Feature	Geometry	Definition
Alignment Lines	Line	The features that make up the levee system alignment including high natural ground,
	Line	highway embankments, floodwalls, railroads embankments.
Boreholes	Point	A shaft drilled, driven, or dug into the earth for the purpose of subsurface exploration.
Closure Structures	Line	The means to close a vehicular, railroad, pedestrian or other opening in the flood control system.
Cross Sections	Line	A geometric line perpendicular to the flood control segment detailing the elevations along that line.
Crossings	Point	A location on a levee or floodwall where crossings occur (utilities or other features).
Embankment	Line	Embankment to restrict the intrusion of floodwaters into the leveed area.
Floodwalls	Line	A structure erected to restrict the intrusion of floodwaters into the leveed area.
FRM Line	Line	The feature representing a lineear flood risk management alignment
Levee Stations	Point	A location of a specific levee distance mark along the length of the flood control
	T OIL	system from a designated beginning point.
Leveed Areas	Polygon	The area of a floodplain from which flood water is excluded by the levee system.
Piezometers	Point	The location of an open tube placed in the ground or a structure which is used to
	FOIIT	measure subsurface water elevation.
Pipe Gates	Point	Gate associated and attached to a Pipe
Pipes	Line	A structure designed to allow flow of water from the interior of a levee unit to the waterside.
Pump Stations	Point	An area or location where a pump is located to pump water from the interior of a levee.
Relief Wells	Point	Well location installed to reduce interior pore pressures.
Toe Drains	Line	Trench that runs parallel to the levee or floodwall at the landside edge, that provides a positive outlet for local under seepage and a check for controlling piping and/or
		excessive uplift pressure.

Alignment Lines							
The features that make up t	The features that make up the levee system alignment including high natural ground, highway embankments, floodwalls, railroads embankments.						
Field Name	Data Type	Domain	Length	Definition			
ALIGN_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.			
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.			
FC_SYSTEM_ID	Text		20	Foreign Key link to the FC_SYSTEM table. Used to link the record to associated FC_SYSTEM table.			
ALIGN_TYPE_ID	Double	ALIGN_TYPE		The type of feature that makes up the levee system alignment.			
COMMENTS	Text		255	A description or other unique information concerning the subject item.			
NONPROJFEATURE_ID	Double	BOOLEAN		A Yes or No flag wether the segment of a Non-project feature for a given system.			

Notes: This table provides information about the levee system alignment. It contains a one to many relationship to the FC_SEGMENT table and the FC_SYSTEM table.

		C	losure Str	uctures		
The means to close a vehicular, railroad, pedestrian or other opening in the flood control system.						
Field Name	Data Type	Domain	Length	Definition		
CLOSURE_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.		
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.		
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee.		
FEATURE_NAME	Text		50	Any commonly used name or alias for the closure.		
CLOSURE_HEIGHT	Double			The height of the closure structure in feet.		
CLOSURE_WIDTH	Double			The overall width of the closure in feet.		
HORIZ_ACCURACY	Double			Value represents horizontal accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
VERT_ACCURACY	Double			Value represents vertical accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: as-built gate details, cross sections, plans and details.		
CLOTYP_ID	Double	CLOTYP		The type of closure.		
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.		
STATUS_ID	Double	STATUS		The status of the feature.		
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		
CONSTRUCTION_YEAR	Short			Date that construction was completed. (Format MM/DD/YYYY)		
RIVER_GAGE_OPERATION	Text		255	Gage reading that triggers closure operation.		
RIVER_STAGE_OPERATION	Double			River stage that triggers closure operation.		
CLOSURE_USE_ID	Long	CLOSUREUSE		Accessing use of the closure; i.e. purpose for vehicles, individuals, etc.		
OPERATION_FREQUENCY	Long			Freqequency with which closure is operated for testing purposes.		
SILL_ELEVATION	Double			Elevation of the sill of the closure in feet.		

Notes: This table provides information about closures. It contains a many to one relationship to the FC_SEGMENT table.

			Crossin	igs			
A location on a levee or floodwall where crossings occur (utilities or other features).							
Field Name	Data Type	Domain	Length	Definition			
CROSSING_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.			
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.			
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee.			
DATE_BUILT	Date			The date when the crossing was first installed. (Format MM/DD/YYYY)			
WIDTH	Double			The width/diameter of the crossing in feet.			
CLEARANCE	Double			The estimated vertical distance from top of protection for the crossing in feet.			
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: typical details, sections, etc.			
CRSTYP_ID	Double	CRSTYP		The crossing type.			
CRSPTH_ID	Double	CRSPTH		The crossing path - through, over, above, or below.			
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.			
PERMITTED_IND	Double	BOOLEAN		Value expressing if there is a permit (Y/N)			
PERMIT_DATE	Date			The date of the permit.			
PERMIT_NUM	Text		25	The number of the permit.			
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)			
AUTH_SECTION_ID	Double	AUTH_SECTION		Type of authorized section of the law			
CROSSING_TYPE	Text		1.074E+09	The crossing type.			

Notes: This table provides information about levee crossings. It contains a many to one relationship to the FC_SEGMENT table.

	Cross Sections						
Ication on a levee or floodwall where crossings occur (utilities or other features).							
Field Name	Data Type	Domain	Length	Definition			
CROSS_SEC_ID	Text		20	Primary Key. A unique, user defined identifier for each record or			
				instance of an entity.			
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to			
				associated FC_SEGMENT table.			
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee.			
RIVER_MILE	Double			The relative distance marking the location of the feature.			
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)			
HORIZ_ACCURACY	Double			Value represents horizontal accuracy in feet at the 95% confidence level			
				in accordance with the NSSDA Standard.			
VERT_ACCURACY	Double			Value represents vertical accuracy in feet at the 95% confidence level in			
				accordance with the NSSDA Standard.			
COMMENTS	Text		255	A description or other unique information concerning the subject item			
				such as: as-built profile, details of headwalls, gates, gatewells, etc.			
COORDCAP_ID	Double (COORDCAP		Description of the method used to capture the feature.			

Notes: This table provides information about cross sections. It contains a many to one relationship to the FC_SEGMENT table.

			Embankm	nents		
Embankment to restrict the intrusion of floodwaters into the leveed area.						
Field Name	Data Type	Domain	Length	Definition		
LEVEE_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.		
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.		
UP_RIVER_MILE	Double			The relative marker at the up river end of the levee.		
DOWN_RIVER_MILE	Double			The relative marker at the down river end of the levee.		
FEATURE_NAME	Text		50	Any commonly used name or alias for the levee		
GAGE_CODE	Text			The commonly used identification number for the controlling gage. This should match what is in the COE CWMS water management database.		
GAGE_OWNER	Text			The name of the owner for the controlling gage.		
SLOPE_LANDSIDE	Text		10	The landside slope ratio of the levee (ex. 3:1)		
SLOPE_WATERSIDE	Text		10	The waterside slope ratio of the levee (ex. 3:1).		
CREST_WIDTH	Double			The average width in feet of the top of the levee used for flood fighting or access.		
CREST_ACCESS	Text		255	A description of the available access points to the crest of the levee		
FLOOD_SOURCE	Text		75	Name of the waterbody that the segment is providing protection from. (Ex. Arkansas River, Lake Ponchatrain, etc)		
HORIZ_ACCURACY	Double			Value represents horizontal accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
VERT_ACCURACY	Double			Value represents vertical accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: as-built centerline profile and plan views.		
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture cross section information.		
BANKSIDE_ID	Double	BANKSIDE		A field to describe the location of the levee centerline in relation to the waterbody.		
TYCUTO_ID	Double	ТҮСИТО		The type of levee cutoff used to prevent seepage under the levee.		
STRMAT_ID	Double	STRMAT		The primary material used in the construction of the levee.		
LEVTYPE_ID	Double	LEVTYPE		A value indicating the type or kind of levee		
STATUS_IND	Double	STATUS		The status of the feature.		
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		
NONPROJFEATURE_ID	Double	BOOLEAN		A Yes or No flag wether the segment of a Non-project feature for a given system.		

Notes: This table provides information about levee centerlines. It contains a many to one relationship to the FC_SEGMENT table.

			Floodwa	alls		
	A structure erected to restrict the intrusion of floodwaters into the leveed area.					
Field Name	Data Type	Domain	Length	Definition		
FLOODWALL_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.		
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.		
UP_RIVER_MILE	Double			The relative marker at the up river end of the floodwall.		
DOWN_RIVER_MILE	Double			The relative marker at the down river end of the floodwall.		
FEATURE_NAME	Text		50	Any commonly used name or alias for the floodwall.		
GAGE_CODE	Text		190	The commonly used identification number for the controlling gage. This should match what is in the COE CWMS water management database.		
WALL_HEIGHT	Double			The average height of the floodwall in feet as measured from the protected side ground surface.		
FOUNDATION_WIDTH	Double			The maximum width of the foundation in feet.		
WALL_WIDTH	Double			The width of the top of the floodwall in feet.		
WALL_DEPTH	Double			The average depth of the floodwall in feet as measured from the protected side ground surface.		
FLOOD_SOURCE	Text		75	Name of the waterbody that the segment is providing protection from. (Ex. Arkansas River, Lake Ponchatrain, etc)		
HORIZ_ACCURACY	Double			Value represents horizontal accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
VERT_ACCURACY	Double			Value represents vertical accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: any as-built structural details.		
STRMAT_ID	Double	STRMAT		The primary material used in the construction of the floodwall.		
 BANKSIDE_ID	Double	BANKSIDE	1	A value for the side of the channel bank when facing downstream.		
TYCUTO_ID	Double	ТҮСИТО	1	The type of cutoff used to prevent seepage under the floodwall.		
 COORDCAP_ID	Double	COORDCAP		Description of the method used to capture floodwall information.		
 WALLTYPE_ID	Double	WALLTYPE		A value indicating the type or kind of floodwall.		
GAGE OWNER	Text		50	The name of the owner for the controlling gage.		
STATUS IND	Double	STATUS		The status of the feature.		
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		

Notes: This table provides information about floodwalls. It contains a many to one relationship to the FC_SEGMENT table.

FRM Lines						
This table contains	information about	t flood risk mana	gement lines u	used to protect areas from high water events or convey water.		
Field Name	Data Type	Domain	Length	Definition		
FRM_ID	Text			Primary Key. A unique, user defined identifier for each record or instance of an entity.		
FC_SYSTEM_ID	Text		20	Foreign Key link to the FC_SYSTEM table. Used to link the record to associated FC_SYSTEM table.		
FC_SEGMENT_ID	Double			Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.		
FEATURE_NAME	Text		255	Any commonly used name or alias for the toe drain.		
STRUCTURE_TYPE_ID	Double	FRMLINTYP		The type of feature that makes up theFlood risk management Alignmen.		

Notes: This table provides information about the Flood risk management alignment. It contains a one to many relationship to the FC_SEGMENT and FC_SYSTEM table.

Levee Stations						
This table contains information regarding levee stations.						
Field Name	Data Type	Domain	Length	Definition		
LEVEE_STATION_ID	Text		20	Primary Key. A unique, user defined identifier for each record or		
				instance of an entity.		
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to		
				associated FC_SEGMENT table.		
RIVER_MILE	Double			The relative distance marking the location of the feature.		
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee. (120+00)		
LEVEE_MILE	Double			Levee mile taken from the surveyed centerline.		
WATER_SURFACE_ELEVATION	Double			Water Surface elevation corresponding to a 1 percent chance		
				exceedance at the station.		
COMMENTS	Text		255	A description or other unique information concerning the subject item.		
STATION_ELEVATION	Double	STATELEV		The station elevation in feet.		
COORDCAP_ID	Double	COORDCAP		The method used to capture the station elevation.		
STATUS_IND	Double	STATUS		The status of the feature.		
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		

Notes: This table provides information about station points. It contains a many to one relationship to the FC_SEGMENT table.

			Leveed A	reas
	The area of a	a floodplain from	which flood w	vater is excluded by the levee system.
Field Name	Data Type	Domain	Length	Definition
LEVEED_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.
FC_SYSTEM_ID	Text		20	Foreign Key. Used to link the record to associated FC_SYSTEM table.
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee.
FEATURE_NAME	Text		50	Any commonly used name or alias for the leveed area.
LEVEED_AREA_SOURCE_ID	Double	LEVSRC		Source data for creating the leveed area polygon.
MIN_OVERTOP_EVENT	Text		20	Percent annual chance exceedance event (e.g. 1% ACE). Derived from the minimum overtopping event from a single segment of the system.
EGRESS_NUMBER	Long			The number of planned evacuation routes for leaving an area.
COMMENTS	Text		255	A description or other unique information concerning the subject item.
WARN_IND	Double	BOOLEAN		Is there a flood warning system? Y or N
 EVACUATION_PLAN_IND	Double	BOOLEAN		Is there an evacuation plan for the leveed area?
COMPUTED_SOURCE_DATE	Date			The date that describes the source of the computed data.
COMPUTED_SOURCE_ID	Double	CMPTSRC		What is the source of the computed data? HEC-RAS model run, FLO2D, MIKE, other flow modeling software, etc.

Notes: The table contains a one to one relationship to the FC_SYSTEM table.

			Piezome	ters		
The location of an open tube placed in the ground or a structure which is used to measure subsurface water elevation.						
Field Name	Data Type	Domain	Length	Definition		
PIEZOM_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.		
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.		
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee.		
FEATURE_NAME	Text		50	Any name, designation, or alias associated with the tube.		
INSTALLATION_DATE	Date			The installation date of the piezometer tube. (Format MM/DD/YYYY)		
TOP_ELEVATION	Double			The elevation at the top of the tube in feet.		
TIP_ELEVATION	Double			The elevation at the tip (bottom) of the tube in feet.		
LOCATION_OFFSET	Double			Offset in feet from levee center.		
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: installation log, typical detail, rehab notes.		
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.		
STATUS_IND	Double	STATUS		The status of the feature.		
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		

Notes: This table provides information about piezometers. It contains a many to one relationship to the FC_SEGMENT table.

			Pipe Ga	tes		
Gate associated and attached to a Pipe						
Field Name	Data Type	Domain	Length	Definition		
GATE_ID	Text		20	Primary Key. A unique, user defined identifier for each record or		
				instance of an entity.		
PIPE_ID	Text		20	Foreign Key link to the Pipes table. Used to link the record to associated		
				Pipe it is attached to.		
GATE_TYPE_ID	Double	GATTYP		The type of gate used.		
COMMENTS	Text		255	A description or other unique information concerning the subject item		
				such as: as-built profile, details of headwalls, gates, gatewells, etc.		
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee. (120+00)		
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.		

Notes: This table provides information about pipe gates. It contains a many to one relationship to the Pipes table.

Pipes						
A st	A structure designed to allow flow of water from the interior of a levee unit to the waterside.					
Field Name Data Type Domain Length Definition						
PIPE_ID	Text		20	Primary Key. A unique, user defined identifier for each record or		
				instance of an entity.		
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to		
				associated FC_SEGMENT table.		
LEVEE_STATION_CODE	Text			Stationing in feet along the levee. (120+00)		
FEATURE_NAME	Text		50	Any commonly used name or alias associated with the drain.		
DIAMETER	Double			The diameter of the gravity drain in inches.		
DESIGN_LENGTH	Double			The design length of the gravity drain in feet.		
INLET_INVERT_ELEVATION	Double			The invert elevation of the inlet of the drain in feet.		
OUTLET_INVERT_ELEVATION	Double			The invert elevation of the outlet of the drain in feet.		
HORIZ_ACCURACY	Double			Value represents horizontal accuracy in feet at the 95% confidence level		
				in accordance with the NSSDA Standard.		
VERT_ACCURACY	Double			Value represents vertical accuracy in feet at the 95% confidence level in		
				accordance with the NSSDA Standard.		
COMMENTS	Text		255	A description or other unique information concerning the subject item		
				such as: as-built profile, details of headwalls, gates, gatewells, etc.		
PIPMAT_ID	Double	PIPMAT		The type of material used in the gravity drain.		
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.		
STATUS_ID	Double	STATUS		The status of the feature.		
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		

Notes: This table provides information about gravity drains. It contains a many to one relationship to the FC_SEGMENT table.

Pump Stations					
	An area or location where a pump is located to pump water from the interior of a levee.				
Field Name	Data Type	Domain	Length	Definition	
PUMPSTATION_ID	Text		_	Primary Key. The unique identification number of stations where pumps are placed to provide levee drainage.	
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.	
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee.	
RIVER_MILE	Double			River mile marker.	
NUMBER_PUMPS	Double			The number of pumps in a station	
PUMP_ELEVATION	Double			The mid-point elevation of the middle pump propeller in feet.	
INVERT_ELEVATION	Double			The lowest sill elevation in feet.	
MAX_DESIGN_HEAD	Double			The water elevation of the maximum design head of the pump in feet.	
CAPACITY	Double			The combined pumping capacity at the maximum design head in GPM of all of the pumps.	
FEATURE_NAME	Text		50	Any commonly used name or alias for the pump station.	
INTERIOR_DRAIN	Text		50	A description of the interior drainage area.	
PUMP_AGE	Long			The average age of the pumps involved.	
FLOOD_SOURCE	Text		75	Name of the waterbody that the segment is providing protection from. (Ex. Arkansas River, Lake Ponchatrain, etc)	
RIVER_BASIN	Text		100	Will be derived from the HUC code	
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: as-built station details, plan view, pump information, sections and profiles, maintenance records.	
PUMPTYP_ID	Double	PUMPTYP		The most common type of pumps, axial flow, mixed flow, or centrifugal.	
PUMPCONF_ID	Double	PUMPCONF		The configuration of pumps.	
PUMPDRIVE_ID	Double	PUMPDRIVE		The most common type of pump drive.	
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.	
STATUS_IND	Double	STATUS		The status of the feature.	
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)	
CONSTRUCTION_YEAR	Short			The date on which the pump station was completed, or first opened. (Format MM/DD/YYYY)	
BACKUP_POWER_ID	Double	BOOLEAN		If the pumps are electric motor driven, is there a backup generator?	

Notes: This table provides information about pump stations. It contains a many to one relationship to the FC_SEGMENT table.

Relief Wells					
	Well location installed to reduce interior pore pressures.				
Field Name	Data Type	Domain	Length	Definition	
RELIEF_WELL_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.	
LEVEE_STATION_CODE	Text		20	Stationing in feet along the levee.	
FEATURE_NAME	Text		50	Any commonly used name or alias for the relief well.	
TOP_ELEVATION	Double			The elevation at the top of the well in feet .	
WELL_DEPTH	Double			Depth of relief well from the top of the casing in feet.	
FLOW_CAPACITY	Double			The design flow capacity of the well in cfs.	
CONTROL_ELEVATION	Double			The elevation that the well outfall was set to to meet minimum design requirements in feet.	
WELL_DIAMETER	Double			The diameter that the well was set to to meet minimum design requirements in inches.	
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: installation log, typical detail, rehab notes.	
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.	
STATUS_IND	Double	STATUS		The status of the feature.	
SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)	

Notes: This table provides information about relief wells. It contains a many to one relationship to the FC_SEGMENT table.

System Routes					
The al	I-encompassing leve	e system align	ment/profile li	ne and includes vertical elevation and measures.	
Field Name Data Type Domain Length Definition					
ROUTE_ID	Text		20	Primary Key. A unique, user defined identifier for each record or	
				instance of an entity.	
FC_SYSTEM_ID	Text		20	Foreign Key link to the FC_SYSTEM table. Used to link the record to	
				associated FC_SYSTEM table.	
COMMENTS	Text		254	A description or other unique information concerning the subject item.	

Notes: This table provides information about the levee system route or linear referencing. This geometry exists as a single feature measured polyline representing the levee elevation as well as to serve as a foundation for linear referencing of study reaches.

			Toe Dra	ins		
Trench that runs parallel to the levee or floodwall at the landside edge, that provides a positive outlet for local under seepage and a check for controlling piping and/or excessive uplift pressure.						
Field Name	Data Type	Domain	Definition			
TOE_DRAIN_ID	Text		20	Primary Key. A unique, user defined identifier for each record or instance of an entity.		
FC_SEGMENT_ID	Text		20	Foreign Key link to the FC_SEGMENT table. Used to link the record to associated FC_SEGMENT table.		
FEATURE_NAME	Text		50	Any commonly used name or alias for the toe drain.		
TRENCH_DEPTH	Double			Depth of the trench from the top of the ground in feet.		
FLOW_CAPACITY	Double			The design flow capacity of the well in cfs.		
OUTFALL_ELEVATION	Double			The elevation that the outfall was set to to meet minimum design requirements in feet.		
PIPE_DIAMETER	Double			The diameter in inches that the pipe was set to to meet minimum design requirements.		
DRAIN_LENGTH	Double			The length of the drain in feet.		
HORIZ_ACCURACY	Double			Value represents horizontal accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
VERT_ACCURACY	Double			Value represents vertical accuracy in feet at the 95% confidence level in accordance with the NSSDA Standard.		
COMMENTS	Text		255	A description or other unique information concerning the subject item such as: as-built profile, sections, details.		
COORDCAP_ID	Double	COORDCAP		Description of the method used to capture the feature.		
	Double	STATUS		The status of the feature.		
 SURVEY_DATE	Date			Date of the survey (Format MM/DD/YYYY)		
CONSTRUCTION_YEAR	Short			Year drain was constructed		

Notes: This table provides information about toe drains. It contains a many to one relationship to the FC_SEGMENT table.

First Two Numbers of 10-digit or first four of twelve Primary Key Classification				
Responsible Org	PK Number			
FEMA Region 1	11			
FEMA Region 2	12			
FEMA Region 3	13			
FEMA Region 4	14			
FEMA Region 5	15			
FEMA Region 6	16			
FEMA Region 7	17			
FEMA Region 8	18			
FEMA Region 9	19			
FEMA Region 10	20			
Alaska	21			
Albquerque	22			
Balitmore	23			
Buffalo	24			
Charleston	25			
Chicago	26			
Detroit	27			
Europe	28			
Far East	29			
Fort Worth	30			
Galveston	31			
Honolulu	32			
Huntington	33			
Jacksonville	34			
Japan	35			
Kansas City	36			
Little Rock	37			
Los Angeles	38			
Louisville	39			
Memphis	40			
Mobile	41			
Nashville	42			
New England	43			
New Orleans	44			

First Two Numbers of 10-digit or first four of twelve Primary Key Classification

Responsible Org	PK Number
New York	45
Norfolk	46
Omaha	47
Philadelphia	48
Pittsburgh	49
Portland	50
Rock Island	51
Sacramento	52
San Francisco	53
Savannah	54
Seattle	55
St. Louis	56
St. Paul	57
Tulsa	58
Vicksburg	59
Walla Walla	60
Wilmington	61
B of Rec	70
National Park Service	71
NRCS	72
FWS	73
IBWC	74
ALASKA	1000
ALABAMA	1100
ARKANSAS	1200
AMERICAN SAMOA	1300
ARIZONA	1400
CALIFORNIA	1500
COLORADO	1600
CONNECTICUT	1700
DISTRICT OF COLUMBIA	1800
DELAWARE	1900
FLORIDA	2000
GEORGIA	2100

Features/Tables - Second	Two Numbers of 10-
digit Primary Key Classif	cation or 5th and 6th
numbers of a 12-c	ligit State key
Feature/Table	PK Number
Embankment	01
Floodwall	02
Leveed Area	06
Closure Structure	10
Stationing	13
Pump Station	14
Crossings	15
Pipe	16
Cross Section	18
Relief Well	21
Piezometer	23
Toe Drain	26
Alignment Line	34
System Route	40
Gate	41
FRM Line	42

Notes: Remaining six digits of keys are enumerators allowing for up 9999999 features per class.

First Two Numbers of 10-digit or first four of twelve Primary Key Classification				
Responsible Org	PK Number			
GUAM	2200			
HAWAII	2300			
IOWA	2400			
IDAHO	2500			
ILLINOIS	2600			
INDIANA	2700			
KANSAS	2800			
KENTUCKY	2900			
LOUISIANA	3000			
MASSACHUSETTS	3100			
MARYLAND	3200			
MAINE	3300			
MICHIGAN	3400			
MINNESOTA	3500			
MISSOURI	3600			
MISSISSIPPI	3700			
MONTANA	3800			
NORTH CAROLINA	3900			
NORTH DAKOTA	4000			
NEBRASKA	4100			
NEW HAMPSHIRE	4200			
NEW JERSEY	4300			
NEW MEXICO	4400			
NEVADA	4500			
NEW YORK	4600			
OHIO	4700			
OKLAHOMA	4800			
OREGON	4900			
PENNSYLVANIA	5000			
PUERTO RICO	5100			
RHODE ISLAND	5200			
SOUTH CAROLINA	5300			
SOUTH DAKOTA	5400			
TENNESSEE	5500			

First Two Numbers of 10-digit or first four of twelve Primary Key Classification

Responsible Org	PK Number
TEXAS	5600
UTAH	5700
VIRGINIA	5800
VIRGIN ISLANDS	5900
VERMONT	6000
WASHINGTON	6100
WISCONSIN	6200
WEST VIRGINIA	6300
WYOMING	6400

Features/Tables - Second Two Numbers of 10digit Primary Key Classification or 5th and 6th numbers of a 12-digit State key Feature/Table PK Number Embankment 01 02 Floodwall 06 Leveed Area Closure Structure 10 13 Stationing Pump Station 14 Crossings 15 Pipe 16 Cross Section 18 Relief Well 21 23 Piezometer 26 Toe Drain 34 Alignment Line 40 System Route Gate 41 FRM Line 42

Notes: Remaining six digits of keys are enumerators allowing for up 999999 features per class.

	Table Name			
Code	Description			
	ACEOVERTOPSOURCE			
1	Screening Level Risk Assessment			
2	Higher Level Risk Assessment			
4	Other (H&H study)			
	ALIGN_TYPE			
1	road			
2	high ground			
Э	bridge			
Z	railroad			
5	levee			
e	floodwall			
7	crossing			
8	closure			
ç	gravity drain			
10	well			
11	pump station			
12	toe drain			
	AUTH_SECTION			
	Section 202			
2	Section 408			
	AUTHCAT			
	USACE Federally Constructed and USACE Federally Operated			
	2 USACE Federally constructed, turned over to public sponsor operations and maintenance			
	Locally Constructed, Locally Operated and Maintained			
	4 Other Federal Agency			
5	Deauthorized			
	BANKSIDE			
	Non Riverine			
	Left Descending			
3	Right Descending			
	BOOLEAN			

1	Yes					
0	No					
	BOREMETHOD					
1	Auger Boring					
2	Combination of Methods Used					
3	Cone Penetration Test Probe					
4	Core Boring					
5	Core Boring with SPT					
6	Dilatomer Test Probe					
7	Driver Sampler					
8	Dry Probe of muck, peat, silt, etc					
9	Fishtail					
	Geophysical Logging of Temporary Bore Hole					
	Groundwater Sample Location					
12	Hand Auger					
	Monitoring Well or Piezometer					
	Percussion Boring with Air Hammer					
15	Piston Sampler					
16	Power Auger					
	Probe Rod					
	Production Well including ASR wells and Relief Wells					
	Rock Bit					
20	Shelby Tube					
	Surface Sediment Sample Location					
	Temporary Well					
	Test Pit					
	Trench					
	Undistrubed Denison					
	Vibracore Boring					
	Wash Boring					
	Wash Probe					
29	Churn Auger					
	CLOSUREUSE					
1	Road					

2	Railroad
3	Pedestrian
4	Bike
5	Trail
6	Other
	CLOTYP
1	Swing Single
2	Swing Double
3	Miter Hinge
4	Miter Pintel
5	Roll 2 Wheel
6	Roll 1 Wheel
7	Roll L Frame
	Trolley
	Stoplog
	Sandbag
	Movable Truss
	Movable Post
	Bulkhead
	Removable Panel
	Other
	Spillway
17	Sector Gate
	Vertical Lift
	Soil Pile
20	Tainter Gates
	CMPTSRC
	HEC-RAS Model
	Other Flow Modeling Software
	LIDAR/DEM (1 meter or better)
	3-meter DEM
	10-meter DEM
8	Minimum data source (topographic map)
	COORDCAP

1	Digitized off of quad sheets
2	Does not exist
3	Surveyed using RTK GPS
4	Surveyed using Total Station
5	Surveyed using Level and stationing
7	Other
8	Using photogrammetric techniques
	Surveyed using RTK and Total Station
	LIDAR
	Heads-up digitizing
	Design Coordinates
6	Surveyed using "mapping grade" GPS
	CRSPTH
	Above
	Below
	Over
4	Through
	CRSTYP
	Road
	Railroad
	Pipeline
	Utility
5	Other
	D_SYSTEM_TYPE
	Canal-related System
2	
	Channel
3	Channel Dam-related System
3	Channel Dam-related System Levee System
3 4 5	Channel Dam-related System Levee System Under Review
3 4 5 6	Channel Dam-related System Levee System Under Review FEMA Only
3 4 5 6 7	Channel Dam-related System Levee System Under Review FEMA Only In-ground Canal
3 4 5 6 7 8	Channel Dam-related System Levee System Under Review FEMA Only In-ground Canal Elevated Canal
3 4 5 6 7 8	Channel Dam-related System Levee System Under Review FEMA Only In-ground Canal

1	Pump
	Sandbag
	Rock
	Earth Fill
	Riprap
	Rapid Deploy Floodwall
	Monitored
	Temporary Levee
	PIG-Inflatable Bladder
10	Other
11	Unknown
12	Berm
13	Multiple Measures
	FRMLINTYP
1	Canal Elevated
2	Canal in Ground
3	Channel
4	Dam
5	Other
6	Rip Rap
7	Wave Barrier
8	Weir
9	Coastal
	GATTYP
1	Flap Gate
2	Sluice Gate
3	Flap Gate and Sluice Gate
4	Other
5	Gate Wells
	INCIDENT
1	Breach
2	Slip
3	Sloughing
4	Burrowing

5 Surface Erosion
6 Overtopping
7 Seepage
8 Mechanical Problem
9 Closure Problem
10 Obstruction
ITEM_DESIGNATION
1 Primary
2 Secondary
LEVDISTRESS
1 Overtopping
2 Piping
3 Rotational Slope Failure
4 Scour
5 Closure Failure
6 Loading
7 Erosion River Side
8 Erosion Land Side
9 Erosion Both
10 Mechanical Closure
11 Mechanical Pumpstation
12 Mechanical Gate
13 Mechanical Other
LEVSRC
2 Hydraulic Modeling (FEMA FIRM 1% AEP)
4 Hydraulic Modeling (FEMA FIRM 0.2% AEP)
6 Other (Specify in Notes)
7 Hydraulic Modeling
8 Flood Fill Method
9 Projected Profile Method
10 Flow Path Method
11 Manual Digitize
12 Flood Study
LEVTYPE

1	Fuseplug
2	Frontline
3	Mainline
4	Other
5	Ring
	Setback
	Spur
	Sublevees
	Tributary
	Interior Drainage
10	Hurricane
	PIPEFLOWTYPE
	Gravity
	Pressurized
3	Undetermined
	PIPEFUNCTION
	Essential
2	Non-Essential
	PIPMAT
	Aluminum
	Brick
	Concrete
	Corrugated Metal
	Copper
_	Fiberglass
	Galvanized Steel
8	Galvanized Steel Plastic
8	Galvanized Steel Plastic Polyvinyl Chloride
8 9 10	Galvanized Steel Plastic Polyvinyl Chloride Steel
8 9 10 11	Galvanized Steel Plastic Polyvinyl Chloride Steel Stone
8 9 10 11	Galvanized Steel Plastic Polyvinyl Chloride Steel Stone Other
8 9 10 11 12	Galvanized Steel Plastic Polyvinyl Chloride Steel Stone Other PUMPCONF
8 9 10 11 12 12	Galvanized Steel Plastic Polyvinyl Chloride Steel Stone Other

3 Vertical Submersible
PUMPDRIVE
1 Electric Motor
2 Diesel Engine
3 Natural Gas Engine
PUMPTYP
1 Axial Flow
2 Mixed Flow
3 Centrifugal
QLTFLW
1 Ponded
2 Running and Clear
3 Running and Muddy
4 Running and Carrying Sand
REHABCOST
1 Less than \$100,000
2 \$100,000 to \$500,000
3 \$500,000 to \$1,000,000
4 Greater than \$1,000,000
RIPSTATUS
1 Active
2 Inactive
3 Not Enrolled
4 Not Eligible
5 NA
STATELEV
1 Calculated
2 Entered from Plan Sheet
3 Measured
STATUS
 1 Decommissioned
2 De-authorized
3 Abandoned
4 Removed

	Current
6	Prior Survey
	STRMAT
1	Aluminum
	Brick
	Concrete
	Cinderblock
5	Earthen
	Logs
	Sheet Metal
	Wood
	Clay
	Sand
	Gravel
	Random Fill
	Zoned
14	Silt
	SWIFSTATUS
	No Letter of Intent Formally Submitted
	Letter of Intent Approved
	Letter of Intent Terminated
	SWIF Accepted
	SWIF Implementation Complete
	SWIF Terminated
7	N/A
	SYSTEMSUBTYPE
	Not a Levee
	Inaccurate Levee Position
	Other Levee Like Structures
	New Levee Construction
5	Newly Entered Levees
	ΤΥϹͶΤΟ
	Combination
	Concrete

3	Sheet Pile	
	Slurry Wall	
5	No Cutoff	
	WALLTYPE	
1	I-Wall	
2	T-Wall	
3	L-Wall	
4	Other	