

US Topo Map Symbols

What is a US Topo?

A US Topo is a digital topographic map that covers 7.5-minutes of longitude by 7.5-minutes of latitude and is produced at a scale of 1:24,000. US Topos are freely distributable and are available for download on the Web from the USGS Store (<http://store.usgs.gov>) in Portable Document Format (PDF) with geospatial extensions (GeoPDF®, a registered trademark of TerraGo Technologies). PDF maps can be viewed and printed with any conforming PDF software. Versions 9.x and 10.x of Adobe® Reader® and Acrobat® software provide access to the geospatial functionality of the US Topo. Adobe Reader is available for free at <http://get.adobe.com/reader>. Geospatial functionality is enhanced with the TerraGo® Toolbar™, a plug-in to the Adobe software that may be downloaded for free at <http://usgs.terragotech.com/home>. More information about US Topos and their use is available at <http://nationalmap.gov/ustopo>.

The base data layer of a US Topo is a recent orthographic aerial photograph. These orthoimages have been corrected to remove scale distortions that result from the varying terrain and deviations of the aircraft's position from the true vertical. The maps include contours that show the shape of the Earth's surface, hydrographic features such as lakes and rivers, roads, boundaries, and geographic names. Additional data from the geographic data themes of transportation, names, elevation, hydrography, boundaries, structures (such as fire stations) and land cover (such as woodland tint) is being added to the maps as they are updated, resulting in a product that will become progressively more robust over time. Feature data is incorporated from national Geographic Information System (GIS) databases under the stewardship of USGS data programs. The US Topo is intended for conventional map users, not for advanced GIS analysis. However, most of the data sources used are in the public domain and may be downloaded for free from The National Map (TNM) (<http://nationalmap.gov>).

US Topos are revised on a three-year production cycle.

Symbols on US Topos

The underlying orthoimage for each US Topo shows those features on the Earth's surface that are visible to the eye. Because each map is made at a scale of 1:24,000 (one inch on the map represents 24,000 inches – or 2,000 feet – on the ground), selected features are also shown and emphasized by symbols, geographic names, and highway route numbers.

Map features may be represented as points, lines, or polygons. They incorporate different colors and patterns to distinguish between feature types and to show each feature's importance. For example, a perennial stream is symbolized by a solid blue line while an intermittent stream is shown by a blue dashed and dotted line. A large reservoir is depicted by a polygon while a small reservoir may be shown by a point symbol if it is too small to show as a polygon.

Point symbols of different shapes and sizes depict features such as structures, dams, gates, rocks, waterfalls, and wells. Linear map symbols (lines) show such features as roads, rivers, boundaries, and contours. Color is used to show the class of information: topographic contours in brown, streams and rivers and other hydrographic features in blue, and roads in black and red. Areal features are outlined to depict the areal extent and may also be emphasized by a color tint. Names and labels are shown in different type fonts, sizes, and colors.

The unique feature of a topographic map is the contour. These lines do not exist on the Earth's surface. They join points of equal elevation above a zero level surface (such as Mean Sea Level) and therefore show heights of the land and reveal the shape of the land surface. Heavier brown lines are index contours and are labeled with the elevation they represent. Closely spaced contours indicate a steep land slope; widely spaced contours show more level ground. The elevation difference between adjacent contours is the contour interval. A map of a relatively flat area may have a contour interval of 10 feet. In steep areas an interval of 100 feet or more may be used to avoid coalescence or convergence of the contour lines. The contour interval is always noted in the map legend.

Transportation Features

	Interstate
	US Route
	State Route
	Ramp
	Local Road (Primary / Private / Public / Secondary / Service)
	Forest Service Primary Route
	Forest Service Passenger Route
	Forest Service High Clearance Route
	4WD Road
	Ferry Crossing
	Tunnel
	Airport Runway
	Lake County Airport

Hydrography Point Features

		Dam / Weir (Earthen / Nonearthen)
		Gate
		Lock Chamber
	~	Rapids
	o	Reservoir (Earthen / Nonearthen), (Aquaculture / Filtration / Treatment Ponds)
	*	Rock (Above Water / Underwater)
	{	Spring / Seep
		Waterfall
	o	Well
	+	Gaging Station

Contour Features

	Index
	Intermediate
	Depression Index
	Depression Intermediate









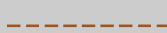










Land Cover

	Woodland
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Structure and Boundary Features


























	Fire Station
	Hospital
	County or Equivalent
	State or Territory
	National Reserve
	International Boundary

Hydrography Linear Features

		Coastline
	<i>Slick Creek</i> 	Stream / River (Intermittent)
	<i>Rio Grande</i> 	Stream / River (Perennial)
	<i>High Line Aqueduct</i> 	Aqueduct
	<i>High Line Ditch</i> 	Canal / Ditch
		Pipeline (Aqueduct / Penstock / Siphon), (At or Near Surface / Elevated / Underwater)
		Pipeline (Underground), (Aqueduct / Penstock)
		Underground Conduit
Chandler Dam		Earthen Dam / Weir
Turquoise Dam		Nonearthen Dam / Weir
		Gate / Lock Chamber / Nonearthen Shore / Wall
		Flume
Eldon Levee		Levee
<i>Lewis Falls</i>		Rapids / Waterfall
		Reef
		Sounding Datum Line (Approximate)
		Sounding Datum Line (Definite)
		Special Use Zone Limit (Definite / Indefinite)
Corbett Tunnel		Tunnel

For more information about the US Topo product, visit <http://nationalmap.gov/ustopo/index.html>.
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Hydrography Area Features

		Estuary
<i>Portage</i>		Ice Mass
<i>Glacier</i>		Lake / Pond (Intermittent); Reservoir (Earthen / Intermittent), (Storage)
<i>Boysen</i>		Lake / Pond (Perennial); Reservoir (Earthen / Perennial), (Aquaculture / Disposal / Storage Pond)
<i>Reservoir</i>		Reservoir (Decorative / Swimming Pool; Cooling / Disposal / Evaporator / Filtration / Treatment Pond)
<i>Wolverine</i>		Reservoir (Settling Pond)
<i>Lakes</i>		Reservoir (Tailings Pond)
		Playa
		Area of Complex Channels
		Area to be Submerged
<i>Hudson Bay</i>		Bay / Inlet
<i>High Line Canal</i>		Canal / Ditch
<i>High Line Aqueduct</i>		Canal / Ditch: Aqueduct
<i>Hoover Dam</i>		Dam / Weir (Earthen / Nonearthen)
		Flume
		Foreshore
		Hazard Zone
		Lock Chamber
		Inundation Area (Controlled: Flood Elevation Stage / Not Controlled)
<i>Upset Rapids</i>		Rapids
<i>Pacific</i>		Sea / Ocean
<i>Ocean</i>		Special Use Zone (Operational Dump Site / Spoil Area)
		Spillway
<i>Bear Creek</i>		Stream / River (Perennial)
<i>West Creek</i>		Stream / River (Intermittent)
		Submerged Stream
		Wash

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