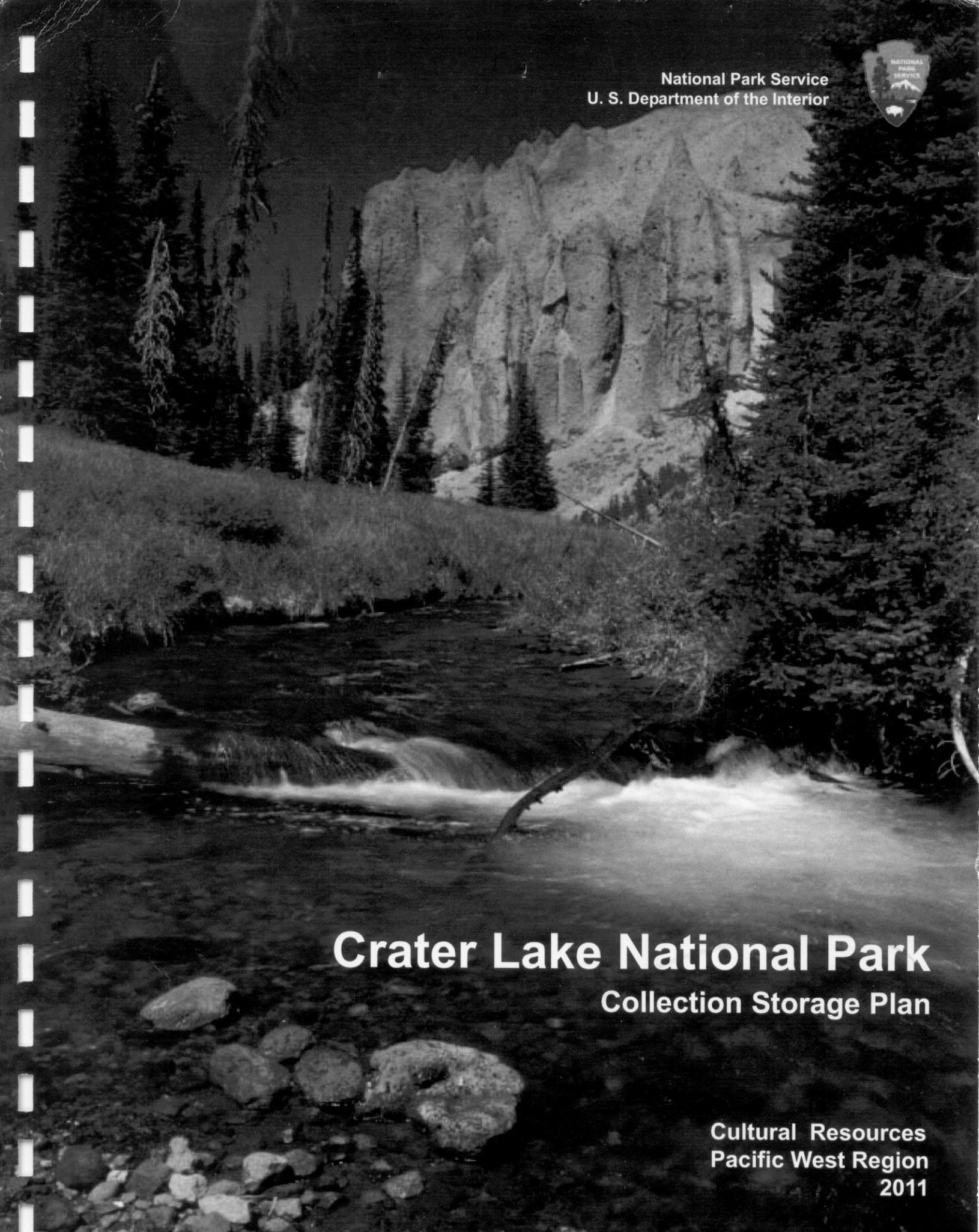




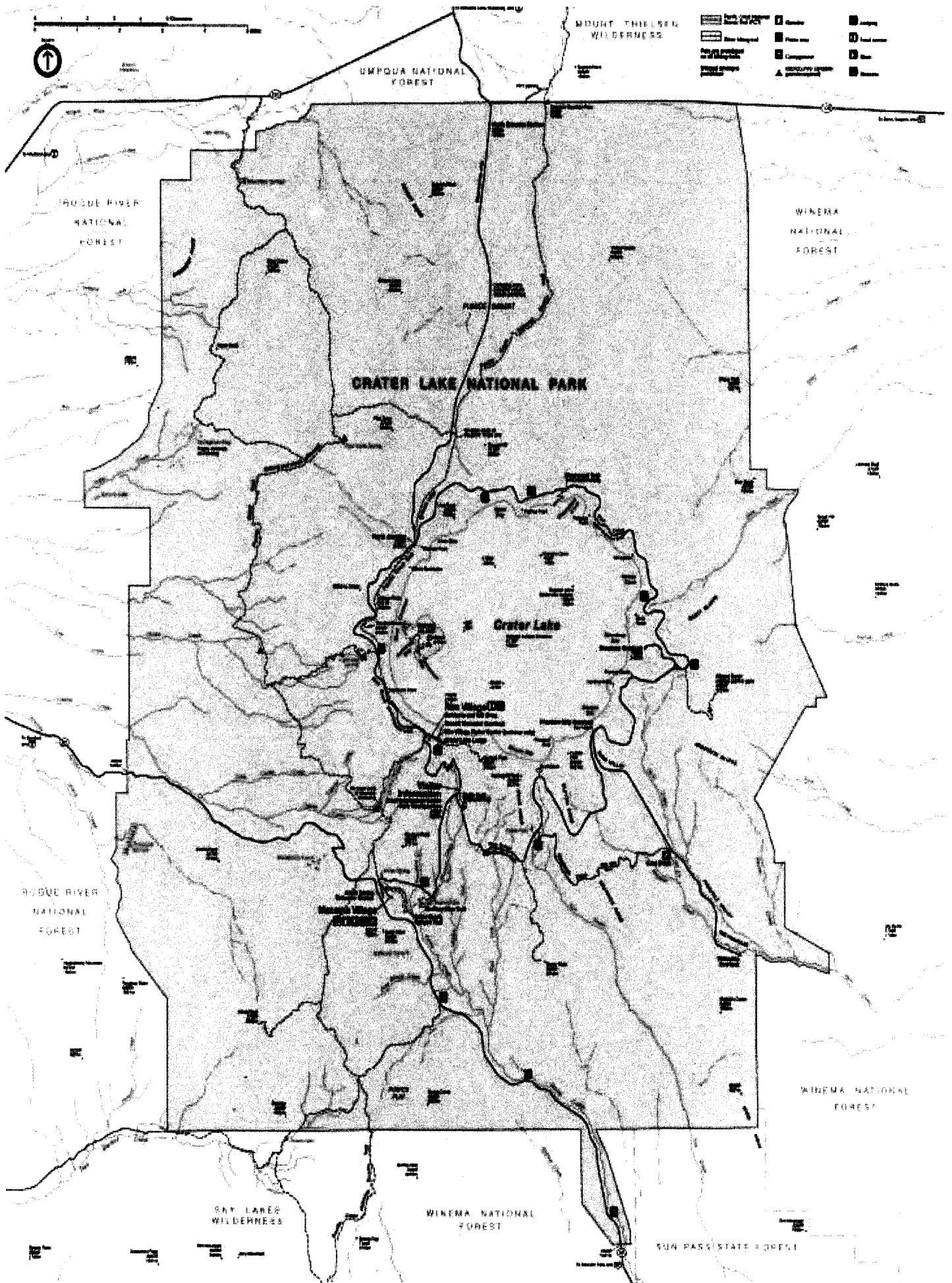
National Park Service
U. S. Department of the Interior



Crater Lake National Park

Collection Storage Plan

Cultural Resources
Pacific West Region
2011



Crater Lake National Park

Expansion of the Museum Management Facilities: An Evaluation of Proposed Alternatives

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Crater Lake National Park

Expansion of the Museum Management Facilities: An Evaluation of Proposed Alternatives

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Executive Summary

The Crater Lake National Park museum collection consists of nearly 240,000 items—natural science specimens documenting the park’s biological diversity and geological processes; works of art created by individuals inspired by the park; historic objects, including items from the Crater Lake Lodge; and archival materials that document surveys, scientific projects, visitor use, and the park’s management history.

Currently, these collections are stored within several structures in the park headquarters area and on exhibit in the Crater Lake Lodge, Steel Information Center, and Sinnott Memorial Overlook (seasonally). The primary museum area is located on the second floor of the Steel Information Center in two small storage rooms and the adjacent office of the curator. Additional (smaller) collections are housed in the administration building (primarily paintings) and the Old Transformer Building. However, as identified by previous park planning documents such as the 2007 *Museum Management Plan* and the 1995 *Collections Management Plan*, these areas are woefully inadequate, as they:

- are insufficient in size to store the collection properly according to NPS museum standards;
- do not possess appropriate museum environments, as collections are adversely impacted by dust, dirt, rodents, and insect pests;
- are not co-located, so effective management, access, and use is extremely difficult; and
- lack adequate office, workspace, and an area to accommodate researchers.

These deficiencies can be corrected only by replacing current storage and workspace with new or additional improved or rehabilitated space. If more suitable space is not created, the collection will continue to deteriorate and be unavailable for exhibits and research, and the public interest will not be served.

In response to these challenges, this planning initiative was developed to provide appropriate prioritized alternatives to overcome these shortcomings and enable the park to build upon all of the progress that has already been achieved. The alternatives presented are prioritized as to immediate, fairly low-cost; interim, requiring additional staff and/or funding support; and long-term, entailing additional dedicated funding for construction/rehabilitation of facilities and relocation of portions of, or the entire, collection.

This report is based on information gathered during the planning team's May 20-22, 2008 visit to the park, as well as subsequent discussions following the site visit. It is organized into four parts: 1) introduction, 2) existing conditions (May 2008), 3) proposed alternatives, and 4) additional information. The planning team's observations and the prioritized potential alternatives which follow should prove useful for the park in developing both short-term and long-term strategies, using the most appropriate, practical, and sustainable means to address these many challenges.

Table of Contents

Executive Summary	5
Table of Contents	7
List of Illustrations	8
Preface.....	9
Introduction.....	11
Existing Conditions: Overview of Facilities Assessed	15
Structures and Spaces Found Ill-suited for Museum Use	15
Existing Park Structures and Spaces with Potential for Museum Use.....	17
Steel Center	17
Old Transformer Building.....	19
Trail Cache (Former Comfort Station)	20
Warehouse.....	23
Steel Circle Duplex	Error! Bookmark not defined.
Fitness Center.....	24
New Construction in the Park	26
Potential Museum Storage Locations Off-Site	27
Related Space Planning Considerations.....	31
Staffing and Museum Program Management	31
Planning Recommendations for Consideration	31
The Alternatives Identified in this Plan	35
A. Short-Term/Interim Alternative	36
Expand Use of Old Transformer Building for Storage (Preferred Short-Term Alternative)	36
B. Intermediate-Term Alternatives	37
Intermediate-Term Alternative B1: Use Additional Space on the Second Floor of the Steel Center for the Park's Museum Management Program (Preferred Intermediate Alternative)	37
Intermediate-Term Alternative B2: Relocate Some Museum Functions to the Trail Cache and Old Transformer Building.....	38
Intermediate-Term Alternative B3: Use Areas in the Steel Center for Museum Offices and Storage.....	38
C. Long-Term Alternatives.....	39
Long-Term Alternative C1: Construct a New Integrated Museum Management Facility in the Park (Preferred Long-term Alternative).....	39
Long-Term Alternative C2: Rehabilitate the Fitness Center for Use as the Park's New Museum Facility	39
Long-Term Alternative C3: Rehabilitate a Steel Circle Duplex for Use as the Park's New Museum Facility.....	40
Long-Term Alternative C4: Locate Park Collections in an Off-Site Repository	41
Alternative D: No Action.....	42
Conclusion	42
Long-term Museum Storage	43
Bibliography	47

Published Works	47
Other Materials Consulted	47
Appendix A: Comparison of All Facilities, Current and Potential	49
Appendix B: Short-Term Alternative	53
Appendix C: Intermediate-Term Alternatives	55
Appendix D: Long-Term Alternatives	57

List of Illustrations

Front cover	View in Crater Lake National Park, photo by Godfrey Glen #200908
Front cover Inside	Map of Crater Lake National Park
Figure 1 Page 17	Overcrowding in museum storage
Figure 2 Page 18	Old Transformer Building
Figure 3 Page 20	Exterior of trail cache (former Old Comfort Station)
Figure 4 Page 21	Exterior of snow-covered trail cache (former Old Comfort Station)
Figure 5 Page 22	Steel Circle duplex
Figure 6 Page 23	Fitness center, exterior
Figure 7 Page 24	Fitness center, interior
Back cover Inside	Drawing of Munson Valley, 2009
Back cover	Trail cache (Old Comfort Station) in the snow

Preface

Although this document is now almost three years old, the park wishes to print its findings. CRLA believes it is important to document the research that was done as well as the recommendations the team of specialists made as a result of their site visit and study. The printing of this document was delayed while further examination of park-wide space limitations was undertaken. With those discoveries also in-hand, it is abundantly clear that the need for indoor space within the park far exceeds simply moving a park operation from one location to another; not enough appropriate indoor space is available within the park to meet all the various program needs.

Off-Site

Bearing this and numerous other factors in mind, some of which are outlined below, the park prefers to explore the alternative of moving the museum management program off-site to a location in a nearby gateway community as recommended in Long-Term Alternative C4. Klamath Falls provides many positive opportunities. However, options for the west side of the park will also be considered.

Several crucial factors that influenced the choice to relocate the museum program off-site have changed or emerged since the team's site visit in 2008:

- The timeline for construction of the Rim Visitor Center is uncertain; the park is not able to predict if/when additional space will become available in the new visitor center for interpretive operations. The interpretive and education program is just as likely to need additional space in the Steel Center.
- Current economic trends are challenging, and opportunities for funding major renovation and construction are even more limited than in 2008.
- Any investment to renovate/upgrade an existing structure(s) will be seen as a long-term solution in these tight budgets; short-term or intermediate-term alternatives involving more than day labor are anticipated to become the long-term solution.

- Demand for in-park space has increased over the last three years as the number of permanent staff has grown.
- Further consideration finds that providing safe winter access to the museum program, if split among three buildings, poses serious challenges requiring additional long-term maintenance monetary investment and changes in winter operations.
- Moving the museum program within close proximity of the park, yet outside the severe snow zone, provides year-round access for off-site researchers while still providing nearby access to CRLA employees.

Introduction

WHAT IS THIS?

During a two-week period in August, 2005, an interdisciplinary team of NPS cultural resources professionals (four curators and one historical architect) assessed the Crater Lake National Park museum program and developed a draft Museum Management Plan (MMP). (Within the Pacific West Region, the Museum Management Plan replaces the Collection Management Plan referred to in the various National Park Service museum-related directives, policies, and publications.) The draft MMP was finalized in early 2008, and approved by the regional director in March 2008.

The MMP team recognized how important museum facilities are to ensure an effective museum program. As a result, museum facilities, along with current and future needs, figured prominently within the plan. In fact, three of the five key recommendations concerned the preservation and use of museum collections and their relationship to, and reliance upon, appropriate museum facilities. Finally, the plan's first two recommendations related to museum facilities suggested that the park:

- identify space adequate to the preservation and use needs of the collection over the next five to ten years, and engage the assistance of the regional office in this process; and
- implement the long-range planning and programming necessary for the development of a curatorial facility that will meet future park needs.

In order to begin to implement these museum facilities-related recommendations, Acting Superintendent Stephanie Toothman requested in February, 2008 that the PWR Museum Management Program assist the park staff to:

- assess the park's current museum spaces;
- consider the existing needs of the collection; and
- identify and evaluate other facilities with the potential to provide appropriate present and future museum storage, workspace, and research area options.

To provide the park with the full range of available alternatives, Regional Curator Diane Nicholson assembled a planning team composed of several individuals with diverse experiences and backgrounds related to cultural and natural resources management: Regional Historical Architect Laurin Huffman, Olympic National Park Curator Gay Hunter, Regional Staff Curator Steve Floray (Team Lead), and Crater Lake National Park Curator Mary Merryman, who represented the park. During the three-day site visit (May 20-22, 2008), the team toured every park structure that houses museum collections and workspace, as well as a number of additional park structures, in order to assess their suitability for use as future museum space.

The team members are unanimous in their assessment that the spaces at the park currently allocated to the museum program are far from ideal. The collections are crowded into two small rooms on the second floor of the Steel Center, with some overflow into the Old Transformer Building. Access to much of the collection is extremely difficult, especially for non-museum staff and outside researchers. From necessity, numerous large objects, including furnishings, are stored in front of specimen cabinets. Access to the interiors of these cabinets requires the large artifacts to be relocated into the adjacent hall, a time-consuming process that places these collections at risk from damage when being transported from room to room in such tight quarters. At the same time, these efforts can be highly disruptive to other park staff members who require access to their nearby offices, the interpretive workroom, or the library. Finally, successful access to items in the main storage room is further impeded as the various cabinets themselves are full beyond appropriate capacity—items are stacked atop others, adversely impacting both access and preservation.

The preservation deficiencies related to the current primary storage location on the second floor of the Steel Center have been quantitatively assessed on the FY2007 Museum Checklist. Accordingly, that space meets only 66% of NPS museum standards.

However, the Museum Checklist lists only **preservation deficiencies**—it neither identifies nor evaluates deficiencies related to access and use of collections, another critical benchmark for an accurate appraisal of the overall museum management program. As a result, reliance upon only the

second floor spaces of the Steel Center with some limited overflow into the transformer building (as is now the case) adequately addresses neither preservation nor access and use shortcomings. Until these challenges are successfully surmounted, the museum program will be unable to furnish a safe and secure environment for the collection while also providing for its legitimate use for exhibits, programs, and research.

An adequate amount of appropriate museum storage and workspace that meets NPS museum standards will provide tremendous benefits to the park by:

- enhancing preservation and protection of its collection by preventing damage and loss;
- providing greater accessibility to the collection for research (that of both park staff and outside researchers), exhibits, and other suitable uses; and
- improving operational efficiencies.

While the collection has numerous preservation needs, individuals also need information that the collection can provide, such as important on-site documentation of park resources; this information should be available for use by park staff and outside researchers for analysis and research. Other important uses of the collection include exhibits, public programs, and other interpretive media. In addition, the continued development of the Science and Learning Center will very likely generate additional needs for enhanced access to these vital park resources.

Existing Conditions: Overview of Facilities Assessed

During the site visit, the team surveyed most of the buildings in the headquarters area, as well as additional facilities at Rim Village and Annie Springs. As Park Curator Mary Merryman was an integral member of the team, the concerns and needs of the park's museum program were readily identified and have been incorporated throughout the planning process. At the same time, the team made a concerted effort to meet with other divisions' staff members and managers. Such inclusiveness was essential—to make certain that no viable alternatives were overlooked or discounted. This process also ensured that the full diversity of expectations, perspectives, and requirements concerning the museum collection's relationships to all facets of park management and operations were made known to the team.

Finally, although the members of the planning team are diverse in their expertise and experience (and each brought observations from their particular vantage point), most discussions resulted in agreement; the recommendations presented in this report were achieved through consensus.

Structures and Spaces Found Ill-suited for Museum Use

Several of the park structures that the team assessed were found to be unsuited for museum use for a number of reasons, including:

- **Current use** - Many of these areas already accommodate other park functions. Relocating these park operations to another building would be highly disruptive, difficult to accomplish (especially if another suitable structure is unavailable), and/or expensive. Also, some buildings' current uses were seen by the planning team as the most appropriate current use based on existing needs and conditions.
- **Location** - Other structures were located in areas of the park that are open only seasonally and/or at such a distance from the curator's office and other collections users/generators as to be impractical and/or not sustainable.

- **Construction** - The materials and/or methods used in the construction of several of the buildings assessed do not easily support the ability of these structures to be rehabilitated for museum use. For example, the building code allows certain practices and materials for residential construction that are incompatible for business (park) use. These include floor-loading limits, egress and other safety requirements, and fire suppression systems, to name a few. Other incompatible characteristics include: several small rooms (in a residence) ill-suited for museum use—an open floor plan is much more useful; the lack of large doors for moving objects into and out of buildings; and heavily peaked, acute-angled roofs, excellent for shedding snow but ill-suited for providing usable space on the uppermost floors.
- **Safety Issues** - Safety issues which would be extremely expensive to correct or adversely impact a historic structure's integrity and context seemed to disqualify several structures. These related to access and egress; hazardous or potentially hazardous activities carried out next door, directly below, or adjacent to the proposed space; or other characteristics of the building with the potential to cause harm to collections or staff.

The specific structures deemed unsuited for museum use include:

- **Community Center** - This building provides conveniently-located space necessary for various community activities for park residents.
- **Canfield Building/Ranger Station (Original Mess Hall)** - This structure is used to its full extent by the Ranger Division. No space is available to accommodate any additional tenants or activities such as the museum program.
- **Prep-Kitchen, Concession Dormitory at Annie Springs** - This first-floor room, originally intended as a prep-kitchen, is used as storage space by the park concessionaire. This location is not optimal for making the park collections easily accessible to park staff and other researchers. Locating collections within a structure also used for overnight accommodations and food-service operations would place the collection in jeopardy of damage, deterioration, or loss due to fire, security, and other related circumstances (plumbing problems, vandalism, rodents and other pests, and so on). However, as this underutilized facility was originally designed to be weather-tight, vermin-resistant, and climate-controlled, the space should be considered

for accommodating other park needs as future space adjustments are made.

- **Concession Café and Gift Shop on the Rim** - The National Park Service space on the second floor is slated for interpretive exhibits. No other space is available within the building.
- **Maintenance Building Attic** - Numerous accessibility, egress, and compatible use and code issues make the attic inappropriate for accommodation of the collection. This environment is not conducive to the long-term preservation of the collection nor the health, safety, and well-being of any park staff working therein.
- **Natural Resources Building** - This structure effectively performs its present mission; no additional space is available for museum use.
- **Sager Administration Building** - This building is functioning as intended; no additional space is available for museum use.
- **Sleepy Hollow Seasonal Housing Units** - All of the park's seasonal housing is needed for its intended use. Inadequate structure and seasonal access limitations exist as well.

Existing Park Structures and Spaces with Potential for Museum Use

The following park structures and areas were assessed for possible adaptive re-use as museum space. The planning team considers them as potential alternatives for increasing and enhancing museum collection storage, work, access, and research space. With thoughtful, sensitive, and appropriate rehabilitation strategies, all of the spaces noted below could provide appropriate museum space in accord with NPS museum standards.

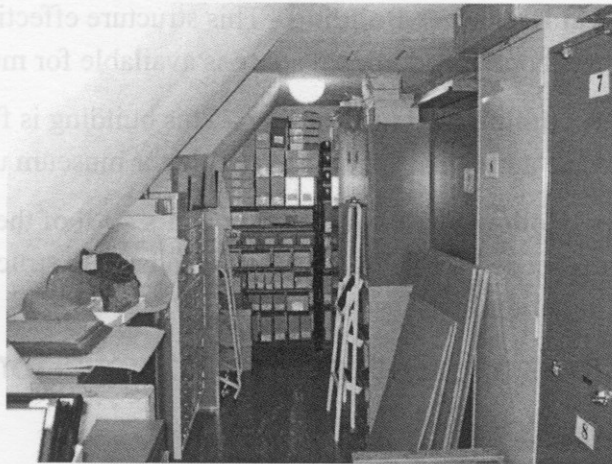
All of these buildings and areas will require varying amounts of time, funding, and effort to effectively adapt them to meet the requirements of the museum programs. *Some of the short-term or currently-feasible alternatives may, in the end, be less cost-effective than planning now for the intermediate and longer-term sustainable solutions.*

Steel Center

The Steel Center houses the bulk of the museum collections in two crowded rooms and the park curator's office. With increased organization, these

spaces could function more efficiently, but they do not have the potential to adequately accommodate the collection long-term. Also, access is seriously inhibited by the current storage configuration.

As seen in Figure 1, the primary collections room is severely overcrowded, so much that the majority of the cabinets cannot be opened unless collections stored in the aisle are relocated from the room. Such constant handling and temporary relocation of collections within such tight quarters places the items in an unwarranted and high risk situation of damage or loss. Such congestion presents numerous opportunities for park staff to injure themselves while



attempting to negotiate a pathway for access. All non-museum property and other items not considered appropriate for accessioning should be removed from collection storage because of these limitations.

Figure 1 Overcrowded museum storage

The team discussed possible relocation of offices and workrooms spaces in the Steel Center. Park staff will have to judge whether this is either feasible or desirable. For example, if seasonal staff office and workspace were to be accommodated in seasonal buildings, some additional space on the second floor might become available for the museum program. This would allow for additional contiguous museum space, an obvious benefit to the museum program.

One potential alternative concerns the large interpreter's workroom. This room is heavily used during the summer by the seasonal interpreters. However, the summer season lasts a few short months each year. Is the current use of this room the most effective use of this space? Perhaps the seasonal interpreters could be accommodated within a seasonal-use building at the heavily-used visitor areas at the Rim (i.e. portions of the Concession Building, the 1928 Building, the Community Building, or another seasonally-available building).

The use of electronic media might also save space in the Steel Center, yet still provide for access to needed information and references. For instance, interpretive resources such as the park's photograph collection and many of the studies and reports that are used as references could be digitized, stored on the park's server, and made available through the park's data network. Another option for creating more space in the Steel Center would be to move the library to a dedicated building such as one of the small stone houses, where it would also be readily accessible to the scholars in the Science and Learning Center program.

Old Transformer Building

The Old Transformer Building currently houses some components of the museum collection. This use has already led to improvements in the collections storage situation at the Steel Center. The Old Transformer Building is heated and provides an open floor plan for storage except for areas in front of the telephone, alarm, and other electronic panels.

The building is well lit but needs to be sealed against pest infestations, regardless of use. In order to minimize housekeeping and security issues, bicycles, snowshoes, and other non-collection items should be removed from the building as soon as possible. For collections security, the door lock should be equipped with a key core unique to the museum program.

In the short-term, inert objects such as geology specimens and other hardy items stored in sealed cabinets and containers can be properly stored in this space. The building also can provide appropriate space for the storage of curatorial supplies as well as a location for those items being considered for inclusion into the museum collection.

In the longer-term, this building may be able to accommodate the bulk of the collection presently stored in the main storage room on the second floor of the Steel Center. The use of both rooms would be required and it would be helpful if the telephone equipment could be relocated. A good deal of floor space is used for the storage of boxes of interpretive division files, which may or may not be appropriate for inclusion within the archives. Until such time that these files can be assessed by an archivist, their temporary relocation, perhaps to Oregon Caves National Monument or Redwood

National Park (both of which could accommodate these items in their modern storage facilities), would allow for a more effective use of the space within the Old Transformer Building.

A detailed cabinet-by-cabinet storage assessment should be conducted, which involves a qualitative and quantitative assessment of all items stored within every cabinet and cabinet drawer within the Steel Center and Old Transformer Building. Any possible compacting of items would be noted, as well as expansion needs, to determine exactly how much of the collection could be housed within the Old Transformer Building. Much, if not all, of the non-archival collection could be housed within this building, although the structure lacks space for additional growth. As a result, the Old Transformer Building could be part of the solution but not the entire solution to the park's museum storage challenges.

Trail Cache (Former Old Comfort Station)

The close proximity of two historic structures, the Old Transformer Building and the trail cache, provides an opportunity to house the park collection in one compact and easily accessible area. Altering the use of the trail cache would necessitate moving the trail crew supervisor's office and finding locations for other activities such as a trail crew workspace and lunchroom. The most suitable location would seem to be within the maintenance building, especially considering its large size and the fact that it already houses other maintenance programs. The sharing of these facilities between maintenance and trail crew staff would be a practical alternative, especially as the trail crew's accommodations would be enhanced.

Another potential office location might be within the Steel Center, following a minor reorganization and relocation of interpretation offices and work areas. For example, if the chief of interpretation moved her office to the second floor (the area currently used for archives storage), the trail crew supervisor could then move to the vacated first floor office.

Some questions remain as to whether this structure can accommodate future collection growth, unless some portions of the collection were stored in an off-site repository (see below).

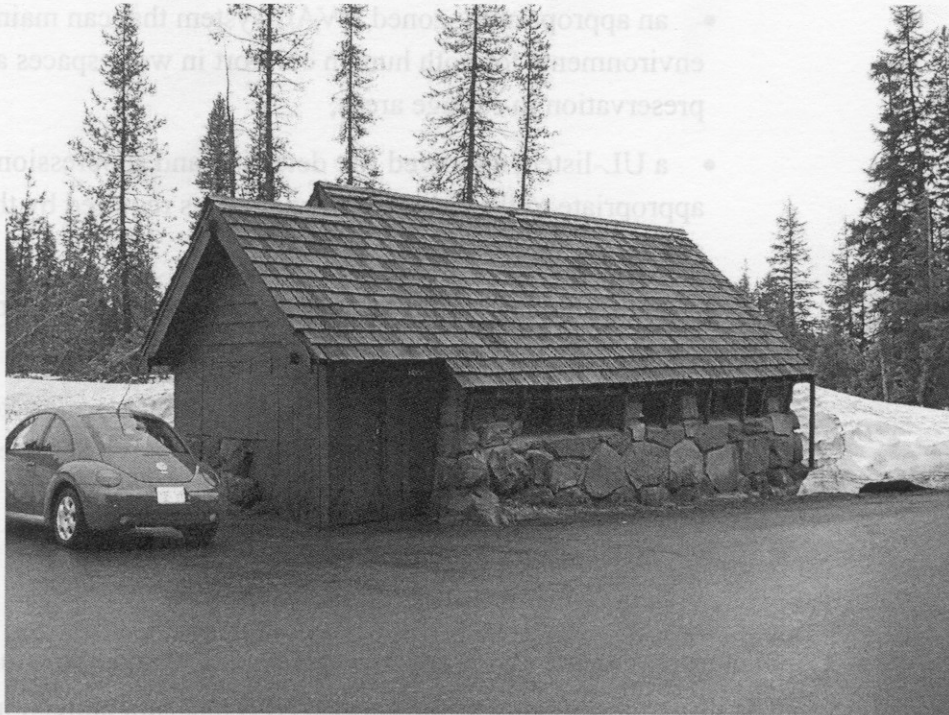


Figure 2 Exterior of trail cache (former Old Comfort Station)

No matter what its future use, the trail cache is in need of rehabilitation, because of present health and safety issues related to on-going pest infestations in the building.

The planning team recommends that in addition to addressing the continuing pest issues, any rehabilitation of the trail cache for future museum use include:

- well-sealed doors to inhibit museum pests, dust, dirt, moisture, and other environmental factors detrimental to the preservation of museum collections;
- secure deadbolt locks with a key core unique to the museum management program;
- separate areas for collection storage, workspace, office, and research activities;
- wet laboratory for handling various fluid-preserved specimens;
- adequate lighting in each area according to function;

- an appropriately-zoned HVAC system that can maintain separate environments for both human comfort in work spaces and objects preservation in storage areas;
- a UL-listed, approved fire detection and suppression system, appropriate to the risk and occupancy, as required by the regional structural fire management officer;
- telecommunications, including computer network and telephone service;
- a UL-listed, approved intrusion detection alarm system, always monitored by park dispatch, Federal Protective Service, or a private UL-listed central station; and
- installation of a new, level concrete floor slab with moveable storage system rails integrated into the floor.

Incorporating the above list of requirements would allow the rehabilitated facility to meet many of the various NPS museum collection preservation standards. No matter which building/s may be rehabilitated for future museum use, these requirements, at a minimum, must be included in both the design phase and the construction. This is a significant consideration when reviewing the various additional building options that follow.

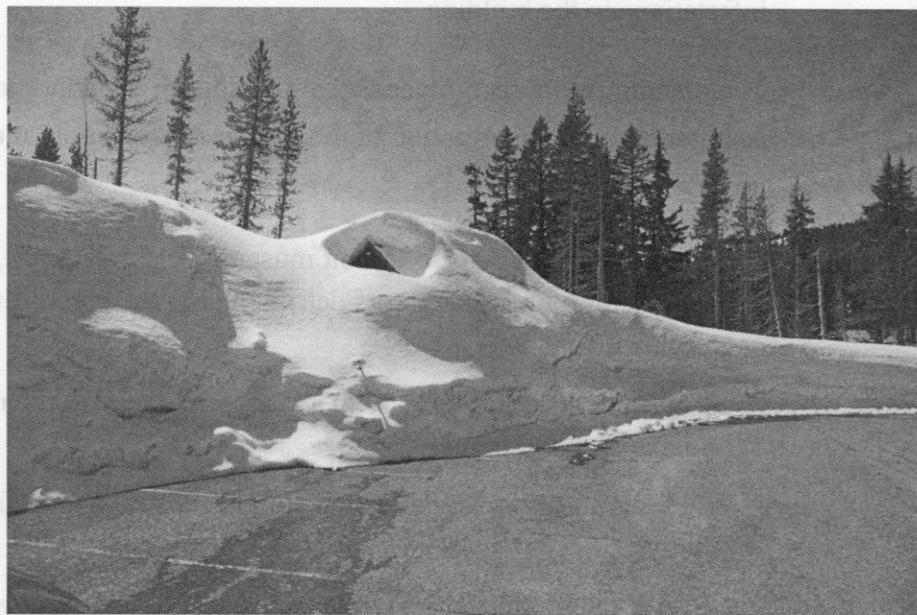


Figure 3 Trail cache (former Old Comfort Station) in the snow

Warehouse

This structure is used by the Division of Maintenance for general storage. It is extremely well-organized to accommodate this use and is functioning as intended. However, additional compacting of these functions within the building could be possible. If compactor shelving were employed to house supplies, additional space for museum collections within the building may become available. At a minimum, the building may be able to accommodate geology and other hardy, inert collections, which would free valuable limited space with the Old Transformer Building.

In the long-term, perhaps one of the storage sheds behind the Warehouse could be enclosed to house either collections or maintenance supplies. Finally, another option to consider is the construction of another storage shed within the immediate area to house some of the materials now in the Warehouse. (See discussion concerning new construction, below.)

Steel Circle Duplex

Adapting one of the Steel Circle duplexes (both units) has the potential to provide the park with a long-term collection facility. The garage area has abundant space for receiving, isolating (for pests), cleaning, and carrying out preservation treatments on both newly-acquisitioned and other collection items.

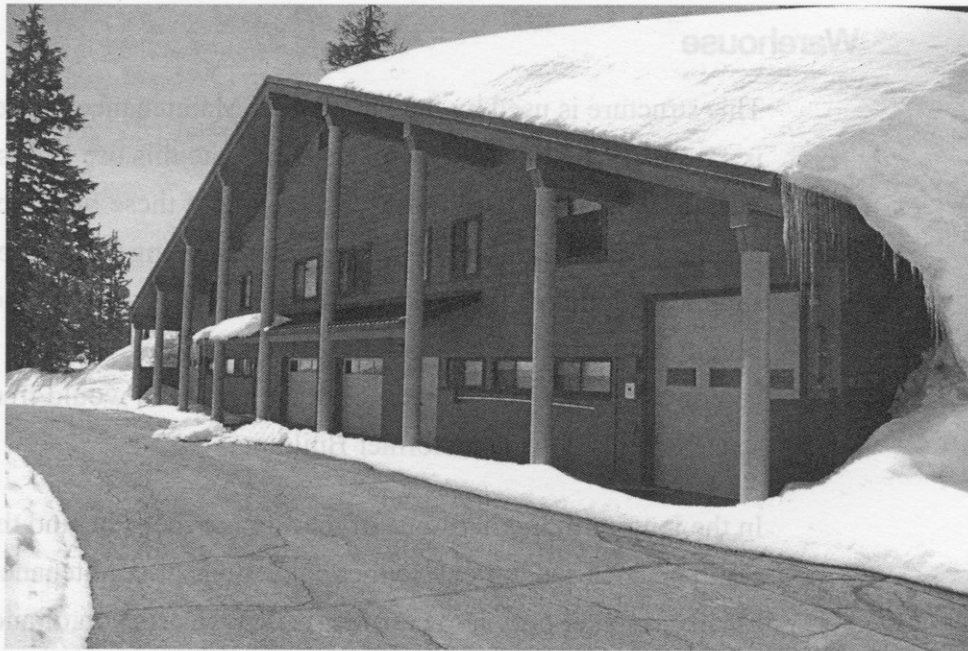


Figure 4 Steel Circle duplex

The size of the duplex allows for future collections growth. While the ground floor slab-on-grade areas could be adapted for high density mobile aisle storage systems, major reinforcement would be necessary to house heavy and dense collections on the upper floors. Other structural modifications would be necessary to provide circulation between the two apartment units. The same rehabilitation measures as those listed for the trail cache would also apply to this building.

Use of one of the Steel Circle duplex units has one major disadvantage—the loss of two park residences. Although this option deserves consideration, any reduction of available employee housing would not be in the long-term interests of the park. As a result, use of a Steel Circle duplex is seen as the least desirable long-term alternative for in-park museum collections storage.

Fitness Center

The fitness center building has the potential to provide the most easily adaptable space of all park buildings surveyed. The open floor plan lends itself well to collection storage configuration and organization, and installation of compactor storage would not be complicated. Its natural lighting would provide inviting study, office, and work areas. The building's

central location would facilitate use by park staff, and it would also be easily accessible to outside researchers. Dedicated parking for visitors and/or collection activities is another advantage.

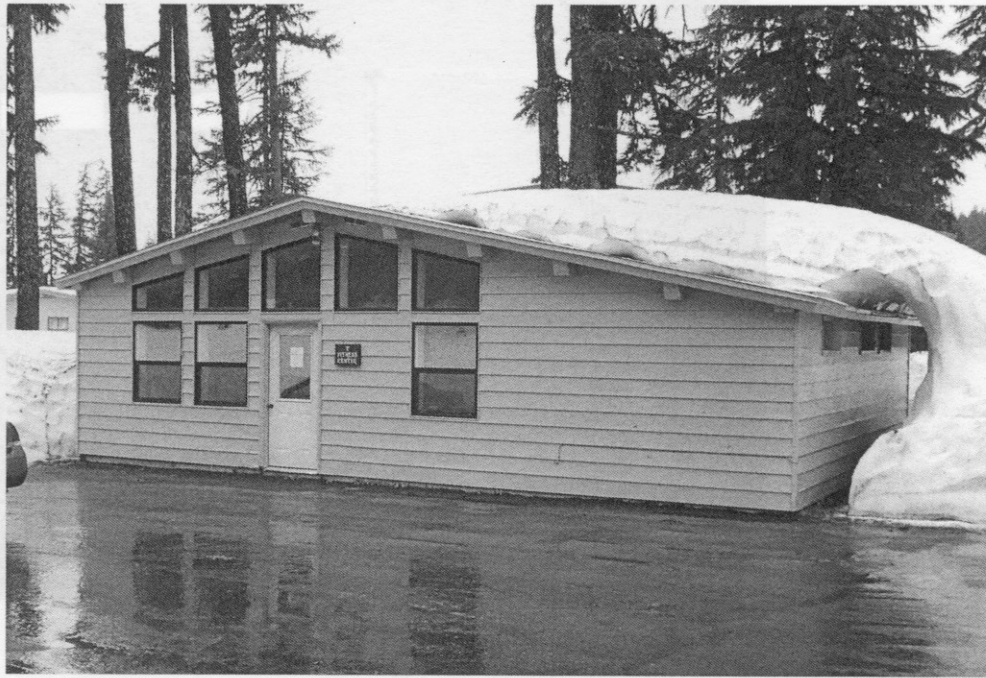


Figure 5 Fitness center, exterior

The nearby Community Center is due for a major adaptive rehabilitation. Should the park implement this rehabilitation, it would create an excellent opportunity to provide a new location for the fitness center, located within the same building as many other such community/park resident amenities.

Of all the on-site building options, this alternative would likely prove to be the least expensive to implement. The same rehabilitation measures as listed for the trail cache would also apply to this building.

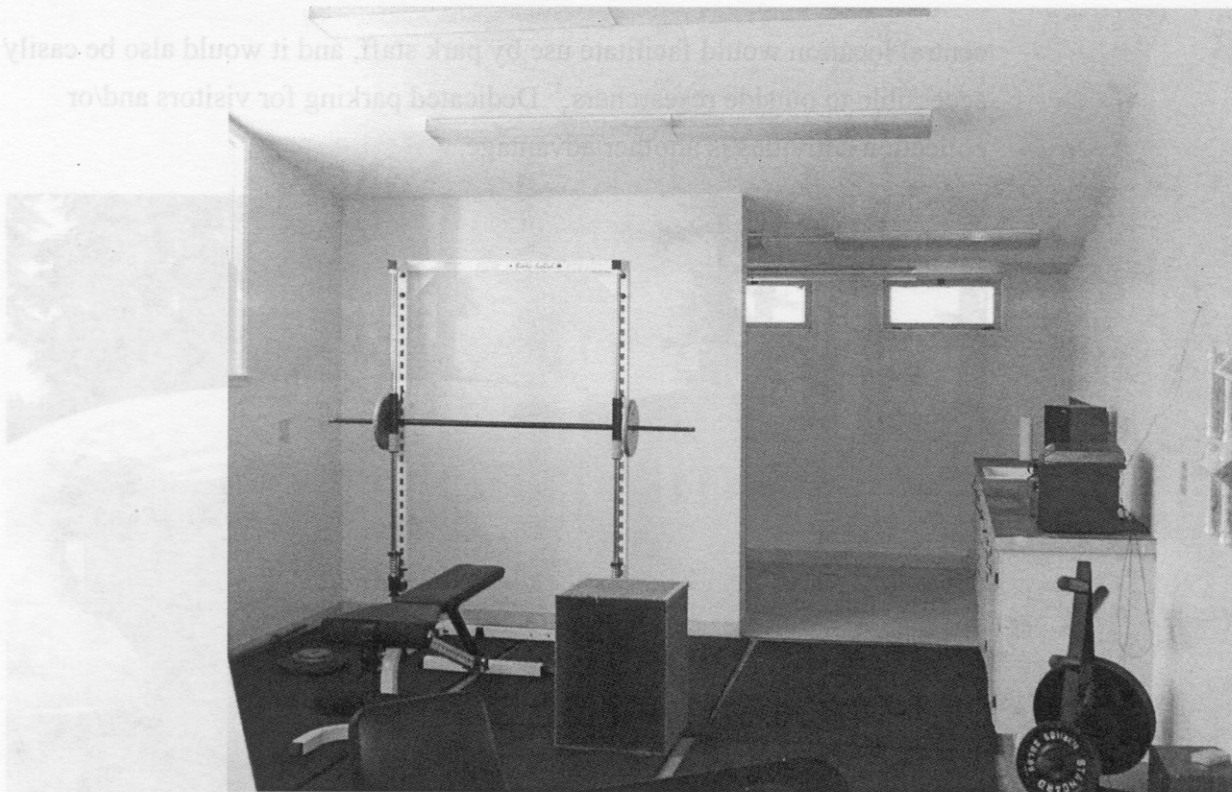


Figure 6 Fitness center, interior

New Construction in the Park

Another alternative for serving the park's long-term museum management needs is the construction of a new building within park boundaries to properly house museum storage, office, work, and research functions. As stated in the park's approved Museum Management Plan (MMP), a new facility of 3,400 square feet (SF) would accommodate the museum program's current functional and operational needs, as well as provide space for anticipated growth of collections. To provide the most effective use of space, compact storage should be installed to house both archival and object collections.

This figure of 3,400 SF was determined by analyzing "actual current museum operational data"—MMP team member Intermountain Region Historical Architect Richard Cronenberger used the NPS Curatorial Facility Design Program that he developed. This program provides objective, quantifiable, outcome-based, facility planning data that is based upon the particular park's needs.

Mr. Cronenberger notes in the Museum Management Plan that the proposed 3,400 SF structure "...would be classified as a small facility." Estimated net construction costs were \$2,040,898 in FY2005 dollars. Using the Bureau of Labor's Statistics Data for the Western United States (inflation rate average of 3% per annum), these costs can be escalated for FY2008 at \$2,230,145 and FY2010 at \$2,365,960.

The General Management Plan states that "current and future needs for office and administrative space would be accommodated without additional construction." With the tour of possible collections space alternatives, the team became aware that the park would benefit from a comprehensive space analysis/utilization plan that did not rule out new construction within the parameters outlined in the GMP. New construction within the park need not be insensitive to the natural environment. In fact, careful planning carried out by a multidisciplinary team devoted to design and construction of a sustainable, green structure could actually be harmonious with the natural setting, like many of the historic structures in the park.

In accordance with the "Mitigating Measures" section of the General Management Plan, any new facilities constructed within the park should "...be built in previously disturbed areas or in carefully selected sites with as small a construction footprint as possible." Potential construction sites in previously disturbed areas include the site of the former building (with existing concrete pad) behind the Warehouse and the "bone yard" at Annie Springs. Another possible location is that proposed for the new fire cache building off Route 62. Co-locating a museum facility adjacent to the new fire cache would keep the construction impact area to a minimum.

Regardless of location, any new construction will require adequate funding to carry out NEPA and Section 106 compliance.

Potential Museum Storage Locations Off-Site

The planning team was specifically asked by the superintendent to address the potential for storing museum collections at off-site locations.

Unfortunately, time constraints did not allow the team to tour any potential facilities outside the park during the site visit. The Service has longstanding partnerships with a number of universities and museums which provide off-

site storage of NPS museum collections, and such strategies should always be considered if in the best interests of the park, the research community, and the public.

Should the park wish to pursue off-site collections storage, establishing a multidisciplinary “Museum Collections Access, Use, and Storage Committee” would be beneficial. The committee, chaired by the curator, should include a cross-section of museum/archives users and generators at the park. Such representation might include an individual from each of the following disciplines: natural resources management, interpretation, cultural resources, maintenance, and administration. In assessing the park’s needs related to museum storage, the committee may wish to consider the following questions:

- What collections, if any, needed to support on-going park research and management activities must be housed at the park?
- If such collections are not needed on a daily basis, could these materials be housed in an appropriate off-site facility at a reasonable travel distance from the park?
- Which collections could be more effectively stored elsewhere? For example, are there any opportunities for sharing costs and staff related to museum management by partnering with other area parks, federal and/or state agencies, institutions, and organizations?
- If the collection is infrequently needed only for in-park research and management purposes, would appropriate off-site storage of some, or all of the collection, allow for:
 - cost-savings through sharing of facilities, funding, and staff?
 - environmental/sustainability benefits related to combining several different organizations’ operations (and separate facilities) into one consolidated facility?
 - enhanced access for non-park researchers, especially if non-park researchers are considered to be the collection’s primary users at some future date?

Obtaining answers to these questions is beyond the scope of this report; however, the planning team has included the following view for consideration:

- **Natural science specimens** provide documentation on park resources and should be available for scientific research. Depending on the type of project, natural science specimens can be quite numerous.
- **The Park Scope of Collection Statement** will address what the park can and should maintain on-site and for what purposes.
- **Universities and other museums** that cater to scientific research for the Pacific Northwest have the potential to be desirable repositories for those specimens that should be readily available to scientists operating outside of the park.

The off-site repositories noted below may be able to accommodate portions of the park's museum collections. Facilities that the planning team is aware of include the following (with distance from Crater Lake National Park noted):

Universities

- Southern Oregon University (89 miles from the park)
- University of Oregon Museum of Natural and Cultural History (143 miles from the park)
- Oregon State University (187 miles from the park)
- University of California, Davis (349 miles from the park)

Museums

- Consideration could also be given to creating a repository agreement/s with a museum/s possessing important and heavily-used Pacific Northwest collections. The park is located almost equidistant from both Seattle and San Francisco, home to these two institutions:
 - California Academy of Sciences, San Francisco (415 miles from the park)
 - Burke Museum of Natural History and Culture, Seattle (415 miles from the park)

Other Federal Facilities Outside Crater Lake National Park

The planning team also considered various federal facilities in the vicinity that currently may possess:

- adequate museum storage space at the present time to accommodate some or all CRLA collections;
- existing unused structures or spaces within a larger building (such as unused storage or office space) that could be reasonably rehabilitated to serve as a CRLA or multi-agency museum facility; or
- land that could accommodate a newly constructed multi-agency (multi-agency funded) museum facility.

Many of these options may appear impractical; however, the park is encouraged to evaluate all of them for any possible potential, should partial or entire off-site storage be deemed in the best interests of the park.

Potential off-site federal facilities and/or locations for new facilities that the planning team is aware of include the following (with distance from Crater Lake National Park noted):

- National Park Service Warehouse, Medford (77 miles from the park)
- Bureau of Land Management, Medford District office (77 miles from the park)
- Lava Beds National Monument (85 miles from the park)
- Oregon Caves National Monument (123 miles from the park)
- Redwood National Park Museum Facility (209 miles from the park)
- Federal Records Center, Seattle (415 miles from the park)
- A future Klamath Network Museum Facility (location to be determined)

Related Space Planning Considerations

Staffing and Museum Program Management

Crater Lake National Park has been fortunate to have on its staff, since 1993, the services of a highly trained, skilled, and knowledgeable full-time professional museum curator. Over the past fifteen years, a tremendous amount of work has been accomplished, resulting in the establishment and maintenance of an effective and proficient museum program.

These important achievements at the park are mirrored by the highly successful museum programs at neighboring Oregon Caves National Monument (ORCA), and Lava Beds National Monument (LBE). In 2003, the CRLA curator was designated curator-of-record for these two parks as well. Obviously, these two curator-of-record agreements have resulted in greatly improved management of the collections for ORCA and LBE. However, there has been a corresponding decrease in curatorial time available for the CRLA collections. Although ORCA and LBE provide funding for travel costs, salary and benefits are still covered solely by CRLA.

Administratively, the museum program at Crater Lake is part of the Division of Interpretation, Fees, and Cultural Resources Management. Although the curator is responsible for managing all aspects of the museum program, she reports to the chief of interpretation. While this administrative structure has been in place since 1993, the 2007 Museum Management Plan recommends that the curator position be transferred to the Division of Resources Management.

Finally, concerning the complexities and responsibilities associated with the management of a three-park museum program, the acting superintendent in 2008 recommended that a desk audit of the curator position be implemented.

Planning Recommendations for Consideration

As noted throughout this document, Crater Lake National Park, like many other National Park Service units, is continually challenged to ensure that

each division possesses adequate office, work, and storage space. While assessing the various park structures that may be suitable for rehabilitation for use by the museum program, the planning team was cognizant of this circumstance. The planning team has no desire to disrupt other park operations; any gains to the museum program should not be at the expense of other operations. If a structure proposed for museum use is currently allocated for another use, the team recognizes that another equally-suitable building will be necessary to house the relocated functions. With these characteristics in mind, the planning team presents the following additional recommendations for consideration:

- Re-establish a steering committee to evaluate space issues parkwide and make recommendations to the superintendent and squad for consideration and implementation. Presumably, the committee would look closely at space issues throughout the park and work toward establishing efficient and organized work areas for all divisions. The committee could include a combination of supervisors and line staff from several divisions to ensure that all perspectives are gathered and considered.
- Establish a Scope of Collection Evaluation Committee to review the current Scope of Collection Statement (SOCS). The committee would evaluate the current document to determine if it is still relevant, up-to-date, and fully supportive of all park needs, goals, and objectives related to museum collections, resources management, and research. If the document does not meet these criteria, the committee can assist the museum curator to develop a supportive collections philosophy and determine how the current scope should be revised to be fully supportive of the park's mission and goals. The work of the committee would be greatly facilitated with representation from the divisions that are primary users and generators of collections, at a minimum, staff from natural resources management, interpretation, administration, and maintenance, and with the museum curator as chair. The park could benefit from a facilitated scope of collection planning exercise and a park collections philosophy discussion open to all staff, perhaps as one of the items on the agenda of an upcoming all-employee meeting.
- Evaluate objects currently stored in museum spaces against updated Scope of Collections Statement and remove those determined to be outside the SOCS. The park's museum storage areas are extremely

crowded; in accordance with NPS museum standards, only accessioned items or materials to be assessed for possible accession should be housed within museum spaces.

- Conduct a cabinet-by-cabinet, shelf-by-shelf, and container-by-container inventory of all storage furniture, boxes, and other enclosures used to house the collection. To give the park critical intermediate and long-term space planning information, this project should provide data concerning:
 - current space allocation and capacity within each container, drawer, shelf, etc.,
 - whether additional cabinets, drawers, boxes, shelving units are required, and,
 - if so, how many and what type/s of additional furnishings and supplies are needed?
- Evaluate the possibility of using seasonal structures for seasonal activities (where appropriate), freeing space for core uses in year-round structures.
- Consider establishing an emergency operations support facility within one of the current residential units. This facility would be used to house park staff members who must be on call for extended tours, but who maintain their primary residence outside the park. Such a facility, like a fire station or police barracks, could serve to alleviate some of the existing housing constraints, while also saving these employees money (there would be no need for them to rent and maintain their own private quarters at the park). This facility could be established by modifying an existing residential unit, or it could be incorporated into a new fire facility. It might also be desirable to locate the fitness center within this facility.

The Alternatives Identified in this Plan

Crater Lake National Park, as is the case Servicewide, is confronted by a lack of funds and staff, not to mention office and workspace; all present serious challenges to effective management and daily operations. With these circumstances in mind, the planning team recognizes that any comprehensive strategy to remedy the park's lack of suitable museum storage, work, and research space must proceed in a phased approach.

Short-term strategies, many of which have already been implemented, can often be addressed through Museum Collection Preservation and Protection Program (MCPPP) funds, as long as the deficiencies are noted on the park's Museum Checklist. Long-term solutions requiring new construction or large expense cannot be accommodated with MCPPP funds. However, these funds can be utilized for planning purposes and/or other associated preliminary work of fairly modest expense. Therefore, it is vital that the park continue to maintain an up-to-date Museum Checklist, in order that all such museum needs are identified, including appropriate, accurate cost estimates.

Although the park currently lacks sufficient space for its museum program, it nonetheless possesses several structures that could be rehabilitated for museum use in the short-term and intermediate-term. But these structures cannot serve the needs of the program beyond the intermediate-term. As a result, construction of a new integrated museum management facility that can accommodate museum storage, work space, offices, and research space should be the park's long-term goal.

By employing such a phased approach, museum facility improvements can proceed at a fairly constant pace. This will allow the park to leverage current and anticipated staffing and funding levels to the fullest, while simultaneously preparing appropriate, credible, and practical funding requests and facility cost estimates to meet the museum program's short-term and long-term needs.

A. Short-Term/Interim Alternative

Expand Use of Old Transformer Building for Storage (Preferred Short-Term Alternative)

This alternative, the preferred interim alternative, allows for limited expansion of storage space, which should provide some measure of relief for two to four years. As previously noted, the Old Transformer Building already houses some portions of the museum collection, is heated, and provides a largely open floor plan. Once the building has been thoroughly cleaned and all non-museum property, such as the snowshoes and bicycle, are removed, it must be completely sealed from pests, including rodents. For increased collections security, and in compliance with NPS museum standards, the door should be equipped with a deadbolt lock with a key core unique to the museum program.

Once the building has been cleaned, sealed, and secured, various inert objects such as geology specimens can be relocated here. Other hardy items stored in sealed cabinets and containers can be stored here as well, such as the large bench stored in the HFC shipping crate. If this space can be maintained at a suitably stable environment, which it likely can be, some of the furnishings currently stored in the aisle of the main storage room might be relocated here too. Finally, certain materials to be assessed for collections relevance (such as office files and reports) might be housed here as well, as long as a relatively stable environment can be maintained. Any such papers stored here should be enclosed in boxes; another option is to purchase a GSA wardrobe-style cabinet to provide additional, yet fairly inexpensive protection.

Based upon the observations of the planning team, this alternative could probably be carried out for the most part using existing park staff and/or other park museum staff on temporary duty at CRLA. Funds remaining from this MMP document could be used in this way, as partial implementation of a storage plan's recommendations is an entirely appropriate use of any such remaining funds. These actions could probably be implemented following two weeks of dedicated effort. This alternative qualifies for MCPPP funding.

B. Intermediate-Term Alternatives

Intermediate-Term Alternative B1: Use Additional Space on the Second Floor of the Steel Center for the Park's Museum Management Program (Preferred Intermediate Alternative)

This alternative is similar to Alternative 3 noted in Issue A: Museum Facilities, in the 2007 Museum Management Plan. However, unlike the option advocated in the MMP, this alternative would not necessarily use the entire second floor for museum activities (although use of the entire second floor could be a viable longer-term option).

The chief prerequisite for this alternative depends upon relocating the current seasonal interpreters' offices and workrooms to the new rim visitor center. This would allow interpretive staff to be situated in the immediate proximity to the prime resource and visitor use areas. If relocation of this seasonal interpretive function within the next two-three years to another equally advantageous (or better) location could be achieved, the park would benefit tremendously, as both museum storage and park research use of the collection would be greatly enhanced. Park staff and outside researchers could be accommodated at the Steel Center, and collections use would undoubtedly experience tremendous growth, benefitting both the park and the public.

The primary benefit of this alternative, unlike Alternative B2 below, is that museum collections and functions are not fragmented among several storage buildings. Museum use of the current interpreters' workroom could replace storage in the Old Transformer Building. Similarly, if at some point the park decides to use the entire second floor of the Steel Center for museum purposes, the trail cache option noted below would not be needed as an intermediate option.

Although the funding to implement this alternative in full rises above the level available through the MCPPP program, some elements could be funded by MCPPP, such as new cabinetry, seasonal/term day labor, and a percentage of construction materials. The majority of the costs would undoubtedly require another fund source/s, perhaps fee demo.

Intermediate-Term Alternative B2: Relocate Some Museum Functions to the Trail Cache and Old Transformer Building

With its location adjacent to the Old Transformer Building, the trail cache is a legitimate candidate for possible rehabilitation to house additional museum collections, workspace, office, and research use. Some collections and research space might be located in the rehabilitated trail cache and additional collections housed in the Old Transformer Building. By utilizing both structures and installing some type of mobile storage, combined with maintaining the museum curator's office in the Steel Center, this option would provide adequate space in the intermediate term.

The shortcomings of this alternative are related to size (square footage) limitations, fragmented storage, and operational oversight among three separate facilities. The program would be required to maintain some space in the Steel Center, as relying solely upon the old transformer and trail cache buildings would not provide adequate space to "decompress" current collections. Even with maintaining space in all three structures, this alternative is neither suitable for long-term collections growth nor effective operational management. As this alternative would rely on a potentially expensive rehabilitation of two historic structures for simply an intermediate-term alternative, it may not be a cost-effective, sustainable approach.

Funding to implement this alternative rises above the level available through the MCPFP program; however, some planning elements could be funded through MCPFP.

Intermediate-Term Alternative B3: Use Areas in the Steel Center for Museum Offices and Storage

This option is similar to the preferred alternative above but might use areas on the first floor as well as the second. For example, the offices of the historian and chief of interpretation could be relocated from the first floor to the second floor spaces currently occupied by the curator and the archives room. These vacated first floor offices could then be used for the curator's office and for archives storage; some collections may be accommodated on the first floor and/or the rehabilitated Old Transformer Building as well.

C. Long-Term Alternatives

Two of the three long-term alternatives presented use structures located at Steel Center, in the park's employee housing area. However, both of these structures are occupied, one for park housing (two units), and the other as the park fitness center. Although both of these options deserve consideration, any reduction of available employee housing would not be in the best interests of the park. As a result, use of a Steel Circle duplex is seen as the least desirable long-term alternative for in-park storage.

Long-Term Alternative C1: Construct a New Integrated Museum Management Facility in the Park (Preferred Long-term Alternative)

The preferred long-term alternative is the construction of a new building within park boundaries to properly house museum storage, office, work, and research functions. As stated in the park's approved Museum Management Plan, a new facility of 3,400 SF would accommodate the museum program's current functional and operational needs, as well as provide space for anticipated growth of collections. To provide the most effective use of space, compact storage should be installed to house both archival and object collections.

New construction within the park offers the best long-term advantages related to preservation of the collection, as well as sustainability, lower life-cycle costs, enhanced access, and various economies of scale derived from locating all museum functions within one modern, specifically-designed museum structure.

Finally, new construction in the park would allow the museum program to be housed within a suitable structure without impacting any other park operation. If adequate funding can be realized, this outcome is truly a win-win situation, a victory for the park's incomparable museum collection and continued success for the park's other important programs.

Long-Term Alternative C2: Rehabilitate the Fitness Center for Use as the Park's New Museum Facility

The second long-range alternative is relocating the fitness center to a space associated with emergency services operations, perhaps a future fire station

or law enforcement barracks (noted below). If the fitness center were relocated to another equally convenient building of similar size, this space could then be rehabilitated to provide sufficient museum storage, office, work, and research space to meet the long-term needs of the museum program.

Like Alternative C1 above, this alternative would feature compactor storage to make the most effective use of the structure's 936 SF of space. This structure could easily accommodate compactor storage, which would allow for additional collections growth. Also, if additional space is ever required for collections growth, perhaps an addition to the building could be constructed.

This alternative is probably the easiest and least expensive to implement. It is not the preferred alternative, as an addition may be required to provide the same amount of usable floor space as one of the duplexes. However, if none of the duplexes become available, the fitness center would then appear to be the most practical and inexpensive long-term solution.

Long-Term Alternative C3: Rehabilitate a Steel Circle Duplex for Use as the Park's New Museum Facility

Adapting both units of one of the Steel Circle duplexes has the potential to provide the park with a long-term collection facility by rehabilitating an existing structure. The garage area has abundant space for receiving, isolating for pests, cleaning, and carrying out preservation treatments on both newly-accessioned and other collection items.

The size of the duplexes (1639 SF per apartment – 3278 SF total) allows for future collections growth. While the ground floor slab-on-grade areas could be adapted for high density mobile aisle storage systems, major reinforcement would be necessary to house heavy and dense collections on the upper floors. Other structural modifications would be necessary to provide circulation between the two apartment units. The same rehabilitation measures as those listed for the trail cache would also apply to this building.

Use of one of the Steel Circle duplex units has one major disadvantage; the loss of two park residences. Although this option deserves consideration, any

reduction of available employee housing would not be in the long-term interests of the park. As a result, use of a Steel Circle duplex is seen as the least desirable long-term alternative for in-park storage.

Long-Term Alternative C4: Locate Park Collections in an Off-Site Repository

The final long-term alternative concerns locating all, or portions, of the collection within one or several off-site repositories. Potential options include:

- newly-constructed NPS-owned building located outside the park;
- NPS-leased building (existing commercial-type structure renovated for museum use) located outside the park;
- GSA-leased, build-to-suit structure located in Medford or another local town;
- space within an existing federal facility, such as the BLM Medford District Office;
- an addition onto either of the existing museum storage facilities or new construction at Oregon Caves National Monument or Lava Beds National Monument;
- storage of portions of the collections within the museum facility at Redwood National Park; and
- an existing university repository or other non-NPS museum.

This alternative is not currently recommended. Before relocation of park collections to an outside location can be seriously considered, the park will want to determine what its overall museum collections use needs are. For example:

- What collections, if any, due to their need in support of on-going park research and management activities, must be housed at the park?
- If such collections are not needed on a daily basis, could these materials be housed in an appropriate off-site facility?
- Which collections could be more effectively stored elsewhere?

- If the collections are infrequently needed for in-park research and management purposes, would appropriate off-site storage of some, or all, of the collection allow for:
 - cost-savings through sharing of facilities, funding, and staff?
 - environmental/sustainability benefits related to combining several different organizations' operations (and separate facilities) into one consolidated facility?

Once the park has addressed these critical, long-range management needs, it can then determine if off-site storage may be a legitimate alternative.

Alternative D: No Action

Museum storage at Crater Lake National Park continues to be housed in substandard facilities which lack adequate space, and which do not meet NPS museum standards. Collections will continue to deteriorate and are at risk of damage or loss due to frequent handling and relocation whenever access to storage is required. Neither park staff nor visiting researchers are adequately served; such visits are extremely disruptive of normal everyday operations. No capacity exists for future collections growth, nor allowance for more access to the stored collection. This alternative is inadequate for meeting the current and future needs of the collection and is therefore not recommended.

Conclusion

As noted throughout this document, the various spaces currently allocated to the park's museum management program:

- are insufficient in size.
- do not possess appropriate museum environments.
- fail to adequately protect the collection from dust, dirt, rodents, and insect pests.
- are not co-located, hampering effective management, access, and use.
- lack adequate office, workspace, and researcher space.

These deficiencies are adversely impacting the collection's long-term preservation, as well as its accessibility for research and educational uses.

This situation can only be corrected by replacing current museum storage and

workspace with new or additional improved or rehabilitated space. If more suitable space is not created, the collection will continue to deteriorate, be unavailable for exhibits and research, and the public interest will not be served.

During the first phase of this project, the planning team assessed a number of existing park structures to determine their suitability for rehabilitation and use as interim, intermediate, or long-term museum facilities. All of the structures were evaluated and then categorized according to practicalities related to the level of rehabilitation required, estimated expense, current use, and other criteria.

Within the short-term and intermediate periods, the park already possesses a number of buildings that can be rehabilitated for use as interim or mid-term museum spaces to either supplement existing museum facilities or replace them. One of these structures, the Old Transformer Building, already provides limited museum storage. Continued and expanded use of this structure provides the park with the ability to carry out a limited program of storage improvements immediately, and at a relatively modest cost.

Long-term Museum Storage

Long-term museum storage is a more complex issue. Like many other parks, availability of space at Crater Lake is a major challenge. All of the structures that might be rehabilitated for future long-term museum use are already allocated to other operations. As a result, every long-term alternative utilizing an existing park structure would entail some degree of disruption to, and possible relocation of, other park activities. This issue is clearly understood by the planning team, which is sensitive to the needs of not only the museum program but of the park as a whole.

As a result, all such alternatives include the full-range of identified advantages and disadvantages. In order to achieve the best long-term alternative for the preservation and use of the collection and ensure that impacts to other operations are nonexistent, the planning team recommends that the park seriously consider construction of a new integrated museum facility within the park. New construction appears to offer the best long-term alternative for museum storage within the park when considering the needs

of the collection, users, and life-cycle costs. As noted earlier, new construction need not be insensitive to the natural environment; a sustainable, green structure can be harmonious with the natural setting, in keeping with many of the park's other historic structures.

Another possible long-term alternative is off-site storage. Although the planning team site visit did not allow for a thorough investigation of this option, it is nonetheless an alternative worthy of consideration. After a careful assessment of all the competing advantages and disadvantages, the park may determine that portions of the collection might reasonably be housed outside the park. Potential locations include other parks, universities, museums, or similar suitable facilities. Off-site storage may be feasible, but to be a truly viable alternative, it must be economically advantageous, sound, and sustainable. *And most importantly, the benefits of a proposal for off-site storage should clearly outweigh any limitations.* Access to NPS collections is vital—off-site storage should neither impair nor otherwise hinder ongoing park research and educational activities.

However, neither adaptive re-use of existing park structures nor off-site storage appears to provide the best long-term option for museum storage at the park. In both cases, the disadvantages (size, availability, incompatibility, current use, location, life-cycle costs, and access and use limitations) seem to outweigh any perceived advantages. Therefore, ***the preferred long-term alternative is the construction of a new integrated museum management facility at the park.***

The current GMP discourages new construction within the park. However, new construction appears to be the best long-term strategy for addressing the various space, capacity, and structural limitations noted in this report, in addition to the inherent needs of the museum collection and its users. Therefore, the park would benefit from a comprehensive space analysis/utilization plan that does not rule out new construction within the parameters outlined in the GMP.

As the nation's sixth national park, Crater Lake National Park was established in 1902, "...for the protection and preservation of the game, fish, timber, and all other natural objects therein." Within the park's 182,304 acres

is the nation's deepest lake—the primary visitor attraction—as well as an amazing diversity of important natural and cultural resources, all of which have great value to both science and the public. A fundamental component of these resources is the collection of specimens, artifacts, and archives that comprise the park's museum collection. These collections are vital, irreplaceable constituents of the park, essential underpinnings for scientific research, education, and inspiration. Without adequate and proper protection that likewise facilitates access and use, the collection's continued preservation and accessibility cannot be ensured. The museum collection at Crater Lake National Park both needs and deserves a new home. The recommendations in this report will prove useful to the park in determining the best course for ensuring the collection's continued preservation and accessibility over the coming years.

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Appendix A: Comparison of All Facilities, Current and Potential

Facility/Building Name	Advantages	Disadvantages	Suitability for Museum Use	Comments
Community Center	- Large multipurpose structure - Located near headquarters complex	Museum use would deprive residents of an important community asset	No	Used extensively by residents for various activities (library; daycare; gym; classrooms; etc.)
Canfield - Ranger Station	None	- Utilized to capacity by Ranger Division - No available space for museum uses	No	
Prep-Kitchen, Concession Dormitory at Annie Springs	None for museum; although other NPS uses here could free other park spaces that might be used for museum operations	- Concession occupied - Housing for concession staff - Food-service operation	No	Housing and cooking in building would place the collection at risk: fire, pests, and security
Concession Cafe and Gift Shop at Rim	None	Will be utilized to capacity once 2nd floor exhibits are installed	No	
Maintenance Building Attic	Large unused area	- Would require a new "building within the building" - Renovation would be costly - Serious access and egress issues	No	Renovation would be very expensive in order to address numerous structural, code, safety, and access/egress issues

Facility/Building Name	Advantages	Disadvantages	Suitability for Museum Use	Comments
Natural Resources Bldg	None	Utilized to capacity	No	
Sager Admin. Building	None	Utilized to capacity	No	
Sleepy Hollow Seasonal Housing Units	None	- All residences required for seasonal housing - Winter-time access issues - Structural limitations	No	
Steel Center, Historian's Office & Adjacent Room	Could provide space in conjunction with space upstairs and/or in Old Transformer Building	- Utilized to capacity - Best-suited for current use	Yes	Good potential location, as most of the collection is nearby/upstairs
Warehouse	With reorganization/compacting, some space for collections may be available here	- Utilized to capacity - Best-suited for current use	Maybe	Would require rehab for museum use
Steel Center (Entire Top Floor)	- Current primary storage in two rooms – expansion into adjacent areas relatively easy - All storage in one building - Could accommodate entire collection + growth - Could house all museum work-office-research spaces - Enhanced research access	- Interpretive offices would require relocation to another building - Library would need to be moved to another structure - Interpretive workroom would need to be relocated to a different building	Yes	- Museum Management Plan noted this as a preferred alternative - Seasonal interpretive operations could be relocated to the new Rim VC to free space for museum use

Facility/Building Name	Advantages	Disadvantages	Suitability for Museum Use	Comments
Old Transformer Building	• Already in limited use • Can provide nearly immediate storage for 'hardy' collections • Additional use will free space in main storage	• Separate building from rest of the collection – additional museum storage facility on Museum Checklist	Yes	Will require removal of non-museum items stored here; thorough cleaning; sealing doors, cracks, etc. from pests and dust
Trail Cache	• Location adjacent to Old Transformer Building – could provide museum work, research, and some storage space	• Already in use by trail cache; staff would require new office, work, and storage space elsewhere • Rodents and pests in bldg • Potentially expensive rehab	Yes	Will require extensive rehab (may be \$). Need to eliminate pests and rodents; seal structure
Steel Circle Duplex	• Can house entire collection • Long-term facility (growth) • Can house all museum operations: storage, office, work, research • Greatly enhanced access • Compactor storage practical	• Would eliminate two park residences • Potential for increased traffic in residential area • Second floor would probably require structural upgrades • Rehab may be expensive	Yes	• Abundant space for receiving, isolating (pests), cleaning, and preservation • Location near park offices and visitor center great for access
Fitness Center	• Probably the least expensive long-term option • Can house entire collection and all museum ops • Long-term facility (growth) • Greatly enhanced access • Compactor storage practical	• Fitness center must be relocated • Potential for increased traffic in residential area	Yes	Location near park offices and visitor center great for access

Facility/Building Name	Advantages	Disadvantages	Suitability for Museum Use	Comments
New Museum Facility in Park (New Construction)	• Design to house all collections + growth, and offices, work, and research spaces • Utilize sustainable design to lower life-cycle costs • Enhanced access • All museum functions in one facility	• Cost	Yes	New construction of an integrated museum management facility in the park is the preferred long-term alternative
Off-Park Storage Facility: CRLA Owned/Leased	• Potential cost savings, especially if GSA build-to-suit or an existing NPS facility • Enhanced access for non-NPS researchers	• Not as accessible to park staff	Yes	Could be an existing facility or new construction
Off-Park Storage Facility: NPS Owned/Leased	• High potential cost savings using the multi-park concept (Network Facility) • Enhanced access for researchers involved in comparative studies	• Not as accessible to park staff	Yes	Could be an addition onto an existing NPS facility (ORCA or LABE) or new construction
Off-Park Storage Facility: Owned/Leased by NPS and Other Federal Agencies	• High potential for cost savings if facility is inter-agency • Enhanced access for non-NPS researchers	• Not as accessible to park staff	Yes	BLM Medford District Office is one potential location

Appendix B: Short-Term Alternative

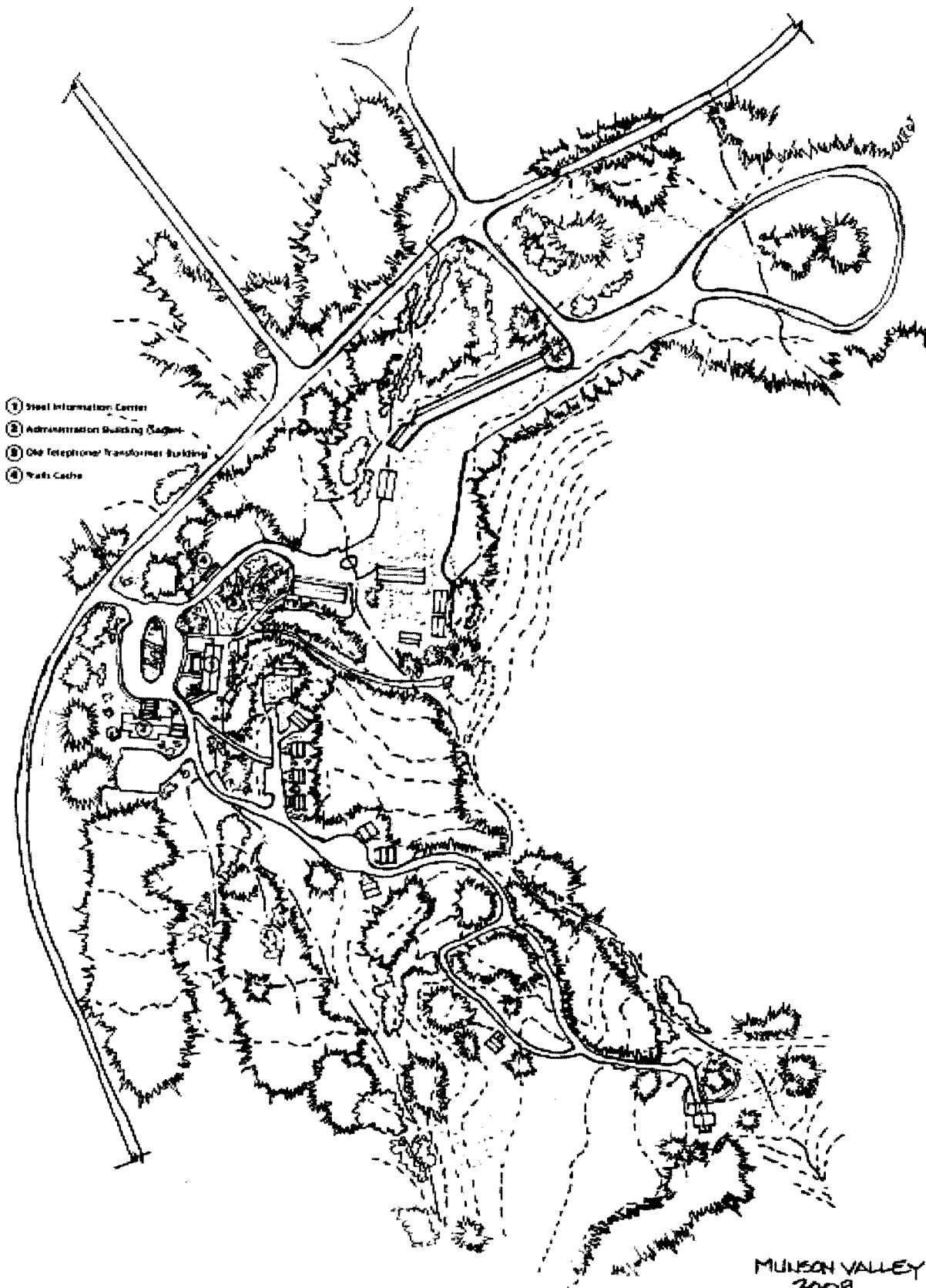
Alternative Name and Number	Facility Name	Advantages	Disadvantages	Comments
Alternative A1 (Preferred): Expand Use of Old Transformer Building for Storage	Steel Center and Old Transformer Building	• Already in limited use • Can provide nearly immediate storage for 'hardy' collections • Additional use will free space in main storage • Low-cost	• Separate building from rest of the collection – additional museum storage facility on Museum Checklist	Additional use of the Old Transformer Building can proceed immediately

Appendix C: Intermediate-Term Alternatives

Alternative Number	Facility Name	Advantages	Disadvantages
B1: (Preferred) Utilize Entire Second Floor of Steel Center	Steel Center, second floor	• All museum functions located in one building • Enhanced access • Sufficient space for proper storage and preservation of all collections in the intermediate term	• Requires relocation of interpretive offices, workroom, and library • Space is insufficient to accommodate long-term growth
B2: Relocate Some Museum Functions to the Trail Cache, and Old Transformer Building	Steel Center, trail cache, and Old Transformer Building	• Could provide space for intermediate term • Would not require relocation of interpreters and library from Steel Center	• Current trail cache; staff would require new office-work-storage space • Potentially expensive rehabilitation • Requires space in Steel Center; operations split between 3 structures • Must maintain three Museum Checklist facilities • Insufficient to accommodate long-term growth
B3: Utilize 1st and 2nd Areas of Steel Center	Steel Center	• All museum functions located in one building • Enhanced access • Sufficient space for proper storage and preservation of all collections in the intermediate term	• Requires relocation of chief of interpretation's and historian's offices • Space is insufficient to accommodate long-term growth

Appendix D: Long-Term Alternatives

Alternative Number and Name	Facility Name	Advantages	Disadvantages
C1: (Preferred) Construct a New Museum Management Facility in the Park	Crater Lake museum building	- Design to house all collections + growth, and offices, work, and research spaces - Utilize sustainable design to lower life-cycle costs - Enhanced access - All museum functions in one facility	Cost
C2: Rehabilitate the Fitness Center for Use as a New Museum Facility	Fitness center	- Probably the least expensive option - Can house all museum operations - Greatly enhanced access - Compactor storage practical	- Fitness center must be relocated - Increased traffic in residential area - Collections growth may require an addition to the building
C3: Use an Entire Steel Circle Duplex for a New Museum Facility	Steel Circle duplex	- Long-term facility (growth) - Can house all museum operations: storage, office, work, research - Greatly enhanced access - Compactor storage practical	- Would eliminate two park residences - Increased traffic in residential area - Second floor would probably require structural upgrades - Rehab may be expensive
C4: Locate Collections in an Off-Site Repository	Off-site repository	- Potential cost savings, especially if using an existing federal facility or a shared operation with others - Enhanced access for non-NPS researcher	Not as accessible to park staff

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- A hand-drawn map of Munson Valley, dated 2009. The map shows a valley with a winding road, several buildings, and a large circular area in the upper right. A legend on the left side identifies four points of interest: 1. Steel Information Center, 2. Administration Building (Adgen), 3. One Telephone/Transformer Building, and 4. Trails Cache. The map is drawn with simple lines and includes some shading to represent terrain and vegetation.
- ① Steel Information Center
 - ② Administration Building (Adgen)
 - ③ One Telephone/Transformer Building
 - ④ Trails Cache

MUNSON VALLEY
2009

