



**U.S. Department of Agriculture
Forest Service**

National Mapping Program Technical Instructions

Part 10

Named Landforms

**Standards for USGS and USDA Forest Service
Single Edition Quadrangle Maps**

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 10: Named Landforms

CONTENTS

	Page
10. Named Landforms	10-1
ARCH	10-2
BAR	10-3
BASIN	10-4
BEND	10-6
CAPE	10-7
CAVE ENTRANCE	10-8
CLIFF	10-9
DESERT	10-10
DIVIDE	10-11
FRACTURE	10-12
GAP	10-13
INCLINE/FLOW	10-14
ISLAND	10-16
ISTHMUS	10-17
MOUNT	10-18
PINNACLE	10-20
PLATEAU	10-21
RANGE	10-22
RIDGE	10-23
TERRACE	10-24
VALLEY	10-25

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 10: Named Landforms

10. NAMED LANDFORMS

This part of the standard provides a description of the Named Landforms features shown on USGS and USDA Forest Service single edition quadrangle maps.

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 10: Named Landforms

BAR

BAR - A natural accumulation of sand, gravel, or other material forming an underwater or exposed embankment.

Characteristics

Show the names of BARS.

Delineation

The limit of an offshore BAR is the break in the slope between the sides of the feature and the relatively flat underwater terrain at the base of the feature.

The limit of a BAR which is not offshore is the extent of the accumulation.

Depiction Conditions

If a BAR is named,
Then show the name.

Source Interpretation Guidelines

All

The feature BAR is included in the GNIS feature class "bar". According to GNIS, bars may be described by about forty generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

If a BAR coincides with a BARREN LAND (Nonvegetative Surface Cover theme), show the BAR name and the BARREN LAND.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

BASIN - A bowl-shaped depression in the surface of the land or ocean floor.

Characteristics

Show the following BASINS:

Carolina Bay	Oval tract of land containing a deep accumulation of humus, muck or peat, (and may even contain water), often partly enclosed by low, sandy ridges. These are found in the coastal plain between northern Florida and New Jersey.
Crater	A rounded hole in the Earth's surface formed as a result of a bomb explosion, meteor impact or volcanic eruption.
General Case	Those that are in common use.

Show the names of Carolina bays BASINS if they are known.

Show the names of crater or general case BASINS.

Delineation

The limit of a BASIN is the identifiable rim, distinguished by the change in elevation.

Depiction Conditions

If a BASIN is a Carolina bay,
Or
If a BASIN is named,
Then show.

Source Interpretation Guidelines

All

The feature BASIN is included in the GNIS feature class "basin". According to GNIS, basins may be described by about forty-five generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

If a named BASIN coincides with a LAKE/POND (Hydrography theme), show the BASIN name and the LAKE/POND.

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 10: Named Landforms

BASIN

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
Carolina Bay	541.17	N/L; Show name if known
Crater	N/A	N/L; Show name
General Case	N/A	N/L; Show name

BEND

BEND - A curve in the course of a stream or the land within the curve.

Characteristics

Show the names of BENDS.

Delineation

The limit of a BEND that is the land within the curve of a STREAM/RIVER is defined by the SHORELINE and the line across the land that connects the points of the recurve. (See the Hydrography theme for STREAM/RIVER and SHORELINE.)

The limit of a BEND that is the area of a STREAM/RIVER is defined by the SHORELINE on both sides of the STREAM/RIVER and the lines across the stream that connect the points of the recurve. (See the Hydrography theme for STREAM/RIVER and SHORELINE.)

Depiction Conditions

If a BEND is named,
Then show the name.

Source Interpretation Guidelines

All

The feature BEND is included in the GNIS feature class "bend". According to GNIS, bends may be described by about twenty generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

CAPE

CAPE - A projection of land extending into a body of water which prominently marks a change in or interrupts the coastal trend of that water body.

Characteristics

Show the names of CAPES.

Delineation

The limit of a CAPE is the extent of the projection of land as defined by the SHORELINE of an ESTUARY, LAKE/POND, SEA/OCEAN, or STREAM/RIVER on the water side and an arbitrary line across the land that isolates the projection. (See the Hydrography theme for ESTUARY, LAKE/POND, SEA/OCEAN, and STREAM/RIVER.)

Depiction Conditions

If a CAPE is named,
Then show the name.

Source Interpretation Guidelines

All

The feature CAPE is included in the GNIS feature class "cape". According to GNIS, capes may be described by about thirty generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

CAVE ENTRANCE

CAVE ENTRANCE - A passage that affords entry to a naturally formed subterranean open area or chamber.

Characteristics

Show the names of CAVE ENTRANCES if they are known.

Delineation

The limit of a CAVE ENTRANCE is the edge of the passage.

Depiction Conditions

If a CAVE ENTRANCE is open to the public,

Or

If a CAVE ENTRANCE is controlled by a governmental or private agency and that agency has given permission to show the CAVE ENTRANCE,

Then show. (See the Source Interpretation Guidelines, if it is necessary to accurately represent a pattern of closely spaced CAVE ENTRANCES.)

Source Interpretation Guidelines

All

If a CAVE ENTRANCE is within an area of closely spaced CAVE ENTRANCES, first show the named CAVE ENTRANCES, then those that are on the perimeter of the area, then those that are the most prominent, then finally show a representative pattern of the CAVE ENTRANCES internal to the area. Show as many as can be depicted in the correct position. The symbols may overlap to reflect the density of CAVE ENTRANCES.

If a BUILDING (Built-up theme) exists over a CAVE ENTRANCE, show the BUILDING and the CAVE ENTRANCE label but do not show the CAVE ENTRANCE symbol.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	512.80	Cave; Show name if known

CLIFF - A high vertical, near-vertical, or over-hanging face.

Characteristics

Show the names of CLIFFS.

Delineation

The limit of a CLIFF is the extent of the face.

Depiction Conditions

If a CLIFF is named,
Then show the name.

Source Interpretation Guidelines

All

The feature CLIFF is included in the GNIS feature class "cliff". According to GNIS, cliffs may be described by about fifty generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

DESERT

DESERT - A region rendered barren or practically barren by environmental extremes, especially low rainfall.

Characteristics

Show the names of DESERTS.

Delineation

The limit of a DESERT is the extent of the barren region.

Depiction Conditions

If a DESERT is named,
Then show the name.

Source Interpretation Guidelines

All

The feature DESERT is not a GNIS feature class. According to GNIS DESERT is included in the GNIS feature class "plain". However, not all GNIS "plains" can be classified as the feature DESERT. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

If a DESERT coincides with a PLAYA or BARREN LAND, show the DESERT name and the other feature. (See the Hydrography theme for PLAYA. See the Nonvegetative Surface Cover theme for BARREN LAND.)

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

DIVIDE

DIVIDE - The line separating drainage basins.

Characteristics

Show the names of DIVIDES.

Delineation

The limit of a DIVIDE is the line connecting points of highest elevation along the ridges that divide the drainage basins.

Depiction Conditions

If a DIVIDE is the Continental Divide or the Tennessee Valley Divide,
Then show.

Source Interpretation Guidelines

All

N/A

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	532.16	N/L; Show name

FRACTURE

FRACTURE - A deformation in the Earth's crust caused by a loss of cohesion.

Characteristics

Show the names of FRACTURES if they are known.

Delineation

The limit of a FRACTURE is the edges of the Earth's surface.

Depiction Conditions

If a FRACTURE is $\geq 0.75"$ (1,500 feet at 1:24,000 scale) along the longest axis and is visible on the surface,
Then show.

Source Interpretation Guidelines

All

The feature FRACTURE is not a GNIS feature class. According to GNIS, the terms "fault" and "fissure" are included in the GNIS feature class "valley". However, not all GNIS "valleys" can be classified as the feature FRACTURE. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

Do not depict rift valleys as FRACTURES. See VALLEY.

Symbolization

Characteristics	Symbol	Label
N/A	518.1	FRACTURE; Show name if known

GAP - A low point or opening between mounts or in a ridge.

Characteristics

Show the names of GAPS.

Delineation

The limit of a GAP is the extent of the constriction, defined by a rise in elevation.

Depiction Conditions

If a GAP is named,
Then show the name.

Source Interpretation Guidelines

All

The feature GAP is included in the GNIS feature class "gap". According to GNIS, gaps may be described by about thirty generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

INCLINE/FLOW

INCLINE/FLOW - A feature characterized by a sloping surface or a formation resulting from movement down a sloping surface.

Characteristics

Show the names of INCLINE/FLOWS.

Delineation

The limit of an INCLINE/FLOW is the extent of the sloping or flow area.

Depiction Conditions

If an INCLINE/FLOW is named,
Then show the name.

Source Interpretation Guidelines

All

Examples of inclines are the slopes of hills and mountains.

Examples of flows include rock slides, lava flows, or other earthen flows.

If an INCLINE/FLOW is composed of lava, label the INCLINE/FLOW and show the material it is composed of as BARREN LAND (Nonvegetative Surface Cover theme).

Some lava flows are identified by date, e.g. "Lava Flow of 1977". This unique identification is considered the name of the lava flow.

The feature INCLINE/FLOW is not a GNIS feature class. According to GNIS, INCLINE/FLOW is included in the GNIS feature classes "slope" or "lava". All GNIS "slopes" or "lava" can be classified as the feature INCLINE/FLOW. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

A brown screen or intricate surface pattern has been used to designate lava flows on previously published maps. Ancillary sources may be required to determine individual flow edges.

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 10: Named Landforms

INCLINE/FLOW

Symbolization

Characteristics	Symbol*	Label
N/A	N/A	N/L; Show name
* Lava flows are symbolized as BARREN LAND (Nonvegetative Surface Cover theme). Do not show lava flow outlines (532.24). This symbol is used only on USGS maps of Hawaii.		

ISLAND

ISLAND - An area of dry or relatively dry land surrounded by water or low wet land.

Characteristics

Show the names of ISLANDS if they are known.

Delineation

The limit of an ISLAND surrounded by a LAKE/POND, SEA/OCEAN, or STREAM/RIVER is the NONEARTHEN SHORE, SHORELINE, or WALL. (See the Hydrography theme for LAKE/POND, NONEARTHEN SHORE, SEA/OCEAN, STREAM/RIVER, SHORELINE, and WALL.)

The limit of an ISLAND covered with mangrove TREES (Vegetative Surface Cover theme) is the indefinite SHORELINE (Hydrography theme).

The limit of an ISLAND surrounded by a SWAMP/MARSH (Hydrography theme) is the extent of the dry land.

Depiction Conditions

If an ISLAND is ≥ 0.03 " (60 feet at 1:24,000 scale) along the shortest axis, Then show.

Source Interpretation Guidelines

All

The term "island" has been loosely applied to land-tied areas and to land cut off on two or more sides by water, such as a peninsula. Do not depict these areas as ISLANDS. See LOCALE (Built-up theme).

The feature ISLAND is included in the GNIS feature class "island". According to GNIS, islands may be described by about 50 generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name if known

ISTHMUS

ISTHMUS - A narrow strip of land, bordered on both sides by water, connecting two larger land areas.

Characteristics

Show the names of ISTHMUSES.

Delineation

The limit of an ISTHMUS is the extent of the strip of land.

Depiction Conditions

If an ISTHMUS is named,
Then show the name.

Source Interpretation Guidelines

All

The feature ISTHMUS is included in the GNIS feature class "isthmus". According to GNIS, isthmuses may be described by about five generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

MOUNT

MOUNT - A landmass that projects conspicuously above its surroundings.

Characteristics

Show the following MOUNTS:

General Case	Those that are in common use.
Hummocked Ice	Sea ice having a rugged, uneven surface due to the formation of hummocks.
Indian Mound	Mound of earth created as a result of Indian burials.
Pingo	Low, rounded mound of turf formed by ice pressure pushing up from beneath. Found in the arctic coastal plain of Alaska.

Show the names of MOUNTS if they are not Indian mounds. Show the names of Indian mounds if they are known.

Delineation

The limit of a MOUNT is the break in slope between the steep sides of the feature and the relatively flat terrain at the base of the feature.

Depiction Conditions

If a MOUNT is an Indian mound that is controlled and protected by a government or private agency and that agency has given permission to show the MOUNT,
Or
If a MOUNT is not an Indian mound and is named,
Then show.

Source Interpretation Guidelines

All

The feature MOUNT is not a GNIS feature class. According to GNIS, MOUNT is included in the GNIS feature class "summit". However, not all GNIS "summits" can be classified as the feature MOUNT. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Indian mounds may exist in ARCHEOLOGICAL SITES (Built-up theme.)

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
 Part 10: Named Landforms

MOUNT

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
General Case	N/A	N/L; Show name
Hummocked Ice	N/A	N/L; Show name
Indian Mound	512.72*	Indian Mound; Show name if known
Pingo	N/A	N/L; Show name
* Show 512.72 if the Indian mound cannot be accurately portrayed by contours.		

PINNACLE

PINNACLE - A vertical, often spire-shaped natural rock formation.

Characteristics

Show the names of PINNACLES.

Delineation

The limit of a PINNACLE is the base of the formation.

Depiction Conditions

If a PINNACLE is named,
Then show.

Source Interpretation Guidelines

All

The feature PINNACLE is not a GNIS feature class. According to GNIS, PINNACLE is included in the GNIS feature class "pillar". However, not all GNIS "pillars" can be classified as the feature PINNACLE. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol*	Label
N/A	512.72	N/L; Show name
* Show 512.72 if the PINNACLE cannot be accurately portrayed by contours.		

PLATEAU

PLATEAU - An elevated and comparatively level expanse of land.

Characteristics

Show the names of PLATEAUS.

Delineation

The limits of a PLATEAU are the edges of the base of the side(s) supporting the elevated flat area and/or the break in the slope of the flat area if partially bounded by an upslope.

Depiction Conditions

If a PLATEAU is named,
Then show the name.

Source Interpretation Guidelines

All

The feature PLATEAU is not a GNIS feature class. According to GNIS, PLATEAU is included in the GNIS feature class "plain". However, not all GNIS "plains" can be classified as the feature PLATEAU. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

RANGE - A chain of mounts and/or ridges.

Characteristics

Show the names of RANGES.

Delineation

The limit of a RANGE is the extent of the connected mounts and/or ridges.

Depiction Conditions

If a RANGE is named,
Then show the name.

Source Interpretation Guidelines

All

The feature RANGE is included in the GNIS feature class "range". According to GNIS, ranges may be described by about twenty generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

RIDGE - A long and narrow upland with steep sides.

Characteristics

Show the names of RIDGES.

Delineation

The limit of a RIDGE is the break in slope between the steep sides of the feature and the relatively flat terrain at the base of the feature.

Depiction Conditions

If a RIDGE is named,
Then show the name.

Source Interpretation Guidelines

All

The feature RIDGE is included in the GNIS feature class "ridge". According to GNIS, ridges may be described by about forty generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

TERRACE

TERRACE - A step-like surface between higher and lower ground.

Characteristics

Show the names of TERRACES.

Delineation

The limits of a TERRACE are the outermost edges of a strip or a series of nearly level strips of ground that interrupt the uniform continuity of a slope.

Depiction Conditions

If a TERRACE is named,
Then show the name.

Source Interpretation Guidelines

All

The feature TERRACE is not a GNIS feature class. According to GNIS, TERRACE is included in the GNIS feature class "bench". All GNIS "benches" can be classified as the feature TERRACE. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name

VALLEY

VALLEY - An elongated depression in the earth's surface which generally slopes from one end to the other.

Characteristics

Show the names of VALLEYS.

Delineation

The limit of a VALLEY is the edges of low relief in gently sloping occurrences, and the highest rim of the sides in steeply inclined occurrences (such as some canyons), generally with a drainage outlet at one end.

Depiction Conditions

If a VALLEY is named,

Then show the name.

Source Interpretation Guidelines

All

The feature VALLEY is included in the GNIS feature class "valley". According to GNIS, valleys may be described by about eighty-eight generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Rift valleys are depicted as VALLEYS.

Hollows are depicted as VALLEYS.

Graphic

N/A

Symbolization

Characteristics	Symbol	Label
N/A	N/A	N/L; Show name