagles, and free-roaming herds of bison and elk, the park is the core of one of the last, nearly intact, natural ecosystems in the Earth’s temperate zone.

The park’s human history spans more than 10,000 years—from prehistoric peoples, Native American tribes, mountain men, prospectors, the U.S. Army, and “modern” tourists—people and their activities have stirred the imagination and enriched the history of this world-renowned treasure.

The National Park Service (NPS), the steward of this special place, is charged with protecting and preserving Yellowstone for all people as our heritage to future generations while providing for appropriate visitor use. It is a mission that is unique among federal land management agencies and one that is increasingly complex in a rapidly evolving world. The NPS is also recognized as a powerful educator in the American system

of learning and is one of the primary sources for lifelong learning opportunities in the country.

It is in this challenging time of change and opportunity that the park has updated its plan for engaging visitors and the general public with Yellowstone National Park. This Comprehensive Interpretation and Education Plan is built upon the substance and successes of preceding plans, and incorporates a wide range of data and research. It supports the NPS mission by connecting people with the park through a spectrum of opportunities, offered by the National Park Service and our partners, that enable individuals to experience and understand the natural and cultural significance of the park. Interpretation and education can encourage civic dialogue about resource preservation, climate change, visitor use, and a spectrum of ongoing and emerging issues.

Organizationally, Yellowstone’s Division of Resource Education and Youth Programs is responsible for achieving these goals. They can be accomplished through resource-based interpretive and education programs, exhibits, publications, the park’s website and social media sites, and other forms of technology-based media, all of

which will be developed and delivered based upon the best available science and evaluative data.

The Yellowstone Association, our primary partner in education and interpretation since 1934, along with numerous additional partners and stakeholders are critical to meeting our mission. Every park employee and partner, regardless of whom they work for, is involved in this function. The maintenance worker responding to an inquiry about directions, the volunteer campground host, the subject-matter expert teaching a multi-day seminar for the Yellowstone Association Institute, the commercial guide leading a wildlife watch—these and countless other interactions connect visitors with Yellowstone National Park, and are vital to achieving the NPS mission.

This is an ambitious plan for the world's first national park. We will continue to be innovative in our actions, encourage innovation from our partners, seek out and apply best practices in our work, and pursue creative strategies to implement the recommendations and actions contained in this plan.

We hope those who experience Yellowstone National Park, whether that takes place as a traditional park visit, an online “virtual visit,” or both, will have a new level of public connection, understanding and stewardship with Yellowstone National Park and the National Park Service.



**Superintendent Dan Wenk**

A handwritten signature in black ink that reads "Dan Wenk". The signature is written in a cursive, flowing style.

Dan Wenk  
Superintendent, Yellowstone National Park

# EXECUTIVE SUMMARY



This Comprehensive Plan for Interpretation and Education in Yellowstone National Park is a National Park Service plan within the hierarchy of authorities and policy development described in NPS Management Policies, 2006.

It provides an overview of services and media that support the NPS mission of providing memorable and meaningful visitor experiences, and inspiring lifelong stewardship of Yellowstone. This overview extends to broadly encompass those services provided in and near the park by concessioners, partners, and stakeholders. The plan is therefore “comprehensive” in scope. However, depth and details appear in various forms and in other types of plans, existing and yet to be developed.

Through a series of surveys, meetings, and consultations, park staff in the Division of Resource Education and Youth Programs (REYP) developed this plan with input from all NPS divisions in Yellowstone National Park, staff in other NPS units across the system, staff in the NPS Washington, D.C., headquarters and

Intermountain Regional Office, and a variety of partners and stakeholders that include the Yellowstone Association, the Yellowstone Park Foundation, Departments of Education in the surrounding states, regional educational organizations, and regional federal, state, and local government agencies.

In addition, a thorough review was conducted of related Yellowstone National Park planning activities and documents, visitor studies, visitor surveys, and U.S. Census data. This plan supports, and is supported by, a variety of related NPS plans and studies, and is grounded in the best available information about park visitors and the broader demographics and trends in the composition of the U.S. population.

This plan is a living document to be reviewed often and adjusted accordingly. An electronic version will be posted on the park’s official website at [www.nps.gov/yell](http://www.nps.gov/yell) and will include links to in-depth information, policies, NPS and other organizations’ plans, and a library of resources. ◀



# VISION



The Division of Resource Education and Youth Programs is dedicated to protecting the resources and preserving the natural processes of Yellowstone National Park and the Greater Yellowstone Ecosystem through education, engagement, and stewardship. We connect people with the wonders of Yellowstone in ways as varied as the needs and preferences of each individual, and recognize that it is the park that inspires people. The law that created the National Park Service in 1916 established its mission to conserve “the scenery and the natural and historic objects and the wildlife therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” Therefore, the Division of Resource Education and Youth Programs plays a significant role in achieving both parts of the NPS mission, as they are truly inseparable.

We will stay relevant and serve visitors and the general public by being innovative and using new technologies while continuing to honor and uphold the long-respected traditions of the NPS. As the National Park Service’s 100th Anniversary approaches, we celebrate this legendary park by

continuing our tradition of providing world class information, education, and interpretive services. Professional NPS educators and interpreters take the lead in this important work, and a variety of partners and stakeholders provide an array of services that, in total, offer visitors a spectrum of options for enjoying and learning about Yellowstone. Indeed, every park employee and partner, regardless of whom they work for, is involved in this function.

The park’s stewards are people of all ages, backgrounds, and racial/ethnic groups. Younger people are the future stewards of the park and national park system. Engagement with families and schools is key to reaching them. We keep abreast of current educational theories, methodologies, and trends; and sustain relationships with federal and state education departments, schools, and institutions of higher learning.

As current NPS Director Jon Jarvis notes, engaging new and diverse audiences can be effectively achieved through bringing parks to people via technology and through personal outreach, as well as via in-park programs. The Division of Resource Education and Youth Programs has been and will continue to be a leader in the use of technology

to engage people with Yellowstone, and has a long tradition of educational outreach in addition to its highly valued in-park programs.

We will demonstrate respect for the multiple perspectives of our visitors, who have different reasons for visiting Yellowstone National Park and arrive with varying levels of knowledge, interest, and abilities. We will exercise the highest standards of professionalism in serving the needs, interests, and abilities of all visitors while also respecting their unique learning styles and the countless ways in which each individual may be inspired by this extraordinary place. Public engagement is a continuous dynamic conversation that informs and enriches our endeavors.

We will be bold, visionary, realistic, strategic, and efficient, and use evolving technology and innovative techniques and practices. We will communicate the latest science on YNP resources. We will consistently evaluate the effectiveness of our programs and services, and those of others that engage Yellowstone National Park visitors in educational, interpretive, and recreational activities and programs.

We will increase the effectiveness and accountability of park interpretation and education activities by collaborating with volunteers, the Yellowstone Association, Xanterra Parks & Resorts, Commercial Use Authorization permit holders, and other partners and stakeholders to provide interpretive and education services that adhere to servicewide standards. NPS educators will provide the leadership, training, example, and standards for all partners to deliver effective interpretive and education services.



*“We will stay relevant and serve visitors and the general public...while continuing to honor and uphold the long-respected traditions of the NPS. ... We will be bold, visionary, realistic, strategic, and efficient, and use evolving technology and innovative techniques and practices.”*

Interpretation and education capacity will be augmented by actively pursuing additional partnerships. Partnerships for this purpose will be sought with willing and able organizations with compatible purposes, such as historical societies, museums, colleges and universities, school districts, tourism commissions, conservation groups, health organizations, libraries, and others.

Yellowstone National Park is one of Earth's superlative wonders because people have supported its preservation. These are times of extraordinary challenges and the National Park Service is excited to be leading the way to a second century of park stewardship by expanding its impact and adding new dimensions to its programs, activities, and media. ●



# FOUNDATIONS

- Foundations of the Plan
- Primary Interpretive Themes
- Visitor Experience Goals
- Summary: Visitor Studies
- Division Overview
- Challenges, Opportunities, and Issues
- In-park Partners



# FOUNDATIONS OF THE PLAN



## **Yellowstone National Park Mission Statement**

Preserved within Yellowstone National Park are Old Faithful and the majority of the world's geysers and hot springs. An outstanding mountain wildland with clean water and air, Yellowstone is home of the grizzly bear and wolf and free-ranging herds of bison and elk. Centuries-old sites and historic buildings that reflect the unique heritage of America's first national park are also protected. Yellowstone National Park serves as a model and inspiration for national parks throughout the world. The National Park Service preserves, unimpaired, these and other natural and cultural resources and values for the enjoyment, education, and inspiration of this and future generations.

## **Yellowstone National Park Purpose Statement**

Yellowstone National Park, the world's first national park, was set aside as a public pleasuring ground to share the geothermal wonders and preserve and protect the scenery, cultural heritage, wildlife, and geologic and ecological systems and processes in their natural condition, for the benefit and enjoyment of present and future generations.

## **Significance of Yellowstone National Park**

The following significance statements have been identified for Yellowstone National Park. (Please note that the sequence of the statements does not reflect the level of significance.)

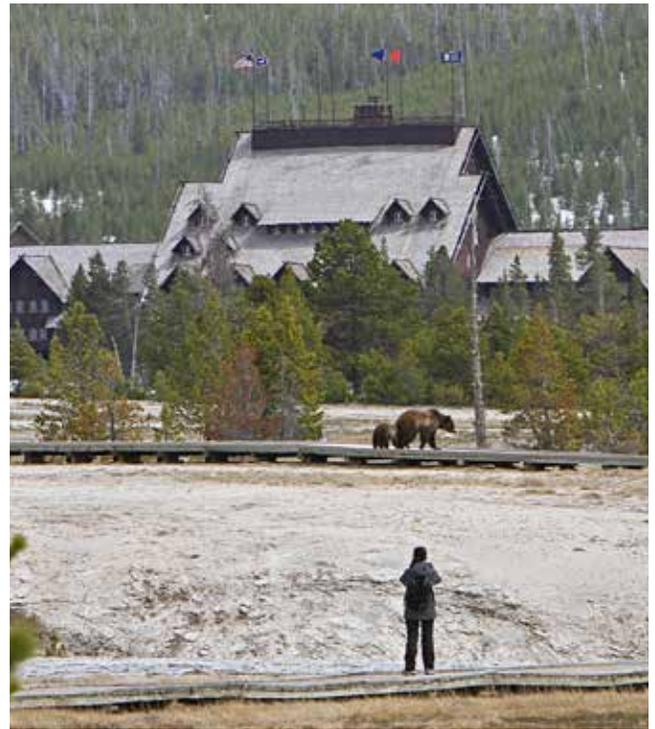
- Yellowstone National Park is the world's first national park—an idea that has spread throughout the world.
- Yellowstone National Park was set aside because of its geothermal wonders—the planet's most active, diverse, and intact collection of geothermal, geologic, and hydrologic features and systems and the underlying volcanic activity that sustains them.
- The park is the core of the Greater Yellowstone Ecosystem, one of the last, largest, mostly intact, natural ecosystems in the temperate zone of Earth. It preserves an exceptional concentration and diversity of terrestrial, aquatic, and microbial life. Natural processes operate in an ecological context that has been less subject to human alteration than most others throughout the nation—and indeed throughout the world. This makes the park not only an invaluable natural

reserve, but a reservoir of information valuable to humanity.

- Yellowstone contains a unique and relatively pristine tapestry of cultural resources that span over 11,000 years. The archeological, architectural, historical, and material collections constitute one of the largest and most complete continua of human occupation in the western United States, including the association of 26 American Indian tribes with the landscape. More recent cultural resources represent the material embodiment of the birth of the National Park System and the American conservation movement.
- Yellowstone visitors have unparalleled opportunities to experience unique geothermal wonders, free-roaming wildlife, inspiring scenic views, cultural heritage, and spectacular wilderness character.

### **National Park Service Policies Addressing Education, Interpretation, Youth Programs, Volunteerism**

- Management Policies 2006
- Director's Order #6 Interpretation and Education
- Director's Order #7 Volunteers in Parks
- Director's Order #21 Donations and Fundraising and Reference Guide 21
- Director's Order #26 Youth Programs
- Director's Order #32 Cooperating Associations and Reference Manual 32
- Director's Order #41 Wilderness Stewardship and Reference Manual 41
- Director's Order #42 Accessibility for Visitors with Disabilities in NPS Programs and Services
- Director's Order #50B Occupational Safety and Health Program and Reference Manual 50B



- Director's Order #50C Public Risk Management Program and Reference Manual 50C
- Director's Order #52A Communicating the National Park Service Mission
- Director's Order #70 Internet and Intranet Publishing
- Director's Order #78 Social Science - Visitor Services Project

Appendix A contains links to and more detail on each of the above NPS policies and Director's Orders.

### **Related Yellowstone National Park Planning Documents and Program Areas**

Yellowstone's Comprehensive Interpretation and Education Plan (CIEP) is one of the park's primary planning documents. It is the only planning document that consolidates all aspects of the park's goals and actions related to visitor information, orientation, education, interpretation, volunteer, and youth programs. However, education and visitor experience elements or goals also appear

in other park plans or programmatic undertakings. The list below identifies Yellowstone-specific plans in which visitor or public education, or some facet of youth programs, have been included. During the preparation of the CIEP, each plan was reviewed and relevant sections were factored into the development of the CIEP.

Appendix A contains detailed documents or links to plans:

- Bear Management Plan
- Bechler Administrative Area Improvement Plan/Environmental Assessment
- Bison Management Plan
- Comprehensive Planning
  - Tower Roosevelt Comprehensive Plan Environmental Assessment
  - Lake Area Comprehensive Plan Environmental Assessment
  - Cultural Landscape Inventories and Reports
- Concession Plans– Commercial Services Strategy, Commercial Use Authorization (CUA) Plan
- Fire Management Plan Environmental Assessment
- Foundation for Planning and Management Historic Structures Strategy
- National Ecological Observatory Network (NEON)
- Native Fish Conservation Plan Environmental Assessment, 2011
- Nonnative Vegetation Management Plan Draft Environmental Assessment, 2013
- Old Faithful Science Advisory Recommendations



- Parkwide Commercial Stock Outfitter Concessions Contracts/EA
- Resource Compliance Program
- Safety and Health Policy
- Social Media Strategy
- Social Science Strategy
- Strategic Plan for Sustainability
- Winter Use Final Environmental Impact Statement
- Wireless Communication Services Plan Environmental Assessment, 2009

**Related Partner Strategic Plans:**

- Yellowstone Association (YA) and Yellowstone Park Foundation (YPF).
- Xanterra Parks & Resorts, and Delaware North Companies Parks & Resorts have contracts with areas of intersection with the tenets of this plan.
- Likewise, a variety of partners and stakeholders have operating plans, strategic plans, business plans, or other types of guiding documents that intersect with the goals, vision, services, and media described by this CIEP.

Appendix A contains links to and more detail on these partners' strategic plans. ●

# PRIMARY INTERPRETIVE THEMES



**I**nterpretive/educational themes are the most important ideas, stories, and concepts that should be presented to park visitors and the general public. They arise from and are firmly grounded in the natural and cultural resources of the park, as well as from management issues that may also be critical/controversial issues. They portray the significance of the park. They also provide direction to park staff, partners and stakeholders, designers, planners, and managers.

## **Geology**

Yellowstone lies on a restless part of the earth. Physical evidence of the park's geologic history spans at least 2.7 billion years, and geologic forces continue to shape the land and the patterns of life on the landscape today.

Yellowstone is positioned on top of a "hot spot" where the earth's crust is unusually thin, and molten magma rises relatively close to the surface. Past volcanic eruptions were among the strongest that have ever occurred on earth, and they have shaped the present landscape. Also, periods of glaciation during the past several hundred thousand years have sculpted and scoured the landscape.

## **Geothermal Features**

Yellowstone has more active geothermal features (geysers, hot springs, mudpots, and fumaroles) than the rest of the world combined; they are a product of underlying geological activity, and their heated waters are habitat for diverse thermophilic life forms that we are only beginning to understand.

Approximately 10,000 thermal features currently exist in Yellowstone, including more than 300 geysers, a form of geothermal feature that is extremely rare worldwide. Geothermal features, both beautiful and fragile, provide an unusual opportunity to view a dynamic geologic process. Myriad species of colorful thermophiles, which are extraordinary heat-loving microorganisms, attract scientific researchers because they find optimal habitat in Yellowstone's geothermal features and their heated, often strongly acidic, runoff waters.

## **Natural Resource Preservation**

The greater Yellowstone ecosystem encompasses a world-renowned biological reserve that includes relatively intact wildlife communities and rare and endangered species.



## Ecosystem

The greater Yellowstone area is one of the largest and most intact temperate ecosystems in North America. It supports an exceptional concentration and diversity of terrestrial and aquatic life.

The greater Yellowstone ecosystem, a complex system of communities of plants, animals, and diverse other life forms that interact with each other and their environment, extends well beyond the park's boundary. It encompasses unique thermal features, the headwaters for many rivers,

diverse habitats and life forms, sustainable recreational and economic opportunities, wilderness, dark night skies, and natural soundscapes. This ecosystem is conceptualized and viewed by the public in the contexts of contemporary issues, values, and personal meanings.

Yellowstone preserves native species and the habitats and biological processes that sustain them. Threats to resources are not limited by park boundaries. For example, migratory species require healthy habitats and protection as far away as Central America and the Arctic tundra. Nonnative species from around the world have invaded the park and now compete with native species.

## Wildlife

Yellowstone is home to abundant, diverse, and free-ranging wildlife in a largely undisturbed setting. Their survival depends on sufficient and healthy habitats, the preservation of biological diversity, and minimal human interference and impact. Yellowstone's wildlife provides outstanding opportunities to experience and appreciate the diversity of life.

Few locations in North America offer similar possibilities to witness the natural behavior of large herds of native ungulates and their interactions with predators such as bears and wolves. A wide variety of birds nest in the park, including species of concern such as trumpeter swans, peregrine falcons, and bald eagles. Many other forms of wildlife, from amphibians, reptiles and fish to butterflies, other insects, and invertebrates, find suitable habitat in Yellowstone.



## Human Culture and History

Yellowstone preserves resources associated with more than 11,000 years of human history, which provide insights into a variety of cultures, values, and perceptions, including those of Native Americans, trappers, explorers, miners, U.S. Army personnel, National Park Service and private sector concession staffs, neighboring communities, and more than 140 years of park visitors.

Resources have physical, cultural, and spiritual dimensions. Diverse perceptions and values characterize human experiences of any one place at any one time. The continuum of these experiences helps shape our present identities and our future possibilities.

## First National Park

Yellowstone is the world's first national park, and it continues to be a model for the preservation and enjoyment of park resources.

Designation as a World Heritage Site and an International Biosphere Reserve recognizes the international significance of Yellowstone National Park. From the history of the park's founding to the variety of today's management challenges, we celebrate an extraordinary idea—the preservation and enjoyment of our natural and cultural heritage.



## Wildness

Yellowstone is an extraordinary place in which to experience wildness.

The greater Yellowstone ecosystem preserves a vital part of America's wilderness system. Experiences of wildness range from scenic driving and day hiking, to backcountry hiking and camping, to off-site experiences through media, outreach programs, the Internet, and personal photographs, stories, and recollections.

## Laboratory

Yellowstone's diverse resources, ecological processes, and cultural history provide important opportunities for research and education.

Yellowstone's own natural, physical, and social scientists and other external researchers conduct studies not possible in other sites due to

Yellowstone's relatively intact ecosystem, long history of human habitation, and large number of visitors. Results of these studies aid park managers in understanding and protecting Yellowstone's resources.

### **Climate Change & Sustainability**

As Yellowstone's climate changes, habitats are already changing, affecting continued survival of native species. Engaging in sustainable practices decreases human contributions to climate change.

As the climate warms, high elevation species may lose much of their habitat within the park and the surrounding ecosystem, and wildland fires may increase. Changes in precipitation patterns may result in drought that negatively impacts species dependent on wetlands for breeding. To help reduce the impact of climate change, Yellowstone has set ambitious goals to cut greenhouse gas

emissions and the consumption of electricity, water, and fossil fuel.

### **Management**

Effective park management requires the protection of resources, promotion of sustainable public use, involvement by and cooperation among interested individuals and groups, and the support of the American people for their National Park System.

Issues such as management of elk and bison herds, protection of large predators, restoration of native species, management of invasive nonnative species, fire management, and appropriate levels of visitor use must be addressed through good science, effective public involvement, and affirmation of park values. ●



# VISITOR EXPERIENCE GOALS

AN EXPERIENCE LIKE NO OTHER

## VISITOR EXPERIENCE GOALS

Yellowstone National Park is a place like nowhere else on the planet, and the experience available to visitors should reflect that uniqueness while ensuring that visitor needs and expectations are appropriately accommodated. In addition, the visitor experience must also ensure that impacts to the park's natural and cultural resources are minimized or eliminated when possible.

### **In Yellowstone National Park, visitors will:**

- Feel welcome in the park through encounters with staff who are courteous, knowledgeable, and professional.



- Have safe visits and find a variety of ways to easily understand park regulations and rules designed to ensure their safety in a rugged wilderness setting with unique features and hazards.
- Use facilities that are inviting, safe, clean, helpful, and conveniently located.
- Find a variety of options to match their personal preferences for learning and activity with park services and products.
- Forge their own intellectual and emotional connections with Yellowstone, resulting in lifelong stewardship and engagement with the park.

Off-site visitors will have opportunities to establish a relationship with the park by meeting rangers in person in their communities. Formal and informal programs will connect people with the park.

Virtual visitors will find a wide variety of self-directed online options for engaging with the park and learning about its significance.

# SUMMARY: VISITOR SURVEYS



Understanding park visitors is vital to achieving park goals and carrying out the mission of the NPS. More broadly, understanding how the population of the United States is changing is critical to ensuring the preservation of Yellowstone National Park. The pace of change is accelerating on almost every front, but perhaps nowhere as quickly as in the realm of technology and its impacts on how we live. As this plan is completed, there is much talk within the NPS and beyond about keeping parks relevant and meaningful now and in the future. Understanding the scope and underlying forces that affect how people perceive and value national parks will be an ongoing need and endeavor.

## Yellowstone Visitation Data

The needs and expectations of visitors affect decisions about how best to serve them and meet the NPS mission. This section summarizes basic data obtained from formal studies and surveys conducted in Yellowstone, and the details of those studies appear in an appendix and online, as links to the actual studies.

Surveys conducted by the Visitor Services Project of the University of Idaho Park Studies Unit

during the summers of 2011, 2006, 1989 and 1987 have provided data on changing park visitors (Kulesza et al., 2012; Manni et al., 2007; Littlejohn et al., 1990; Machlis et al., 1988). A pilot survey was conducted in 1983 to aid in designing future surveys (Machlis et al., 1984), but the data probably shouldn't be compared with data from later surveys as the techniques changed.

The majority of visitors to Yellowstone continue to be American (88% in 2011), white (92% in 2011) and non-Hispanic (97% in 2011), although an increasing percentage of international visitors experience the park: 12% in 2011 compared to 8% in 1987. The age of visitors has shifted during the past 24 years. The percentage of visitors ages 26–45 has decreased from 37% in 1987 to 23% in 2011, while the percentage of visitors ages 46–65 has increased from 24% in 1987 to 34% in 2011. In 2011, most (55%) visitors were on their first trip to the park. Most visitors surveyed acquire park information prior to their visit, with use of the park website increasing from 46% in 2006 to 56% in 2011; 74% of visitors plan to consult the park website to plan future visits.

In the 1980s, more than 70% of visitor groups went to at least one park visitor center. Only 49%



went to a park visitor center in 2006, but this increased to 55% of visitor groups in 2011, perhaps due to construction of new visitor education centers at Canyon (*above*), opened to the public post-survey in 2006, and Old Faithful in 2010. As expected, Old Faithful remained the most popular park location, with visitation increasing from 78% of groups in 1987 to 90% of groups in 2011.

Survey questions reflect changing visitor practices and interests. In 2011, 74% of the groups surveyed preferred cell phone access in developed areas for future visits, while 56% of groups preferred internet access in developed areas for future visits. These questions were not asked of survey respondents prior to 2011, so no comparison of visitor preferences over time can be made.

Appendix B contains additional data on park visitors based on these and other visitor studies

conducted in the park and other park statistics. The U.S. Census of 2010 also is a source of information about the U.S. population and provides useful perspectives on trends. Appendix C contains relevant data from the 2010 Census.

Park visitation was 3,447,729 in 2012 and an all-time high of 3,640,185 in 2010. Visitor contacts are also gathered during ranger-led programs, at visitor centers, and during interpretive roves.

Formal and informal interpretive contacts in FY2012:

- Total visitor center, contact station, and warming hut contacts in FY12 = 3,049,523
- Total visitor contacts at ranger-led programs (formal interpretation) in FY12 = 291,394
- Total number of ranger-led programs (formal interpretation) = 9,812
- Total number of contacts made during interpretive roves (informal interpretation) = 348,401
- Resource warnings (given to visitors for approaching wildlife too closely, food storage violations, being off-trail in thermal areas, and other violations of park regulations) = 36,015

Additional data about NPS interpretive and education programs and products appears in Appendix H. ●

*The visitor is unlikely to respond unless what you have to tell, or to show, touches his personal experience, thoughts, hopes, way of life, social position or whatever else. If you cannot connect his ego with the chain of your revelation, ... you have lost his interest.*

—Freeman Tilden, *Interpreting Our Heritage*

# DIVISION OVERVIEW

## RESOURCE EDUCATION AND YOUTH PROGRAMS, 2012



The Division of Resource Education and Youth Programs (REYP) provides a variety of educational and interpretive services, programs, and products to Yellowstone National Park visitors and to people throughout the country and around the world. This section introduces the work of REYP in 2012, the most recent year of complete data prior to finalization of this document. Appendix H contains more detailed descriptions of the work performed by the various branches of REYP.

### **Operations Branch**

The Operations Branch contacts visitors at visitor centers, during formal interpretive programs, and while conducting informal interpretation (roving). Visitor centers serve three primary functions: providing interpretation, orientation and information, and visitor services. Education rangers staff 13 different visitor centers, museums, and warming huts. Formal interpretive programs promote park stewardship by providing visitors with opportunities to form intellectual and emotional connections to park resources. Education rangers provide informal interpretation at critical resource

locations throughout the park. Permanent staff conduct community outreach.

### **Youth Programs Branch**

The Youth Programs Branch provides curriculum-based education through a wide variety of program tracts with the following primary goals:

- Engage new audiences, as well as maintain connections with traditional constituencies.
- Encourage families and young people to get outdoors.
- Use public and private funds to efficiently and effectively maximize impact.
- Make park resources relevant to visitors.
- Cultivate a stewardship ethic among young people and in all audiences so they will understand the importance of protecting Yellowstone National Park.

### **Planning and Media Development Branch**

The Branch of Planning and Media Development supports REYP goals through the development

and delivery of traditional communication media and leading-edge technologies as well as social media to educate, interact with, and capture the interest of the public. Educational and interpretive media include films, printed materials, internet websites, and exhibits.

### **Management of Partnerships**

Yellowstone National Park, including the Division of REYP, works with a wide variety of partners. These include the Yellowstone Association, the nonprofit cooperating association that has supported Yellowstone National Park for 80 years and is a primary education partner. Also included is the Yellowstone Park Foundation, the nonprofit fundraising partner that has supported major projects for the education of visitors for more than 18 years. We also work with park concessioners, whose presence in various forms dates back to the early years of the park's designation as the world's first national park; commercial use authorized permittees; various federal, state, and local agencies and entities (e.g., U.S. Forest Service, U.S. Geological Survey, U.S. Fish and Wildlife Survey, Grand Teton National Park); gateway and community organizations (e.g., Chambers of Commerce and area museums); nonprofit organizations with educational, recreational, youth, and service mission; and public/private schools, and post-secondary academic institutions. A comprehensive list of partners is included in Appendix I.

These relationships exist and are conducted at different scopes and depths of engagement. In addition, the REYP division actively seeks out new partnerships to further its mission and goals. ●



# CHALLENGES, OPPORTUNITIES, AND ISSUES



## **Maintain relevancy and effectiveness**

Newer technology appeals to many virtual visitors, and is desired by many in-park visitors. In general, the goals of the park and of this CIEP cannot be achieved without the use of electronic communication and education media. However, Yellowstone National Park's remoteness has limited its access to the level of information technology (IT) infrastructure needed to support state-of-the-art electronic educational services and media. NPS and DOI policies related to IT security have limited some of the ways online services can be delivered to the public. Despite these challenges, REYP's Branch of Planning and Media Development has led the way servicewide through such features as webcasts/podcasts, the Old Faithful live streaming webcam, and live ranger programs. The live streaming webcam at Old Faithful Geyser has become extraordinarily popular with millions of virtual visitors. The Youth Programs Branch has experimented successfully with classroom presentations via Skype™. REYP will continue to emphasize the importance of electronic education and the necessary supporting technological infrastructure, as they are core to the success of effective and cost efficient youth and public engagement.

## **Youth involvement**

A remote wilderness park, Yellowstone faces challenges in engaging large numbers of young people and those from diverse communities or populations. Urban parks can more easily work directly with large, diverse populations that live, in effect, "next door." Yellowstone has established that electronic media are a powerful and highly effective means of engaging these audiences, and has been a leader in the NPS System in developing online education programs, products, and services.

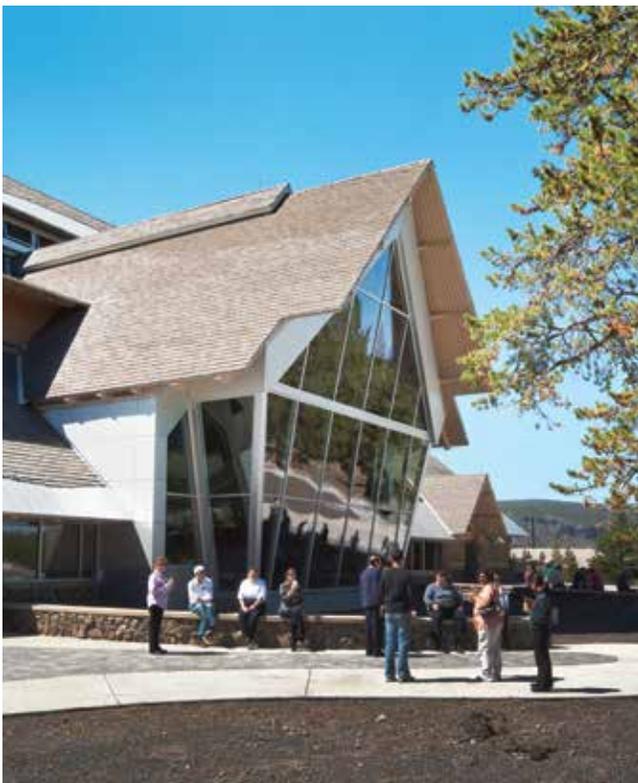
Through a wide variety of programs, the Youth Programs Branch annually contacts more than 130,000 youths and their families through on-site, off-site, and virtual visits, and strives to engage new and underserved audiences. Funding provided by grants and donations for many of these programs will expire in FY 2013-14. Challenges include maintaining these highly successful programs and funding proposed in-park and virtual/online programs that will double the reach and impact of our youth programs by 2016, the NPS centennial year.

## Operations branch

As visitor demographics and interests change, ranger-led programs must continue to evolve. A menu of ranger-led programs designed for all ages, interests, abilities, and itineraries will include traditional hikes and evening programs blended with shorter and longer activities in a variety of venues. Workshops and demonstrations, in addition to services at information desks, will educate visitors about safe practices in an unfamiliar wilderness setting. Civic engagement has been firmly anchored in such programs as the REYP's Community Outreach Program, and will be strengthened.

## Visitor Centers, museums, contact stations

Today's visitors live in a world with sophisticated media of all types. The NPS experience will strive to blend traditional media and materials with modern electronic media in order to maintain relevance while preserving appealing aspects and the charm of facilities and media from a by-gone era. While the popular Old Faithful Visitor Education Center (*below*) and Canyon Visitor



Education Center have been built in the last decade and feature state-of-the-art exhibits, other visitor centers are in need of repair/renovation and modernization, including replacing old exhibits with accurate media that engage and educate. Albright Visitor Center is undergoing major rehabilitation (including the development of new exhibits and educational media) and is planned for completion by summer, 2015. Four historic museums (Norris Geyser Basin Museum, the Museum of the National Park Ranger at Norris Campground, Fishing Bridge Visitor Center, and Madison Information Station) may be combined into a major fundraising initiative that would preserve structures and support development of new exhibits.

## Accessibility

Universal accessibility to interpretive and education services and media will continue to be a priority for the NPS. While it is acknowledged that not every service will be directly available to every person, everyone should have access to park stories in some way. Serving the needs of non-English speaking visitors also contributes to goals for resource preservation, as resource violations are known to occur more frequently among non-English speaking populations due to gaps in information that would help them understand park regulations.

## Evaluation, visitor studies

Evaluation is vital to understanding what visitors need and expect, and therefore aligning resources to effectively serve visitors and protect resources; and to measure our success and those of partners and stakeholders in accomplishing park and division goals. REYP has initiated and participated in visitor studies and program/media evaluations as funding and opportunities have been available. Expanding these efforts into a comprehensive and ongoing program is among the highest priorities in the next five to seven years of this plan.

## Employee development

REYP will continue to hire and develop a highly skilled and dedicated workforce. Training and a spectrum of developmental opportunities will be needed to maximize their potential as well as meet the needs of the park and its visitors. The knowledge and skills needed today will not be the same in the years to come, and REYP will maintain excellence in identifying, developing, and delivering appropriate training for the many positions, functions, roles, and responsibilities of the staff.

## Managing partnerships

Viewed as a challenge and opportunity, partnerships have grown dramatically in numbers and complexity since the last plan was developed in the late 1990s.

Among the profound changes of the past decade that have greatly influenced the perspectives of this plan are those associated with the rapid population growth in counties adjacent to the park boundary, and the explosion of technology and electronic communications in every facet of living. The latter is addressed elsewhere. The former has many ripple effects, among them the dramatic increase in the numbers of commercial



and nonprofit entities engaged in serving visitors and educating people in and around Yellowstone. When viewed from a national perspective, the proliferation of these groups has been truly unprecedented, and for a park of Yellowstone's visibility and stature, the opportunities for partnerships and relationships abound.

Yellowstone engages in partnerships to further the NPS mission and achieve the division's goals. Staff cultivate professional relationships with all

partners. Each partnership is unique in terms of the nature, character, quality, scope, and effect of the partnership. Additionally, maximizing the achievement of goals and broad engagement occurs when the park works with a spectrum of partners. A significant partnership has existed since 1933 with the park's cooperating association, the Yellowstone Association. The park's official fundraising partner, the Yellowstone Park Foundation, has provided significant financial support for the NPS's education programs and services since its establishment in 1996.



Yellowstone Association staff and volunteers offer trip-planning assistance at the headquarters office in Gardiner, MT.

Challenges include aligning priorities and updating them as needed, managing expectations, and ensuring that NPS policies, along with applicable laws and regulations, are appropriately framing relationships and activities. Consultation, coordination, and evaluation of all partnerships will continue to achieve these goals.

### **Sustainable funding**

REYP will continue to maintain the high quality of its world class programs and media while striving to achieve the goals in this comprehensive plan. All viable options and opportunities for securing funding and attaining the budget levels needed to serve the public and protect resources through education will be explored.

REYP's base funding as a percentage of total park base expenditures was 8.9% based on the 2010 parkwide base budget allocation (fiscal year 2010 is often used as a baseline year for a variety of NPS budget exercises). In addition to base funding, REYP receives funds from the Federal Lands Recreation Enhancement Act (FLREA) for a few of its operations and media. Fees charged for fishing permits also are allocated to REYP to support the education of visitors about fishing regulations and the sale of permits in NPS visitor centers.

A variable amount of NPS "soft" funds (federal funds not part of the park's base budget) provide limited support for educational media and youth programs. The Yellowstone Association makes an annual cash donation known as Aid to NPS, a portion is also donated to support the Research Library, Museum Collections, and archives managed by the Yellowstone Center for Resources. Grants from the park's official fundraising partner, the Yellowstone Park Foundation, and occasional grants from other entities such as the National Park Foundation may also be available. Non-base funds are variable from year to year, and usually include restrictions on how these funds can be spent.

REYP will continue to be entrepreneurial and strategic in seeking necessary funding support.



Commercial Use Authorizations to private tour operators fill a vital role in visitor education.

### **Training and evaluation of partners**

Hundreds of partners and stakeholders provide guided services with recreational and/or interpretive and education elements in and around Yellowstone. Services range from those designed for young people, to those appropriate for adults of all ages. In addition, local and regional stakeholders such as tourism information centers, chambers of commerce, area museums and other commercial or nonprofit entities serve millions of people who pass through Yellowstone National Park. The park has established a high priority for achieving consistent messaging relative to critical safety and resource protection concerns, such as safe travel in bear country. REYP has expanded its training program to include this large and varied category of groups who provide information, education and recreation services. NPS training and evaluation will be enhanced to ensure that visitors served through these entities receive accurate and current information, and that key messages are consistently delivered to the public, especially with regard to visitor safety (e.g., bear encounters and how to avoid them), park regulations, and resource protection concerns.

Training for winter guides will continue to prepare them to safely lead visitors into the harsh but beautiful winter experience that is uniquely Yellowstone. In addition to ensuring visitor safety, winter training is designed to mitigate impacts to wildlife and damage to fragile resources.



### **Visitor experience: Managing numbers, safety, resource protection**

Although visitation to the park fluctuates yearly, the longer term trend is for increasing visitation. Education will play a vital role in determining how to manage increased visitation while preserving resources, planning for managed levels in the future, and developing effective strategies for educating the increasing population of visitors about safety around wildlife, thermal areas, and other wilderness hazards with which most are not familiar, and furthering resource stewardship.

REYP will provide training and ongoing professional support to all partners involved with this aspect of visitor services and the visitor experience to ensure consistent messaging and delivery of accurate information. Partners include the Yellowstone Association, the Yellowstone Park Foundation, Xanterra Parks & Resorts, Commercial Use Authorization permit holders, and adjacent NPS units and federal agencies (e.g. Grand Teton National Park, surrounding units of the U.S. Forest Service).

### **Staffing**

REYP has aligned its field staffing levels with seasonal park operations, resulting in a ratio of

ten seasonal employees for every one permanent employee at the peak season. Additionally, the number of seasonal employees aligns closely with the seasonal distribution of park visitation, resulting in a low cost per visitor served. However, this efficiency has come at the expense of permanent and subject to furlough positions that are needed to anchor key programs and ensure that safety and administrative/supervisory responsibilities are balanced effectively.

The ever-increasing administrative, supervisory, and mandatory training demands on employees and supervisors are becoming more difficult to address, and efforts to do so result in impacts to other core functions and activities. Leadership and succession planning are areas of focus for the future, in addition to diversifying the workforce and ensuring that all staff receive training and development opportunities that meet the needs of the organization and the changing needs and preferences of visitors and the general public.

### **Housing and transportation**

Adequate housing for permanent and seasonal employees, as well as volunteers, interns, and other categories of staff is a major challenge and limiting factor in accomplishing park goals. Building more housing in the park is expensive, and choosing sites for housing units must take into consideration potential impacts to natural and cultural resources. Housing options outside of the park raise concerns such as cost, distance to duty stations, and limited year-round access. The NPS will continue to explore ways to obtain housing to support its operations and programs.

## **In-park Partners**

These nonprofit, commercial, governmental, and university partners work in the park and that work is managed/coordinated by the Division of Resource Education and Youth Programs through formal agreements, contracts, and plans. A more complete list of partners appears in Appendix I.

- Yellowstone Park Foundation
- Yellowstone Association
- Commercial Use Authorization (CUAs) guiding services – summer and winter; limited to those offering education/recreation-based tours (not locksmiths, propane vendors, etc.).
- Xanterra Parks & Resorts
- Delaware North Companies Parks and Resorts
- Medcor Medical Services
- Yellowstone Park Service Stations
- Yellowstone Volcano Observatory
- U.S. Geological Survey
- University of Utah
- Montana State University and its Thermal Biology Institute
- University of Montana





# RECOMMENDATIONS

Facilities

Youth Programs

Web/Electronic/ Social Media

Distance Learning/Lifelong Learning

Webcams/ Mobile Devices

Publications

Exhibits

Personal Services/ Ranger Programs

Community Outreach

Volunteers in Parks



# RECOMMENDATIONS 2014–2020



The Comprehensive Interpretation and Education Plan (CIEP) presents recommendations that achieve the NPS mission and park goals for visitor safety, enjoyment, and inspiration, resulting in the ongoing stewardship of Yellowstone National Park.

These recommendations appear in generalized statements. Details tier from this document and will be developed in a wide variety of implementation plans, such as annual work plans and media development plans. Recommendations provide focus for the allocation of human and financial resources and other forms of support, such as the use of facilities, that will be necessary to achieve the NPS Mission and Yellowstone National Park goals.

Recommendations do not always require infrastructure to support the goal, service, or activity. However, where they do require some level of infrastructure in order to be accomplished, the NPS will select and use facilities that provide the greatest advantage to the park as determined by priorities and cost-benefit considerations.

Recommendations will be reviewed annually and updated as necessary. Emerging needs or new

initiatives will be incorporated into the CIEP as appropriate and approved. Recommendations appear by type or category of service or media. Long term recommendations—items of note that may or may not begin during the effective dates of this CIEP—appear in the last section.

## Plan Pillars

These tenets have been deemed priority factors in developing CIEP recommendations:

- Electronic Media and Communications
- Program/Media Evaluation and Studies
- Universal Accessibility
- Lifelong Learning and Engagement
- Training Staff and Partners.





## GENERAL RECOMMENDATIONS

---

### **Opportunity: Celebrate the 100th Anniversary of the NPS.**

We recommend that a variety of services and products commemorating the 100th Anniversary of the National Park Service be offered to park visitors and the general public. This milestone in NPS history will take place during the years encompassed by this plan. Partners and stakeholders in and around the park will be involved, including but not limited to the Yellowstone Park Foundation, the Yellowstone Association, Xanterra Parks & Resorts, Delaware North Companies Parks and Resorts, local and regional chambers of commerce and tourism offices, and area educational organizations.

### ***Examples:***

- Albright Visitor Center grand reopening and the launch of a new, enhanced Fort Yellowstone Self-Guiding Interpretive Trail
- Celebration of the North Entrance-Roosevelt Arch Project in conjunction with the Gardiner Gateway Project
- Creation of commemorative pins for employees and/or sale to the public
- Living history programs
- NPS alumni event
- Special Junior Ranger commemorative patches
- Opportunities for volunteer involvement (individuals and groups)

**Challenge: The quantity and quality of guided educational and recreational tours and activities in and around Yellowstone.**

We recommend that training and evaluation of all individuals and organizations providing park information, guided tours, talks, and educational services be enhanced. This recommendation consolidates long standing services and more recently expanded elements, and enhances these through a formalized Training Center concept that is anchored in traditional classroom and online (without walls) classes. This recommendation builds upon long standing training that has been provided to YA staff and Winter Guides by expanding to include all stakeholders and partners, and including ongoing education and information support.

**Examples:**

- Expand existing one day consolidated training to two days of intense resource education and visitor safety workshops.
- Offer a live online delivery of the above for those who cannot attend in person.
- Further develop information and education bulletins, forums and workshops, and e-communities that distribute accurate and timely park information to partners and stakeholders.
- Strengthen and enhance the existing program of stakeholder and partner evaluation through an expanded program that integrates online resources with traditional evaluation methods.
- Maintain and expand Guide and Interpretive/Education Service provider forums. Host workshops at locations throughout the region and online to share updates, answer questions, address and resolve issues, and proactively plan for major events or situations.

**Opportunity: Formalize a Yellowstone Science School.**

We recommend maintaining and enhancing the science curriculum focus and programs of Expedition: Yellowstone! and Windows-Into-Wonderland electronic field trips. These have come to be known by thousands of students and educators as “Yellowstone’s Science School.”

This recommendation formalizes and provides an organized framework that furthers the concept of a “school” that is not limited to traditional venues or formats. It is based upon the recognition of the NPS as a major education force and resource in the education system of the U.S. Integration of activities and functions will achieve economies of scale, and will maximize the investment in development of programs and media.

**Examples:**

- Integrate citizen science concepts, working closely with staff of the Yellowstone Center for Resources, NPS Biological Resource Management Division, the Great Northern Landscape Conservation Cooperative, and other agencies and universities.
- Ensure that science concepts underpin the information and services provided by partners and stakeholders, as appropriate to the type of service or activity.
- Establish an expanded schedule of the highly successful Skype™-delivered ranger programs.
- Revise, update, and expand the curriculum-based online programs in the Windows-Into-Wonderland series.
- Expand the Young Scientist Program to include the Albright Visitor Center upon completion of renovation and the establishment of new exhibits on wildlife and the Northern Range.

**Challenge: Facilitate connections with each Yellowstone visitor, regardless of abilities.**

We recommend that universal accessibility tenets be factored into all facets of the work of REYP and partners/stakeholders. Ensures that all visitors have appropriate options for experiencing the park in conformity with NPS policy and ADA standards.

**Examples:**

- New technologies offer innovative means of providing all visitors with a menu of engaging and enriching experiences.
- Offer activities that encourage people with physical disabilities to participate.
- Develop media that include features for people with visual and hearing disabilities.
- Provide non-English speaking visitors with information and education to ensure safe and high quality visitor experiences.

**Opportunity: Yellowstone is the catalyst for lifelong learners.**

We recommend planning, coordinating, and hosting an education summit or workshop to be held during or in the year immediately following the NPS's 100th Anniversary.

**Example:**

- The summit will explore how visitor expectations and experience intersect with providing a range of informal and formal opportunities for education and engagement with the park.
- Best practices in media-based or online education program design and delivery.
- An in-depth exploration of the often used “new and nontraditional audiences;” going beyond the label to achieve a better understanding about this complex and rapidly changing demographic.

- Facilitating civic engagement and dialogue on issues such as climate change and increasing visitor use, and exploration of relevance.

**Opportunity: Teach old dogs new tricks.**

We recommend planning, coordinating, and hosting an internet/social media/new media summit that explores how digital media and the internet/social media are high impact, cost effective means of serving visitors and engaging the general public.

**Examples:**

- Identifying best practices for NPS units, especially those with infrastructure issues and remote locations.
- Leveraging individual park projects or experiments that can benefit multiple NPS units.
- Understanding NPS initiatives; providing feedback that might make them stronger relative to their online components or impacts; field statements of issues and possible solutions.

**Challenge: Ensure relevance.**

We recommend enhancing use of surveys and studies of education services and media. Build upon the studies that have been conducted in Yellowstone by REYP and the Division of Concessions Management relative to visitor preferences and media effectiveness to create a substantive database that informs decisions about the types of visitor experiences to offer in response to visitor expectations and preferences; and documents the effectiveness of information, orientation, and education services and media provided by the NPS, partners, and stakeholders. The park will achieve better alignment with its visitors and the general public, and this will, in turn, address visitor safety, resource protection, and stewardship goals.



## FACILITIES

---

### **Opportunity: Provide enhanced trip planning information to travelers.**

We recommend continuing to find high impact, convenient, and cost-effective methods of providing NPS information and orientation for the traveling public. The NPS will provide visitor orientation and trip-planning services at major travel hubs throughout the region surrounding Yellowstone National Park. The cycle or frequency of delivery of this information will vary based on travel and visitation trends, and the method of delivery. Though listed in “Facilities,” these services may also take the form of interactive, real time, electronic media delivered via kiosks or through mobile devices, or might be provided by uniformed NPS staff on a seasonal basis. Decisions regarding choice of delivery will be based on efficiency, effectiveness, and funding.

### **Examples:**

- Regional locations:
  - Billings, MT
  - Bozeman, MT
  - Livingston, MT
  - Red Lodge, MT
  - Casper, WY
  - Cheyenne, WY
  - Idaho Falls, ID
  - Ashton, ID
  - Other cities may be added as travel trends indicate a need for services.
- Gateway/Entrance Locations:
  - West Yellowstone, MT (continue established operation)
  - Gardiner, MT
  - Cooke City/Silver Gate, MT
  - Cody, WY
  - Jackson, WY

## Challenge: Maintain in-park facilities to meet visitor needs and expectations.

We recommend maintaining and improving in-park facilities that serve visitors of all ages. In-park facilities range from small historic trailside museums to structures built in the 1960s and 1970s. High priority needs are listed. Facilities of more recent vintage are not included as a major priority but require adequate routine maintenance to prevent deterioration that might require major rehabilitation sooner rather than later (e.g., Canyon and Old Faithful Visitor Education Centers). The Albright Visitor Center renovation is underway and is not included as a priority.

### Examples:

- Renovate and expand Youth Program infrastructure at the YCC facility, Mammoth Community Center, and Lamar Buffalo Ranch. Each has different renovation and repair needs. Conduct a systematic assessment of needs, and identify options for expanding facilities to support more users.
- Renovate Fishing Bridge Visitor Center (*bottom, right*). One of three remaining historic trailside museums in Yellowstone. Along with museums at Madison and Norris Geyser Basin, Fishing Bridge Visitor Center (Museum) was designated a National Historic Landmark in 1982. Assess preservation needs and perform necessary work; complete exhibit development in the west wing; assess needs for treatment of museum collection objects in the central exhibit space.
- Renovate Norris Geyser Basin Museum. Identify historic preservation needs and complete those repairs/renovations; update old exhibits and address the trailside system of exhibits.
- Renovate Norris Museum of the National Park Ranger. Identify historic preservation needs and complete those repairs/renovations; update the National Park Service Ranger exhibits.



- Renovate Madison Museum (*top, above*). Replace outdated orientation exhibits and develop a system of outdoor exhibits that interpret the significance of the area in park history as well as the rich natural history and geology of the setting.
- Renovate Grant Visitor Center. Plan, design, and install new information, orientation, and education exhibits. A new theme and updated exhibits will improve the visitor experience and provide an overview of a primary theme and value of YNP—wilderness, why it matters, and what it is in YNP.
- Renovate Madison Campground Amphitheater. The second largest campground amphitheater in Yellowstone, serving tens of thousands of visitors annually, Madison Amphitheater needs updated AV systems and equipment, new seating, and accessible seating and surfaces/access routes.



## YOUTH PROGRAMS

**Challenge: Serve young audiences and families with relevant and cost-effective programs.**

We recommend continuing the highly successful array of youth programs (described in Appendix H) and identifying options for expanding current programs as well as developing new programs.

**Examples:**

- Maintain residential Youth Programs. Engage a larger number of young people through some or all of the following changes: more sessions, more dorm space to support larger numbers of participants in existing sessions, or during the school year by exploring special programs or curricula that offer students credits for nontraditional, non-classroom-based learning. Continue to work with partners such as Groundwork USA, Montana Conservation

Corps, Yellowstone Association, Teton Science School, and other groups to provide a diverse menu of opportunities for engagement with the NPS.

- Build upon the existing Intern/Intake Program involving all NPS divisions in Yellowstone that provide young people with demonstrated potential with the opportunity to work in seasonal NPS positions and begin a path toward permanent employment. This program could be developed in conjunction with other nearby/regional NPS units, e.g. the NPS Academy.
- Build upon the existing NPS Academy/Leadership Program. This program offers a stepping stone for young people exploring the possibility of NPS careers. Adapt and expand the concept, and develop other programs to expand its scope from introducing young people



to NPS careers to developing leaders through training and mentoring programs. Work with other NPS sites in the region to leverage opportunities for job placement and developmental opportunities.

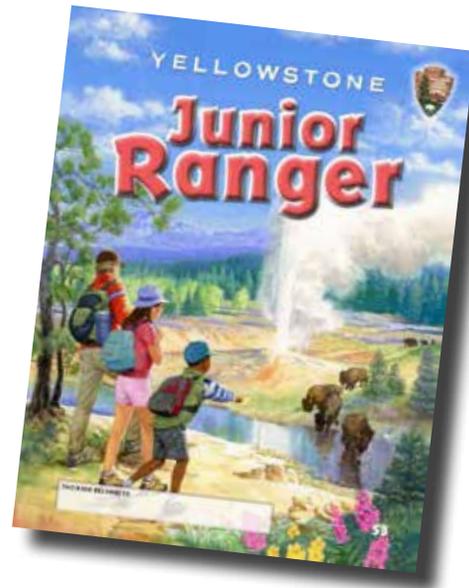
- Explore options for a High School Program, working with Yellowstone Association, schools and school districts, and consider a variety of models that might align with high school curricular and extra-curricular components.
- Host a Youth Summit. Plan and conduct a summit that brings together young people of middle school and high school ages, teachers, and other professionals to convey their ideas on how Yellowstone and the entire NPS system can remain relevant and engage young people as the second century of the NPS begins.
- Adopt a 2016 class or classes. These could be local (e.g., one class in each gateway community) or a blend of local and regional (e.g., a Native American class from Hardin or Pryor, Montana), or even have tiered components—local, regional, national.
- Conduct Teacher Learning Center/Workshops. Enhance teacher engagement through online

webinars and live ranger programs, and in-park workshops offered in partnership with Yellowstone Association and other organizations. Online resources will provide educators with a variety of curriculum-based tools to meet different classroom needs and goals. Offer continuing academic credit for selected courses at the Yellowstone Association Institute; workshops also educate teachers about the menu of options for engaging their classes with the park—from in-park residential or day use programs to outreach activities

that bring the park to their classes. Teachers will find a variety of tools to fit diverse classroom and school situations.

- Enhance the Junior Ranger Program. This highly popular program anchors in-park services for young people traveling with their families. Update program content; develop an online Junior Ranger Program component. Consider developing a youth volunteer component of the program that provides safe and meaningful service of some type in the park (e.g., entering wildlife observations on a smartphone app).
- Enhance the Young Scientist Program. Revise existing program content and expand the program to a parkwide scope; develop an online Young Scientist component; integrate Young Scientist with curriculum-based programs in the park and include components of the Young Scientist materials in outreach activities. Consider developing a youth volunteer component of the program that provides safe and meaningful service of some type in the park (e.g., entering wildlife observations on a smartphone app).

- Enhance the Yellowstone to You: Youth Outreach Program. Expand to provide classroom programs in grades K – 12, with a goal of providing programs three times within the school experience, at every public school in Gardiner, West Yellowstone, Bozeman, Livingston, Billings, Cody, and Jackson (the latter in partnership with Grand Teton National Park); continue to provide NPS activities and programs at regional community events.
- Expand Yellowstone to You: Native American Youth Outreach. Provide classroom programs in schools on all reservations in Montana, Wyoming, and Idaho; develop an in-park component that provides funding and scholarships to bring these classes to the park to participate in an in-park program, including Expedition: Yellowstone! and Yellowstone Field Trips. Further develop the existing program component that encourages Native American youth to consider NPS careers.



- Update and Expand Electronic Field Trips (aka “Windows Into Wonderland”). Replace outdated programs with updated content. Apply new technologies and development/delivery methods to maintain relevance and engagement with this highly popular online education services. Integrate into the Distance Learning Program and its umbrella program, the Yellowstone Science School.
- Expand Expedition: Yellowstone! This residential education program for 4th through 8th grades serves some 1,100 students and teachers annually. Explore options for increasing the number of schools participating in the program and for bringing more schools from underserved communities to the park.
- Yellowstone Field Trips. Expand opportunities to all school groups who travel independently to Yellowstone to engage with the NPS in a menu of program opportunities.





## WEB PROGRAM/ELECTRONIC COMMUNICATIONS/SOCIAL MEDIA

### Challenge: Maintain and enhance relevance and stewardship of Yellowstone.

We recommend maximizing visitor and public engagement with Yellowstone through the park's official web site, web features, social media, and online programs. From planning a visit to lifelong learning and engagement, electronic education is not a luxury or a nice option—it is essential to identify all appropriate opportunities to serve the public through what has become the basic communication medium of our time.

#### Examples:

- Focus all NPS electronic communications (information, orientation, education) on the park's official web site. Merge the content of the Greater Yellowstone Science Learning Center web site with Yellowstone's official web

site. Doing so will facilitate finding all NPS-produced Yellowstone content in a single credible and highly popular source. NPS policy also requires that this content be available on an **nps.gov** web site.

The park's official website will become a comprehensive education resource with links to a variety of NPS programs and activities and those of other sources—an online and central component of the Yellowstone Science School concept. Among the concepts to be built into this lifelong learning resource is a "Speaker Series" featuring NPS scientists and other well-known and long-established scientists such as Dr. Robert Smith, along with park staff in all divisions.

- Continue the development of web videos and podcasts. Complete the park visit orientation

- series; complete the wildlife safety series; develop the interactive trip planning feature; develop “virtual” video hikes of selected trails and destinations; link all to other electronic resources within the official web site and to social media, as well as other approved resources.
- Consider integrating Google Earth Maps into appropriate sections and content on the park’s official web site. Maximize their value relative to the ongoing development of other types of map and select the feature that best serves the identified purpose.
  - Develop Virtual Visitor Centers (VVCs) to maximize the investment in content development of exhibits for park facilities and enrich lifelong learning opportunities. Complete development of OFVVC and maintain/update; develop VVCs for Canyon and Albright Visitor Centers, consider at least one VVC for a rustic museum (Norris Geyser Basin, Norris Museum of the National Park Ranger, Fishing Bridge); maintain content links to scientific papers and the websites of appropriate and approved institutions.
  - Enhance social media communications. Build upon the park’s Facebook, Twitter, YouTube, and Flickr presences, and build capacity to monitor and interact with users; establish appropriate levels of content on Flickr and YouTube; continually monitor use and adjust levels of engagement to balance overall web communication goals. Evaluate effectiveness of social media presence to determine if park goals for engagement and effective communication are being met.
  - Establish online visitor communities or other means of engaging the public with the park through online interactive sharing of experiences, photos, and video. These communities may tier from established social networking sites described above, blogs, or other forms of “chat” rooms may be organized around webinars and live ranger programs. Online communities are among the most rapidly changing of online features or engagement, and the park’s activity should be flexible and adaptable.
- Develop and manage an ongoing web-based evaluation program consisting of :
    - Evaluation of web site effectiveness—is content well organized, easy to find, easy to understand, and available at varying levels of scope and depth;
    - evaluation of park visitor satisfaction/expectations; and
    - gap analysis: what is missing in terms of content and method of delivery; emerging trends or technologies worth factoring into our online suite of services/experiences.
  - Develop and maintain a fully searchable database of still images and video footage on the park’s official web site. The initial investment of time and effort will allow hundreds of thousands of users—from various media outlets to educators to hobbyists to the general public—to find what they need without requiring assistance (or only minimal assistance) from park staff.
  - Redesign web pages as recruiting tools for volunteers, to announce opportunities for engagement in youth programs, and to more effectively engage teachers with education programs. This effort will address the goals of various NPS portals being established to provide product-driven search methods for educators and others.
  - Develop an integrated web/mobile rapid communication app to provide regional and park travelers with current and rapidly changing road, facility, and weather information. Continue to identify and develop apps that provide a full spectrum of visitor orientation, safety, and educational services.



## DISTANCE LEARNING/WEBINARS/LIFELONG LEARNING

---

### **Challenge: Connect people of all ages and interests with Yellowstone.**

We recommend maximizing visitor and public engagement with Yellowstone through ongoing and enhanced development of distance learning opportunities. These online educational features will take the form of live programs for schools, organizations, and individuals; webinars on a variety of topics; and other forms of live and “canned” online programs.

### **Examples:**

- Establish live ranger program schedule for general online audiences, based upon successful prototype programs and spanning both formal and informal presentations—scheduled year-round and from a variety of locations in/near the park. This program will feature staff in all divisions and encompass the full spectrum of

Yellowstone’s natural and cultural resources, and management challenges/issues.

- Establish live ranger programs in classrooms grades K-12. Offer a full schedule of programs throughout the academic calendar and engage schools in all 50 states, with particular emphasis on underserved communities or school districts. Live programs can also be used as recruitment tools for youth programs and NPS jobs.
- Establish live informal “town hall” ranger meetings with community groups such as Chambers of Commerce, Lions or Rotary clubs, and other types of service groups or informal education/lifelong learning organizations serving adults. Programs will be tailored to the purposes and interests of the group and provide an efficient and effective method of ongoing dialogue and engagement with the public.



## WEBCAMS, MOBILE DEVICES

---

### **Challenge: Deliver real-time information and in-depth education when and where people want it.**

We recommend expanding the use of webcams and smartphone-based media as infrastructure allows these features to be offered. Currently, the park's official website features views of major Yellowstone features or scenic vistas from eight webcams. The division has experimented with cell phone or smartphone-based education at Fort Yellowstone. Expanding existing webcam-delivered features and establishing smartphone tours and interactive information services will provide impact services to large numbers of visitors and the general public. These features will also have cross-platform application in a variety of education programs described in other sections of these recommendations.

### **Examples:**

- Maintain existing static and live streaming webcams; add webcams as technology and policy allows and within defined education parameters and priorities; link to other online resources to expand educational value and as tools to engage viewers with prioritized messages and content.
- As technology and policy allows, develop interactive electronic walking and driving tours delivered via smartphone. These will include self-guiding trails, short drives, and upper/lower loop tours. Tours can also be delivered in different languages and will incorporate universal accessibility features.

## PUBLICATIONS PROGRAM

**Challenge: Deliver information and education to visitors when, where, and how they want it.**

We recommend providing visitors and the general public with high quality printed and electronic publications that meet park goals for information, orientation, safety, resource protection, and education.

### **Examples:**

- Printed information, orientation, and education materials will be available electronically via the park's official web site and through various mobile devices.
- All major publications (e.g., the park newspaper, self-guiding trail booklets, youth materials, the annual Resources and Issues Handbook) will be available in non-English versions.
- All major publications will be accessible to visitors with vision impairments and the blind.
- Work with the Yellowstone Association to produce a Yellowstone National Park-specific family of publications spanning the full range of natural and cultural resource topics, and addressing items of special interest. This will be based upon annual reviews of the current inventory of products sold by Yellowstone Association, and park priorities for visitor information, safety and orientation, and education. These may be produced in a variety of electronic formats in addition to traditional printed format; as appropriate, some may be produced solely as electronic media.
- The family of self-guiding trail publications will be redesigned to better compliment on-site exhibits. As infrastructure allows, self-guiding trail publications will be available on mobile devices.
- Electronic versions of cross country ski trail guides will include interactive features that



- visually describe trail steepness and provide up to date trail conditions.
- The Yellowstone family of site bulletin publications (100+) will be evaluated. Outdated publications will be removed from the system. Duplicative publications will be consolidated. New publications will be produced to support resource education and visitor safety/resource protection goals.
- Updated Junior Ranger education materials will be developed and produced for all age groups, and for summer and winter visitors.
- Young Scientist Program materials will be updated for Canyon and Old Faithful. New materials will be developed in conjunction with the availability of the new exhibits at Albright Visitor Center. Consider developing a single publication for the park, but designed for different age groups.
- Maps for each developed area will be updated or created to provide consistent, clear information about facilities, services, major attractions and/or things to do, and seasons of operations. Maps will be interactive as electronic media, pulling up current information about hours and dates of operation along with any other extenuating information such as road construction delays.

## EXHIBITS PROGRAM

### **Challenge: Produce and maintain exhibits that engage visitors through state of the art design and content.**

We recommend that exhibits be updated, added, or removed to ensure that visitors receive accurate information and high quality educational media that achieve park goals for safety, resource protection, visitor enjoyment, and stewardship. Exhibits in historic museums were addressed in the “facilities” category.

### **Subcategory: Visitor Centers, Museums, Contact Stations**

#### **Examples:**

- Update and rehabilitate exhibits at Canyon Visitor Education Center. Opened in 2006, these exhibits will be 10 years old by the NPS’s 100th Anniversary. Because the content is based on dynamic scientific research associated with hot spot and volcanism, updates will be needed to incorporate new research findings.
- Plan, design, and install multimedia interactive orientation exhibits at West Yellowstone Visitor Information Center. The West Entrance of the park is consistently the most highly travelled of any of the park’s five entrances, and improved orientation services will benefit large numbers of people seeking trip planning assistance and general park information, year round.

### **Subcategory: Waysides, Self-guiding Trails, Trailheads**

#### **Examples:**

- Maintain the park’s nearly 400 wayside exhibit units at satisfactory standards for appearance and accuracy. One quarter of all units will receive condition assessments a minimum of once per year, and assessments will include recommendations for retention or removal. Follow up with replacements, repairs, or removal to ensure



that visitors receive accurate information and high quality exhibits.

- Enhance learning through the addition of Quick Response (QR) Codes (or similar/emerging technologies) to wayside exhibits as infrastructure exists to support delivery of on-line content. QR codes can provide translations of content in foreign languages, and can deliver in-depth educational content for those learners who wish to explore topics at greater depth and detail.
- Plan, design, fabricate, and install trailhead wayside exhibits that are consistently designed, made of weather resistant materials, and that effectively communicate safety and resource protection messages.
- Plan, design, fabricate, and install new winter wayside exhibits at key visitor information hubs and along the North to Northeast Entrance road corridor. Current winter waysides are nearly 25 years old and long ago became obsolete with changes in the park’s winter use policies and regulations. New waysides will help the park achieve goals for visitor safety, resource protections, and visitor enjoyment of the unique experience of Yellowstone National Park in winter.
- Provide exhibit planning, design, contract development, and project management assistance to parks in the Northern Rockies without that expertise.

## PERSONAL SERVICES, RANGER PROGRAMS

---

**Opportunity: Leverage the Park Ranger image and its high positive association in the public eye to achieve NPS and YNP missions and goals.**

We recommend that NPS education rangers continue to serve visitors in traditional and innovative ways based upon visitor expectations, feedback, and emerging trends or issues.

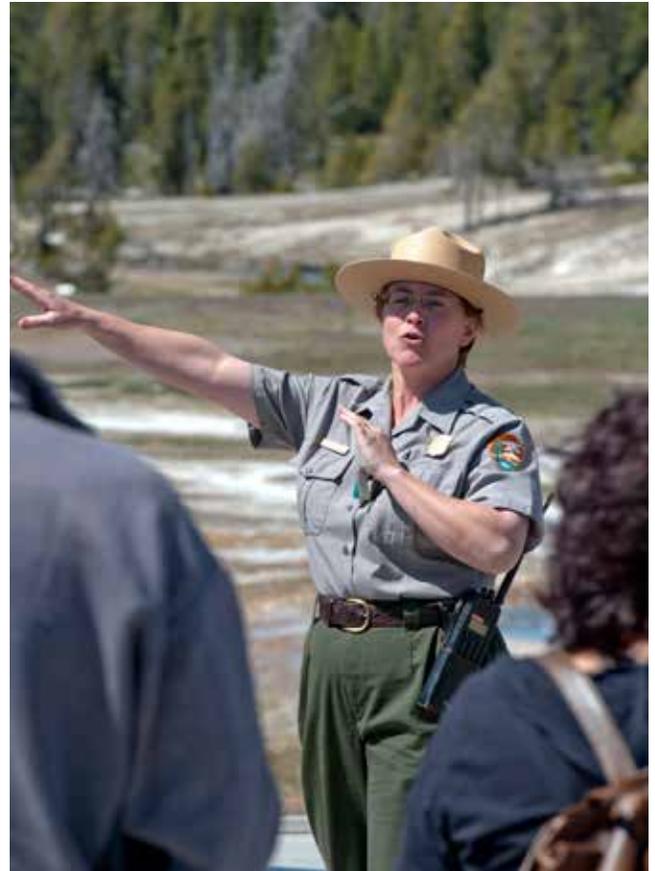
### **Examples:**

Staffing of NPS visitor centers, museums, and contact stations will continue to be comprised of uniformed NPS employees. Volunteers, interns, including Student Conservation Association (SCAs), are included in staffing plans to provide entry level work experience and help develop the future NPS workforce, and to provide baseline services that allow senior staff to perform more complex duties or render assistance to visitors where advanced skills and knowledge are required.

Seasons and hours of visitor center, museum, and contact station operations will be established based on park operating seasons and visitor needs.

The Tower-Lamar area will be staffed with education rangers to provide comprehensive coverage of wildlife viewing areas and overlooks, evening programs seven nights per week during the main season of park operations, and informal/roving visitor services in the Roosevelt Lodge-Tower Store developed areas. We will also provide winter visitor contact services in this area for skiers and wildlife watchers.

Uniformed ranger staff will provide informal visitor talks and contacts at parkwide locations, with emphasis on wildlife-caused traffic jams, front country thermal areas, and other heavily visited attractions. The goal is that every park visitor will have the opportunity to interact with a uniformed education ranger.



Uniformed education rangers will continue to offer in-depth experiences and develop new opportunities through a variety of formal interpretive/education programs, workshops, or demonstrations. Costs may be fully or partially offset through fees.

Uniformed education rangers will offer a variety of shorter talks, demonstrations, workshops, hikes, and programs to serve audiences of all ages and abilities. These activities will be offered in the park and, when appropriate, in gateway communities where the goal is to prepare people for a park visit, provide special programs in conjunction with major initiatives or commemorative events, or address needs and issues that span park boundaries.



## COMMUNITY OUTREACH PROGRAM

---

### **Opportunity: Gateway and regional communities funnel visitors to and from Yellowstone.**

We recommend that the park's goals for community engagement and support continue to be achieved through the Community Outreach Program.

#### ***Examples:***

- Continue existing Community Outreach Program in which REYP staff attend Chamber of Commerce and other community meetings in the towns of West Yellowstone, Bozeman, Livingston, Gardiner, and Billings, Montana; Jackson and Cody, Wyoming; and occasionally, Idaho Falls, Idaho. Include more venues, such as community organizations or events, and locations in the tri-state region.

- Expand the scope and impact of NPS community outreach through live online programs and “town hall” meetings that involve staff in all divisions and provide opportunities for civic engagement with members of the public who are not affiliated solely with special interest groups. This recommendation also appears in other categories.

## VOLUNTEER IN PARKS (VIP) PROGRAM

### **Challenge: Effectively engage people who are interested in volunteering for the NPS in Yellowstone.**

We recommend that the Yellowstone VIP Program be strengthened through supervisory training and support, improved recruitment for specific needs, further development of a range of volunteer opportunities that are appropriate and provide meaningful support or service, and the development of infrastructure to support larger numbers of people wishing to engage in some type of service to the park.

#### **Examples:**

- Enhance online recruitment for VIP opportunities in YNP and leverage VIP interest in other NPS sites and/or other agencies, state and local governments, and non-governmental organizations (NGOs). Improve the online portal for VIP recruitment, making it clearer and easier to use and linking it to other online resources and opportunities.
- Continue implementing the park's VIP Strategic Plan through planning and discussions with park staff. Revise and update annually, and review goals for citizen engagement with the park via VIP opportunities. Identify infrastructure needed to support goals, and develop a plan for obtaining necessary infrastructure (e.g., housing).
- Provide VIP service learning projects for organizations that meet all relevant NPS standards for safety, resource protection, and align with NPS needs and priorities.
- Continue Elk Rut Corps VIP Program and consider how these may relate to other programs or initiatives.
- Continue Upper Geyser Basin VIP Program and consider how these may relate to other programs or initiatives.
- Continue wolf, fish, and other existing VIP Programs related to wildlife/resource monitoring, and consider how other programs targeted to adult audiences may or may not include volunteer experiences.
- Continue existing relationships with organizations such as Wounded Warriors, and explore developing new relationships with commercially sponsored VIP groups.
- Explore the development of a Senior Ranger program that could include elements of citizen science, service projects, or program support for other youth or adult programs.



See Youth Programs section for recommendations related to young people and volunteerism.

## LONG TERM, ONGOING

A world class plan for interpretation and education in Yellowstone National Park is one that reaches beyond what is easy or convenient to accomplish. The priority recommendations in previous sections do all of that and more. The recommendations below have a longer term and in some cases, ongoing dimension to them that merits inclusion in this plan. They may not be undertaken at all, or only in small or exploratory steps during the effective dates of this CIEP.



- Art in all forms is a powerful means of connecting people with parks. Develop an Arts Program that has visual, written, and performing/demonstration components, and that engages young audiences as well as adults. This program should be designed for Yellowstone National Park and not be a copy of programs that exist in units near urban areas or those having different resource and safety issues.
- Ensure that employee development for REYP staff meets the needs of the division, the park, and the broader goals of the NPS through a variety of traditional and technology-based training and development opportunities.
- Establish a REYP mentoring program to develop tomorrow's leaders. Establish a park exchange program with NPS units in the Northern IMR as a means of providing a wide range of developmental opportunities that cannot be found in just one park unit.
- Adaptively re-use the Lake Service Station as a visitor contact station. Adaptively restore and use the Lake Fish Hatchery as a visitor contact station with educational exhibits about fisheries management and the aquatic ecosystem of which Yellowstone Lake is a centerpiece.
- Renovate the West Thumb contact station to provide improved visitor services in summer and winter.
- Maintain the investment in the Old Faithful Visitor Education Center by establishing a fund for building maintenance and improvements. Install fully electronic geyser prediction systems in the building that also link to mobile devices.
- Maintain Canyon Visitor Education Center and provide a backup generator. Long term winter use function requires better insulation and utility upgrades.
- Adaptively convert a structure on Officer's Row to enhance visitor experience through education about the significance of the origins of the National Park Idea, Yellowstone as the world's first National Park, and the role of the U.S. Army in the early decades of Yellowstone's existence as a national park.
- Develop a visitor contact facility at Tower Junction to provide information, orientation, and education about wildlife safety and habitat.
- Renovate campground amphitheaters at Mammoth, Canyon, Tower, Fishing Bridge, Bridge Bay, and Grant Village to provide accessibility; improve seating and circulation; and install sustainable electronic systems and audio-visual equipment to support delivery of ranger programs to the public. ◀

# ACKNOWLEDGEMENTS



The following National Park Service Staff generously gave their time, experience, perspectives, knowledge, and wisdom to the process of developing this updated and expanded CIEP for Yellowstone National Park, and we express our sincere gratitude to them for their involvement. We are proud to work in an organization of such exceptionally talented and dedicated individuals. All are YNP employees unless otherwise noted.

Dan Wenk, Superintendent  
Steve Iobst, Deputy Superintendent  
Jan Laye, Executive Assistant  
Kerrie Evans, Executive Assistant  
Wade Vagias, Management Assistant  
Al Nash, Public Affairs Officer  
Eleanor Clark, Office of Comprehensive Planning

Dave Hallac, Chief, Yellowstone Center for Resources  
PJ White, Chief, Branch of Natural Resources  
Tobin Roop, Chief, Branch of Cultural Resources  
Doug Madsen, Acting Chief, Compliance and Professional Support  
Janine Waller, YCR Publications  
Tim Reid, Chief, Division of Resources and Visitor Protection  
Bonnie Schwartz, Deputy Chief, RVP  
Nick Herring, Deputy Chief, RVP  
Tammy Wert, Manager, Visitor Services  
Nancy Ward, Chief, Division of Maintenance  
Lori Gruber, Landscape Architects and Accessibility  
Lynn Chan, Landscape Architects and Greening/sustainability  
Lindsay Robb, Chief, Division of Administration

Brett DeYoung, Branch Chief,  
Telecommunications and Computer Support  
Services  
George Helfrich, Chief, Division of Concessions  
Management  
Linda Young, Chief, Division of Resource  
Education & Youth Programs  
Judy Knuth Folts, Deputy Chief, Operations and  
Youth Programs  
Tami Blackford, Deputy Chief, Interpretive  
Planning and Media Development  
Bob Fuhrmann, Program Manager, Youth  
Programs  
Beth Taylor, Curriculum-based Education  
Program Manager  
Melanie Condon-Weeks, Education Specialist  
Trudy Patton, Education Specialist  
Matt Ohlen, Education Specialist  
Michael Breis, Education Specialist  
Katy Duffy, Interpretive Planner and Project  
Manager  
Jo Suderman, Exhibits Program Manager  
Maurine Hinckley-Cole, Exhibits Assistant  
Mike Warner, Exhibits Technician  
Holli Traucht, Exhibits Technician  
Jay Elhard, Publications Program Manager  
Jim Peaco, Audio-Visual Technical Specialist/  
Photography  
Diane Renkin, AV Assistant  
Craig Johnson, Web Specialist  
Peggy Olliff, Web Specialist  
Tom Cawley, Web Special Projects  
Joshua McRae, Web Assistant  
Brian Suderman, North District Education  
Ranger  
Jennifer Conrad, Mammoth Subdistrict Ed.  
Ranger

Leigh Anne Dunworth, Mammoth Ed. Ranger  
Tammi Corchero, Canyon Subdistrict Ed. Ranger  
Rich Jehle, South District Education Ranger  
Laurie Tuohy, Lake Subdistrict Ed. Ranger  
Sabrina Diaz, Grant Subdistrict Ed. Ranger  
Rita Garcia, Old Faithful Subdistrict Ed. Ranger  
Jeanne Roy, Old Faithful Subdistrict Ed. Ranger  
Joy Perius, Budget Analyst and Miracle Worker  
Clare Cloghessy, Administrative Support and  
QuickTime Expert  
Amanda Brown, Administrative Support and  
Blue-Ribbon Organizer

**Other NPS:**

Tom Medema, Chief of Interpretation and  
Education, Yosemite National Park  
Vicki Mates, Chief of Interpretation, Education,  
and Partnerships, Grand Teton National Park  
Judy Helmich-Bryan, Chief of Interpretation and  
Education, Grand Canyon National Park  
Larry Frederick, Chief of Interpretation and  
Education, Rocky Mountain National Park  
Diane Chalfant, Washington D.C Office,  
Deputy Associate Director, Interpretation and  
Education  
Phil Zichteremann, Intermountain Regional  
Office, Chief of Interpretation, Education, and  
Youth Engagement

With special thanks to Katy Duffy for her dedi-  
cation, expertise, and ability to extract infor-  
mation from the most obscure sources. Katy's  
research, experience, and writing inform every  
page of this document. ◀

# BIBLIOGRAPHY



## Visitor Surveys

- Coble, T. G., S. H. Lin, and D. Coble. 2009. Visitor Voices Project 2007–2008, Assessing Interpretive Outcomes in the Intermountain Region. Overall Final Report. Nagadoches, TX: Stephen F. Austin State University.
- Coble, T. G., S. H. Lin, and D. Coble. 2009. Visitor Voices Project 2008, Assessing Interpretive Outcomes in the Intermountain Region, Yellowstone National Park, Final Park Report. Nagadoches, TX: Stephen F. Austin State University. 145 p.
- Duffield, J.W., D. Patterson and C. J. Neher. 2000. Yellowstone National Park Visitor Survey, Summer 1999: Final Report. Missoula, MT: University of Montana.
- Forist, B. E. 2003. Visitor Use and Evaluation of Interpretive Media, A Report on Visitors to the National Park System. NPS-Visitor Services Project, NPS Social Science Program. Washington D.C.: National Park Service. 115 p.
- Gramman, J. H. 2003. Trends in Demographics and Information Technology Affecting Visitor Center Use: Focus Group Report. NPS Social Science Program. Washington D.C.: National Park Service. 27 p.
- Gramman, J. H. 2003. Visitation Forecasting and Predicting Use of NPS Parks and Visitor Centers: Focus Group Report. NPS Social Science Program. Washington D.C.: National Park Service. 25 p.

- Jorgenson, J., N. Nickerson and K. Grau. 2013. The Beartooth Highway: 2012 Summer Use and Image. Research Report 2013-2. Missoula, MT: University of Montana, Institute for Tourism and Recreation Research.
- Kulesza, C., J. Gramann, Y. Le and S.J. Hollenhorst. 2012a. Yellowstone National Park Visitor Study: Summer 2011. Natural Resource Report NPS/NRSS/EQD/NRR—2012/539. Fort Collins, CO: National Park Service.
- Kulesza, C., J. Gramann, Y. Le and S.J. Hollenhorst. 2012b. Yellowstone National Park Visitor Study: Winter 2012. Natural Resource Report NPS/NRSS/EQD/NRR—2012/611. Fort Collins, CO: National Park Service.
- Le, Y., N. C. Holmes, C. Kulesza. 2012. Barriers to a Backyard National Park: Case Study of African American Communities in Columbia, SC. Natural Resource Report NPS/NRSS/EQD/NRR-2012/604. Fort Collins, CO: National Park Service.
- Le, Y., N. C. Holmes, C. Kulesza. 2013. Barriers to the Wilderness Next Door. Recreational Preferences and Behaviors of Hispanics in Tucson, AZ —revised. Natural Resource Report NPS/NRSS/EQD/NRR-2013/614. Fort Collins, CO: National Park Service.
- Littlejohn, M., Y. Le, J. H. Russell, S. J. Hollenhorst, and J. Gramann. 2009. Serving the Visitor 2008, A Report on Visitors to the National Park System. NPS-Visitor Services Project Report. Moscow, ID: University of Idaho, Cooperative Park Studies Unit. 28 p.
- Littlejohn, M., D. E. Dolsen and G. E. Machlis. 1990. NPS-Visitor Services Project Report-25, Yellowstone National Park. Moscow, ID: University of Idaho, Cooperative Park Studies Unit.
- Machlis, G. E. and D. E. Dolsen. 1988. NPS-Visitor Services Project Report-15, Yellowstone National Park. Moscow, ID: University of Idaho, Park Studies Unit. 66 p.
- Machlis, G. E., S. H. Ham, C. Dragon, R. Narby and W. J. Lewis. 1984. Mapping Visitor Populations: A Pilot Study at Yellowstone National Park. NPS-Visitor Services Project Report 84-4. Moscow, ID: University of Idaho, Cooperative Park Studies Unit.
- Manni, M. F., M. Littlejohn, J. Evans, J. H. Gramann, and S. J. Hollenhorst. 2007. Yellowstone National Park Visitor Study, Summer 2006. NPS-Visitor Services Project Report 178. Moscow, ID: University of Idaho, Cooperative Park Studies Unit.
- Oschell, C. 2009a. Yellowstone National Park Visitors: A Seasonal Analysis. Research Report 2009-8. Missoula, MT: University of Montana, Institute for Tourism and Recreation Research. 20 p.
- Oschell, C. 2009b. Park Visitors: A Summary. Technical Completion Report – TCR 2009-9. Missoula, MT: University of Montana, Institute for Tourism and Recreation Research. 4 p.
- Stynes, D. J. 2011. Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010. Natural Resources Report NPS/NRSS/EQD/NRR—2011-481. Fort Collins, CO: National Park Service.
- Taylor, P. A., B. D. Grandjean, and J. H. Gramann. 2011. National Park Comprehensive Survey of the American Public, 2008-2009: Racial and Ethnic Diversity of National Park Service Visitors and Non-Visitors. Natural Resources Report NPS/NRSS/SSD/NRR—2011-432. Fort Collins, CO: National Park Service.
- Visitor Survey Card Project. 2002–2012. Visitor Services Project Report #YELL 702-712. Moscow, ID: University of Idaho, Cooperative Park Studies Unit.

## Published Reports and Journal Articles on Social Science in National Parks

- Bath, A. J. and J. W. Enck. 2003. Wildlife-Human Interactions in National Parks in Canada and the USA. *National Park Service: Social Science Research Review*. 4(1).
- Floyd, M.F. 1999. Race, Ethnicity and Use of the National Park System. *National Park Service: Social Science Research Review*. 1(2).
- Knapp, D. H. and K. Bareford. 2003. *Case Study Analysis of Yellowstone National Park*. Washington D.C.: National Park Service.
- Knapp, D.H. and G. Benton. 2004. Analysis of interpretive programs at selected national park service units: Variables for successful interpretation. *Journal of Interpretation Research*, 9(2), 9-25.
- Rodriguez, D. A. and N. S. Roberts. 2002. The Association of Race/Ethnicity, Gender and Social Class in Outdoor Recreation Experiences. State of the Knowledge Report. Fort Collins, CO: Colorado State University. 92 p.
- Tuler, S. and D. Golding. 2002. A Comprehensive Study of Visitor Safety in the National Park System: Final Report. Worcester, MA: Clark University. 85 p.
- Tuler, S., D. Golding, and R. J. Krueger. 2002. A Review of the Literature for a Comprehensive Study of Visitor Safety in the National Park System. Worcester, MA: Clark University. 77 p.

## Guide to Approvals Needed for Social Science Surveys

National Park Service. 2002. Social Science Surveys and Interviews in the National Parks and for the National Park Service: A Guide to NPS and OMB Approvals. Washington D.C.: National Park Service.

## Management

- Presidential Initiative, America's Great Outdoors: A Promise to Future Generations. 2011.
- Anderson, D.H., D. W. Lime, and T. L. Wang. 1998. Maintaining the Quality of Park Resources and Visitor Experiences, A Handbook for Managers. St. Paul, MN: University of Minnesota.
- National Parks Second Century Commission. 2009. Advancing the National Park Idea: National Parks Second Century Commission Report. Washington D.C.:National Parks Conservation Association. 52 p.
- Roberts, N. and D. Ross. 2009. Relevance and Diversity Executive Steering Committee Newsletter. National Park Service, Intermountain Region. San Francisco, CA: San Francisco State University.
- Department of the Interior. 2011. *Strategic Plan for Fiscal Years 2011-2016*. Washington D.C.: Department of the Interior. 48 p.



# APPENDICES

Appendix A: Policies

Appendix B: Visitor Characteristics

Appendix C: U.S. Population Data and Trends

Appendix D: Law Enforcement Incidents: Thermal Areas 2007–2011

Appendix E: Law Enforcement Incidents: Wildlife Including Bears

Appendix F: Resource Warnings Given by REYP 2007–2011

Appendix G: NPS Call to Action Correlation

Appendix H: REYP in 2012

Appendix I: Partners and Stakeholders



# APPENDIX A

## NATIONAL PARK SERVICE POLICIES THAT RELATE TO EDUCATION, INTERPRETATION, YOUTH PROGRAMS, VOLUNTEERISM

### Management Policies 2006

National parks are among the most remarkable places in America for recreation, learning, and inspiration. Interpretive programs are the methods the [National Park] Service uses to connect people to their parks, with opportunities for all visitors to form their own intellectual, emotional, and physical connections to the meanings and values found in the parks' stories. Facilitating those opportunities through effective interpretive and educational programs will encourage the development of a personal stewardship ethic and broaden public support for preserving and protecting park resources so that they may be enjoyed by present and future generations.

An effective park interpretive and educational program will include:

- Information and orientation programs that provide visitors with easy access to the information they need to have a safe and enjoyable park experience;
- Interpretive programs that provide both on- and off-site presentations and are designed to encourage visitors to form their own intellectual or emotional connections with the resource. Interpretive programs facilitate a connection between the interests of visitors and the meanings of the park;
- Curriculum-based educational programs that link park themes to national standards and state curricula and involve educators in planning and development. These programs include pre-visit and post-visit materials, address different learning styles, include an evaluation mechanism, and provide learning experiences that are linked directly to clear objectives. Programs develop a thorough understanding of a park's resources in individual, regional, national, and global contexts and of the park's place within the national park system; and
- Educational media that provide visitors with relevant park information and facilitate more in-depth understanding of—and personal connection with—park stories and resources. This media will be continually maintained for both quality of content and condition based upon established standards.

All interpretive and educational services, including personal services, interpretive media, and partnerships that support interpretive and educational programs, will be based on and coordinated with the comprehensive interpretive plan.

[Cooperating] Associations may offer appropriate and approved interpretive services that support but do not supplant interpretive and educational services offered by the Park Service.

Interpretive and educational programs will be based on current scholarship and research about the history, science, and condition of park resources, and on research about the needs, expectations, and behavior of visitors. All employees who provide interpretive services will be required to meet the Service's national standards of interpretation and education. NPS interpretation and education employees will act as models and coaches for other NPS staff, especially law enforcement, volunteers, and other partners.

National parks belong to all of the nation's people [who] should have opportunities to enjoy them. Demographic trends in the United States indicate an ever increasing array of diversity within the population. The National Park Service must change its traditional approach of interpretation to reach out, engage, and cultivate the support of the increasingly diverse array of visitors. Efforts will be made to ensure that NPS interpretive and educational programs are available to all people and consider the special needs of children, senior citizens, non-English speaking visitors, and the economically disadvantaged.

The National Park Service will also ensure that persons with disabilities receive the same interpretive opportunities as those without disabilities. Interpretive and educational programs, exhibits, publications, and all other interpretive media will comply with Department of the Interior regulations at 43 CFR Part 17, subpart E, and with standards required by the Architectural Barriers Act. Accordingly, the Park Service will ensure that persons with disabilities have the opportunity to participate in all programs and activities in the most integrated setting appropriate.

Evaluation is also critically important for continuous improvement of educational and interpretive programs that lead to achievement of the NPS mission.

## **Director's Order #6: Interpretation and Education**

The goal of National Park Service interpretive and educational programs is to provide memorable and meaningful learning and recreational experiences, foster development of a personal stewardship ethic, and broaden public support for preserving park resources. Such programs will be successful when they forge emotional and intellectual connections among park resources, visitors, the community, and park management. The NPS will provide visitors with an experience that is enjoyable and meaningful within the context of the park's resources and the values they represent. NPS interpretive and educational programs and media will strengthen public understanding of the full meaning and relevance of heritage resources, both cultural and natural, by creating public dialogue, and fostering civic engagement. In addition, visitors should be made aware of the purposes and scope of the national park system. Interpretation and education is the key to preserving both the idea of national parks and the park resources themselves. In a world of rapidly changing demographics, it is essential that interpretive and educational programs reach beyond park boundaries to schools and the wider general public.

### ***Interpretive and Educational Programs***

- NPS programs are place-based. NPS programs are learner-centered. Programs honor personal freedom and interests through a menu of life-long learning opportunities that serve a wide variety of learning styles, encourage personal inquiry, and provoke thought.
- NPS programs are widely accessible. Programs provide learning opportunities, reflect and embrace different cultural backgrounds, ages, languages, abilities, and needs. Programs are delivered through a variety of means, including distance learning, to increase opportunities to connect with and learn from the resources.
- NPS programs are based on sound scholarship, content methods and audience analysis. Programs are informed by the latest research related to natural and cultural heritage and incorporate contemporary education research and scholarship on effective interpretive and educational methods.

- NPS programs help people understand and participate in our civil democratic society. Programs highlight the experiences, lessons, knowledge, and ideas embodied in America's national parks and other special places and provide life-long opportunities to engage in civic dialogue.
- NPS programs incorporate ongoing evaluation for continual program improvement and effectiveness. Programs are regularly evaluated and improved to ensure that they meet program goals and audience needs.

### **Director's Order #7 Volunteers in Parks**

Volunteering is an American tradition that over the years has made an immeasurable contribution to communities, organizations, and individuals throughout the country. Volunteers are vital to the success of the National Park Service (NPS). The Volunteers-In-Parks (VIP) program can accept and use voluntary help and services from the public, in a way that is mutually beneficial to the NPS and the volunteer.

### **Director's Order #21 Donations and Fundraising and Reference Guide 21**

The National Park Service (NPS) recognizes private philanthropy as both a noble tradition for national parks and a vital element of the success of today's National Park System. Donations come to the NPS from individuals, families, organizations, foundations, corporations, businesses, and other entities purely as expressions of support, as a result of a donor's awareness of needs, or in response to an organized fundraising campaign by others. Donations are used to enhance NPS programs and to help achieve excellence. Donations are not to be used as offsets to appropriated funds or to meet recurring operational requirements. The NPS appreciates the generosity of those who donate directly, and those who work through authorized non-profit organizations that raise funds for the benefit of the park units and programs.

Fundraising to support parks is typically undertaken by long-standing, park support groups such as friends groups. Friends groups are non-profit organizations that are generally formed under state law and must comply with state and federal requirements for charitable fundraising as well as standards of professional conduct. The NPS values the commitment of its non-profit partners and their many contributions to the NPS and the National Park System.

### **Director's Order #26 Youth Programs**

The purpose of this Director's Order is to:

- Provide direction to NPS personnel who work with youth programs such as the Youth Conservation Corps.
- Provide guidance and support for parks to design local youth programs.
- Provide encouragement to park managers and other NPS personnel to operate such programs.

Youth programs have been an integral part of the NPS for over 40 years. The needs of youth are expected to become more complex, requiring greater creativity and collaboration between government and others who have the capability to serve youth. By reaching out to young people from different social and economic backgrounds, the NPS provides special opportunities for young Americans who might not otherwise have the chance to visit or work in a park.

The objectives of the NPS youth programs are to:

- Engage America's youth in developing a life-long awareness of, and commitment to, national parks.
- Involve youth in the protection of natural and cultural resources through a variety of creative means and endeavors that enhance the relationship between the NPS and young Americans.
- Educate youth about the NPS mission through formal and informal methods.
- Train and prepare young people, including youth from diverse and underrepresented populations, so that they may qualify for jobs and careers in the NPS.
- Promote diversity of park visitors and staff, in terms of social, ethnic, and economic backgrounds.
- Provide the NPS with valuable assistance and additional labor to address deferred maintenance and other essential park projects.

### ***Youth Conservation Corps (YCC)***

The YCC, a National Youth Program, was established in 1971 as a summer program for young men and women from different social, ethnic, and economic backgrounds. The program's objective was to place them on work crews in national forests, wildlife refuges, and national parks. To enroll in the YCC program, the participants must be between 15 and 18 years of age. Programs that are residential are responsible for housing, transportation, and all other expenses associated with the programs' administration.

### ***Education Programs***

The NPS works with schools and youth organizations to provide young people with formal and informal educational opportunities in our National Parks.

### **Director's Order #32 Cooperating Associations and Reference Manual 32**

Cooperating Associations (Associations or CAs) are one of the oldest and most enduring partnerships of the National Park Service. The strength of the partnership is derived from its primary purpose, which is the support of the educational, scientific, historical, and interpretive activities of the NPS through the provision of educational products and services to national park visitors through retail sales. The success of an Association as a partner is determined by its ability to work cooperatively with NPS staff to evolve in a way that is responsive to the changing needs of the park(s) and the visitors they serve.

As organizations that work on behalf of the NPS, cooperating associations are afforded special privileges and have special responsibilities in helping the NPS carry out its mission.

A nonprofit organization may perform other functions to support the NPS, such as fundraising or operating an environmental education center when authorized by a separate appropriate legal instrument. Formal interpretive activities conducted by an Association in support of the NPS mission must be approved in a written agreement between the Association and the NPS, and must conform to Director's Order #6: Interpretation and Education. Appropriate roles for Association assistance in providing interpretive and educational programs and activities will be identified in a park's Comprehensive Interpretive Plan or Long-Range Interpretive Plan.

An Association that wishes to create and operate an institute or other interpretive program(s) must do so under a separate legal instrument with the NPS. When determining whether to authorize an institute or other organization to undertake interpretive activities, the NPS will first confirm that the proposed activities are needed and will be conducted consistent with applicable law and NPS policy, including the park's long-range interpretive plan.

### **Director's Order #41 Wilderness Stewardship and Reference Manual 41**

This Order should be applied to stewardship actions carried out within the framework of park general management plans, wilderness stewardship plans, natural and cultural resources plans, fire management plans, and other operational plans. It directs parks to include wilderness education in public programs.

### **Director's Order #42 Accessibility for Visitors with Disabilities in NPS Programs and Services**

The primary goal of the program is to develop and coordinate a comprehensive approach to achieving the highest level of accessibility that is reasonable, while ensuring consistency with the other legal mandates of conservation and protection of the resources the NPS manages. Since 1980, the NPS has been working with accessibility coordinators to: (1) assess the level of accessibility; (2) identify the barriers to accessibility; (3) develop policies and guidelines regarding appropriate methods and techniques for improving access; and (4) provide technical assistance and in-service training on effective approaches and program implementation.

The goal of the NPS is to ensure that all people, including citizens with disabilities, have the highest level of accessibility that is reasonable to NPS programs, facilities, and services in conformance with applicable regulations and standards. The NPS seeks to provide that level in the planning, construction, and renovation of buildings and facilities and in the provision of programs and services to the public and to NPS employees.

### **Director's Order #50B Occupational Safety and Health Program and Reference Manual 50B**

The National Park Service has a continuing concern about the occupational safety and health of our employees and others who work in the parks as volunteers, contractors, concession employees, or in any other capacity. Controlling hazard exposures that affect employees can also positively affect the visitor experience and enhance the accomplishment of the NPS mission. In recognizing this, the NPS is committed to reducing workplace accidents, injuries and illnesses, and the associated pain, suffering, and losses associated with these incidents.

### **Director's Order #50C Public Risk Management Program and Reference Manual 50C**

The intent of the NPS is that all visitors have an injury-free park experience. Because of the wide range of activities visitors engage in, the diverse type, origin, and experience level of park visitors, and the inherent risks that cannot be managed or transferred away, visitor risk management continues to be a difficult challenge. Injury prevention is a responsibility shared by the park staff, park partners, and park visitors. Park superintendents and their partners (e.g., concessioners, contractors, and permittees) seek to identify risks within their jurisdiction and to eliminate or mitigate these risks within the limits of

available resources without compromising the integrity of the environments they are charged to protect. Visitors must also take responsibility to plan adequately by preparing for their park visit, seeking and heeding the information, advice, and warnings provided by park staff, educating themselves to possible risks associated with a particular park environment and activity in which they engage, understanding their physical and mental limits, taking reasonable precautions during their visit, and using reasonable judgment to avoid risks in general.

### **Director's Order #52A Communicating the National Park Service Mission**

To enhance the public's understanding of what [the NPS is] and what we do, we must significantly improve our ability to deliver to all segments of society high quality, useful information that paves the way to knowledge and understanding and invites support for, and participation in, the NPS mission. If we are to truly play a much more significant role as an educational resource for the American people, we must excel in communicating our mission clearly and effectively. The public will be most supportive of our mission if they have a greater knowledge of what we do. They will better understand our management decisions if we more clearly and thoroughly explain why the places we care for are special. We will be most successful in accomplishing our mission if we invite the public to be our partners in stewardship.

### **Director's Order #70 Internet and Intranet Publishing**

Advances in electronic information technology have created extraordinary opportunities for the NPS to use Internet publications to inform and educate the public about the NPS mission and organization, the uniqueness of park resources, and the relevance of a national system of parks and partnership programs. The design and content of web publications has the potential to deliver and communicate essential information about the identity of [the] NPS. The national park experience (which includes the "national park idea" as well as the cultural and natural resources of parks) provides us with a very potent frame of reference for who we are as a people and as a country. This information is available globally to anyone who has access to the Internet and who wants to learn about these American places; the many associated people, objects, and events; and the national values they represent.

### **Director's Order #78 Social Science**

Proper management of the National Park System requires accurate, science-based understanding of the relationships between people and parks in order to protect park resources unimpaired and provide for public enjoyment. Social science research in support of the NPS mission is an important function that provides new and helpful information upon which to base management decisions. The purpose of this Director's Order is to delineate the policies, procedures, and responsibilities for social science under jurisdiction of the NPS Social Science Program, which includes the disciplines of economics, geography, psychology, political science, and sociology, as well as appropriate interdisciplinary research fields.

### **Visitor Services Project**

The Visitor Services Project (VSP) is managed via a cooperative agreement with a university and provides NPS managers with scientific information about visitors that can be used to improve visitor services and protect park resources. The VSP conducts several visitor studies each year. The VSP also manages the Visitor Survey Card program used for annual Government Performance and Review Act-based evaluation of all the NPS units.

## **YELLOWSTONE PARK PLANNING DOCUMENTS AND PROGRAM AREAS**

Yellowstone's Comprehensive Interpretive and Education Plan is one of Yellowstone's primary planning documents. It is the only planning document that consolidates all aspects of the park's goals and actions related to visitor information, orientation, education, and youth programs. However, education and visitor experience elements or goals also appear in other park plans or programmatic undertakings. The list below identifies Yellowstone-specific plans in which visitor or public education, or some facet of youth programs, has been included. During the preparation of the CIEP, each plan was reviewed and relevant sections were factored into the development of the CIEP.

### **Bear Management Plan**

Yellowstone staff is responsible for protecting and maintaining natural populations of grizzly bears and black bears as part of the park's native fauna and providing park visitors the opportunity to safely enjoy the park's natural resources. The chance of bear-human conflicts (bear-caused human injuries and property damages) will be minimized through public education; management of human foods, garbage, and other attractants; and the direction and regulation of human activity. This management plan is intended to provide guidance and direction to park employees responding to bear management situations occurring within the park.

REYP educates visitors and staff concerning bear ecology and safety procedures in bear country in myriad ways, including public walks, talks, demonstrations, and evening programs; curriculum-based school programs and an array of youth programs; outdoor exhibits, podcasts, and other information on the park website, and the park newspaper, and numerous other publications. Public education is key to ensuring safe visits and the ultimate preservation of grizzly and black bears in the Greater Yellowstone Ecosystem.

### **Bechler Administrative Area Improvement Plan/Environmental Assessment**

The NPS is looking at ways to improve facilities and services while preserving the historic character of the Bechler area.

### **Bison Management Plan**

A major park management goal is to maintain a wild, free-ranging bison population, including maintaining the existing population's genetic integrity, but there is limited tolerance for bison when they migrate from the protection of Yellowstone. All programs and activities of REYP support the park's management goal and educate the public concerning the controversial issue of bison management. While presenting the multiple perspectives associated with this long standing controversial issue, the REYP strives to ensure that the science underlying park management goals and actions is clearly explained to the public.

### **Comprehensive Planning**

REYP participated in the development and review of these comprehensive plans. Resource-based interpretive themes and visitor experience goals of these plans and other park comprehensive plans that have not been completed (e.g., Old Faithful Area Comprehensive Plan and the Mammoth Area

Comprehensive Plan) are in alignment with REYP's goal of providing visitors with appropriate and effective education and interpretation of natural and cultural resources through a variety of methods.

- Tower Roosevelt Comprehensive Plan Environmental Assessment
- Lake Area Comprehensive Plan Environmental Assessment
- Old Faithful Comprehensive Plan Environmental Assessment – in progress
- North Entrance and Park Street Improvement Plan Environmental Assessment, 2011

### **Cultural Landscape Inventories and Reports**

REYP has participated in the review and development of several of these documents. The Cultural Landscapes Inventory (CLI) is a computerized, evaluated inventory of all cultural landscapes while a cultural landscape report (CLR) is the primary guide to treatment and use of a cultural landscape. Both analyze the landscape's development and evolution of site, including existing conditions.

- North Entrance Road Historic District Landscape, Cultural Landscapes Inventory
- Mammoth Hot Springs Historic District (includes Fort Yellowstone National Historic Landmark) Cultural Landscape Report
- Fishing Bridge and Lake Historic District Cultural Landscapes Inventories
- Yellowstone Park Transportation Company Historic District , Cultural Landscape Inventory
- Lake Fish Hatchery Historic District, Cultural Landscape Inventory

### **Concession Plans**

#### ***Commercial Services Strategy***

The strategy ensures that the visitor services provided under concession contracts are consistent with park goals, statutory and regulatory requirements, park planning, NPS policies and guidelines, and park management priorities. This strategy is the foundation for the park in future contracting. It is the goal of the park to ensure quality visitor services are provided in concession contracts that are consistent with the preservation and conservation of the resources and values of the park.

#### ***Commercial Use Authorization (CUA) Plan, 2013***

These recommendations guide the superintendent in administering the numerous CUAs providing a wide array of visitor services in Yellowstone. Visitor services provided by CUAs include orientation, interpretation, informal education, demonstrations, etc.

### **Fire Management Plan Environmental Assessment**

The Fire Management Plan guides the fire management program and is a requirement for managing wildland fire in accordance with current NPS policies. A goal of the Wildland Fire Management Plan is to maintain a public education program on the ecological role of fire in the park and provide daily fire danger and situation information when fires in and near the park are of sufficient magnitude to merit attention.

## **Foundation for Planning and Management (draft)**

A formal statement of Yellowstone's core mission will provide basic guidance for all planning and management decisions: a foundation for planning and management. The primary advantage of developing and adopting a foundation statement is the opportunity to integrate and coordinate all types and levels of planning and decision making into a single, shared understanding of what is most important about the park. The development of a foundation statement for Yellowstone is essential for effectively managing the park over the long term and protecting the park's resources and values that are integral to the park's purpose and identity. Primary interpretive themes are a component of the Foundation for Planning and Management.

## **Historic Structures Strategy**

This park-wide plan evaluates park historic buildings based on historical significance, condition, and use. The strategy also identifies buildings to be evaluated for eligibility to the National Register of Historic Places.

## **Native Fish Conservation Plan Environmental Assessment, 2011**

To implement aggressive actions that will ensure recovery of native fish and restore natural ecosystem function, a Native Fish Conservation Plan/Environmental Assessment (Koel et al. 2010) and Finding of No Significant Impact (FONSI) were completed in 2011.

Goals of the plan include:

- Reduction in the long-term extinction risk for fluvial Arctic grayling, westslope cutthroat trout, and Yellowstone cutthroat trout;
- Restoration and maintenance of the important ecological role of native fishes; and
- Creation of sustainable native fish angling and viewing opportunities for the public.

## **Nonnative Vegetation Management Plan Environmental Assessment, 2013**

The effective management of nonnative plant species is essential to prevent the establishment and proliferation of nonnative plants in Yellowstone, which is considered to be the largest threat to the integrity of native plant communities and associated ecosystem processes. Programs and activities of REYP educate visitors concerning the problems caused by invasive nonnative plants.

## **National Ecological Observatory Network (NEON)**

The National Science Foundation initiated the National Ecological Observatory Network to understand and forecast how the United States responds to natural and human-induced changes in climate, land-use, and invasive species at continental, regional, and local scales. Yellowstone is the only national park identified as a Core Site and the park will host permanent monitoring stations to collect, transmit, store data that can be analyzed at a continental-scale for a 30-year time period.

## **Resource Compliance Program**

All actions of Yellowstone National Park must comply with the National Environmental Policy Act (NEPA), especially Section 7 of the Endangered Species Act (ESA) and Section 106 of the National Historic Preservation Act (NHPA). All activities and programs of the REYP will comply with NEPA regulations and Yellowstone's process for determining the type and level of compliance required for a given activity when necessary. REYP also educates the public about the role of compliance in park management, and as a part of natural and cultural history topics when appropriate.

## **Safety and Health Policy**

The safety and health of visitors, employees, volunteers, concessioners, and contractors is a core value of Yellowstone National Park. Comprehensive safety procedures and practices are part of the planning of, training for, and execution of all REYP activities and programs.

## **Social Media Strategy**

Yellowstone uses social media to connect and reconnect with, engage, educate, inform, and develop and foster stewardship in a global audience of park fans. The park's social media efforts encourage people to develop a lasting participatory relationship with the National Park Service, Yellowstone, and each other. They create places for time-sensitive information to be shared and direct followers to more detailed information on the park website.

## **Strategic Plan for Sustainability**

This plan sets goals for operational and infrastructure improvements that reduce impacts on the environment while enhancing visitor experience and employee living and working conditions. The plan also provides direction focused on the park's specific challenges to reduce greenhouse gas emissions; consumption of energy, water and materials; adapt facilities; and conduct operations in an environmentally-responsible manner.

## **Winter Use Final Environmental Impact Statement, 2013**

The park's goal is to establish a management framework that allows the public to experience the unique winter resources and values at Yellowstone National Park. All programs and activities of REYP support the park's management goals, including adaptive management, and educate the public concerning the controversial issue of winter use.

## **Wireless Communication Services Plan Environmental Assessment, 2009**

This plan limits the types and locations of wireless services and infrastructure in the park. All activities of REYP requiring internet access or cell phone service will adhere to the policies and intent of the approved Wireless Communication Services Plan.

## **Partner Strategic Plans**

### ***YA Strategic Plan***

Revised and completed in late 2011, this one-page document is broadly written. Director's Order #32 provides the NPS framework for all aspects of managing the relationship. As the primary purpose of cooperating associations (CAs) is the support of interpretation and education through sales of educational materials, priorities tier from working on such elements as the Scope of Sales and engaging in strategic discussions about the rapidly changing world of technology as it affects traditional bookstore sales. D.O. 32 states that all other visitor services not defined within the core purpose of a CA must be described/defined in the park's CIEP and be officially codified in separate legal instruments known as Interpretive Services Plans.

### ***YPF Strategic Plan***

Unlike cooperating associations, friends groups such as YPF do not have a specific NPS policy defining and guiding the relationship. However, the fundraising work of friends groups must conform with the policy articulated in Director's Order #21, Donations and Fundraising. YPF completed a strategic plan in spring, 2012. YPF was created to support a broad spectrum of needs in Yellowstone National Park. This CIEP notes the linkages with that portion of the plan relative to visitor experience, resource preservation through education and stewardship, information, orientation, interpretation, youth programs, and other special populations, in and outside of the park.

# APPENDIX B

## VISITOR CHARACTERISTICS

### Basic Park Visitation Data and Visitor Center Contacts

Certain specific visitor data is compiled on an annual basis (e.g., recreational visits based on entrance station counts, the number of contacts at visitor centers, and a count of visitors participating in ranger-led programs) along with the cost of providing these services. (Source: NPS Public Use Statistics Office.)

*Table B-1.* Annual Park Recreational Visits and Visits to Park Visitor Centers and Warming Huts, 2002–2012.

Year	Park Recreational Visits	Visitor Center Contacts
2012	3,447,729	3,049,523
2011	3,394,326	2,938,665
2010	3,640,185	2,424,394
2009	3,295,187	2,246,085
2008	3,066,580	2,273,542
2007	3,151,343	2,247,020
2006	2,870,295	2,128,651
2005	2,835,651	2,202,816
2004	2,868,317	1,872,664
2003	3,019,375	2,061,534
2002	2,973,677	2,031,637

*Table B-2.* Park Recreational Visits by Month, 2012

Month	Park Recreational Visits
January	24,766
February	27,752
March	20,248
April	29,056
May	268,251
June	671,825
July	888,335
August	780,286
September	527,610
October	177,069
November	14,059
December	18,472

*Table B-3.* Visitor Center Visits during FY 2012

<b>Visitor Center</b>	<b>Number of Visits</b>
Old Faithful Visitor Education Center	1,225,835
Canyon Visitor Education Center	401,726
Norris Geyser Basin Museum	435,201
Mammoth Visitor Center	326,873
Grant Visitor Center	253,514
Fishing Bridge Visitor Center	173,327
West Yellowstone Visitor Information Center	112,012
Madison Information Station/Junior Ranger Station	41,838
Museum of the National Park Ranger	28,089
Total Visitor Center visits	2,998,415

*Table B-4.* Winter Warming Hut Visits during FY 2012

<b>Warming Hut</b>	<b>Number of Visits</b>
Madison	30,765
West Thumb	10,266
Canyon	8,307
Fishing Bridge	1,770
Total warming hut visits	51,108

Total visitor center, contact station, and warming hut contacts in FY12 = 3,049,523

## Visitor Surveys

Surveys conducted by the Visitor Services Project of the University of Idaho Park Studies Unit during the summers of 2011, 2006, 1989 and 1987 have provided data on changing park visitors (Kulesza et al., 2012; Manni et al., 2007; Littlejohn *et al.*, 1990; Machlis *et al.*, 1988). A pilot survey was conducted in 1983 to aid in designing future surveys (Machlis *et al.*, 1984), but the data probably shouldn't be compared with data from later surveys as the techniques changed. When possible, data from the 2011 Visitor Survey is compared below to data gathered from previous surveys.

### Group size and composition

In 2011, most visitors were in groups of 2 (34%), 3 (14%) or 4 (22%), for a total of 70 percent. An additional 17% of visitors were in groups of 6 or more. The percentage of visitors traveling in groups of two has shown a slight decrease since the 1980s, from 39% in 1987 and 42% in 1989, to 34% in 2011. Family members comprised 78% of the groups visiting Yellowstone in 2011, with group composition remaining relatively similar since the 1980s. In the following tables, G = number of groups participating in the survey and I = number of individuals participating in the survey.

*Table B-5.* Visitor Group Size and Group Type.

	2011	2006	1989	1987	1983
<b>Group Size</b>	<i>G</i> = 893	<i>G</i> = 882	<i>G</i> = 810	<i>G</i> = 839	
1	4%	5%	4%	5%	
2	34%	35%	42%	39%	
3	14%	11%	14%	16%	
4	22%	24%	21%	21%	
5	8%	7%	9%	7%	
6 or more	17%	18%	11%	13%	
<b>Group Type</b>	<i>G</i> = 892	<i>G</i> = 873	<i>G</i> = 851	<i>G</i> = 838	<i>I</i> = 251
Family	78%	71%	78%	75%	75%
Friends	7%	8%	9%	9%	11%
Family and friends	9%	10%	7%	5%	6%
Alone	6%	10%	5%	9%	6%
Organized tour			<1%	1%	2%

### ***U.S. and international visitors***

In 2011, most (88%) park visitors were Americans, while international visitors from 30 countries comprised 12% of the visiting public. California residents and Utah residents each comprised 8% of visitors. Of the international visitors, 27% were from Canada, 11% from the United Kingdom, 10% from France, and 10% from Germany. The percentage of international visitors from Canada has decreased from 47% in 1987 to 27% in 2011.

**Table B-6.** State or Country of Origin for Visitors.

<b>Residence</b>	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
State of residence (% of U.S. visitors)	<i>l = 2589</i>	<i>l = 2575</i>	<i>l = 2265</i>	<i>l = 2330</i>	<i>l = ??</i>
CA	8%	12%	11%	10%+	CA
WY	N/A	2%	7%	4-9%	MN
UT	8%	10%	6%	4-9%	MT
ID	5%	5%	6%	4-9%	MI
MT	5%	4%	6%	4-9%	IL & WA
WA	6%	5%			
CO	5%	5%			
TX	4%	5%			
International visitors	<i>l = 350</i>	<i>l = 276</i>	<i>l = 181</i>	<i>l = 193</i>	
Canada	27%	25%	43%	47%	
Germany	10%	10%	14%	14%	
Switzerland	5%	5%	8%	14%	
France	10%	5%	7%		
England/U.K.	11%	9%	5%	8%	
Netherlands	9%	17%	4%		
Italy	2%	7%	<1%		
China	7%				
Sweden	2%		1%	2%	

### **Age of visitors**

The age of adult park visitors shifted during the 24 years between 1987 and 2011. While the percentage of younger adult visitors, ages 26–45, has decreased from 37% in 1987 to 23% in 2011, the percentage of older adult visitors, ages 46–65, has increased from 24% in 1987 to 34% in 2011. The percentage of visitors in other age groups has remained relatively constant during this time period.

**Table B-7.** Age of Respondents to Visitor Surveys.

<b>Visitor Age</b>	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
	<i>l = 3077</i>	<i>l = 3036</i>	<i>l = 2545</i>	<i>l = 2585</i>	<i>l = 250</i>
10 or younger	12%	14%	13%	14%	
11-15	11%	11%	10%	9%	
16-20	5%	5%	4%	4%	
21-25	3%	3%	4%	4%	
26-30	3%	3%	5%	7%	10%
31-35	4%	5%	7%	9%	18%
36-40	7%	8%	11%	12%	
41-45	9%	10%	10%	9%	
46-50	10%	10%	7%	7%	
51-55	8%	8%	6%	5%	
56-60	8%	8%	6%	5%	
61-65	8%	7%	7%	7%	
66-70	5%	4%	5%	4%	
71-75	3%	2%	3%	3%	
76 or older	2%	1%	1%	2%	

**Table B-8.** Visitor Age

(Age groups lumped to demonstrate age shift during 24 years between 1987 and 2011).

<b>Visitor Age - lumped</b>	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
26 - 45	23%	26%	33%	37%	
46 - 65	34%	33%	26%	24%	

### ***Ethnicity and race***

Data on the ethnicity and race of visitors has been surveyed since 2006. In 2011 and 2006, the ethnicity of 97% of park visitors was non-Hispanic, while 3% were Hispanic or Latino. Ninety-two percent of visitors were white in 2011, a decrease from 95% white in 2006. Asian visitors increased from 3% in 2006 to 5% in 2011. One percent consisted of American Indians or Alaskan Natives in 2011 and 2% in 2006. One percent was African-American in 2011 and <1% in 2006. Because these data were not obtained during surveys in the 1980s, visitor ethnicity and race cannot be compared over time.

**Table B-9.** Visitors' Ethnicity and Race.

	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
<b>Ethnicity</b>	<i>I = 2604</i>	<i>I = 813</i>			
Hispanic	3%	3%			
Non-Hispanic	97%	97%			
<b>Race</b>	<i>I = 3035</i>	<i>I = 829</i>			
White	92%	95%			
Asian	5%	3%			
American Indian/Alaskan native	1%	2%			
Native Hawaiian/Pacific Islander	<1%	<1%			
Black/African American	1%	<1%			
More than 1 race	1%				

### ***Number and length of park visits***

In 2011, most (55%) of visitors were on their first trip to the park. The number of first-time visitors has steadily increased from 46% in 1983 to 55% in 2011. Nearly half (48%) of all visitor groups spent less than 24 hours in the park in 2011, which is consistent with time spent in the park by visitor groups surveyed in 2006 and 1989. In 1987, only 10% of visitors surveyed spent less than 24 hours in the park. Multi-day visitor groups averaged 5 days in the park.

**Table B-10.** Number of Park Visits and Number of Days Spent in Yellowstone.

<b>Visit</b>	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
<b>Number of park visits</b>	<i>I = 2660</i>	<i>I = 2605</i>	<i>I = 2479</i>	<i>I = 2458</i>	<i>I = 254</i>
first	55%	53%	49%	48%	46%
2-4	30%	30%	36%	34%	44%
5+	15%	18%	16%	18%	10%
<b>Number of days in park</b>	<i>G = 754</i>	<i>G = 685</i>	<i>G = 813</i>	<i>G = 824</i>	<i>I = 255</i>
Less than 1	48%	49%	45%	10%	36%
1 day	7%	2%	3%	21%	
2 days	10%	13%	22%	29%	25%
3 days	12%	14%	15%	20%	17%
4+ days	22%	22%	15%	19%	20%

### **How visitors acquired information prior to visit**

In 2011, most visitor groups obtained information prior to their trip. The most common sources of information were friends/relatives/word of mouth (59%), the park website (56%), maps/brochures (55%), previous visits (46%), and travel guides/tour books (39%). Use of the park website increased from 46% to 56% between 2006 and 2011, while most (74% in 2011; 70% in 2006) visitor groups planned to use the park website to plan future trips.

**Table B-11.** Sources of Park Information.

<b>Information Sources</b>	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
<b>Information sources prior to visit</b>	<i>G = 815</i>	<i>G = 800</i>			
Friends/relatives/word of mouth	59%	55%			
Park website	56%	46%			
Maps/brochures	55%	56%			
Previous visits	46%	53%			
Travel guides/tour books	39%	48%			
Welcome center/Chamber/visitor bureau	17%	11%			
Inquiry to park via phone,mail,email	17%	10%			
Other websites	16%	17%			
TV/radio/DVDs	16%	22%			
Xanterra website	16%	19%			
Newspaper/magazine articles	15%	15%			
Airport/motel/other & local business	9%	5%			
Social media	4%				
School class/program	2%				
Delaware North website	<1%	0%			
Other	3%	10%			
<b>Information sources to plan future visit</b>	<i>G = 579</i>	<i>G = 526</i>			
Park website	74%	70%			
Previous visits	58%	56%			
Maps/brochures	52%	54%			
Travel guides/tour books	40%	49%			
Friends/relatives/word of mouth	35%	36%			
Email/phone/written inquiry	22%	12%			
Welcome center/Chamber	21%	16%			
Xanterra website	20%	22%			
Newspaper/magazine articles	16%	14%			
Other websites	16%	18%			
TV/radio/videos	14%	15%			
Airport/motel/other & local business	9%	5%			
Social media	7%				
Delaware North website	3%	2%			
School/class program	2%				
Other	1%	4%			

### **Use of visitor centers, waysides and interpretive programs**

In the 1980s, more than 70% of visitor groups went to at least one park visitor center. Only 49% went to a park visitor center in 2006, but this increased to 55% of visitor groups in 2011, perhaps due to construction of new visitor education centers at Canyon, opened to the public post-survey in 2006, and Old Faithful in 2010. Of the groups who went to visitor centers in 2011, 39% visited 3 or more visitor centers in 2011 (Kulesza *et al.*, 2012a). The percent of visitor groups who viewed roadside or trailside exhibits increased from 54% in 2006 to 63% in 2011. The percentage of visitor groups attending ranger-led programs has remained relatively constant since 1987, with 18% of visitor groups attended ranger-led programs in 2011.

**Table B-12.** Visitor Participation in Educational Activities.

<b>Activities</b>	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
	<i>G</i> = 894	<i>G</i> = 887	<i>G</i> = 856	<i>G</i> = 846	<i>I</i> = 2523
Visit museum/visitor center	55%	49%	73%	72%	4%
Viewing roadside/trailside exhibits	63%	54%			
Attend interpretive program	18%	15%	15%	18%	3%

### **Park sites visited**

As expected, Old Faithful remained the most popular park location, with visitation increasing from 78% of groups in 1987 to 90% of groups in 2011. Mammoth and Canyon are the next most popular sites for visitors, with Canyon more popular than Mammoth in the 1980s and the reverse, Mammoth more popular, in the 2000s.

**Table B-13.** Locations Visited.

<b>Locations visited</b>	<b>2011</b>	<b>2006</b>	<b>1989</b>	<b>1987</b>	<b>1983</b>
	<i>G</i> = 748	<i>G</i> = 847	<i>G</i> = 856	<i>G</i> = 846	<i>I</i> = 2527
Old Faithful	90%	90%	84%	78%	19%
Mammoth Hot Springs	69%	69%	57%	54%	15%
Canyon Village	66%	64%	68%	70%	17%
Bridge Bay/Lake /Fishing Bridge	53%	53%	47% BB/Lake; 54% FB	33% BB/Lake; 51% FB	16%
West Thumb/Grant Village	49%	49%	63%	48%	10%
Tower-Roosevelt	45%	45%	43%	45%	10%
Madison	42%	47%	61%	51%	5%
Norris	N/A	N/A	61%	54%	7%

### **Cell phones and internet**

Survey questions reflect changing visitor practices and interests. In 2011, 74% of the groups surveyed preferred cell phone access in developed areas for future visits, while 56% of groups preferred internet access in developed areas for future visits. These questions were not asked of survey respondents prior to 2011, so no comparison of visitor preferences over time can be made.

**Table B-14.** Visitor Preference for Cell Phone and Internet Access

<b>Preferences for future visits</b>	<b>2011</b>
Cell phone access in developed areas	<i>G</i> = 858
Yes	74%
No	26%
Internet access in developed areas	<i>G</i> = 796
Yes	56%
No	44%

Other visitor characteristics from the 2011 survey (Kulesza et al., 2012a):

- 97% of visitor groups used English as their primary language for speaking and reading.
- Yellowstone visitors were highly educated; 33% of visitors had a bachelor's degree, while 32% had a graduate degree and 22% of visitors have attended some college.
- 9% of visitor groups had members with disabilities and/or impairments that affected their park experience. Mobility (82%) was the dominant physical condition that made park visitation difficult.
- 72% of park visitor groups had an annual household income of at least \$50,000.

## Characteristics of Winter Visitors

Experiencing Yellowstone in winter imposes a variety of constraints on visitors. Travel to the interior of the park (e.g., Old Faithful, Madison, West Thumb and Canyon) is oversnow, either on a guided snow-coach (a tracked vehicle driven by a guide and carrying a number of people) or with a guided group on snowmobiles. The North Entrance to Mammoth, Tower Junction and the Northeast Entrance is the only section of the park where travel is by wheeled vehicles, but driving conditions are often extreme due to storms and cold temperatures.

A survey conducted by the Visitor Services Project of the University of Idaho Park Studies Unit in February, 2012 (Kulesza *et al.*, 2012b) provides characteristics of current winter visitors.

### **Size and composition of groups**

Most (63%) visitor groups are traveling with family and most (48%) are traveling with one other person.

*Table B-15.* Winter visitors: Size and Type of Group

<b>Group</b>	<b>Winter 2012</b>
<b>Group Size</b>	<i>G</i> = 332
1	3%
2	48%
3	10%
4	19%
5	7%
6 or more	13%
<b>Group Type</b>	<i>G</i> = 329
Family	63%
Friends	16%
Family and friends	16%
Alone	5%
Other	1%
<b>Guided Tour Group</b>	<i>G</i> = 292
Yes	44%
No	56%

### **Age of visitors**

As in summer, people of all ages come to Yellowstone in winter. When the ages of winter visitors are lumped, it becomes readily apparent that most winter visitors (48%) are older adults, ages 46–65.

**Table B-16.** Winter Visitors: Age

<b>Visitor Age <i>n</i> = 1014</b>	<b>Winter 2012</b>
10 or younger	6%
11-15	5%
16-20	3%
21-25	3%
26-30	5%
31-35	6%
36-40	5%
41-45	7%
46-50	11%
51-55	11%
56-60	14%
61-65	12%
66-70	7%
71-75	3%
76 or older	2%
<b>Gender <i>n</i> = 1031</b>	
Male	49%
Female	51%

**Table B-17.** Winter Visitors: Ages Lumped

<b>Visitor Age - Lumped</b>	<b>Winter 2012</b>
26 - 45	23%
46 - 65	48%

### **Ethnicity and race of visitors**

Most winter visitors are non-Hispanic (99%) and white (96%).

**Table B-18.** Winter Visitors: Ethnicity and Race.

<b>Winter 2012</b>	
<b>Ethnicity</b>	<i>I</i> = 969
Hispanic	1%
Non-Hispanic	99%
<b>Race</b>	<i>I</i> = 1039
White	96%
Asian	2%
American Indian/Alaskan native	1%
Native Hawaiian/Pacific Islander	<1%
Black/African American	<1%
More than 1 race	1%

*I* = Number of individuals participating in the survey.

### **U.S. and international visitors**

A disproportionate 22% of winter visitors are Montana residents, perhaps reflective of the difficulties winter imposes on travelers from more distant states. International visitors hail from numerous countries, with Australia, United Kingdom, Netherlands and Germany topping the list.

**Table B-19.** Winter Visitors: State of Residence of U.S. Visitors

<b>State of residence (% of U.S. visitors)</b>	<b>Winter 2012</b>
MT	22%
UT	7%
CA	7%
WY	5%
CO	4%
WA	4%
GA	4%
NY	4%

*I* = Number of individuals participating in the survey.

**Table B-20.** Winter Visitors: Residence of International Visitors

<b>International visitors</b>	<b>Winter 2012</b>
Australia	21%
United Kingdom	19%
Netherlands	15%
Germany	11%
Canada	6%
Japan	6%

*I* = Number of individuals participating in the survey.

### **Length of park visit**

The majority (55%) of winter visitors spend less than one day in the park. Most guided trips to Old Faithful and the interior of Yellowstone in winter last less than one day.

**Table B-21.** Winter Visitors: Lifetime Visits and Number of Days in the Park.

<b>Visits</b>	<b>Winter 2012</b>
<b>Number of lifetime visits (including this one)</b>	<i>I</i> = 859
first	31%
2-4	34%
5+	34%
<b>Number of days in park</b>	<i>G</i> = 261
Less than 1 (avg. 7.7 hrs.)	55%
1 day	2%
2 days	9%
3 days	14%
4+ days	21%

G = Number of groups participating in the survey.

I = Number of individuals participating in the survey.

### **How visitors acquired information prior to visit**

While 54% of winter visitor groups used the park website to plan their 2012 trip, a higher percentage (67%) plan to use the park website to plan future trips.

**Table B-22.** Winter Visitors: Sources of Information

<b>Information sources</b>	<b>Winter 2012</b>	<b>Used prior to visit</b>	<b>Future planning</b>
		<i>G</i> = 296	<i>G</i> = 213
Previous visits		63%	58%
Park website		54%	67%
Friends/relatives/word of mouth		53%	34%
Maps/brochures		34%	37%
Xanterra website		29%	27%
Inquiry to park via phone, mail, email		25%	26%
Local businesses		22%	18%
Other websites		20%	18%
Travel guides/tour books		20%	23%
TV/radio/DVDs		12%	11%
Newspaper/magazine articles		10%	17%
State welcome center/visitors bureau/Chamber		8%	14%
Social media		4%	4%
School class/program		2%	2%
Delaware North website		0%	<1%
Other		7%	2%

G = Number of groups participating in the survey.

### **Park sites visited**

Since Old Faithful was the most visited site in winter, it is not surprising that 79% of visitor groups spent time there. Guided trips originating at the West Entrance, the busiest park entrance in all seasons, also stop at Madison to use the warming hut and adjacent restrooms, which explains why Madison was the next most visited location.

**Table B-23.** Winter Visitors: Locations Visited

<b>Locations visited in park</b> <i>G</i> = 277	<b>Winter 2012</b>
Old Faithful	79%
Madison	41%
Mammoth Hot Springs	38%
Canyon Village	28%
West Thumb/Grant Village	15%
Tower-Roosevelt	13%
Fishing Bridge/Lake/Bridge Bay	9%

*G* = Number of groups participating in the survey.

### **Cell phones and internet**

Most (61%) visitors would like to have cell phone access in developed areas for future visits, but the preference for internet access is nearly evenly split: 49% for and 51% against.

**Table B-24.** Winter Visitors: Cell Phone and Internet Preferences

<b>Preferences for future visits</b>	<b>Winter 2012</b>
<b>Cell phone access in developed areas</b>	<i>G</i> = 320
Yes	61%
No	39%
<b>Internet access in developed areas</b>	<i>G</i> = 309
Yes	49%
No	51%

*G* = Number of groups participating in the survey.

Some of the data collected from an earlier survey of winter visitors at Old Faithful (Freimund *et al.*, 2009) contributed a snapshot of winter visitors to the Old Faithful area: Of the visitors sampled by this survey, most are U.S. residents, while 3% are international visitors. Most (73%) visitors live in small to large cities with populations of 5,000 to more than 1 million. Most (73%) visitors have a college or graduate degree. Winter visitors primarily travel as family groups (45%) or with friends (37%). Since Old Faithful is an extremely popular winter destination for visitors to the interior of Yellowstone, this snapshot appears to provide a reasonable representation of many winter visitors.

## Visitor Survey Card Data Report

To assist the NPS in complying with the Government Performance and Results Act (GPRA), visitor surveys are conducted in Yellowstone each year. This visitor survey measures the park's performance related to visitor satisfaction and visitor understanding and appreciation of the park. Survey cards are distributed randomly to 400 visitors at prescribed times during July at certain designated popular attractions within the park (Visitor Survey Card Project, 2002-2012).

Results from the 2012 Visitor Survey Card Data Report show high visitor satisfaction in categories relevant to REYP:

- Visitor centers: 99% of respondents gave a satisfactory (very good and good) evaluation.
- Exhibits: 98% of respondents gave a satisfactory (very good and good) evaluation.
- Assistance from Park Employee: 97% of respondents gave a satisfactory (very good and good) evaluation.
- Park map/brochure: 94% of respondents gave a satisfactory (very good and good) evaluation
- Ranger programs: 98% of respondents gave a satisfactory (very good and good) evaluation.
- Learning about nature, history or culture: 92% of respondents gave a satisfactory (very good and good) evaluation.

Visitor Survey Card Data Report results for the past eleven years demonstrate similar high visitor satisfaction.

**Table B-25.** Visitor Survey Card Data 2002–2012

Year	Overall Quality: Facilities, Services, Recreational Opportunities	Visitor Centers	Exhibits	Assistance from Park Employee	Park Map or Brochure	Ranger Programs	Learning about Nature, History, or Culture
2002	96%	94%	94%	95%	88%	92%	94%
2003	100%	99%	96%	95%	95%	96%	91%
2004	96%	93%	90%	93%	94%	96%	94%
2005	98%	96%	97%	95%	94%	94%	92%
2006	97%	92%	91%	92%	94%	90%	91%
2007	93%	96%	94%	94%	91%	100%	94%
2008	100%	96%	94%	99%	93%	95%	95%
2009	98%	96%	95%	96%	95%	92%	94%
2010	99%	98%	94%	92%	96%	95%	94%
2011	99%	99%	97%	96%	93%	100%	95%
2012	98%	99%	98%	97%	94%	98%	92%

## **Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010**

Wyoming is among the six states receiving the greatest economic effects from NPS visitor and employee spending. In 2010, visitors spent \$334,445,000 in Yellowstone and the surrounding area. The impact of Yellowstone's NPS payroll on the local economy in 2010 was \$41,899,000 (Stynes, 2011).

### **Visitor Comment Forms**

Of 303 complimentary visitor comment forms received from 2006–2011 by REYP, 201 (66%) were compliments about formal interpretive programs. Visitor compliments for service provided to them by interpretive rangers, often at visitor center information desks, account for 67 (22%) compliments.

### **Visitor Voices Project**

A 2008 survey of visitors to Yellowstone (Coble *et al.*, 2009) was designed to answer the following question: “Do visitors benefit from park interpretive offerings in ways that are consistent with the stated goals and objectives of park interpretive programs?”

Survey results suggested that visitors readily form intellectual connections to meanings obtained through interpretive programs and media to a greater extent than they form emotional connections. The mean of intellectual connection measured at 4.2 out of a possible scoring of 5, while the mean of emotional connection measured at 3.6 out of a possible 5.

The most meaningful programs/media for survey participants were:

1. Ranger-led walk (17%)
2. Park brochure and map (15%)
3. Talking informally to a park employee or volunteer about the park (9%)
4. Yellowstone Volcano exhibit at Canyon Visitor Education Center (9%)

This survey gauged the extent of participants' intellectual connection to park resources, with the mean of intellectual connection measured at 4.2 out of a possible scoring of 5.

This survey also gauged the extent of participants' emotional connection to park resources, with the mean of emotional connection measured at 3.6 out of a possible scoring of 5.

The most important reasons survey participants proffered for visiting Yellowstone are:

1. Part of a trip/vacation (32%)
2. Interest in nature (19%)
3. Like visiting national parks (14%)

Survey participants were predominantly white (91%), followed by Asian (8%). International visitors were from the Netherlands (21%), France (12%), Germany (11%), China (11%) and Canada (10%) along with 12 other countries. California visitors (15%) topped the list of American visitors, followed by Utah (7%), Texas (5%) and Florida (4%). Visitors participating in the survey were well-educated: 22% had some college or an associate degree, 26% had an undergraduate degree and 43% had an advanced

degree. A slight majority of participants (56%) were on their first visit to Yellowstone, while 44% had made other trips to the park.

Region-wide research results suggest that visitors readily form intellectual connections to meanings obtained through interpretive programs and media to a greater extent than they form emotional connections (Coble et al.). Ranger-led programs fostered intellectual and emotional connections to a greater extent than did park films. First-time visitors formed more intellectual connections to meanings than did repeat visitors, but the number of emotional connections did not differ between first-time and repeat visitors.

Visitors traveling with their immediate family and relatives were more likely to make intellectual connections than those who were traveling with friends, but there was no effect of group composition on the formation of emotional connections. Survey participants made more emotional connections to meanings as the number of interpretive sites visited each year increased, but the number of sites visited did not influence the formation of intellectual connections.

Survey participants who reported a combination of motivations for visiting had increased intellectual and emotional connections, with those reporting three reasons for visiting having the highest levels of intellectual and emotional connections. When an interest in nature (“nature lovers”) exerted more influence on the decision to visit, both intellectual and emotional connections to meanings increased. As liking to visit national parks (“park lovers”) exerted more influence on the decision to visit, intellectual and emotional connections to resource meanings also increased.

### **Cost of YNP visitor centers; broad summaries of attendance**

The total cost per visitor at Yellowstone visitor centers is \$0.25, compared to \$0.66 per visitor for all NPS visitor centers system-wide (\$0.62/visitor in the Intermountain Region of the NPS).

Yellowstone accounts for 3.7% of all visits to NPS visitor centers system-wide (17.7% of visits to visitor centers in the Intermountain Region); 1.1% of all informal visitor contacts system-wide (5.5% in the Intermountain Region); 2.3% of all attendance at formal interpretive programs system-wide (13.6% in the Intermountain Region).

# APPENDIX C

## U.S. POPULATION DATA AND TRENDS

From Overview of Age and Sex Composition: 2010 in *2010 Census Briefs*, [www.census.gov](http://www.census.gov)

### Age Groups

- Under 18 years old – 24%
- 18 to 24 years old – 10%
- 25 to 44 years old – 27%
- 45 to 64 years old – 26%

From Overview of Race and Hispanic Origin: 2010 in *2010 Census Briefs*, [www.census.gov](http://www.census.gov)

### U.S. population in 2010

308.7 million people resided in the U.S. on April 1, 2010, an increase of 27.3 million between 2000 and 2010. The group who reported their race and ethnicity as something other than non-Hispanic White increased from 86.9 million in 2000 to 111.9 million in 2010, an increase of 29%.

### *Hispanic population in 2010*

- More than half of the growth in the total population was due to the increase in the Hispanic population.
- Between 2000 and 2010, the Hispanic population increased by 15.2 million (43%) from 35.3 million in 2000.
- In 2010, there were 50.5 million Hispanics in the U.S., composing 16% of the total population.

### Race in 2010

- White alone = 223.6 million (72% of the total population)
- Black or African-American alone = 38.9 million (13% of the total population)
- Asian alone = 14.7 million (5% of the total population)
- American Indian and Alaskan Native alone = 2.9 million (0.9% of the total population)
- Native Hawaiian and Other Pacific Islander alone = 0.5 million (0.2% of the total population)
- Some other race alone = 19.1 million (6% of the total population)
- Two or more races = 9 million (3% of the total population)

### **Asian population in 2010**

- The Asian alone population increased by 4.4 million (43%) between 2000 and 2010, the fastest rate of growth of any major race.
- The Asian alone population grew from 10.2 million in 2000 to 14.7 million in 2010.

### **White race**

The only major race group to experience a decrease in its proportion of the total population was the White alone population.

### **Black or African-American alone race**

The Black or African-American alone group, the second-largest major race group, grew at a slower rate than all other major race groups except the White alone race group.

### **West Census Region**

- States included are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.
- In the West Census Region in 2010, the minority population (the subset of the population who reported their race and ethnicity as something other than non-Hispanic White) was 33.9 million, 47% of the total population. This represented an increase of 29% over the 2000 census.

### **Ethnicity and Race by State**

The states with the largest minority populations (the subset of the population who reported their race and ethnicity as something other than non-Hispanic White) are:

1. California – 22.3 million
2. Texas – 13.7 million
3. New York – 8.1 million
4. Florida – 7.9 million
5. Illinois – 4.7 million

The states with the largest non-Hispanic White populations are:

1. California – 15.0 million
2. Texas – 11.4 million
3. New York – 11.3 million
4. Florida – 10.9 million
5. Pennsylvania – 10.1 million

Minority population growth was concentrated in the counties in the Pacific Northwest, Pacific Southwest, western Arizona, southern Nevada, and areas of the interior West.

## Race and Ethnicity, MT-WY-ID

<b>Montana</b>		<b>Population by Ethnicity</b>	<b>Population by Race</b>
Total population		989,415	
Non-Hispanic or Latino		960,850	
Hispanic or Latino		28,565	
	White		884,961
	African-American		4,027
	Asian		6,253
	American Indian & Alaska Native		62,555
	Native Hawaiian & Pacific Islander		668
	Other		5,975
	Identified by 2 or more		24,976
<b>Wyoming</b>		<b>Population by Ethnicity</b>	<b>Population by Race</b>
Total population		563,626	
Non-Hispanic or Latino		513,395	
Hispanic or Latino		50,231	
	White		511,279
	African-American		4,748
	Asian		4,426
	American Indian & Alaska Native		13,336
	Native Hawaiian & Pacific Islander		427
	Other		17,049
	Identified by 2 or more		12,361
<b>Idaho</b>		<b>Population by Ethnicity</b>	<b>Population by Race</b>
Total population		1,567,582	
Non-Hispanic or Latino		1,391,681	
Hispanic or Latino		175,901	
	White		1,396,487
	African-American		9,810
	Asian		19,069
	American Indian & Alaska Native		21,441
	Native Hawaiian & Pacific Islander		2,317
	Other		79,523
	Identified by 2 or more		38,935

Growth in minority populations (the subset who reported their race and ethnicity as other than non-Hispanic White) by county:

<b>Montana - Adjacent Counties</b>		<b>Population by Ethnicity</b>	
Gallatin County			
Total Population		89,513	
Hispanic or Latino		2,506	
Park County			
Total Population		15,636	
Hispanic or Latino		328	
<b>Wyoming - Adjacent Counties</b>		<b>Population by Ethnicity</b>	
Teton County			
Total Population		21,294	
Hispanic or Latino		3,194	
Park County			
Total Population		28,205	
Hispanic or Latino		1,353	
<b>Idaho - Adjacent Counties</b>		<b>Population by Ethnicity</b>	
Fremont County			
Total population		13,242	
Hispanic or Latino		1,695	
Teton County			
Total population		10,170	
Hispanic or Latino		1,719	
Bonnevillle County			
Total Population		104,234	
Hispanic or Latino		11,882	

# APPENDIX D

## LAW ENFORCEMENT INCIDENTS: THERMAL AREAS, 2007–2011

When staff of the Division of Resource and Visitor Protection (RVP) contacts visitors for violations, the patrol ranger completes a case incident form for each person involved in the violation. From 2007 through 2011, there were 233 case incidents involving violations in thermal areas. Table D-1 shows the number of people contacted by patrol rangers for thermal violations each year from 2007 through 2011 and the final disposition of each contact. Of the people contacted for thermal area violations, 95% received citations or citations with a mandatory appearance.

*Table D-1.* Number of people involved in thermal area violations from 2007–2011.

Disposition	2007	2008	2009	2010	2011	Total
Verbal Warning	2	5	0	1	2	10
Citation	40	24	42	32	81	219
Mandatory Appearance	0	0	2	1	0	3
Report	0	0	0	1	0	1
Total	42	29	44	35	83	233

The number of people cited for thermal area violations increased dramatically in 2011.

Overall, the number of people contacted for thermal area violations is low compared to total visitation. The efforts of patrol rangers are augmented by education rangers roving in thermal areas throughout the park where they provide resource warnings—see Appendix F; serious infractions, e.g., “conewalking” (which is walking up to the cone of Old Faithful Geyser or another geyser) are always reported to patrol rangers.

*Table D-2.* Concession employees involved in thermal area violations, 2007–2011.

	2007	2008	2009	2010	2011	Total
Number of Employees	0	0	7	1	3	11

In 2009, 5 of the 7 concession employees were involved in one infamous incident of “conewalking” at Old Faithful; each of the five received a citation (and was fired by Xanterra). The other 2 concession employees contacted in 2009 were both at New Highland Terrace on the same date; one received a citation and one had a mandatory appearance before the judge. In 2011, 3 concession employees were named in one case incident; all received citations.

In addition, there were 2 records of visitors receiving citations for throwing rocks in thermal features, one in 2009 and one in 2011.

During the same time period (2007–2011), there were 172 records of pet violations (Dogs, Cats and Other Pets; Failure to Crate/Leash/Restrain Pet; Unattended pet; Pet in Closed Area). Of the 172 records, 18 occurred in thermal areas. Table D-3 shows the violations that occurred each year and the disposition of each. No concession employees were contacted for pet violations in thermal areas.

*Table D-3.* Pet violations occurring in thermal areas.

<b>Disposition</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Verbal Warning	0	0	0	1	1	2
Citation	1	4	2	4	5	16
Mandatory Appearance	0	0	0	0	0	0
Total	1	4	2	5	6	18

# APPENDIX E

## LAW ENFORCEMENT INCIDENTS: WILDLIFE (INCLUDING BEARS)

When staff of the Division of Resource and Visitor Protection (RVP) contacts visitors for violations, the patrol ranger completes a case incident report for each person involved in the violation.

Table E-1 contains a summary of the 235 records that involve approaching or disturbing wildlife including bears and entering areas closed for bear management and the disposition of each contact. Eighteen of these violations involved concession employees.

*Table E-1.* Total number of people contacted for all wildlife violations, 2007–2011.

<b>Disposition</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Verbal Warning	9	4	4	5	7	29
Citation	35	28	24	34	32	153
Mandatory Appearance	9	1	0	6	22	38
Investigation	1	0	0	0	6	7
Report	0	2	2	3	1	8
<b>Total</b>	<b>54</b>	<b>35</b>	<b>30</b>	<b>48</b>	<b>68</b>	<b>235</b>

Of the total number of wildlife infractions, more than one-third involved entering areas closed for bear management (Table E-2); violators of bear management closures included 8 concession employees.

*Table E-2.* Number of people contacted for entering areas closed for bear management, 2007–2011.

<b>Disposition</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Verbal Warning	2	0	0	1	4	7
Citation	15	15	12	11	12	65
Mandatory Appearance	4	0	0	2	8	14
Investigation	0	0	0	0	0	0
Report	0	0	1	1	0	2
<b>Total</b>	<b>21</b>	<b>15</b>	<b>13</b>	<b>15</b>	<b>24</b>	<b>88</b>

Six people were contacted for approaching bears or not maintaining the required distance when a bear approached them (Table E-3).

*Table E-3.* Number of people contacted for approaching bears, 2007–2011.

<b>Disposition</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Verbal Warning	0	0	0	0	0	0
Citation	0	0	0	3	0	3
Mandatory Appearance	1	0	0	1	1	3
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>6</b>

Several visitors were contacted for feeding wildlife (Table D-4).

**Table E-4.** Number of visitors contacted for feeding wildlife, 2007–2011.

<b>Disposition</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Verbal Warning	0	1	1	0	0	2
Citation	1	2	2	1	1	7
Mandatory Appearance	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>9</b>

Other visitor violations involving wildlife involved approaching or disturbing wildlife (Table E- 5). Ten concession employees were contacted for approaching or disturbing wildlife.

**Table E-5.** Number of visitors contacted for approaching or disturbing wildlife.

<b>Disposition</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Verbal Warning	7	3	3	4	3	20
Citation	19	11	10	19	19	78
Mandatory Appearance	4	1	0	3	13	21
Investigation	1	0	0	0	6	7
Report	0	2	1	2	1	6
<b>Total</b>	<b>31</b>	<b>17</b>	<b>14</b>	<b>28</b>	<b>42</b>	<b>132</b>

Overall, the number of visitors contacted concerning wildlife infractions is low compared to annual visitation, but 81% of the visitors contacted were given citations or citations with a mandatory appearance.

In addition, wildlife education rangers and other roving education rangers augment the work of patrol rangers by providing numerous resource warnings to visitors concerning the safe and legal distance to remain from wildlife.

Bison and bears caused a low number of injuries during 2007–2011, although there were 2 fatalities caused by grizzly bears in 2011. All bear-related injuries were due to grizzly bears except for one research-related accident in 2007 that involved a black bear. Please see Table E-6.

**Table E-6.** Injuries caused by bison and bears, 2007–2011.

	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Bear-caused injuries	2	2	0	0	2 <sup>a</sup>	6
Bison-caused injuries	0	1	3	2	0	6

<sup>a</sup> 2 fatalities.

# APPENDIX F

## RESOURCE WARNINGS GIVEN BY DIVISION OF RESOURCE EDUCATION AND YOUTH PROGRAMS, 2007–2011

Resource warnings given by REYP staff nearly always involve thermal area warnings or warnings about wildlife, including bears.

<b>REYP Resource Warnings</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Canyon	2,598	1,972	1,876	2,403	2,808
Grant	819	2,130	1,381	1,510	5,966
Lake	2,328	4,770	4,299	5,500	2,178
Madison/West	959	530	783	1,029	325
Mammoth	9,329	13,438	7,925	5,554	11,616
Norris	1,110	1,384	770	1,039	878
Old Faithful	4,414	3,484	5,190	4,457	3,997
Wildlife Rangers	9,878	30,017	14,697	6,053	6,516
<b>Total</b>	<b>31,435</b>	<b>57,725</b>	<b>36,921</b>	<b>27,545</b>	<b>34,284</b>
<b>Grand Total</b>					<b>187,910</b>

# APPENDIX G

## EXISTING AND PROPOSED PROGRAMS WITH CORRELATION TO THE NPS CALL TO ACTION

### Theme: Connecting People to Parks

#### ***Action 2–Step by Step***

Create deep connections between a younger generation and parks through a series of diverse park experiences. To accomplish this we will collaborate with education partners and youth organizations to create a pathway to employment with the NPS, with a focus on diversifying the workforce. We will involve at least 10,000 youth each year in a multi-year progression of experiences from education programs to internship/volunteer opportunities to employment.

- Expedition: Yellowstone! – a residential curriculum-based education program that introduces youth in grades 4–8 to YNP and to NPS career possibilities.
- Yellowstone Field Trips – curriculum-based day use programs for K–12 and college-aged students that includes NPS career modules.
- Yellowstone to You – beyond park boundaries, community events, schools, science fairs; includes modules that introduce youth to NPS as a career choice.
- Yellowstone to You – Native American Outreach: programs on reservations place emphasis on employment with the NPS and include specific job vacancy announcements or recruiting.
- Young Scientist Program – encourages careers in the sciences including those professional tracks in the NPS.
- Internships, paid/unpaid – part of the path to employment with the NPS and/or YNP.
- NPS Academy – in partnership with Grand Teton National Park, offers a pathway to employment in the NPS/YNP.
- YCC – residential youth employment program ages 15–18. Young people progress to leadership positions within YCC and also have progressed to employment with the NPS in seasonal and eventually even permanent positions.
- SCA – youth employment focus; SCAs have been employed in all YNP divisions.
- Distance Learning/webinars – In existing and to be developed programs, curricula include modules on NPS careers; recruiting and job vacancy announcements will be included in the modules presented to older teens, young adults, and adult groups as a component of the lifelong learning framework.
- Adopt the Class of 2016 – In development but will include career and unpaid/paid employment modules.
- NPS: New – Youth Leadership Program (working title) – multiyear program designed to provide unpaid and paid work experiences; may form the framework for a modern YACC Program.

- Youth employment partners such as MCC, Groundwork USA, and AmeriCorps, provide additional links in the paths to employment opportunities in the NPS through paid and unpaid work, residential or day camps, etc.
- Internships with Georgia Tech, University of Montana, Montana State University, University of Idaho, and other colleges or universities – continue existing programs in all divisions and further the options for young people to become acquainted with NPS career tracks as well as gain work experience.
- Teacher Workshops/Teacher Development – in-depth Institute courses for academic credit that include curriculum units about NPS careers. Another means of disseminating information about the menus of ways in which young people can participate in unpaid/paid work experiences, job vacancies and recruiting for older teens and young adults, etc.

### ***Action 3–History Lesson***

Expand the meaning of parks to new audiences and provide an opportunity for communities to learn more about their heritage by conducting history discovery events, using oral histories and other methods, in at least 100 parks.

- Work with professional consultants to obtain oral histories and video interviews from Native American communities. These become resource materials in the park’s Research Library and will be used by REYP to develop educational media. Yellowstone Association may also use this material to develop educational products and media for sale in its bookstores.

### ***Action 6–Take A Hike, Call Me in the Morning***

Expand the health community’s use of parks as a healing tool and increase citizen recognition of the value of parks to improve health and well-being by establishing 50 formal partnerships with health and medical providers across the country.

- Junior Ranger Wildlife Olympics emphasizes healthy outdoor activity and is integrated with “Let’s Move Outdoors.” Diversify program to include elements marketed to the health community, along with special events.

### ***Action 7–Next Generation Stewards***

Create a new generation of citizen scientists and future stewards of our parks by conducting fun, engaging, and educational biodiversity discovery activities in at least 100 national parks, including at least five urban parks.

- Junior Ranger and Young Scientist Programs already include biodiversity elements and activities; will be expanded in program updates to be undertaken in 2014.
- Develop a Senior Ranger Program that emphasizes citizen science activities including biodiversity, climate change, social science, and cultural disciplines.
- Formalize wildlife sightings and geyser eruption reporting that have taken place in the park for decades by creating a citizen science program for all visitors. Program will use technology/smartphones to encourage visitors to report sightings through links to databases; online communities will enhance

long term stewardship through ongoing sharing of information, still and video images, and special events keyed to in-park and national events and initiatives.

- In correlation with Action Item (2), include a citizen science component for adults and aligned with NPS priorities for data gathering based on needs assessments.

### ***Action 10–Arts Afire***

Showcase the meaning of parks to new audiences through dance, music, visual arts, writing, and social media. To do so we will launch 25 artist-led expeditions that involve youth in creating new expressions of the park experience through fresh perspectives and new technology.

- Existing and emerging NPS social media services and activities will employ the visual arts and writing as tools of communication, and as core elements of special online events.
- Parks in Focus – A photography/video-based program that will blend education with photography to engage young people with the park—inside and beyond park boundaries. Will be developed to work as a stand-alone module, or as a module within other youth programs and social media.

### ***Action 13–Stop Talking and Listen***

Learn about the challenges and opportunities associated with connecting diverse communities to the great outdoors and our collective history. To accomplish this we will conduct in-depth, ongoing conversations with citizens in seven communities, one in each NPS Region, representing broadly varied cultures and locations. We will create and implement work plans at each location, which explore new approaches for building and sustaining mutually beneficial relationships with diverse communities.

- Once the community within the IMR has been selected, evaluate options for engaging diverse populations with Yellowstone, especially with unpaid and paid youth employment programs. This could further support the concept of “stepping stone” employment programs that draw diverse populations to a variety of options throughout IMR, thus maximizing each site’s unique possibilities to provide employment options.

## **Theme: Advancing the NPS Education Mission**

### ***Action 15–A Class Act***

Help students develop a deep understanding of park resources and the relevance of parks in their lives through a series of park education programs. To do so we will adopt a class of 2016 graduates (grade school, middle school, or high school) at every national park and develop a series of fun, educational, and engaging activities culminating in the NPS Centennial in 2016.

- Adopt the Class of 2016 – NPS is in the process of selecting a local school class of 2016 and an urban 2016 school/class, and will engage both with its in-park and distance learning/webinar programs.
- Teacher Workshops/Teacher Development – teachers in the above classes and those in nearby NPS units receive priority consideration for workshops and other development opportunities; scholarship support to be determined.

### **Action 16–Live and Learn**

Provide multiple ways for children to learn about the national parks and what they reveal about nature, the nation's history, and issues central to our civic life. We will accomplish this by reaching 25 percent of the nation's K–12 school population annually through real and virtual field trips, residential programs, teacher training, classroom teaching materials, online resources, and educational partnerships.

- Expedition: Yellowstone! is a residential curriculum-based education program that introduces youth in grades 4–8 to YNP. Program will have expanded in-park and online components.
- Yellowstone Field Trips – curriculum-based day use programs for K–12 and college-aged students provides non-residential curriculum-based education experiences.
- Yellowstone to You – beyond park boundaries, community events, schools, science fairs – engages young people and communities with parks through a variety of programs.
- Yellowstone to You – Native American Outreach – curriculum-based education programs presented on reservations; includes modules on careers and employment.
- Young Scientist Program – encourages careers in the sciences including those professional tracks in the NPS.
- Internships, paid/unpaid – a blend of education through on the job experiences; part of the path to employment with the NPS and/or YNP.
- NPS Academy – in partnership with Grand Teton, a blend of educational activities and career modules.
- YCC – residential youth employment program ages 15–18. Blends education, recreation, and employment tracks to provide a well-rounded foundation and introduction to a variety of tracks for additional education and employment opportunities.
- NPS - SCA – youth employment focus; SCAs have been employed in all YNP divisions.
- NPS Distance Learning/webinars – highly effective and efficient engagement with large and diverse populations of young people; existing Skype and live ranger programs are building a foundation that even at these early stages has served over 1,000 students and teachers a week in schools from coast to coast, border to border, and in a few countries such as Chile.
- Adopt the Class of 2016 – Education and employment modules.
- NPS: Youth employment partners such as MCC, Groundwork USA, AmeriCorps, provide additional links in the paths to employment opportunities in the NPS through paid and unpaid work, residential or day camps, etc. Though work programs will be emphasized, all will include education modules.
- NPS: Internships with Georgia Tech, University of Montana, MSU, University of Idaho, other colleges or universities – continue existing programs in all divisions and further the options for young people to become acquainted with NPS career tracks as well as gain work experience and additional on-the-job education.
- Teacher Workshops/Teacher Development – in-depth Institute courses for academic credit emphasize teacher educational development through traditional academic programs, and also engages teachers in

long term relationships with the park through distance learning. Encourages participation in in-park education programs.

### ***Action 17–Go Digital***

Reach new audiences and maintain a conversation with all Americans by transforming the NPS digital experience to offer rich, interactive, up-to-date content from every park and program. To accomplish this we will create a user-friendly web platform that supports online and mobile technology including social media.

- NPS Web/Technology/Social Media Programs, existing and those in development.

### ***Action 18–Ticket to Ride***

Expand opportunities for students to directly experience national parks, where natural and historic settings inspire powerful learning. To achieve this we will provide transportation support for 100,000 students each year to visit national parks through collaboration with the National Park Foundation and other park fundraising partners.

- Relates to Action item (2) – Yellowstone Association provides transportation support to bring students to the park. Emphasis will be on disadvantaged and underserved schools/communities.

### ***Action 19–Out with the Old***

Engage national park visitors with interpretive media that offer interactive experiences, convey information based on current scholarship, and are accessible to the broadest range of the public. To that end we will replace 2,500 outdated, inaccurate, and substandard interpretive exhibits, signs, films, and other media with innovative, immersive, fully accessible, and learner-centered experiences.

- NPS: Complete planning, design, and installation of 2,000+sf of new exhibits and multimedia features for Albright Visitor Center.
- Complete planning, design, and installation of new exhibits and multimedia self-guiding tour components for the Fort Yellowstone self-guiding trail.
- Update exhibits at Norris Geyser Basin Museum, Madison Museum, Fishing Bridge Visitor Center, and the Museum of the National Park Ranger, Norris Campground.

## **Theme: America's Special Places**

### ***Action 23–Go Green***

Reduce the NPS carbon footprint and showcase the value of renewable energy to the public by doubling, over 2009 levels, the amount of renewable energy generated within parks and used by park facilities.

- NPS: showcase greening and sustainable practices and accomplishments through development of educational media.

**Action 28–Park Pulse**

Assess the overall status of park resources and use this information to improve park priority setting and communicate complex park condition information to the public in a clear and simple way. To accomplish this, we will complete 50 “State of the Park” reports that synthesize monitoring information, resource inventories, facilities condition data, and visitor surveys.

- NPS Prepares State of the Park report and develops media to communicate approved messages to the general public and special interest groups.

**Action 29–Posterity Partners**

This aligns with the Director’s goal of establishing an endowment for the NPS.

# APPENDIX H

## DIVISION OF RESOURCE EDUCATION AND YOUTH PROGRAMS IN 2012

REYP provides a variety of educational and interpretive services, programs, and products to Yellowstone National Park visitors and to people throughout the country and around the world. This section provides a broad overview of the organization and work of REYP in 2012, the start of the five years encompassed by this CIEP. (Electronic versions of this document will link to an organization chart and the FY2012 Servicewide Interpretive Report to provide detailed information about organization and accomplishments.)

### **Operations Branch**

The Operations Branch supports the goals of REYP by contacting visitors at visitor centers, during formal interpretive programs, and while conducting informal interpretation (roving).

Visitor centers serve three primary functions: providing interpretation of park resources, facilitating visitor orientation and access to information, and visitor services. These functions are accomplished through personal contacts, exhibits, audiovisual presentations, and interpretive sales. Education rangers provide information and orientation at 13 different visitor centers, museums, and warming huts that received 3,049,523 visits in FY2012.

Formal interpretive programs promote park stewardship by providing visitors with opportunities to form intellectual and emotional connections to park resources. In FY2012, education rangers presented 9,812 formal interpretive programs to 291,394 change visitors participating in walks, talks, hikes, and evening programs. A wide array of ranger-led activities occurs in every sub-district within Yellowstone during late spring through September. Summer programs include 10-minute and 20-minute talks at popular attractions such as Old Faithful Geyser and the Grand Canyon of the Yellowstone. Rangers lead guided walks around frontcountry geyser basins and walks into the park's backcountry. Programs for children of Junior Ranger age occur at the Junior Ranger Station at Madison and at other popular locations throughout the park. Rangers lead nightly illustrated evening programs at most park amphitheaters, while traditional evening campfire programs are held nightly at a few campgrounds where electricity is not available. Indoor evening programs occur nightly in the theater of the Old Faithful Visitor Education Center.

During winter, ranger-led programs are conducted at Mammoth, Old Faithful, and West Yellowstone. Winter programs consist of talks, snowshoe walks, and illustrated evening programs in indoor locations.

Education rangers provide informal interpretation at critical resource locations throughout the park including geyser basins, along the rims of the Grand Canyon of the Yellowstone River, major overlooks and scenic attractions, wildlife jams, picnic areas, and campgrounds. Informal interpretive activities resulted in 348,401 visitor contacts in FY2012. Staff also provide a variety of special tours, talks, and programs for visiting dignitaries and special groups.

### ***Wildlife and Visitor Safety Programs***

Education rangers provide information at locations where wildlife and visitors interact, inform visitors about wildlife habituation, enhance visitor and wildlife safety, and reduce visitor–animal conflicts. They

provide demonstrations to promote visitor safety, such as how to use bear spray and tips/techniques for safe hiking and camping.

### **Gateway Community Outreach Program**

District resource education staff makes professional contacts and represent Yellowstone National Park in gateway communities by attending Chambers of Commerce meetings, civic organization meetings, and special event shows.

### **Youth Programs Branch**

The Youth Programs Branch provides curriculum-based education through a wide variety of program tracts. REYP evaluates and reengineers youth programs of all types with the following primary goals:

1. Engage new and underserved audiences.
2. Encourage families and young people to get outdoors.
3. Use funds, both public and private, efficiently and effectively to maximize impact.
4. Make park resources relevant to visitors.
5. Cultivate a stewardship ethic among young people and underserved audiences so they will understand the importance of protecting Yellowstone National Park.

### **Current programs:**

**Yellowstone to You.** This education outreach program provides the Yellowstone National Park experience for a larger and more diverse number of children and their families who are not familiar with the park or may not have had the opportunity to visit Yellowstone. Staff travel to schools, community events, and science fairs in the tri-state area offering educational programs on park resources. This program reaches 8,500 children, families, and teachers annually.

**Yellowstone Junior Ranger Program.** Annually more than 40,000 children participate in this free program, which is the third largest Junior Ranger Program in the national park system. By completing a self-guided activity paper and attending a ranger-led program, children can earn an official Yellowstone Junior Ranger patch. Several times per week in summer, children and their families can participate in Junior Ranger Wildlife Olympics events in the park; more than 4,000 visitors participate in Wildlife Olympics each year. Children compare their physical skills to those of park wildlife.

**Young Scientist Program.** Annually approximately 2,300 children participate in this self-guided program. Participants are introduced to Yellowstone as a living laboratory as they investigate microbes, supervolcanoes and other geologic wonders in the Upper Geyser Basin and in the Old Faithful and Canyon Visitor Education Centers.

**Yellowstone Field Trips** serve organized groups, K–12 classes, and occasionally college students, by providing resource and curriculum-based educational experiences in the park. The program serves approximately 4,000 students annually.

**Expedition: Yellowstone! (EY)** is a curriculum-based residential program allowing students in grades 4–8 a chance to live and learn with their class in Yellowstone. The goals of the program are to teach

students about the natural and cultural resources of Yellowstone, investigate current issues affecting the Greater Yellowstone Ecosystem, and to promote stewardship and preservation of ecosystems worldwide. Annually, approximately 1,400 students and their teachers from about 50 school groups, primarily from Idaho, Montana, and Wyoming (including regional Indian schools) participate in the four- or five-day program. Scholarships allow underserved and disadvantaged target audiences to attend the program.

*Windows into Wonderland* is a series of 17 free online electronic field trips on various park topics with lesson plans for teachers and their students, grades 5–8. Nearly 50,000 students from around the world experience Yellowstone via this program each year.

*Yellowstone's Youth Conservation Corps (YCC)* program consists of two one-month summer residential programs for 50 students ages 15–18 and 15 team leaders. The goals of the YCC program are to accomplish needed conservation work on public lands; provide employment for young people from all social, economic, and ethnic backgrounds; and to develop an understanding and appreciation of our nation's natural, historical, and cultural heritage. The program emphasizes work ethics, introduces participants to the spectrum of NPS career opportunities, supports environmental awareness, and promotes recreational activities that encourage participants to build lifelong healthy habits. Staff develop age-appropriate work projects for crews and provide students with environmental education lessons.

*Native American Outreach.* Staff seek to continue mutually beneficial relationships with members of the 26 tribes affiliated with Yellowstone by working with Native American school students and teachers and by participating in events within their communities. Approximately 3,500 contacts are made annually.

Other youth programs include the *Resources Stewardship Boy Scout Ranger Program*, *Resources Stewardship Girl Scout Ranger Program*, and the *Student Conservation Association*.

### ***New programs under development***

New programs include distance learning and other youth programs to explore former Department of Interior Secretary Salazar's vision for "a national youth conservation corps that would introduce young Americans from all backgrounds to the beauty of our national parks...and would promote an ethic of volunteerism and conservation among our children and grandchildren."

## **Planning and Media Development Branch**

The Branch of Planning and Media Development supports REYP goals through the development and delivery of traditional communication media and leading-edge technologies as well as social media to educate, interact with, and capture the interest of the public. Educational and interpretive media include films, printed materials, Internet websites, and exhibits. These are the most common and preferred means by which the public receives information about the park, its resources, and visitor safety.

### ***Exhibit Program***

The Exhibit Program is responsible for indoor (visitor center) and outdoor (wayside) exhibits parkwide, including all facets of development from inception through design, installation, maintenance and upkeep, and eventual replacement. Plans for new Albright Visitor Center exhibits are underway in coordination with the upcoming renovation and earthquake mitigation of this visitor center. Exhibit staff perform routine maintenance and repair of exhibits in all park visitor centers, especially the Canyon

Visitor Education Center and the Old Faithful Visitor Education Center. Nearly 400 outdoor or way-side exhibits provide safety, regulatory, orientation, and educational messages at locations parkwide. Technologies such as QR codes are being added to indoor and outdoor exhibits to link vast repositories of in-depth information and allow individually customizable park educational experiences.

### ***Publications Program***

The publications specialist annually develops or revises more than 70 publications, including 4 issues of the park newspaper, the annual Yellowstone Resources and Issues Handbook, site bulletins, and trail guides. Publications are merging with electronic media on the official web site and with exhibits, thus building a matrix of educational opportunities and delivery methods.

### ***Web/Internet/Social Media Program***

The Web Program develops, maintains, and evaluates the park's official website and related assets, including electronic field trips on Windows into Wonderland and a social networking presence on Facebook, Twitter, YouTube, and Flickr. Yellowstone National Park's official website continues to be the most viewed park website in the NPS.gov system. In FY10, Yellowstone's web pages were viewed a total of 78,785,396 times, and the Old Faithful live-streaming webcam launch page had 1,627,403 page visits. Social media is providing significant opportunities to cultivate new park audiences. In the two months since the park launched its Facebook page, the content reached almost 350,000 people weekly. Daily posts include wildlife images and safety, timely cultural history events, and public service notifications. The park's Twitter site offers emergency notifications, road and weather conditions, fire activity, general news, and educational notices. Park images are also made available to the public on Flickr, while park videos and podcasts are accessible on YouTube.

### ***Photography/Videography/AV Technical Support Program***

This office provides essential support for all interpretive programs and interpretive media development including exhibits, publications, and the park website and coordinates equipment management and troubleshooting of audiovisual systems in nine visitor contact facilities and nine campground amphitheaters. The existing collection of digital images is continually updated and is available to the public online.

### ***Planning***

This office offers division and parkwide interpretive support of planning and educational efforts. Its functions include REYP accessibility coordination, training coordination, citizen science and science literacy program coordination and development, visitor studies and social science coordination, liaison with the Yellowstone Center for Resources in program coordination and data/information transmission, REYP compliance coordination, and project management associated with any of these programs or disciplines.

### ***Major Issues, Resource Concerns***

- Climate and landscape change
- Greening and sustainability
- Energy development, especially as it affects geothermal fields adjacent to the park

- Volcanology, seismology, geothermal/hydrothermal features, hazards
- Thermophiles, bioprospecting, benefits sharing
- Bison management
- Winter use
- Aquatic invasive species (AIS), especially lake trout, quagga and zebra mussels awareness and management
- Vegetation management to restore native flora; prevention and control of non-native plants
- Bear management
- Wolf management
- Visitor management and safety
- Northern Range issues
- Wildland fire management/policies
- Wilderness
- Budget and staffing planning, strategies
- Emerging issues

# APPENDIX I

## REYP PARTNERS AND STAKEHOLDERS

### **Government Agencies and Universities**

- U.S. Geological Survey (USGS) – units with which the park works
- U.S. Forest Service (USFS) – surrounding units
- U.S. Fish and Wildlife Service (USFWS) – units with which the park works most frequently – Red Rock Lakes National Wildlife Refuge
- NPS Biological Resources Management Division
- Yellowstone Volcano Observatory
- EarthScope
- Greater Yellowstone Coordinating Committee
- Interagency Grizzly Bear Committee
- NPS Great Northern Landscape Conservation Cooperative
- Rocky Mountain Cooperative Ecosystem Studies Units ( (CESU)
- Grand Teton NP
- Glacier NP
- Nearby, smaller NPS sites (e.g., Grant Kohrs Ranch, Little Bighorn Battlefield, Nez Perce National Historic Trail, Bighorn Canyon)
- State and/or Local parks or sites – Harriman State Park, Lewis and Clark Caverns,
- University of Montana Western in Dillon, MT
- Big Sky Institute (or organization in the process of replacing BSI)
- Montana State University/Thermal Biology Institute

### **YNP Partners, Concessioners**

- Yellowstone Park Foundation
- Yellowstone Association
- National Park Foundation
- Commercial Use Authorization (CUAs) guiding services – summer and winter; limited to those offering education/recreation based tours (not locksmiths, propane vendors, etc.).

- Xanterra Parks and Resorts
- Delaware North

The Division of Resource Education and Youth Programs has worked with a wide variety of partners and stakeholders for decades. These relationships vary in scope, complexity, and longevity. All have been and continue to be important, and REYP continues to seek and be sought by nonprofit, commercial, and governmental groups wishing to engage in short term or long term endeavors.

### **Non-profit Organizations**

- West Yellowstone Economic Development Council's Yellowstone Studies Center
- Elder Hostel Now called Road Scholar: Adventures in Life Long Learning
- The Corps Network
- The Corporation for National and Community Service
- National Environmental Education Foundation
- North American Association for Environmental Education (NAAEE)
- American Hiking Society
- The Outdoor Foundation
- The Sierra Club
- The Audubon Society
- The National Wildlife Federation
- The Wildlife Conservation Society
- The Nature Conservancy
- NOLS—National Outdoor Leadership School
- National Association of Latino Elected and Appointed Officials
- U.S. Department of Labor Job Corps – Montana Jobs Corps, Wyoming Jobs Corps, Idaho Youth Corps
- AmeriCorps
- Public Land Corps

### **Museums**

- Buffalo Bill Historical Center – Cody, WY
- Museum of the Rockies – Bozeman, MT
- National Museum of Wildlife Art – Jackson, WY
- Livingston Depot Center – Livingston, MT
- Yellowstone Gateway Museum of Park County – Livingston, MT
- Museum of the Yellowstone – West Yellowstone, MT
- Yellowstone Historic Center – West Yellowstone, MT
- Grizzly and Wolf Discovery Center – West Yellowstone, MT
- Emerson Cultural Center – Bozeman, MT

### **Tribal Connections**

- Native American Tribes (not all 27 Affiliated Tribes) – Crow, Blackfeet, Northern Cheyenne, Shoshone-Bannock, Nez Perce/Umatilla/ Coleville, Eastern Shoshone, Northern Arapaho
- Salish Kootenai College
- Little Bighorn College
- Hopa Mountain

### **Youth Related**

- NatureBridge
- Montana Conservation Corps

- SCA Lodge, Cody, Jackson, West Yellowstone, Idaho Falls
- Big Brothers/Big Sisters – emphasis on local organizations
- Teton Science School
- Eagle Mount
- Montana Office of Public Instruction
- Wyoming Department of Education
- Idaho State Department of Education
- Montana Digital Academy
- Montana Indian Education Association
- Expedition: Yellowstone! teachers
- Children and Nature Network
- IMR - Youth/Education/Resources
- Boy Scouts/Girl Scouts of America
- NPS sites with residential YCC or Education facilities - Cuyahoga, Yosemite, Everglades, etc.
- Montana Educators Association
- Montana Environmental Educators Association
- Idaho Environmental Educators Association
- Project Wet
- 4H
- Elementary and Secondary Schools – regional, national
- Park County Schools MT & WY
- Gallatin County Schools (West Yellowstone, Ophir, etc.)
- Youthgo.gov
- Wounded Warriors
- George Wright Society
- Visitor Studies Association
- National Park Trust

### **Others**

- Chambers of Commerce in communities with which we provide community outreach services – Gardiner, Livingston, Bozeman, Billings, Red







U.S. Department of the Interior • National Park Service • Yellowstone National Park • Resource Education and Youth Programs  
Yellowstone National Park, Wyoming 82190