Appendix 1 - NEWUDS Data Dictionary

The Data Dictionary is a listing of table and field properties for the NEWUDS database in MS Access. Information about each table is shown in a heading area at the top of the table:

Table Name is self explanatory.

Fields is the number of fields in the table.

Records is the current number of records at the time the dictionary was generated.

Below the heading area, a numbered listing of each field in the table is accompanied by descriptive information:

Field Name is self explanatory.

PK is checked if the field is part of the primary key for the table.

FK is checked if the field is a foreign key pointing to data in a 'parent' table.

Rqd is checked if the field is required to have a value for each record in the table, if unchecked field is optional.

Type is the data type of the field.

Size is the size of the field (maximum number of characters for text fields; for other data types it represents the number of bytes used for storage).

Default is the default value for the field (usually refers to a foreign key value that represents a selection from a domain table).

Description is a description of the field.

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Table Name	# Fields	# Records
tadConveyanceDetail	**4**	**0**

Table Description: **Detail information about a Conveyance**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Conveyance_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Conveyance
2	ConveyanceDetailLabel_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Conveyance Detail Label
3	ConveyanceDetail	☐	☐	☑	Text	50		Conveyance Detail information (numeric or textual 'value') corresponding to the ConveyanceDetailLabel descriptor
4	ConveyanceDetailMemo	☐	☐	☐	Memo	-		Note about a Conveyance Detail

Table Name	# Fields	# Records
tadLocationHUC	**3**	**0**

Table Description: **Association of a Location with a Hydrologic Unit**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Location_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Location
2	HUC_ID	☑	☑	☑	Number (Integer)	2		Key that uniquely identifies a Hydrologic Unit
3	IsPrimaryHUC	☐	☐	☑	Yes/No	1	Yes	Identifies a primary HUC to be associated with a Location; 'Yes' for only one HUC among alternatives for a single Location, or when only one HUC is associated

Table Name	# Fields	# Records
tadLocationStateBasin	**3**	**0**

Table Description: **Association of a Location with a State Basin**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Location_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Location
2	StateBasin_ID	☑	☑	☑	Number (Integer)	2		Key that uniquely identifies a State Basin
3	IsPrimaryStateBasin	☐	☐	☑	Yes/No	1	Yes	Identifies a primary State Basin to be associated with a Location; 'Yes' for only one StateBasin among alternatives for a single Location, or when only one StateBasin is associated

Table Name	# Fields	# Records
tadRateDetail	**4**	**0**

Table Description: **Detail information about a Transaction Rate**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Rate_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Rate for a Transaction
2	RateDetailLabel_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Rate Detail Label
3	RateDetail	☐	☐	☑	Text	50		Rate Detail information (numeric or textual 'value') corresponding to the RateDetailLabel descriptor
4	RateDetailMemo	☐	☐	☐	Memo	-		Note about a Rate Detail

Table Name	# Fields	# Records
tadResourceDetail	**5**	**0**

Table Description: **Detail information about a Resource**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Resource_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a water Resource
2	ResourceDetailLabel_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Resource Detail Label
3	DataSource_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Data Source
4	ResourceDetail	☐	☐	☑	Text	50		Resource Detail information (numeric or textual 'value') corresponding to the ResourceDetailLabel descriptor
5	ResourceDetailMemo	☐	☐	☐	Memo	-		Note about a Resource Detail

Table Name	# Fields	# Records
tadSiteConveyance	**3**	**0**

Table Description: **Association of a Site with one end of a Conveyance (From or To)**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Conveyance_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Conveyance
2	FromOrTo	☑	☐	☑	Text	4		Identifies an individual Site as the Input (From) or Output (To) end of a specific Conveyance
3	Site_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Site

Table Name	# Fields	# Records
tadSiteDetail	**8**	**0**

Table Description: **Detail information about a Site (time-dependent)**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Site_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Site
2	SiteDetailEffectiveDate	☑	☐	☑	Date/Time	8		Effective (starting) date for a recorded Site Detail (lower bound of time interval)
3	SiteDetailLabel_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Site Detail Label
4	DataSource_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Data Source
5	TimeInterval_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Time Interval
6	SiteDetailEndingDate	☐	☐	☐	Date/Time	8		Ending date for a recorded Site Detail (upper bound of time interval)
7	SiteDetailValue	☐	☐	☑	Text	50		Value of a Detail describing a Site
8	SiteDetailMemo	☐	☐	☐	Memo	-		Note about a Site Detail

Table Name	# Fields	# Records
tadSiteResource	**3**	**0**

Table Description: **Association of a Site with a water Resource**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Site_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Site
2	Resource_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a water Resource
3	ConnectionCount	☐	☐	☐	Number (Integer)	2		Number of direct Connections represented by the association of a Site with a water Resource

Table Name	# Fields	# Records
tasConveyanceAlias	**2**	**0**

Table Description: **Association of a Conveyance with an Alias**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Conveyance_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Conveyance
2	Alias_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies an Alias

Table Name	# Fields	# Records
tasConveyanceOwner	**2**	**0**

Table Description: **Association of a Conveyance with an Owner**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Conveyance_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Conveyance
2	Owner_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies an Owner

Table Name	# Fields	# Records
tasOwnerAddress	**2**	**0**

Table Description: **Association of an Owner with an Address**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Owner_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies an Owner
2	Address_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies an Address

Table Name	# Fields	# Records
tasResourceAlias	**2**	**0**

Table Description: **Association of a water Resource with an Alias**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Resource_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a water Resource
2	Alias_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies an Alias

Table Name	# Fields	# Records
tasSiteAddress	**2**	**0**

Table Description: **Association of a Site with an Address**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Site_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Site
2	Address_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies an Address

Table Name	# Fields	# Records
tasSiteAlias	**2**	**0**

Table Description: **Association of a Site with an Alias**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Site_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Site
2	Alias_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies an Alias

Table Name	# Fields	# Records
tasSystemSite	**2**	**0**

Table Description: **Association of a Site with a named System**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	System_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a System
2	Site_ID	☑	☑	☑	Number (Long)	4		Key that uniquely identifies a Site

Table Name	# Fields	# Records
tblAddress	**9**	**0**

Table Description: **Address for Owners and Sites**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Address_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies an Address
2	AddressType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies an Address Type
3	AddressLine1	☐	☐	☐	Text	50		Address Line 1
4	AddressLine2	☐	☐	☐	Text	50		Address Line 2
5	City	☐	☐	☑	Text	50		City Name
6	StateAbbrv	☐	☐	☑	Text	2		State (or Canadian Province) Abbreviation
7	ZipCode	☐	☐	☐	Text	10		Postal Zip Code
8	CountryAbbrv	☐	☐	☑	Text	3	"USA"	Country Abbreviation (USA or CAN)
9	AddressMemo	☐	☐	☐	Memo	-		Note about an Address

Table Name	# Fields	# Records
tblAlias	**4**	**0**

Table Description: **Alias, such as State or EPA ID, for a Site, Conveyance or water Resource**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Alias_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies an Alias
2	AliasLabel_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies an AliasLabel
3	AliasValue	☐	☐	☑	Text	50		Alias Value, such as a permit number or station ID
4	AliasMemo	☐	☐	☐	Memo	-		Note about an Alias

Table Name	# Fields	# Records
tblConveyance	**5**	**0**

Table Description: **Conveyance that serves as the water-carrying connection between two Sites (unidirectional); includes pipes, canals and conduits, trucking, and virtual linkages**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Conveyance_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Conveyance
2	ConveyanceType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Conveyance Type
3	ConveyanceAction_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies an Action performed by a Conveyance between two Sites
4	ConveyanceName	☐	☐	☐	Text	200		Name of Conveyance
5	ConveyanceMemo	☐	☐	☐	Memo	-		Note about a Conveyance

Table Name	# Fields	# Records
tblLocation	**10**	**1**

Table Description: **Location information for a Site; includes physical coordinates and geopolitical position, and links to hydrologic areas**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Location_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Location
2	LocationDetMethod_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Location Determination Method
3	LocationScale_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a spatial Scale term for a Location
4	State_ID	☐	☑	☑	Number (Integer)	2	0	Key that uniquely identifies a State or Canadian Province
5	County_ID	☐	☑	☑	Number (Integer)	2	0	Key that uniquely identifies a State/County combination
6	MCD_ID	☐	☑	☑	Number (Integer)	2	0	Key that uniquely identifies a MCD (Minor Civil Division of US Census Bureau)
7	LocationName	☐	☐	☐	Text	200		Location Name
8	LocationLatitude	☐	☐	☐	Text	10		Latitude coordinate (DMS format) for a Location
9	LocationLongitude	☐	☐	☐	Text	12		Longitude coordinate (DMS format) for a Location
10	LocationMemo	☐	☐	☐	Memo	-		Note about a Location

Table Name	# Fields	# Records
tblOwner	**7**	**1**

Table Description: **Owner organization or entity that owns, controls or monitors a Site or Conveyance, or is the parent organization for a Data Source**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Owner_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies an Owner
2	OwnerType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies an Owner Type
3	ParentOwner_ID	☐	☑	☐	Number (Long)	4		Key that uniquely identifies the Parent-Owner of the current Owner, for example a regional organization
4	OwnerName	☐	☐	☑	Text	200		Owner Name
5	OwnerContact	☐	☐	☐	Text	200		Contact Name for an Owner
6	OwnerPhone	☐	☐	☐	Text	25		Contact Phone number for an Owner
7	OwnerMemo	☐	☐	☐	Memo	-		Note about an Owner

Table Name	# Fields	# Records
tblRate	**9**	**0**

Table Description: **Rate (volume of water per unit time) recorded for a Transaction based on a specific Determination Method and Unit**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Rate_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Rate for a Transaction
2	Transaction_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Transaction
3	Staff_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Staff person
4	DataSource_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Data Source
5	RateMethod_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Rate Method for determining the Rate of a Transaction
6	RawRateValue	☐	☐	☑	Number (Double)	8		Numeric part of the Raw Rate Value for a Transaction
7	RateUnit_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Rate Unit (units by which raw rate values are originally recorded or estimated) for a Transaction
8	IsDefaultRate	☐	☐	☑	Yes/No	1	Yes	Identifies a default Rate to be associated with a parent Transaction; 'Yes' for only one Rate among alternatives for a single Transaction, or when only one Rate is associated; when 'No', at least one additional Rate exists as the default
9	RateMemo	☐	☐	☐	Memo	-		Note about a Rate

Table Name	# Fields	# Records
tblResource	**5**	**0**

Table Description: **Water Resource involved in water-use activities (withdrawals or releases); includes aquifers, springs, streams and rivers, lakes and reservoirs, estuaries and embayments, and the ocean**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Resource_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a water Resource
2	WaterBodyType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Type of Water Body represented by a water Resource (e.g., lake, river, estuary)
3	ResourceName	☐	☐	☑	Text	200		Name typically used to identify a specific water Resource (e.g., Mill Brook or Scituate Reservoir)
4	ResourceCodeName	☐	☐	☐	Text	200		Code-Name phrase used to uniquely identify a Resource to distinguish it from others having the same ResourceName; e.g., 'Mill Brook, Middletown, MA' versus 'Mill Brook, Springfield, MA.'
5	ResourceMemo	☐	☐	☐	Memo	-		Note about a water Resource

Table Name	# Fields	# Records
tblSite	**10**	**3**

Table Description: **Site involved in water-use Transactions; includes wells, intakes and outfalls, distribution and treatment facilities, collection systems, industrial, commercial and domestic users, and aggregate-use entities**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Site_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Site
2	Location_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Location
3	Owner_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies an Owner
4	SiteType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Site Type
5	NEUseType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a New England Water Use Type for a Site
6	SIC_ID	☐	☑	☐	Number (Integer)	2		Key that uniquely identifies a Standard Industrial Classification item
7	NAICS_ID	☐	☑	☐	Number (Integer)	2		Key that uniquely identifies a North American Industrial Classification System item
8	SiteName	☐	☐	☑	Text	100		Site Name
9	SiteContact	☐	☐	☐	Memo	-		Site Contact Information
10	SiteMemo	☐	☐	☐	Memo	-		Note about a Site

Table Name	# Fields	# Records
tblTransaction	**7**	**0**

Table Description: **Record of a water-use Transaction on a Conveyance between two Sites for a specified Time Interval**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Transaction_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Transaction
2	Conveyance_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Conveyance
3	TimeInterval_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Time Interval
4	TransactionEffectiveDate	☐	☐	☑	Date/Time	8		Effective (starting) date for a Transaction record (lower bound of time interval)
5	TransactionEndingDate	☐	☐	☑	Date/Time	8		Ending date for a Transaction record (upper bound of time interval)
6	RateMGD	☐	☐	☑	Number (Double)	8	-1	Rate value for the Transaction in Mgal/d units; a derived value representing the product of the default RawRateValue for the transaction and the CommonConversion factor to convert to Mgal/d common units.
7	TransactionMemo	☐	☐	☐	Memo	-		Note about a Transaction

Table Name	# Fields	# Records
tdsAddressType	**2**	**3**

Table Description: **List of Types of Addresses associated with a Site or an Owner**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	AddressType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies an Address Type
2	AddressType	☐	☐	☑	Text	20		Type of Address (street, mailing, both)

Table Name	# Fields	# Records
tdsConveyanceAction	**5**	**172**

Table Description: **List of Actions performed by a Conveyance between two Sites**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	ConveyanceAction_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies an Action performed by a Conveyance between two Sites
2	ConveyanceActionCategory_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Category of an Action performed by a Conveyance between two Sites
3	ConveyanceActionPhrase	☐	☐	☑	Text	75		Phrase that describes the particular Action performed by a Conveyance
4	SiteTypeFromID	☐	☐	☑	Number (Integer)	2		Key that identifies the SiteType on the 'From' side of a Conveyance for a particular Action between two Sites
5	SiteTypeToID	☐	☐	☑	Number (Integer)	2		Key that identifies the SiteType on the 'To' side of a Conveyance for a particular Action between two Sites

Table Name	# Fields	# Records
tdsConveyanceActionCategory	**2**	**25**

Table Description: **List of Major Categories of Conveyance Actions performed between two Sites**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	ConveyanceActionCategory_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Category of an Action performed by a Conveyance between two Sites
2	ConveyanceActionCategory	☐	☐	☑	Text	50		Term that defines a Category of an Action performed by a Conveyance between two Sites

Table Name	# Fields	# Records
tdsConveyanceType	**3**	**7**

Table Description: **List of Types of Conveyances**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	ConveyanceType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Conveyance Type
2	ConveyanceType	☐	☐	☑	Text	20		Type of Conveyance (e.g., pipe, canal, conduit, etc.)
3	ConveyanceTypeMemo	☐	☐	☐	Memo	-		Note about a Conveyance Type

Table Name	# Fields	# Records
tdsCounty	**8**	**130**

Table Description: **List of County Names and Codes**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	County_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a State/County combination
2	State_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a State or Canadian Province
3	StateCountyCode	☐	☐	☑	Text	5		Concatenation of State and County Code numbers (unique)
4	CountyCode	☐	☐	☑	Text	3		County Code number within a State
5	CountyName	☐	☐	☑	Text	50		County Name
6	CountyShortName	☐	☐	☑	Text	23		County Name without the word 'County' or 'Parish'
7	CountyLatitude	☐	☐	☑	Text	6		Latitude coordinate (DMS format) for the centroid of a County
8	CountyLongitude	☐	☐	☑	Text	8		Longitude coordinate (DMS format) for the centroid of a County

Table Name	# Fields	# Records
tdsHUC	**3**	**61**

Table Description: **List of National 8-digit Hydrologic Unit Codes and Names**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	HUC_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Hydrologic Unit
2	HUC	☐	☐	☑	Text	8		Hydrologic Unit Code (8-digit) from national list
3	HUCName	☐	☐	☑	Text	50		Official Name of 8-digit Hydrologic Unit

Table Name	# Fields	# Records
tdsLocationScale	**2**	**8**

Table Description: **List of Scale terms (point, MCD, County, etc.) that describe the spatial extent of a Location**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	LocationScale_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a spatial Scale term for a Location
2	LocationScale	☐	☐	☑	Text	20		Term that describes the spatial Scale of a Location (e.g., point, MCD, County, State, HUC, etc.)

Table Name	# Fields	# Records
tdsMCD	**9**	**2,617**

Table Description: **List of Minor Civil Divisions of the US Census Bureau**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	MCD_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a MCD (Minor Civil Division of US Census Bureau)
2	County_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a State/County combination
3	StateMCDCode	☐	☐	☑	Text	7		Concatenation of State and MCD Code numbers (unique)
4	MCDCode	☐	☐	☑	Text	5		MCD Code within a State
5	MCDType	☐	☐	☑	Text	20		Type of MCD (e.g., town, city, plantation, reservation, etc.)
6	MCDName	☐	☐	☑	Text	50		MCD Name
7	MCDShortName	☐	☐	☑	Text	38		Short name for MCD (excludes MCD type, which is part of formal Census MCD name)
8	MCDLatitude	☐	☐	☑	Text	6		Latitude coordinate (DMS format) for the centroid of a MCD
9	MCDLongitude	☐	☐	☑	Text	8		Longitude coordinate (DMS format) for the centroid of a MCD

Table Name	# Fields	# Records
tdsNAICS	**3**	**1,824**

Table Description: **List of North American Industrial Classification System codes and item descriptions from US Census Bureau**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	NAICS_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a North American Industrial Classification System item
2	NAICSCode	☐	☐	☑	Text	6		North American Industrial Classification System official Code
3	NAICSDescription	☐	☐	☑	Text	120		North American Industrial Classification System official Name or item description

Table Name	# Fields	# Records
tdsNEUseType	**4**	**86**

Table Description: **List of New England water use types to describe Sites in more detail than USGS Use Types**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	NEUseType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a New England Water Use Type for a Site
2	USGSUseType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a USGS Water Use Type for a Site
3	NEUseTypeCode	☐	☐	☑	Text	2		USGS New England Water Use Type Code
4	NEUseType	☐	☐	☑	Text	50		USGS New England Water Use Type Name or short description

Table Name	# Fields	# Records
tdsOwnerType	**3**	**6**

Table Description: **List of Owner Types**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	OwnerType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies an Owner Type
2	OwnerType	☐	☐	☑	Text	25		Type of Owner (e.g., federal, state, municipal, private, etc.)
3	OwnerTypeMemo	☐	☐	☐	Memo	-		Note about an Owner Type

Table Name	# Fields	# Records
tdsRateUnitDecimal	**3**	**7**

Table Description: **List of choices for the Decimal part of a RateUnit (ten, hundred, thousand, etc.) and their conversion factor to Million to get a common Rate unit of 'million gallons per day'**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	RateUnitDecimal_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Rate Unit Decimal component
2	DecimalUnit	☐	☐	☐	Text	20		Term used to describe the Decimal part of a Rate Unit (e.g., hundred, thousand)
3	ConversionToMillion	☐	☐	☑	Number (Double)	8		Factor used to convert Decimal Unit to one equivalent in Millions

Table Name	# Fields	# Records
tdsRateUnitTime	**3**	**6**

Table Description: **List of choices for the Time part of a RateUnit (second, minute, hour, day, etc.) and their conversion factor to Day to get a common Rate unit of 'million gallons per day'**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	RateUnitTime_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Rate Unit Time component
2	TimeUnit	☐	☐	☑	Text	20		Term used to describe the Time part of a Rate Unit (e.g., second, minute, hour, day)
3	ConversionToDay	☐	☐	☑	Number (Double)	8		Factor used to convert Time Unit to one equivalent in Days

Table Name	# Fields	# Records
tdsRateUnitVolume	**3**	**6**

Table Description: **List of choices for the Volume part of a RateUnit (gallon, cubic feet, acre-feet, etc.) and their conversion factor to Gallon to get a common Rate unit of 'million gallons per day'**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	RateUnitVolume_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Rate Unit Volume component
2	VolumeUnit	☐	☐	☑	Text	20		Term used to describe the Volume part of a Rate Unit (e.g., gallons, cubic feet, acre-feet)
3	ConversionToGallon	☐	☐	☑	Number (Double)	8		Factor used to convert Volume Unit to one equivalent in Gallons

Table Name	# Fields	# Records
tdsResourceType	**4**	**7**

Table Description: **List of Types of water Resources**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	ResourceType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a water Resource Type
2	GWorSW	☐	☐	☑	Text	2		GW (ground water) or SW (surface water) identifier for a ResourceType
3	Salinity	☐	☐	☑	Text	2		Salinity group of a ResourceType (fresh, brackish or saline)
4	ResourceType	☐	☐	☑	Text	50		Type of water Resource (e.g., fresh ground-water, brackish surface-water, etc.)

Table Name	# Fields	# Records
tdsSIC	**3**	**1,005**

Table Description: **List of Standard Industrial Classification System codes and item descriptions from US Census Bureau**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	SIC_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Standard Industrial Classification item
2	SICCode	☐	☐	☑	Text	4		Standard Industrial Classification official Code
3	SICDescription	☐	☐	☑	Text	120		Standard Industrial Classification official Name or item description

Table Name	# Fields	# Records
tdsSiteType	**4**	**30**

Table Description: **List of Types of Sites**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	SiteType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Site Type
2	SiteTypeSubcategory_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a SubCategory for describing Site Types
3	SiteType	☐	☐	☑	Text	50		Type of Site (e.g., well, discharge pipe, regional distribution Site, potable treatment plant, single user, etc.)
4	SiteTypeMemo	☐	☐	☐	Memo	-		Note about a Site Type

Table Name	# Fields	# Records
tdsSiteTypeCategory	**2**	**6**

Table Description: **List of Major Categories for describing Types of Sites**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	SiteTypeCategory_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a major Category for describing Site Types
2	SiteTypeCategory	☐	☐	☑	Text	25		Term that defines a major Category of Site Types

Table Name	# Fields	# Records
tdsSiteTypeSubcategory	**3**	**12**

Table Description: **List of Sub-Categories for describing Types of Sites, with link to Major Categories**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	SiteTypeSubcategory_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a SubCategory for describing Site Types
2	SiteTypeCategory_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a major Category for describing Site Types
3	SiteTypeSubcategory	☐	☐	☑	Text	25		Term that defines a SubCategory of Site Types

Table Name	# Fields	# Records
tdsState	**7**	**8**

Table Description: **List of States and State Codes**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	State_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a State or Canadian Province
2	CountryAbbrv	☐	☐	☑	Text	3	"USA"	Country Abbreviation (USA or CAN)
3	StateCode	☐	☐	☑	Text	2		FIPS State Code, or surrogate for Canadian Province
4	StateAbbrv	☐	☐	☑	Text	2		State (or Canadian Province) Abbreviation
5	StateName	☐	☐	☑	Text	50		State (or Canadian Province) Name
6	StateLatitude	☐	☐	☐	Text	6		Latitude coordinate (DMS format) for the centroid of a State
7	StateLongitude	☐	☐	☐	Text	8		Longitude coordinate (DMS format) for the centroid of a State

Table Name	# Fields	# Records
tdsStateBasin	**4**	**0**

Table Description: **List of State Basin codes and names**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	StateBasin_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a State Basin
2	StateMajorBasin	☐	☐	☐	Text	200		Name used by a State to identify a Major Basin or Watershed area that contains one or more State Basins (ex: major river system names where one or more individual basins are designated)
3	StateBasinCode	☐	☐	☐	Text	20		Code used by a State to identify a Basin or Watershed within its boundaries
4	StateBasin	☐	☐	☑	Text	200		Name used by a State to identify a Basin or Watershed within its boundaries

Table Name	# Fields	# Records
tdsTimeInterval	**2**	**11**

Table Description: **List of Time intervals (year, month, week, day, multi-day) over which Transactions and Site Details apply**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	TimeInterval_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Time Interval
2	TimeInterval	☐	☐	☑	Text	25		Term that defines a Time Interval (e.g., year, month, week, day, etc.)

Table Name	# Fields	# Records
tdsUSGSUseType	**3**	**16**

Table Description: **List of USGS National Water Use Program Water Use Type designations and codes**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	USGSUseType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a USGS Water Use Type for a Site
2	USGSUseTypeCode	☐	☐	☑	Text	2		USGS National Water Use Type 2-letter Code
3	USGSUseType	☐	☐	☑	Text	50		USGS National Water Use Type Name or short description

Table Name	# Fields	# Records
tdsWaterBodyType	**3**	**10**

Table Description: **List of Types of Water Bodies represented by a water Resource, such as pond/lake, reservoir, river or estuary**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	WaterBodyType_ID	☑	☐	☑	Number (Integer)	2		Key that uniquely identifies a Type of Water Body represented by a water Resource (e.g., lake, river, estuary)
2	ResourceType_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a water Resource Type
3	WaterBodyType	☐	☐	☑	Text	30		Type of Water Body describing a water Resource (e.g., river, lake, estuary, ocean, etc.)

Table Name	# Fields	# Records
tdxAliasLabel	**5**	**0**

Table Description: **User-Extendable List of standardized Labels used for Alias assignments**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	AliasLabel_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies an AliasLabel
2	DataSource_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Data Source
3	AliasSource	☐	☐	☑	Text	75		Source of an Alias
4	AliasLabel	☐	☐	☑	Text	50		Label for an Alias, for example "Permit Number" or "Station ID"
5	AliasLabelMemo	☐	☐	☐	Memo	-		Note about an Alias Label

Table Name	# Fields	# Records
tdxConveyanceDetailLabel	**3**	**5**

Table Description: **User-Extendable List of standardized Labels used for Conveyance Details**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	ConveyanceDetailLabel_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Conveyance Detail Label
2	ConveyanceDetailLabel	☐	☐	☑	Text	50		Label describing the numeric or textual 'value' of a Conveyance Detail
3	ConveyanceDetailLabelMemo	☐	☐	☐	Memo	-		Note about a Conveyance Detail Label

Table Name	# Fields	# Records
tdxDataSource	**4**	**0**

Table Description: **User-Extendable List of the Sources of Data being stored**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	DataSource_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Data Source
2	Owner_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies an Owner
3	DataSource	☐	☐	☑	Text	75		Data Source name
4	DataSourceMemo	☐	☐	☐	Memo	-		Note about a Data Source

Table Name	# Fields	# Records
tdxLocationDetMethod	**2**	**10**

Table Description: **User-Extendable List of Location Determination Methods for Sites**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	LocationDetMethod_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Location Determination Method
2	LocationDetMethod	☐	☐	☑	Text	50		Location Determination Method

Table Name	# Fields	# Records
tdxRateDetailLabel	**3**	**1**

Table Description: **User-Extendable List of standardized Labels used for Rate Details**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	RateDetailLabel_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Rate Detail Label
2	RateDetailLabel	☐	☐	☑	Text	50		Label describing the numeric or textual 'value' of a Rate Detail (e.g., Accuracy)
3	RateDetailLabelMemo	☐	☐	☐	Memo	-		Note about a Rate Detail Label

Table Name	# Fields	# Records
tdxRateMethod	**4**	**42**

Table Description: **User-Extendable List of Methods used to measure or estimate a Transaction Rate**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	RateMethod_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Rate Method for determining the Rate of a Transaction
2	RateMethodCategory_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Category of Rate Determination Methods
3	RateMethod	☐	☐	☑	Text	200		Name or short description of the Method used for determining the Rate (volume per unit time) of a water Transaction
4	RateMethodMemo	☐	☐	☐	Memo	-		Note about a Rate Method

Table Name	# Fields	# Records
tdxRateMethodCategory	**2**	**11**

Table Description: **User-Extendable List of Major Categories of Rate Determination Methods**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	RateMethodCategory_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Category of Rate Determination Methods
2	RateMethodCategory	☐	☐	☑	Text	50		Term that defines a Category of Rate Determination Methods

Table Name	# Fields	# Records
tdxRateUnit	**8**	**20**

Table Description: **User-Extendable List of Units and conversion factors used for Transaction/Rate Raw Rate Values**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	RateUnit_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Rate Unit (units by which raw rate values are originally recorded or estimated) for a Transaction
2	RateUnitAbbrv	☐	☐	☑	Text	20		Abbreviation commonly used to express a Rate Unit
3	RateUnitPhrase	☐	☐	☑	Text	50	-1	Rate Unit Name made of Decimal, Volume and Time component terms
4	MGDConversion	☐	☐	☑	Number (Double)	8	-1	Conversion value to be multiplied against a Raw Rate Value recorded in a particular Unit to create an equivalent value for that Rate in MGD (million gallons per day)
5	RateUnitMemo	☐	☐	☐	Memo	-		Note about a Rate Unit
6	RateUnitDecimal_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Rate Unit Decimal component
7	RateUnitVolume_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Rate Unit Volume component
8	RateUnitTime_ID	☐	☑	☑	Number (Integer)	2		Key that uniquely identifies a Rate Unit Time component

Table Name	# Fields	# Records
tdxResourceDetailLabel	**3**	**5**

Table Description: **User-Extendable List of standardized Labels used for Resource Details**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	ResourceDetailLabel_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Resource Detail Label
2	ResourceDetailLabel	☐	☐	☑	Text	50		Label describing the numeric or textual 'value' of a Resource Detail
3	ResourceDetailLabelMemo	☐	☐	☐	Memo	-		Note about a Resource Detail Label

Table Name	# Fields	# Records
tdxSiteDetailCategory	**2**	**5**

Table Description: **User-Extendable List of Label Categories used for time-dependent Site Details**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	SiteDetailCategory_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Category for describing Details about a Site
2	SiteDetailCategory	☐	☐	☑	Text	20		Term that defines a Category for describing Details about a Site

Table Name	# Fields	# Records
tdxSiteDetailLabel	**6**	**43**

Table Description: **User-Extendable List of Labels used for time-dependent Site Details**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	SiteDetailLabel_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Site Detail Label
2	SiteDetailCategory_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Category for describing Details about a Site
3	SiteDetailLabel	☐	☐	☑	Text	50		Label describing the numeric or textual 'value' of a Site Detail
4	IsNumericDetail	☐	☐	☑	Yes/No	1		Identifies a Site Detail Label for numeric values; 'Yes' only for labels associated with numeric values
5	SiteDetailUnit	☐	☐	☑	Text	50		Optional Unit for a Site Detail Label, but Required for labels representing numeric values
6	SiteDetailLabelMemo	☐	☐	☐	Memo	-		Note about a Site Detail Label

Table Name	# Fields	# Records
tdxStaff	**5**	**0**

Table Description: **User-Extendable List of Staff entering, reviewing or evaluating Rate data**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	Staff_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Staff person
2	StaffInitials	☐	☐	☑	Text	4		Initials of Staff person (unique code for each individual)
3	StaffName	☐	☐	☑	Text	50		Name of Staff person
5	StaffAffiliation	☐	☐	☑	Text	50		Affiliation of Staff person
6	StaffMemo	☐	☐	☐	Memo	-		Note about Staff person

Table Name	# Fields	# Records
tdxSystem	**5**	**0**

Table Description: **User-Extendable List of Systems consisting of a two or more associated Sites**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	System_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a System
2	SystemType_ID	☐	☑	☑	Number (Long)	4		Key that uniquely identifies a Type of System
3	SystemName	☐	☐	☑	Text	200		Name of a System consisting of one or more Sites
4	ParentSystem_ID	☐	☑	☐	Number (Long)	4		Key that uniquely identifies the Parent System of the current System (accomodates nested Systems)
5	SystemMemo	☐	☐	☐	Memo	-		Note about a System

Table Name	# Fields	# Records
tdxSystemType	**3**	**6**

Table Description: **User-Extendable List of Types of Systems (aggregates of Sites)**

	Field Name	PK	FK	Rqd	Type	Size	Default	Description
1	SystemType_ID	☑	☐	☑	AutoNumber (Long)	4		Key that uniquely identifies a Type of System
2	SystemType	☐	☐	☑	Text	40		Type classification of a System consisting of one or more Sites
3	SystemTypeMemo	☐	☐	☐	Memo	-		Note about a System Type