

Watershed Boundary Dataset (WBD) Data Model (v2.2.1)

National Hydrography Dataset (NHD)

WBDv2.2.1 Model Changes

HUC class field renamed to HUCDigit in WBDLine feature class
 HULevel field removed from WBDLine feature class
 NonContributingAcres and NonContributingSqKm field names updated to
 NonContributingAreaAcres and NonContributingAreaSqKm in WBDHU12,
 WBDHU14, WBDHU16 feature classes

All changes indicated in diagram:
■ New element ■ Update ■ Delete

ArcCatalog View

Geodatabase

- Feature dataset
 - WBD
 - Polygon feature class
 - NonContributingDrainageArea
 - Line feature class
 - NonContributingDrainageLine
 - Polygon feature class
 - NWISDrainageArea
 - Line feature class
 - NWISDrainageLine
 - Line feature class
 - WBDLine
 - Polygon feature class
 - WBDHU2
 - Polygon feature class
 - WBDHU4
 - Polygon feature class
 - WBDHU6
 - Polygon feature class
 - WBDHU8
 - Polygon feature class
 - WBDHU10
 - Polygon feature class
 - WBDHU12
 - Polygon feature class
 - WBDHU14
 - Polygon feature class
 - WBDHU16
- Object table
 - HUMod
- Object table
 - MetaProcessDetail
- Relationship
 - MetaProcessHasMetaSource
- Object table
 - MetaSourceDetail
- Object table
 - FeatureToMetadata
- Relationship
 - MetaProcessToFeature
- Object table
 - ExternalCrosswalk
- Object table
 - ProcessingParameters
- Object table
 - UpdateStatus

FEATURE CLASSES

WBD Hydrologic Units (HU)

Field name	Data type	Allow nulls	Default value	Domain	Prec-ision	Scale	Length
OBJECTID	Object ID	Yes					
Shape	Geometry	Yes					
TNMIID	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes			0	0	8
AreaSqKm	Double	Yes			0	0	8
AreaAcres	Double	Yes			0	0	8
GNIS_ID	Long Integer	Yes			0	0	8
Name	String	Yes					120
States	String	Yes					50
HUC2	String	Yes					50
Shape_Length	Double	Yes			0	0	2
Shape_Area	Double	Yes			0	0	0

USGS National Water Information System (NWIS)

Field name	Data type	Allow nulls	Default value	Domain	Prec-ision	Scale	Length
OBJECTID	Object ID	Yes					
SHAPE	Geometry	Yes					
TNMIID	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes			0	0	8
AreaSqKm	Double	Yes			0	0	8
AreaAcres	Double	Yes			0	0	8
GNIS_ID	Long Integer	Yes			0	0	8
Name	String	Yes					120
States	String	Yes					50
StationName	String	Yes					50
TotalAreaSqKm	Double	Yes			0	0	5
NWISContributingAreaSqKm	Double	Yes			0	0	10
NWISContributingAreaAcres	Double	Yes			0	0	10
Remarks	String	Yes					250
SHAPE_Length	Double	Yes			0	0	0
SHAPE_Area	Double	Yes			0	0	0

Computed runoff in hydrologic units

Explanation -- Percentile Range

Lowest	< 10	10 - 24	25 - 75	76 - 90	> 90	Highest	No data
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ATTRIBUTE TABLES

Feature-level Metadata

Processing Tables

Field name	Data type	Allow nulls	Default value	Domain	Prec-ision	Scale	Length
OBJECTID	Object ID	Yes					
MetaProcessID	String	No					40
ProcessDescription	String	No					4000
ProcessDate	Date	No			0	0	8
EditType	Long Integer	Yes		EditTypeDomain			
LoadDate	Date	Yes			0	0	8
DataSetCredit	String	Yes					4000
ContactOrganization	String	Yes					100
Address	String	Yes					100
City	String	Yes					40
StateOrProvince	String	Yes					50
ExternalName	String	Yes					30
ExternalID	String	Yes					50
ExternalOriginator	String	Yes					130
OrganizationType	Long Integer	Yes		Organization Type	0	0	8
ContactURL	String	Yes					40
ContactInstructions	String	Yes					120

Field name	Data type	Allow nulls	Default value	Domain	Prec-ision	Scale	Length
OBJECTID	Object ID	Yes					
MetaProcessID	String	Yes					40
TNMIID	String	Yes					40

DOMAINS

Feature Class Domains Metadata Domains Processing Tables Domains

HUCLevel Domain

(Formerly HUCClass Domain)

Code	Description
0	No data
2	2-digit Hydrologic Unit
4	4-digit Hydrologic Unit
6	6-digit Hydrologic Unit
8	8-digit Hydrologic Unit
10	10-digit Hydrologic Unit
12	12-digit Hydrologic Unit
14	14-digit Hydrologic Unit
16	16-digit Hydrologic Unit

HULevel Domain Removed

Organization Type

Code	Description
1	Update Attribute - Name
2	Update Attribute - Other Significant
3	Update Spatial
4	Add Feature
5	Delete Feature

SourceRefType Domain

Code	Description
1	Dataset
2	Website
3	Map
4	Text
5	Interview
0	Unknown

HUType Domain

Code	Description
S	Standard
C	Closed Basin
F	Frontal
M	Multiple Outlet
W	Water
I	Island

ParameterName Domain

Code	Description
1	Add Feature
2	Modify Feature Attribute
3	Delete Feature
4	Delete Relationship
5	Add Metadata
6	Modify VAA
7	Modify Event
8	Add Event
9	Delete Event
10	Delete Event
11	Modify VAA All
12	Modify VAA All
13	Add Relationship
14	Add Metadata All (historic)
15	Add Feature/Relationship All (historic)
16	Ass Feature/Relationship Reasoning
17	Create External Crosswalk
18	Modify External Crosswalk
19	Process External Crosswalk All

