

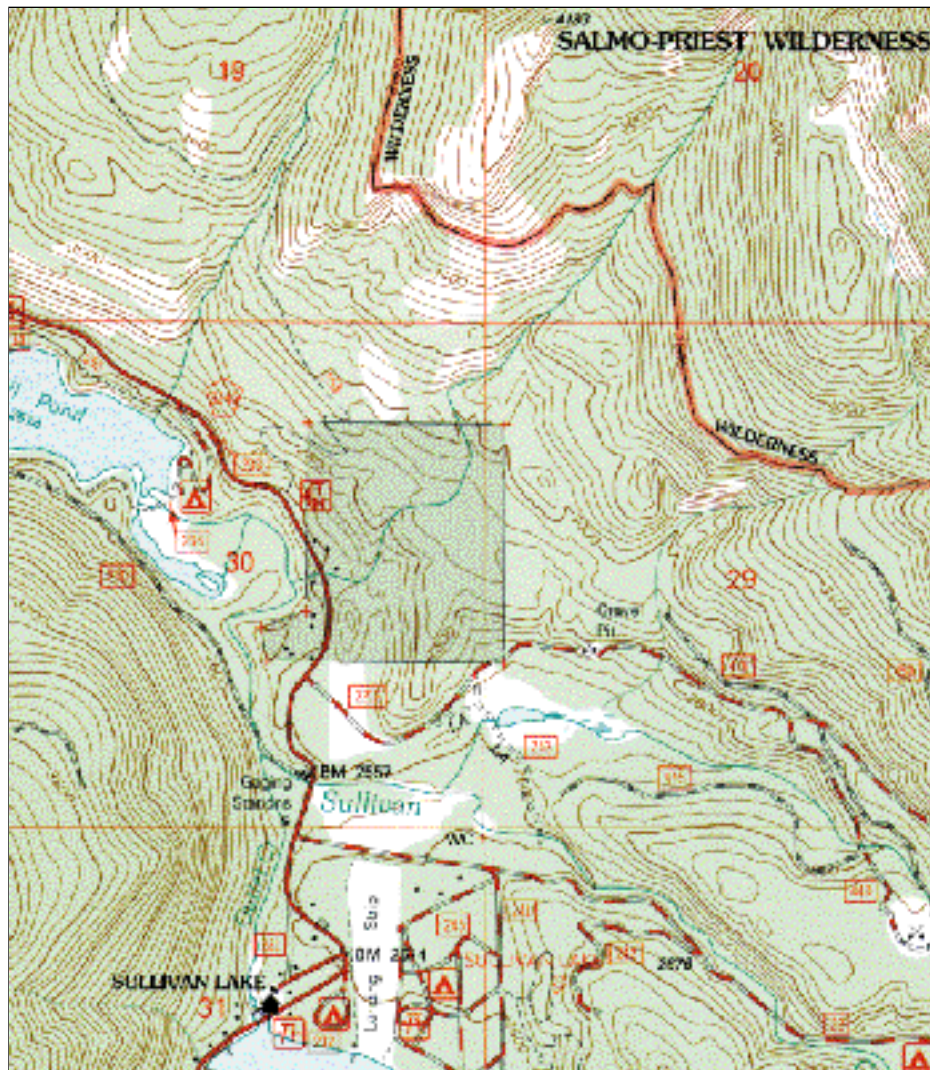
## Single-Edition Quadrangle Maps

### Introduction

In August 1993, the U.S. Geological Survey's (USGS) National Mapping Division and the U.S. Department of Agriculture's Forest Service signed an Interagency Agreement to begin a single-edition joint mapping program. This agreement established the coordination for producing and maintaining single-edition primary series topographic maps for quadrangles containing National Forest System lands. The joint mapping program saves money by eliminating duplication of effort by the agencies and results in a more frequent revision cycle for quadrangles containing national forests. Maps are revised on the basis of jointly developed standards and contain normal features mapped by the USGS, as well as additional features required for efficient management of National Forest System lands. Single-edition maps look slightly different but meet the content, accuracy, and quality criteria of other USGS products.

The Forest Service is responsible for the land management of more than 191 million acres of land throughout the continental United States, Alaska, and Puerto Rico, including 155 national forests and 20 national grasslands. These areas make up the National Forest System lands and comprise more than 10,600 of the 56,000 primary series 7.5-minute quadrangle maps (15-minute in Alaska) covering the United States. The Forest Service has assumed responsibility for maintaining these maps, and the USGS remains responsible for printing and distributing them.

Before the agreement, both agencies published similar maps of the same areas. The maps were used for different purposes, but had comparable types of features that were revised at different times. Now, the two products have been combined into one so that the revision cycle is stabilized and only one agency revises the maps, thus increasing the number of current maps available for National Forest System lands. This agreement has improved service to



A part of the Metaline Falls, Wash., single-edition quadrangle.

the public by requiring that the agencies share the same maps and that the maps meet a common standard, as well as by significantly reducing duplication of effort.

### Are Single-Edition Maps Different?

'Yes' and 'No.' Single-edition maps are different in some ways when compared with the standard quadrangle map, but they are the same in most other ways because single-edition maps are produced with the same set of standards. Nevertheless, the

differences are actually beneficial for map users because single-edition maps provide more information than standard maps. Standard maps also have been improved by the incorporation of international symbols for recreational features, such as campgrounds and picnic areas, and the enhancement of Federal land boundaries.

Single-edition maps are different because they have about 25 additional features. Several features needed by the Forest Service to manage our national forests efficiently have been combined with

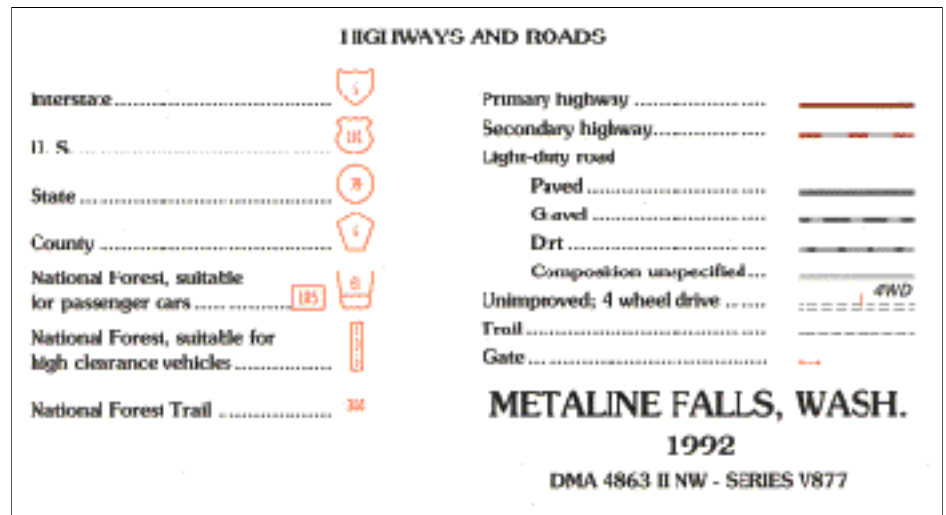
features traditionally shown on USGS general-purpose topographic maps. For example, the surface construction of light-duty roads is further defined as paved, gravel, dirt, or unspecified. Symbols for forest routes provide information on whether or not a road is passable by high-clearance or low-clearance vehicles. Single-edition maps show additional forest administrative and land status boundaries, as well as protracted and surveyed township and range information of the Public Land Survey System. Private property inside the national forest boundary is portrayed with a light-gray tint. The maps are still projected on the NAD27 datum. Lastly, these maps show Forest Service campground names, indicate trailheads, and use a few cartographic enhancements of other symbols and margin information to emphasize some of the multiple public uses of the Forest System lands.

Single-edition maps are the same as traditional quadrangle maps in that they retain the same 7.5-minute, 1:24,000-scale format, contours, and other conventional features and symbols. The standards for revising all quadrangle maps were developed jointly by the USGS and the Forest Service. The quality in terms of content, names, and labels is the same. The positional accuracy of well-defined features shown on the existing map is maintained during revision. Therefore, maps having the National Map Accuracy statement should continue to meet accuracy standards.

## Single-Edition Map Revision

In a perfect world, all features on all quadrangle maps would be revised at the same time, giving a true and complete snapshot of the ground on the date of map publication. Unfortunately for map users, this is not economically possible; thus, for all quadrangle maps we have defined two kinds of revision: basic and complete. For basic revision, only certain features that can be positively identified from imagery (for example, aerial photographs, digital orthophotos, satellite images, and so on) are revised. Map content is revised by adding new features, modifying features that change, and deleting features that no longer exist. Generally, there is no field checking and the contours are left as they were originally drawn. The positional accuracy of features on the previous edition of the map is maintained.

For complete revision, all feature content is revised, there is field verification, and



The expanded "Highways and Roads" legend for single-edition maps.

the contours are updated. The positional accuracy of each feature is improved as necessary.

Revision of single-edition maps, like that of most standard USGS maps, usually follows basic revision guidelines, with some notable exceptions. The Forest Service does some field checking, especially for areas within the national forest boundaries. On quadrangles having both Forest System lands and non-Forest System lands, the revision is not exhaustive; that is, features inside the national forest boundary are comprehensively revised, but only certain features may be revised outside the boundary. The kinds of features that may be revised outside of Forest System lands are those that provide access to public land, those that continue from one map to the next, or those features that are large in area and highly visible. Examples include four-lane highways, large reservoirs, high-voltage powerlines, public access roads, and the Public Land Survey System.

## Availability

Standard USGS 7.5-minute maps (15-minute in Alaska) cover the entire United States and its possessions. The USGS and the Forest Service are in the process of converting the maps covering National Forest System lands to single-edition versions. Currently, not all national forests have single-edition map coverage; however, complete coverage could be realized near the year 2010.

Single-edition maps, as with standard USGS quadrangle maps, are available from map dealers, USGS Earth Science Information Centers, and National Forest Visitor Centers, or by ordering through the Internet.

For more information about the single-edition program contact:

U.S. Geological Survey  
Attention: RMMC Standards Team  
Box 25046, Mail Stop 509  
Denver Federal Center  
Denver, CO 80225  
Telephone: 303-202-4200  
E-mail: [RMMC-Standards@usgs.gov](mailto:RMMC-Standards@usgs.gov)  
Fax: 303-202-4188

USDA Forest Service  
Geometrics Service Center  
2222 West 2300 South  
Salt Lake City, UT 84119-2083  
Telephone: 801-975-3473  
Fax: 801-975-3478

or

USDA Forest Service  
Engineering Staff Unit  
201 14th Street SW.  
Washington, D.C. 20250  
Telephone: 202-205-0926  
Fax: 202-205-0861

Ordering paper maps from the Internet  
<http://edcwww.cr.usgs.gov/webglis>.

For information on these and other USGS products and services, call 1-800-USA-MAPS, use the EARTHFAX fax-on-demand system, which is available 24 hours a day at 703-648-4888, or visit the general interest publications website at <http://mapping.usgs.gov/www/products/mappubs.html>.

Please visit the USGS home page at <http://www.usgs.gov/>.