

## Appendix M

### National Hydrography Requirements and Benefits Study

#### Final Study Geodatabase Data Dictionary

**Table Name:** Agency

**Table Description:** This table contains information about questionnaire respondent's agency and can be used to query data by agency or agency type. This is a non-spatial table containing information about the study respondent's agency. There should be one record per respondent.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Org_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
Org_Type	String	255	D_Org_Type	Organization type
Org_Name	String	255	None	User provided organization name
Sub_Agency	String	150	None	User provided sub-agency name
Organiz	String	250	None	User provided organization name
Prog_Name	String	250	None	User provided program name
Complete	String	5	D_YesNo	Questionnaire completeness flag
Summary_Type	String	255	None	Organization type categorization; used for grouping summary reports

**Table Name:** Agency\_Summary\_Final

**Table Description:** This table contains information about consolidated study agencies and can be used to query data by agency or agency type. Non-spatial table containing consolidated summary-type information for agencies interviewed. There should be one record per agency.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Agy_Final_ID	Double	8	None	Primary key; sequential whole numbers that are automatically generated
Summary_Type	String	255	None	Organization type categorization; used for grouping summary reports
Discover_Data	String	16	D_Importance1	Importance of services to discover data
Download_Data	String	16	D_Importance1	Importance of services to download data
Custom_Prod	String	16	D_Importance1	Importance of services to create and download custom products
Dynamic_Use	String	16	D_Importance1	Importance of services to dynamically use data with client-based software (like a browser, GIS, or to feed other services)
Visualiz	String	16	D_Importance1	Importance of services to visualize cartographically rendered and symbolized hydrography data
Mashup	String	16	D_Importance1	Importance of services that allow combination of visualizations with other visualization services
Generalize	String	16	D_Importance1	Importance of services to create generalized versions of hydrography (different scales and level of detail)
Analyze	String	16	D_Importance1	Importance of services to support online analysis of hydrography information (such as StreamStats)
Hyd_Align_3m_DEM	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Rivers and streams in the hydrography dataset align with channels as defined from the elevation data at 1:12,000-scale or larger (3 meter DEM)
Levee_Link_Hyd	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Objects defined by elevation, such as a levees, are linked to a particular river in the hydrography dataset

Field	Field Type	Field Length	Domain Name	Field Description
Hyd_Elev_Pkg	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Hydrography and elevation data are packaged in a single product such as a or a 3-D dataset
Hyd_Elev_Data_Model	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Hydrography data (streams, stream gages, dams, hydrologic units along with elevation data (elevations, catchments, levees, floodplains) coexist within a common data model
Synthesis_Hyd_Elev	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Perform synthesis such that streamflow can be estimated from elevation-based drainage area and other factors
Calc_Gradient	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Produce data derivatives such that gradient can be calculated on a stream using elevation data
Synchronize_Hyd_Elev	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Manage hydrography and elevation data as a unified activity always keeping both datasets synchronized with one another
Hyd_Elev_Same_Date	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Ensure that hydrography and elevation data represent a similar point in time
Hyd_Elev_Unified_Deliv	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Both hydrography and elevation data are delivered in unison rather than two separate operations
Hyd_Rast_Flowpath	String	16	D_Importance1	Importance of integration of hydrography data with raster elevation data: Determine new flow paths across the land surface into existing stream channels
Hyd_Rast_Feat	String	16	D_Importance1	Importance of integration of hydrography data with raster elevation data: Determine on the hydrographic network to which a point (with elevation value) is connected
Hyd_Rast_Point_Loc	String	16	D_Importance1	Importance of integration of hydrography data with raster elevation data: Determine the actual point location (within a DEM cell) on the hydrographic network to which a point is connected
Miss_One_Lake	String	20	D_Importance2	Impact of errors in hydrography data: In a series of lakes formed at gravel pits, one lake is missing from the NHD

Field	Field Type	Field Length	Domain Name	Field Description
Miss_All_Lake	String	20	D_Importance2	Impact of errors in hydrography data: In a series of lakes formed at gravel pits, all lakes are missing from the NHD
Trib_Disconnect	String	20	D_Importance2	Impact of errors in hydrography data: In a series of tributary streams, several streams do not connect with the main river
Misname_Perennial	String	20	D_Importance2	Impact of errors in hydrography data: A perennial stream is misnamed
Misname_Reservoir	String	20	D_Importance2	Impact of errors in hydrography data: A large reservoir is misnamed
Flow_Rev_1st	String	20	D_Importance2	Impact of errors in hydrography data: A first order stream flow direction is reversed
Flow_Rev_2nd	String	20	D_Importance2	Impact of errors in hydrography data: A second order stream flow direction is reversed
Flow_Rev_3rd	String	20	D_Importance2	Impact of errors in hydrography data: A third order stream flow direction is reversed
Miscoded_1st	String	20	D_Importance2	Impact of errors in hydrography data: Two first order streams coded as perennial should be intermittent
Meander_Error	String	20	D_Importance2	Impact of errors in hydrography data: A meandering river represented in the NHD is overlaid over a contemporary image of the river. The position of the meanders has deviated over time with a mean error of 100 feet and a maximum error of 200 feet
Strm_Misalign_175	String	20	D_Importance2	Impact of errors in hydrography data: An intermittent stream represented in the NHD is portrayed along with contours and shaded terrain. The stream appears to be misaligned with the terrain by a mean of 175 feet
Strm_Misalign_75	String	20	D_Importance2	Impact of errors in hydrography data: An intermittent stream represented in the NHD is portrayed along with contours and shaded terrain. The stream appears to be misaligned with the terrain by a mean of 75 feet
Ridge_Misalign_70	String	20	D_Importance2	Impact of errors in hydrography data: A ridge line in the NHD is portrayed along with contours and shaded terrain. The ridge line appears to be misaligned with the terrain by a mean of 70 feet
Catch_Acc	String	25	D_CatchAcc	Required catchment accuracy

Field	Field Type	Field Length	Domain Name	Field Description
WBD_NHDPlus_Acc	String	66	D_Problem	How much of a problem differences in the way the WBD Hydrologic Units and NHDPlus catchments are defined, that can lead to the situation that one cannot simply aggregate whole NHDPlus catchments to create replicas of the hydrologic units, pose
Error_Resol	String	50	D_ErrResolution	How quickly reported errors need to be resolved
Web_Tool_Use	String	10	D_Webmap	Would your program use a simple web map tool
OGC_conformant	String	3	D_YesNo	Does your program require vector data in OGC-conformant format (e.g. WaterML, GeoJSON)
Esri_shapefiles	String	3	D_YesNo	Does your program require vector data in Esri shapefile format
Esri_FGDB	String	3	D_YesNo	Does your program require vector data in Esri file geodatabase format
Raster_NetCDF	String	3	D_YesNo	Does your program require raster data in NetCDF format
Raster_GeoTIFF	String	3	D_YesNo	Does your program require raster data in GeoTIFF format
Raster_NITF	String	3	D_YesNo	Does your program require raster data in NITF format
Raster_Esri_Grid	String	3	D_YesNo	Does your program require raster data in Esri Grid format
Other_format	String	3	D_YesNo	Does your program require data in another format
Other_Data_Format	String	4500	None	User provided description of "Other_format" requirement
HUC12	String	3	D_YesNo	Does your program require hydrographic data access by HUC 12 Units
HUC8	String	3	D_YesNo	Does your program require hydrographic data access by HUC 8 Units
HUC6	String	3	D_YesNo	Does your program require hydrographic data access by HUC 6 Units
HUC4	String	3	D_YesNo	Does your program require hydrographic data access by HUC 4 Units
HUC2	String	3	D_YesNo	Does your program require hydrographic data access by HUC 2 Units
NHDPlus_Catchments	String	3	D_YesNo	Does your program require hydrographic data access by NHDPlus catchments
State_Territory	String	3	D_YesNo	Does your program require hydrographic data access by state or territory

Field	Field Type	Field Length	Domain Name	Field Description
CONUS	String	3	D_YesNo	Does your program require hydrographic data access by the conterminous U.S.
Nationwide_AK_HI	String	3	D_YesNo	Does your program require hydrographic data access nationwide, including Alaska and Hawaii
User_defined_extent	String	3	D_YesNo	Does your program require hydrographic data access by user defined map extents
User_defined_polygon	String	3	D_YesNo	Does your program require hydrographic data access by user defined polygons
Unknown	String	3	D_YesNo	Program requirements for hydrographic data access are unknown
Other_Geog	String	3	D_YesNo	Does your program require hydrographic data for another geographic extent
Other_Geog_Extent	String	4500	None	User provided description of "Other_Geog" extent requirement
Comments	String	10000	None	User provided comments

**Table Name:** Agy\_Data\_Access\_Reqt

**Table Description:** This table contains information about agency data access requirements. Many to one relationship to Agency table. Non-spatial table containing information about data access requirements by agencies (non-MCA specific). Each agency can have many records in this table.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Agy_Data_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire. Foreign key to Respondent table; sequential unique whole numbers that are automatically generated
Org_ID	String	25	None	Foreign key to Agency table; sequential unique whole numbers that are automatically generated
Data_Access_Reqt	String	255	D_ProgDataType	User provided access requirements
Data_Access_Reqt_Other	String	4500	None	User provided description of "Data_Access_Reqt" other requirement

**Table Name:** Agy\_Geog\_Access\_Reqt

**Table Description:** This table contains information about agency geographic access requirements. Many to one relationship to Agency table. Non-spatial table containing information about geographic access requirements by agencies (non-MCA specific). Each agency can have many records in this table.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Agy_Geog_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
Org_ID	String	25	None	Foreign key to Agency table; sequential unique whole numbers that are automatically generated
Geog_Extent	String	255	D_ProgDataRequired	User provided requirements for geographic extents of hydrography data
Geog_Extent_Other	String	4500	None	User provided description of "Geog_Extent" other requirement



**Table Name:** Agy\_Hydro\_Reqt

**Table Description:** This table contains information about agency hydrography requirements. One to one relationship to Agency table. Non-spatial table containing information about hydrography requirements by agencies (non-MCA specific). There should be one record in this table per respondent/agency.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Agy_Hydro_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
Org_ID	String	25	None	Organization ID; foreign key to Agency table; sequential unique whole numbers that are automatically generated
Discover_Data	String	16	D_Importance1	Importance of services to discover data
Download_Data	String	16	D_Importance1	Importance of services to download data
Custom_Prod	String	16	D_Importance1	Importance of services to create and download custom products
Dynamic_Use	String	16	D_Importance1	Importance of services to dynamically use data with client-based software (like a browser, GIS, or to feed other services)
Visualiz	String	16	D_Importance1	Importance of services to visualize cartographically rendered and symbolized hydrography data
Mashup	String	16	D_Importance1	Importance of services that allow combination of visualizations with other visualization services
Generalize	String	16	D_Importance1	Importance of services to create generalized versions of hydrography (different scales and level of detail)

Field	Field Type	Field Length	Domain Name	Field Description
Analyze	String	16	D_Importance1	Importance of services to support online analysis of hydrography information (such as StreamStats)
Hyd_Align_3m_DEM	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Rivers and streams in the hydrography dataset align with channels as defined from the elevation data at 1:12,000-scale or larger (3 meter DEM)
Levee_Link_Hyd	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Objects defined by elevation, such as a levees, are linked to a particular river in the hydrography dataset
Hyd_Elev_Pkg	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Hydrography and elevation data are packaged in a single product such as a or a 3-D dataset
Hyd_Elev_Data_Model	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Hydrography data (streams, stream gages, dams, hydrologic units along with elevation data (elevations, catchments, levees, floodplains) coexist within a common data model
Synthesis_Hyd_Elev	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Perform synthesis such that streamflow can be estimated from elevation-based drainage area and other factors
Calc_Gradient	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Produce data derivatives such that gradient can be calculated on a stream using elevation data
Synchronize_Hyd_Elev	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Manage hydrography and elevation data as a unified activity always keeping both datasets synchronized with one another
Hyd_Elev_Same_Date	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Ensure that hydrography and elevation data represent a similar point in time
Hyd_Elev_Unified_Deliv	String	16	D_Importance1	Importance of integration of hydrography data with elevation data: Both hydrography and elevation data are delivered in unison rather than two separate operations

Field	Field Type	Field Length	Domain Name	Field Description
Hyd_Rast_Flowpath	String	16	D_Importance1	Importance of integration of hydrography data with raster elevation data: Determine new flow paths across the land surface into existing stream channels
Hyd_Rast_Feat	String	16	D_Importance1	Importance of integration of hydrography data with raster elevation data: Determine on the hydrographic network to which a point (with elevation value) is connected
Hyd_Rast_Point_Loc	String	16	D_Importance1	Importance of integration of hydrography data with raster elevation data: Determine the actual point location (within a DEM cell) on the hydrographic network to which a point is connected
Miss_One_Lake	String	20	D_Importance2	Impact of errors in hydrography data: In a series of lakes formed at gravel pits, one lake is missing from the NHD
Miss_All_Lake	String	20	D_Importance2	Impact of errors in hydrography data: In a series of lakes formed at gravel pits, all lakes are missing from the NHD
Trib_Disconnect	String	20	D_Importance2	Impact of errors in hydrography data: In a series of tributary streams, several streams do not connect with the main river
Misname_Perennial	String	20	D_Importance2	Impact of errors in hydrography data: A perennial stream is misnamed
Misname_Reservoir	String	20	D_Importance2	Impact of errors in hydrography data: A large reservoir is misnamed
Flow_Rev_1st	String	20	D_Importance2	Impact of errors in hydrography data: A first order stream flow direction is reversed
Flow_Rev_2nd	String	20	D_Importance2	Impact of errors in hydrography data: A second order stream flow direction is reversed
Flow_Rev_3rd	String	20	D_Importance2	Impact of errors in hydrography data: A third order stream flow direction is reversed
Miscoded_1st	String	20	D_Importance2	Impact of errors in hydrography data: Two first order streams coded as perennial should be intermittent

Field	Field Type	Field Length	Domain Name	Field Description
Meander_Error	String	20	D_Importance2	Impact of errors in hydrography data: A meandering river represented in the NHD is overlaid over a contemporary image of the river. The position of the meanders has deviated over time with a mean error of 100 feet and a maximum error of 200 feet
Strm_Misalign_175	String	20	D_Importance2	Impact of errors in hydrography data: An intermittent stream represented in the NHD is portrayed along with contours and shaded terrain. The stream appears to be misaligned with the terrain by a mean of 175 feet
Strm_Misalign_75	String	20	D_Importance2	Impact of errors in hydrography data: An intermittent stream represented in the NHD is portrayed along with contours and shaded terrain. The stream appears to be misaligned with the terrain by a mean of 75 feet
Ridge_Misalign_70	String	20	D_Importance2	Impact of errors in hydrography data: A ridge line in the NHD is portrayed along with contours and shaded terrain. The ridge line appears to be misaligned with the terrain by a mean of 70 feet
Catch_Acc	String	25	D_CatchAcc	Required catchment accuracy
WBD_NHDPlus_Acc	String	66	D_Problem	How much of a problem differences in the way the WBD Hydrologic Units and NHDPlus catchments are defined, that can lead to the situation that one cannot simply aggregate whole NHDPlus catchments to create replicas of the hydrologic units, pose
Error_Resol	String	17	D_ErrResolution	How quickly reported errors need to be resolved
Web_Tool_Use	String	10	D_Webmap	Would your program use a simple web map tool
Comments	String	4500	None	User provided comments

**Table Name:** HUC2

**Table Description:** This table contains information about MCAs that require HUC2s as their area of interest. Many to one relationship to MCA\_Main table. Non-spatial table containing MCA requests for HUC2s as area of interest. There may be many records in this table per MCA.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
HUC_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
MCA_No	String	5	None	MCA number; integer value from 1 to 5; respondents could submit up to 5 MCAs
MCA_ID	String	25	None	Foreign key to MCA_Main table; unique number is combined from Resp_ID and MCA_No; sequential unique whole numbers that are automatically generated
HUC2	String	2	D_HUC2_Codes	2-digit hydrologic unit code
HUC2_Name	String	255	D_HUC2_Names	2-digit hydrologic unit code and region name
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not

**Table Name:** HUC4

**Table Description:** This table contains information about MCAs that require HUC4s as their area of interest. Many to one relationship to MCA\_Main table. Non-spatial table containing MCA requests for HUC4s as area of interest. There may be many records in this table per MCA.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
HUC4_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
MCA_No	String	5	None	MCA number; integer value from 1 to 5; respondents could submit up to 5 MCAs
MCA_ID	String	25	None	Foreign key to MCA_Main table; unique number is combined from Resp_ID and MCA_No; sequential unique whole numbers that are automatically generated
HUC4	String	4	D_HUC4_Codes	4-digit hydrologic unit code
HUC4_Name	String	255	D_HUC4_Names	4-digit hydrologic unit code and subbasin name
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not

**Table Name:** MCA\_Char

**Table Description:** This table contains information about required MCA characteristics. Many to one relationship to MCA\_Main table. Non-spatial table containing information about data characteristics needed per MCA. Each MCA can have many records in this table.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
MCA_Char_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
MCA_No	String	5	None	MCA number; integer value from 1 to 5; respondents could submit up to 5 MCAs
MCA_ID	String	25	None	Foreign key to MCA_Main table; unique number is combined from Resp_ID and MCA_No; sequential unique whole numbers that are automatically generated
Org_ID	String	25	None	Organization ID; foreign key to Agency table; sequential unique whole numbers that are automatically generated
Reqd_Char	String	89	D_Char	User provided Mission Critical Activity characteristics
Reqd_Char_Other	String	4500	None	User provided description of "Reqd_Char" other requirement
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not

**Table Name:** MCA\_Data\_Use

**Table Description:** This table contains information about MCA data use requirements. Many to one relationship to MCA\_Main table. Non-spatial table containing information about data types needed per MCA. Each MCA can have many records in this table.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
MCA_Data_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
MCA_No	String	5	None	MCA number; integer value from 1 to 5; respondents could submit up to 5 MCAs
MCA_ID	String	25	None	Foreign key to MCA_Main table; unique number is combined from Resp_ID and MCA_No; sequential unique whole numbers that are automatically generated
Org_ID	String	25	None	Organization ID; foreign key to Agency table; sequential unique whole numbers that are automatically generated
Data_Type	String	58	D_Data_Set	Hydrography data type currently used
Data_Type_Other	String	4500	None	User provided description of "Data_Type" other requirement
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not



Table Name: MCA\_Main

**Table Description:** This table contains information about MCA requirements and benefits. Primary MCA table. Main non-spatial table containing information about MCA requirements and benefits. There is one record in this table per MCA. Each respondent could specify up to 5 MCAs.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
MCA_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
MCA_No	String	5	None	MCA number; integer value from 1 to 5; respondents could submit up to 5 MCAs
Org_ID	String	25	None	Organization ID; foreign key to Agency table; sequential unique whole numbers that are automatically generated
MCA_Name	String	4500	None	User provided MCA description
MCA_Title	String	4500	None	User provided MCA title
Geog_Area_Req	String	255	D_Geog_Area_Req	Description of geographic requirement for area of interest
BU	String	250	D_Bus_Use	Business Use
Update_Freq	String	10	D_UpFrequency	Required hydrographic data update frequency
Evtnt_Update_Imp	String	16	D_Importance1	Importance of updates to hydrographic data after an event
Pos_Acc	String	35	D_Accuracy	Hydrography data positional accuracy requirements
Strm_Density	String	67	D_Stream	Hydrography data stream density requirements
Sm_Contrib_Ar	String	33	D_Small	Smallest contributing area for which a watercourse is needed
Sm_Wtrbdy	String	100	D_Waterbody	Smallest mapped waterbody needed

<b>Field</b>	<b>Field Type</b>	<b>Field Length</b>	<b>Domain Name</b>	<b>Field Description</b>
Sm_Wtrbdy_Other	String	4500	None	User provided description of "Sm_Wtrbdy" other requirement
Lvl_Detail	String	155	D_Available	Required level of detail for hydrography data
LC_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Land Cover data
LC_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Land Cover data
Soils_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Soils data
Soils_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Soils data
Geol_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Surficial Geology data
Geol_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Surficial Geology data
Bathy_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Bathymetry data
Bathy_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Bathymetry data
Climate_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Climate data
Climate_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Climate data
Contam_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Contaminant sources
Contam_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Contaminant sources
Elev_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Elevation data

<b>Field</b>	<b>Field Type</b>	<b>Field Length</b>	<b>Domain Name</b>	<b>Field Description</b>
Elev_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Elevation data
Streamflow_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Streamflow data
Streamflow_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Streamflow data
Wetlands_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Wetlands data
Wetlands_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Wetlands data
Census_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Census data
Census_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Census data
Aquifer_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Aquifer data
Aquifer_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Aquifer data
Disch_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Point Discharge data
Disch_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Point Discharge data
Wtr_Use_Imp	String	16	D_Importance1	Importance of integration between hydrography data and Water Use (diversions) data
Wtr_Use_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and Water Use (diversions) data
NPDES_Imp	String	16	D_Importance1	Importance of integration between hydrography data and EPA NPDES data

<b>Field</b>	<b>Field Type</b>	<b>Field Length</b>	<b>Domain Name</b>	<b>Field Description</b>
NPDES_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and NPDES data
STORET_Imp	String	16	D_Importance1	Importance of integration between hydrography data and EPA STORET data
STORET_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and STORET data
NID_Imp	String	16	D_Importance1	Importance of integration between hydrography data and USACE National Inventory of Dams data
NID_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and USACE National Inventory of Dams data
NASS_Imp	String	16	D_Importance1	Importance of integration between hydrography data and USDA NASS data
NASS_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and USDA NASS data
NWI_Imp	String	16	D_Importance1	Importance of integration between hydrography data and FWS NWI data
NWI_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and FWS NWI data
NWIS_Imp	String	16	D_Importance1	Importance of integration between hydrography data and USGS NWIS data
NWIS_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and USGS NWIS data
NAWQA_Imp	String	16	D_Importance1	Importance of integration between hydrography data and USGS NAWQA data
NAWQA_HLOAR	String	28	D_HLOAR	Highest level of analysis required between hydrography data and USGS NAWQA data
Other	String	4500	None	Importance of integration between hydrography data and other data

Field	Field Type	Field Length	Domain Name	Field Description
Tot_An_Budg	String	1000	None	Total annual program budget supported by this Mission Critical Activity
An_Budget_Low	Double	8	None	Total annual budget supported by this Mission Critical Activity as numeric value.; low value where budget range was provided
An_Budget_High	Double	8	None	Total annual budget supported by this Mission Critical Activity as numeric value; high value where budget range was provided
Time_Cur_Bfit	String	14	D_Benefit	Current Time or Cost Savings (Operational Benefits)
Mission_Cur_Bfit	String	14	D_Benefit	Current Mission Compliance Benefits (Operational Benefits)
Produc_Cur_Bfit	String	14	D_Benefit	Current Products or Services Benefits (Customer Service Benefits)
Resp_Cur_Bfit	String	14	D_Benefit	Current Response or Timeliness Benefits (Customer Service Benefits)
Cust_Cur_Bfit	String	14	D_Benefit	Current Customer Experience Benefits (Customer Service Benefits)
Edu_Cur_Bfit	String	14	D_Benefit	Current Education or Public Safety Benefits (Societal Benefits)
Envir_Cur_Bfit	String	14	D_Benefit	Current Environmental Benefits (Societal Benefits)
Life_Cur_Bfit	String	14	D_Benefit	Current Human Lives Saved (Societal Benefits)
Other_Cur_Bfit	String	4500	None	User provided other description to "Other" Current Benefits
An_DoI_Cur_Bfit	String	1000	None	User provided current annual dollar benefits
Cur_Benefit_Low	Double	8	None	Current annual dollar benefits as numeric value; low value where benefits were provided as a range of value
Cur_Benefit_High	Double	8	None	Current annual dollar benefits as numeric value; high value where benefits were provided as a range of values
Time_Fut_Bfit	String	14	D_Benefit	Future Time or Cost Savings Benefits (Operational)
Mission_Fut_Bfit	String	14	D_Benefit	Future Improved Mission Compliance Benefits (Operational)
Produc_Fut_Bfit	String	14	D_Benefit	Future Improved Products or Services Benefits (Customer Service)

Field	Field Type	Field Length	Domain Name	Field Description
Resp_Fut_Bfit	String	14	D_Benefit	Future Improved Response or Timeliness Benefits (Customer Service)
Cust_Fut_Bfit	String	14	D_Benefit	Future Improved Customer Experience Benefits (Customer Service)
Edu_Fut_Bfit	String	14	D_Benefit	Future Improved Education or Public Safety Benefits (Societal Benefits)
Envir_Fut_Bfit	String	14	D_Benefit	Future Environmental Benefits (Societal Benefits)
Life_Fut_Bfit	String	14	D_Benefit	Future Human Lives Saved (Societal Benefits)
Other_Fut_Bfit	String	4500	None	User provided other description to "Other" Future Benefits
Major_Fut_Bfit	String	4500	None	User provided description of the major new benefits
An_DoI_Fut_Bfit	String	1000	None	User provided future annual dollar values
Fut_Benefit_Low	Double	8	None	Future annual dollar benefits as numeric value; low value where benefits were provided as a range of values
Fut_Benefit_High	Double	8	None	Future annual dollar benefits as numeric value; high value where benefits were provided as a range of values
Type	String	255	None	Edit type
Date_Upload	String	50	None	Date of data upload
Date_LastEdit	String	50	None	Date of last edit
GeographyChange	String	5	D_YesNo	Indicates if area of interest was changed during interview/workshop
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not
Comments	String	10000	None	User provided comments

**Table Name:** Misc\_Poly

**Table Description:** This table contains information about MCAs that require a user defined polygon as their area of interest. Non-spatial table containing MCA requests for user-defined area of interest.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
MiscPoly_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
MCA_No	String	5	None	MCA number; integer value from 1 to 5; respondents could submit up to 5 MCAs
MCA_ID	String	25	None	Foreign key to MCA_Main table; unique number is combined from Resp_ID and MCA_No; sequential unique whole numbers that are automatically generated
Geog_Shp	String	200	None	User provided filename for area of interest shapefile
SubRegion	String	255	None	User provided description of sub-region of state-based area of interest
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not
Label	String	255	None	Map label description
AOI_ID	String	50	None	Foreign key to MiscPoly_ALL table; sequential unique numbers

**Table Name:** MiscPoly\_ALL

**Table Description:** This feature class contains information about MCAs that require a user defined polygon as their area of interest. Spatial feature class containing information about user-defined areas of interest for Mission Critical Activities (MCAs).

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Shape	Geometry	0	None	Feature geometry; coordinates defining the features
AOI_ID	String	255	None	Primary key; sequential unique numbers
Shape_Length	Double	8	None	Length of feature in internal units; positive real numbers that are automatically generated
Shape_Area	Double	8	None	Area of feature in internal units squared; positive real numbers that are automatically generated



**Table Name:** Respondent

**Table Description:** This table contains information about questionnaire respondents. Non-spatial table containing information about questionnaire respondents.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Resp_ID	String	25	None	Primary Key; Respondent ID from questionnaire; sequential unique whole numbers that are automatically generated
Collect_ID	String	25	None	Survey Monkey collector ID number; sequential unique whole numbers that are automatically generated
Org_ID	String	25	None	Organization ID; foreign key to Agency table; sequential unique whole numbers that are automatically generated
Start_Dt	String	15	None	Date questionnaire was started
End_Dt	String	15	None	Date questionnaire was completed or last worked on
IP_Add	String	25	None	IP address of computer from which questionnaire was filled out
First_Name	String	50	None	First name of respondent
Last_Name	String	50	None	Last name of respondent
Organiz	String	250	None	User provided respondent's organization name
Prog_Name	String	250	None	User provided respondent's program name
Job_Title	String	255	None	User provided respondent's job title
Phone	String	255	None	User provided respondent's telephone number
Email	String	50	None	User provided respondent's email address

<b>Field</b>	<b>Field Type</b>	<b>Field Length</b>	<b>Domain Name</b>	<b>Field Description</b>
Custom	String	250	None	Additional custom data from Survey Monkey
Comments	String	4500	None	User provided comments
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not

**Table Name:** State

**Table Description:** This table contains information about MCAs that require States or CONUS 48 as their area of interest. Many to one relationship to MCA\_Main table. Non-spatial table containing MCA requests for States as area of interest. There may be many records in this table per MCA.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
State_ID	String	25	None	Primary key; sequential unique whole numbers that are automatically generated
State	String	25	D_StatePlus	State or territory name
Resp_ID	String	25	None	Respondent ID from questionnaire; foreign key to Respondent table; sequential unique whole numbers that are automatically generated
MCA_No	String	5	None	MCA number; integer value from 1 to 5; respondents could submit up to 5 MCAs
MCA_ID	String	25	None	Foreign key to MCA_Main table; unique number is combined from Resp_ID and MCA_No; sequential unique whole numbers that are automatically generated
Complete	String	5	D_YesNo	Questionnaire completeness flag; indicates if questionnaire was completed or not

**Table Name:** State\_ALL

**Table Description:** This feature class contains information about State boundaries. U.S. States represents the 50 states, the District of Columbia, and the territories of Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Mariana Islands of the United States.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Shape	Geometry	0	None	Feature geometry; coordinates defining the features
STATE_NAME	String	255	None	State/territory name or 48 Conterminous States
STATE_FIPS	String	2	None	2-digit State Federal Information Processing System (FIPS) code
STATE_ABBR	String	2	None	2-letter State/Territory Postal Code abbreviation
Shape_Length	Double	8	None	Length of feature in internal units; positive real numbers that are automatically generated
Shape_Area	Double	8	None	Area of feature in internal units squared; positive real numbers that are automatically generated

**Table Name:** WBDHUC2

**Table Description:** This data set is a complete digital hydrologic unit boundary layer of the Region (2-digit) 1st level for the entire United States. This data set consists of geo-referenced digital data and associated attributes. Polygons are attributed with hydrologic unit codes, name, and size. The data are currently updated through the USGS National Hydrography Dataset (NHD) Program and replicated to NRCS twice per year.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Shape	Geometry	0	None	Feature geometry; coordinates defining the features
TNMID	String	40	None	The National Map identifier
MetaSourceID	String	40	None	Metadata source identifier
SourceDataDesc	String	100	None	Source data description
SourceOriginator	String	130	None	Source data originator
SourceFeatureID	String	40	None	Source feature identifier
LoadDate	Date	8	None	Date
GNIS_ID	Long Integer	4	None	Geographic Names Information System identifier
AreaAcres	Double	8	None	Area in acres
AreaSqKm	Double	8	None	Area in square kilometers
States	String	50	None	The "States" field includes the names of all state(s) that the subwatershed falls within. The 2-digit postal abbreviation in upper case and in alphabetical order was used, separated with a comma
HUC2	String	2	None	2-digit hydrologic unit code
Name	String	120	None	2-digit hydrologic unit region name

<b>Field</b>	<b>Field Type</b>	<b>Field Length</b>	<b>Domain Name</b>	<b>Field Description</b>
Shape_Length	Double	8	None	Length of feature in internal units; positive real numbers that are automatically generated
Shape_Area	Double	8	None	Area of feature in internal units squared; positive real numbers that are automatically generated

**Table Name:** WBDHUC4

**Table Description:** This data set is a complete digital hydrologic unit boundary layer of the Subregion (4-digit) 2nd level for the entire United States. This data set consists of geo-referenced digital data and associated attributes. Polygons are attributed with hydrologic unit codes, name, and size. The data are currently updated through the USGS National Hydrography Dataset (NHD) Program and replicated to NRCS twice per year.

Field	Field Type	Field Length	Domain Name	Field Description
OBJECTID	OID	4	None	Internal feature number; sequential unique whole numbers that are automatically generated
Shape	Geometry	0	None	Feature geometry; coordinates defining the features
TNMID	String	40	None	The National Map identifier
MetaSourceID	String	40	None	Metadata source identifier
SourceDataDesc	String	100	None	Source data description
SourceOriginator	String	130	None	Source data originator
SourceFeatureID	String	40	None	Source feature identifier
LoadDate	Date	8	None	Date
GNIS_ID	Long Integer	4	None	Geographic Names Information System identifier
AreaAcres	Double	8	None	Area in acres
AreaSqKm	Double	8	None	Area in square kilometers
States	String	50	None	The "States" field includes the names of all state(s) that the subwatershed falls within. The 2-digit postal abbreviation in upper case and in alphabetical order was used, separated with a comma
HUC4	String	4	None	4-digit hydrologic unit code

Field	Field Type	Field Length	Domain Name	Field Description
Name	String	120	None	4-digit hydrologic unit region name
Shape_Length	Double	8	None	Length of feature in internal units; positive real numbers that are automatically generated
Shape_Area	Double	8	None	Area of feature in internal units squared; positive real numbers that are automatically generated

**Domain Table Name:** D\_Accuracy

Coded Value	Description
+/- 3 feet, 90% (1:1,200-scale)	+/- 3 feet, 90% (1:1,200-scale)
+/- 7 feet, 90% (1:2,400-scale)	+/- 7 feet, 90% (1:2,400-scale)
+/- 33 feet, 90% (1:12,000-scale)	+/- 33 feet, 90% (1:12,000-scale)
+/- 40 feet, 90% (1:24,000-scale)	+/- 40 feet, 90% (1:24,000-scale)
+/- 170 feet, 90% (1:100,000-scale)	+/- 170 feet, 90% (1:100,000-scale)
+/- 420 feet, 90% (1:250,000-scale)	+/- 420 feet, 90% (1:250,000-scale)

**Domain Table Name:** D\_Available

Coded Value	Description
The "best available" geospatial detail is required (quality and detail may vary)	Best Available
Consistent level of geospatial detail is required (quality and detail will be the same, but better data for some areas may be available from other sources)	Consistent Level of Detail

**Domain Table Name:** D\_Benefit

Coded Value	Description
Major	Major
Moderate	Moderate



<b>Coded Value</b>	<b>Description</b>
Minor	Minor
Don't Know	Don't Know
Not Applicable	Not Applicable

**Domain Table Name:** D\_Bus\_Use

<b>Coded Value</b>	<b>Description</b>
River and Stream Flow Management	River and Stream Flow Management
Natural Resources Conservation	Natural Resources Conservation
Water Resource Planning and Management	Water Resource Planning and Management
Water Quality	Water Quality
River and Stream Ecosystem Management	River and Stream Ecosystem Management
Coastal Zone Management	Coastal Zone Management
Forest Resources Management	Forest Resources Management
Rangeland Management	Rangeland Management
Wildlife and Habitat Management	Wildlife and Habitat Management
Agriculture and Precision Farming	Agriculture and Precision Farming
Geologic Resource Assessment and Hazard Mitigation	Geologic Resource Assessment and Hazard Mitigation
Resource Mining	Resource Mining
Renewable Energy Resources	Renewable Energy Resources
Oil and Gas Resources	Oil and Gas Resources
Flood Risk Management	Flood Risk Management
Sea Level Rise and Subsidence	Sea Level Rise and Subsidence
Wildfire Management, Planning, and Response	Wildfire Management, Planning, and Response
Homeland Security, Law Enforcement, and Disaster Response	Homeland Security, Law Enforcement, and Disaster Response
Marine and Riverine Navigation Safety	Marine and Riverine Navigation Safety
Infrastructure and Construction Management	Infrastructure and Construction Management
Urban and Regional Planning	Urban and Regional Planning
Health and Human Services	Health and Human Services

<b>Coded Value</b>	<b>Description</b>
Real Estate, Banking, Mortgage, and Insurance	Real Estate, Banking, Mortgage, and Insurance
Education K-12 and Beyond	Education K-12 and Beyond
Recreation	Recreation

**Domain Table Name:** D\_CatchAcc

<b>Coded Value</b>	<b>Description</b>
Within 1% of actual area	Within 1% of actual area
Within 5% of actual area	Within 5% of actual area
Within 10% of actual area	Within 10% of actual area

**Domain Table Name:** D\_Char

<b>Coded Value</b>	<b>Description</b>
Floodplain boundary	Floodplain boundary
Coastlines	Coastlines
Coastal bathymetry	Coastal bathymetry
Estuaries	Estuaries
Deltas	Deltas
Wetlands	Wetlands
Linkages to streamgage observations	Linkages to observations associated with streamgages
Linkages to cross section geometry	Linkages to cross-sectional geometry of hydrographic feature (i.e. elevation-profile)
Left right bank delineation	Left and right bank delineation (geometry that shows two banks instead of a centerline)
Velocity or time of travel	Velocity estimates and/or time of travel
Leakage along lines	Leakage/seepage along natural lines (for example, sandy-bottomed streams)
Leakage at points	Leakage/seepage at natural points (sinks, springs)
Flood stage	Bankfull and/or flood stage
Flow periodicity	Flow periodicity (perennial, ephemeral, intermittent)
Riverine bathymetry	Lake and channel bathymetry

<b>Coded Value</b>	<b>Description</b>
Diversion points	Built diversion points (gates)
Bridges, culverts	Bridges and culverts
Diversion lines	Built diversion lines (pipelines, canals, channels, conveyances)
Badlands	Badlands/deserts
Navigate up or downstream on network	Network analysis – Navigate up or downstream on network
Calculate stream distance to points	Network analysis – Calculate stream distance to any point on the network
Calculate time of travel to points	Network analysis – Calculate time of travel to another point on the network
Find upstream or downstream feature within watershed	Area analysis – Find feature upstream or downstream within defined areas (i.e. watershed)
Calculate drainage area	Area analysis – Determine drainage area upstream from a point
Delineate catchment	Area analysis – Determine area and boundary on the network of a catchment
Determine downstream flood area	Area analysis – Determine downstream flood inundation area
Accumulate upstream or downstream features	Area analysis – Accumulate upstream or downstream features or attributes
Find upstream or downstream points	On-network discovery – Find upstream or downstream points
Calculate distance on network	On-network discovery – Calculate distance between points or other attributes on network
Find events or features on network	On-network discovery – Find features, events or addresses (i.e. reach code) on network
Preset symbolization	Visualization – View preset symbolization for network lines and other features
User defined symbolization	Visualization – View user defined symbolization for network lines and other features
Mash-ups	Visualization – View online hydrography service with my own service (mash-ups)
Animation of time-series	Animations – Render and view time-series information
Other (please specify)	Other (please specify)

**Domain Table Name:** D\_Data\_Set

<b>Coded Value</b>	<b>Description</b>
National Hydrography Dataset (NHD)	National Hydrography Dataset (NHD)
National Hydrographic Dataset Plus (NHDPlus)	National Hydrographic Dataset Plus (NHDPlus)
Watershed Boundary Dataset (WBD)	Watershed Boundary Dataset (WBD)
No hydrography data are currently being used	No hydrography data are currently being used
Other dataset (please provide name and brief description)	Other dataset (please provide name and brief description)

**Domain Table Name:** D\_ErrResolution

<b>Coded Value</b>	<b>Description</b>
Within 1 day	Within 1 day
Within 2-30 days	Within 2-30 days
Within 1-2 months	Within 1-2 months
Within 3-6 months	Within 3-6 months
Within 1 year	Within 1 year

**Domain Table Name:** D\_Geog\_Area\_Reqt

<b>Coded Value</b>	<b>Description</b>
Nationwide	Nationwide
One or more states, territories, counties, or cities	One or more states, territories, counties, or cities
One or more Watersheds	One or more Watersheds
Other geographic area; I will provide my own shapefile or geodatabase	Other geographic area; I will provide my own shapefile or geodatabase

**Domain Table Name:** D\_HLOAR

<b>Coded Value</b>	<b>Description</b>
Perform Geospatial Analysis	Perform Geospatial Analysis
Associate Selected Data Type	Associate Selected Data Type
Visual Inspection	Visual Inspection
None	None

**Domain Table Name:** D\_HUC2\_Codes

<b>Coded Value</b>	<b>Description</b>
01	01
02	02

<b>Coded Value</b>	<b>Description</b>
03	03
04	04
05	05
06	06
07	07
08	08
09	09
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23

**Domain Table Name:** D\_HUC2\_Names

<b>Coded Value</b>	<b>Description</b>
New England Region	01 - New England Region
Mid Atlantic Region	02 - Mid Atlantic Region
South Atlantic-Gulf Region	03 - South Atlantic-Gulf Region
Great Lakes Region	04 - Great Lakes Region

<b>Coded Value</b>	<b>Description</b>
Ohio Region	05 - Ohio Region
Tennessee Region	06 - Tennessee Region
Upper Mississippi Region	07 - Upper Mississippi Region
Lower Mississippi Region	08 - Lower Mississippi Region
Souris-Red-Rainy Region	09 - Souris-Red-Rainy Region
Missouri Region	10 - Missouri Region
Arkansas-White-Red Region	11 - Arkansas-White-Red Region
Texas-Gulf Region	12 - Texas-Gulf Region
Rio Grande Region	13 - Rio Grande Region
Upper Colorado Region	14 - Upper Colorado Region
Lower Colorado Region	15 - Lower Colorado Region
Great Basin Region	16 - Great Basin Region
Pacific Northwest Region	17 - Pacific Northwest Region
California Region	18 - California Region
Alaska Region	19 - Alaska Region
Hawaii Region	20 - Hawaii Region
Caribbean Region	21 - Caribbean Region
South Pacific Region	22 - South Pacific Region

**Domain Table Name:** D\_HUC4\_Codes

<b>Coded Value</b>	<b>Description</b>
0101	0101
0102	0102
0103	0103
0104	0104
0105	0105
0106	0106
0107	0107

<b>Coded Value</b>	<b>Description</b>
0108	0108
0109	0109
0110	0110
0202	0202
0203	0203
0204	0204
0205	0205
0206	0206
0207	0207
0208	0208
0301	0301
0302	0302
0303	0303
0304	0304
0305	0305
0306	0306
0307	0307
0308	0308
0309	0309
0310	0310
0311	0311
0312	0312
0313	0313
0314	0314
0315	0315
0316	0316
0317	0317
0318	0318
0401	0401

<b>Coded Value</b>	<b>Description</b>
0402	0402
0403	0403
0404	0404
0405	0405
0406	0406
0407	0407
0408	0408
0409	0409
0410	0410
0411	0411
0412	0412
0413	0413
0414	0414
0415	0415
0501	0501
0502	0502
0503	0503
0504	0504
0505	0505
0506	0506
0507	0507
0508	0508
0509	0509
0510	0510
0511	0511
0512	0512
0513	0513
0514	0514
0601	0601



<b>Coded Value</b>	<b>Description</b>
0602	0602
0603	0603
0604	0604
0701	0701
0702	0702
0703	0703
0704	0704
0705	0705
0706	0706
0707	0707
0708	0708
0709	0709
0710	0710
0711	0711
0712	0712
0713	0713
0714	0714
0801	0801
0802	0802
0803	0803
0804	0804
0805	0805
0806	0806
0807	0807
0808	0808
0809	0809
0901	0901
0902	0902
0903	0903

<b>Coded Value</b>	<b>Description</b>
0904	0904
1002	1002
1003	1003
1004	1004
1005	1005
1006	1006
1007	1007
1008	1008
1009	1009
1010	1010
1011	1011
1012	1012
1013	1013
1014	1014
1015	1015
1016	1016
1017	1017
1018	1018
1019	1019
1020	1020
1021	1021
1022	1022
1023	1023
1024	1024
1025	1025
1026	1026
1027	1027
1028	1028
1029	1029

<b>Coded Value</b>	<b>Description</b>
1030	1030
1101	1101
1102	1102
1103	1103
1104	1104
1105	1105
1106	1106
1107	1107
1108	1108
1109	1109
1110	1110
1111	1111
1112	1112
1113	1113
1114	1114
1201	1201
1202	1202
1203	1203
1204	1204
1205	1205
1206	1206
1207	1207
1208	1208
1209	1209
1210	1210
1211	1211
1301	1301
1302	1302
1303	1303

<b>Coded Value</b>	<b>Description</b>
1304	1304
1305	1305
1306	1306
1307	1307
1308	1308
1309	1309
1401	1401
1402	1402
1403	1403
1404	1404
1405	1405
1406	1406
1407	1407
1408	1408
1501	1501
1502	1502
1503	1503
1504	1504
1505	1505
1506	1506
1507	1507
1508	1508
1601	1601
1602	1602
1603	1603
1604	1604
1605	1605
1606	1606
1701	1701

<b>Coded Value</b>	<b>Description</b>
1702	1702
1703	1703
1704	1704
1705	1705
1706	1706
1707	1707
1708	1708
1709	1709
1710	1710
1711	1711
1712	1712
1801	1801
1802	1802
1803	1803
1804	1804
1805	1805
1806	1806
1807	1807
1808	1808
1809	1809
1810	1810
1901	1901
1902	1902
1903	1903
1905	1905
1906	1906
1907	1907
1908	1908
1909	1909

<b>Coded Value</b>	<b>Description</b>
2001	2001
2002	2002
2003	2003
2004	2004
2005	2005
2006	2006
2007	2007
2008	2008
2101	2101
2102	2102
2201	2201
2202	2202
2203	2203

**Domain Table Name:** D\_HUC4\_Names

<b>Coded Value</b>	<b>Description</b>
St. John	0101 - St. John
Penobscot	0102 - Penobscot
Kennebec	0103 - Kennebec
Androscoggin	0104 - Androscoggin
Maine Coastal	0105 - Maine Coastal
Saco	0106 - Saco
Merrimack	0107 - Merrimack
Connecticut	0108 - Connecticut
Massachusetts-Rhode Island Coastal	0109 - Massachusetts-Rhode Island Coastal
Connecticut Coastal	0110 - Connecticut Coastal
Upper Hudson	0202 - Upper Hudson
Lower Hudson-Long Island	0203 - Lower Hudson-Long Island

<b>Coded Value</b>	<b>Description</b>
Delaware-Mid Atlantic Coastal	0204 - Delaware-Mid Atlantic Coastal
Susquehanna	0205 - Susquehanna
Upper Chesapeake	0206 - Upper Chesapeake
Potomac	0207 - Potomac
Lower Chesapeake	0208 - Lower Chesapeake
Chowan-Roanoke	0301 - Chowan-Roanoke
Neuse-Pamlico	0302 - Neuse-Pamlico
Cape Fear	0303 - Cape Fear
Pee Dee	0304 - Pee Dee
Edisto-Santee	0305 - Edisto-Santee
Ogeechee-Savannah	0306 - Ogeechee-Savannah
Altamaha-St. Marys	0307 - Altamaha-St. Marys
St. Johns	0308 - St. Johns
Southern Florida	0309 - Southern Florida
Peace-Tampa Bay	0310 - Peace-Tampa Bay
Suwannee	0311 - Suwannee
Ochlockonee	0312 - Ochlockonee
Apalachicola	0313 - Apalachicola
Choctawhatchee-Escambia	0314 - Choctawhatchee-Escambia
Alabama	0315 - Alabama
Mobile-Tombigbee	0316 - Mobile-Tombigbee
Pascagoula	0317 - Pascagoula
Pearl	0318 - Pearl
Western Lake Superior	0401 - Western Lake Superior
Southern Lake Superior-Lake Superior	0402 - Southern Lake Superior-Lake Superior
Northwestern Lake Michigan	0403 - Northwestern Lake Michigan
Southwestern Lake Michigan	0404 - Southwestern Lake Michigan
Southeastern Lake Michigan	0405 - Southeastern Lake Michigan
Northeastern Lake Michigan-Lake Michigan	0406 - Northeastern Lake Michigan-Lake Michigan

<b>Coded Value</b>	<b>Description</b>
Northwestern Lake Huron	0407 - Northwestern Lake Huron
Southwestern Lake Huron-Lake Huron	0408 - Southwestern Lake Huron-Lake Huron
St. Clair-Detroit	0409 - St. Clair-Detroit
Western Lake Erie	0410 - Western Lake Erie
Southern Lake Erie	0411 - Southern Lake Erie
Lake Erie	0412 - Lake Erie
Southwestern Lake Ontario	0413 - Southwestern Lake Ontario
Southeastern Lake Ontario	0414 - Southeastern Lake Ontario
Northeastern Lake Ontario-Lake Ontario-St. Lawrence	0415 - Northeastern Lake Ontario-Lake Ontario-St. Lawrence
Allegheny	0501 - Allegheny
Monongahela	0502 - Monongahela
Upper Ohio	0503 - Upper Ohio
Muskingum	0504 - Muskingum
Kanawha	0505 - Kanawha
Scioto	0506 - Scioto
Big Sandy-Guyandotte	0507 - Big Sandy-Guyandotte
Great Miami	0508 - Great Miami
Middle Ohio	0509 - Middle Ohio
Kentucky-Licking	0510 - Kentucky-Licking
Green	0511 - Green
Wabash	0512 - Wabash
Cumberland	0513 - Cumberland
Lower Ohio	0514 - Lower Ohio
Upper Tennessee	0601 - Upper Tennessee
Middle Tennessee-Hiwassee	0602 - Middle Tennessee-Hiwassee
Middle Tennessee-Elk	0603 - Middle Tennessee-Elk
Lower Tennessee	0604 - Lower Tennessee
Mississippi Headwaters	0701 - Mississippi Headwaters
Minnesota	0702 - Minnesota



<b>Coded Value</b>	<b>Description</b>
St. Croix	0703 - St. Croix
Upper Mississippi-Black-Root	0704 - Upper Mississippi-Black-Root
Chippewa	0705 - Chippewa
Upper Mississippi-Maquoketa-Plum	0706 - Upper Mississippi-Maquoketa-Plum
Wisconsin	0707 - Wisconsin
Upper Mississippi-Iowa-Skunk-Wapsipinicon	0708 - Upper Mississippi-Iowa-Skunk-Wapsipinicon
Rock	0709 - Rock
Des Moines	0710 - Des Moines
Upper Mississippi-Salt	0711 - Upper Mississippi-Salt
Upper Illinois	0712 - Upper Illinois
Lower Illinois	0713 - Lower Illinois
Upper Mississippi-Kaskaskia-Meramec	0714 - Upper Mississippi-Kaskaskia-Meramec
Lower Mississippi-Hatchie	0801 - Lower Mississippi-Hatchie
Lower Mississippi-St. Francis	0802 - Lower Mississippi-St. Francis
Lower Mississippi-Yazoo	0803 - Lower Mississippi-Yazoo
Lower Red-Ouachita	0804 - Lower Red-Ouachita
Boeuf-Tensas	0805 - Boeuf-Tensas
Lower Mississippi-Big Black	0806 - Lower Mississippi-Big Black
Lower Mississippi-Lake Maurepas	0807 - Lower Mississippi-Lake Maurepas
Louisiana Coastal	0808 - Louisiana Coastal
Lower Mississippi	0809 - Lower Mississippi
Souris	0901 - Souris
Red	0902 - Red
Rainy	0903 - Rainy
Saskatchewan River	0904 - Saskatchewan River
Missouri Headwaters	1002 - Missouri Headwaters
Missouri-Marias	1003 - Missouri-Marias
Missouri-Musselshell	1004 - Missouri-Musselshell
Milk	1005 - Milk

<b>Coded Value</b>	<b>Description</b>
Missouri-Poplar	1006 - Missouri-Poplar
Upper Yellowstone	1007 - Upper Yellowstone
Big Horn	1008 - Big Horn
Powder-Tongue	1009 - Powder-Tongue
Lower Yellowstone	1010 - Lower Yellowstone
Missouri-Little Missouri	1011 - Missouri-Little Missouri
Cheyenne	1012 - Cheyenne
Missouri-Oahe	1013 - Missouri-Oahe
Missouri-White	1014 - Missouri-White
Niobrara	1015 - Niobrara
James	1016 - James
Missouri-Big Sioux	1017 - Missouri-Big Sioux
North Platte	1018 - North Platte
South Platte	1019 - South Platte
Platte	1020 - Platte
Loup	1021 - Loup
Elkhorn	1022 - Elkhorn
Missouri-Little Sioux	1023 - Missouri-Little Sioux
Missouri-Nishnabotna	1024 - Missouri-Nishnabotna
Republican	1025 - Republican
Smoky Hill	1026 - Smoky Hill
Kansas	1027 - Kansas
Chariton-Grand	1028 - Chariton-Grand
Gasconade-Osage	1029 - Gasconade-Osage
Lower Missouri	1030 - Lower Missouri
Upper White	1101 - Upper White
Upper Arkansas	1102 - Upper Arkansas
Middle Arkansas	1103 - Middle Arkansas
Upper Cimarron	1104 - Upper Cimarron

<b>Coded Value</b>	<b>Description</b>
Lower Cimarron	1105 - Lower Cimarron
Arkansas-Keystone	1106 - Arkansas-Keystone
Neosho-Verdigris	1107 - Neosho-Verdigris
Upper Canadian	1108 - Upper Canadian
Lower Canadian	1109 - Lower Canadian
North Canadian	1110 - North Canadian
Lower Arkansas	1111 - Lower Arkansas
Red Headwaters	1112 - Red Headwaters
Red-Washita	1113 - Red-Washita
Red-Sulphur	1114 - Red-Sulphur
Sabine	1201 - Sabine
Neches	1202 - Neches
Trinity	1203 - Trinity
Galveston Bay-San Jacinto	1204 - Galveston Bay-San Jacinto
Brazos Headwaters	1205 - Brazos Headwaters
Middle Brazos	1206 - Middle Brazos
Lower Brazos	1207 - Lower Brazos
Upper Colorado	1208 - Upper Colorado
Lower Colorado-San Bernard Coastal	1209 - Lower Colorado-San Bernard Coastal
Central Texas Coastal	1210 - Central Texas Coastal
Nueces-Southwestern Texas Coastal	1211 - Nueces-Southwestern Texas Coastal
Rio Grande Headwaters	1301 - Rio Grande Headwaters
Rio Grande-Elephant Butte	1302 - Rio Grande-Elephant Butte
Rio Grande-Mimbres	1303 - Rio Grande-Mimbres
Rio Grande-Amistad	1304 - Rio Grande-Amistad
Rio Grande Closed Basins	1305 - Rio Grande Closed Basins
Upper Pecos	1306 - Upper Pecos
Lower Pecos	1307 - Lower Pecos
Rio Grande-Falcon	1308 - Rio Grande-Falcon

<b>Coded Value</b>	<b>Description</b>
Lower Rio Grande	1309 - Lower Rio Grande
Colorado Headwaters	1401 - Colorado Headwaters
Gunnison	1402 - Gunnison
Upper Colorado-Dolores	1403 - Upper Colorado-Dolores
Great Divide-Upper Green	1404 - Great Divide-Upper Green
White-Yampa	1405 - White-Yampa
Lower Green	1406 - Lower Green
Upper Colorado-Dirty Devil	1407 - Upper Colorado-Dirty Devil
San Juan	1408 - San Juan
Lower Colorado-Lake Mead	1501 - Lower Colorado-Lake Mead
Little Colorado	1502 - Little Colorado
Lower Colorado	1503 - Lower Colorado
Upper Gila	1504 - Upper Gila
Middle Gila	1505 - Middle Gila
Salt	1506 - Salt
Lower Gila	1507 - Lower Gila
Sonora	1508 - Sonora
Bear	1601 - Bear
Great Salt Lake	1602 - Great Salt Lake
Escalante Desert-Sevier Lake	1603 - Escalante Desert-Sevier Lake
Black Rock Desert-Humboldt	1604 - Black Rock Desert-Humboldt
Central Lahontan	1605 - Central Lahontan
Central Nevada Desert Basins	1606 - Central Nevada Desert Basins
Kootenai-Pend Oreille-Spokane	1701 - Kootenai-Pend Oreille-Spokane
Upper Columbia	1702 - Upper Columbia
Yakima	1703 - Yakima
Upper Snake	1704 - Upper Snake
Middle Snake	1705 - Middle Snake
Lower Snake	1706 - Lower Snake

<b>Coded Value</b>	<b>Description</b>
Middle Columbia	1707 - Middle Columbia
Lower Columbia	1708 - Lower Columbia
Willamette	1709 - Willamette
Oregon-Washington Coastal	1710 - Oregon-Washington Coastal
Puget Sound	1711 - Puget Sound
Oregon Closed Basins	1712 - Oregon Closed Basins
Klamath-Northern California Coastal	1801 - Klamath-Northern California Coastal
Sacramento	1802 - Sacramento
Tulare-Buena Vista Lakes	1803 - Tulare-Buena Vista Lakes
San Joaquin	1804 - San Joaquin
San Francisco Bay	1805 - San Francisco Bay
Central California Coastal	1806 - Central California Coastal
Southern California Coastal	1807 - Southern California Coastal
North Lahontan	1808 - North Lahontan
Northern Mojave-Mono Lake	1809 - Northern Mojave-Mono Lake
Southern Mojave-Salton Sea	1810 - Southern Mojave-Salton Sea
Southeast Alaska	1901 - Southeast Alaska
South Central Alaska	1902 - South Central Alaska
Southwest Alaska	1903 - Southwest Alaska
Northwest Alaska	1905 - Northwest Alaska
Arctic Alaska	1906 - Arctic Alaska
Headwaters Yukon-Lake Laberge/Upper Yukon River	1907 - Headwaters Yukon-Lake Laberge/Upper Yukon River
Middle Yukon River	1908 - Middle Yukon River
Lower Yukon River	1909 - Lower Yukon River
Hawaii	2001 - Hawaii
Maui	2002 - Maui
Kahoolawe	2003 - Kahoolawe
Lanai	2004 - Lanai
Molokai	2005 - Molokai

<b>Coded Value</b>	<b>Description</b>
Oahu	2006 - Oahu
Kauai	2007 - Kauai
Niihau	2008 - Niihau
Puerto Rico	2101 - Puerto Rico
Virgin Islands	2102 - Virgin Islands
Guam	2201 - Guam
Northern Mariana Islands	2202 - Northern Mariana Islands
American Samoa	2203 - American Samoa

**Domain Table Name:** D\_Importance1

<b>Coded Value</b>	<b>Description</b>
Highly Desirable	Highly Desirable
Required	Required
Nice To Have	Nice To Have
Not Required	Not Required

**Domain Table Name:** D\_Importance2

<b>Coded Value</b>	<b>Description</b>
Critically Impactful	Critically Impactful
Highly Impactful	Highly Impactful
Somewhat Impactful	Somewhat Impactful
Little or No Impact	Little or No Impact

**Domain Table Name:** D\_Org\_Type

<b>Coded Value</b>	<b>Description</b>
U.S. Territorial Government	U.S. Territorial Government

<b>Coded Value</b>	<b>Description</b>
Federal Agencies and Commissions	Federal Agencies and Commissions
State Government	State Government
Regional, County, City or Other Local Government	Regional, County, City or Other Local Government
Tribal Government	Tribal Government
Not for Profit	Not for Profit
Private or Commercial	Private or Commercial

**Domain Table Name:** D\_Problem

<b>Coded Value</b>	<b>Description</b>
Major problem, data can not be used for Mission Critical Activity	Major problem, data can not be used for Mission Critical Activity
Significant problem, but we have workarounds	Significant problem, but we have workarounds
Minor problem, requires some intervention	Minor problem, requires some intervention
No problem at all	No problem at all
I don't know	I don't know

**Domain Table Name:** D\_ProgDataRequired

<b>Coded Value</b>	<b>Description</b>
12-digit Hydrologic Units	12-digit Hydrologic Units
8-digit Hydrologic Units	8-digit Hydrologic Units
6-digit Hydrologic Units	6-digit Hydrologic Units
4-digit Hydrologic Units	4-digit Hydrologic Units
2-digit Hydrologic Units	2-digit Hydrologic Units
NHDPlus Catchments	NHDPlus Catchments
State or Territory	State or Territory
Conterminous United States	Conterminous United States
Nationwide including Alaska and Hawaii	Nationwide including Alaska and Hawaii
User defined map extent	User defined map extent

<b>Coded Value</b>	<b>Description</b>
User defined irregular area (polygon)	User defined irregular area (polygon)
I don't know	I don't know
Other (please specify)	Other (please specify)

**Domain Table Name:** D\_ProgDataType

<b>Coded Value</b>	<b>Description</b>
Point, line, polygon - Open Geospatial Consortium (OGC) conformant (for example, Water ML, GeoJSON)	Point, line, polygon - Open Geospatial Consortium (OGC) conformant (for example, Water ML, GeoJSON)
Point, line, polygon - Esri shapefiles	Point, line, polygon - Esri shapefiles
Point, line, polygon - Esri file geodatabase	Point, line, polygon - Esri file geodatabase
Raster - NetCDF	Raster - NetCDF
Raster - GeoTIFF	Raster - GeoTIFF
Raster - NITF	Raster - NITF
Raster - Esri Grid	Raster - Esri Grid
Other format (please specify)	Other format (please specify)

**Domain Table Name:** D\_Small

<b>Coded Value</b>	<b>Description</b>
6 acres	6 acres
60 acres	60 acres
1 square mile (640 acres)	1 square mile (640 acres)
10 square miles (6,400 acres)	10 square miles (6,400 acres)
100 square miles (64,000 acres)	100 square miles (64,000 acres)



<b>Coded Value</b>	<b>Description</b>
1000 square miles (640,000 acres)	1000 square miles (640,000 acres)
I don't know	I don't know

**Domain Table Name:** D\_StatePlus

<b>Coded Value</b>	<b>Description</b>
Alabama	Alabama
Alaska	Alaska
Arizona	Arizona
Arkansas	Arkansas
California	California
Colorado	Colorado
Connecticut	Connecticut
Delaware	Delaware
Florida	Florida
Georgia	Georgia
Hawaii	Hawaii
Idaho	Idaho
Illinois	Illinois
Indiana	Indiana
Iowa	Iowa
Kansas	Kansas
Kentucky	Kentucky
Louisiana	Louisiana
Maine	Maine
Maryland	Maryland
Massachusetts	Massachusetts
Michigan	Michigan
Minnesota	Minnesota

<b>Coded Value</b>	<b>Description</b>
Mississippi	Mississippi
Missouri	Missouri
Montana	Montana
Nebraska	Nebraska
Nevada	Nevada
New Hampshire	New Hampshire
New Jersey	New Jersey
New Mexico	New Mexico
New York	New York
North Carolina	North Carolina
North Dakota	North Dakota
Ohio	Ohio
Oklahoma	Oklahoma
Oregon	Oregon
Pennsylvania	Pennsylvania
Rhode Island	Rhode Island
South Carolina	South Carolina
South Dakota	South Dakota
Tennessee	Tennessee
Texas	Texas
Utah	Utah
Vermont	Vermont
Virginia	Virginia
Washington	Washington
Washington D.C.	Washington D.C.
West Virginia	West Virginia
Wisconsin	Wisconsin
Wyoming	Wyoming
American Samoa	American Samoa

<b>Coded Value</b>	<b>Description</b>
Guam	Guam
Northern Mariana Islands	Northern Mariana Islands
Puerto Rico	Puerto Rico
Virgin Islands	Virgin Islands
48 Conterminous States	48 Conterminous States

**Domain Table Name:** D\_Stream

<b>Coded Value</b>	<b>Description</b>
1.0 mile of surface water channel per square mile (1:100,000-scale)	1.0 mile of surface water channel per square mile (1:100,000-scale)
2.5 miles of surface water channel per square mile (1:24,000-scale)	2.5 miles of surface water channel per square mile (1:24,000-scale)
5.0 miles of channel per square mile (1:5,000-scale mapping)	5.0 miles of channel per square mile (1:5,000-scale mapping)
I don't know	I don't know

**Domain Table Name:** D\_UpFrequency

<b>Coded Value</b>	<b>Description</b>
Annually	Annually
2-3 years	2-3 years
4-5 years	4-5 years
6-10 years	6-10 years
>10 years	>10 years

**Domain Table Name:** D\_Waterbody

<b>Coded Value</b>	<b>Description</b>
Less than an acre	Less than an acre
1 acre	1 acre
2 acres	2 acres

<b>Coded Value</b>	<b>Description</b>
5 acres	5 acres
10 acres	10 acres
20 acres	20 acres
Other (please specify)	Other (please specify)

**Domain Table Name:** D\_Webmap

<b>Coded Value</b>	<b>Description</b>
Yes	Yes
Probably	Probably
Maybe	Maybe
No	No

**Domain Table Name:** D\_YesNo

<b>Coded Value</b>	<b>Description</b>
Yes	Yes
No	No

## Final Geodatabase Entity Relationship Diagram

