

Chapter 2

## Origins of The National Forest Built Environment

“...the interest of the visitor...should concentrate on features of natural, in preference to artificial, beauty.... Architectural features should be confessedly subservient...”

—Frederick Law Olmsted & Calvert Vaux



## A BRIEF HISTORY OF USDA FOREST SERVICE BUILT ENVIRONMENTS

In establishing the image of the Forest Service's built environment, the origins and meanings of the buildings, structures, furnishings, and signs that exist today were studied.

### EARLY PARK AND RECREATION DESIGN INFLUENCES

The emphasis on harmonious design of the built environment on the national forests had its roots in the Public Park Movement of the mid-19th century. During the Industrial Revolution and its aftermath, social thinkers became concerned over crowded and unsanitary cities and the perceived loss of connection for the average citizen to the natural world. That led to efforts to set aside or create natural areas in urban areas, such as New York's Central Park (1853) and the metropolitan park system for Minneapolis-St. Paul (1872-1895).

At the same time, national interest was growing to conserve the dramatic landscapes of the West for tourism. As a result, large natural areas such as the Yosemite Valley (first as a California State park in 1864, later as a national park in 1890), the Adirondack Forest Preserve (1885), and Yellowstone (1872) were reserved as "public parks or pleasuring grounds for the benefit and enjoyment of the people" (Carr, 1998, p. 11).

The urban parks of that era emphasized maintaining "picturesque" landscapes for "passive" use such as picnicking or touring to enjoy the scenery. The built environment was often minimal, consisting primarily of curvilinear carriage drives and winding walking paths from which to enjoy the views of the landscape. Bridges and other structures were kept low and horizontal in form, often using rock from the immediate area. Rather than creating facilities for specific uses, large meadows and open spaces were provided to support an array of activities.

This philosophy prevailed when the Forest Service began permitting construction of summer homes, resorts, lodges, and boathouses in the early 20th century. The Forest Service constructed its own ranger stations, roads, and trails for administrative purposes, while private interests designed and built recreation facilities under Forest Service permits and regulations. Most of these early facilities fit into the landscape quite well (Tweed, 1978, p. 2).



However, public recreational facilities remained rare even though recreation use was growing rapidly. As described in an early report, rangers tried to fill this gap in some cases:

"Forest rangers took time to clear inflammable material from around heavily used camp spots and to build crude rock fireplaces. They erected toilets and dug garbage pits whenever materials could be obtained.... Tables, toilets, and garbage pit covers were made from lumber scraps and wooden boxes, and crude signs were painted and displayed on rough-hewn shakes. Many of these...improvements were raw looking and some of them were clearly out of place in the forest environment, but they filled a real need" (Tweed, 1978, p. 3).

## **PUBLIC RECREATION DEVELOPMENT AND THE ARTS AND CRAFTS STYLE**

Public recreation facilities on a national forest were first truly planned and developed in 1916. This occurred in the Columbia Gorge Park division of the Oregon National Forest (later Mt. Hood National Forest and now within the Columbia River Gorge National Scenic Area) (Tweed, 1978). The campground and ranger station at Eagle Creek included an entrance station, restrooms, tables, fireplaces, and a trail designed in the Arts and Crafts architectural style of the day.

The Arts and Crafts movement favored the beauty and honesty of traditional handcraftsmanship and the use of natural building materials (Carley, 1994).

Like the earlier Public Park movement, the Arts and Crafts movement arose out of concern over the effects of the advancing Industrial Age. Proponents believed that mass production threatened people's appreciation of natural materials and craftsmanship. The use of natural materials, as well as an emphasis on simplicity in form, line, and function, made Arts and Crafts architecture fit well in natural settings. This influence was clearly visible at Eagle Creek and was a major influence in the evolving "rustic" style of architecture in natural areas (Tweed, 1978).



Arts and Crafts included the prairie-style architecture of Frank Lloyd Wright, who believed that a building should appear to grow organically from its site. Prairie-style roofs were low-pitched, usually hipped, and had wide, overhanging eaves and low porches and terraces. Architectural details emphasized horizontal lines as well. The style echoed the context of the landscape. Its long, low character reflected the horizontal line of America's prairies.



## THE CIVILIAN CONSERVATION CORPS AND PUBLIC WORKS ERA

With the Great Depression of the 1930's came the first era of large-scale recreation planning and development in the Forest Service. Beginning in 1933, spurred on by the plentiful labor provided through the Civilian Conservation Corps (CCC) and other public works agencies, the Forest Service began to employ professionally trained landscape architects and architects to design and implement plans on national forests across the country.

Design guidance evolved quickly to ensure consistent levels of quality and image throughout the Forest Service. In 1935 and 1936, the Forest Service hired Albert D. Taylor, president of the American Society of Landscape Architects, to analyze problems and devise solutions to recreation planning and design. Taylor's three-volume 1936 report included drawings of many types of recreation structures unknown to earlier Forest Service recreation designers, such as bathhouses, shelters, amphitheaters, and playgrounds. "Across the country in the middle 1930's, these types of facilities appeared in national forests where before there had been only privies and ranger cabins" (Tweed, 1978, pp. 20-21).

At the same time, the National Park Service contracted architect Albert H. Good to catalog appropriate structures for use in the parks. In 1938, the Park Service published the definitive work, *Park & Recreation Structures*, edited by Good, which collected these and other examples of rustic architecture.

By 1940, W. Ellis Groben, Chief Architect of the Forest Service, had written *Architectural Trends of Future Forest Service Buildings*. In it, Groben decried the widespread use of inappropriate urban styles on many forests. He advocated "buildings of a more distinctive character...which both express the purposes of the Forest Service and which are more appropriate to their particular locales."

All these guides emphasized the need for harmonious design using local natural materials such as timber and stone. They also called for the use of trained design professionals.

The effects of this guidance, carried out by trained professionals and labor forces, soon became visible in the design and construction of forest roads, trails, buildings, and public recreation sites. Stone masonry and log structures predominated, and the massive scale of structural elements and site furnishings implied permanence and connection to the landscape.



The style was generally referred to as “rustic architecture.” It was based upon a canny combination of pioneer building skills and techniques, principles of the Arts and Crafts movement, and the premise of harmony with the landscape. The guides captured and codified the prevailing design that already had been practiced for many decades in natural settings such as New York’s Adirondack Reserve and the early national parks.

The work of the CCC influenced virtually every national forest. While the architectural style was consistently rustic, featuring stone and massive timbers, regional variations that reflected cultural context and the availability of building materials did occur.

For example, in the Juan Tabo and La Cueva Picnic Area on the Cibola National Forest in New Mexico and in Sabino Canyon on the Coronado National Forest in Arizona, picnic shelters, restrooms, and bridges are made entirely of large granite boulders and native stone. These fit well within the rocky, arid character of the site.

“However, the highest expression of CCC-era rustic architecture came in the Pacific Northwest Region of the Forest Service. Both in quantity and quality of facilities, this region surpassed all others, including that of the National Parks in the area. Rich in timber and volcanic rock, the region’s architecture and recreation site furnishings exhibited the classic elements of rustic architecture—stone bases, massive timbers, wood shakes, and incorporation of handcrafted features. This expression of rustic architecture in the Northwest became known as *Cascadian style*” (Tweed, 1978, pp 21–22).



The most significant example of the Cascadian style is the Timberline Lodge. Begun in 1936 by the Works Progress Administration (WPA), this massive rustic structure used native materials and incorporated lavish use of handcrafted regional decoration in the Arts and Crafts style.

With the onset of World War II, the public works era came to an end. The built works and publications of the era, however, established the principles and tradition of rustic architecture for parks and public lands. These principles, summarized, were:

- Emphasis on horizontal form and avoidance of hard straight lines.
- Combinations of harmonious exterior textures and colors.
- Use of local natural materials sized in proportion to the grand scale of the landscape.
- Appearance of pioneer building methods.
- Strong incorporation of handcrafted elements.
- Reflection of regional cultural influences.



The rustic style resonated strongly because it reflected the character of the forests themselves and stood in pleasing contrast to the increasing “civilization” of the rest of the country. People sensed a connection to the uniqueness of the natural settings and to frontier traditions. These bonds contributed strongly to the agency image for decades. For many people, rustic architecture represents the ideal for natural parks and forests. Indeed, the work of the CCC is a legacy we cherish to this day.



## **POST-WORLD WAR II AND OPERATION OUTDOORS**

Following World War II, the context of recreation use and architecture in the United States changed again. The post-war economic boom created demand for recreation on the national forests. It also increased distribution of manufactured and finished materials throughout the country.

In 1956, the National Park Service began “Mission 66,” a 10-year program to upgrade its facilities by the agency’s 50th anniversary. The Forest Service began a parallel program called “Operation Outdoors” in 1957. Designers in both programs consciously departed from the nostalgic rustic style and embraced the tenets of the international style and modern design. This style included simple forms with clean, straight edges; functional design with little ornamentation or decoration; and the use of manufactured rather than handcrafted materials.

In addition, construction practices reflected a new era of manufacturing technology, distribution processes, and human resources. As such, facilities from that era reflect the practical realities and the spirit of their time as clearly as those built by the CCC. This modern era resulted in some landmark structures, as well as many other examples of design excellence. In other cases, the new manufactured materials proved less durable than the natural materials of the rustic era. Many people sensed that modern design, in general, was less evocative of and sensitive to the forest settings.

### **EVOLUTION OF SUSTAINABLE DESIGN**

Pioneered by landscape architects Ian McHarg and Phillip Lewis in the 1960’s, a new ecological approach to planning and design emphasized respect for the flows of wildlife, air, and water across the landscape.

Parallel to that movement was the increased awareness of the need to conserve energy, prompted by the oil crisis of the mid 1970’s. This resulted in increased conservation measures in buildings, development of such “off the grid” energy systems as solar and wind power, and use of natural ventilation and daylighting. Recycling became part of the American consciousness, reflected in increased reuse of building materials and buildings themselves. The effects of building materials on human health also became a concern.

These developments eventually converged under the umbrella term of “sustainable design.” A 1993 National Park Service publication, *Guiding Principles of Sustainable Design*, synthesized many of these concepts for park and recreation settings.

## RECREATION PLANNING AND SCENERY MANAGEMENT SYSTEMS

Over the past 25 years, two systems based on social science research emerged to affect the form of the built environment. These are the Recreation Opportunity Spectrum (ROS) and the Scenery (previously known as Visual) Management System (SMS). In addition to these two systems, the Forest Service's customer base has diversified and expanded, reflecting social changes.

### RECREATION OPPORTUNITY SPECTRUM

ROS is based on the premise that people expect certain levels of development related to the character of the setting and the type of recreation they prefer. For example, a facility intended to create a safe, controlled environment for large numbers of people should be highly developed using modern materials and providing ample conveniences. Consistent with visitor expectations, a more primitive "backwoods" area would have far fewer constructed elements. Those would generally be small in scale and made of natural materials. More detail on ROS can be found in chapter 3 and appendix C.

### SCENERY MANAGEMENT SYSTEM

One premise of SMS is that land management activities (including construction of facilities) should not contrast with the existing natural-appearing landscape. Within a framework of regional landscape character types, form, line, color, and texture should be used to make activities and structures "fit" within landscapes (Agricultural Handbook 666). This approach promotes a strong response to the context of the natural landscape. It also reinforces the concept of early park planning that structures should be visually subordinate to the landscape.

### DIVERSITY OF CUSTOMER BASE/ACCESSIBILITY

Public lands provide outdoor recreation opportunities for an increasingly diverse customer base. This reflects demographic changes within the American population, including an increase in the number of ethnic groups, recognition of nontraditional family structures, and the increased mobility of persons with disabilities. Locally, such factors may require new design responses for different group sizes, different types of amenities, and different language needs, although they generally do not affect overall architectural character on a regional scale.

Under the Architectural Barriers Act of 1968 and other mandates, universal design requires complete integration of accessibility within our facilities. As with sustainable design elements, universal design principles applied to a site or facility design from the outset seldom, if ever, have any obvious effect on architectural character. When skillfully executed, universally designed facilities fit seamlessly within the natural and social environments.

As population increases near national forests, facilities must also be made more resistant to vandalism. In addition, offices must be made secure for Forest Service employees who sometimes work in communities where tensions arise over forest resource issues.



## CONSTRUCTION TECHNOLOGIES, MATERIALS, AND LABOR AVAILABILITY

Three trends of the post-World War II era have accelerated in recent years. Construction technology and distribution systems have greatly increased the availability and variety of construction materials and furnishings. Labor for construction is increasingly scarce and costly. Two developments in particular have direct bearing on the image of the built environment:

- Prefabricated construction systems or modular buildings and structures, including toilets, are readily available, have relatively low initial costs, and require little labor beyond site preparation

to install. Therefore, they are often used to meet functional needs and economic constraints.

- Prefabricated recreation site furnishings, such as tables, benches, and trash receptacles, are often used instead of the custom designed and built furnishings of the past. The character of these ranges from fairly rustic (made of natural or natural-appearing materials) to manufactured (including metal and plastics).

Already an economic reality, prefabricated units can be carefully selected and sited to meet requirements of function, efficiency, and aesthetics. This requires professional analysis of the landscape and ROS setting to yield locations and design treatments that blend these elements into forest settings. Without such measures, prefabricated units can look out of place. The contexts of ecology and culture should not be sacrificed to economics. All three contexts must be kept in careful balance.



## ROLE AND LEVEL OF GOVERNMENT

“The era of big government is over.”

Then-President Clinton’s pronouncement during the 1996 State of the Union address capped a 20-year trend toward reduced Government size and increased privatization of public services. The Forest Service had been moving in that direction for some time. In 1987, the National Recreation Strategy emphasized “partnerships” and private investment in national forest recreation management. Since then, the number of entities involved in providing recreation facilities and services has exploded. Nonprofit organizations have contributed to construction of recreation and wildlife viewing facilities. About 50 percent of the national forest campground capacity is managed under concessionaire permits. The Forest Service is also strongly considering a program to encourage private investment, not just for the operation but for the planning, design, and construction of recreation facilities.

In short, the Forest Service is moving away from direct development of projects to a position of guidance, approval, and oversight. Our design philosophies will face the realities posed by the private sector’s cycles of investment and amortization. Key considerations include permanence versus short-term adaptability and the use of prefabricated elements, as previously discussed.

## THE BUILT ENVIRONMENT IMAGE—PAST AND FUTURE

To many people, the rustic imagery of the CCC era remains the most positive image for the built environment of the Forest Service. Perhaps this image remains popular because of its strong relation to the natural, cultural, and economic contexts; its reflections of a frontier past; and the humanizing aspects of handcrafted buildings. In subsequent decades, different stylistic trends have touched the Forest Service, with varying levels of success. All were responses to the context and spirit of the times.

Many trends have had positive effects, but others simply reflect the changing context of the times. One result has been a lack of a unified vision for the appropriate built environment image for the Forest Service. This guide attempts to define that vision. Just as the success of the rustic style was based on integration of context, the new Forest Service philosophy for the built environment must integrate the lessons of the past with the context of the present to create new and enduring places.