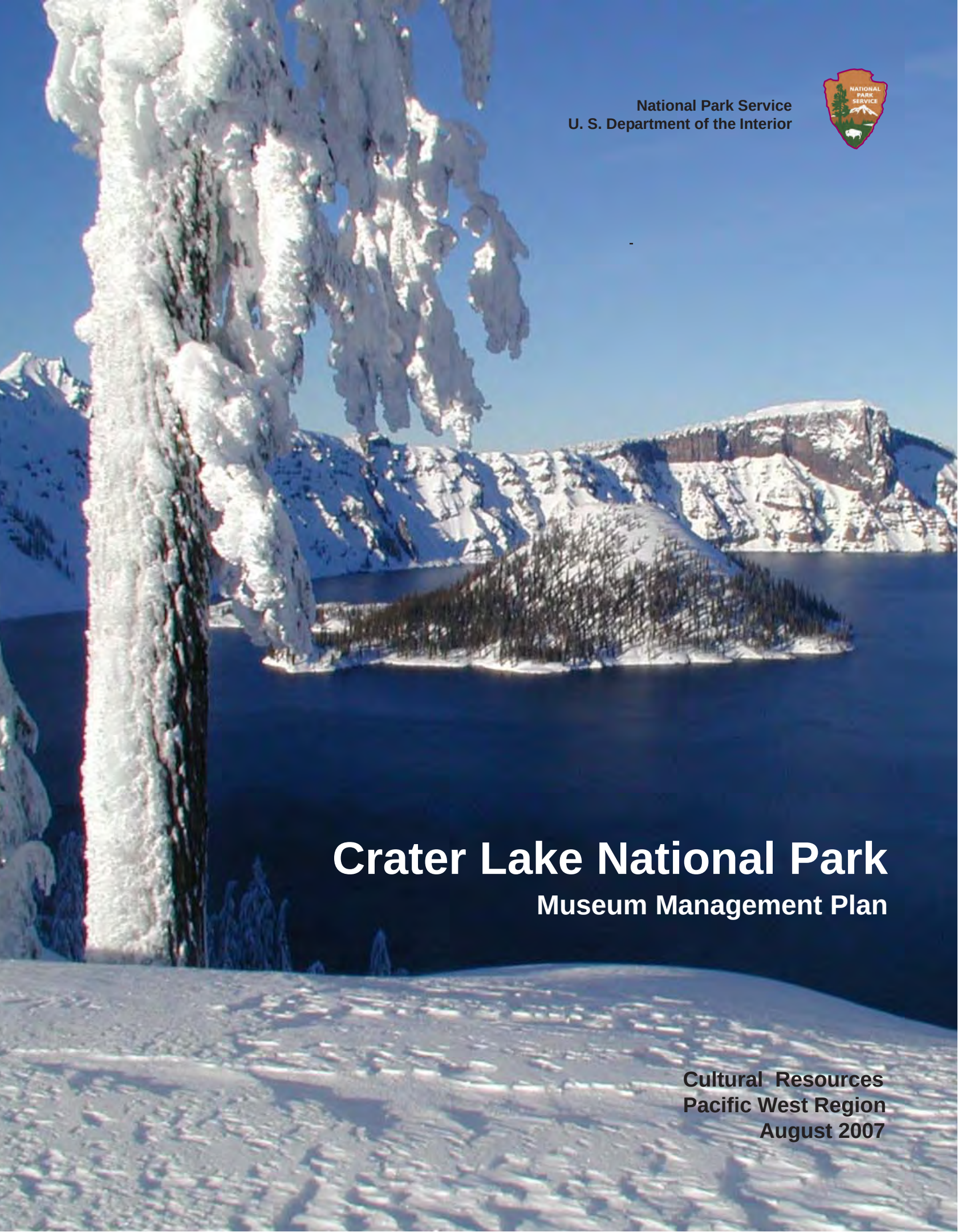

National Park Service
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Crater Lake National Park

Museum Management Plan

Cultural Resources
Pacific West Region
August 2007

Crater Lake National Park

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Museum Management Plan

August 2007

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Executive Summary

The *Crater Lake National Park Museum Management Plan* outlines a series of issues concerning the development, management, and use of the park archives, library, and museum collections (hereafter referred to as "the collections"), and it recommends corresponding actions to address these issues. A Collections Management Plan (CMP) (precursor to the current Museum Management Plan format) was completed in 1995, and the park has had the services of a journeyman-level curator for 12 years.

Despite the age and maturity of the park, these park-specific resources remain in a developmental stage. They lack status, definition, and support, and thus are not able to efficiently contribute to park operations. Few of the recommendations in the 1995 CMP have been implemented. With the continued influx of collections, the documentation program and physical facilities are in worse condition now than in 1995. These deficiencies could be corrected by the following actions:

- Developing internal protocols to govern collections growth, processing, and access.
- Solving the space and facilities problem.
- Developing a robust program identity.

CRLA is one of the few parks in the region to retain the collections management program under the visitor services or interpretation division. Archives and museum collections in parks are built on the natural and cultural resources of the park, as well as the records pertaining to the study, understanding, and management of those resources. Generally, resource management divisions have a better understanding of collection management needs, and a vested interest in developing and supporting a robust program for collections preservation and management.

Since 1995, the park museum management program has taken on the archival and curatorial responsibilities for two additional parks—Oregon Caves National Monument (ORCA) and Lava Beds National Monument (LABE).

These responsibilities have been approved by both the superintendents involved and the Pacific West Regional Director, and have been codified in both the Regional and NPS Curatorial Facilities Strategy documents. These plans call for all three collections to remain on site in the individual parks because they are in continuous use by park staff for both cultural and natural resource management. All three park collections depend on the services of the GS-1015-11 curator currently stationed at CRLA, which makes a healthy program at the park more important now than it was in 1995.

This Museum Management Plan (MMP) recommends that the park collections undergo a developmental phase that provides for the basic needs of these park-specific resources and organizes them into efficient tools to support the operational goals and missions of the park. The following are key program recommendations; detailed action recommendations follow each Issue section of this plan.

Key Recommendations

- Develop the necessary work, storage, and study areas, both centralized and at points of use within the park.
- Develop a park-specific collections management philosophy, incorporate this philosophy in a role and function statement, and create collection protocols to facilitate the orderly growth, management, and use of the park collections.
- Develop partnerships with park staff, network, and other organizations to foster the necessary documentation, preservation, management, and use of the collections.
- Develop the informational management tools and procedures needed to support physical and intellectual access to the resources in the park collections.
- Consider realignment of the museum management program under the park resources management division.

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Introduction

The Museum Management Plan (MMP) replaces the Collection Management Plan (CMP) referred to in the National Park Service (NPS) publications *Outline for Planning Requirements, DO#28: Cultural Resources Management,* and the *NPS Museum Handbook,* Part I.

In contrast to the CMP, the MMP focuses on the key aspects of museum-related programs within the park to address the needs as identified by park personnel. The MMP recognizes that specific directions for the technical aspects of archival and collections management exist within the *NPS Museum Handbook* series and does not attempt to duplicate that information. The MMP places museum operations in a holistic context within park operations by first showing how the elements of museum operations can support the goals of this particular park unit, and then providing park-specific advice on how this can be accomplished. As a result, the topics addressed in the MMP do not necessarily represent a complete range of collections-management concerns or options.

Prior to the site visit by the MMP team, park personnel were surveyed to collect baseline data about archival and museum collections, the library, and related services needed by the staff. This information allowed the team to quickly evaluate many issues relating to these operations and provided insights as to how these goals might be accomplished. The results of this survey are in Appendix A of this plan.

A CMP was created for the park in 1995 that provided important and necessary technical guidance for the developmental phase of the park archives, library, and museum collections. Most of the recommendations made in that plan were never carried out. In fact, some aspects of the program (such as the need for storage and work space) are in worse condition now than they were in 1995.

Since 1995, the park has added appreciably to the collections in both natural and cultural specimens and objects. An agreement with two neighboring parks in the network (ORCA and LABE) has Crater Lake now providing professional archival and curatorial services to these areas. These agreements have been approved by the regional office, and have been documented in both the regional and NPS Museum Facility Strategy plans approved by the Department of the Interior in 2006. As a result, Crater Lake National Park is now responsible for the documentation, protection, and preservation of these park-specific resources.

The elements of this particular plan are both remedial and developmental. The recommendations are intended to guide the park through the process of creating and implementing a workable park museum management program that supports all aspects of park operations, while providing guidelines for program growth and development. Success or failure of this plan will depend largely on the will of park management to implement and support the recommendations made by the team.

The MMP team gathered primary information and wrote the initial draft during a two-week period in August 2005. The team wishes to thank the staff of Crater Lake National Park for the courtesy, consideration, and cooperation they extended during this planning effort. Their time, effort, and involvement are very much appreciated.

History of the Museum Management Program

Crater Lake National Park was established May 22, 1902 as "an area of two hundred and forty-nine square miles...dedicated and set apart forever as a public park or pleasure ground for the benefit of the people of the United States." Furthermore, the park was set aside "for the preservation of the natural objects...the protection of the timber...the preservation of all kinds of game and fish...and...shall be open...to all scientists, excursionists, and pleasure seekers" (Park Enabling Legislation).

Crater Lake is contained within a caldera formed about 7,000 years ago from the cataclysmic eruption and subsequent collapse of Mount Mazama. Surrounding the lake, a jagged rim rises abruptly and crests at 500 to 2,000 feet above the water. Outward from the caldera rim, the land gradually slopes downward in all directions. Significant geological and biological features and communities exist within the boundaries of the park and a number of rare, endangered, threatened, and sensitive species have been identified.

The lake itself is considered the park's primary resource. Crater Lake is 1,947 feet deep at its greatest depth, making it the deepest lake in the United States. Historically, emphasis has been placed on the study of its clarity and composition. The importance of the lake is reflected in Superintendent Earnest P. Leavitt's Annual Report from 1948:

> More and more we are thinking seriously of endeavoring in every possible way to keep the waters of Crater Lake, the crater walls, and Wizard Island areas in as natural a condition as possible, unmodified by the hand of man. There are many lakes in Oregon suitable for fishing, boating, swimming, and other recreational sports, but there is only one Crater Lake in the world.

The museum collection of Crater Lake National Park supports the research and preservation strategies for which the park was established. However, the details of the history of collections management remain a mystery. Except for the attention given to exhibits created by Ansel Hall and John Merriam in

1931 for the Sinnott Memorial, not many records exist of museum management prior to the 1980s.

However, the existing files indicate that collections management was the responsibility of the park naturalist from park authorization through the 1970s. After that time, the responsibility for collections management was passed back and forth between the Ranger Division and the Interpretation Division, depending upon which division had the time and desire to develop funding requests and perform the necessary work.

A note to the files in response to a regional call titled “Accountability, Management, and Security of Museum Collections, Reply Due: April 15, 1985,” dated January 21, 1985 states: "The responsibility for the museum has been one duty of many for the individual involved. As a result of routine park operations, museum work has been placed in a low priority. For example, between 03 OCT 1969 and the present there were only seven museum accessions at Crater Lake. Only two of these occurred in the 1970s! The museum...has stagnated for many years" (Jon Jarvis, CRLA Resource Management Specialist, from the CRLA collections management files).

In 1984, funding for a collection condition survey was approved by the Regional Office; however, the survey was never undertaken. A report to the regional curator in 1985 stated that the museum collection at Crater Lake had suffered "…from years of neglect, lack of control, and low priority." As of April 9, 1985 the responsibility of managing the collection was under the direction of Resource Management Specialist Jonathan Jarvis. He and his staff found incomplete cataloging and accessioning, poor maintenance, missing specimens, and a "…staggering backlog of uncataloged specimens" (from CRLA collections management files).

Until 1987, collections storage was situated in the upper floors of the Machine Shop (Building #5, constructed in 1932), also known as "Rat Hall." Environmental controls were minimal, work and storage space was inadequate, and security was limited. In 1987, the collections were moved to the current location on the second floor of the Ranger Dormitory (Building #2, originally constructed in 1932-33), now known as the Steel Center, and placed under the control of the Interpretation Division. While the existing space in

the Steel Center was an improvement over that in Rat Hall, it has never been adequate for the work, preservation, and study needs of the collections.

For three years starting in Fiscal Year 1989, backlog cataloging money funded a GS-05 level seasonal museum technician, Melanie (Smith) Ruesch, as well as clerical assistance, and approximately 10,000 objects were cataloged or re-cataloged. With the departure of the museum technician in 1991, the cataloging and care of the collection once again came to a standstill. Early in 1993, the position description for a full-time park curator was finally approved, and the position was filled by the current incumbent in July 1993.

Following are highlights of changes and accomplishments made within 16 months of hiring a full-time curator:

- Accurate and timely annual reporting
- Scope of Collection Statement drafted
- Collections Management Plan drafted jointly with Oregon Caves National Monument
- Museum Opening and Closing Procedures written and approved
- Checklist for Museum Preservation and Protection updated
- Resource Management Plan project statements written
- Objects clearly not appropriate for collections disposed of
- Objects for lodge exhibit packed and shipped to Harpers Ferry Center
- Cabinets and safes locked and access to collections limited
- Environmental and pest monitoring implemented
- Maintenance of wet collections implemented
- W.G. Steel papers archivally processed
- Cabinets reorganized to better house collections
- Two major herbarium projects received basic curation
- Numerous accession and catalog errors corrected
- Museum Standard Operating Procedures initiated

In the next five years (1995-2000), the following tasks were completed:

- All cataloging backlog (known at the time) eliminated

- A Collections Condition Survey completed
- Several large loans of botanical specimens processed
- All herbarium specimens stamped with NPS property stamp and affixed with permanent catalog numbers
- Higher use archival materials and administrative records made available on microfiche
- Numerous research requests answered

The year 2000 brought the beginnings of preparations for the upcoming Crater Lake National Park Centennial in 2002. The curator participated in planning the new Sinnott Memorial Exhibits, and was increasingly pressed into responding to media requests for images and historical materials. Books, articles, press releases, handouts, exhibits, events, and even the production of a play all required varying amounts of the curator's time. The curator spent the peak of the Centennial celebration managing an art exhibit resulting from the Centennial Artists-in-Parks project. The curator was also given the task of creating a Bi-Centennial time capsule. As a result, the curator had less and less time for the normal tasks of museum management.

In 2003, agreements were established between CRLA and Oregon Caves National Monument (ORCA), and CRLA and Lava Beds National Monument (LABE), to designate the CRLA curator as curator-of-record for these two park units. This action was partly in response to the regional requirement that a journeyman-level curator be assigned to administer park collections. The agreements have resulted in greatly improved management of the collections for ORCA and LABE, and a corresponding decrease in curatorial time available for the CRLA collections. Although ORCA and LABE provide funding for travel costs, salary and benefits are still covered solely by CRLA.

Currently, the museum program at CRLA is positioned in the Division of Interpretation, Fees, and Cultural Resources Management. The division chief administratively supervises the curator, while the curator is responsible for managing all aspects of the museum program. With budgets continuing to shrink, the future of the museum program is considered to be in jeopardy. If the incumbent were to vacate the curatorial position, the museum program would face an uncertain future.

Museum Management Philosophy

The basic principles for managing museum collections in national parks are not always well understood. Park managers, resource managers, and interpreters are often too busy with their specialties and daily work to fully consider the concepts and logistics governing collections management. It is easy for parks to fall short of developing a sound museum management program and, as a result, not realize the full benefit and value from their collections.

This section provides the following background information about museum collections:

- Purpose of museum collections within national parks.
- How collections represent a park's resources.
- Determining where to locate museum collections.
- Establishing access, use, and management policies.
- Professionalism in collections management.

Purpose of National Park Museum Collections

Museum collections always contain objects and specimens, and most parks also administer their own archives and operate their own libraries. These functions are necessary to support the work of the organization as a whole. These resources—collections, archives, and libraries—are also accessible to the public.

Within national parks, museum collections (including archives) serve these basic functions:

- **Documentation of resources**. Park collections document the physical resources of the park as well as the history of the park's efforts to preserve and protect those resources.

- **Physical preservation and protection of resources**. Park collections help preserve and protect a park's resources, not only by keeping the specimens and collections that document those resources, but also by preserving information about the individual items and the resource as a whole. This information is central to the management of both natural and cultural material.
- **Research**. During documentation of collections, a park performs research to provide the background information used in cataloging. The park is also responsible for making this information available to legitimate research, which can itself lead to new discoveries about an individual item, or the park as a whole.
- **Public programs**. The park uses its collections to provide information to the public. Traditionally, this information has been supplied through exhibits, publications, and interpretive programs, but new technology has led to other communication methods, including electronic access through web sites and online databases.

How Collections Represent a Park's Resources

A park's museum, library, and archival collections provide different perspectives on its resources.

Museum collections contain three-dimensional objects and specimens and should represent the resources within the park boundaries. Examples of museum collections include:

- Artifacts from archeological activities.
- Specimens and resulting reports from resource management research and projects.
- Paint samples and building fragments from restoration of historic structures.

Park archives, a subset of the museum collection, contain files, manuscripts, maps, building plans, and photographs that document the history of park development and the management of park resources. Individual collections within the archives should further document the activities that created portions of the museum collections. Examples of park archives include:

- Copies of field records and maps created while collecting botanical specimens.
- Photographs taken during historic structure work.
- Maps and as-built drawings made during utility installation.
- Property, land, and water use agreements that document past acquisition and use of park lands.

The park library should contain both published literature and less formal reports and documents relative to the park's resources and their management. Examples might include:

- General literature concerning local history, flora, and fauna.
- Specialized scientific studies relative to biota and archeological resources found in the park.
- Circulating copies of all park-specific planning documents.
- Trade, craft, and professional journals reflecting the need for park staff to remain current in their field.

Determining Where to Locate Park Collections

The *NPS Museum Handbook* should be used as a guideline for identifying locations of the museum collections as well as for branch or satellite park collections, and for establishing methodologies for their documentation, organization, storage, and use.

It is often most effective if collections are located centrally because this promotes efficient use of space (particularly in terms of combining preparation and work areas). However, it may also be efficient operationally to co-locate collections with potential users (for example, the herbarium and insect collection going to separate branches for storage and use).

Branch or satellite collections are possible as long as proper preservation and security conditions are met, and the requisite work areas necessary for management and use are provided. Overall responsibility for documentation, preservation, and reporting should, however, remain vested in one curatorial lead position, no matter where branch collections are located.

Establishing Access, Use, and Management Policies

Access, use, and management policies define who can access the collections (both staff and public), what types of uses are possible and under what conditions, and how the collections should be managed. Desired outcomes or products should be identified as well. For example, the type of services that are expected from the collections might include production of over-lays for buried utilities, production of CDs containing research done at the park, access to botanical specimens for comparative studies, and inter-library loan services. Samples of access, use, and management policies may be obtained from the curator.

The park may wish to consider the use of focus group exercises to develop a number of park-specific documents, including a role and function statement, for the combined collections. These documents would clearly state who is responsible for the development of a joint resource and how it will function to serve park-wide goals. Access and use policies should be defined and implemented, and responsibilities for development, documentation, and management of the resource should be defined in a formal position description and associated performance standards. These objectives must be fully defined in writing if they are to be accomplished in fact.

Professionalism in Collections Management

The management of archival, museum, and library collections requires the application of three different management approaches. These disciplines each have two components: technical and philosophical. It is possible to be proficient in either one of these components without being fully functional in the other.

The primary difference between the technical and the philosophical lies not only in understanding how to apply the technology, but being able to

determine when, why, and which technologies need to be applied in any given situation. This distinction and ability can be called “professionalism” and can be an illusive, difficult thing to define—probably because most practitioners of the curatorial craft possess varying degrees of facility with both the technological and philosophical aspects of the work.

Professionalism does need to be practiced and exercised to develop properly. It is better fostered by mentoring, particularly in the early stages, for professionalism is difficult to develop in isolation—it takes close association with a range of others working in the craft, so that the developing professional personality has a healthy range of philosophy, opinion, and action to model. Professionalism also needs to be maintained in much the same manner.

The management of park archives was added to park curatorial portfolios in the mid-1980s, and increasingly park curators also manage the individual park library program. This accretion of complex duties has to some extent resulted from the overall loss of permanent positions throughout the NPS, and particularly within the parks. These factors are not likely to improve in the foreseeable future, so park management must ensure that each position is filled with the best qualified candidate available.

The professional series and journeyman level for the position of park curator is GS-1015-11. The GS-1016 series is the technician or specialist series, which is not only at lower levels expected to operate independent of professional oversight. A GS-1015-11 is required by qualification standards, service, and regional policy to independently manage a museum program and administer museum program funds. Parks that do not have a GS-1015-11 position on staff need to provide this oversight through the use of an agreement for a curator-of-record. This is a Pacific West Region requirement.

The curator-of-record approach to providing professional services to all parks is a logical outgrowth of the network system, and the reductions in staffing and funding that all programs are currently facing. This approach serves to match the existing resources to park-defined needs, and it has the support of the regional directorate and the regional professional staff.

Park managers who have a professional on staff who provides required curator-of-record services for other parks need to be aware that this service constitutes an accretion of duties. The factor of just and adequate compensation for services needs to be discussed and resolved on a park-to-park basis and a park-to-professional-staff basis. Park managers should also realize that curator-of-record duties may cause a reduction in services to the providing park that could be resolved by part-time technical help.

The following recommendations should be considered for developing and formalizing a park-specific management philosophy for archives, libraries, and museum collections:

- Create a focus group of senior staff representing all park divisions and branches to define what the collections should contain, how they should be managed and accessed most efficiently, and what products should be produced upon request.
- Define the role and function of the combined collections by formal statement, formal access policies, and formal methodologies for depositing collections material, archival information, and required literature into the collections.
- Assign responsibility for developing and managing the joint collections to a single administrative unit and individual with a written position description and performance standards.
- Identify possible cooperative partnerships within the park network and in the community with individuals and groups that hold common interests regarding the preservation and management of park resources.

Issue A — Museum Facilities

Issue Statement

Improvement in basic museum facilities will help preserve park-specific collections and make these resources available for use by staff, partners, and the public in support of park operations.

Background

The NPS requires each park's museum management program to maintain and preserve their collections in the best possible condition *(DO#24: NPS Museum Collections Management; DO#28: Cultural Resources Management Guidelines*). Ideal conditions cannot always be met; however, this does not necessarily mean that the collections are at a significant risk. By taking a practical and logical approach to evaluating the real risk to the collections, an informed decision can be made to correct or mitigate the highest risk areas.

One way to assess the real risk to collections is to use the *Framework for Preservation of Museum Collections* developed by the Canadian Conservation Institute (CCI) and evaluate the existing park conditions against the agents of deterioration. The following agents are listed in rough order of importance according to their potential for damaging museum collections. Identifiable deterioration threats specific to Crater Lake National Park (CRLA) are identified after each agent.

- **Direct Physical Forces:** The primary threat at CRLA includes improper handling due to inadequate storage space, dropping due to inadequate storage layout, and damage due to moving objects long distances for research use and preservation functions.

  This threat is easily resolved or prevented by having functional and accessible storage.

- **Thieves, Vandals, Displacers:** Primary threats at CRLA include a temporary loss of artifacts through misplacement due to inadequate storage areas, a poor park key control system, and a potential loss of park

records that are currently located at several areas throughout the park. A secondary threat is the unintentional loss or theft of artifacts due to inadequate workroom or research areas.

These threats may be prevented or resolved by providing proper storage and by housing important park records (future archives) in an accessible environment with accountability controls.

> Museums and visitor centers are often vulnerable to burglary because of the value of their collections. Electronic intrusion detection systems are useful for deterring illegal entry when a site is closed. They can also compensate in part for physical security weaknesses. No electronic system is foolproof, however, nor can it provide complete protection. A system should never be considered a substitute for theft prevention measures or constant surveillance by staff. (CRLA CMP, 1995, Chapter 5, page 47)

- **Fire:** The loss of collections by fire is very high; however, the risk of a fire occurring is relatively low. The primary threat at CRLA is structural fire. The most likely cause would be the electrical system and/or the ca. 1987 HVAC (heat, ventilation, and air conditioning) system located in the attic. There is a smaller threat of loss due to wildfire.

  This threat is resolved or prevented by having fast-acting smoke detection systems, fire-suppression systems, and quick and knowledgeable response by law enforcement and fire personnel.

- **Water:** The level of threat to CRLA museum collections from water damage is very low. The collections are stored on the second floor of the Steel Center (HS-2, LCS 012012), which was re-roofed the summer of 2005. There is no obvious water source located near the collection storage area. Collections stored in the Old Transformer Building (HS-36, LCS 100267) show evidence of past water damage, probably due to snow melt or to high levels of humidity and moisture wicking into the storage boxes from the concrete floor. The exact cause is not known.

  The overall threat from water damage at CRLA is low. Store the boxes above the floor.

- **Pests:** Pests include insects, beetles, and small mammals. The primary threat at CRLA appears to be from rodents entering the building during the winter months. They do not appear to be a direct threat to the collections. The larger threat is their movement throughout the building and attic space. However, their presence may prevent or inhibit appropriate and timely inspection and maintenance of the HVAC system. Pest control

needs to be addressed in the museum collections component of the park's Integrated Pest Management (IPM) plan. A secondary threat is potential failure of the HVAC system due to possible reduced preventative maintenance.

The windows have no screens and are often open during the summer months for ventilation. The environment appears to have few insect pests that would be harmful to archival or museum collections.

IPM activities have not noted any significant pest issues that could be prevented by window screens.

Inadequate storage space, leading to collections being tightly packed into the available storage areas, makes large part of these storage areas inaccessible for normal preventative maintenance and IPM activities.

This threat can be resolved or prevented by having sufficient, accessible storage.

- **Contaminates:** Crater Lake is a Class 1 air shed, so the threats of pollution and contaminates are considered minimal at this time. The open, unscreened windows could allow contaminates such as dust and pollen to enter the building. Wet specimens stored in ethanol need to be carefully managed and the area containing these collections should be well ventilated.

  The contaminate threat can be mitigated by having all the collections in sealed museum cabinets and boxes. Windows located in storage areas should remain closed.

- **Radiation:** Ultraviolet and visible light will cause irreversible damage to museum collections unless controlled or mitigated. The best prevention is maintaining collections enclosed in cabinets, covered shelving, and sealed containers. Windows may be fitted with UV film, Lexan panels, or opaque coverings, and the internal lighting adjusted and filtered to reduce light contamination.

  The threat from radiation damage at CRLA is low at this time.

- **Incorrect Temperatures and Incorrect Relative Humidity:** Temperature and relative humidity (RH) are interrelated and therefore need to be considered together. The CRLA climate is favorable to

collection preservation. The year-round RH averages 28% with seasonal lows in the teens and highs in the 40% range. The year-round temperatures are relatively mild. In the summer, the temperature averages about 75, and in the winter the average lows are about 18 at night and in the 30s during the day. The heavy snowfall and high elevation result in a near perfect climate for museum collections.

The potential damage to collections from the natural fluctuating levels of temperature and RH at CRLA is extremely low. However, the threat from artificial changes in the internal climate is somewhat higher. For example, high wintertime building temperatures could result in very low RH levels, which could negatively affect some museum collections. Both temperature and humidity need to be monitored, and corrective actions need to be taken as required to minimize potentially high and rapid internal environment changes.

Discussion

The overall climate, facility, and storage situation for the collections is good, with minimal long-term threats when these conditions are evaluated using the CCI *Agents of Deterioration* review. The official museum collections are located primarily in two facilities, the Steel Center (HS-2) and the Old Transformer Building (HS-36). In addition, park management records (potential archives) are located in several facilities within the park. These records are stored within their respective program area. The current organization of the museum space is perhaps the weakest area of the museum management program. This has been true for some time, as evidenced by the following quote:

> The main problem facing the park archives and manuscripts, the park library, and the park museum collections is the overall lack of space to manipulate these resources adequately and use them in a productive manner. As a result, the resources are under-utilized, and they are a liability rather than an asset to park management. (CRLA CMP, 1995, Chapter 6, page 58)

The planning team was asked by the superintendent and staff to consider the following four alternatives to address the museum management program's need for adequate facilities and space:

- Using the entire Steel Visitor Center for the museum collection program.
- Using Steel Circle Unit 18A.

- Constructing a new building to specifications that would meet the NPS requirements for curatorial facilities.
- Reorganizing the second floor of the Steel Visitor Center.

Alternative 1: Constructing a New Building to Specifications

To determine the size of the facility, the NPS Museum Collection Facility Planning Model was run based on the requirements of the Crater Lake collections. This program was developed to predict the appropriate size for a museum facility based on the actual current museum operational data. The model calculated a facility sized at approximately 3,400 square feet (SF) to meet the current functional and operational needs. The breakdown of functions is a follows:

- Core museum collection functions: net assignable – 832 SF
- Public areas: net assignable – 250 SF
- Processing areas: net assignable – 320 SF
- Objects storage area: net assignable – 778 SF
- Archive storage area: net assignable – 243 SF
- Library space: net assignable – 277 SF
- Circulation at 20%: 700 SF

A building of this size would be classified as a small facility. The net construction costs of the **museum building** are estimated at $600.00 per SF, for a net total of $2,040,898 in FY 2005 dollars. (This estimate has been made without a specific site cost identified, using the maximum overhead/profit and general conditions and using a park location factor of 1.21 percent. NPS gross up figures will significantly increase this cost.)

Alternative 2: Using the Entire Steel Visitor Center

The Steel Center has approximately 4,962 SF of interior space. The net usable area (excluding the corridors, stairs, storage areas, and restrooms) of this building is approximately 3,100 SF. This size closely matches the facility size predicted by the NPS Museum Collection Facility Planning Model. The auditorium (576 SF) could be used as the collections storage room, and the visitor center area (667 SF) could be used as collection processing, research, and workspace. The park association storage area would be used for curatorial

supply storage and holding rooms. The curator's office would remain upstairs primarily due to the winter snow conditions which block the first floor windows for much of the year.

A second alternative would be to maintain the park association function as is, and eliminate the auditorium, using this space for museum collections storage. The remaining museum functions would continue to be located on the second floor.

This approach is presented to document one option for use of the Steel Visitor Center. The MMP team does not recommend implementing this approach unless the visitor contact functions are successfully relocated to the Rim. Renovation is estimated to cost $100.00 per SF, or $310,000.00 in FY2005 dollars.

Curatorial Program Function Analysis for the Reorganized Space

Core functions – workstations, offices, file storage: Relocating the office, workstation, and file storage to the larger room (currently the interpretive workshop) greatly increases the efficiency and security of the museum operation. It allows for better oversight by the curator and greater access by the park staff, researchers, and the public.

Restrooms/break room/recycling: These functions are currently provided elsewhere in the building and the park.

Processing, workroom, material storage, receiving/holding: Museum standards require these functions to be separated from the workroom and museum storage. However, the overall environment for Crater Lake is exceptional for collection preservation with very few pest issues. While these functions are co-located with the core functions and museum collection storage, careful management controls by the curator would mitigate potential pest infiltration problems.

Public areas, research space: The library could function as a research space and well as the collections storage room. The hall area near the main stairs and along the corridor to the back stairs offers a great opportunity for

displaying items from the museum collection. The downstairs visitor center area also offers the opportunity to display items from the collection, provided they are in properly designed exhibit cases or visual storage cabinets.

Museum storage: Although it is always better to have the museum storage in its own secured room, if the storage cabinets are always locked, then the collections are protected. Having the curator's office co-located in the storage area greatly increases the overall security of the museum collection, provided that museum objects are not left out overnight and that the door to the room is locked when the curator is not present.

Archives: Keeping the archives in the current space will provide adequate storage for the existing collection when the material supply and non-archive equipment are removed. However, this space is not large enough to hold the entire potential park archives material if this material were to come to the museum program right away.

Library: The library can easily serve as a conference area if it is reorganized based on the proposed layout and non-critical documents removed. This space would serve conference needs of all the park programs located in the Steel building.

Curatorial workspace: The work area provided in the museum collections area will adequately serve the museum program in the short run, particularly for the type of work that the program currently does on the collection. It is not the preferred approach because security issues are increased, but it can work for the CRLA museum program. The current situation is totally inadequate.

Alternative 3: Reorganizing the Second Floor of the Steel Center

The second floor spaces that are currently used by the Interpretation, Museum Management, and Cultural Resources programs could be reorganized to improve operations and allow for limited future growth through a more efficient utilization of these spaces.

Significant improvements can be made to improve the management of the museum collection, as well as the interpretive program, by relocating the

program functions to spaces and critical adjacencies that better match the current organizational operation.

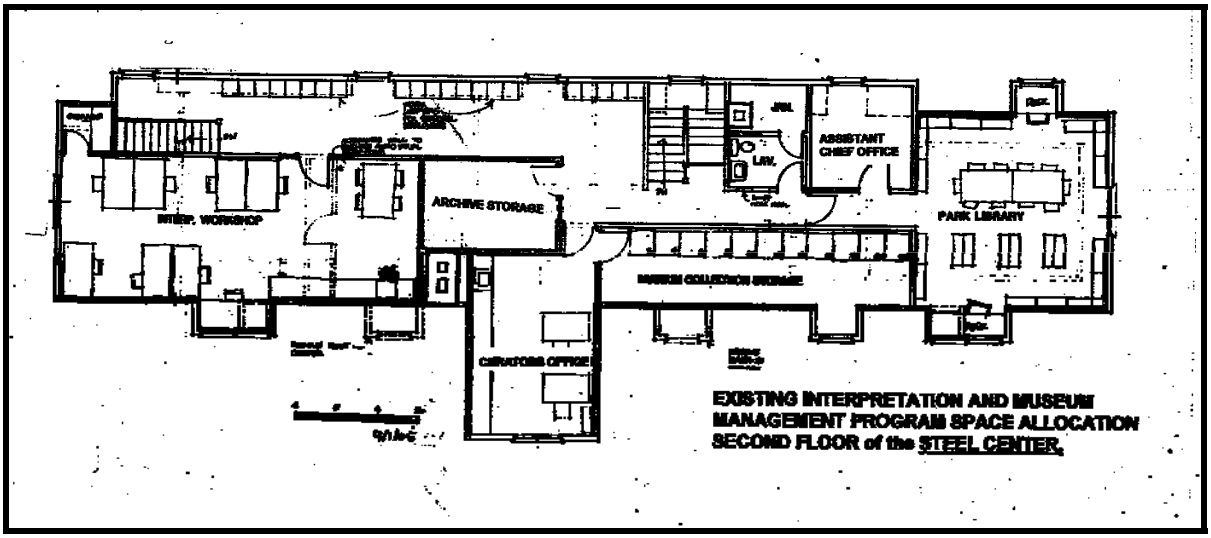

Figure 1 Existing interpretation and museum management program space allocation

The usable space (excluding corridors, stairs, and restrooms) totals approximately 1,396 square feet (SF). The existing allocation of space is as follows:

- Museum program – 572 SF
- Library – 296 SF
- Interpretation – 528 SF

While the overall breakdown of space is roughly equal, it does not represent the most efficient space utilization. For example, the museum collections storage is located in a long narrow room, which makes use of the collections very difficult and compromises the safety of the individual artifacts when accessing the cabinets. The interpretation workroom is used intensively by a large group for only three weeks a year, and is otherwise greatly underutilized as a general workroom space. The library organization is fairly efficient, except for the centrally-located shelves that contain supplies and recent periodicals.

Relocating the primary museum storage function into the interpretation workroom would address the current storage deficiencies, increase the

accessibility of the collections, and improve the management of the collections. The curator's office would be relocated to this space.

The interpretation workroom could be relocated into the current museum storage room. The wallboard covering the dormer windows would be removed. This long, narrow room, with very good natural lighting, is functionally more appropriate for the interpretation workspace and presentation preparation. One of the ranger offices could be located here as well.

The library would remain where it is, but the freestanding bookcases in the center of the room would be removed and replaced with conference/work tables. Much of the material in these bookcases consists of supplies and vertical files, which could be more efficiently located in a central supply cabinet and file cabinet. The space could double as a meeting/conference room and research room. The two workspaces currently located at the windows would remain and be available for preparation and research.

The supervisory interpretive office next to the library would exchange offices with the historian. This would locate the historian closer to the library resource and the interpreter closer to the first floor visitor center operations.

The existing curatorial office would function as a curatorial and interpretive workroom, utilizing the sink and some of the counters. The two workspaces from the interpretive workroom could be relocated into this space as well. The workspace function is visualized as an occasional, low-impact use that would not drastically affect the use of this space for offices.

The existing space that is assigned to the archives would remain as archives storage. This central location provides good accessibly and visibility for this highly used resource.

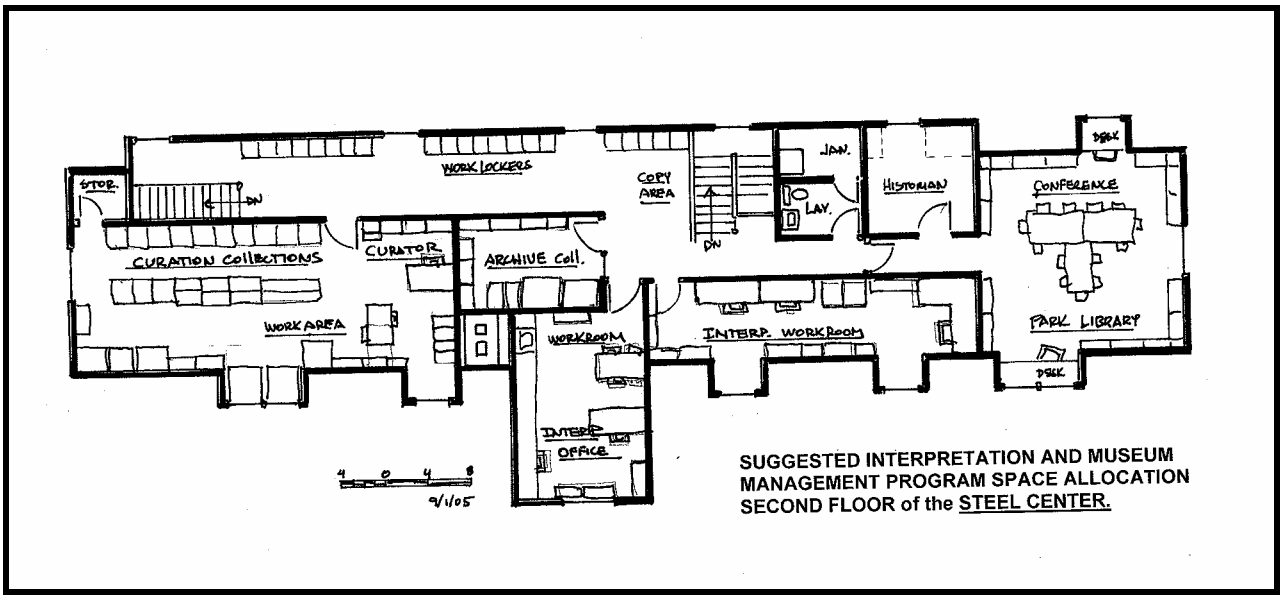

Figure 2 Suggested interpretation and museum management program space allocation

The approximate reorganized space breakdown is as follows:

- Museum Program – 555 SF
- Library – 296 SF
- Interpretation – 465 SF

The corridors area would continue to be used for the copy machine, interpretive staff lockers, and a suggested museum program temporary exhibit area. While the overall amount of second floor space encumbered by each operation would be roughly the same, the overall utilization of the spaces could be greatly improved, taking greater advantage of the space configuration to support the interpretation and museum program functions.

This proposed recommendation is the least expensive option, requiring no intervention or modification of the current structure. The team believes that it could be accomplished for under $10,000.00, and the funds could probably be reprogrammed from regional project funds in the near future.

It also needs to be emphasized that this option would address the *current* collections facility needs, with limited space for expected growth resulting from the Natural Resource Challenge Inventory and Monitoring (I&M) Program and the Science and Learning Center activities. As a result, the park would probably have to look for new or additional space in five to seven

years. This option would, however, give the park the time to adequately plan and program to fill these developing needs.

At the present time, the superintendent does not support this alternative.

1. Curatorial Program Functions	2. Model Net SF	3. Park Net SF	4. Dif-ference	5. Comments	6. Reor-ganized Space Use	7. Short-fall Net SF
a. Core functions: workstations, offices, file storage	580	198	(382)	Non-museum office space in one area.	104	184
b. Rest rooms, break room, recycle space	252	0	0	Provided by existing building.	0	0
c. Processing areas, workroom, material storage, receiving/holding	170	0	(170)	The processing is currently part of the curator's office.	In Museum objects storage	170
d. Public areas, research space	250	0	0	Essential, Not often used.	0	0
e. Museum objects storage	778	267	(511)	The storage is located in an inaccessible closet.	344	0
f. Archive storage	243	107	(136)	Archives will grow.	107	136
g. Library	277	296	19	This is an existing space.	296	0
h. Curatorial workspace	150	0	(150)	This space should be used for processing and holding.	In Museum objects storage	150
i. Other						
Total net SF	**2700**	**868**	(1330)		**851**	**(640) NSF**
Tare/HVAC	676					
Estimated gross SF	3400					
Recommendation						

Table 1 Evaluation of reorganizing the second floor for CRLA museum collections program space as compared with the museum collection facility planning model, predicted results, and actual current use

Instructions by numbered column:

1. **Curatorial Program Functions:** the functions identified in the Museum Collection Facility Planning Model plus any unique collections functions that a park program may have. (Add other functions as needed.) The tare does not need to be calculated for the existing space or building unless there is need for new infrastructure, such as a dedicated HVAC system. (Tare includes wall thicknesses, circulation, janitor closets, and mechanical rooms. Net square feet, or dedicated space, plus tare, constitutes gross square feet.) The final recommendation is a brief summary of the analysis of adequacy of existing spaces, including possible recombinations, reassignments, or additions needed to satisfy program essentials.
2. **Model Net Square Footage:** the square footage for each function as estimated by the NPS Museum Collection Facility Planning Model.
3. **Park Net Square Footage**: the *existing* park net square footage of each functional area. For the building support functions such as restrooms, general storage, recycle rooms, and break rooms, it is necessary only to indicate in column 5 that the function is appropriately and conveniently provided if that is the case. If these spaces are insufficient, estimate the existing net square footage.
4. **Difference:** the net square foot difference of shortfall or overage between the model benchmark and the existing space. Indicate negative values with brackets.
5. **Comments:** used for an objective and brief evaluation of the difference to indicate a critical space or functional shortfall, or to call attention to excesses.
6. **Reorganized Space Utilization:** an objective, on-site evaluation of the park operational efficiency that covers storage cabinet capacity and utilization, physical arrangement of existing space, and programmatic efficiency or conflicts. This evaluation will be considered valid only if by

an *outside*, multi-disciplinary team consisting of curator, architect, conservator, and archivist or other museum specialist.

7. **Shortfall Net Square Footage:** the amount of space that the museum program needs above what is currently available. This may not cover all that is "wished-for," but denotes what is necessary for a fully functioning program that takes into account current operations, growth potential, actual use of spaces, efficiencies of the existing program, and the status of the security, fire protection, and environmental controls.

Using Steel Circle Unit 18A

The MMP team does not recommend using Steel Circle Unit 18A, which is a residential facility, for the museum management program. Experience has demonstrated that residential structures cannot efficiently or effectively be rehabilitated for office and/or operational functions. Relocation of the collections management function to this space would isolate that operation at a time when program development is recommended. Such relocation would also introduce user traffic into a residential area, with attendant safety concerns that would need to be addressed.

Recommendations

- Cooperate with other park divisions to identify space adequate to the preservation and use needs of the collections over the next five to ten years. Engage the assistance of the regional office in this process.
- Implement the long-range planning and programming necessary to the development of a curatorial facility that will meet future park needs.
- Measure and monitor the temperature and relative humidity in the current and proposed spaces to develop base line environmental data. One monitor should be placed outside to record the actual climatic conditions.
- Cooperate in the development of a park-wide IPM plan that includes a component specific to the needs of the collections.
- Implement a pest monitoring program and report the results to the park IPM coordinator.
- Cooperate in the development of a park-wide structural fire plan that includes a component specific to the needs of the collections.

Issue B — Function, Visibility, and Access of Museum Collections

Issue Statement

The use of park museum collections will be defined by a clear mission statement and supported by workable access policies.

Background

Crater Lake National Park (CRLA) maintains collections of both museum objects and archives. Although there is a large holding of objects (including historical, geological, and, most notably, the herbarium specimens), the largest component of the cataloged collections are archives (93% of holdings).

These archives have formed the basis for research by the park historian and have been a significant resource for interpretive staff while they assemble educational programs. Other users include outside researchers and people from the CRLA Division of Resource Preservation and Research.

Currently, the administrative, maintenance, and ranger divisions of the park make very limited use of the museum collections. The staff of CRLA, as a whole, is unaware of the holdings, locations, or usefulness of the park's museum collections.

Discussion

Function

The function of park museum collections is to facilitate a system of collecting, preserving, and describing park resources and to make the resulting information readily available for use by staff and the public. This function is largely accomplished by three sets of holdings and their associated data: museum collections, archives, and library. CRLA currently maintains all three types of holdings, but they are largely limited to use by the Interpretive and Cultural Resources Divisions.

The following paragraphs describe what can be done to enhance and expand the museum collections, archives, and library that are housed at the park and how to make them available for use.

Museum Collections

Object-based collections (recognized by the NPS museum management program as archeological, ethnological, historical, biological, paleontological, and geological) make up a small percentage of the current park holdings (approximately 7%). These collections require different levels of attention depending on their ongoing needs for preservation and conservation.

Park staff, outside educators, and researchers are not aware of these collections or of their content, so they make few requests for access to them. However, it is likely that the use of these collections will increase as the Science and Learning Center at CRLA is developed.

Archives

Information and paper-based collections document the history of management, research, and education at CRLA by preserving historical and management documents, maps, architectural and engineering plans, engineering and as-built schematics, and original research notes and data forms. Currently CRLA is preserving, using, and housing all of these types of documents, but few are documented or managed by the curator. Archival documents (or documents that are eligible to be considered as archives) exist in most divisions of the park (especially the Maintenance and Resource Preservation and Research Divisions).

To ensure the long-term preservation of the archives collections at the park, these documents should be centralized as a unified holding that is continuously monitored for archival conditions (including temperature, humidity, pests, and chemicals). The centralization of the archival records will require the development of an adequate electronic finding aid and accessibility to the information.

In addition to centralizing archival materials at the park, a formal archives survey should be performed. The survey would assist the curator and cooperating divisional managers to target which holdings should be

considered for archival preservation. (For more information, see Appendix E – Acquisition Planning.) This survey should be conducted by a professional archivist who does not have a specific interest in park operations, but does have the breadth of knowledge to anticipate what current documents may fulfill the informational needs of the future.

Library

While not directly managed by the park's museum management program, library holdings constitute a significant holding of park information. Most parks are not able to employ professional curators, archivists, and librarians at a single unit, and so the library often falls under the curator or archivist (whichever is employed by the park).

The library at Crater Lake is currently well organized and accessible to all employees. However, the holdings focus mostly on the needs of historical research and visitor interpretation and education. The library function should be expanded to fill the needs of all park staff and of educators and researchers who work in the park in partnership roles. This expansion may be accomplished by creating an electronic library catalog that is accessible to all park employees and visiting scholars. In addition, there should be a library access policy that defines the rules for checking out and returning library materials.

To further serve the needs of all park divisions and visiting educators and researchers, two other documents are necessary: a library-specific scope of collection statement addressing the needs of every discipline represented at the park, and a park-wide policy to guide the acquisition of library materials. All these concerns may be addressed by a Library Management Policy. (See suggestions in Appendix D – Library Management Policy.)

Many books and reference materials are purchased by separate divisions for their specific needs. These materials should remain housed with these divisions; however, they should also be cataloged into the park library, be available to all park personnel, and be housed in adequate and reasonably secure conditions.

Visibility

The use and overall visibility of the museum collections at the park is limited to the Division of Interpretation and Cultural Resource Management. The survival and health of museum collections at the park require that the management team, and ultimately the separate divisions and individual staff, recognize the role, importance, and usefulness of the museum management program. This understanding may be accomplished by educating staff regarding the role of the museum and by highlighting significant accomplishments of the museum management program. For this to be successful, the curator needs to be ready to highlight these accomplishments, and park management must be willing to recognize these successes as important to reaching larger park management goals.

Newsletters, posters, exhibits, and other local interpretive media may increase the staff's immediate awareness of the museum mission. However, increasing the overall awareness and usability of the park collections depends on enhancing access to these resources.

Access

The most effective way to enhance access to the collections will be through the creation of an accessible finding aid to archival collections, because these archives constitute the bulk of park collections. Every division needs to have access to their own documents, so the location and methodology to do so must be "user friendly." There are many ways to accomplish this goal and park management, in consultation with the curator, needs to decide how this might best be accomplished.

Other finding aids that should be available include the library catalog and the general museum catalog. These may also be made available in multiple ways and the particular methods selected would benefit from multi-disciplinary discussions and agreement. One such access point is read-only access to the park's ANCS+ database.

The opening of the Science and Learning Center will likely cause an increase in requests to gain access to museum holdings. In addition, increased holdings and more frequent use of the museum collection will require that access to the

collections be available more often. A Collections Access Policy will guide appropriate use of the collections. (See suggestions in Appendix C – Collections Access Policy.) This policy can detail issues like scheduling and use of the collections. It can also describe procedures to gain access to collections when the curator is not available.

Other forms of emergency access need to be addressed as well, including access by structural fire teams to address smoke and fire alarms and by law enforcement personnel who are responding to threats or disturbances to or in the proximity of museum collections. The Collections Access Policy should also address access to collections areas for utility, maintenance, or management issues. Also, during emergencies, responding personnel will need a clear procedure to follow to gain access to these areas.

Planning

Several additional working plans would benefit the park collections: Museum Emergency Operations Plan, Museum Preventive Maintenance Plan, Integrated Pest Management Plan, Structural Fire Plan, and Emergency Operations Plan. These are described below.

Emergency access to museum collections should be addressed in the Collections Access Policy, but it also needs to be addressed in multiple other documents. Primary among these is a Museum Disaster Management Plan. This plan has three components:

- Before the disaster: anticipate possible catastrophic problems and either mitigate them ahead of time or construct a plan or procedure to follow.
- During the disaster: a checklist or Emergency Operations SOP of procedures to follow during an event.
- After the disaster: a procedure to follow to take stock of damages, triage damaged specimens, and ensure that further damage will be prevented. The plan should also contain a list of names, phone numbers, and appendices of resources that may be called upon to assist during and following a disaster.

A Museum Preventive Maintenance Plan (formerly known as a Museum Housekeeping Plan) allows the curator to systematically take stock in museum conditions, including pest management, cyclic preservation and maintenance

issues, and environmental monitoring. Implementation of this plan ensures that these required conditions of museum space are met at all times.

Other required park-wide plans should contain a museum-specific component. These plans include the Integrated Pest Management Plan, Structural Fire Plan, and Emergency Operations Plan.

The Integrated Pest Management Plan, typically assembled by the Division of Resource Management, outlines what biological organisms present a direct threat to park resources and offers guidelines and procedures for mitigating these threats. Museum collections are a unique resource to parks and need to be specifically addressed in these plans. Often the mitigation of pests is similar in the museum as the rest of the park, but usually the museum, especially collections spaces, will need to have an even more aggressive policy regarding pests. Additionally, specific conservation needs of the museum holdings may require different procedures in mitigating pests than in other areas. Funding for generating this component is available from the Museum Collection Protection and Preservation Program (MCPPP).

The Structural Fire Plan addresses procedures to follow during the threat of structural fire. One major component of this plan is to identify spaces and resources that need special attention during a structural fire threat. The park archives, museum collections, and library constitute specialty spaces. The specific needs of the museum collections should be addressed in these plans as well as a list of potential hazardous materials that firefighters may be exposed to in museum spaces. A second component of a structural fire plan is maps or schematics of each structure with access points, utility locations, stairways, windows, and spaces with special needs identified. Museum collections constitute areas that may have special needs and should be identified in these schematics.

The Emergency Operations Plan is normally a continuously updated binder that contains one-page Standard Operating Procedures (SOPs) or checklists of what procedures to follow during unusual events (such as fire, vehicle accidents, or utility failure). These SOPs should be continuously updated with current phone numbers, contact names, and appropriate procedures. Normally each page has a date to identify that it is the latest revision and a copy is

provided for every building and contact center in the unit. Units that have a dispatch center may choose to keep this document with the dispatcher and instruct all employees to contact the dispatcher for all emergencies. The special needs of museum collections require that a single-page SOP be available that guides fire, law enforcement, and management personnel during an emergency threat to the museum collections. This SOP, possibly titled Threat to Museum Collections, should be written for use by law enforcement and fire personnel and should be authored in conjunction with these people.

Operations

The museum management program crosses many disciplines and subject areas, and the park needs to take an aggressive approach to long-range planning for an effective program budget, including the staff necessary to preserve these resources and complete these missions. Taking a proactive approach toward documenting realistic needs for realistic operational goals will both help preserve park resources and serve the public.

When planning for resource preservation it is necessary to maintain perspective as to how these activities support the overall missions and goals of the park. The resources that make up the aggregate park collections constitute documentary evidence of park resource management activities and the administrative decisions affecting them. Park museum collections are primary resources, and comprise the park's institutional memory. From the perspective of this planning team, the park museum management program should serve the four distinct functions mentioned in the Museum Management Philosophy section above (documentation, preservation, research, and public programs).

Collections management staff must produce the planning, programming, and reporting documents needed to ensure that the primary functions of the program are adequately staffed, funded, and performed. Documenting the time and costs of the primary function of the program is an essential element of planning and programming. Increasingly park managers are asked to show "value received for value given" in their park operations, and increasingly the response "to comply with regulations" is not sufficient justification in today's climate of lean budgets and reduced staff. It is often difficult for the non-specialist reviewing budget requests to perceive exactly what the "value

received" to the park actually is, so that illustrations of "value" in planning documents, budget requests, and reports must be overt and proactive.

Collections management staff should be doing a cost analysis for both current and projected activities as a means to establish and document credibility for the management of park collections. In cases where a park curator may be serving as curator-of-record for other park collections, a separate analysis should be done for each collection serviced. Some basic time and cost analysis questions include:

- How many accessions have been processed over the past three years?
- Is the rate of new accessions entering the collection increasing or decreasing?
- Is the park keeping up with basic registration, or is a backlog developing?
- What is the average time/cost to process an accession?
- What is the average time/cost to catalog an object?
- What is the time/cost to provide Integrated Pest Management (IPM) and environmental monitoring per year?
- What is the time/cost to provide storage/inventory per cubic foot of storage per year?
- What is the time/cost to provide the suite of reports required by each collection per year?
- How many requests for research access to the collections are received from all sources each year?
- Have the requests for access increased/decreased over the past three years?

After these types of data are collected, analyzed, and formatted, they may be presented to park management to illustrate the direct costs associated with the various facets of collections management and to document any shortfall of staff time or assets required to accomplish either mandated or management-required work activities. With these data, park staff should be able to develop effective and integrated programs to identify, program for, and respond to park needs. The data should also document where project or temporary staff may be needed to accomplish backlogged work, or to make the overall program more efficient and responsive to park needs. Finally, this data will provide the foundation and documentation for establishing the appropriate

number of staff positions and grade levels required to manage these park specific resources. These needs should be documented in the park Operations Formula System (OFS) base increase request.

There are different ways such a workload analysis may be organized, depending on the specific park and tasks at hand. One method is illustrated in Appendix F—Suggested Work Load Analysis. The curator can modify this method to fit specific park needs, and can then implement the result to document what is and what is not being accomplished with currently available assets.

Funding Sources

With the data from the work load analysis suggested above, the park may then seek additional project funding sources as required to support mandated and management-desired programs. In addition to the normal Museum Collections Protection and Preservation Program (MCPPP), backlog cataloging (BAC-CAT), Cultural Resources Preservation Program (CRPP), and Cultural Cyclic Maintenance programs the park is familiar with, the following are some suggestions for funding sources:

- **Cooperating association**: Approach the park's cooperating association with specific project requests tailored to organizational interests (for example, the duplication and sales of park-owned art and photographs, with resulting sales profits dedicated to collections management activities).
- **Graduate programs**: There are several graduate programs that might provide interns to do professional level museum project work under the direction of either university or park staff: The American Association of Museums is able to provide a list of such accredited programs upon request.

  The NPS has a cooperative agreement with the National Council for Preservation Education, which provides a clearinghouse for interns from appropriate college and university programs for parks. The American Institute for Conservation has a list of conservation training programs along the same lines as above. If free housing could be provided, it might be possible to find free, or nearly free, interns with professional training to

work on specific projects at the park. Stipends could be funded with project money, or through donation from the park cooperative association.

- **Partnerships**. The park may also look at expanding existing partnership opportunities with other federal agencies (Bureau of Land Management, Fish and Wildlife Service, U.S. Forest Service) plus regional, state, and local agencies. Nongovernmental agencies should also be considered. As the management of both public and private lands becomes more aligned with ecosystems than with artificial socio/political boundaries, it becomes more efficient for all to manage resources in a more holistic manner, and park management should be on the lookout for any opportunities that might arise.

Most governmental (federal, state, local) and private sector funding sources require a transparent view of the management of awarded project funds, and this view is far easier to provide if those funds are not tied into the general operation of another park branch or division. To use alternative funding sources, CRLA needs a separate Operation of the National Park Service (ONPS) budget for cultural resources in general, and the museum management program in particular. Creating these separate budgets is worthy of consideration to promote program development and growth.

Recommendations

- Combine the cultural resources and museum management program with the resource management and research program to recognize the holistic nature of these resources and their multi-disciplinary ties within the park and network organization.
- Develop a list of essential archival, museum, and library management activities, by park, and begin a time/cost documentation and analysis for each activity in each park.
- Accession backlogged material in all tier-member network parks to accurately project backlog catalog needs.
- Develop new Project Management Information System (PMIS) project statement that accurately defines current needs in the network and tier-member parks in a consolidated five-year program for collections management.
- Develop necessary Collection Access Policy statements for tier-member parks.

- Develop necessary Library Management Policy statements for tier-member parks.
- Develop partnerships with other federal, state, and local government agencies and private sector organizations where these will support existing or potential collections management activities.
- Revise the Resource Management Plans and Business Plans for partner parks as opportunities arise to include the specific needs of the collections held by tier parks.
- Develop Operations Formula System (OFS) statements to be included in tier park requests that better define collections management staffing and support needs.

Issue C — Acquisition Planning

Issue Statement

Planned acquisition of high quality museum collections will ensure documentation of park resources and the history of park stewardship.

Background

CRLA is unique in a region of volcanic wonders. The park contains an extraordinary cross section of the biota, geology, and human history of the southern Cascade Range. The size of the park and variety of its resources provide a broad range of resource management challenges, research opportunities, and visitor experiences. To ensure that these values are preserved into the future, the park is managed to protect the ecosystem conditions and processes and their biologically and culturally diverse resources.

The 1993 Resource Management Plan (RMP) committed the park to the collection of needed baseline data to be accomplished through research and monitoring. Baseline data collection includes such diverse subjects as long-term lake monitoring, spotted owl distribution, amphibian distribution, dendrochronolgy analysis, forest insect monitoring, fungi inventory, fire ecology, and geothermal research. The Natural Resource Challenge Inventory and Monitoring (I&M) Program supports this concept on an ecosystem scale. Vital signs inventory and monitoring data collection includes nonnative species, bird communities, terrestrial vegetation, aquatic communities, water quality, and land cover and use.

Cultural resource themes represented in the collections include use patterns of indigenous peoples, European discovery and early scientific exploration, federal forest reservations and park management, and rustic architecture in national parks. Museum and archival collections support research, exhibits, programs, and publications.

Non-NPS and academic research and park staff interests also contribute to collections. The park recognizes that a research plan needs to be updated. The Chief of Resource Preservation and Research (RP&R) has identified that directing research topics is a means of accomplishing base line inventory data collection.

Special emphasis funding (for example, I&M, Natural Resource Preservation and Protection, and staff development through Resources Careers Professionalization) resulted in planning research, performing resource inventories, and staffing the park with journeymen ecologists and a museum curator to oversee the preservation of the results of such studies.

Events, including the Crater Lake NP Centennial, resulted in the recovery of historic information, which in turn resulted in exhibits, programs, and publications. Large amounts of archival materials have impacted the museum and archival collections.

The Crater Lake Science and Learning Center (SLC) will expand the education program and foster opportunities for teachers, researchers, and students to learn in a park with park resources and staff. A substantial portion of park resources will need to be dedicated to the SLC. Access to the library, museum, and archival collections are museum management program dependent. The Rim Visitor Contact Station will further require the curator's attention with exhibit planning.

The 2004 Draft General Management Plan (GMP) and Environmental Impact Statement discussion of museum collections explores four alternative approaches to collection management. Each alternative offers the park the option to house collections both on-site and in off-site repositories. The no-action alternative anticipates little growth to the collection and no additional storage space is allocated. Actions taken under this alternative would have negligible-to-minor adverse impact on the collections. The preferred alternative actions would have minor to moderate beneficial impacts on the collection. Collection additions would come from long-term monitoring as pertinent park-related materials are acquired. The remaining two alternatives do not differ from the preferred alternative in impacts to the museum collections. The GMP discussions of impacts to the museum management

program from the enhanced visitor experience are conspicuously absent. Also absent from the GMP is mention of the Science and Learning Center.

Park staff creates museum, teaching, and interpretive collections. These collections support the mission of resource preservation and museum management program through education. Staff and visitors are important partners in resource protection and preservation.

Discussion

The numbers and types of collections do not reflect the complexity or diversity of the park resources. In an effort to better document resources and park stewardship of them, the collections will continue to increase. One of the park's goals is to increase collections. Planned growth can fill gaps in information, illustrate changes in park management and philosophy, provide exhibit materials, and document protection and preservation efforts.

The remodeling and adaptive use of the SLC and the Rim Visitor Contact Station provide the opportunity for teachers, researchers, students, and visitors to learn about the park and its resources in a park setting. Participants will use the curator as a resource. The curator will also play a vital role in developing finding aids and in giving researchers access to collections. These activities will increase the curator's workload with the need to perform collection management, property accountability, and collection access.

The responsibilities of the CRLA curator have increased over the past several years with the addition of collection management for Lava Beds National Monument and Oregon Caves National Monument. This has been a positive movement that strengthens the credibility of the facility as a research center for the Klamath Basin Ecosystem Network.

While the two monuments benefit from the experience of a curator, the workload associated with this oversight impacts the museum program at Crater Lake. The work plan created by the curator needs to include all three parks and their minimally required reporting requirements. The work plan should include required activities in the planning cycle. The work time estimated will assist in both setting priorities and in program scheduling and development in long-term planning.

The curator should be involved in the planning process for all scientific activities and monitoring programs that take place in the park, including those undertaken by outside researchers, the Division of RP&R, I&M, and SLC participants. The curator's involvement also needs to extend to finalizing projects to ensure that the appropriate materials are transferred to the facility and included in the archival collection files.

Integrated information management and access is a vital component of resource preservation, research, and education. A standardized approach to data collection and information access is needed for those datasets that contain GIS, I&M data, archives, museum collections, library materials, technical information, visitor centers, and web sites. Information must be usable to park staff and management. The museum and archives collection can provide physical spaces to place objects and dataset umbrellas for associated materials. The museum program can take concepts, information, archives, and objects and provide finding aids, products, and access.

Parks preserve and protect park resources, so they collect natural history specimens and data, cultural artifacts and data, and park stewardship documents. Parks should preserve and protect these objects in the park museum and archival collections. These collections present opportunities for research and study of these objects, associated data, and reports.

The museum management program needs to look at nationwide efforts to implement digital museum management, including accessible software, web-based databases, spatial datasets, the integration with I&M network archival collections, and integration with In-Focus, the NPS database searching tool.

When space management is critical, the museum collections facility is dedicated, and functions, as a repository for those objects. Other spaces previously used to house collections can be freed for staff and work spaces.

By participating in an over-arching resource management dialog, the research application process, and the park work plan process, the curator can anticipate types of growth and categories of collections that will require attention.

Partnership with other repositories and other agencies is vital to long-term collection management. The superintendent has the option of conveying

ownership of natural history specimens to partner repositories. Since the collector continues research in academic institutions long after collections are made, access to specimens may be enhanced by keeping collections with the primary researchers and their institutions. The NPS mission to collect information (for example, catalog records, photographs, maps, and reports associated with specimens) needs to continue. Information is captured through the permit system, the museum management program, and I&M databases. Long-term loans impose a set of lending terms on non-NPS repositories that can be limiting to research. The concept may be embraced that natural history collections can be considered a renewable resource. The park should continue to explore the alternatives to voucher storage and ownership. Reference by the curator and park staff to outside repository collections can relieve pressure from repeat or duplicate specimen collections. Determination as to final disposition of research specimens should be made on a case-by-case basis.

The CRLA museum and archival collections are unevenly represented, as the 2004 Collections Management Report reflects in Table 2. The main area of growth is in the archival collections.

	Disciplines	Cataloged	Not Cataloged	Discipline Totals
2004 CMR Data	Archeology	26	2	28
	Ethnography	3	0	3
	History	2,840	0	2,840
	Archives	186,477	35,119	221,596
	Biology	10,270	375	10,645
	Paleontology	0	0	0
	Geology	3,732	18	3,750
Totals		203,348	35,514	238,862

Table 2 Crater Lake National Park 2004 Collections Management Report.

The research permitting process and compliance records document the interest and application for study access in the park by non-NPS researchers and scholars. Annually from 6 to 12 research applications are reviewed by park

staff. Permits are reviewed by park staff for study design and compliance issues process questions are answered. Cooperators and contractors comprise another 6 to 12 studies. Park staff is involved in additional 6 to 12 projects. No one system of tracking these specimen and records-generating projects is used. The interdisciplinary acquisition team needs to represent these special interest groups in its considerations.

By engaging in early and continued dialog with researchers through the permitting process, work planning, and project completion documentation, the curator can identify the objects and records anticipated, planned, and finally acquired by the museum. The curator can utilize the researchers as subject-matter-specialists and require that they catalog their collections. This action will ensure data integrity and will reduce the workload for the curator. The curator can advise the researcher to use a data collection format that easily folds into the museum management dataset, so that the objective of data collection is achieved.

The long-term limnological survey stores its resultant data and samples at the cooperator repository. This arrangement is functional both for the researchers and park staff, and it appears to provide the best protection for the specimens. The curator faces limited storage space for these samples and is concerned with semi-annual sample hydration.

Park staff acknowledges that they have not contributed to the collections, and instead have developed separate systems for preparation, storage, data, and specimen collections. Many staff expressed concern regarding access to collections. They have knowledge of the importance of historical collections and why restricted use of those collections protects the resource.

Considering the destructive nature of teaching taxonomy and mount preparation, it was decided that teaching would occur with specimens not included in the museum collection. For example, a collection of exotic vascular plants is used to train seasonal staff in plant identification. This collection serves resource management in quickly familiarizing staff with the area’s plants, while the museum collection benefits by restricting access and protecting the historic collection from handling.

In a parallel example, historic images are scanned to reduce handling, thus protecting the images from wear and exposure to light. Access is then limited to the historic images; the reproduced images take the impact of use. The educational herbarium specimen is impacted by use, and the historic specimen is protected by restricted, protective access. Long-term care and continuing access need to preserve specimens and objects so that future generations may study and learn from them.

The Science and Learning Center (SLC), due to open 2006, will partner park staff with researchers and educators. The SLC mission invites and supports scientific investigation, incorporating the findings into management decisions and interpretive programs and materials for educators.

The potential for providing SLC users access to collections access has not been thoroughly investigated. The museum management program needs to create finding aids, provide physical access to collection storage, and provide a curator-as-resource. The curator needs to physically retrieve specimens and objects that require attention. The curator's work plan needs to include time dedicated to the SLC use of the collections. This is a new use, and it may need to be revisited once statistics are collected. With the impact of SLC use, other work activities may not be undertaken. The need for additional staff is predicted for this user group, in addition to existing regular and recurring needs by the museum program. The interdisciplinary acquisition team needs to represent this special interest group in its considerations.

The park has formulated a funding request for a science advisor and an education specialist to provide coordination and oversight for park research, inventory and monitoring, educational outreach, and SLC coordination. The positions may not be funded during the lifetime of this plan; therefore, increased work load assistance by these positions has not been calculated.

The curator may also have to spend time planning exhibits for the Rim Visitor Contact Station. The curator may need to create new exhibits, text, brochures, and publications to fulfill the need for access to and possible reproduction of museum and archival materials. The interdisciplinary acquisition team also needs to represent this special interest group in its considerations.

From the perspective of this planning team, the museum management program serves four functions within the park: documentation, preservation, research, and education and public programs. Each of these functions must be documented in terms of time and costs to the museum management program as part of the planning and programming process. Museum collections management staff must do cost analysis for both the current and projected activities of their branch to establish credibility for the management of park museum collections. Work plan development is needed to identify the direct cost associated with collections management and to determine whether essential work is being accomplished in a timely manner. With these data, park staff will be able to develop effective, integrated programs to identify, program for, and meet park needs.

Acquisition planning is a tool that the curator and management team need to forecast space needs, time management, and access needs. Acquisition planning needs to be a cooperative venture. A multidisciplinary acquisition team can work to identify gaps and make collections more robust in areas of heightened interest and reflect long-term research needs. The collections of natural resources, cultural resources, and archives need to reflect the diversity of the park, park management history, and the interests and products of researchers and educators. Research planning can target new acquisitions. Team members can represent several interest groups (for example, resource managers, archivists, educators, and park management). Review of partner repository collections can reveal assemblages of primary and/or supplemental collections, relieving the need to acquire duplicate collections. Team members know and share information in their area of expertise. (For more information, see Appendix E—Acquisition Planning.)

The funding request system PMIS allows park managers to plan long-range resource management and research projects. As these activities generate records and specimen collections, each project should contain a collection management funding element. This may be included as part of a contract or cooperative agreement where the collector catalogs information and objects, or it may be detailed as support by the museum program performing the work. Capturing the costs of collections, both planned and reported, will help future planning efforts. The curator can assist in cataloging element cost calculation.

Inventory, monitoring, and mapping projects are being conducted by NPS staff, cooperators, and researchers. These projects generate data, maps, field notes, and photos that will become part of the park collection. Ecosystem vital signs identified for inventory and monitoring include nonnative species, keystone sensitive plants, terrestrial vegetation, bird communities, aquatic communities, and land cover and use. Integration of data between I&M and the museum management program could create a readily accessible platform of information for researchers, teachers, park staff, and managers. To allow searching across datasets, the nomenclature, data reliability and data quality must have consistent commonalities and be accessible through a stable platform.

CRLA is a member of the Klamath Basin Ecosystem Network. The records that are acquired in network-wide planning and data collection need to be identified nationally as archival collections. These records have received the attention of the CRLA museum management program and include the archiving of reports, data sheets, maps, photographs, and reprints.

Fire ecology, fire management, and fire effects monitoring are generating vast amounts of ecosystem documentation. The archives of fire managers should be added to park archival collections. Once programs are identified as generating documents with a wealth of historical and management importance, it is recognized that the archives will be impacted with new acquisitions.

Reliance on special emphasis funding sources does not appear to be driving programs, but enhancing them. Program support from the Crater Lake Natural History Association enhances and assists the research and monitoring programs.

Recommendations

- Update the park's Scope of Collection Statement.
- Initiate a work plan for the curator for the three parks managed by museum program.
- Create a focus group of senior staff representing all park administrative units to define what the collections should contain, how they should be

managed and accessed most efficiently, and what products should be produced upon request.

- Develop an acquisition plan that targets the priorities for growth of the collections over the next five to ten years.
- Create a focus group to develop the role, function, and responsibilities of the curator regarding the Science and Learning Center access and use of collections.
- Include the curator in discussions and as a signatory to the Crater Lake project clearance requests, research permit application review, and to the Preservation Assessment or 106 forms.
- Implement a system for bringing in resource management records and associated information into the archives on a regular schedule.
- Continue developing and posting finding aids to park staff.
- Inform staff about the museum program and available information resources as part of park orientation.
- Expand and maintain relationships between the museum program and other park programs.
- Initiate branch storage for natural resources management archival collections to include cooperative management and access to the archival collections with the Resource Preservation and Research Division. Utilize secondary and digital copies where possible.
- Promote use of the collections as a resource for all park staff, taking opportunities at training, meetings, and electronic mail to announce new acquisitions.
- Include collection management as a cost of doing business in appropriate project proposals.

Appendix A — Survey Results

This appendix details the results of a survey relating to the archives and collections management program at CRLA. The survey was conducted in advance of the Museum Management Plan to identify and quantify park staff needs related to the existing park archives, museum collections, and library programs.

Survey Objectives

The primary objectives of the survey were to determine the following:

- Percentage of the staff using the park archives and the museum and library collections.
- Percentage of the staff using non-park information resources.
- Primary areas (categories) of information use, and the reasons for use of those specific collections.
- Suggestions for improvement of archives, museum and library collections services.

In addition, limited demographic information was collected to develop a length of service and experience profile, and to demonstrate equitable response from each park administrative unit.

Survey Methodology

The target universe of the survey was the temporary and permanent staff of Crater Lake National Park (CRLA). The survey was sent to a total of 53 staff with a cover memorandum from the superintendent in February, 2005, requesting that the survey be completed and returned to the regional curator. A total of 11 responses were received, representing a 21% response rate. A response rate of 12% is required for this type of survey to be considered statistically valid, so the CRLA response should be considered adequate. Responses were also well distributed across park work units and by employment type, factors which add to the presumed validity of the results.

A checklist was the primary method used to gather information. Additional supporting data was gathered by having survey respondents fill in survey blanks with quantitative information.

Respondents were given limited opportunities to add written comments. Write-in responses are generally not used in surveys of this type as they often fail to elicit statistically valid responses, and the responses that are generated are often difficult to quantify. Most of the written responses in this survey were anecdotal in nature, and tended to reinforce information already recorded by the respondents in the checklist sections.

Because the response to the survey in general (21%) was sufficient to be considered statistically valid, there is an adequate level of confidence in considering the results as representative of the survey population as a whole. Percentages have been rounded up to equal numbers when 0.5 or more, and rounded down when less than 0.5.

Demographics

Demographic information can assist with understanding motivation and needs of the respondents, in addition to documenting an adequate distribution of response across administrative division and employment status. Information collected from this survey included length of service, distribution by administrative unit, and employment status, which are shown in the tables below. Two individuals did not respond to this section of the survey, thus the totals are based on the nine responses received.

Length of Service	**Total (years)**	**Average (years)**
Years of service	130	14
Years at CRLA	87	10
Years in current position	74	8
Distribution by Administrative Unit		
Administration	1	
Interpretation	3	
Maintenance	2	

Ranger	0
Resource management	3
Not recorded	2
Employment Status	
Not recorded	2
Permanent	9

Survey Summaries

When reviewing survey results it is important to remember that a response rate of 12% is necessary for the results of the survey as a whole to be considered statistically valid. Within the survey we have arbitrarily set an additional 12% response to any given section or question as necessary for the response to be considered as "significant." Naturally this significance increases with the number of responses to each section or question. For these reasons the results provided below are phrased in terms of percentages of the respondents to any given section or question.

Percentage of use the collections receive by park staff responding (11 responses):

- 82% used the library an average of 17 times each in the last year.
- 45% used the museum collections/archives an average of 18 times in the last year.
- 66% used non-service archival, library, or museum resources in the last year.

The rates of use and the average times of use per year claimed by this survey are high when compared to the same rates and averages documented for other parks where this survey has been done. This is probably due to the fact that primarily those individuals using the resources were those completing the survey.

In addition, 66% of the staff is also using non-service archival, library, and museum collections in pursuit of information necessary to do their jobs. It would be interesting to determine what services are not being offered by the

park that requires this number of staff to use outside resources at least once a month. This could be accomplished by a one-sheet survey to all employees requesting specific information for improving services.

A total of five respondents (45% of the total response universe) indicated they used the archives and museum collections. Respondents were allowed to pick as many types of collections as they had used. The top five types of collections indicated as being used by this group are as follows:

- 100% - Photographs and images
- 80% - Park cultural resource records
- 80% - Natural resource records/maps/images/reports
- 80% - Park administrative records
- 80% - Historic archives/records

The same five respondents as above (the universe of those respondents reporting collections use) indicated the following as the primary reasons for using the collections. Again, the respondents were allowed to select as many of the reasons for use as applied to their circumstances. The top seven responses were:

- 80% - Address internal NPS information needs
- 60% - Address non-NPS needs
- 60% - Develop publications
- 80% - Information for planning/compliance
- 60% - Maintenance/repair information
- 60% - Planning/compliance
- 80% - Personal learning

These results document that the primary resources being used are the archival collection (a growing trend within the Service). The primary reasons cited for this use are an interesting mixture including both advocate and vocational motivations. (It is uncommon to find this degree of collections use cited for “personal learning.”)

Section II of the survey considered reasons staff did not use the resources and/or suggestions for improvement in the way these resources are managed and made available for use. The full universe of 11 park staff responding were considered, and respondents were allowed to pick as many statements as they felt applied. The top responses were:

- 64% - Provide on-line or remote access to databases
- 55% - Reorganize collections to make them more accessible
- 55% - Provide listing and finding aids of what is in the museum collection
- 55% - Improve electronic access to collections data and object information
- 45% - Provide remote computer access to databases
- 36% - Provide a work area

The responses to this section indicate the primary need of the respondents is to effectively get information from the collections by both physical interaction and intellectual interaction methods.

General Conclusions

A few factors stand out concerning this survey:

- The total number of persons responding was disappointing given both the time of the year the survey was sent out and the fact that completion and return was specifically requested by the superintendent. Sufficient return was realized to make the results statistically valid; however, a larger return rate, and one more evenly distributed across the types of park staff, would have resulted in a better end product.
- According to the survey, the primary use of collections was for the park records and archives in their various forms. This follows a decade-long trend of increased use of archival resources according to the 30+ surveys that have been done. The reasons for use of the collections likewise follow the same trend; the use is mostly in response to needs generated by job-related activities in the park. Thus the park collections are directly supporting various facets of park operations.
- The park staff also documented the need to have the collections more available, both physically (the ability to see and handle items in the collections), and intellectually (in the form of remote and electronic access

to information concerning the items in the collections and the history of park stewardship).

- The survey format provided the park staff with the opportunity to offer individual impressions of the archives, museum collections, and library program operations in a candid manner, as well as providing a venue for staff suggestions for changes and improvements. The survey results provide park management with firm background data that should be useful in developing a specific program to better manage these unique and park-specific resources.

Appendix B — Facility Report

NPS Facility Planning Model Report

NOTE: Nothing in this report should be published as an Official Report of the NPS Facility Planning Model without Approval by the Office of Construction Program Management

Draft Subject To Approval

Identification:

Project Title:	**Crater Lake New Facility**
Model:	Museum Collection Facility
Type of Project:	New Construction
PMIS Number:	
Region:	Pacific West
Park Name:	Crater Lake NP
Your Name:	Richard Cronenberger
Job Title:	Historical Architect
Park Suggested GSF:	
Concurred by (Region):	
Recommended by (WASO, CPM):	
Approved by (DAB):	
Created Date:	8/31/2005 1:45:33 PM
Modified Date:	9/26/2006 10:31:44 AM
Calculator Mode:	Custom Calculator

Comments on this report:

This report run assuming a totally new facility, meeting all the needs of the Museum program.

This information should only be used for long range planning.

All Modifications Subject To Approval

Drivers:

Permanent Staff	3
Others	3
Object Storage	17,262

NPS Park Specific Calculations:

Museum Collection Model Calculations	
Core Museum Collection (NSF)	2,275
Additional Functions (NSF)	427
Tare at 20% (nearest 100)	700
Building (GSF, nearest 100)	3,400
Site (Acres)	0.20
Exterior Requirements (Acres)	0.10
Total Net Construction Cost (Not Calculated)	-

Estimated Square Footage Report:

Room Description	# Persons	# Spaces or Units	Park Modified Spaces with Standard Drivers
Core Museum Collection Functions			
Staff Areas			
Workstations	2	2	160
Staff Restrooms	6	2	150
Volunteer/Intern Workspaces	2	2	120
Storage	3	1	100
Museum File Storage	0	1	100
Offices	1	1	100
Break Room	5	1	62
Recycle Bins	0	1	40
Staff: Net Assignable			832

Staff: Net Assignable			832
Public Areas			
Lobby/Exhibits	0	1	120
Researcher Workspaces	1	1	80
Public Lockers	0	1	50
Public: Net Assignable			250
Processing Areas			
Receiving/Temporary Holding	0	1	80
Material Storage	0	1	50
Isolation Freezer	0	1	40
Processing: Net Assignable			170
Objects Storage Area			
Storage Units, Pallets and Floor Area Storage			778
Archive Storage Area			
Paper, Maps, Media and Fireproof Cabinets			243
Core: Net Assignable			2,275
Tare at 20%			569
Gross Square Feet			2,844
Museum Collection Additional Functions			
Library Space	0	1	277
Others			
Curatorial Workroom	0	1	150
Additional Functions: Net Assignable			427
Tare at 20%			107
Gross Square Feet			534
Subtotal: Building Area			
Buildings: Net Assignable (nearest 100)			2,700
Gross Square Feet (nearest 100)			3,400
Site			
Building			3,400
Parking: Private Vehicles	0	6	1,980
Bike Racks	0	2	24
Site: Net Assignable (nearest 100)			5,400
Tare + Site Constraints			5,400
Site GSF (nearest 100)			10,800
Site Acres			0.2
Site Access			
Site Access (Miles), new, paved			1
Physical and Environmental Constraints			
Environmental			1.00
Soils			1.00
Slope			1.00
Archaeology			1.00

Definitions:

GSF- Gross Square Feet
NASF- Net Assignable Square Feet
NSF- Net Square Feet
NTE- Not to exceed
Tare (for buildings)- Corridors, walls, mechanical, electrical, vertical shafts, vertical circulation, janitor closets, etc.

Draft Subject To Approval

Additional Responses:

Evaluator
Richard Cronenberger, Historical Architect, Intermountain Regional Office, FM

Staff Location Issues
Yes, space is tight and staff space is needed for the collections

Unusual Functions Noted by Facility Calculator
Other Spaces: additional space added.
Library Space
"Other" staff occupy the facility
Storage needs based on "Estimate by Other"

Justification of Unusual Functions
The research library is part of the Museum Program. It currently occupies 312 gross SF. Other staff would be park staff. It is assumed that this facility would be located out of the park. Estimate by others is Richard Cronenberger, Historical Architect.

Draft Subject To Approval

Appendix C — Collections Access Policy

National Park Service (NPS) policy dictates that park-specific cultural and natural collections are available for educational and scholarly purposes. The Service is also charged to manage these resources for optimum preservation. To minimize the potential impact on the archives and museum collections and to ensure basic security and preservation conditions, access to the collections must be documented, restricted, and monitored. The guidelines in this appendix are followed at [name of park] in order to provide supervised management of park-specific resources.

Access Levels to the Archives / Museum Collections

All serious research—regardless of educational level—is encouraged.

Providing different levels of access to collections is a standard curatorial philosophy underlying the policies of most major museums. Based on the information provided on the research application (included in this appendix), individuals will be provided access to different types of collections information or material depending on their needs and the available staff time.

Conditions for Access

- The research application must be completed; it will be used as a basis for determining the level of access necessary, and to maintain a record of use for statistical purposes.
- Level of access will be determined by the chief of Natural and Cultural Resource Management and/or the Collections Manager(s). Prior to allowing direct access to the archives and collections, alternatives such as access to exhibits, publications, photographs, and catalog data will be considered.
- Access will be made with the assistance of the curatorial staff during regular staff working hours. A fee to cover the cost of staff overtime may be required for access outside of the normal working hours.

- Individuals provided access to archives and collections in nonpublic areas are required to sign in and out using the guest register.
- The Guidelines for the Use of Archival and Museum Collections will be followed by all individuals with access to the collections.
- While no user fee will be required for access to the archives or museum collections, the chief of Natural and Cultural Resource Management and the curatorial staff will determine what services may be reasonably offered and what charges may be required for services such as staff overtime, photography of specimens, or reproduction of documents.
- All photography of specimens and duplication of documents will take place on-site using the Guidelines for Photography of Museum Collections and Duplication of Historic Documents.
- A limited amount of space is available for researcher use of archives and museum collections. Researchers are required to check in all collections and remove all personal possessions each evening.
- [Name of park] reserves the right to request copies of notes made by researchers, and it requires copies of research papers or publications resulting in whole or part from use of the collections.
- There may be legal considerations (such as the Native American Graves Protection and Repatriation Act, 1991) that allow or limit access to part of the archives and museum collections.

Access Policy Administration

This statement of policies and procedures is public information and is available upon request from the following:

Superintendent

[Name of park]

[Address of park]

Implementation of these policies and procedures has been delegated to the collections manager(s); however, the superintendent has the final authority to grant access to the archives and museum collections.

The evaluation of requests should consider the motives of the researcher, the projected length of the project, the demands upon the available space, staff, and collections, and the possible benefits of the research project. Access may

be denied if thought not to be in the best interests of the resources, the park, or the NPS. It is expected that the chief of Natural and Cultural Resources Management will make these decisions in consultation with the collections manager(s).

With increased attention and use, the archives and collections will require increased monitoring to provide security, to detect developing preservation problems, and to facilitate prompt treatment. Regular inventory of the most heavily used portions of the archives and museum collections will be required to ascertain object location and condition.

RESEARCH APPLICATION FOR MUSEUM COLLECTIONS AND HISTORIC DOCUMENTS

[NAME OF PARK]

Name _____ Telephone number (_____)_____

Institution/Organization _____

Address _____

Date you wish to visit _____

(An alternate date might be necessary due to staffing limitations.)

Have you previously conducted research in the park's museum collection? Yes___ No_____

Research topic and materials you wish to see

_____

Indicate which activities you wish to do

o Consult catalog cards o Consult archeological records

o View objects in storage o Study objects in storage

o Draw objects o Consult historic documents

o Other _____

Purpose of your research

o Book o Article

o Lecture/conference paper o Term paper

o Thesis o Dissertation

o Exhibit o Project

o Identify/compare with other material

o Other commercial use or distribution _____

o Other _____

I have read the Museum Collection Access and Use/Research Policies and Procedures and agree to abide by it and all rules and regulations of [name of park]. I agree to exercise all due care in handling any object in the museum collection and assume full responsibility for any damage, accidental or otherwise, which I might inflict upon any museum property. Violation of National Park Service rules and regulations may forfeit research privileges.

Signature _____

Date _____

Please return to: Curator, [Name of park], National Park Service, [Address of park]

(Reverse side: Research Application)

PARK SERVICE USE ONLY

Identification (provide at least one)

Institutional ID _____

Driver's License Number _____

Research Topic

_____

_____

Location of Research (check one)

o Curatorial Office

o Storage

o Exhibit Area

o Others _____

MUSEUM OBJECTS REVIEWED BY THE RESEARCHER

[NAME OF PARK]

Park	Catalog	Object Name	Location	Accession	Acronym	Number

APPROVED BY:

Name _____

Title _____

Date _____

GUIDELINES FOR THE USE OF ARCHIVAL AND MUSEUM COLLECTIONS

[NAME OF PARK]

The guidelines provided here are followed at [name of park] regarding use of the park's museum collections and archives. It should be noted that these resources are separate from the park's library, which is managed by the Division of Interpretation.

It is the policy of the National Park Service that its museum collections and archival resources be available for educational and scholarly purposes. The Service is also charged with managing these resources for optimum preservation. To minimize impact on these collections, it is necessary to regulate access to the materials.

Copies of the research application and the full text of the *Guidelines for the Use of Archival and Museum Collections* are available to the public, upon request from:

Superintendent,
[Name of park]
[Address of park]

Availability

The museum collections and archives are open Monday through Friday, from 8:00 A.M. to 4:30 P.M. Park staff should contact the park collections manager(s) for assistance with access. The museum collections and archives are "non-lending," and the materials will remain in the building.

Non-staff users must complete a research application (included in this appendix) prior to accessing information or materials to ensure that assistance is available upon arrival. Access will not normally be granted on weekends. All materials must stay within the study areas provided within the collection management facility. The size and location of these areas may vary according to the time of year, requests from other researchers, and staff available. The researcher may bring only those materials needed for research into the assigned study area.

Registration

The Guest Register, used to record access to museum and archival collections, must be signed when the collections are used by staff or non-staff members. Non-staff researchers are required to complete a Research Application (included with this policy). These forms will be retained indefinitely for statistical analysis and as a permanent record of collections use. A new application is required for each research project and must be renewed each calendar year.

As part of the registration process, the researcher will be given a copy of these procedures to review and sign, thereby indicating his/her agreement to abide by them.

Use of Archival Records and Manuscripts

Many of the park administrative records, archeological records, and other historic reference material have been copied onto microfiche, and a reader/printer is available for limited research use by the public. Where microfiche is available, it will be used for research requests. Only in the most extraordinary circumstances will original documents be used when microfiche is available.

When microfiche is *not* available, the archives user should follow these procedures to ensure careful handling of all materials:

- Remove only one folder from a box at a time. Do not remove or alter the arrangement of materials in the folders.
- Maintain the exact order of materials in a folder, as well as folders within a box. If a mistake in arrangement is discovered, please bring it to the attention of museum staff. Do not rearrange material yourself.
- Do not erase existing marks on documents and do not add any additional marks.
- Do not lean on, write on, trace, fold, or handle materials in any way that may damage them.
- Use only pencils for note-taking. The use of pens of any kind is prohibited. Typewriters and computers may be used for note-taking if provided by the researcher.

Duplication

The park will consider requests for limited reproduction of materials when it can be done without injury to the records and when it does not violate donor agreements or copyright restrictions. Depending on the number of copies requested, there may be a charge for photocopying. Fragile documents and bound volumes will not be photocopied. All photocopying of archival material is to be done by the museum staff.

Copyrights and Citations

The revised copyright law, which took effect in 1978, provides protection for unpublished material for the life of the author, plus 70 years. In addition, all unpublished material created prior to 1978, except that in the public domain, is protected at least through the year 2002. Permission to duplicate does not constitute permission to publish. The researcher accepts full legal responsibility for observing the copyright law, as well as the laws of defamation, privacy, and publicity rights.

Information obtained from the park museum collections and archives must be properly cited, in both publications and unpublished papers. The citation should read:

"(Object name and catalog #) in the collection of [name of park]. Photograph courtesy of the National Park Service."

Restrictions on Use

The use of certain materials may be restricted by statute, by the creator, or by the donor. For the protection of its collections, the park also reserves the right to restrict access to material that is not fully processed, or is exceptionally valuable or fragile, and to information that may be restricted or confidential in nature.

Responding to Off-Site Reference Inquiries

It is the responsibility of the park curatorial staff to attempt to answer inquiries received by letter or telephone within at least 20 days from the date of receipt. Clearly, the extent to which this reference service is undertaken will depend upon availability of staff time and the nature of the question. The

receipt of written inquiries will be acknowledged by telephone if a full response cannot be provided promptly. The staff must set time limits for answering research questions, so researchers are encouraged to use the collections in person.

A record of all research inquiries will be maintained. Such a record is useful for security and for compiling statistics on research use of the collection. Use of the collections by park staff will be included in these statistics.

Guidelines for Handling Museum Collections

Handling museum collections may be hazardous. Follow the guidelines provided here to ensure safe handling.

Safe Handling

Archeological collections can contain broken glass and rusty metal objects with sharp edges. Historic material may retain chemical or biological contamination. Natural history collections contain chemical preservatives and possible biological contamination. Archival collections may be contaminated with mold, insects, and vermin droppings, or may contain asbestos or cellulose nitrate film.

- Use caution in handling collections, and wear gloves when requested to do so.
- Curatorial personnel will retrieve and replace material for anyone using the collections. Direct access to material may be restricted if the object is very fragile.
- Do not remove materials from storage packaging without the permission and assistance of the curatorial staff. The packaging is necessary to prevent damage and deterioration of the specimen, and to protect the researcher from potential injury.
- Always handle objects with clean hands. Use white cotton gloves when handling metal, photographs, paper, and leather objects; washed white duck gardener's gloves may be required for heavy objects.
- Do not use white cotton gloves when handling glass or other objects with slippery surfaces, very heavy objects, or items with friable or brittle surfaces.

- Do not pick up anything before you have a place to put it down and your path to this place is clear.
- Look over an artifact before lifting it to see how it is stored and to observe any peculiarities of its construction, fragility, etc. If an object is made in separable sections, take it apart before moving it. Do not attempt to carry heavy or awkward objects alone. Never carry more than one object at a time, and be particularly careful with long objects.
- Except for small items, always grasp an object with two hands, and grasp the largest part or body of the object. Slide one hand under fragile items as you lift them.
- If an artifact has a weak or damaged area, place or store it with that area visible.

Special Objects

- Mounted herbarium specimens should be laid on a flat surface and the folder cover and specimens handled gently, taking care not to bend the sheets or touch the actual specimen.
- Pinned insect specimens should be handled as little as possible, and then handled by the pin. Avoid bumping and strong drafts when handling these specimens.
- Skulls and skeletons should be kept in their jars or containers while examining.
- Ceramics and baskets should be supported from the bottom, never lifted by the rim or handles.
- Photographs, transparencies, and negatives should be handled by the edges, and they should remain in protective Mylar sleeves whenever possible. White gloves should always be used when handling photographs.
- Unrolled textiles should be broadly supported from underneath rather than by holding from the edge.

Reporting Damage

Please report any damage you observe or cause to specimens.

Behavior

- Food, beverages, smoking, and pets are not allowed in the storage or study areas.

- Staff members are responsible for the behavior of any person accompanying them into the collections.
- Children under six years of age must be accompanied by an adult and physically controlled at all times. Other minors must be under the direct supervision of an accompanying adult at all times.

I have read and understand the above policy.

Name _____

Date _____

GUIDELINES FOR PHOTOGRAPHY OF COLLECTIONS AND DUPLICATION OF HISTORIC DOCUMENTS

[NAME OF PARK]

This policy documents the appropriate procedures for providing photographs of [name of park] National Park museum collections, and for duplicating original historic photographs and documents. The policy is intended to prevent damage or loss through mishandling or exposure to detrimental environmental conditions.

Duplicate Photographs of Museum Collections

There are many possible uses for photographs of the items in museum collections. The most common uses include exhibits, publication, and research. It is the policy of the National Park Service to encourage the use of Service collections in these legitimate ventures and to make photographs of museum collections available within reasonable limitations.

Photography involves exposing often fragile museum objects to potential damage or loss from handling and exposure to heat and light. The Service minimizes this potential damage by photographing items as few times as possible. To accomplish this, the park will develop a reference collection of object photographs that will be available for public use. A minimal fee may be required for copies of the photographs.

To provide this service and to build the necessary reference collection, the following procedures will be followed:

- Requests for photographs of items in the museum collections will be submitted to the park curator, who will establish any necessary priority for the work. Requests should be made on copies of the attached form.
- Requested items that do not have copy negatives will be photographed based on these priorities. A cost recovery charge for photography and processing may be required.
- Photography will be done at the park, under park control, to preclude the possibility of artifact damage or loss. The resulting photographic negatives and their copyrights belong to the National Park Service.

- Once an object has been photographed, the negative will be maintained at the park to fill future requests for photographs of that objects. A minimal cost recovery charge through the Park Association maybe required for prints.

Duplication of Historic Photographs and Documents

All historic photographic processes and document types are subject to rapid deterioration from exposure to visible light and are very susceptible to damage from handling. Handling is often disastrous to these materials and causes damage such as tears, cracks, abrasions, fingerprints and stains. Handling also subjects historic photographs and documents to frequent fluctuations in temperature and humidity.

To prevent further deterioration, copies will be made of all historic photographs and documents, with the copy replacing the originals as the primary item for research and use. The original material will remain in storage, for the most part, as primary source material.

Increased requests for access to and copies of historic photographs and documents will require the following procedures to establish priorities for the duplication work:

- Requests for duplicate historic photographs and documents are submitted to the park collections manager who will establish any necessary priority for copy work.
- Requested items that do not presently have copy negatives will be duplicated based on these priorities. The originals must be accessioned and cataloged into the park collection. A cost recovery charge for duplication may be requested.
- Duplication will be done at the park, or under park control, to preclude possibilities of loss or damage of the originals.
- Once the photographs have been duplicated, copy prints and modern negatives of the originals will be maintained and used for intellectual access and for further duplication. Microfiche copies of historic documents will also be maintained and will be available for use. A cost recovery charge may be required for copy prints.

The park will provide the sufficient quality duplication necessary to fulfill all the normal requirements for suitable reproduction. Outside individuals or organizations that request use of the images will be required to use only those copies provided by the park; and they will be obligated to acknowledge NPS credit if the photographs are published or exhibited to the public. By law, users must also credit the photographer, if known.

REQUEST FOR PHOTOGRAPHS OF ITEMS FROM THE MUSEUM COLLECTIONS

[NAME OF PARK]

Catalog #	Object Name	B&W / Color	Size	Finish

The undersigned agrees to provide the following credit statement for all publication use:

"(object name and catalog #) in the collection of [name of park]. Photograph courtesy of the National Park Service."

Signature _____

Date _____

Appendix D — Library Management Policy

Introduction

The libraries at [name of park] are an essential resource that enables staff to carry out the park's mandate. The operating policies establish guidelines and standards for developing and operating the libraries. These policies also provide stability, continuity, and efficiency in the operation of the libraries. The policies are intended to guide and support decisions of the library manager and to inform park staff and other users of the library's objectives. Operating policies will be reviewed and updated by park staff every two years and be approved by the superintendent, unless policy changes require action sooner.

Objective

The primary objective of the [name of park] libraries is to select, preserve, and make available material that assists park staff and site-related researchers in their work. Primary emphasis will be the support of interpretive services to park visitors.

Responsibility

Implementation of this policy is the responsibility of the library manager. This person will be designated by the superintendent and will be responsible for compiling a list of desired acquisitions, promptly adding new library items to the collection, shelving materials, ensuring that material is returned in proper condition, accounting for the collection, and maintaining catalog materials in computerized and physical form.

Scope of Collection

The collection consists of books, periodicals, microfilm, videotape, maps, photographs, and a vertical research file. These materials cover [emphasis of the park], park mandate and development, and NPS material.

Materials in the library will pertain to the following:

[List the areas of interest to the park, including cultural and natural resource management, law enforcement, maintenance, administration, and interpretation].

Selection Guidelines and Procedures

The Division of Interpretation and Education and the Division of Natural and Cultural Resources will use the following criteria in selecting materials for the library:

- Importance of the subject matter to the collection
- Authenticity and accuracy
- Permanent value and/or historic potential
- Author’s reputation
- Publisher's reputation and standards
- Readability
- Price
- Availability in nearby libraries

The library manager will compile a list of desired acquisitions in August of each year. Input from all staff will be considered. Copies of the list will be forwarded to the superintendent and team leaders for budget and reference purposes.

Microfilm

The microfilm collection will include materials unavailable or prohibitively expensive in their original form.

Periodicals

In addition to general library selection criteria, periodical selections will consider the following:

- Periodicals must supplement the collection as an additional and current source of information.

- Periodicals must occasionally or regularly publish either popular articles or historic articles of use or interest to the park staff.

Loan Privileges

Borrowing privileges are extended to all NPS employees and volunteers at the park. There is a 30-day limit on individual loans. The 30-day loan period can be extended at the discretion of the park library manager. The library manager is responsible for reviewing the card files no less than once a month and contacting staff with overdue materials. No more than three items may be checked out at one time.

At the discretion of the library manager or the chief of Natural and Cultural Resources Management, library privileges may be extended to the following:

- NPS employees from other areas.
- Contractors conducting research in the park.
- Researchers with valid research needs at all levels.
- Other users who will benefit the park and not interfere with normal operations.
- Non-NPS library use will be restricted to on-site use. The superintendent may make exceptions. Use of the library by non-park staff will be by appointment with the library manager. Use will be supervised; users will sign in and check out. The library will maintain an attendance log of non-park users.
- Returned materials are to be placed in the “Return” box. The library manager is responsible for re-shelving and re-filing materials. No other person should re-shelve books. Materials should be re-shelved at least on a biweekly basis.

Damage and Loss Policy

Borrowers will replace lost or seriously damaged materials and, if materials are not immediately available, reimburse the park with the cost of replacement. If materials are not replaced or compensated for within a period of 90 days, a bill of collection will be issued for the estimated market value of the materials.

Abuse of library materials and privileges will result in the loss of library privileges.

Vertical File

The library will maintain a vertical file. This file contains information about the park, photocopied material not suitable for cataloging into the regular collection, pamphlets, articles, and personal accounts from diaries, journals, letters, and newspaper clippings. Materials in this file will be cataloged into a vertical file index, which the park library manager will maintain. This file will be updated yearly in January.

Paperbacks

Paperbacks will be acquired for the following reasons:

- Title is not available in hardcover.
- Substantial price difference exists.
- Subject is estimated to be of current interest only.

Duplicates

Duplicate copies of heavily used materials will be acquired when needed.

Replacement

After all reasonable efforts have been made to recover lost or stolen books, replacement will be attempted if there is a demand and/or the item meets selection criteria. If possible, a replacement should be purchased by the individual to whom the lost book was loaned.

Gifts

Gifts of materials that meet the selection criteria may be accepted with the understanding that:

- The park retains the right to keep, use, or dispose of them as deemed appropriate by the Superintendent.
- The materials will be integrated into the regular collection.
- Park staff will give no appraisals for tax purposes, but the library manager may assist in the following ways:

- Suggest sources of such information, such as dealers' catalogs.
- Provide a receipt describing the donated items but not assigning a value to them.

Controlled Access Collection

A locked cabinet will be maintained in the library with rare and fragile materials. Items will be considered for inclusion in this cabinet if they:

- Are virtually irreplaceable.
- Have a monetary value over seventy-five ($75.00) dollars.
- Have particular historic interest to the park.
- Have unusual attractiveness or interest.
- Are in fragile or delicate condition.

Materials from this collection will be loaned only at the discretion of the Superintendent. Titles will be noted in the catalog as being in the cabinet. A separate list of these materials will be maintained in the cabinet.

Exhibited Materials

The library manager will compile and maintain a list of all books, periodicals, and maps that are used as furnishings and are not part of the library. The list will be kept in the controlled access area.

Interlibrary Loan

Interlibrary loans will be made only through the [name of regional library or support office]. Loans will be made of non-sensitive materials only, and the concurrence of the library manager is required. The log of loaned materials will be kept.

Vertical File Policy

Items in the vertical file may be checked out in the same manner as books unless they are specifically marked to the contrary. When borrowing a vertical file, the entire folder must be taken and all materials returned to the re-shelving area.

Photocopying

Photocopying of materials is permitted except when:

- Materials could be damaged due to flattening the binding or exposure to light.
- Materials are marked “Do Not Copy.”

Material photocopied for use outside the park must be labeled as follows:

NOTICE:
Copyright law found in Title 17, U.S. Code
may protect this material.

Adding New Publications

The Library of Congress Cataloging System (LCS) is used at [name of park]. The following steps will be taken when new publications are added to the system:

1. The Administration Office will receive new books and attend to all invoice matters.
2. The new books will then go to the library manager.
3. The library manager will photocopy the title page and the reverse page, and forward the copy to the [name of regional library or support office]. The library staff will catalog the book, add it to the card catalog, and prepare labels for the book.
4. The library manager will prepare an accession record for the book consisting of date received, cost, source of acquisition, and condition.
5. While books are being added to the catalog, they will be placed in the controlled access area; they can be used in the library only with the permission of the library manager.
6. The library manager will prepare a monthly memo for the park staff that lists the new additions and provides the title, author, and a short summary.
7. When cataloging is completed and labels arrive, the library manager will affix labels, pocket, and checkout card to the publication.
8. Books will then be shelved according to their LCS number.

9. Every four months the library manager will update the park's computerized catalog with the most current copy from the [name of regional library or support office] library. At this time, hard copies of the author, title, and subject listings will be added to the library reference area.

Excluded Publications

With the exception of the publication categories listed below, all books purchased with NPS or cooperating association funds will be accessioned and cataloged into the park library in a timely manner. Excluded categories include:

- Dictionaries, thesauruses, word finders, usage guides, or similar reference guides.
- Other books regularly needed by employees to carry out their day-to-day duties, such as safety manuals, fire codes, regulations, laws, museum manuals, and public health manuals.
- Annual publications, such as almanacs, price books, catalogs, and zip code guides.
- Publications purchased as part of an approved training program.

Books in the excluded category may be included in the collection at the discretion of the library manager.

Inventories

The library will be inventoried annually in October. An up-to-date shelf list will be acquired from the [name of regional library or support office]; the library manager will match the shelf list with current holdings and account for all missing books. Books that cannot be found will be listed on a memorandum, which will be circulated to staff for input. If this process produces no results, the list will be forwarded to the [name of regional library or support office] for deletion from the catalog.

By the end of each fiscal year, the library manager will compile a list of acquisitions of the past year, noting source and cost. The list will be forwarded to the [name of position].

Binding

Unbound or paperback material will be bound at the recommendation of the library manager when value, condition, or frequency of use justifies this step.

Weeding

The removal of material from the collection judged to be of no use for research or documentary purposes will occur on a yearly basis in October. Weeding will take place at the time of the annual inventory, and library managers will use the same criteria used in the selection of new materials. Items considered for removal should exhibit the following characteristics:

- Information outside of the scope of collection
- Outdated information
- Inaccurate information
- Irreparably damaged or worn materials

All items, including those that exhibit the above characteristics, should be carefully considered for possible historic value.

Weeding Procedure

- Items are removed from the collection following the criteria outlined in the preceding *Weeding* section.
- Selected material is included in a memo and circulated to park staff. Final approval of weeding is made by the chief of Natural and Cultural Resources Management.
- A Report of Survey (DI-103) is prepared and circulated.
- Library records are updated.
- Cataloged items are offered to the following:
    - [Name of regional library or support office]
    - [Name of region] Region Units
    - Harpers Ferry
    - Department of the Interior Library
    - Library of Congress

Materials may be disposed of to other institutions at the discretion of the library manager with the concurrence of the [name of position]. The library will be weeded in October.

The staff at the [name of regional library or support office library] may be contacted with questions concerning library management or operations not specific to the parks, at [phone number].

Approved by:

Superintendent _____ Date _____

Team Leader_____ Date _____

Library Manager _____Date _____

Appendix E — Acquisition Planning

The park must create specific goals for the collection in order to define the future direction of the archives, collections, and library. It should develop an acquisition plan that includes short-term goals for the growth of the collection. This plan should delineate the extent of the collections growth and the uses it is intended to fulfill. The plan should also specify the type and amount of growth the park expects for the collection. The following three alternatives for growth of the park's herbarium provide examples of the type of planning that is necessary.

Alternative 1 – High Priority

The growth of the park's herbarium will receive high priority. In the next five to ten years an estimated 10,000 specimens will be contained in 10 to 15 full herbarium cabinets. The herbarium will document all vascular and nonvascular plants found in the park, with special emphasis on threatened, endangered, and sensitive plants. Specimens are expected to represent the diversity of elevation changes, habitats, distributions, and genetic types found in the park. Time series may be represented with annual collections of keystone species, such as [include park specific decisions on this here].

Alternative 2 – Medium Priority

The park's herbarium will be an important component of the park's collections and will grow in relation to projects that generate voucher specimens. In the next five to ten years an estimated 2,000 specimens will be collected in three to four cabinets. The herbarium will seek to include all known vascular plant species in the park, but outside of achieving a synoptic (with all species represented) collection, it will be limited to vouchers from projects; [include further park specific decisions on this here].

Alternative 3 – Low Priority

The park's herbarium will grow as the opportunity to include scientific specimens arises. In the next five to ten years an estimated 500 specimens will be added. The herbarium will attempt to include all known species of vascular plants from the park, but this goal may not be achieved during this period. The vast majority should be well represented. The herbarium will direct large voucher collections to other repositories with the capacity to provide adequate storage and care.

The collections types that are addressed in the acquisition plan should include the main categories of biological, geological, and cultural collections.

The acquisition plan should define an internal process for reviewing potential acquisitions and establishing a decision-making process. One approach is to create an acquisition team that consists of staff members with expertise and interest in managing the growth of the collections. Experience has shown that teams consisting of three to five members operate most efficiently, but the park must decide what size works best. Resource managers are likely team members because they represent the majority of subject matter specialists. The park should also consider interpreters, rangers, administrators and maintenance personnel as potential members. The team can operate on a consensus basis and when views diverge, management can make the decision on unresolved issues after briefings provided by various team members. The team should try to create an effective working relationship—each member must be committed to operating as a team for the best interests of the park.

Appendix F — Suggested Workload Analysis

This appendix provides an example of a system for analyzing the museum management program work elements for CRLA. By completing this chart, the total staffing needs will be documented.

Core Work Elements	**Current (Hours)**	**Current (FTE)**	**Needed (Hours)**	**Needed (FTE)**	**Non-Pers. $**
Acquisition of Collections					
Plan strategy for acquisition					
Identify sources of collections					
Survey for inclusion in park collections					
Appraisal and evaluation of proposed acquisitions					
Manage acquisition committee					
Manage park records					
Acquire rights and permission					
Subtotal					
Documentation of collections					
Accession new acquisitions within two weeks					
Process archival collections including completion of ANCS+ catalog records					

Catalog museum objects					
Catalog library materials					
Photograph museum collections					
Maintain museum documentation					
Manage databases/knowledge systems					
Maintain documentation of treatment, use, etc. Maintain NAGPRA information *Subtotal*					
Preservation and protection of collections					
Maintain facility					
Provide for physical and operation security					
Ensure fire protection					
Monitor environment					
Monitor pests					
Ensure disaster preparedness					
Conduct housekeeping					
Ensure proper storage, including organization, equipment, and housing					
Conduct conservation program by assessing collection condition					

Treat items in need					
Subtotal					
Access and use of collections					
Provide for public and park access including reference services					
Develop and maintain exhibits					
Participate in curriculum-based education programs					
Conduct public program					
Produce publications					
Conduct research and obtain legal rights and permissions					
Loan collections for appropriate use by other institutions					
Develop and maintain internet/intranet access and web site(s)					
Participate in NPS planning and compliance					
Conduct research					
Support appropriate reproduction of collections					
Subtotal					

Program administration and management					
Maintain up-to-date Scope of Collection Statement					
Complete annual reporting: Collection Management Report; Annual Inventory; ANCS+ Database					
Manage annual budget					
Provide for future programming: PMIS and OFS					
Supervise paid and unpaid staff					
Develop and maintain up-to-date museum plans and policies					
Manage contracts					
Maintain information technology/management					
Provide administrative support					
Participate in park management and administrative issues					
Subtotal					
Total					

Bibliography

Good museum management planning requires an understanding of the library, archives, and museum collections as they currently exist; background on how and why these resources were developed; and information on what is required to preserve the resources and make them available for use. To accomplish these goals effectively, planners must first review park-specific documentation such as reports, checklists, and plans, and then make recommendations based on professional theory and techniques that are documented in the professional literature. This bibliography provides the references to park-specific documentation used by the team to understand the current status of the resources.

Park Reference List

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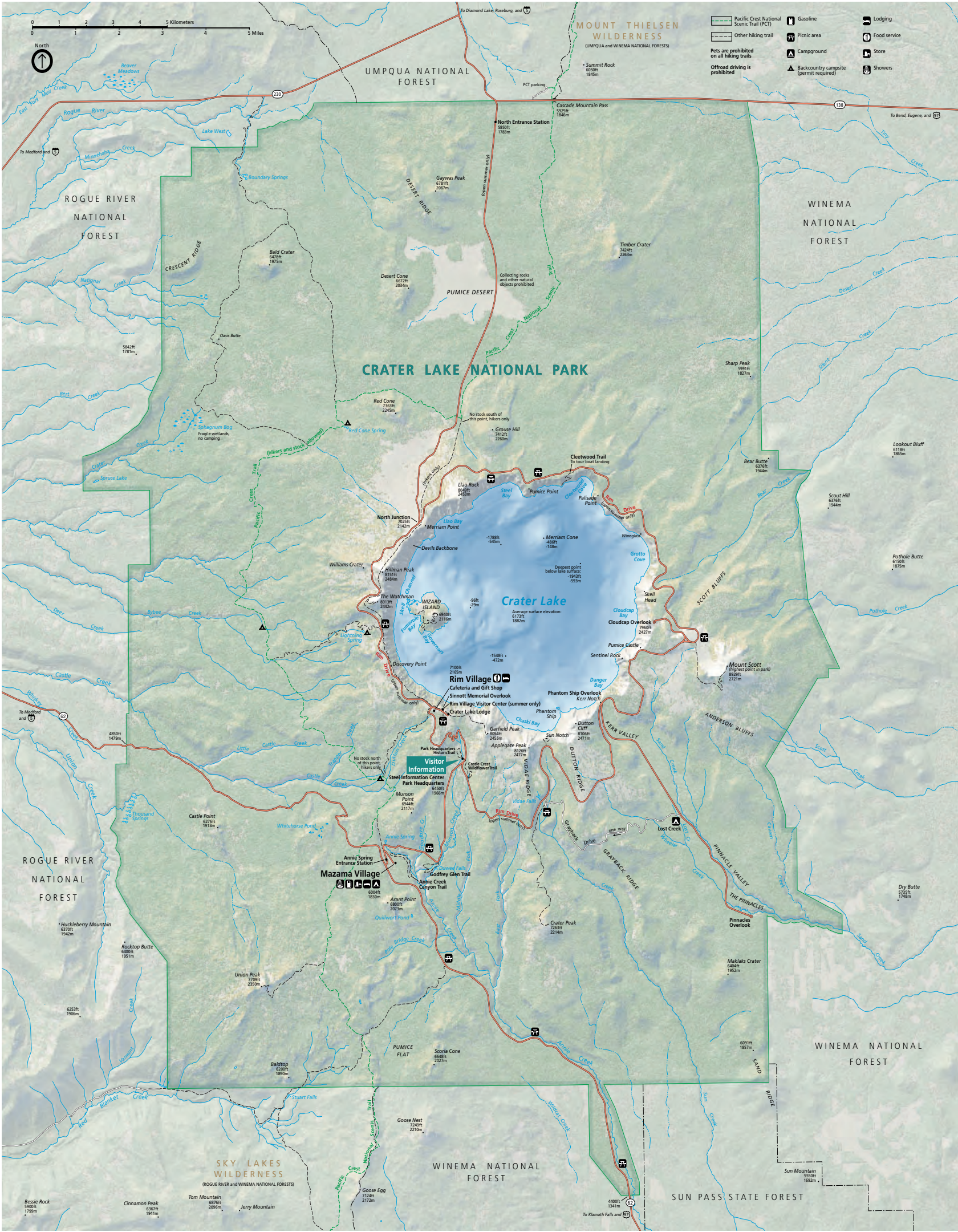
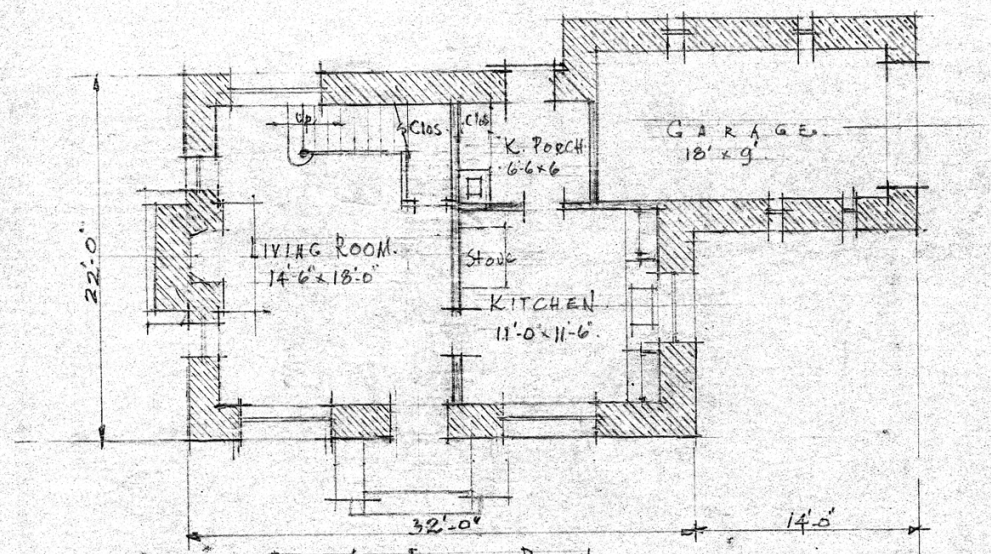
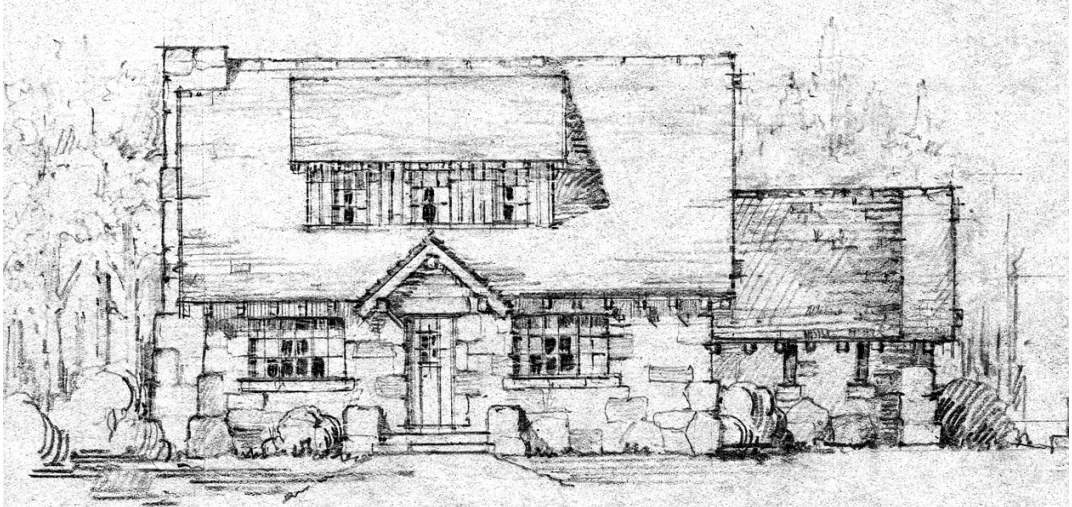

0 1 2 3 4 5 Kilometers
0 1 2 3 4 5 Miles
North
Pacific Crest National Scenic Trail (PCT)
Other hiking trail
Pets are prohibited on all hiking trails
Offroad driving is prohibited
Gasoline
Picnic area
Campground
Backcountry campsite (permit required)
Lodging
Food service
Store
Showers
MOUNT THIELSEN WILDERNESS
(UMPQUA and WINEMA NATIONAL FORESTS)
UMPQUA NATIONAL FOREST
ROGUE RIVER NATIONAL FOREST
WINEMA NATIONAL FOREST
CRATER LAKE NATIONAL PARK
SKY LAKES WILDERNESS
(ROGUE RIVER and WINEMA NATIONAL FORESTS)
SUN PASS STATE FOREST
Crater Lake
Average surface elevation: 6173ft 1882m
Deepest point below lake surface: -1943ft -593m
Rim Village
Cafeteria and Gift Shop
Sinnott Memorial Overlook
Rim Village Visitor Center (summer only)
Crater Lake Lodge
Visitor Information
Steel Information Center
Park Headquarters
Mazama Village
Annie Spring Entrance Station
Cleetwood Trail
To tour boat landing
North Entrance Station
Cascade Mountain Pass
PCT parking
Summit Rock
Lost Creek
Pinnacles Overlook
Rim Drive
(open summer only)
(hikers and stock allowed)
(hikers only)
No stock south of this point, hikers only
No stock north of this point, hikers only
Collecting rocks and other natural objects prohibited
(open summer only)
PUMICE DESERT
DESERT RIDGE
CRESCENT RIDGE
SCOTT BLUFFS
ANDERSON BLUFFS
KERR VALLEY
DUTTON RIDGE
VIDAE RIDGE
GRAYBACK RIDGE
PINNACLE VALLEY
THE PINNACLES
SAND RIDGE
PUMICE FLAT
Llao Rock
Steel Bay
Pumice Point
Cleetwood Cove
Palisade Point
Llao Bay
Merriam Point
Merriam Cone
Devils Backbone
Wizard Island
Skell Head
Grotto Cove
Cloudcap Bay
Cloudcap Overlook
Pumice Castle
Sentinel Rock
Danger Bay
Phantom Ship Overlook
Kerr Notch
Phantom Ship
Chaski Bay
Garfield Peak
Applegate Peak
Sun Notch
Dutton Cliff
Discovery Point
The Watchman
Hillman Peak
Williams Crater
Red Cone
Red Cone Spring
Grouse Hill
Desert Cone
Bald Crater
Gaywas Peak
Timber Crater
Sharp Peak
Bear Butte
Lookout Bluff
Scout Hill
Pothole Butte
Mount Scott
(highest point in park)
Dry Butte
Maklaks Crater
Crater Peak
Scoria Cone
Goose Nest
Goose Egg
Sun Mountain
Castle Point
Munson Point
Annie Spring
Godfrey Glen Trail
Annie Creek Canyon Trail
Arant Point
Quillwort Pond
Vidae Falls
Dowell Falls
Stuart Falls
Whitehorse Pond
Thousand Springs
Sphagnum Bog
Fragile wetlands, no camping
Oasis Butte
Boundary Springs
Beaver Meadows
Lake West
Spruce Lake
Lightning Spring
Huckleberry Mountain
Rocktop Butte
Union Peak
Balldtop
Bessie Rock
Cinnamon Peak
Tom Mountain
Jerry Mountain
To Diamond Lake, Roseburg, and
To Bend, Eugene, and
To Medford and
To Klamath Falls and
Park Headquarters Historic Trail
Castle Crest Wildflower Trail
Pacific Crest National Scenic Trail
Rogue River
Minnehaha Creek
Bert Creek
Bybee Creek
Castle Creek
Little Castle Creek
Union Creek
Whiskey Creek
Deer Creek
Trapper Creek
Dutton Creek
Annie Creek
Sun Creek
Sand Creek
Scott Creek
Pothole Creek
Bear Creek
Desert Creek
Stent Creek
Tiny Creek
Cinder Creek
Red Blanket Creek
Varnet Creek
Winchester Creek
Cinder Cr.
Goodyear Cr.
Middle Fork
East Fork
Pete's Bridge Creek
Whitehorse Creek
Wildcat Creek
Gravback Drive
(one way)
Rim Drive
(open summer only)



FIRST FLOOR PLAN
Scale 1/8"



FRONT ELEVATION
Scale 1/8"=1'-0"