

Buildings and Grounds

More than 1,800 permanent buildings can be found within Yellowstone's boundaries, including 122 portable structures such as mobile homes and movable dormitories. Of these buildings, 800 are operated and maintained by the park's major concessioner, AmFac Parks and Resorts, and another 50 by other concessioners (see "Accommodating Visitors," page 6–18). More than 950 of the buildings are more than 50 years old and must therefore

be treated as of potential historic significance unless a formal evaluation determines otherwise (see "Historic Structures," page 4–10).

STILL STANDING AFTER ALL THESE YEARS

Substandard structures. Because of their age and lack of maintenance, many buildings have insufficient insulation, substandard wiring, asbestos, lead-based paint, high levels of radon, pest infestations, failing roofs, and rotten siding. The backlog of work that needs to be done detracts from the appearance of developed and historic areas. This ongoing work and emergency repairs are the responsibility of about 40 skilled crafts personnel who comprise Yellowstone's own cadre of carpenters, painters, plumbers, electricians, and heating mechanics.

Over-extended facilities. Many employees have cramped work areas that are unsuited for the numbers of visitors and services they are expected to handle. Until 1992, South Entrance rangers worked out of an under-sized office in the front of the district ranger's residence. A non-winterized trailer is still being used during the winter as the warming hut at Canyon Village. The same trailer was moved to Grant Village to serve as the backcountry permit office for the summer of 1998 because the Grant Village visitor center had insufficient space for this purpose. Throughout the park, emergency vehicles such as fire trucks, ambulances, and patrol cars, and snowmobiles are without garage space.

Marine facilities. Park visitors can launch their boats at Yellowstone Lake using the Grant Village boat ramp or at the Bridge Bay Marina, where a steel bulkhead "sea wall" creates a harbor that averages 12 feet deep, sufficient for all permitted watercraft. However, the channel entering the lake has silted in to a depth of only about five feet at the low water mark. Dredging has been deferred, but the existing passage provides only minimal clearance for larger touring, sailing, and rescue vessels.

A marina was also completed at Grant Village in the early 1970s, but it had to be closed in 1978 because the bulkheads were collapsing due to faulty engineering. Funds have not been available to either repair or remove the structures, but the associated parking lot has proved useful as a heli-spot, and the boat ramp was being replaced with one at a better location in late 1999.

New navigational buoys have been placed around Yellowstone Lake. The docks that have traditionally enabled boaters to tie up and disembark at Eagle Bay, Plover Point, and Trail Creek have recently been replaced. Park staff used fee demonstration funds to install additional floating dock systems at Frank Island and Wolf Point in 1999. The boat ramp at Lewis Lake is in poor condition and should be replaced.

You are here. As many as 15,000 signs are posted to welcome, educate, and direct park visitors. Most of the rustic wood-routed signs used at visitor centers, concession facilities, and ranger stations are made by a park employee who also produces or orders the metal safety and regulatory signs required along roads and backcountry trails. In 1998, 1,144 new or replacement signs were produced at a cost of about \$33,000, not including sign posts, stain, associated hardware, or the labor to install them. Park staff are experimenting with synthetic solid foam as a more durable substitute for wooden signs.

Community buildings. As a holdover from earlier days when employees requiring basic services for their families faced a long hard journey, Yellowstone maintains a chapel that was built by the U.S. Army and an elementary school. More recent additions



that benefit the park community are a day care center and small recreational facilities such as weight rooms for employee exercise. Although the school has always been funded out of entrance gate receipts, the other facilities have suffered the same fate as many other park buildings; repair and upkeep of the buildings have fallen short of basic standards for safety and aesthetics.

Recent improvements. Some enhancements to the park's building inventory have been made during the last 20 years, such as rewiring to meet safety codes and improving security systems and energy efficiency (see "Energy, Utility, and Waste Management Systems," page 7–30), Improvements have also been made in offices, workshops, and public facilities around the park. A new combination ranger station-clinic was

GETTING PAID IN SUNSETS

In the traditional NPS culture, employee pay and housing were regarded as somewhat frivolous concerns, almost not worthy of discussion among park staff. The peaceful surroundings and proximity to nature were recognized as the intangible benefits of working in a national park, and the NPS was slow to adapt to changing financial and demographic realities.

By the late 1970s and early 1980s, park workers were setting up employee associations and lobbying for better living and working conditions. Parents wanted easier access to good schools for their children, and long-term employees testified to a deplorable sample of park housing across the country. The requirement to live in government-owned housing, sacrificing the opportunity of home ownership and equity buildup, was also seen as a detriment to preparing for retirement. No longer are park employees willing to "take their pay in sunsets" at the expense of reasonable living conditions for themselves and their families.



completed at Old Faithful in 1995, and the maintenance garage at Mammoth was renovated for conversion into an emergency operations center for vehicles, life-saving equipment, and offices for wildland and structural fire staff.

EMPLOYEE HOUSING

Although Yellowstone and many other older national parks have developed substantial infrastructure over the years, the more recent trend has been toward avoiding unnecessary construction and encouraging employees to live outside the park when possible. However, this is rarely feasible for employees stationed in Yellowstone's interior, and some staff members are required to live near their work station as a condition of their employment. About half of the employees who work in the park headquarters at Mammoth Hot Springs have found private housing in Gardiner, Montana, five miles away; the same is true of those who work near West Yellowstone, Montana. Some employees chose to live outside the park because of the better housing options there, or because of their spouse's job, their children's school, or other conveniences; others must do so because the park does not have enough housing to accommodate all the employees who would like to live there. Agreements with park concessioners call for them to house nearly all of their employees on land assigned to them by the park, or to hire employees who obtain their own housing outside the park.

But the housing options outside the park are very limited. Both Gardiner and West Yellowstone experienced dramatic price increases in the real estate market in the early to mid-1990s, making investment in land or a house difficult for the average park employee; the 1999 rental market in both communities was still characterized by high



costs and limited selection because of competition from the increasing number of other seasonal employees in the tourism industry.

Human habitats in Yellowstone.

The park contains 14 residential areas that were established for NPS and concessioner employees. Many of these quarters are historic, built by the army between

1890 and 1915 or by the Civilian Conservation Corps in the late 1930s. Concessions quarters

also range from rooms in historic lodges or cabins to newer dormitories, bunkhouses, or employees' recreational vehicles and trailers. A few housing units maintained by the park are assigned to other people working in the park, such as schoolteachers in Mammoth.

As Yellowstone visitation has increased over the years, improving employee housing has had less priority than improving visitor facilities. During the



Mission 66 program, completed more than 30 years ago, significant efforts were made to address housing deficiencies, but today only 40 percent of the park's housing units are considered in good condition. Through the 1980s, available funding permitted only "temporary" and often inappropriate solutions—especially an influx of trailers—that have become long-term, high-maintenance, energy-inefficient eyesores.

These old houses. The park maintains 457 housing units for NPS employees, including 101 trailers and transit homes, with an average size of just over 1,000 square feet; 379 of these units are more than 25 years old. The problems with the park's employee housing are therefore many.

- HOUSING CODE VIOLATIONS. Many employee residences fail to meet basic health, safety, sanitary, electrical, and building codes.
- YEAR-ROUND USE. Although about 22 percent of the park's housing units were intended for use only by summer seasonal employees, Yellowstone now has longer visitor seasons. Many of the trailers weren't new even when the park acquired them in the 1960s; they are generally uninsulated and in serious disrepair, making them expensive to heat and potentially unsafe.
- CHANGING DEMOGRAPHICS. Along with having a larger portion of year-round employees, the park's work force has gotten older on average during the last two decades, making shared living problematic. The staff also includes more employees with disabilities for whom accessible housing and facilities must be provided.

- HISTORIC STRUCTURES. The park has 92 housing units located in 60 buildings that are eligible for National Register listing and therefore need special maintenance and refurbishment to prevent deterioration.
- INSUFFICIENT SUPPLY. Although park and concessioner employee numbers have remained stable in recent years, there are not enough quarters available to meet current needs. Many employees must either commute long distances or accept substandard or crowded living conditions. This affects not only employee morale, but the park's ability to attract and retain a diversity of qualified job candidates, especially for seasonal positions, for which wages are lowest and competition for short-term living space most intense.
- RENT. The rents charged for NPS housing are established under servicewide guidelines that compare rents for similar units in communities outside the park, taking into consideration the condition of park housing and lack of comparable amenities. While these rents have increased over the years, the income falls short of the quarters' maintenance costs.



Home improvements. The attention drawn to infrastructure and housing problems throughout the national park system during the last decade has begun to have an effect. Starting in 1988 Yellowstone received special funds to construct new housing, and within four years plans had been approved that would have the least impact on the

park while providing the needed improvements. By 1999, 57 new units for NPS employees (8 single-family, 1 duplex, 9 four-plexes, 1 five-plex, and 1 six-plex) had been built in 10 existing developed areas; construction was underway for two more multi-family units that have been funded. Several of the new units are designed to meet accessibility standards for mobility-impaired residents, and modifications have also been made to some existing quarters. Park concessioners also invested more than \$650,000 in new employee housing between 1996 and 1998. While some additional disturbance of the park's natural features has been necessary, it has not been significant overall, and many efforts are made before, during, and after construction to minimize the impacts.

Completion of the most controversial housing plans, for the headquarters at Mammoth, was delayed in the early 1990s by a debate over the appropriateness and need for additional park land to be used for housing and other infrastructure so close to the border community of Gardiner, Montana. In 1997, a revised proposal called for a combination of new housing units in both the Mammoth area and on park land adjacent to Gardiner. However, as a result of a congressionally mandated review of NPS housing policies, at the end of 1999 construction of any additional quarters was on hold pending an independent contractor's assessment of housing needs and alternative means of providing for them. Similar questions exist about providing park housing adjacent to West Yellowstone. The dilemma is that in order to improve the standard of visitor facilities and services Yellowstone offers the public, the park will need more staff—which increases the demand for available housing, whether in or outside of the park.

GROUNDS KEEPING

Although most of the park's vegetation is permitted to grow or die as determined by climate and influences other than human interference, landscaping is done around park buildings for aesthetic reasons, for fire protection, and to preserve cultural landscapes (see page 4–15). In the past decade, the park has promoted more natural landscaping through the use of native, locally collected trees, flowers, and shrubs around the park's office buildings, employee housing, and concession-operated facilities. To support these efforts, the park maintains a small native plant nursery and propagates native seedlings for revegetation of construction sites and roadways.

Park staff are also responsible for maintaining the seven smallest of the 11 park campgrounds, as well as picnic areas and roadside pullouts, including 185 comfort stations and 132 vault toilets. Many of these facilities are dilapidated, and few are accessible to all users. All of the restrooms require cleaning at least daily during the busiest visitation periods. The park spent \$209,379 for 30 janitors to clean restrooms, public facilities, and office buildings parkwide during 1998, and \$114,714 to pick up litter along roads, boardwalks, and frontcountry trails.

Program Needs

- STRUCTURES. As with other facilities, the park needs to address the backlog of building repairs and secure adequate funding and staff for a cyclic maintenance program. To properly maintain quarters, public buildings, and other administrative facilities requires regular inspection and repair or replacement of:
 - electrical outlets, switches, and panels;
 - boilers, furnaces, and pipes;
 - roofs and floor coverings;
 - building exteriors and interiors;
 - plumbing systems in all buildings, comfort stations, and vault toilets;
 - docks, boat ramps, and other special use structures; and
 - signs and signposts.
- Housing. Unless Yellowstone's policy is revised as a result of the service-wide housing review, current plans call for:
 - replacement of 101 trailers and transit homes with single-family and multi-unit structures designed to blend into the park landscape as inconspicuously as possible;
 - remodeling and rehabilitation of existing housing to meet current health and safety standards at an estimated cost of \$6.2 million; and
 - construction of 156 additional units with an average size of 1,100 square feet to eliminate overcrowding and provide currently needed housing. This construction would take place over the next 10 to 15 years, if funding becomes available.
- Finding private options. One alternative that the park will explore is the development of partnerships with private entities that would encourage investors to purchase existing homes or develop new housing in the gateway communities that could be rented to park employees. This could provide additional housing for employees without creating additional impacts on the park—although there are resource concerns associated with proposed development beyond Yellowstone's borders as well.



Buildings and Grounds

STEWARDSHIP GOALS



Historic buildings and other park structures are maintained in good condition, serving a wide variety of visitor and employee needs.



Special project funds permit some high-quality reconstruction of buildings and other facilities, but most structures have deteriorated components that are repaired only when a crisis occurs.

CURRENT STATE OF RESOURCES/PROGRAMS



Employee housing needs are addressed inside and outside park boundaries through partnerships and strategic planning. State-of-the-art construction methods maximize energy efficiency and minimize effects of park housing and construction on visitors and park resources.



Limited housing options, both in and outside the park, create difficulties in recruiting and retaining qualified employees. Recent housing projects address issues of energy efficiency but the cyclic maintenance backlog indicates unmet needs and a financial liability.



Park grounds in developed areas are clean, attractive, and landscaped using native plants.

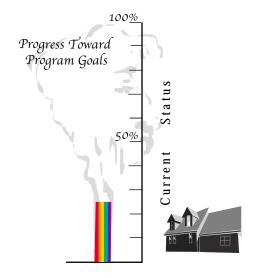


Park grounds are well-maintained but restroom cleaning, litter pickup, and general upkeep are less frequent than desired. Some landscaping with native plants has been done, but non-native species remain from previous intentional and inadvertent plantings.

1998 Funding and Staff

Staff

70.48 FTE



Recurring Funds Yellowstone N.P. Base Budget Cost Recovery/Special Use Fees Non-Recurring Funds One-time Projects Fee Demonstration Program Projects Capital Improvements (non-Fee Demo) Supply Suppl

The human resources and funding necessary to professionally and effectively manage the park to stewardship levels will be identified in the park business plan.