# NHD GEODATABASE

*Date :* April 15, 2005

**DRAFT**

## Hydrography

**Simple feature class NHDPoint** — Geometry: Point; Contains M values: No; Contains Z values: Yes

Contains points representing NHD hydrographic landmark features.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| Shape | Geometry | Yes | | | | | |
| ComID | Long integer | No | 0 | | 0 | | |
| FDate | Date | Yes | | | 0 | 0 | 8 |
| Resolution | Long integer | No | 2 | Resolution | 0 | | |
| GNIS_ID | String | Yes | | | | | 10 |
| GNIS_Name | String | Yes | | | | | 65 |
| ReachCode | String | Yes | | | | | 255 |
| FType | Long integer | No | 458 | | 0 | | |
| FCode | Long integer | Yes | 45800 | | 0 | | |

Unique identifier composed of two parts. The first eight digits is the subtaxon code as defined by FIPS 103. The next six digits are randomly assigned, sequential numbers that are unique within a Catalog/Unit. Length 14.

Three digit, unique identifier of a feature type.

Five digit, Feature type and combinations of characteristics and values.

Subtypes of NHDPoint

Subtype field: *FType*; Default subtype: *458*

List of defined default values and domains for subtypes in this class

| Subtype Code | Subtype Description | Field name | Default value | Domain |
|---|---|---|---|---|
| 458 | Spring/Seep | Resolution | 2 | Resolution |
| | | FCode | 45800 | Spring/Seep FCode |
| 367 | Gaging Station | Resolution | 2 | Resolution |
| | | FCode | 36700 | Gaging Station FCode |
| 398 | Lock Chamber | Resolution | 2 | Resolution |
| | | FCode | 39800 | Lock Chamber FCode |
| 488 | Well | Resolution | 2 | Resolution |
| | | FCode | 48800 | Well FCode |
| 431 | Rapids | Resolution | 2 | Resolution |
| | | FCode | 43100 | Rapids FCode |
| 369 | Gate | Resolution | 2 | Resolution |
| | | FCode | 36900 | Gate FCode |
| 450 | Sink/Rise | Resolution | 2 | Resolution |
| | | FCode | 45000 | Sink/Rise FCode |
| 485 | Water Intake/Outflow | Resolution | 2 | Resolution |
| | | FCode | 48500 | Water Intake/Outflow FCode |
| 436 | Reservoir | Resolution | 2 | Resolution |
| | | FCode | 43600 | Reservoir FCode |
| 487 | Waterfall | Resolution | 2 | Resolution |
| | | FCode | 48700 | Waterfall FCode |
| 441 | Rock | Resolution | 2 | Resolution |
| | | FCode | 44101 | Rock FCode |

**Relationship class NHDPointToMeta**

Type: Simple; Cardinality: One to many; Notification: None; Forward label: 0OFTOFeatureToMetadata; Backward label: To0ofOfPoint

Origin feature class: Name: NHDPoint; Primary: ComID; Key: ComID; Foreign key

Destination table: Name: NHDFeatureToMetadata

One to Many

**Simple feature class NHDLine** — Geometry: Polyline; Contains M values: No; Contains Z values: Yes

Contains routes representing linear NHD hydrographic landmark features.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| Shape | Geometry | Yes | | | | | |
| ComID | Long integer | No | 0 | | 0 | | |
| FDate | Date | Yes | | | 0 | 0 | 8 |
| Resolution | Long integer | No | 2 | Resolution | 0 | | |
| GNIS_ID | String | Yes | | | | | 10 |
| GNIS_Name | String | Yes | | | | | 65 |
| LengthKM | Double | Yes | | | 0 | 0 | |
| ReachCode | String | Yes | 411 | | | | 14 |
| FType | Long integer | No | 41100 | | 0 | | |
| FCode | Long integer | Yes | | | 0 | | |
| Shape_Length | Double | Yes | | | 0 | 0 | |

Unique identifier composed of two parts. The first eight digits is the subtaxon code as defined by FIPS 103. The next six digits are randomly assigned, sequential numbers that are unique within a Catalog/Unit. Length 14.

Three digit, unique identifier of a feature type.

Five digit, Feature type and combinations of characteristics and values.

Subtypes of NHDLine

Subtype field: *FType*; Default subtype: *411*

List of defined default values and domains for subtypes in this class

| Subtype Code | Subtype Description | Field name | Default value | Domain |
|---|---|---|---|---|
| 450 | Sink/Rise | Resolution | 2 | Resolution |
| | | FCode | 45000 | Sink/Rise FCode |
| 411 | Nonearthen Shore | Resolution | 2 | Resolution |
| | | FCode | 41100 | Nonearthen Shore |
| 431 | Rapids | Resolution | 2 | Resolution |
| | | FCode | 43100 | Rapids FCode |
| 483 | Wall | Resolution | 2 | Resolution |
| | | FCode | 48300 | Wall FCode |
| 434 | Reef | Resolution | 2 | Resolution |
| | | FCode | 43400 | Reef FCode |
| 533 | Sounding Datum Line | Resolution | 2 | Resolution |
| | | FCode | 53302 | Sounding Datum Line |
| 398 | Lock Chamber | Resolution | 2 | Resolution |
| | | FCode | 39800 | Lock Chamber FCode |
| 478 | Tunnel | Resolution | 2 | Resolution |
| | | FCode | 47800 | Tunnel FCode |
| 362 | Flume | Resolution | 2 | Resolution |
| | | FCode | 36200 | Flume FCode |
| 369 | Gate | Resolution | 2 | Resolution |
| | | FCode | 36900 | Gate FCode |
| 533 | Special Use Zone Limit | Resolution | 2 | Resolution |
| | | FCode | 53302 | Special Use Zone Limit |
| 318 | Bridge | Resolution | 2 | Resolution |
| | | FCode | 31800 | Bridge FCode |
| 487 | Waterfall | Resolution | 2 | Resolution |
| | | FCode | 48700 | Waterfall FCode |

**Relationship class NHDLineToMeta**

Type: Simple; Cardinality: One to many; Notification: None; Forward label: 1OLTOFeatureToMetadata; Backward label: To0nOfLine

Origin feature class: Name: NHDLine; Primary: ComID; Key: ComID; Foreign key

Destination table: Name: NHDFeatureToMetadata

One to Many

**Simple feature class NHDFlowline** — Geometry: Polyline; Contains M values: Yes; Contains Z values: Yes

Consists of routes that make up a linear surface water drainage network.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| Shape | Geometry | Yes | | | | | |
| ComID | Long integer | No | 0 | | 0 | | |
| FDate | Date | Yes | | | 0 | 0 | 8 |
| Resolution | Long integer | No | 2 | Resolution | 0 | | |
| GNIS_ID | String | Yes | | | | | 10 |
| GNIS_Name | String | Yes | | | | | 65 |
| LengthKM | Double | Yes | | | 0 | 0 | |
| ReachCode | String | Yes | | | | | 14 |
| FlowDir | Long integer | Yes | 0 | HydroFlowDirections | 0 | | |
| WBArea0ComID | Long integer | Yes | | | 0 | | |
| FType | Long integer | No | 460 | | 0 | | |
| FCode | Long integer | Yes | 46003 | | 0 | | |
| Shape_Length | Double | Yes | | | 0 | 0 | |

Unique identifier composed of two parts. The first eight digits is the subtaxon code as defined by FIPS 103. The next six digits are randomly assigned, sequential numbers that are unique within a Catalog/Unit. Length 14.

Three digit, unique identifier of a feature type.

Five digit, Feature type and combinations of characteristics and values.

Subtypes of NHDFlowline

Subtype field: *FType*; Default subtype: *460*

List of defined default values and domains for subtypes in this class

| Subtype Code | Subtype Description | Field name | Default value | Domain |
|---|---|---|---|---|
| 566 | Coastline | FlowDir | 0 | HydroFlowDirections |
| | | FCode | 56600 | Coastline FCode |
| 428 | Pipeline | Resolution | 2 | Resolution |
| | | FCode | 42805 | Pipeline FCode |
| 334 | Connector | FlowDir | 0 | HydroFlowDirections |
| | | FCode | 33400 | Connector FCode |
| 558 | Artificial Path | Resolution | 2 | Resolution |
| | | FlowDir | 0 | HydroFlowDirections |
| | | FCode | 55800 | ArtificialPath FCode |
| 460 | Stream/River | Resolution | 2 | Resolution |
| | | FlowDir | 0 | HydroFlowDirections |
| | | FCode | 46006 | StreamRiver FCode |
| 336 | Canal/Ditch | Resolution | 2 | Resolution |
| | | FlowDir | 0 | HydroFlowDirections |
| | | FCode | 33600 | CanalDitch FCode |

**Relationship class NHDFlowlineToMeta**

Type: Simple; Cardinality: One to many; Notification: None; Forward label: 1OFTOFeatureToMetadata; Backward label: To1nOfFlowLine

Origin feature class: Name: NHDFlowline; Primary: ComID; Key: ComID; Foreign key

Destination table: Name: NHDFeatureToMetadata

No relationship rules defined

**Simple feature class NHDArea** — Geometry: Polygon; Contains M values: No; Contains Z values: Yes

Contains regions representing areal NHD hydrographic landmark features.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| Shape | Geometry | Yes | | | | | |
| ComID | Long integer | No | 0 | | 0 | | |
| FDate | Date | Yes | | | 0 | 0 | 8 |
| Resolution | Long integer | No | 2 | Resolution | 0 | | |
| GNIS_ID | String | Yes | | | | | 10 |
| GNIS_Name | String | Yes | | | | | 65 |
| AreaSqKm | Double | Yes | | | 0 | 0 | 0 |
| Elevation | Double | Yes | | ElevationRange | 0 | 0 | |
| FType | Long integer | No | 460 | | 0 | | |
| FCode | Long integer | Yes | 46006 | | 0 | | |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Unique identifier composed of two parts. The first eight digits is the subtaxon code as defined by FIPS 103. The next six digits are randomly assigned, sequential numbers that are unique within a Catalog/Unit. Length 14.

Three digit, unique identifier of a feature type.

Five digit, Feature type and combinations of characteristics and values.

Subtypes of NHDArea

Subtype field: *FType*; Default subtype: *460*

List of defined default values and domains for subtypes in this class

| Subtype Code | Subtype Description | Field name | Default value | Domain |
|---|---|---|---|---|
| 362 | Flume | Resolution | 2 | Resolution |
| | | Elevation | 36200 | ElevationRange |
| | | FCode | | Flume FCode |
| 485 | Water Intake/Outflow | Resolution | 2 | Resolution |
| | | Elevation | 48500 | ElevationRange |
| | | FCode | | Water Intake/Outflow |
| 343 | Dam/Weir | Resolution | 2 | Resolution |
| | | Elevation | 34305 | ElevationRange |
| | | FCode | | Dam/Weir FCode |
| 318 | Bridge | Resolution | 2 | Resolution |
| | | Elevation | 31800 | ElevationRange |
| | | FCode | | Bridge FCode |
| 455 | Spillway | Resolution | 2 | Resolution |
| | | Elevation | 45500 | ElevationRange |
| | | FCode | | Spillway FCode |
| 364 | Foreshore | Resolution | 2 | Resolution |
| | | Elevation | 36400 | ElevationRange |
| | | FCode | | Foreshore FCode |
| 454 | Special Use Zone | Resolution | 2 | Resolution |
| | | Elevation | 45401 | ElevationRange |
| | | FCode | | Special Use Zone |
| 312 | Bay/Inlet | Resolution | 2 | Resolution |
| | | Elevation | 31200 | ElevationRange |
| | | FCode | | Bay/Inlet FCode |
| 307 | Area to be Submerged | Resolution | 2 | Resolution |
| | | Elevation | 30700 | ElevationRange |
| | | FCode | | Area to be Submerged |
| 431 | Rapids | Resolution | 2 | Resolution |
| | | Elevation | 43100 | ElevationRange |
| | | FCode | | Rapids FCode |
| 403 | Inundation Area | Resolution | 2 | Resolution |
| | | Elevation | 40308 | ElevationRange |
| | | FCode | | Inundation Area FCode |
| 461 | Submerged Stream | Resolution | 2 | Resolution |
| | | Elevation | 46100 | ElevationRange |
| | | FCode | | Submerged Stream |
| 373 | Hazard Zone | Resolution | 2 | Resolution |
| | | Elevation | 37300 | ElevationRange |
| | | FCode | | Hazard Zone FCode |
| 398 | Lock Chamber | Resolution | 2 | Resolution |
| | | Elevation | 39800 | ElevationRange |
| | | FCode | | Lock Chamber FCode |
| 537 | Area of Complex Channels | Resolution | 2 | Resolution |
| | | Elevation | 53700 | ElevationRange |
| | | FCode | | Area of Comp Channels |
| 484 | Wash | Resolution | 2 | Resolution |
| | | Elevation | 48400 | ElevationRange |
| | | FCode | | Wash FCode |
| 445 | Sea/Ocean | Resolution | 2 | Resolution |
| | | Elevation | 44500 | ElevationRange |
| | | FCode | | SeaOcean FCode |
| 460 | Stream/River | Resolution | 2 | Resolution |
| | | Elevation | 46006 | ElevationRange |
| | | FCode | | StreamRiver FCode |
| 336 | Canal/Ditch | Resolution | 2 | Resolution |
| | | Elevation | 33600 | ElevationRange |
| | | FCode | | CanalDitch FCode |

**Relationship class NHDAreaToMeta**

Type: Simple; Cardinality: One to many; Notification: None; Forward label: 2OATOFeatureToMetadata; Backward label: To2nOfArea

Origin feature class: Name: NHDArea; Primary: ComID; Key: ComID; Foreign key

Destination table: Name: NHDFeatureToMetadata

No relationship rules defined

**Simple feature class NHDWaterbody** — Geometry: Polygon; Contains M values: No; Contains Z values: Yes

Contains regions representing areal NHD hydrographic waterbody features.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| Shape | Geometry | Yes | | | | | |
| ComID | Long integer | No | 0 | | 0 | | |
| FDate | Date | Yes | | | 0 | 0 | 8 |
| Resolution | Long integer | No | 2 | Resolution | 0 | | |
| GNIS_ID | String | Yes | | | | | 10 |
| GNIS_Name | String | Yes | | | | | 65 |
| AreaSqKm | Double | Yes | | | 0 | 0 | 0 |
| Elevation | Double | Yes | | ElevationRange | 0 | 0 | |
| ReachCode | String | Yes | | | | | 14 |
| FType | Long integer | No | 390 | | 0 | | |
| FCode | Long integer | Yes | 39004 | | 0 | | |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Unique identifier composed of two parts. The first eight digits is the subtaxon code as defined by FIPS 103. The next six digits are randomly assigned, sequential numbers that are unique within a Catalog/Unit. Length 14.

Three digit, unique identifier of a feature type.

Five digit, Feature type and combinations of characteristics and values.

Subtypes of NHDWaterbody

Subtype field: *FType*; Default subtype: *390*

List of defined default values and domains for subtypes in this class

| Subtype Code | Subtype Description | Field name | Default value | Domain |
|---|---|---|---|---|
| 378 | Ice Mass | Resolution | 2 | Resolution |
| | | Elevation | 37800 | ElevationRange |
| | | FCode | | Ice Mass FCode |
| 493 | Estuary | Resolution | 2 | Resolution |
| | | Elevation | 49300 | ElevationRange |
| | | FCode | | Estuary FCode |
| 390 | Lake/Pond | Resolution | 2 | Resolution |
| | | Elevation | 39004 | ElevationRange |
| | | FCode | | LakePond FCode |
| 436 | Reservoir | Resolution | 2 | Resolution |
| | | Elevation | 43600 | ElevationRange |
| | | FCode | | Reservoir FCode |
| 466 | Swamp/Marsh | Resolution | 2 | Resolution |
| | | Elevation | 46600 | ElevationRange |
| | | FCode | | SwampMarsh FCode |
| 361 | Playa | Resolution | 2 | Resolution |
| | | Elevation | 36100 | ElevationRange |
| | | FCode | | Playa FCode |

**Relationship class NHDWaterbodyToMeta**

Type: Simple; Cardinality: One to many; Notification: None; Forward label: 2OWTOFeatureToMetadata; Backward label: To0WaterbodyOf

Origin feature class: Name: NHDWaterbody; Primary: ComID; Key: ComID; Foreign key

Destination table: Name: NHDFeatureToMetadata

No relationship rules defined

## Domain Tables

Coded value domain **FlowDirection**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 709 | In |
| 712 | NetworkStart |
| 713 | NetworkEnd |
| 714 | NonFlowing |

Coded value domain **Flume FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 36200 | Flume |

Coded value domain **Foreshore FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 36400 | Foreshore |

Coded value domain **Gaging Station FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 36700 | Gaging Station |

Coded value domain **Gate FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 36900 | Gate |

Coded value domain **Area of Complex Channels FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 53700 | Area of Complex Channels |

Coded value domain **Area to be Submerged FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 30700 | Area to be Submerged |

Coded value domain **ArtificialPath FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 55800 | Artificial Path |

Coded value domain **Baylnlet FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 31200 | Bay/Inlet |

Coded value domain **Hazard Zone FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 37300 | Hazard Zone |

Coded value domain **HydroFlowDirections**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 0 | Unestimated |
| 1 | WithOrigized |

Coded value domain **HydrologicUnitSource**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 0 | Watershed Boundaries Dataset |
| 1 | NHD |
| 2 | Other |

Coded value domain **Ice Mass FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 37800 | Ice Mass |

Coded value domain **Inundation Area FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 40308 | Inundation Area |
| 40308 | Inundation CM Station/Controlled |
| 40309 | Inundation CM Status 1 Controlled: Stage + Flood Dir |
| 40307 | Inundation CM Stage/Not Dated |

Coded value domain **LakePond FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 39000 | LakePond |
| 39001 | Hydrographic Cat = Intermittent |
| 39006 | Hydro Cat=Intermit. Stage<Data of Photo |
| 39005 | Hydro Cat=Intermit. Stage>High Water Elev |
| 39004 | Hydrographic Cat = Perennial |
| 39009 | Hydro Cat=Perenn. Stage>Avg Water E |
| 39011 | Hydro Cat=Perennial Stage< Low Water E |
| 39010 | Hydro Cat=Perenn. Stage< Normal Pool |
| 39012 | Hydro Cat=Perenn. Stage> Spillway |

Coded value domain **Lock Chamber FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 39800 | Lock Chamber |

Coded value domain **Nonearthen Shore**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 41100 | Nonearthen Shore |

Coded value domain **Pipeline FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 42800 | Pipeline |
| 42816 | Pipeline Type = Aqueduct; Rel to Surface = In or Near |
| 42801 | Pipeline Type = Aqueduct; Rel to Surface = Elevated |
| 42802 | Pipeline Type = Aqueduct; Rel to Surface = Underground |
| 42803 | Pipeline Type = Aqueduct; Rel to Surface = Underwater |
| 42804 | Pipeline Type = General Case |
| 42814 | Pipeline Type = General Case; Rel to Surface = In or Near |
| 42805 | Pipeline Type = General Case; Rel to Surface = Elevated |
| 42806 | Pipeline Type = General Case; Rel to Surface = Underground |
| 42807 | Pipeline Type = General Case; Rel to Surface = Underwater |
| 42808 | Pipeline Type = Penstock |
| 42815 | Pipeline Type = Penstock; Rel to Surface = In or Near |
| 42809 | Pipeline Type = Penstock; Rel to Surface = Elevated |
| 42810 | Pipeline Type = Penstock; Rel to Surface = Underground |
| 42811 | Pipeline Type = Penstock; Rel to Surface = Underwater |
| 42812 | Pipeline Type = Siphon |
| 42813 | Pipeline Type = Siphon |

Coded value domain **Canal/Ditch FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 33600 | Canal/Ditch |
| 33601 | Canal Ditch Type: Aqueduct |

Coded value domain **Coastline FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 56600 | Coastline |

Coded value domain **Connector FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 33400 | Connector |

Coded value domain **Reservoir FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 43600 | Reservoir |
| 43618 | Construction Material = Earthen |
| 43619 | Const Material = Nonearthen |
| 43601 | Reservoir Type = Aquaculture |
| 43609 | Reservoir Type = Cooling Pond |
| 43603 | Reservoir Type = Decorative Pool |
| 43606 | Reservoir Type = Disposal |
| 43625 | Reservoir Type = Disposal; Construction Material = Earthen |
| 43626 | Reservoir Type = Disposal; Material = Nonearthen |
| 43607 | Reservoir Type = Evaporator |
| 43623 | Reservoir Type = Evaporator; Construction Material = Earthen |
| 43610 | Reservoir Type = Filtration Pond |
| 43611 | Reservoir Type = Settling Pond |
| 43612 | Reservoir Type = Sewage Treatment Pond |
| 43608 | Reservoir Type = Swimming Pool |
| 43605 | Reservoir Type = Tailings Pond |
| 43604 | Reservoir Type = Tailings Pond; Construction Material = Earthen |
| 43624 | Reservoir Type = Treatment |
| 43617 | Reservoir; Reservoir Type = Water Storage |
| 43614 | Res Type = Water Stor; Const Mat = Earthen; Hydro Cat = Intermittent |
| 43615 | Reservoir Type = Water Storage; Const Mat = Earthen; Hydro Cat = Perennial |
| 43613 | Reservoir Type = Water Stor; Const Material = Nonearthen |
| 43621 | Reservoir Type = Water Stor; Hydrographic Cat = Perennial |

Coded value domain **Playa FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 36100 | Playa |

Coded value domain **Rapids FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 43100 | Rapids |

Coded value domain **Reef FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 43400 | Reef |

Coded value domain **Estuary FCode**
Description:
Field type: Long integer
Split policy: Default value
Merge policy: Default value

| Code | Description |
|---|---|
| 49300 | Estuary |

Range domain **ElevationRange**
Field type: Double
Split policy: Default value
Merge policy: Default value

| Minimum value | Maximum value |
|---|---|
| -40000 | 9000 |

## NHD Metadata

**Table NHDMetadata**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| Shape | Geometry | Yes | | | | | |
| ProcessDescription | Text | Yes | | | | | 255 |
| ProcessDate | Date | Yes | | | 0 | 0 | 8 |
| AttributeAccuracyReport | String | Yes | | | | | 1000 |
| LogicalConsistencyReport | String | Yes | | | | | 1000 |
| Completeness Report | String | Yes | | | | | 1000 |
| HorizPositionalAccuracyReport | String | Yes | | | | | 1000 |
| VertPositionalAccuracyReport | String | Yes | | | | | 1000 |
| MetadataStandardName | String | Yes | | | | | 100 |
| MetadataStandardVersion | String | Yes | | | | | 10 |
| MetadataDate | Date | Yes | | | 0 | 0 | 8 |
| ContactPerson | String | Yes | | | | | 100 |
| ContactOrganization | String | Yes | | | | | 100 |
| AddressType | String | Yes | | | | | 40 |
| Address | String | Yes | | | | | 100 |
| City | String | Yes | | | | | 40 |
| StateOrProvince | String | Yes | | | | | 30 |
| PostalCode | String | Yes | | | | | 20 |
| ContactVoiceTelephone | String | Yes | | | | | 20 |
| ContactInstructions | String | Yes | | | | | 120 |

NHDMetadata is the Data Quality Information - a general assessment of the quality of the data set.

Digital Update Unit, unique ID
Explanation of the event and related parameters or tolerances.
Date when the event was completed.
Explanation of entities and assignments of values in dataset.
Explanation of fidelity of relationships in data set and tests used.
Info about omissions, crimes, definitions used to derive data set.
Horiz. coordinate measurements and desc. of tests used.
Vertical coordinate measurements and desc. of tests used.
Name of the metadata standard used to document the data set.
Identification of the version of the metadata standard used to document the dataset.
Date the metadata was last created or updated.
Name of person responsible for creating the data set.
Name or Organization to which type of contact applies.
Information provided by the address
Address line for the address.
City of the address.
State or province of the address.
ZIP or other postal code of the address.
Telephone number to reach Org. or individual.
Supplemental instructions to contact Org. or Individual.

**Relationship class NHDMetadataSourceCitation**

Type: Simple; Cardinality: One to many; Notification: None; Forward label: SourceCitation; Backward label: Metadata

Origin table: Name: NHDMetadata; Primary: OBJECTID; Key: OuID; Foreign key

Destination table: Name: NHDSourceCitation

No relationship rules defined

**Table NHDSourceCitation**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| Shape | Geometry | Yes | | | | | |
| SourceCitationAbbreviation | Text | Yes | | | | | 255 |
| Originator | Text | Yes | | | | | 255 |
| PublicationDate | Date | Yes | | | 0 | 0 | 8 |
| BeginningDate | Date | Yes | | | 0 | 0 | 8 |
| EndingDate | Date | Yes | | | 0 | 0 | 8 |
| SourceContribution | Text | Yes | | | | | 255 |
| SourceScaleDenominator | Long integer | Yes | | | 0 | | |
| TypeofSourceMedia | Text | Yes | | | | | 255 |
| CalendarDate | Date | Yes | | | 0 | 0 | 8 |
| SourceCurrentness Reference | Text | Yes | | | | | 255 |
| OuID | Long integer | No | | | 0 | | |

Sources and a short discussion of the information contributed by each. This table links process description information found in the NHDMetadata table.

Name by which the dataset is known.
Short form alias for source citation.
Name of an organization or individual that developed the data set.
Date the data set is published or made available for release.
First year of the event if Range_of_Dates applies).
Last year for the event if Range_of_Dates applies).
Brief statement identifying info contributed by source to data set.
Denominator of representative fraction on a map.
The medium of the source data set.
The year of Single Date applies).
Source time period of content info of source data set is determined.
Digital Update Unit, unique ID

**Relationship class NHDMetaToFeature**

Type: Simple; Cardinality: One to many; Notification: None; Forward label: M1FeatureToMetadata; Backward label: To0MetadataOf

Origin table: Name: NHDMetadata; Primary: OuID; Key: OuID; Foreign key

Destination table: Name: NHDFeatureToMetadata

No relationship rules defined

**Table NHDFeatureToMetadata**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| ComID | Long integer | Yes | | | 0 | | |
| OuID | Long integer | Yes | | | 0 | | |

Metadata, or data about data, are data that describe the content, quality, condition, and other characteristics of data.

Digital Update Unit, unique ID

## Hydrologic Units

**Simple feature class Region** — Geometry: Polygon; Contains M values: No; Contains Z values: No

Regions are the largest drainage basins, containing either the drainage area of major river or the combined drainage areas of several rivers. Regions are the first level (2-digit) in the hydrologic unit hierarchy.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| Shape | Geometry | Yes | | | | | |
| OBJECTID | Object ID | | | | | | |
| Source | Long integer | No | | HydrologicUnitSource | 0 | | |
| HU_2 | String | No | | | | | 8 |
| HU_2_Name | String | Yes | | | | | 80 |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Name of entity creating extended element.
Subgr identifier
Name of the Region.

**Simple feature class Subregion** — Geometry: Polygon; Contains M values: No; Contains Z values: No

Subdivisions of regions. Subregions arethe second level (4-digit) of the hydrologic unit hierarchy.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| Shape | Geometry | Yes | | | | | |
| OBJECTID | Object ID | | | | | | |
| Source | Long integer | No | | HydrologicUnitSource | 0 | | |
| HU_4 | String | No | | | | | 8 |
| HU_4_Name | String | Yes | | | | | 80 |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Name of entity creating extended element.
Subgr identifier
Name of the Subregion.

**Simple feature class Basin** — Geometry: Polygon; Contains M values: No; Contains Z values: No

Basins are the third level (6-digit) of the hydrographic unit hierarchy. Formerly named "accounting units."

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| Shape | Geometry | Yes | | | | | |
| OBJECTID | Object ID | | | | | | |
| Source | Long integer | No | | HydrologicUnitSource | 0 | | |
| HU_6 | String | No | | | | | 6 |
| HU_6_Name | String | Yes | | | | | 80 |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Name of entity creating extended element.
Subgr identifier
Name of the Basin.

**Simple feature class Subbasin** — Geometry: Polygon; Contains M values: No; Contains Z values: No

Subdivisions of basins. Subbasins are the fourth level (8-digit) of the hydrologic unit hierarchy. Formerly named "cataloging units."

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| Shape | Geometry | Yes | | | | | |
| OBJECTID | Object ID | | | | | | |
| Source | Long integer | No | | HydrologicUnitSource | 0 | | |
| HU_8 | String | No | | | | | 8 |
| HU_8_Name | String | Yes | | | | | 80 |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Name of entity creating extended element.
Subgr identifier
Name of the Subbasin.

**Simple feature class Watershed** — Geometry: Polygon; Contains M values: No; Contains Z values: No

Subdivisions within a subbasin. Watersheds are the fifth level (10-digit) of the hydrologic unit hierarchy.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| Shape | Geometry | Yes | | | | | |
| OBJECTID | Object ID | | | | | | |
| Source | Long integer | No | | HydrologicUnitSource | 0 | | |
| HU_10 | String | No | | | | | 10 |
| HU_10_Name | String | Yes | | | | | 80 |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Name of entity creating extended element.
Subgr identifier
Name of the Watershed.

**Simple feature class Subwatershed** — Geometry: Polygon; Contains M values: No; Contains Z values: No

Subdivisions of Watersheds. Subwatersheds are the sixth level (12-digit) of the hydrologic unit hierarchy.

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| Shape | Geometry | Yes | | | | | |
| OBJECTID | Object ID | | | | | | |
| Source | Long integer | No | | HydrologicUnitSource | 0 | | |
| HU_12 | String | No | | | | | 12 |
| HU_12_Name | String | Yes | | | | | 80 |
| Shape_Length | Double | Yes | | | 0 | 0 | |
| Shape_Area | Double | Yes | | | 0 | 0 | |

Name of entity creating extended element.
Subgr identifier
Name of the Subwatershed.

**Table NHDHydroPointEvent**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| ReachCode | String | Yes | | | | | 14 |
| ComID | Long integer | Yes | | | 0 | | |
| Measure | Double | Yes | | | 0 | 0 | |

Template for creating user point events.

Unique ID composed of two parts. First eight digits is Catalog/Unit (CU). Next six digits are randomly assigned sequential numbers unique with a CU.
10-digit integer value that uniquely identifies each feature or reach.
Standard of measure for an attribute value.

**Table NHDHydroLineEvent**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| ReachCode | String | Yes | | | | | 14 |
| ComID | Long integer | Yes | | | 0 | | |
| FMeasure | Double | Yes | | | 0 | 0 | |
| TMeasure | Double | Yes | | | 0 | 0 | |
| Offset | Double | Yes | | | 0 | 0 | |

Template for creating user line events.

Unique ID composed of two parts. First eight digits is Catalog/Unit (CU). Next six digits are randomly assigned sequential numbers unique with a CU.
10-digit integer value that uniquely identifies each feature or reach.

**Table NHDVerticalRelationship**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| ComID | Long integer | No | | | 0 | | |
| AboveComID | Long integer | No | | | 0 | | |
| BelowComID | Long integer | Yes | | | 0 | | |

Only NHDFlowline features can participate in vertical relationships

10-digit integer value that uniquely identifies the occurrence of each feature.
Store common identifiers of features above vertical offsets.
Store common identifiers of features below vertical offsets.

**Table NHDProcessingParameters**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| ParameterName | String | Yes | | | | | 24 |
| ParameterValue | String | Yes | | | | | 100 |

Parameters used for processing data.

**Table NHDStatus**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECTID | Object ID | | | | | | |
| ID | Long integer | No | | | 0 | | |
| Status | Long integer | No | | Status | 0 | | |

NHDStatus is only used to track data changes for transaction uploads to the central repository.

**Table NHDReachCrossReference**

| Field name | Data type | Allow nulls | Default value | Domain | Precision | Scale | Length |
|---|---|---|---|---|---|---|---|
| OBJECT