National Mapping Program
Technical Instructions

Part 10
Named Landforms

Standards for 1:24,000-Scale Digital Line Graphs and Quadrangle Maps

U.S. Department of the Interior
U.S. Geological Survey
National Mapping Division

CONTENTS

LIST OF PAGES

A complete and current copy of Part 10 of Standards for 1:24,000-Scale Digital Line Graphs and Quadrangle Maps consists of the pages (and most recent creation or revision dates) listed below.

ARCH - A naturally occuring, freestanding curved structure that spans an opening.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Arch Category	Form or nature
Natural Arch	An opening through rock created by wind, freeze/thaw cycles and percolating water.
Natural Bridge	An opening through rock created by wave action or stream erosion.
Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99
Unspecified	The value is not known and is not required

DELINEATION

The limit of ARCH is the extent of the curved structure.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional			

Special Conditions:

If ARCH cannot be accurately portrayed by the contour pattern,
Then ARCH is represented as a 0-dimensional basic feature object.

If ARCH can be accurately portrayed by the contour pattern,
Then ARCH is represented as a 2-dimensional basic feature object.

DATA EXTRACTION

Capture Conditions

Capture all.

Attribute Information

Source Interpretation Guidelines

All

The feature ARCH is included in the GNIS feature class "arch". According to GNIS, arches may be described by about four generics. GNIS maintains a list of feature classes and related generics. Contact GNIS for more information.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: ARCH_P001
Dimension: 0

⊙ NAM
(Natural Arch)

Attribute	Value	Symbol Specs	Type Specs
Arch Category	Natural Arch	Circle Color: Black Lineweight: 0.003" Diameter: 0.04"	**Label:** Color: Black Style: UL C/lc Size: 7 Spacing: 0
Name	(Alphanumeric) or Unspecified	Dot Color: Black Diameter: 0.006" Positioning: centered in circle	**Name:** Color: Black Style: UI C/lc Size: 7 Spacing: 0
		Symbol Orientation Origin: center of symbol	

Symbol#: ARCH_P002
Dimension: 0

⊙ NAM
(Natural Bridge)

Attribute	Value	Symbol Specs	Type Specs
Arch Category	Natural Bridge	Circle Color: Black Lineweight: 0.003" Diameter: 0.04"	**Label:** Color: Black Style: UL C/lc Size: 7 Spacing: 0
Name	(Alphanumeric) or Unspecified	Dot Color: Black Diameter: 0.006" Positioning: centered in circle	**Name:** Color: Black Style: UI C/lc Size: 7 Spacing: 0
		Symbol Orientation Origin: center of symbol	

Symbol#: ARCH_A001
Dimension: 2

NAM
(Natural Arch)

Attribute	Value	Symbol Specs	Type Specs
Arch Category	Natural Arch	N/A	**Label:** Color: Black Style: UL C/lc Size: 7 Spacing: 0
Name	(Alphanumeric) or Unspecified		**Name:** Color: Black Style: UI C/lc Size: 6-16 Spacing: 0-32

Symbol#: ARCH_A002
Dimension: 2

NAM
(Natural Bridge)

Attribute	Value	Symbol Specs	Type Specs
Arch Category	Natural Bridge	N/A	**Label:** Color: Black Style: UL C/lc Size: 7 Spacing: 0 **Name:** Color: Black Style: UI C/lc Size: 6-16 Spacing: 0-32
Name	(Alphanumeric) or Unspecified		

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

If ARCH has Name = Unspecified,
Then suppress parenthesis around the label.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Bryce Canyon, UT (Tower Bridge 0-D)
Ireland Mesa, UT (The Hondu 0-D)
Moss Back Butte, UT (Owachomo, Kachina and Sipapu Bridges 2-D)
Natural Bridge, VA
Rainbow Bridge, UT-AZ (Rainbow Bridge 2-D)
Snow Flat Spring Cave, UT
The Windows Section, UT (Eye of the Whale, North Window, and South Window 0-D)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

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.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If BAR is named,
Then capture.

Attribute Information

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.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: BAR_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Newport News South, VA (Newport News Middle Ground, Newport News Bar)
Provincetown, MA (Shank Painter Bar, Wood End Bar)
Walkers, VA (Binns Bar)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Basin Category	Form or nature
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	Common use
Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99
Unspecified	The value is not known and is not required

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional			

Special Conditions:

If BASIN has Basin Category = Carolina Bay and only a portion of BASIN is evident,
Then BASIN is represented as a 1-dimensional basic feature object.

If BAsin has Basin Category = Crater or General Case or if BASIN has Basin Category = Carolina Bay and the entire perimeter is evident,
Then BASIN is represented as a 2-dimensional basic feature object.

DATA EXTRACTION

Capture Conditions

If BASIN is a Carolina Bay,
Or
If BASIN is named,
Then capture.

Attribute Information

If Basin Category = Crater or General Case,
Then Name = (Alphanumeric).

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 BASIN has Basin Category = Carolina Bay and the area of the BASIN coincides with or includes a LAKE/POND,
Then capture BASIN and LAKE/POND (Hydrography theme).

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: BASIN_L001
Dimension: 1

Attribute	**Value**	**Symbol Specs**	**Type Specs**
Basin Category	Carolina Bay	Dashed Line Color: Blue Lineweight: 0.008" Dash Length: 0.07" Dash Spacing: 0.02"	**Name:** Color: Blue Style: SLI CAPS or C/lc Size: 6-16 Spacing: 0-32
Name	(Alphanumeric) or Unspecified		

Symbol#: BASIN_A001
Dimension: 2

Attribute	Value	Symbol Specs	Type Specs
Basin Category	Carolina Bay	Dashed Area Perimeter Color: Blue Lineweight: 0.008" Dash Length: 0.07" Dash Spacing: 0.02"	**Name:** Color: Blue Style: SLI CAPS or C/lc Size: 6-16 Spacing: 0-32
Name	(Alphanumeric) or Unspecified		

Symbol#: BASIN_A002
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Basin Category	Crater or General Case	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32
Name	(Alphanumeric)		

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Gainesville West, FL (General Case, "Devils Mill Hopper")
Kahuku Ranch, HI (Volcanic craters)
Lane Salt Lake, NM (Possible bomb crater, unnamed)
Meteor Crater, AZ (Meteoric crater)
Northeast Lumberton, NC (Carolina Bay)
Oak Spring, NV (Bomb crater)
Sunset Crater West, AR (Volcanic crater)
Unalaska, AK (Volcanic crater)
Unimak (C-1), AK (Volcanic crater)
Unimak (C-2), AK (Volcanic crater)
Williams Sink, NM (General case)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

BEND can be a portion of a stream or the land inside the curve of the stream.

The limit of BEND that is the land within the curve of STREAM/RIVER, is defined by SHORELINE and the line across the land that connects the points of recurve.

The limit of BEND that is the area of STREAM/RIVER, is defined by SHORELINE on both sides of STREAM/RIVER and the lines across the stream that connect the points of recurve.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If BEND is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: BEND_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Symbol#: BEND_A101
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Blue Style: SLI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

If BEND coincides with STREAM/RIVER,
Then resymbolize using A101.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Bowknot Bend, UT (Point Bottom, Woodruff Bottom, Tidewell Bottom)
Humptulips, WA (Big Creek Bottoms)
Monroe, WA (Big Bend)
Pascagoula North, MS (Rogers Bend, Macon Bend)
Rappahannock Academy, VA (Moss Neck, Corbins Neck, Skinners Neck)
Riverdale, VA-NC (Georges Bend, Smiths Bend)
Temple of Sinawava, UT (Big Bend)

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.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If CAPE is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: CAPE_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Cape Canaveral, FL (Cape Canaveral)
Cape Fear, NC (Cape Fear)
Cape Hatteras, NC (Cape Hatteras)
Cape Henry, VA (Cape Henry)
Cape Lookout, NC (Cape Lookout, Cape Point)
Cape St. George, FL (Cape St. George)
Cape San Blas, FL (Cape San Blas)
Grand Island Pass, MS-LA (Heron Bay Point, Lower Point Clear, St. Joseph Point)
Point Clear, AL (Mullet Point, Point Clear)
Provincetown, MA (Cape Cod, Long Point)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99
Unspecified	The value is not known and is not required

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional		> 0	
1-dimensional			
2-dimensional			

Special Conditions:

DATA EXTRACTION

Capture Conditions

If CAVE ENTRANCE is open to the public,
Or
If CAVE ENTRANCE is controlled by a governmental or private agency and that agency has given USGS permission to capture CAVE ENTRANCE,
Then capture.

Attribute Information

Source Interpretation Guidelines

All

If CAVE ENTRANCE is in an area of closely spaced cave entrances,
Then first capture named CAVE ENTRANCES, then those that are on the perimeter of the area, then those that are most prominent, then finally capture a representative pattern of CAVE ENTRANCES internal to the area. CAVE ENTRANCES must be captured in their correct position. The symbols may overlap to reflect the density of CAVE ENTRANCES.

If a building exists over CAVE ENTRANCE,
Then capture both BUILDING and CAVE ENTRANCE.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accommodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: CAVE_ENTRANCE_P001
Dimension: 0

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric) or Unspecified	Symbol Orientation Orientation: position stem perpendicular to contours Origin: junction of the arms Arms Color: Black Lineweight: 0.003" Length: 0.033" Angle Of Intersection: 90˚ Stem Color: Black Lineweight: 0.003" Length: 0.067" Positioning: end of stem intersects apex of arms at 135 degrees	**Label and Name:** Color: Black Style: UL C/lc Size: 7 Spacing: 0

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

If CAVE ENTRANCE coincides with BUILDING,
Then suppress_symbol for CAVE ENTRANCE.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Carlsbad, NM (Symbol labeled "Cavern Entrance" - Carlsbad Caverns National Park)
Gunsight Canyon, NM (Double Cave, Red Cave)
Jewel Cave, SD (Jasper Cave and Jewel Cave)
Mammoth Cave, KY (Several BUILDINGS symbols labeled "Mammoth Cave")
Luray, VA (Several BUILDINGS labeled "Luray Caverns")
Marianna, FL (Florida Caverns - Florida Caverns State Park)
New Market, VA (BUILDINGS labeled "Shenandoah Caverns")
North Chalone Peak, CA
Petersburg West, WV (Peacock Cave)
Sunset Crater West, AZ (Ice Cave - Sunset Crater National Monument)
Timpanogos Cave, UT (Timpanagos Cave and Hansen Cave)
Upper Tract, WV (Smoke Hole Cave)
Wind Cave, SD (WIND CAVE - Wind Cave National Park)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name — Proper name, specific term, or expression

(Alphanumeric) — Length Value: 99

DELINEATION

The limit of CLIFF is the extent of the face.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional			

Special Conditions:

If CLIFF has an average horizontal distance < 0.025" between the top of the face and the bottom of the face,
Then CLIFF is represented as a 1-dimensional basic feature object.

If CLIFF has an average horizontal distance ≥ 0.025" between the top of the face and the bottom of the face,
Then CLIFF is represented as a 2-dimensional basic feature object.

DATA EXTRACTION

Capture Conditions

If CLIFF is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: CLIFF_L001
Dimension: 1

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-10 Spacing: 0-1

Symbol#: CLIFF_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Champlain, VA (Fones Cliffs)
North Beach, MD (Fairhaven Cliffs, Owings Cliffs
Pintura, UT (Hurricane Cliffs)
Pioneer Mesa, UT (Circle Cliffs)
Yorktown, VA (York River Cliffs)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If DESERT is named,
Then capture.

Attribute Information

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.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: DESERT_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Black Rock Point West, NV (Black Rock Desert)
Hog Spring, NV (Smoke Creek Desert)
Lime Mountain, NV (Tule Desert)

DIVIDE - The line separating drainage basins.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional		> 0	
2-dimensional			

Special Conditions:

DATA EXTRACTION

Capture Conditions

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

Attribute Information

Source Interpretation Guidelines

All

Graphic

Revision - General

Revision - Standard

Revision - Limited

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: DIVIDE_L001
Dimension: 1

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	Dashed Line Color: Brown Lineweight: 0.012" Dash Length: 0.4" Dash Spacing: 0.1"	**Name:** Color: Black Style: UI CAPS Size: 10 Spacing: 5

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Freemont Peak South, WY (Continental Divide)
Hemp Top, GA-TN (Tennessee Valley Divide)
Jacks Gap, GA (Tennessee Valley Divide)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99
Unspecified	The value is not known and is not required

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional		> 0	
2-dimensional			

Special Conditions:

DATA EXTRACTION

Capture Conditions

If FRACTURE is ≥ 0.75 " along the longest axis, and is visible on the surface,
Then capture.

Attribute Information

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 capture rift valleys as FRACTURE. See VALLEY.

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

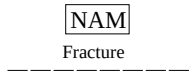
All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: FRACTURE_L001
Dimension: 1



Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric) or Unspecified	Dashed Line Color: Black Lineweight: 0.005" Dash Length: 0.1" Dash Spacing: 0.02"	**Label:** Color: Black Style: UL C/lc Size: 7 Spacing: 0 **Name:** Color: Black Style: UI CAPS or C/lc Size: 6-10 Spacing: 0-1

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Little Park, ID (Cracks)
Pahala, HI (Great Crack, cracks)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional		< 0.04"	
1-dimensional			
2-dimensional		≥ 0.04"	

Special Conditions:

DATA EXTRACTION

Capture Conditions

If GAP is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: GAP_P001
Dimension: 0

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 7 Spacing: 0

Symbol#: GAP_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Anthracite Range, CO (Swampy Pass, Castle Pass)
Jacks Gap, GA (Poplar Stomp Gap, Low Gap, Wide Gap)
Mohawk, AZ (Mohawk Pass)
Mohawk Mountains NW, AZ (Mohawk Pass)
Pingree Park, CO (Stormy Peaks Pass)
Rileyville, VA (Woodstock Gap, Red Spring Gap, Walters Gap, Golladays Gap)
Suches, GA (Cooper Gap, Locust Gap, Cane Creek Gap, Jones Gap, Deep Gap)

ICEBERG - Large mass of floating or stranded ice of greatly varying shape, more than 5 meters above sea level, which has broken away from a glacier.

ATTRIBUTE/ATTRIBUTE VALUE LIST

N/A

DELINEATION

The limit of an ICEBERG

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional			

Special Conditions:

DATA EXTRACTION

Capture Conditions

Attribute Information

Source Interpretation Guidelines

All

Graphic

Revision - General

Revision - Standard

Revision - Limited

ICEBERG TONGUE - A major accumulation of icebergs projecting from the coast, held in place by grounding and joined together by fast ice.

ATTRIBUTE/ATTRIBUTE VALUE LIST

N/A

DELINEATION

The limit of an ICEBERG TONGUE

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional			

Special Conditions:

DATA EXTRACTION

Capture Conditions

Attribute Information

Source Interpretation Guidelines

All

Graphic

Revision - General

Revision - Standard

Revision - Limited

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If INCLINE/FLOW is named,
Then capture.

Attribute Information

Source Interpretation Guidelines

All

Examples of FLOW are a rock slide, lava flow, or other "earthen" flow.

Examples of INCLINE are slopes of hills and mountains.

Some lava flows are identified by date, e.g. Lava Flow of 1977. This unique identification is considered as Name.

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.

If INCLINE/FLOW is composed of lava,
Then also collect BARREN LAND.

Graphic

Individual lava flows in Hawaii are shown with a brown dashed line. In other areas the brown screen or intricate surface pattern has been used to designate lava without a line separating individual flows. Ancillary source may be required to determine individual flow edges.

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: INCLINE_FLOW_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UL CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Barren Mountain East, ME (Hammond Street Pitch)
Beverly SE, WA (Wahluke Slope)
Demming, WA (Devils Slide)
Inferno Cone, ID (Many named lava flows)
Kalalua, HI
Kau Desert, HI (Kamoolii Lava Flows)
Manson, WV (Granite Slide)
Mt. St. Helens, WA (Worm Flows)
Royal Gap, WA (Royal Slope)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

The limit of ISLAND surrounded by STREAM/RIVER, SEA/OCEAN or LAKE/POND is the SHORELINE.

The limit of ISLAND covered with TREES, Vegetation Characteristics = Mangrove, is the Indefinite SHORELINE.

The limit of ISLAND surrounded by SWAMP/MARSH is the extent of the dry land.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If ISLAND is named,
Then capture.

Attribute Information

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 capture these named areas as ISLAND. 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.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: ISLAND_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Bar Harbor, ME (Bean Island (partially surrounded by REEF))
Belle Meade, FL (Umbrella Island, Halloway Island (mangrove islands), Rattlesnake Hammock)
Biddeford Pool, ME (Beach Island, Wood Island)
Bossier Point, LA (Bear Island (not surrounded by water or "low wetland")
Calumet Island, LA (Casse - Tete Island, Calumet Island)
Cameron Farms, LA (Bird Island, Rabbit Island, Deer Island (dry land surrounded by SWAMP/MARSH))
Cape Hatteras, NC (Hatteras Island)
Card Sound, FL (Broad Key, Swan Key, Gold Key (mangrove islands))
Corkscrew, FL (Eagle Island, Little Corkscrew Island, Ruess Island)
Cypress Lake, FL (Sheep Hammock, Long Hammock)
Delacroix, LA (Delacroix Island (ISLANDS surrounded by LAKE/PONDS, STREAM/RIVERS, and SWAMP/MARSH)
Delcambre, LA (Jefferson Island (not surrounded by water or "low wetland")
Deer Park, LA-MS (Glasscock Island (not surrounded by water or "low wetland"))
Extension, LA (Cocklebur Island, Rabbit Island (not surrounded by water or "low wetland"))
Fosters Falls, VA (Baker Island)
Naples South, FL (Munlin Island, Halloway Island"(mangrove ISLANDS))
Ship Shore Inlet, VA (Myrtle Island, Smith Island (used to describe several ISLANDS))
Vivian South, LA (Pine Island (not surrounded by water or "low wetland"))

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If ISTHMUS is named,
Then capture.

Attribute Information

Source Interpretation Guidelines

All

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

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: ISTHMUS_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Santa Catalina West, CA (Unnamed ISTHMUS)

MOUNT - A landmass that projects conspicuously above its surroundings.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Mount Category	Form or nature
General Case	Common use
Hummocked Ice	Sea ice having a rugged, uneven surface due to the formation of hummocks
Ice Dome	An accumulation of thick (typically 0.5 km) ice found on the continental margin of Antarctica
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.
Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99
Unspecified	The value is not known and is not required

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional			

Special Conditions:

If MOUNT has Mount Category = Indian Mound and cannot be accurately portrayed by the contour pattern,
Then MOUNT is represented as a 0-dimensional basic feature object.

If MOUNT has Mount Category = Indian Mound and can be accurately represented by the contour pattern or MOUNT has Mount Category = General Case, Hummocked Ice, Ice Dome, or Pingo,
Then MOUNT is represented as a 2-dimensional basic feature object.

DATA EXTRACTION

Capture Conditions

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

Attribute Information

If Mount Category ≠ Indian Mound,
Then Name = (Alphanumeric).

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.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: MOUNT_P001
Dimension: 0

⊙ NAM
Indian Mound

Attribute	Value	Symbol Specs	Type Specs
Mount Category	Indian Mound	Circle Color: Black Lineweight: 0.003" Diameter: 0.04"	**Label:** Color: Black Style: UL C/lc Size: 7 Spacing: 0
Name	(Alphanumeric) or Unspecified	Dot Color: Black Diameter: 0.006" Positioning: centered in circle	**Name:** Color: Black Style: UI CAPS or C/lc Size: 7 Spacing: 0
		Symbol Orientation Origin: center of symbol	

Symbol#: MOUNT_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Mount Category	General Case, Hummocked Ice, Ice Dome, or Pingo	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32
Name	(Alphanumeric)		

Symbol#: MOUNT_A002
Dimension: 2

NAM
Indian Mound

Attribute	Value	Symbol Specs	Type Specs
Mount Category	Indian Mound	N/A	**Label:** Color: Black Style: UL C/lc Size: 6-10 Spacing: 0-1
Name	(Alphanumeric) or Unspecified		**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Andersonville, OH (Indian Mounds)
Bismark, ND (Indian Mounds)
Kau Desert, HI (Puu Kapukapu, Puu Koae)
Milan, NH (Little Cambridge Mountain)
Monks Mound, IL (Monks Mound, mounds within Cahokia Mounds State Park)
Mount St. Helens, WA (Mount St. Helens, Butte Camp Dome)
Pocahontas, MS (Indian Mounds, Indian Mound)
Teakettle Ridge, NH (Pond Hill, Sugar Hill)
Unimak (C-30), AK (Pogromni Volcano, Faris Peak)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

The limit of PINNACLE is the base of the formation.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional			

Special Conditions:

If PINNACLE cannot be accurately portrayed by the contour pattern,
Then PINNACLE is represented as a 0-dimensional basic feature object.

If PINNACLE can be represented accurately by the contour pattern,
Then PINNACLE is represented as a 2-dimensional basic feature object.

DATA EXTRACTION

Capture Conditions

If PINNACLE is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: PINNACLE_P001
Dimension: 0

- NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	Circle Color: Black Lineweight: 0.003" Diameter: 0.04" Dot Color: Black Diameter: 0.006" Positioning: centered in circle Symbol Orientation Origin: center of symbol	**Name:** Color: Black Style: UI C/lc Size: 7 Spacing: 0

Symbol#: PINNACLE_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Moss Black Butte, UT (The Needles)
Pahala, HI (Lava Plastered Cones)
The Windows Section, UT (Balanced Rock, Ham Rock, Tower of Babel, Three Gossips)

PLATEAU - An elevated and comparatively level expanse of land.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

The limits of 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.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If PLATEAU is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: PLATEAU_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Brazos Peak, NM (Grouse Mesa)
Cabezon, NM (Mesa Prieta)
Miami, NM (Gonzalitos Mesa)
Page, AZ (Rainbow Plateau, Cummings Mesa)
Powell Plateau, AZ
San Mateo, NM (La Jara Mesa)

RANGE - A chain of mounts and/or ridges.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name — Proper name, specific term, or expression

(Alphanumeric) — Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If RANGE is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: RANGE_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Alberhill, CA (Santa Ana Mountains)
Sacagewea Peak, MT (Bridger Range)
Saddle Peak, MT (Bridger Range)

RIDGE - A long and narrow upland with steep sides.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If RIDGE is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: RIDGE_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Argenta, MT (Dutchman Mountain)
Bedford, PA (Wills Mountain)
Blain, PA (Rising Mountain, Trostle Ridge)
Holden, WA (Martin Ridge)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

The limits of 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.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If TERRACE is named,
Then capture.

Attribute Information

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

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: TERRACE_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Big Point, AZ-UT (Todicheenie Bench)
Cass Creek Pass, UT (Coyote Benches)
Cedar Tree Bench, AZ (Cedar Tree Bench)
Cleopatras Chair, UT (Millard Canyon Benches)
Hancock Cove, UT (North Myton Bench, Page Bench, Harmston Bench)
Mesquite NE, NV-AZ (Terry Benches)
Mount Moriah, NV (The Table)
Powell Plateau, AZ (Tapeats Terrace, Arrowhead Terrace, Specter Terrace)
Ritz, ID (North Bench)

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

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

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

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If VALLEY is named,
Then capture.

Attribute Information

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.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not add new features. Modify existing features only to accomodate a change in name.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: VALLEY_A001
Dimension: 2

NAM

Attribute	Value	Symbol Specs	Type Specs
Name	(Alphanumeric)	N/A	**Name:** Color: Black Style: UI CAPS or C/lc Size: 6-16 Spacing: 0-32

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Benton Hot Springs, CA (Commanche Gulch, Blind Spring Valley)
Big Ten Peak West, NV (Ralston Valley)
Birch Creek Ranch, NV (Big Smokey Valley)
Bristol Lake, NE (Ideal Valley, Survey Valley)
Caliente Canyon South, NM (Caliente Canyon, Deadhorse Canyon)