NEW BRUNSWICK

AQUATIC

DATA WAREHOUSE

DATABASE MANUAL

Version 4.0

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INTRODUCTION

BACKGROUND

The NB Aquatic Data Warehouse stores physical, chemical, and biological characteristics of New Brunswick's lakes and streams, which is gathered primarily through assessment activities or field work. In addition, the Data Warehouse contains information on management activities which protect, regulate or enhance the province's aquatic and fisheries resources. Finally, the foundation of the Data Warehouse is the water resource inventory which assigns unique identifiers to each lake and stream in the province. The inventory also assigns each water body to one of the 446 hydrologic or catchment areas.

The NB Aquatic Data Warehouse manages two types of data: tabular and spatial. The spatial or GIS data includes the locations or spatial extent of tabular data, plus many other data sets which support management of water and fishery resources.

The purpose of this document is to describe the Microsoft Access database which stores the tabular data of the NB Aquatic Data Warehouse.

DATA SUBJECTS

The tabular data is organized into 5 subject areas to facilitate presentation (Figure 1). Complex subjects may be further subdivided. The subjects are:

Water Resource Inventory (Hydrology)

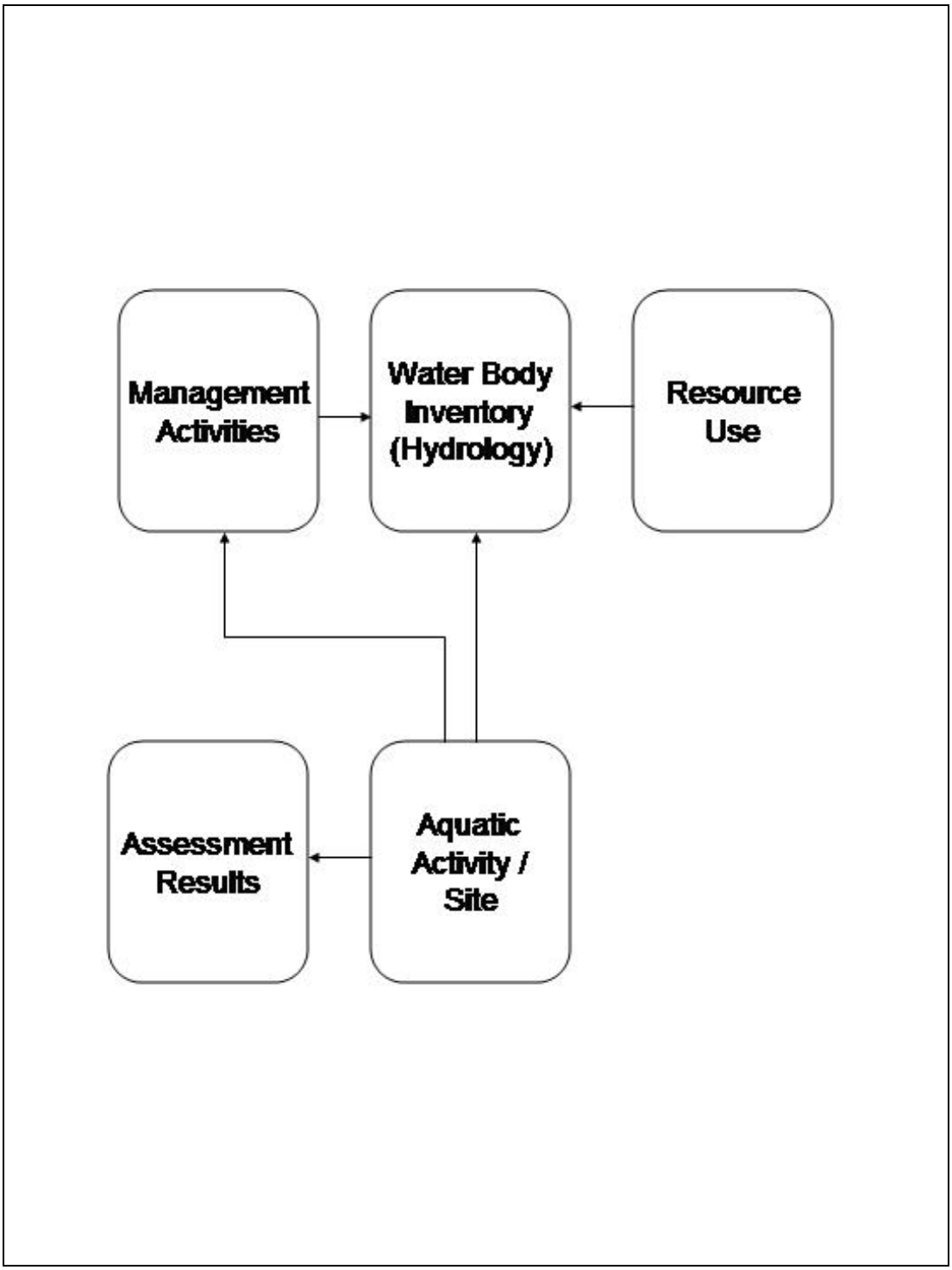
Aquatic Activity / Site

Assessment Results
- Habitat Assessment
- Fish Populations
- Water Quality

Resource Use
- Sportfishing

Management Activities
- Regulated Angling Waters
- Fish Population Enhancements
- Habitat Enhancement
- Protected Drinking Water Supplies

Figure 1. Diagram of the 5 subject areas of data within the NB Aquatic Data Warehouse.



Water Body Inventory (Hydrology) is the foundation of the NB Aquatic Data Warehouse. It includes the inventory of New Brunswick lakes and streams and associated hydrologic or catchment units. The water body inventory includes basic attributes, such unique identifier, stream order, length or area if known, and the receiving body of water. The hydrologic or drainage system is a six level hierarchal system with the first level representing thirteen major drainage basins. Each basin is then divided into composites and 5^{th} order or higher streams, according to Strahler's (1952) stream ordering method. Each drainage unit is then further subdivided until it no longer contains units meeting the minimum order/size criteria: 4^{th} order with a drainage area greater than 100 km^2.

Aquatic Activity / Site is the most abstract and complex component of the database. A single table, tblAquaticActivity, tracks all assessment and management activities, storing basic information common to all activities, such as date, time, and personnel. Similarly, a single table, tblAquaticSite, manages all of the locations where aquatic activities (assessment or management) take place. An aquatic activity must reference an aquatic site in the aquatic site table.

An aquatic site may represent a point, such as an electrofishing or thermistor site; a stream section such as a habitat survey section or redd survey section; or it may represent the entire body of water. For instance, an aquatic site will represent a body of water for lake surveys or when a specific site is unknown, such as during most fish stocking activities. Most aquatic sites are georeferenced.

This design, although complex, allows efficient retrieval of data for a specific site or body of water. It also eliminates redundancy when multiple activities may occur at the same location, e.g. electrofishing and thermistor, and/or multiple agencies may use the same site.

Assessment Results describe the physical, chemical and biological characteristics of a lake or stream and includes field data, lab results or derived information from field data. Assessment data are the results of assessment or survey activities, such as lake and stream surveys, electrofishing, fish counts at trap nets, fences and barriers, redd surveys, water samples for chemical or bacterial analysis, and temperature monitoring.

Resource Use is limited to sportfishing license sales and catch and effort at this time.

Resource Management includes information on resource protection, regulations, and activities which enhance water and fishery resources. The subject includes regulated angling waters, fish stocking, habitat restoration, and designated drinking water supplies (watersheds and wellfields). Enhancement activities, such as fish stocking and habitat rehabilitation, are linked to the Aquatic Activity subject.

WATER BODY INVENTORY (HYDROLOGY)

RELATIONSHIP DIAGRAM

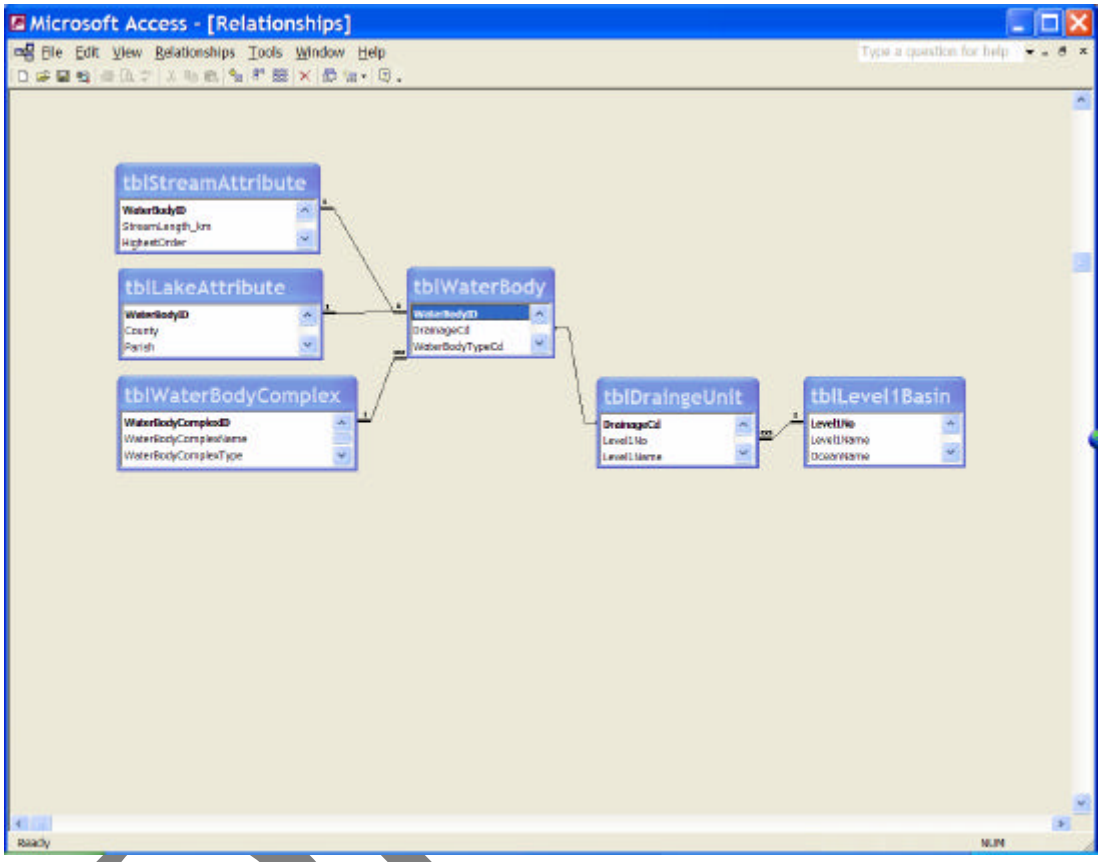


TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblLevel1Basin	List of the 13 NB's major drainage basins representing the highest level of the 6-level hierarchal drainage system
tblDrainageUnit	List of the 446 hydrologic or drainage units as defined by the 6-level hierarchal drainage system
tblWaterBody	Inventory of the province's lakes and streams and includes basic attributes, such unique identifier, stream order, length or area if known, and the receiving body of water. All data within the data warehouse references the water resource inventory table through the unique water body identifier. All water bodies are also assigned to a drainage unit.

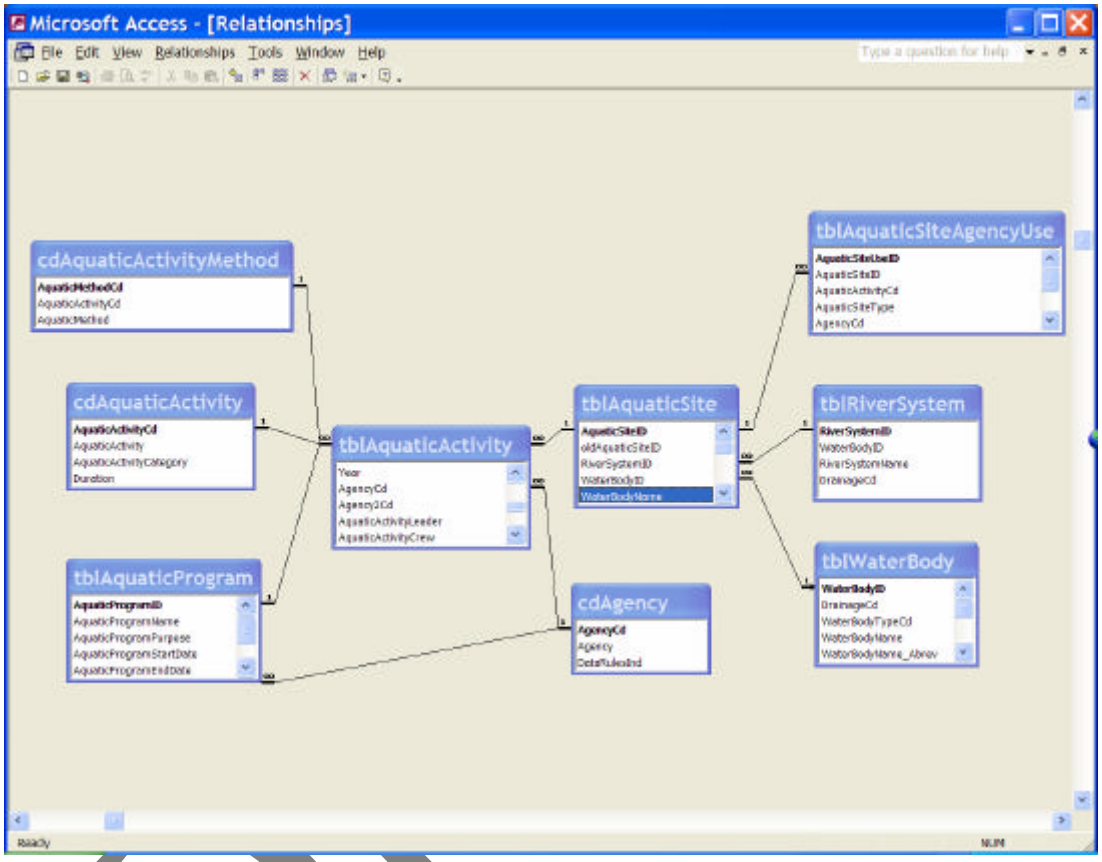
tblLakeAttribute	Additional hydrological attributes specific to lakes, such as area, perimeter and classification, which are acquired during the inventory process or determined through field surveys
tblStreamAttribute	Additional hydrological attributes specific to streams, such as length and stream order, acquired during the inventory process
tblWaterBodyComplex	Identifies groups of 2 or more lakes belonging to a lake complex with single official name. For instance, Twin Lakes refers to two lakes yet each lake occurs individually in the water resource inventory

RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblDrainageUnit – tblMajorBasin	A drainage unit is part of one major basin	1 to 1,1
	A major basin has one or more drainage units	1 to 1, Many
tblWaterBody – tblDrainageUnit	A water body belongs to a single drainage unit	1 to 1,1
	A drainage unit generally contains one or more water bodies, except in a few cases where there were no digitized streams. This can occur in small composites between two stream units or in composites at the mouth of streams	1 to 0, Many
tblLakeAttribute – tblWaterBody	A lake attribute is only associated with one lake	1 to 1,1
	Only lakes have lake attributes	1 to 0,1
tbStreamAttribute – tblWaterBody	A stream attribute is only associated with one stream	1 to 1,1
	Only streams have stream attributes	1 to 0,1
tblWaterBody - tblWaterBodyComplex	A water body can be part of a multi lake complex	1 to 0,1
	A water body complex can consist of two or more lakes	1 to Many

AQUATIC ACTIVITY / SITE

RELATIONSHIP DIAGRAM



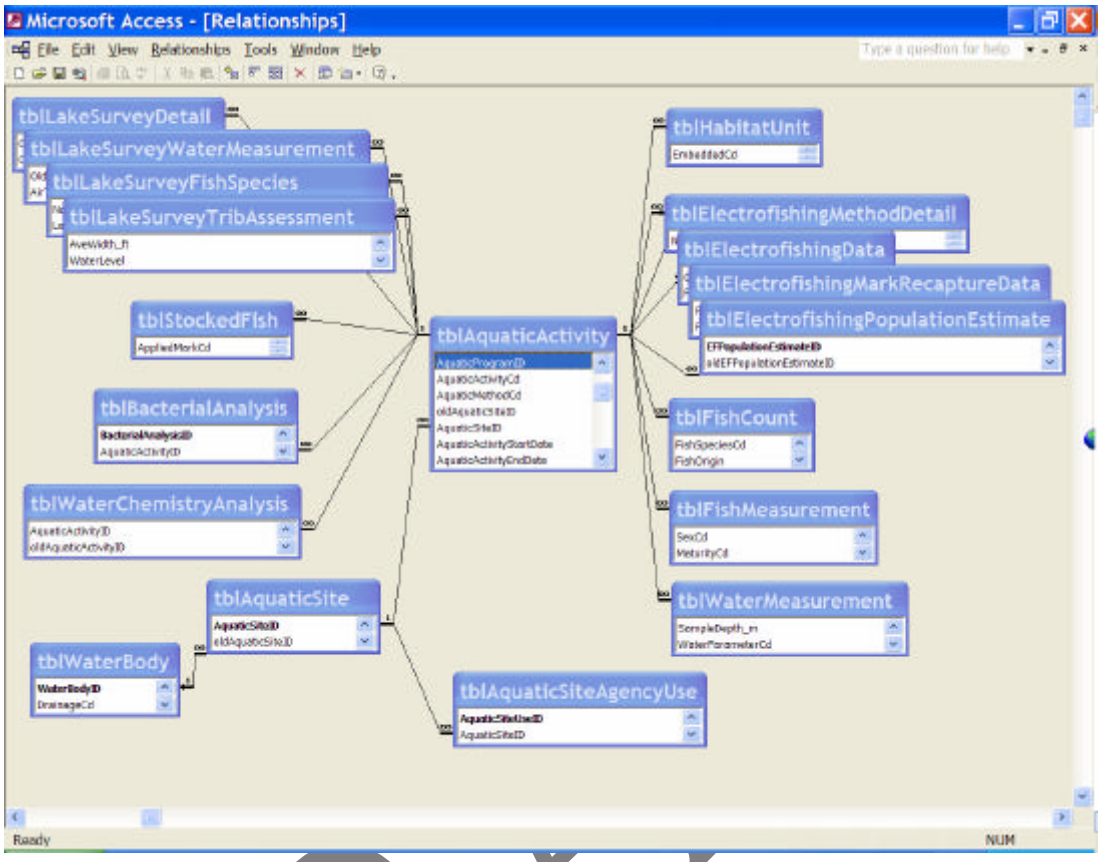


TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblAquaticActivity	Maintains event details, such as date, time, personnel, that is common to aquatic and fisheries assessment and management activities. Activities include lake and stream surveys, electrofishing, fish run counts, fish measurements, redd surveys, water sampling, temperature monitoring, fish stocking, and habitat restoration. Aquatic activities represent a unique combination of aquatic site, date, time, agency and activity type.
tblAquaticProgram	List of programs or projects which involve specific aquatic activities, such as an EIA project, DELG's Water Classification program, a research project. Use of this table allows the activities and results of a specific program or project to be queried or reported.

tblAquaticSite	List of unique sites where aquatic activities have occurred. A site may be a specific point on a stream or lake, a stream section, or it may represent the entire body of water. Point sites will exist in the Aquatic Sites spatial file if they have been georeferenced, The table includes stream route start and end measures if the site represents a section of stream. Route measurements are displayed in GIS as event data (see ESRI's ArcMap documentation for more details).
tblAquaticSiteAgencyUse	Maintains the agency references to the Data Warehouse's unique aquatic sites. Agencies generally have their own site codes and a single site may have multiple codes if different activities occur on the site.

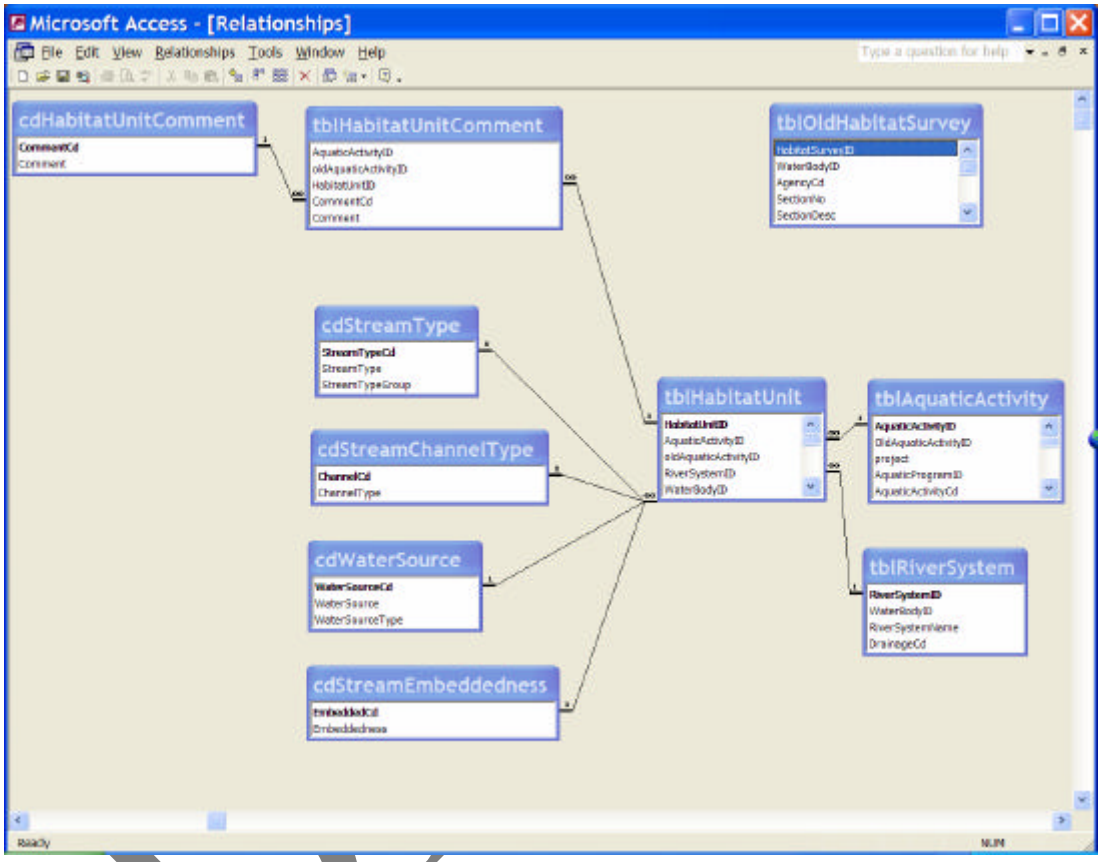
RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblAquaticActvity - tblAquaticProgram	An aquatic activity can be part of a program or project	1 to 0,1
	A program or project can have one or more activities associated with it	1 to 1, Many
tblAquaticActvity - tblAquaticSite	An aquatic activity takes place at single site	1 to 1
	An aquatic site may have one or more activities occurring	1 to 1, Many
tblAquaticSite - tblAquaticSiteAgencyUse	An aquatic site has one or more agency site references	1 to 1, Many
	An agency use record must reference to an aquatic site	1 to 1
tblAquaticSite - tblWaterBody	An aquatic site occurs on a single body of water	1 to 1
	A water body may have 0, 1, or more aquatic sites	1 to 0, Many

ASSESSMENT RESULTS

Habitat Assessment

RELATIONSHIP DIAGRAM



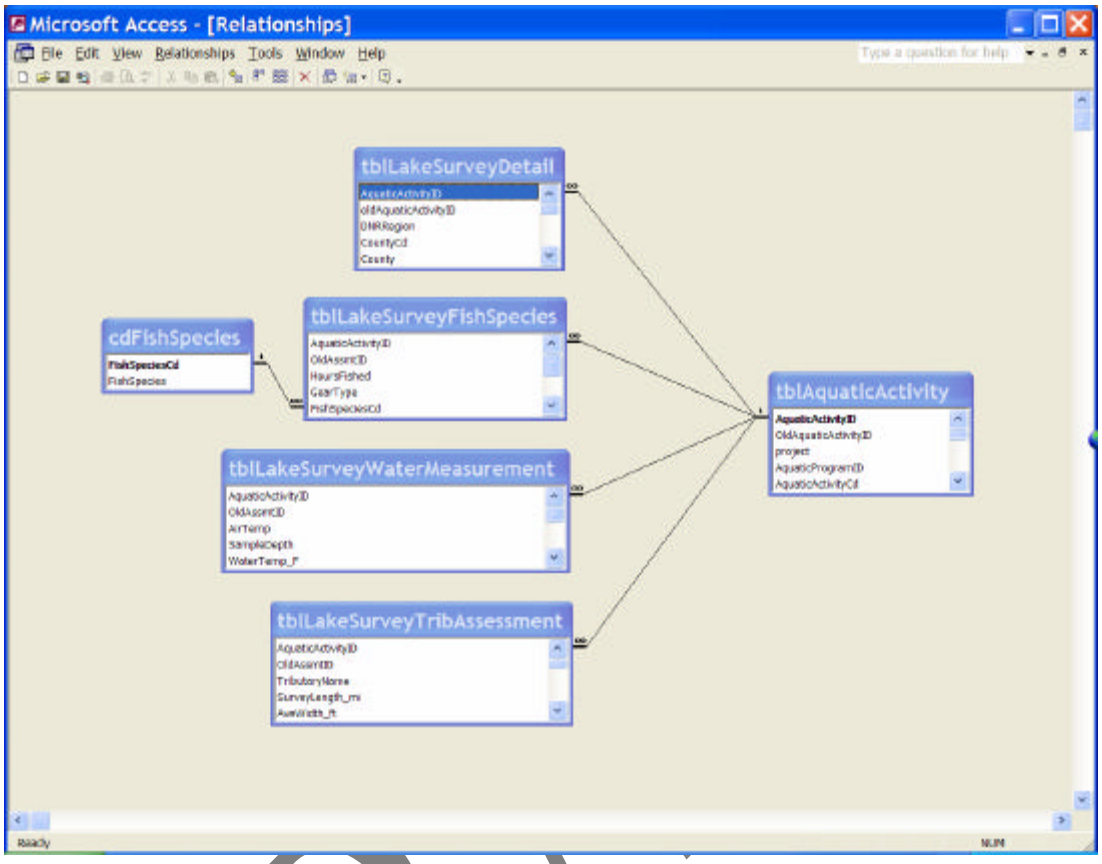


TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblHabitatUnit	Habitat units identified by unique stream type using the DFO/DNR standardized stream survey methodology
tblHabitatUnitComment	Coded comments associated with habitat units as defined by the DFO/DNR standardized stream survey form
tblHabitatUnitWaterMeasurement	Water flow and/or water temperature measurements taken during a DFO/DNR standardized stream survey
tblRiverSystem	Names of primary surveyed streams. Used to associate tributary data with the main stem
tblOldHabitatSurvey	Results of stream surveys using DNR's former stream survey methodology
tblReconnaissanceResults	Results from reconnaissance surveys
tblLakeSurveyDetails	Details of lake surveys using DNR's lake survey methodology
tblLakeSurveyWaterMeasurement	Temperature, dissolved oxygen and chemical (field measurements) at multiple depths, creating profiles

tblLakeSurveyFishSpecies	Fish species present in a lake
tblLakeSurveyTribAssessment	Survey results of lake tributaries using DNR's lake survey methodology

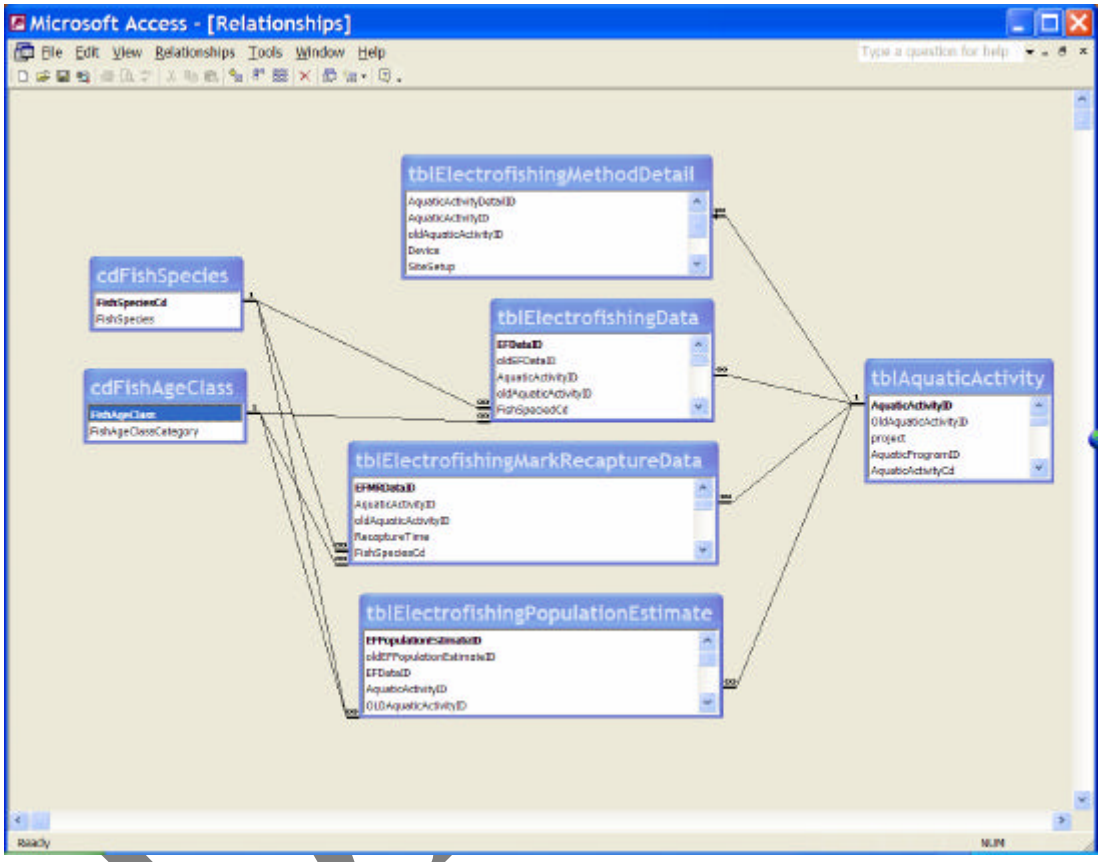
RELATIONSHIPS

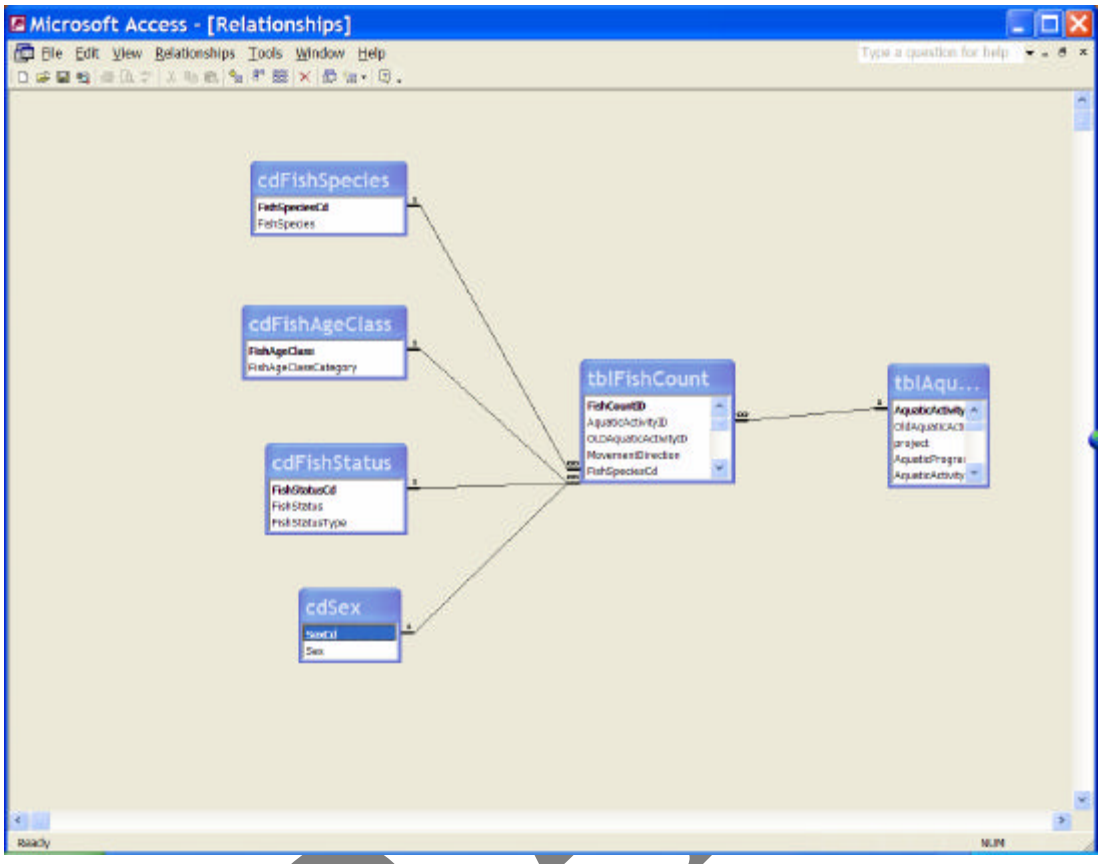
TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblHabitatUnit - tblAquaticActivity	Habitat units are associated with an aquatic activity	1 to 1
	An aquatic activity can identify one or more habitat units	1 to 1, Many
tblHabitatUnit - tblHabitatUnitComment	A habitat unit may have 0, 1 or many comments	1 to 0, Many
	A habitat unit comment is for a single unit	1 to 1
tblHabitatUnit - tblHabitatUnitWaterMeasurement	A habitat unit may have 0, 1 or many water measurements	1 to 0, Many
	A habitat unit water measurement occurs at a single unit	1 to 1
tblHabitatUnit - tblRiverSystem	A habitat unit belongs to a single river system	1 to 1
	A river system has 1 or more habitat units	1 to 1, Many
tblLakeSurveyDetail - tblAquaticActivity	Lake survey details are associated with an aquatic activity	1 to 1
	An aquatic activity may produce one occurrence of lake survey details	1 to 0,1
tblLakeSurveyWaterMeasurement - tblAquaticActivity	A lake survey water measurement is associated with a single aquatic activity	1 to 1
	An aquatic activity may take one or more water measurements	1 to 0, Many
tblLakeSurveyFishSpecies - tblAquaticActivity	A fish species present in a lake is associated with a single aquatic activity (lake survey)	1 to 1
	An aquatic activity may find one or more fish species in a lake	1 to 0, Many
tblLakeSurveyTribAssessment - tblAquaticActivity	A lake survey tributary assessment is associated with a single aquatic activity	1 to 1
	An aquatic activity may survey one or more fish net results	1 to 0, Many

ASSESSMENT RESULTS

Fish Population Assessment

RELATIONSHIP DIAGRAM




Microsoft Access - [Relationships]
File Edit View Relationships Tools Window Help
cdFishSpecies
FishSpeciesCd
FishSpecies
cdFishAgeClass
FishAgeClass
FishAgeClassCategory
cdFishStatus
FishStatusCd
FishStatus
FishStatusType
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Sex
tblFishCount
FishCountID
AquaticActivityID
OLDAquaticActivityID
MovementDirection
FishSpeciesCd
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Ready
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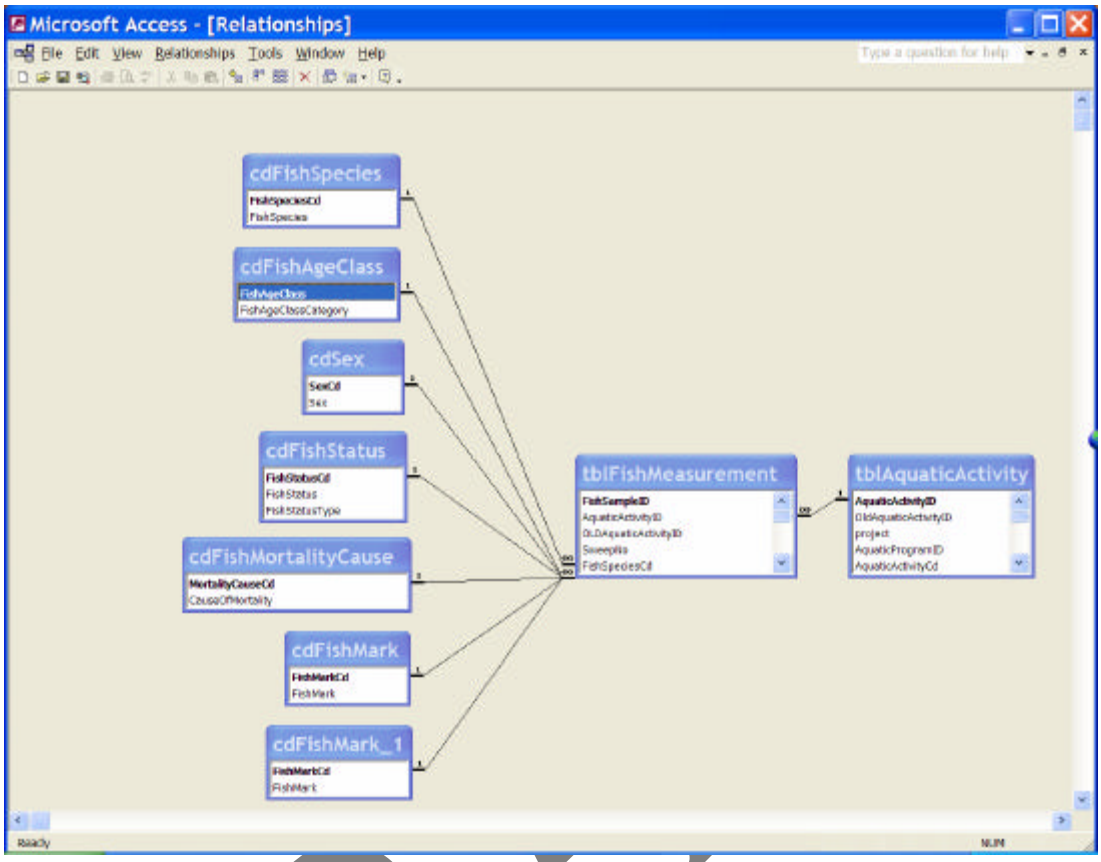
Microsoft Access - [Relationships]
File Edit View Relationships Tools Window Help
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cdFishAgeClass
cdSex
cdFishStatus
cdFishMortalityCause
cdFishMark
cdFishMark_1
tblFishMeasurement
tblAquaticActivity
Ready
NUM

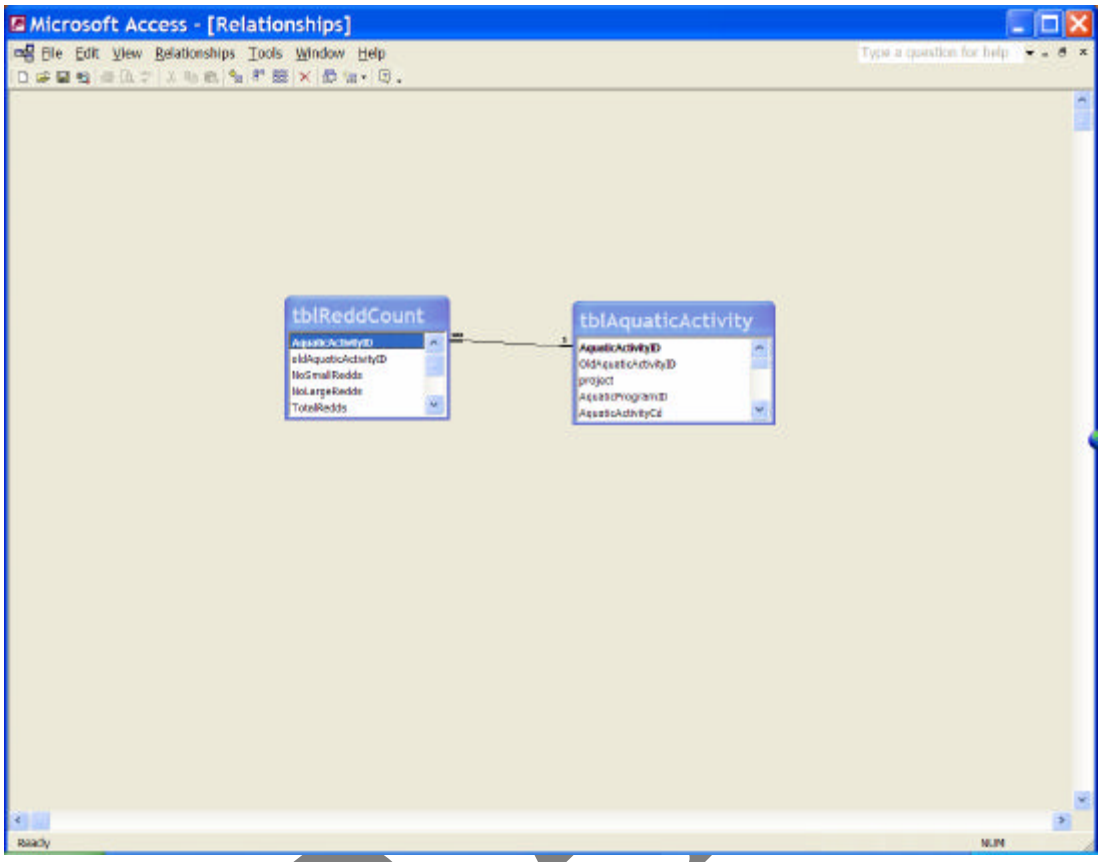

TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblElectrofishingMethodDetail	Details of the electrofishing method used by each electrofishing activity
tblElectrofishingData	Sweep data associated with an electrofishing activity
tblElectrofishingMarkRecaptureData	Mark and recapture data associated with an electrofishing activity using the Petersen method
tblElectrofishingPopulationEstimate	Population estimates derived from electrofishing field data. Contains different types of estimates depending on the methods used
tblFishRunCount	Daily fish counts at fish counting facilities such as barriers, counting fences, smolt wheels and trap nets
tblFishMeasurement	Measurements of individual fish sampled at fish counting facilities or during electrofishing
tblReddCount	Number of salmon redds and/or salmon observed along a stretch of stream during a redd survey activity

RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblElectrofishingMethodDetail - tblAquaticActivity	An electrofishing method detail is associated with a single aquatic activity	1 to 1
	An electrofishing activity may have a related electrofishing method detail	1 to 0,1
tblElectrofishingData - tblAquaticActivity	Electrofishing field data is associated with a single aquatic activity	1 to 1
	An electrofishing activity may have one or more electrofishing data records	1 to 0, Many
tblElectrofishingMarkRecaptureData - tblAquaticActivity	Mark and recapture electrofishing field data is associated with a single aquatic activity	1 to 1
	An electrofishing activity may have one or more mark and recapture data records	1 to 0, Many
tblElectrofishingPopulationEstimate - tblAquaticActivity	An electrofishing population estimates is associated with a single aquatic activity	1 to 1
	An electrofishing activity may produce one or more types of population estimates	1 to 0, Many
tblFishCount - tblAquaticActivity	A daily fish count is associated with a single aquatic activity	1 to 1
	A fish counting activity can have multiple fish counts – one per species or age class	1 to 0, Many
tblFishMeasurement - tblAquaticActivity	A fish measurement is associated with a single aquatic activity	1 to 1
	A fish measurement activity produces one or more measurements, but not all activities are fish measurement activities	1 to 0, Many
tblReddCount - tblAquaticActivity	A redd count is associated with a single aquatic activity	1 to 1
	A redd survey activity produces only one count, but not all activities are redd survey activities	1 to 0,1

ASSESSMENT RESULTS

Water Quality

RELATIONSHIP DIAGRAM

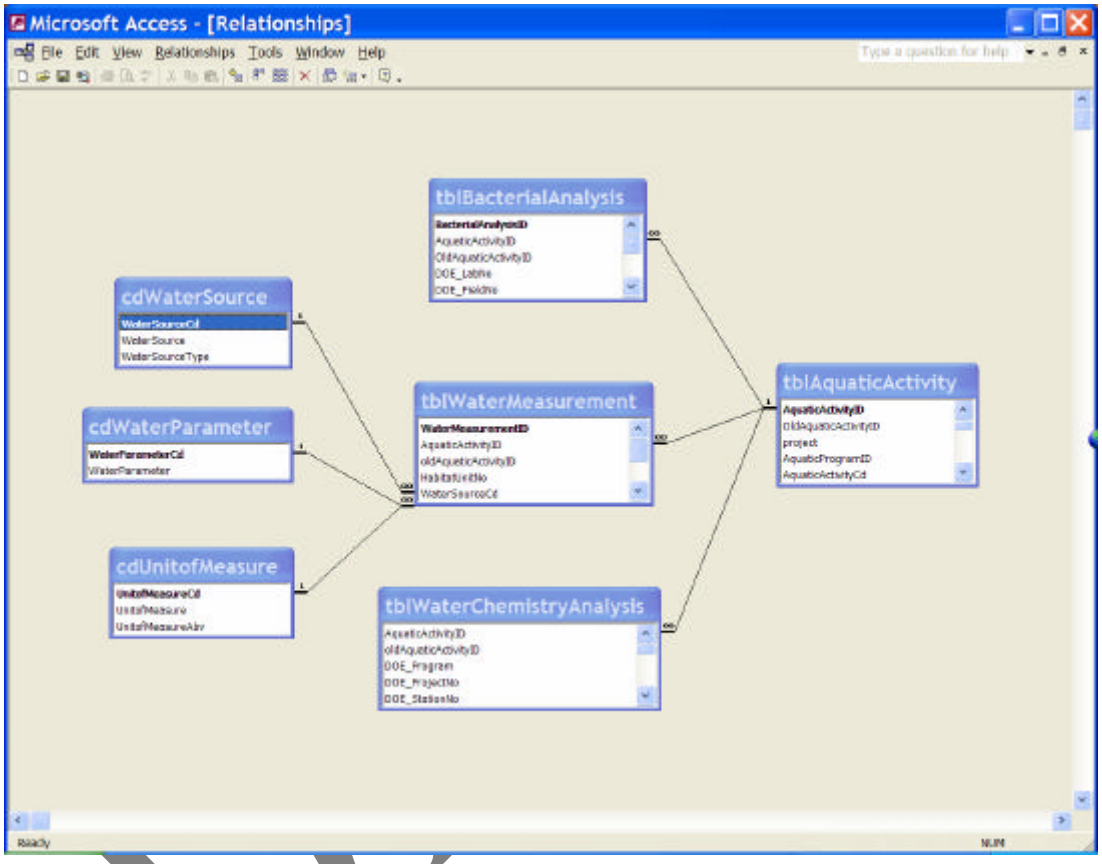

TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblBacterialAnalysis	Water sample bacterial analysis results
tblWaterChemistryAnalysis	Water sample chemical analysis results
tblWaterMeasurement	Field water measurements and derived measurements, such as instantaneous water temperature, minimum, maximum and average daily water temperatures, and water level.

RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblBacterialAnalysis - tblAquaticActivity	A bacterial analysis result is associated with a single aquatic activity	1 to 1
	A bacterial water sampling activity has analysis results, but not all activities are bacterial water sampling	1 to 0,1
tblWaterChemistryAnalysis - tblAquaticActivity	A chemical analysis result is associated with a single aquatic activity	1 to 1
	A water chemistry sampling activity has analysis results, but not all activities are chemistry water sampling	1 to 0,1
tblWaterMeasurement - tblAquaticActivity	A water measurement is associated with a single aquatic activity	1 to 1
	An aquatic activity may take zero, one or more water measurements	1 to 0, Many

RESOURCE USE

Sportfishing

RELATIONSHIP DIAGRAM

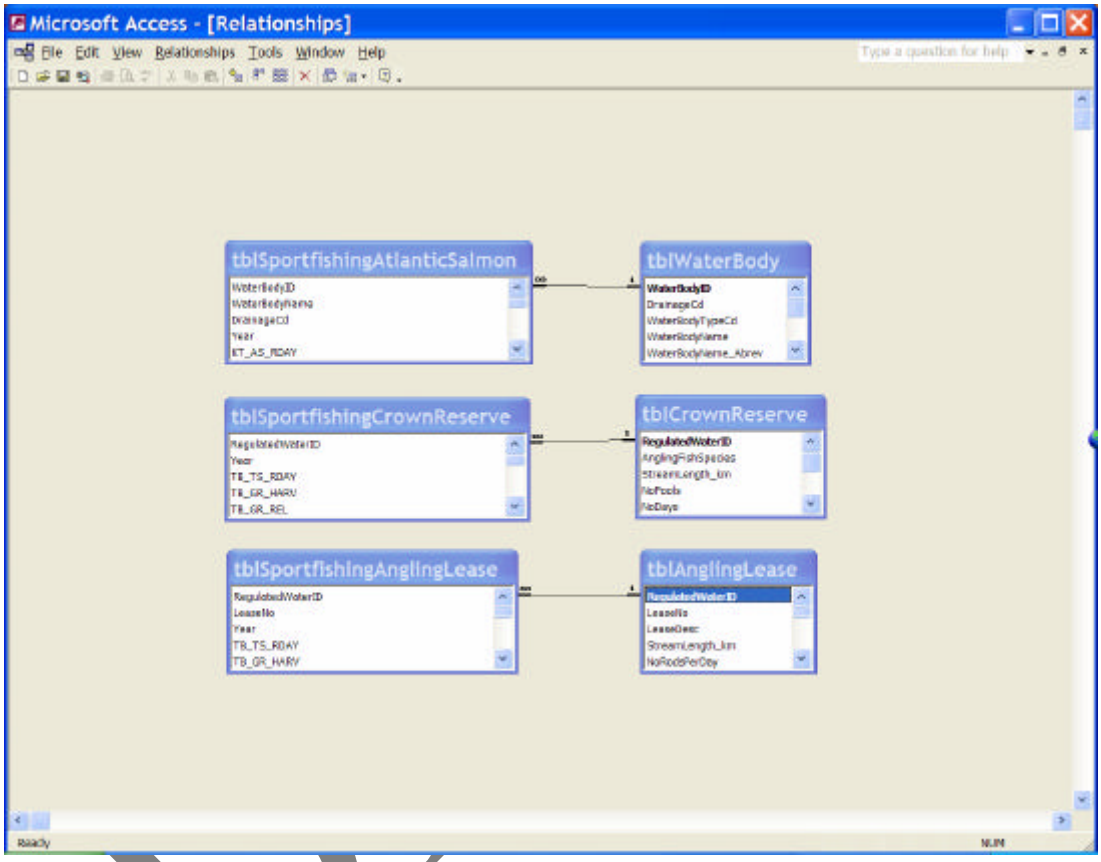

TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblAnglingLicenseSales	Angling license sales since 1954
tblSportFIshingAnglingLease	Brook trout and Atlantic salmon catch and effort on NB's angling leases
tblSportFIshingAtlanticSalmon	Atlantic salmon catch and effort from 1969 – 1997
tblSportFIshingCrownReserve	Brook trout and Atlantic salmon catch and effort on NB's Crown reserves

RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblSportFIshingAnglingLease - tblAnglingLease	Angling lease catch and effort is associated with a angling lease	1 to 1
	An angling lease has multiple years of angling catch and effort	1 to Many
tblSportFIshingAtlanticSalmon - tblWaterBody	Atlantic salmon catch and effort is associated with major salmon streams	1 to 1
	Some streams will have multiple years of salmon angling catch and effort, but not all streams have salmon angling	1 to 0, Many
tblSportFIshingCrownReserve - tblCrownReserve	Crown reserve catch and effort is associated with a Crown reserve	1 to 1
	An Crown reserve has multiple years of angling catch and effort	1 to Many

MANAGEMENT ACTIVITIES

Regulated Angling Waters

RELATIONSHIP DIAGRAM

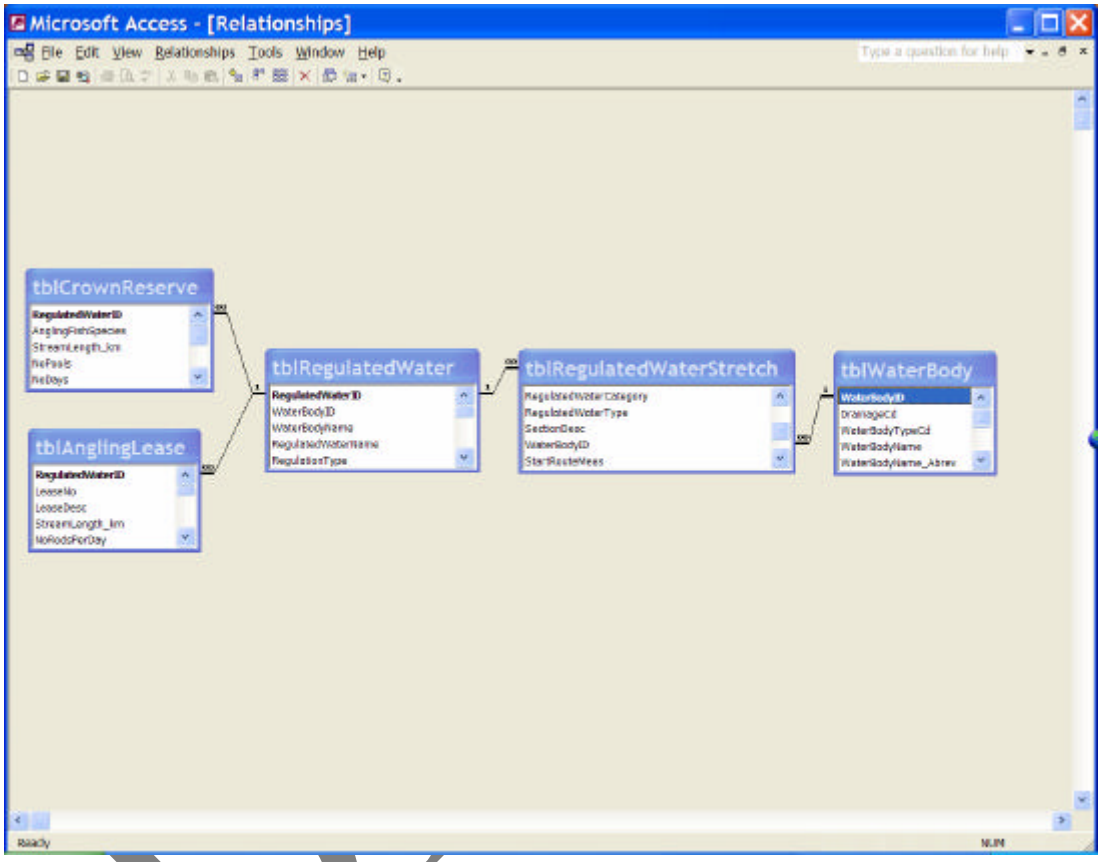

TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblRegulatedWater	List of angling regulated waters. Some regulated river stretches, such as angling leases, may involve multiple stretches
tblRegulatedWaterStretch	Individual stretches of water with angling regulations. Contains the linear spatial references
tblAnglingLease	Active and inactive Crown angling leases
tblCrownReserve	Active and inactive Crown reserves (quality angling waters allotted by lottery)

RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblRegulatedWater - tblRegulatedWaterStretch	A regulated water involves at least one stretch of water or lake	1 to 1, Many
	A regulated stretch belongs to one and only one regulated water	1 to 1
tblRegulatedWater - tblAnglingLease	A regulated water may be an angling lease	1 to 0,1
	An angling lease is a type of regulated water	1 to 0,1
tblRegulatedWater - tblCrownReserve	A regulated water may be a Crown reserve angling water	1 to 0,1
	A Crown reserve is a type of regulated water	1 to 0,1

MANAGEMENT ACTIVITIES

Fish Population Enhancements

RELATIONSHIP DIAGRAM

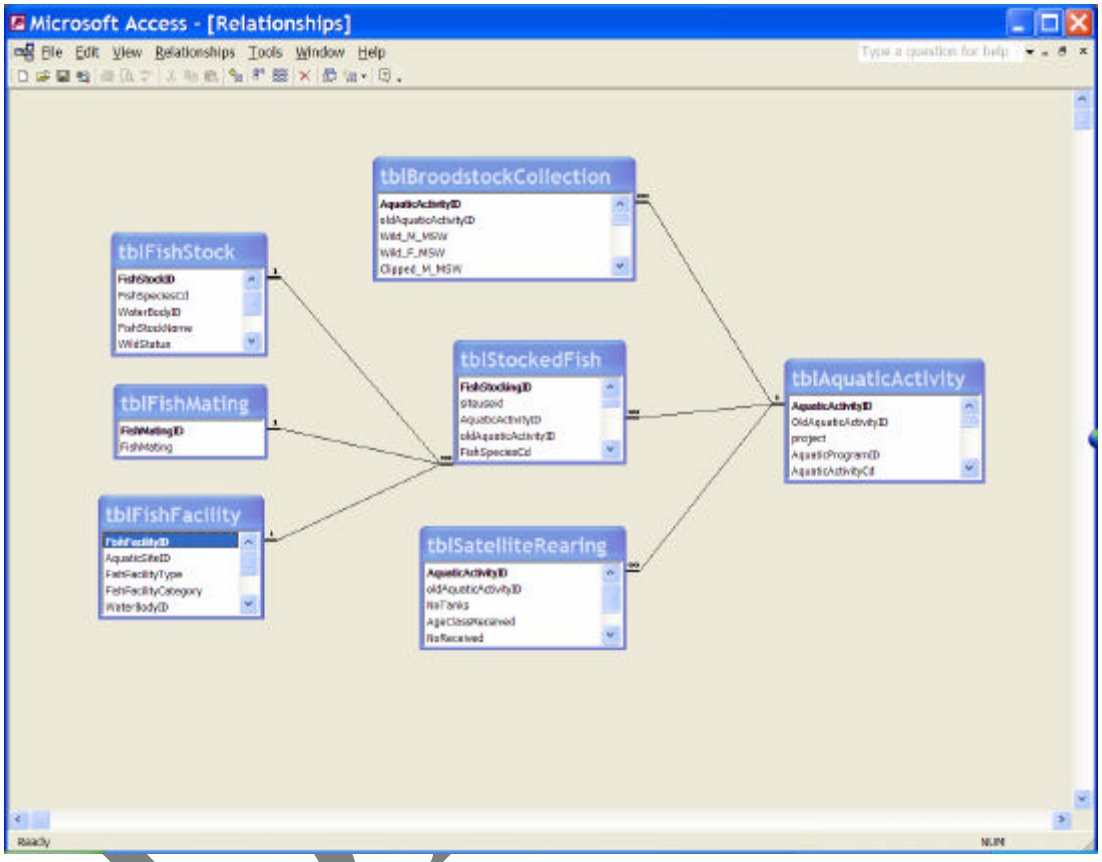

TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblFishFacility	List of fish counting and rearing facilities
tblBroodstockCollection	Numbers of male, female, wild and hatchery fish collected for broodstock
tblFIshMating	Parentage of stocked fish
tblFishStock	Stocks of fish reared in hatcheries. A stock is unique to a specific body of water; wild, hatchery or a cross; run season; and whether the eggs were treated to create triploids.
tblSatelliteRearing	Numbers of Atlantic salmon fry reared at each satellite rearing station

	and the number of fish stocked
tblStockedFish	Number of fish, stock, average length and weight, markings and source of fish stocked in specific bodies of water

RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblStockedFish - tblAquaticActivity	Each record of stocked fish is associated with a single aquatic activity	1 to 1
	Multiple bodies of water can be stocked during a single fish stocking activity	1 to 0, Many
tblSatelliteRearing - tblAquaticActivity	Each record of satellite rearing is associated with a single aquatic activity	1 to 1
	A satellite rearing activity rears fish at a single location in a given year	1 to 0,1
tblBroodstockCollection - tblAquaticActivity	The results of a broodstock collection are associated with a single aquatic activity	1 to 1
	A broodstock collection activity is associated with a single broodstock collection record	1 to 0,1
tblStockedFish - tblFishStock	Stocked fish have a source or origin of the broodstock	1 to 1
	A particular stock of fish may be stocked many times	1 to 1, Many
tblStockedFish - tblFishMating	Stocked fish may be from a particular mating	1 to 0, 1
	Progeny from specific matings may be stocked in one or more locations	1 to 1, Many
tblStockedFish - tblFishFacility	Stocked fish come from a single fish rearing facility	1 to 1
	A fish facility may have many stockings, but not all fish facilities are hatcheries	1 to 0, Many

MANAGEMENT ACTIVITIES

Habitat Enhancement

RELATIONSHIP DIAGRAM

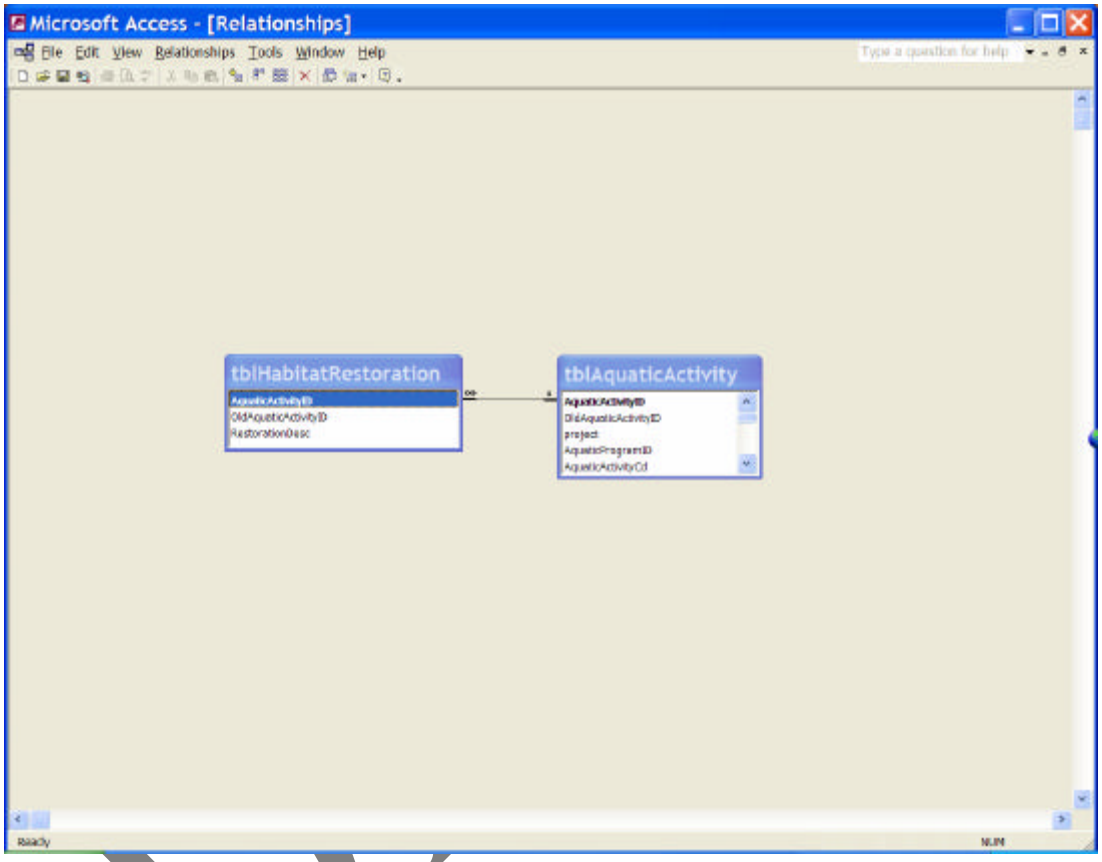

TABLE DESCRIPTIONS

TABLE	DESCRIPTION
tblHabitatRestoration	Description of the restoration work

RELATIONSHIPS

TABLES	RELATIONSHIP	RELATIONSHIP TYPE
tblHabitatRestoration - tblAquaticActivity	Habitat restoration details are associated with a single aquatic activity	1 to 1
	A habitat restoration activity is described by a single habitat restoration detail record	1 to 0,1

CODE TABLES

TABLE DESCRIPTIONS

TABLE	DESCRIPTION
cdAgency	Agencies contributing data to the Data Warehouse
cdAquaticActivity	Types of aquatic activities
cdAquaticActivityMethod	Methods used by specific activities, e.g. electrofishing activity might use the Mark and Recapture method or Zippen Removal
cdCountyParish	County and parish codes and names
cdFishAgeClass	List of valid fish age classes
cdFishMark	List of possible ways of marking fish either through fin clipping, tagging, branding or combination thereof
cdFishMaturity	Codes for fish maturation – mature, immature, precocious
cdFishMortalityCause	Possible causes of fish mortality
cdFishParasiteClass	Classes of fish parasites
cdFishPopulationParameter	Methods of measuring fish populations density, biomass and habitat saturation
cdFishSpecies	List of fish species
cdFishStatus	Status of individual fish processed at fish counting facilities, e.g. some may be dead, tagged, sampled, removed for research, etc.
cdFishStomachContent	Possible contents within a fish's stomach
cdHabitatUnitComment	Comments and associated codes found on the DFO/DNR standardized stream survey form
cdSampleGear	Types of gear used to sample fish and associated codes
cdSex	Sex codes and descriptions
cdSteamChannelType	Stream channel types and associated codes used on the DFO/DNR standardized stream survey form
cdStreamEmbeddedness	Stream embeddedness codes used on the DFO/DNR standardized stream survey form
cdStreamType	Stream channel types and codes used on the DFO/DNR standardized stream survey form
cdUnitofMeasure	Units of measure codes, descriptions and abbreviations
cdWaterParameter	Types of water measurements, actual and derived, such as instantaneous water measurement and average daily water temperature derived from temperature data logger information
cdWaterSource	Water source associated with water temperature measurement as used on the DFO/DNR standardized stream survey form

TABLE DETAILS

tblAnglingLease

Field Name	Description	Field Type	Code Reference
RegulatedWaterID	Unique identifier for each regulated water	Numeric	
LeaseNo	Unique identifier for each angling lease	Numeric	
LeaseDesc	Description of the location of the lease	Text	
StreamLength_km	Length of angling lease in kilometres	Numeric	
NoRodsPerDay	Maximum rods per day	Numeric	
NoRodsPerYear	Maximum rods per year	Text	
ExpiryYear	Date lease expires	Text	
LodgeName	Name of lodge on lease	Text	
Lessee	Holder of the angling lease	Text	
LesseeAddress1	Street address of lessee	Text	
LesseeAddress2	Second line of address of lessee	Text	
LesseeCity	City portion of lessee address	Text	
LesseeProv	State or province of lessee address	Text	
LesseePostalCode	Postal or zip code of lessee address	Text	
Contact1	Individual who is the primary contact for the lease	Text	
Contact1Title	Primary contact's title	Text	
Contact1Dept	Primary contact's department	Text	
Contact1Phone	Primary contact's phone number	Text	
Contact1Fax	Primary contact's fax number	Text	
Contact2	Individual who is the secondary contact for the lease	Text	
Contact2Title	Secondary contact's title	Text	
Contact2Department	Secondary contact's department	Text	
Contact2Phone	Secondary contact's phone number	Text	
Contact2Fax	Secondary contact's fax number	Text	
Manager	Individual who manages the lodge	Text	
ManagerPhone	Lodge manager's phone number	Text	

tblAnglingLicenseSales

Field Name	Description	Field Type	Code Reference
LicenseSalesID	Unique identifier for each sales record	Numeric	
LicenseCd	Numeric code representing the residence, license type, class of licence and duration of licence or special waters	Numeric	
Residence	Residence of licence holder – NB or non-resident	Text	Resident Non-Resident
LicenseType	Type of licence Salmon, general angling, special waters	Text	General Ice Fishing Salmon Special Waters
LicenseClass	Code assigned by DNR to represent each type of license	Text	1-10 Permit Reserve
LicenseDesc	Description of licence	Text	
Year	Sales year	Numeric	

tblAquaticActivity

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier for aquatic activities	Numeric	
Project	Used internally by DW	Text	
AquaticProgramID	Identifies the program or project the activity is associated with, such as an EIA project, DELG's Water Classification program, or a research project.	Numeric	
AquaticActivityCd	Type of activity performed	Numeric	cdAquaticActivity
AquaticMethodCd	Method of carrying out the activity	Numeric	cdAquaticActivityMethod
AquaticSiteID	Unique identifier of the aquatic site where activity occurred	Numeric	
AquaticActivityStartDate	Date the activity started or occurred	Text	
AquaticActivityEndDate	Date the activity ended	Text	
AquaticActivityStartTime	Time of day the activity started or occurred	Text	
AquaticActivityEndTime	Time of day the activity ended	Text	
Year		Text	

Field Name	Description	Field Type	Code Reference
AgencyCd	Code representing the agency performing the activity	Text	cdAgency
Agency2Cd	Secondary agency involved in the activity	Text	cdAgency
AquaticActivityLeader	Person responsible for the activity	Text	
Crew	Personnel involved in the activity	Text	
WeatherConditions	Description of weather conditions at the time of the activity	Text	
WaterLevel	Description of the water level conditions	Text	
WaterLevel_cm	Water level measured in centimetres	Text	
WaterLevel_AM_cm	Water level measured in the morning recorded in centimetres	Text	
WaterLevel_PM_cm	Water level measured in the evening recorded in centimetres	Text	
Siltation	Description of the water clarity	Text	
PrimaryActivityInd	Indicated whether the activity is the primary activity and other activities also occurred during the primary activity, e.g, gathering fish measurements during fish counts or electrofishing. The fish count or electrofishing activity would be the primary activity	Yes/No	
Comments	Comments	Text	
DateEntered	Date information recorded in database	Text	

tblAquaticProgram

Field Name	Description	Field Type	Code Reference
AquaticProgramID	Unique identifier for each program	Numeric	
AquaticProgramName	Name of program	Text	
AquaticProgramPurpose	Purpose of program	Text	
AquaticProgramStartDate	Date program started	Date/Time	
AquaticProgramEndDate	Date program ended	Date/Time	
AgencyCd	Code representing agency undertaking the project or program	Text	cdAgency
AquaticProgramLeader	Name of project leader	Text	

tblAquaticSite

Field Name	Description	Field Type	Code Reference
AquaticSiteID	Unique identifier for each aquatic site	Numeric	
RiverSystemID	ID of river system the site belongs to – generally used for stream habitat survey stretches	Numeric	
WaterBodyID	ID of body of water the site is part of	Numeric	
AquaticSiteName	Name of site	Text	
HabitatDesc	Description of stream type or habitat	Text	
ReachNo	Survey reach number the site is associated with as identified on the stream survey form – represents a stretch of stream surveyed during a given day	Numeric	
StartDesc	Description of the starting point if the site represents a stretch of stream	Text	
EndDesc	Description of the end point if the site represents a stretch of stream	Text	
StartRouteMeas	Stream route measure of the stretch's start point – used by GIS for displaying linear stream data, such as regulated waters	Numeric	
EndRouteMeas	Stream route measure of the stretch's end point – used by GIS for displaying linear stream data, such as regulated waters	Numeric	
SpecificSiteInd	Indicates whether the site represents the entire body of water or a specific point or stretch of a water body	Text	Blank = specific site N = represents entire body of water
GeoReferencedInd	Indicates whether the site has been mapped	Text	Blank = mapped N = not mapped
DateEntered	Date information recorded in database	Date/Time	

tblAquaticSiteAgencyUse

Field Name	Description	Field Type	Code Reference

Field Name	Description	Field Type	Code Reference
AquaticSiteUseID	Unique identifier for each agency site use record	Numeric	
AquaticSiteID	ID of site used by an agency	Numeric	
AquaticActivityCd	Code representing the activity occurring at the site	Numeric	cdAquaticActivity
AgengySiteID	Site identifier used by the agency	Text	
StartYear	Year the agency started using the site	Text	
End Year	Year the agency stopped using the site	Text	
YearsActive	Years active	Text	

tblBacterialAnalysis

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with		
DOE_LabNo	Number assigned by DOE lab	Text	
DOE_FieldNo	Number assigned by field crew	Text	
SampleDepth_m	Depth at which water sample was collected - measured in metres.	Numeric	
WaterTemp_C	Water temperature measured in °C	Numeric	
QualifierA	Qualifies the data for faecal coliforms, sample A	Text	
FaecalColiformCount_A	Number of colony forming units per 100 ml, sample A	Numeric	
QualifierB	Qualifies the data for faecal coliforms, sample B	Text	
FaecalColiformCount_B	Number of colony forming units per 100 ml, sample B	Numeric	

tblBroodstockCollection

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
Wild_M_MSW	Number of wild male multi-sea winter (MSW) Atlantic salmon seined	Numeric	
Wild_F_MSW	Number of wild female multi-sea winter (MSW) Atlantic salmon seined	Numeric	
Clipped_M_MSW	Number of hatchery-raised (adipose fin-clipped) male multi-sea winter (MSW) Atlantic salmon seined	Numeric	
Clipped_F_MSW	Number of hatchery-raised (adipose fin-clipped) female multi-sea winter (MSW) Atlantic salmon seined	Numeric	
Total_M_MSW	Total number of clipped and wild male multi-sea winter (MSW) Atlantic salmon seined	Numeric	
Total_F_MSW	Total number of clipped and wild female multi-sea winter (MSW) Atlantic salmon seined	Numeric	
Total_MSW	Total number of multi-sea winter (MSW) Atlantic salmon seined	Numeric	
Wild_M_Grilse	Number of wild male grilse (1SW) Atlantic salmon seined	Numeric	
Wild_F_Grilse	Number of wild female grilse (1SW) Atlantic salmon seined	Numeric	
Clipped_M_Grilse	Number of hatchery-raised (adipose fin-clipped) male grilse (1SW) Atlantic salmon seined	Numeric	
Clipped_F_Grilse	Number of hatchery-raised (adipose fin-clipped) female grilse (1SW) Atlantic salmon seined	Numeric	
Total_M_Grilse	Total number of clipped and wild male grilse (1SW) Atlantic salmon seined	Numeric	
Total_F_Grilse	Total number of clipped and wild female grilse (1SW) Atlantic salmon seined	Numeric	
Total_Grilse	Total number of grilse (1SW) Atlantic salmon seined	Numeric	

Field Name	Description	Field Type	Code Reference
Total_F_ASalmon	Total number of female Atlantic Salmon seined	Numeric	
Total_M_ASalmon	Total number of male Atlantic Salmon seined	Numeric	
Total_ASalmon	Total number of Atlantic Salmon seined	Numeric	
Comments	Any relevant comments e.g. tagged fish, other species seined, etc	Text	

tblCrownReserve

Field Name	Description	Field Type	Code Reference
RegulatedWaterID	Regulated water ID of the Crown reserve	Numeric	
CrownReserveID	Unique identifier for each Crown reserve assigned by the Data Warehouse	Numeric	
AnglingFishSpecies	Species of fish anglers fish for on the reserve	Text	
StreamLength_km	Length of stream available for fishing	Numeric	
NoPools	Number of pools available for angling	Numeric	
NoDays	Number of calendar days available to each party	Numeric	
MaxRodPerDay	Maximum number of individuals that can be fishing at one time	Numeric	
AccommodationsInd	Indicates whether or not accommodations are on site	Text	Y = Yes N = No
StartYear	Year the stretch of water was first regulated as a Crown reserve	Text	
EndYear	Year the stretch of water ceased to be regulated as a Crown reserve	Text	
ActiveInd	Indicates whether or not the Crown reserve is still active	Text	Blank = Yes N = No

tblDraingeUnit

Field Name	Description	Field Type	Code Reference
Level1No	Numeric code representing the 1st level drainage basin	Text	
Level1Name	Name of the 1st level drainage basin	Text	
Level2No	Numeric code representing the 2nd level drainage unit	Text	
Level2Name	Name of the 2nd level drainage basin	Text	
Level3No	Numeric code representing the 3rd level drainage unit	Text	
Level3Name	Name of the 3rd level drainage basin	Text	
Level4No	Numeric code representing the 4th level drainage unit	Text	
Level4Name	Name of the 4th level drainage basin	Text	
Level5No	Numeric code representing the 5th level drainage unit	Text	
Level5Name	Name of the 5th level drainage basin	Text	
Level6No	Numeric code representing the 6th level drainage unit	Text	
Level6Name	Name of the 6th level drainage basin	Text	
DrainageCd	Concatenation of the drainage system codes	Text	tblDrainageUnit
UnitName	Name of the drainage unit	Text	
UnitType	Type of drainage unit - stream, headwaters or composite	Text	
BorderInd	Indicates whether the drainage unit is incomplete as drainage area extends into Maine, Québec or Nova Scotia	Text	Y = Yes Blank = No
StreamOrder	The order of the stream if a drainage unit represents a stream	Numeric	
Area_ha	Drainage area measured in hectares as defined by the drainage area polygon	Numeric	
Area_percent	Percent of province drainage unit's drainage area represents	Numeric	

tblElectrofishingData

Field Name	Description	Field Type	Code Reference
EFDataID	Unique identifier of the electrofishing data record	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
FishSpeciesCd	Species code of fish electrofished	Text	cdFishSpecies
FishAgeClass	Age class of fish electrofished (e.g., 0+, 1+, 2+, Fry, Parr)	Text	cdFishAgeClass
AveWeight_gm	Average weight of captured fish, measured in grams		
AveForkLength_cm	Average fork length of captured fish, measured in centimetres	Numeric	
AveTotalLength_cm	Average total length of captured fish measured in centimetres		
Sweep1NoFish	***Zippin:*** No. of fish captured in first sweep of the electrofishing device ***Petersen:*** No. of fish captured, marked and released on the first sweep	Numeric	
Sweep1Time_s	Number of shocking seconds for first sweep	Numeric	
Sweep2NoFish	***Zippin:*** No. of fish captured in second sweep of the electrofishing device ***Petersen:*** No.unmarked fish on the second sweep	Numeric	
Sweep2Time_s	Number of shocking seconds for second sweep	Numeric	
Sweep3NoFish	***Zippin:*** No. of fish captured in third sweep of the electrofishing device ***Petersen:*** No. marked fish on the second sweep	Numeric	
Sweep3Time_s	Number of shocking seconds for third sweep	Numeric	
Sweep4NoFish	***Zippin:*** No. of fish captured in fourth sweep of the electrofishing device	Numeric	
Sweep4Time_s	Number of shocking seconds for fourth sweep	Numeric	

Field Name	Description	Field Type	Code Reference
Sweep5NoFish	***Zippin:*** No. of fish captured in fifth sweep of the electrofishing device	Numeric	
Sweep5Time_s	Number of shocking seconds for fifth sweep	Numeric	
Sweep6NoFish	***Zippin:*** No. of fish captured in sixth sweep of the electrofishing device	Numeric	
Sweep6Time_s	Number of shocking seconds for sixth sweep	Numeric	
PercentClipped	Percentage of fish captured with adipose fin clips (indicating hatchery origin)	Numeric	
Comments	General comments	Text	

tblElectrofishingMarkRecaptureData

Field Name	Description	Field Type	Code Reference
EFMRDataID	Unique identifier of the electrofishing mark and recapture data record	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
RecaptureTime		Numeric	
FishSpeciesCd	Species code of fish electrofished	Text	cdFishSpecies
FishAgeClass	Age class of fish electrofished (e.g., 0+, 1+, 2+, Fry, Parr)	Text	cdFishAgeClass
AveWeight_gm	Average weight of captured fish measured in grams	Numeric	
AveForkLength_cm	Average fork length of captured fish measured in centimetres	Numeric	
AveTotalLength_cm	Average total length of captured fish measured in centimetres	Numeric	
MarkCount	Number of fish captured on the first sweep for marking	Numeric	
MarkMarked	Number of fish marked	Numeric	
MarkMorts	Number of marked fish which died	Numeric	
RecaptureCount	Number of fish recaptured on the second sweep	Numeric	
RecaptureUnmarked	Number of unmarked fish captured on the second sweep	Numeric	

Field Name	Description	Field Type	Code Reference
RecaptureMarked	Number of marked fish captured on the second sweep	Numeric	
RecaptureMorts	Number of fish captured on the second sweep which were dead	Numeric	
MarkEfficiency	Equals marked recaptures divided by total recapture count	Numeric	
Comments	Comments	Text	

tblElectrofishingMethodDetail

Field Name	Description	Field Type	Code Reference
AquaticActivityDetailID	Unique identifier of the electrofishing method detail record	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
Device	Device used for sampling (e.g., Backpack, Boat)	Text	
SiteSetup	Site setup used (e.g., Open, Closed)	Text	
NoSweeps	Number of sweeps performed at the site	Numeric	
StreamLength_m	Length of sample area (m)	Numeric	
Area_m2	Surface area of the stream section being sampled (m^2)	Numeric	

tblElectrofishingPopulationEstimate

Field Name	Description	Field Type	Code Reference
EFPopulationEstimateID	Unique identifier of the electrofishing fish population ecord	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
FishSpeciesCd	Species code of fish electrofished	Text	cdFishSpecies
FishAgeClass	Age class of fish electrofished (e.g., 0+, 1+, 2+, Fry, Parr)	Text	cdFishAgeClass
RelativeSizeClass	Relative size the age class, e.g. large parr or small parr	Text	Large, Small

Field Name	Description	Field Type	Code Reference
AveForkLength_cm	Average fork length of captured fish measured in centimetres	Numeric	
AveWeight_gm	Average weight of captured fish measured in grams		
PopulationParameter	Type of population estimate - Density, PHS, Minimum Density or Minimum PHS	Text	Biomass, CPUE, Density, Minimum Density, Minimum PHS, PHS
PopulationEstimate	Population estimate (Density in per 100 m^2, PHS in %)	Numeric	
Comments	General comments	Text	

tblFishCount

Field Name	Description	Field Type	Code Reference
FishCountID	Unique identifier of the fish count record	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
MovementDirection	Direction fish are migrating	Text	Down, Up
FishSpeciesCd	Code representing the fish species caught	Text	cdFishSpecies
FishOrigin	Indicates whether the fish are hatchery, wild or unknown	Text	Hatchery Wild Unknown
FishAgeClass	Age class of fish electrofished (e.g., 0+, 1+, 2+, Fry, Parr)	Text	cdFishAgeClass
RelativeSizeClass	Relative size the age class, e.g. large MSW or small MSW	Text	Large, Small
FishAge	Actual age of fish as determine through scale reading	Text	
SexCd	Sex of fish	Text	cdSex
NoFish	Number of fish translocated	Numeric	
FishStatusCd	Indicates whether the fish were released, tagged, dead, sacrificed, removed, etc	Text	cdFishStatus
RPM		Numeric	
RPM Left/Right		Text	Left, Right

tblFishFacility

Field Name	Description	Field Type	Code Reference
FishFacilityID	Unique identifier of fish facility	Numeric	
AquaticSiteID	ID of site where facility is located	Numeric	
FishFacilityType	Type of facility	Text	Aquaculture Barrier Counting Fence Fishway Fishway Trap Fyke Net Hatchery Research Satellite Rearing Smolt Wheel SRC Trap Net
FishFacilityCategory	Category of facility – fish counting or fish rearing	Text	Fish Counting Fish Rearing
FishFacilityName	Name of facility	Text	
AgencyCd	Agency operating the facility	Text	cdAgency
YearsActive	Years active	Text	
ActiveInd	Indicates whether the facility is active	Text	

tblFishMating

Field Name	Description	Field Type	Code Reference
FishMatingID	Unique identifier of fish mating	Numeric	
FishMating	Description of parents	Text	

tblFishMeasurement

Field Name	Description	Field Type	Code Reference
FishSampleID	Unique identifier of fish sample	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
SweepNo	Sweep number if the measurements are captured during electrofishing	Numeric	

Field Name	Description	Field Type	Code Reference
FishSpeciesCd	Code representing the fish species	Text	cdFishSpecies
FishOrigin	Indicates whether the fish are hatchery, wild or unknown	Text	
FishAgeClass	Age or age class category (e.g., 2+, parr, 1SW, MSW) of fish	Text	cdFishAgeClass
RelativeSizeClass	Relative size the age class, e.g. large parr or small parr	Text	Large, Small
FishAge	Actual age of fish as determine through scale reading	Text	
SexCd	Sex of fish	Text	cdSex
Maturity	Sexual maturity of fish	Text	Immature Mature Precocious Unknown
FishStatusCd	Indicates whether the fish were released, tagged, dead, sacrificed, removed, etc	Text	cdFishStatus
FishMortalityCauseCd	Code representing the cause for mortality	Text	cdFishMortalityCause
ForkLength_mm	Fork length of fish measured in mm	Numeric	
TotalLength_cm	Total length of fish measured in mm	Numeric	
Weight_gm	Average fish weight measured in grams	Numeric	
ObservedMarkCd	Observed mark or tag on the fish	Text	cdFishMark
ObservedTagNo	Tag number found on fish	Text	
AppliedMarkCd	Mark or tag applied to the fish	Text	cdFishMark
AppliedTagNo	Tag number applied to fish	Text	
ScaleSampleInd	Indicates whether scale sample removed	Text	A= N=No Y=Yes
KFactor	Condition factor	Text	
Comments	General comments	Text	

tblFishStock

Field Name	Description	Field Type	Code Reference
FishStockID	Unique identifier of fish stock	Numeric	
FishSpeciesCd	Code representing fish species	Text	cdFishSpecies

Field Name	Description	Field Type	Code Reference
WaterBodyID	ID of water body if the fish stock is from a NB lake or stream	Numeric	
FishStockName	Name of fish stock	Text	
WildStatus	Indicates whether the stock is wild, domestic, hatchery return, a cross, etc.	Text	Aquaculture Domestic Domestic x Wild Hatchery Return Millbank Sea Cage Line Sea Ranch Line Strathadam Unknown Wild Wild x Domestic Wild x Hatchery Wild x Hatchery Return
RunSeason	Season the stock migrates into freshwater	Text	
TriploidInd	Indicates whether the stock is triploid	Yes/No	
LandlockedInd	Indicates whether the stock is landlocked	Yes/No	

tblFishTranslocation

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the translocation is associated with	Numeric	
FishStockID	Stock of fish being translocated	Numeric	tblFishStock
FishAgeClass	Age or age class of fish being translocated (e.g., 3+, smolt, adult, 1SW, MSW)	Text	cdFishAgeClass
NoFish	Number of fish translocated	Numeric	
ForkLength_cm	Average fish length measured in centimetres	Numeric	
Weight_gm	Average fish weight measured in grams	Numeric	
AppliedMarkCd	Code indicating the type of tag or mark used to identify translocated fish	Numeric	cdFishMark
AppliedTagNo	Number of tag applied	Text	

Field Name	Description	Field Type	Code Reference
Source	Source of origin for translocated fish (e.g., specific pool or site)	Text	

tblHabitatRestoration

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the restoration is associated with	Numeric	
RestorationDesc	Description of habitat alteration activity (e.g., rock riffle construction, small substrate removal, dam removal)	Text	

tblHabitatUnitComment

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
HabitatUnitID	Unique number representing an individual habitat unit. Assigned by the Data Warehouse	Numeric	
CommentCd	Numeric comment code recorded on the stream survey form	Text	cdHabitatUnitComment
Comment	Description of comment code	Text	

tblHabitatUnit

Field Name	Description	Field Type	Code Reference
HabitatUnitID	Unique number representing an individual habitat unit. Assigned by the Data Warehouse	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the unit is associated with	Numeric	

Field Name	Description	Field Type	Code Reference
RiverSystemID	A number assigned to a collection of streams within the same drainage unit to be displayed together in the Data Warehouse system	Numeric	tblRiverSystem
WaterBodyID	Unique identifier of the surveyed stream	Numeric	
WaterBodyName	Name of the surveyed stream	Text	
DrainageCd	Drainage system codes indicating the drainage unit of the surveyed stream	Text	
AgencyCd	Code for agency or group performing the survey	Text	cdAgency
Personnel	Initials or names of individuals performing the survey	Text	
StartRouteMeas	***FOR GIS PURPOSES***. Starting point along the stream route where the habitat unit begins. Measurement in meters	Numeric	
EndRouteMeas	***FOR GIS PURPOSES***. End location along the stream route where the habitat unit ends. Equals From Measure + Unit Length. Measurement in meters	Numeric	
CalibratedLength_m	A calibrated unit length calculated for plotting when the stream survey data is significantly (±10% or more) different than the stream route length covering the same stretch	Numeric	
StreamOrder	Order of stream where habitat unit occurs	Numeric	
ReachNo	Reach number as indicated on the survey form. Generally refers to a stretch of stream surveyed during a given time period. Has no standard meaning, but maintained for cross referencing data sheets	Numeric	
HabitatUnitNo	Sequential habitat unit number assigned at the time of survey. Useful for cross referencing data sheets	Text	
StreamTypeCd	Numeric code representing the geomorphic description of the habitat unit	Text	cdStreamType
ChannelCd	Numeric code representing the type of stream channel	Text	cdStreamChannelType
ChannelPosition	Position of main or side channel if left, right or middle	Text	L = Left R = Right M = Middle

Field Name	Description	Field Type	Code Reference
StreamLength_m	Length of the habitat unit measured in meters	Numeric	
WetWidth_m	Average width (meters) of the channel that is currently wet	Numeric	
BankFullWidth_m	Average width (meters) of the channel at high water	Numeric	
Area_m2	Area of the habitat unit measured in m^2	Numeric	
Bedrock	Percent of substrate composed of bedrock	Numeric	0-100%
Boulder	Percent of substrate composed of boulder	Numeric	0-100%
Rock	Percent of substrate composed of rock	Numeric	0-100%
Rubble	Percent of substrate composed of rubble	Numeric	0-100%
Gravel	Percent of substrate composed of gravel	Numeric	0-100%
Sand	Percent of substrate composed of sand	Numeric	0-100%
Fines	Percent of substrate composed of fines	Numeric	0-100%
TotalLgSubstrate	Percent of large substrate types - rock + boulder+ bedrock	Numeric	0 - 100%
AveDepth_cm	Average depth of channel measured in centimeters	Numeric	
UndercutBank_L	Percent of left bank length which is undercut	Numeric	0 - 100%
UndercutBank_R	Percent of right bank length which is undercut	Numeric	0 - 100%
OverhangingVeg_L	Percent of stream width shaded overhanging vegetation on left bank	Numeric	0 - 50%
OverhangingVeg_R	Percent of stream width shaded overhanging vegetation on right bank	Numeric	0 - 50%
WoodyDebrisLength_m	Total length (meters) of woody debris greater than 10 cm in diameter	Numeric	
WoodyDebrisLengthPer100 m^2	Length of woody debris (m) per 100 m^2 of habitat area	Numeric	
WaterSourceCd	Numeric code indicating the source of water being measured	Text	cdWaterSource
WaterFlow_cms	Flow of water source measured in cubic meters per second	Numeric	
AssmtTime	Time of day when water temperature or flow is measured	Text	
WaterTemp_C	Water temperature measured in ºC	Numeric	

Field Name	Description	Field Type	Code Reference
AirTemp_C	Ambient air temperature measured in ºC	Numeric	
EmbeddedCd	Numeric code representing the extent of embeddedness	Text	cdStreamEmbeddedness
CommentCds	String of comment codes as per survey sheet. A comment code represents a feature such as a road crossing, active beaver dam, or cottage present	Text	cdHabitatUnitComment
Shade	Percent shade	Numeric	0 - 100%
Bank_Bare	Percent of stream bank which has no vegetation	Numeric	0 - 100%
Bank_Grass	Percent of stream bank vegetation which is grassy	Numeric	0 - 100%
Bank_Shrubs	Percent of stream bank vegetation composed of shrubs	Numeric	0 - 100%
Bank_Trees	Percent of stream bank vegetation composed of trees	Numeric	0 - 100%
Bank_L_Stable	Percent of left bank which is stable	Numeric	0 - 100%
Bank_L_BarelyStable	Percent of left bank which is barely stable	Numeric	0 - 100%
Bank_L_Eroding	Percent of left bank which is eroding	Numeric	0 - 100%
Bank_R_Stable	Percent of right bank which is stable	Numeric	0 - 100%
Bank_R_BarelyStable	Percent of right bank which is barely stable	Numeric	0 - 100%
Bank_R_Eroding	Percent of right bank which is eroding	Numeric	0 - 100%
FieldNotes	Descriptive free form text or general comments (not comment codes)	Text	

tblHabitatUnitWaterMeasurement

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
HabitatUnitID	Habitat Unit ID to which water temperature or flow data is associated	Numeric	
WaterSourceCd	Numeric code indicating the source of water being measured	Text	cdWaterSource
AssmtTime	Time of day when water temperature or flow is measured	Text	

Field Name	Description	Field Type	Code Reference
WaterTemp_C	Water temperature measured in ºC	Numeric	
AirTemp_C	Ambient air temperature measured in ºC	Numeric	
WaterFlow_cms	Flow of water source (measured in cubic meters per second)	Numeric	
WaterFlow_gpm	Flow of water source (measured in gallons per minute)	Numeric	
WaterFlow_lpm	Flow of water source (measured in litres per minute)	Numeric	

tblLakeAttribute

Field Name	Description	Field Type	Code Reference
WaterBodyID	Unique number representing a lake	Numeric	
County	County the lake is located in	Text	
Parish	Parish the lake is located in	Text	
LakeClass	Lake classification – oligotrophic, mesotrophic, eutrophic, or mesotrophic	Text	
Area_m2	Area of the lake as determined by GIS, measured in square meters	Numeric	
Perimeter_m	Perimeter of the lake measured in meters by GIS	Numeric	
ShorelineCrown_Percent	Percent of the lake's shoreline owned by the crown.	Numeric	
ShorelinePrivate_Percent	Percent of the lake's shoreline which is privately owned	Numeric	
Depth_Max	Maximum depth of lake if known	Numeric	
Depth_Mean	Mean depth of lake if known	Numeric	
Depth_Percent_LT6m	Percent of lake less than 6m(20 ft) deep	Numeric	
Depth_Percent_LT3m	Percent of lake less than 3m(10 ft) deep	Numeric	
StratifiedInd	Indicates whether the lake is stratified	Text	N = No Y = Yes
Volume_m3	Volume of lake if known, Measured in m3	Numeric	
AcreFeet	Surface area multiplied by mean depth	Numeric	

Field Name	Description	Field Type	Code Reference
MEI	Morphoedaphic Index - Productivity index derived from total dissolved solids/mean depth	Numeric	
PotentialProductivity	Productivity index developed by DNRE	Numeric	
WCHIndex	Productivity index developed by DNRE	Numeric	
SalmonIndex	Productivity index for landlocked salmon	Numeric	
TogueIndex	Productivity index for lake trout	Numeric	
TotalProductivity	Total lake productivity	Numeric	
ShorelineDev	A quantitative expression describing the configuration of the shoreline and an indicator of lake productivity SDI = Shoreline Length ÷ 2 vp*Area	Numeric	

tblLakeSurveyDetail

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the lake survey details are associated with		
DNRRegion	DNRE region in which lake is located	Text	1=Region 1 2=Region 2 3=Region 3 4=Region 4 5=Region 5
CountyCd	Code representing the county in which the lake is located	Text	cdCountyParish
County	Name of the county in which the lake is located	Text	
ParishCd	Code representing the parish in which the lake is located	Text	cdCountyParish
Parish	Name of the parish in which the lake is located	Text	
AirTemp_F	Ambient air temperature measured in ºF	Numeric	
Terrain_Flat	Percentage of drainage basin which is considered flat	Numeric	
Terrain_Rolling	Percentage of drainage basin which is rolling hills	Numeric	

Field Name	Description	Field Type	Code Reference
Terrain_Hilly	Percentage of drainage basin which is hilly	Numeric	
Terrain_Mountainous	Percentage of drainage basin which is mountainous	Numeric	
Forest_Softwood	Percentage of forest cover which is softwood only	Numeric	
Forest_Hardwood	Percentage of forest cover which is hardwood only	Numeric	
Forest_Softwood_ Hardwood	Percentage of forest cover which is predominantly softwood with some hardwood	Numeric	
Forest_Hardwood_ Softwood	Percentage of forest cover which is predominantly hardwood with some softwood	Numeric	
ShoreUse_RecentCutover	Percentage of shoreline with forest which has recently been cut	Numeric	
ShoreUse_MatureTimber	Percentage of shoreline that has mature timber	Numeric	
ShoreUse_ImmatureTimber	Percentage of shoreline that has immature timber	Numeric	
ShoreUse_Residential	Percentage of shoreline that is residential	Numeric	
ShoreUse_Cottages	Percentage of shoreline that has cottages	Numeric	
ShoreUse_Farm Land	Percentage of shoreline that is used for farming	Numeric	
ShoreUse_Wetlands	Percentage of shoreline that is wetland	Numeric	
AquaticVeg_Submerged	Percentage of submerged aquatic vegetation	Numeric	
AquaticVeg_Emergent	Percentage of emergent aquatic vegetation	Numeric	
ShoreVeg_Sedge	Percentage of shoreline shrubs which are sedge	Numeric	
ShoreVeg_Heath	Percentage of shoreline shrubs which are heath	Numeric	
ShoreVeg_Cedar	Percentage of shoreline shrubs which are cedar	Numeric	
ShoreVeg_Alder	Percentage of shoreline shrubs which are alder	Numeric	
Substrate_Mud	Percentage of shoreline substrate consisting of mud	Numeric	

Field Name	Description	Field Type	Code Reference
Substrate_Sand	Percentage of shoreline substrate consisting of sand	Numeric	
Substrate_Gravel	Percentage of shoreline substrate consisting of gravel	Numeric	
Substrate_Rubble	Percentage of shoreline substrate consisting of rubble	Numeric	
Substrate_Rock	Percentage of shoreline substrate consisting of rocks	Numeric	
Substrate_Boulder	Percentage of shoreline substrate consisting of boulders	Numeric	
Substrate_Bedrock	Percentage of shoreline substrate consisting of ledge	Numeric	
PublicAccess_Trail	Number of public right of ways by trails	Numeric	
PublicAccess_Car	Number of public right of ways by roads suitable for cars	Numeric	
PublicAccess_Jeep	Number of public right of ways by roads suitable for 4x4's only	Numeric	
PublicAccess_Boat	Number of public right of ways by boat	Numeric	
PrivateAccess_Trail	Number of private right of ways by trails	Numeric	
PrivateAccess_Car	Number of private right of ways by roads suitable for cars	Numeric	
PrivateAccess_Jeep	Number of private right of ways by roads suitable for 4x4's only	Numeric	
PrivateAccess_Boat	Number of private right of ways by boat	Numeric	
NoBoatLandings	Number of public boat landings	Numeric	
ShoreOwnership_Crown	Percentage of shoreline owned by the Crown	Numeric	
ShoreOwnership_Private	Percentage of shoreline privately owned	Numeric	
NoCamps	Number of camps or cottages	Numeric	
NoBeaches	Number of beaches	Numeric	
WoodyDebris	Classifies the amount of woody debris in the littoral area (<6 ft) as considerable, light or none	Text	
ShorelineShape	Classifies the shoreline shape as irregular, moderately irregular, or circular	Text	
SpawningPotential	Classifies the potential for salmonid shoreline spawning as good, fair, or poor	Text	

Field Name	Description	Field Type	Code Reference
SecchiDepth_ft	Depth at which a secchi disc becomes invisible (feet)	Numeric	
WaterColor	Classifies observed water color as colorless, yellow/brown, or blue/green	Text	
WaterChemInd	Indicates whether a water sample was collected for chemical analysis in the lab	Text	Y = Yes Blank = No
AnglingInfoInd	Indicates whether there is any creel census information available	Text	Y = Yes Blank = No

tblLakeSurveyWaterMeasurement

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with		
OldAssmtID	Identifier assigned to each lake survey. Assigned by the Data Warehouse	Numeric	
AirTemp	Ambient air temperature measured in ºF	Numeric	
SampleDepth	Depth of the water sample or depth measurement taken	Numeric	
WaterTemp_F	Temperature of the water measured in ºF	Numeric	
DissolvedO2	Amount of dissolved oxygen measured in parts per million	Numeric	
O2Saturation	Percent oxygen saturation	Numeric	
pH	Water chemistry parameter	Numeric	
PhenoAlkalinity	Water chemistry parameter in ppm	Numeric	
MethylOrangeAlkalinity	Water chemistry parameter in ppm	Numeric	
TotalHardness	Water chemistry parameter in ppm	Numeric	
CO2	Water chemistry parameter in ppm	Numeric	
FreeAcid	Water chemistry parameter in ppm	Numeric	

tblLakeSurveyFishSpecies

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
OldAssmtID	Identifier assigned to each lake survey. Assigned by the Data Warehouse	Numeric	
HoursFished	Number of hours the net was in place	Numeric	
GearType	Type of gear used to collect fish	Text	
FishSpeciesCd	Code representing the fish species caught	Text	cdFishSpecies
NoFish	Number of the fish species caught	Numeric	
Length_Min	Minimum size of the fish species caught	Numeric	
Length_Max	Maximum size of the fish species caught	Numeric	
PopulationStatus	Indicates whether the fish species was actually found present in the lake, was reported to be there or known to be a stocked species	Text	

tblLakeSurveyTribAssessment

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with		
OldAssmtID	Identifier assigned to each lake survey. Assigned by the Data Warehouse	Numeric	
TributaryName	Name of the stream being surveyed	Text	
SurveyLength_mi	Length of stream surveyed measured in tenths of a mile	Numeric	
AveWidth_ft	Average width of the stream measured in feet	Numeric	
WaterLevel	Description of water level at the time of the survey - low, moderate or high	Text	
Silt	Percentage of substrate which is composed of silt	Numeric	
Sand	Percentage of substrate which is composed of sand	Numeric	

Field Name	Description	Field Type	Code Reference
Gravel	Percentage of substrate which is composed of gravel	Numeric	
Rubble	Percentage of substrate which is composed of rubble	Numeric	
Rock	Percentage of substrate which is composed of rock	Numeric	
Boulder	Percentage of substrate which is composed of boulder	Numeric	
Bedrock	Percentage of substrate which is composed of bedrock	Numeric	
NurseryLength_ft	Length of surveyed stream which is considered salmonid nursery area (feet)	Numeric	
NurseryWidth_ft	Average width of the salmonid nursery area (feet)	Numeric	
NurseryQuality	Assessment of the salmonid nursery area as good, fair, or poor	Text	
SpawningLength_ft	Length of the surveyed stream which is considered salmonid spawning area (feet)	Numeric	
SpawningWidth_ft	Average width of the salmonid spawning area (feet)	Numeric	
SpawningQuality	Assessment of the salmonid spawning area - good, fair, or poor	Text	
NoPools_LT3ftDeep	Number of pools less than 3 ft deep	Numeric	
NoPools_4 to 6Deep	Number of pools between 3 - 6 ft deep	Numeric	
NoPools_GT6Deep	Number of pools greater than 6 ft deep	Numeric	
ObstructionInd	Indicates whether there is an obstruction in the stream	Text	Y = Yes Blank = No
ObstructionType	Describes the type of obstruction - beaver, concrete, rock fill, or wood	Text	
FishwayInd	Indicates whether there is a fishway installed around the obstruction	Text	Y = Yes N = No Blank = Fishway Not Needed
VerticalJump	Height of the obstruction over which fish must jump	Numeric	
HorizontalJump	Horizontal distance a fish must jump to clear an obstruction	Numeric	

tblLevel1Basin

Field Name	Description	Field Type	Code Reference
Level1No	Code representing the first level drainage unit	Text	
Level1Name	Name of the first level drainage unit	Text	
OceanName		Text	
Area_km2	Area measured in km2 of the drainage basin	Numeric	
Area_Percent	Percent of province drainage unit's drainage area represents	Numeric	

tblOldHabitatSurvey

Field Name	Description	Field Type	Code Reference
HabitatSurveyID	Unique identifier of each survey result	Numeric	
WaterBodyID	Unique identifier of the surveyed stream	Numeric	
AgencyCd	Code for agency or group performing the survey	Text	cdAgencies
SectionNo	Unique identifier assigned to each stream section	Numeric	
SectionDesc	Textual description of the start and end of the stream section	Text	
StreamLength_m	Length of the surveyed section measured in meters	Numeric	
AveWidth_m	Average width of the surveyed section measured in meters	Numeric	
Area_m2	Total area of the surveyed stretch measured in m^2	Numeric	
ProductiveArea_m2	Total area of productive (riffle) habitat within the surveyed stretch measured in m^2	Numeric	
NonProducitveArea_m2	Total area of non-productive (non-riffle) types of habitat within the surveyed stretch measured in m^2	Numeric	

Field Name	Description	Field Type	Code Reference
GoodArea_m2	Portion of the total productive (riffle) area within the surveyed stretch considered good habitat	Numeric	
FairArea_m2	Portion of the total productive (riffle) area within the surveyed stretch considered fair habitat	Numeric	
PoorArea_m2	Portion of the total productive (riffle) area within the surveyed stretch considered poor habitat	Numeric	
FieldNotes	Descriptive free form text or general comments	Text	

tblReconnaissanceResult

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
StreamTypeCd	Numeric code representing the geomorphic description of the habitat unit	Text	cdStreamTypes
WetWidth_m	Average width (meters) of the channel that is currently wet	Numeric	
BankFullWidth_m	Average width (meters) of the channel at high water	Numeric	
Bedrock	Percent of substrate composed of bedrock	Numeric	0-100%
Boulder	Percent of substrate composed of boulder	Numeric	0-100%
Rock	Percent of substrate composed of rock	Numeric	0-100%
Rubble	Percent of substrate composed of rubble	Numeric	0-100%
Gravel	Percent of substrate composed of gravel	Numeric	0-100%
Sand	Percent of substrate composed of sand	Numeric	0-100%
Fines	Percent of substrate composed of fines	Numeric	0-100%
EmbeddedCd	Numeric code representing the extent of embeddedness	Text	cdStreamEmbeddedness
AssmtTime	Time of day when water temperature or flow is measured	Text	
AirTemp_C	Ambient air temperature measured in ºC	Numeric	

Field Name	Description	Field Type	Code Reference
WaterTemp_C	Water temperature measured in ºC	Numeric	
WaterFlow_cms	Flow of water measured in cubic meters per second	Numeric	

tblReddCount

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
NoSmallRedds	Number of small redds counted throughout stretch	Numeric	
NoLargeRedds	Number of large redds counted throughout stretch	Numeric	
TotalRedds	Total number of redds counted throughout stretch	Numeric	
NoGrilse	Number of grilse counted throughout the stretch	Numeric	
NoMSW	Number of MSW salmon counted throughout the stretch	Numeric	
TotalASalmon	Total number of Atlantic salmon counted throughout the stretch	Numeric	
Comments	General Comments	Text	

tblRegulatedWater

Field Name	Description	Field Type	Code Reference
RegulatedWaterID	Unique identifier of each regulated water	Numeric	
WaterBodyID	ID of water body the regulation applies to	Numeric	
RegulatedWaterName	Name of regulated water	Text	
RegulationType	Type of regulated water – currently only angling regulated waters	Text	Angling
RegulatedWaterCategory	Category of angling regulated water	Text	Angling Lease Closed to Angling Crown Reserve Designated River Lease Scheduled Special Lease
RegulatedWaterType	Crown reserves are further defined by a type	Text	Daily Live Release Regular Special

Field Name	Description	Field Type	Code Reference
SectionDesc	Description of the regulated water's location	Text	
IncludesTributaryInd	Indicates whether the regulation includes the primary water body's tributaties	Text	
StartDate	Start date of the regulation, usually the month-day	Text	
EndDate	End date of the regulation, usually the month-day	Text	
StartDate2	Second start date if the regulation starts, stops, then starts again within an angling season	Text	
EndDate2	Second end date if the regulation starts, stops, then starts again within an angling season	Text	
StartYear	Year the regulated waters came into effect	Text	
EndYear	Year the regulated waters ended	Text	
ActiveInd	Indicates whether the regulated water is currently active	Text	Blank = Yes N = No

tblRegulatedWaterStretch

Field Name	Description	Field Type	Code Reference
RegWaterStretchID	Unique identifier for each regulated water stretch	Numeric	
RegulatedWaterID	ID of regulated water the stretch represents	Numeric	
SectionDesc	Description of the regulated stretch	Text	
WaterBodyID	ID of water body the regulation applies to	Numeric	
StartRouteMeas	Stream route measure of the stretch's start point – used by GIS for displaying linear stream data, such as regulated waters	Numeric	
EndRouteMeas	Stream route measure of the stretch's end point – used by GIS for displaying linear stream data, such as regulated waters	Numeric	

Field Name	Description	Field Type	Code Reference
StreamLength_m	Length of stream measured in meters	Numeric	

tblRiverSystem

Field Name	Description	Field Type	Code Reference
RiverSystemID	Unique identifier of each river system	Numeric	
WaterBodyID	ID of the primary river	Numeric	
RiverSystemName	Name of the river system	Text	
DrainageCd	Drainage code of the river system	Text	tblDrainageUnit

tblSatelliteRearing

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
NoTanks	Number of tanks used for satellite rearing	Numeric	
AgeClassReceived	Age class of fish received for grow out	Text	cdFishAgeClass
NoReceived	Number of Atlantic salmon fry received from the hatchery and placed in satellite rearing tanks in spring/summer	Numeric	
DateStocked	Date of stocking - YYYY.MM.DD	Text	
NoStocked	Number of Atlantic salmon fingerlings released from satellite rearing tanks to streams in fall	Numeric	

tblSpawners

Field Name	Description	Field Type	Code Reference
AquaticActivityID		Numeric	
SmallRedds		Numeric	
LargeRedds		Numeric	
TotalRedds		Numeric	

Field Name	Description	Field Type	Code Reference
NoGrilse	Number of Atlantic salmon grilse counted at site	Numeric	
NoMSW	Number of multi-seawinter Atlantic salmon counted at site	Numeric	
TotalASalmon	Total number of Atlantic salmon counted at site	Numeric	
Comments		Text	

tblSportfishingAnglingLease

Field Name	Description	Field Type	Code Reference
LeaseNo	Lease number or ID	Text	
Year	Year of angling	Text	
TB_TS_RDay	Total number of rod days for grilse and salmon for entire bright season	Numeric	
TB_Gr_Harv	Number of grilse harvested for entire bright season	Numeric	
TB_Gr_Rel	Number of grilse released for entire bright season	Numeric	
TB_Gr_Tot	Number of grilse harvested and released for entire bright season	Numeric	
TB_Sa_Harv	Number of salmon harvested for entire bright season	Numeric	
TB_Sa_Rel	Number of salmon released for entire bright season	Numeric	
TB_Sa_Tot	Number of salmon harvested and released for entire bright season	Numeric	
TB_AS_Harv	Number of grilse and salmon harvested for entire bright season	Numeric	
TB_AS_Rel	Number of grilse and salmon released for entire bright season	Numeric	
TB_AS_Tot	Number of grilse and salmon harvested and released for entire bright season	Numeric	
TB_CPU_Gr	Catch per rod day for grilse for entire bright season	Numeric	Calculated field
TB_CPU_Sa	Catch per rod day for salmon for entire bright season	Numeric	Calculated field

Field Name	Description	Field Type	Code Reference
TB_CPU_Tot	Catch per rod day for grilse and salmon for entire bright season	Numeric	Calculated field
TS_BT_RDay	Total number of rod days for brook trout for entire season	Numeric	
TS_BT_Harv	Number of brook trout harvested for entire season	Numeric	
TS_BT_Rel	Number of brook trout released for entire season	Numeric	
TS_BT_Tot	Number of brook trout harvested and released for entire season	Numeric	
TS_CPU_BT	Catch per rod day for brook trout for entire season	Numeric	Calculated field

tblSportfishingAtlanticSalmon

Field Name	Description	Field Type	Code Reference
WaterBodyID	Unique identifier of the salmon stream	Numeric	
WaterBodyName	Name of stream	Text	
DrainageCd	Drainage system codes indicating the drainage unit of the salmon stream	Text	tblDrainageUnit
Year	Year of angling	Text	
Kt_AS_RDay	Number of rod days for grilse and salmon for kelt season	Text	
Kt_Gr_Harv	Number of grilse harvested for kelt season	Numeric	
Kt_Gr_Rel	Number of grilse released for kelt season	Numeric	
Kt_Gr_Tot	Number of grilse harvested and released for kelt season	Numeric	
Kt_Sa_Harv	Number of salmon harvested for kelt season	Numeric	
Kt_Sa_Rel	Number of salmon released for kelt season	Numeric	
Kt_Sa_Tot	Number of salmon harvested and released for kelt season	Numeric	
Kt_AS_Harv	Number of grilse and salmon harvested for kelt season	Numeric	

Field Name	Description	Field Type	Code Reference
Kt_AS_Rel	Number of grilse and salmon released for kelt season	Numeric	
Kt_AS_Tot	Number of grilse and salmon harvested and released for kelt season	Numeric	
Kt_CPU_Gr	Catch per rod day for grilse for kelt season	Numeric	Calculated field
Kt_CPU_Sa	Catch per rod day for salmon for kelt season	Numeric	Calculated field
Kt_CPU_Tot	Catch per rod day for grilse and salmon for kelt season	Numeric	Calculated field
Kt_CPA_Lwr	The lower confidence limit value of catch per angler for grilse and salmon for kelt season	Numeric	
Kt_CPA_Mn	The mean value of catch per angler for grilse and salmon for kelt season	Numeric	
Kt_CPA_Upr	The higher confidence limit value of catch per angler for grilse and salmon for kelt season	Numeric	
Kt_CPA_CV	The coefficient of variation of the mean catch per angler for grilse and salmon for kelt season	Numeric	
TB_AS_RDay	Number of rod days for grilse and salmon for entire bright season	Numeric	
TB_Gr_Harv	Number of grilse harvested for entire bright season	Numeric	
TB_Gr_Rel	Number of grilse released for entire bright season	Numeric	
TB_Gr_Tot	Number of grilse harvested and released for entire bright season	Numeric	
TB_Sa_Harv	Number of salmon harvested for entire bright season	Numeric	
TB_Sa_Rel	Number of salmon released for entire bright season	Numeric	
TB_Sa_Tot	Number of salmon harvested and released for entire bright season	Numeric	
TB_AS_Harv	Number of grilse and salmon harvested for entire bright season	Numeric	
TB_AS_Rel	Number of grilse and salmon released for entire bright season	Numeric	

Field Name	Description	Field Type	Code Reference
TB_AS_Tot	Number of grilse and salmon harvested and released for entire bright season	Numeric	
TB_CPU_Gr	Catch per rod day for grilse for entire bright season	Numeric	Calculated field
TB_CPU_Sa	Catch per rod day for salmon for entire bright season	Numeric	Calculated field
TB_CPU_Tot	Catch per rod day for grilse and salmon for entire bright season	Numeric	Calculated field
TB_CPA_Lwr	The lower confidence limit value of catch per angler for grilse and salmon for entire bright season	Numeric	
TB_CPA_Mn	The mean value of catch per angler for grilse and salmon for entire bright season	Numeric	
TB_CPA_Upr	The higher confidence limit value of catch per angler for grilse and salmon for entire bright season	Numeric	
TB_CPA_CV	The coefficient of variation of the mean catch per angler for grilse and salmon for entire bright season	Numeric	
EB_AS_RDay	Number of rod days for grilse and salmon for early bright season	Numeric	
EB_Gr_Harv	Number of grilse harvested for early bright season	Numeric	
EB_Gr_Rel	Number of grilse released for early bright season	Numeric	
EB_Gr_Tot	Number of grilse harvested and released for early bright season	Numeric	
EB_Sa_Harv	Number of salmon harvested for early bright season	Numeric	
EB_Sa_Rel	Number of salmon released for early bright season	Numeric	
EB_Sa_Tot	Number of salmon harvested and released for early bright season	Numeric	
EB_AS_Harv	Number of grilse and salmon harvested for early bright season	Numeric	
EB_AS_Rel	Number of grilse and salmon released for early bright season	Numeric	
EB_AS_Tot	Number of grilse and salmon harvested and released for early bright season	Numeric	

Field Name	Description	Field Type	Code Reference
EB_CPU_Gr	Catch per rod day for grilse for early bright season	Numeric	Calculated field
EB_CPU_Sa	Catch per rod day for salmon for early bright season	Numeric	Calculated field
EB_CPU_Tot	Catch per rod day for grilse and salmon for early bright season	Numeric	Calculated field
LB_AS_RDay	Number of rod days for grilse and salmon for late bright season	Numeric	
LB_Gr_Harv	Number of grilse harvested for late bright season	Numeric	
LB_Gr_Rel	Number of grilse released for late bright season	Numeric	
LB_Gr_Tot	Number of grilse harvested and released for late bright season	Numeric	
LB_Sa_Harv	Number of salmon harvested for late bright season	Numeric	
LB_Sa_Rel	Number of salmon released for late bright season	Numeric	
LB_Sa_Tot	Number of salmon harvested and released for late bright season	Numeric	
LB_AS_Harv	Number of grilse and salmon harvested for late bright season	Numeric	
LB_AS_Rel	Number of grilse and salmon released for late bright season	Numeric	
LB_AS_Tot	Number of grilse and salmon harvested and released for late bright season	Numeric	
LB_CPU_Gr	Catch per rod day for grilse for late bright season	Numeric	Calculated field
LB_CPU_Sa	Catch per rod day for salmon for late bright season	Numeric	Calculated field
LB_CPU_Tot	Catch per rod day for grilse and salmon for late bright season	Numeric	Calculated field
TS_AS_RDay	Total number of rod days for grilse and salmon for entire season	Numeric	
TS_Gr_Harv	Number of grilse harvested for entire season	Numeric	
TS_Gr_Rel	Number of grilse released for entire season	Numeric	

Field Name	Description	Field Type	Code Reference
TS_Gr_Tot	Number of grilse harvested and released for entire season.	Numeric	
TS_Sa_Harv	Number of salmon harvested for entire season	Numeric	
TS_Sa_Rel	Number of salmon released for entire season	Numeric	
TS_Sa_Tot	Number of salmon harvested and released for entire season.	Numeric	
TS_AS_Harv	Number of grilse and salmon harvested for entire season	Numeric	
TS_AS_Rel	Number of grilse and salmon released for entire season	Numeric	
TS_AS_Tot	Number of grilse and salmon harvested and released for entire season.	Numeric	
TS_CPU_Gr	Catch per rod day for grilse for entire season	Numeric	Calculated field
TS_CPU_Sa	Catch per rod day for salmon for entire season	Numeric	Calculated field
TS_CPU_Tot	Catch per rod day for grilse and salmon for entire season	Numeric	Calculated field

tblSportfishingCrownReserve

Field Name	Description	Field Type	Code Reference
CrownReserveID	Unique identifier of the Crown reserve (assigned by the data warehouse)	Numeric	
Year	Year of angling	Text	
TB_TS_RDay	Total number of rod days for grilse and salmon for entire bright season	Numeric	
TB_Gr_Harv	Number of grilse harvested for entire bright season	Numeric	
TB_Gr_Rel	Number of grilse released for entire bright season	Numeric	
TB_Gr_Tot	Number of grilse harvested and released for entire bright season	Numeric	
TB_Sa_Harv	Number of salmon harvested for entire bright season	Numeric	

Field Name	Description	Field Type	Code Reference
TB_Sa_Rel	Number of salmon released for entire bright season	Numeric	
TB_Sa_Tot	Number of salmon harvested and released for entire bright season	Numeric	
TB_AS_Harv	Number of grilse and salmon harvested for entire bright season	Numeric	
TB_AS_Rel	Number of grilse and salmon released for entire bright season	Numeric	
TB_AS_Tot	Number of grilse and salmon harvested and released for entire bright season	Numeric	
TB_CPU_Gr	Catch per rod day for grilse for entire bright season	Numeric	
TB_CPU_Sa	Catch per rod day for salmon for entire bright season	Numeric	
TB_CPU_Tot	Catch per rod day for grilse and salmon for entire season	Numeric	
TS_BT_Harv	Number of brook trout harvested for entire season	Numeric	
TS_BT_Rel	Number of brook trout released for entire season	Numeric	
TS_BT_Tot	Number of brook trout harvested and released for entire season	Numeric	

tblStockedFish

Field Name	Description	Field Type	Code Reference
FishStockingID	Unique identifier of each fish stocking	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the stocking is associated with	Numeric	
FishSpeciesCd	Species code of fish being stocked	Text	cdFishSpecies
FishStockID	Code representing the stock of fish (origin) being stocked	Numeric	tblFishStock
FishMatingID	Code representing the parentage of the fish being stocked	Numeric	tblFishMating
FishAge	Actual age of fish being stocked	Text	
AgeUnitOfMeasure	Unit of measure for age – weeks, months, years	Text	

Field Name	Description	Field Type	Code Reference
FishAgeClass	Age class of fish stocked (e.g., egg, 0+, fry, adult)	Text	cdFishAgeClass
NoFish	Number of fish stocked	Numeric	
FishFaciltyID	ID of facility providing the fish	Numeric	tblFishFacility
FishTankNo	Tank number at hatchery where fish originated	Text	
AveLength_cm	Average fish length measured in centimetres	Numeric	
LengthRange_cm	Length range of fish measured in centimetres	Text	
AveWeight_gm	Average fish weight measured in grams	Numeric	
WeightRange_gm	Weight range of fish measured in grans	Text	
AppliedMarkCd	Code indicating the type off tag or mark used to identify stocked fish	Text	cdFishMark
Source	Source of origin for stocked fish (e.g., satellite rearing, hatchery)	Text	

tblStreamAttribute

Field Name	Description	Field Type	Code Reference
WaterbodyID	Unique number representing the stream	Numeric	
StreamLength_km	Length of the stream determined through GIS, measured in meters	Numeric	
HighestOrder	Indicates the highest stream order within the stream	Numeric	
IntermittentInd	Indicates whether SNB identified the stream as completely intermittent	Text	
TidalInd	Indicates whether the stream has tidal influence, i.e. flows directly into salt water or flows into the tidal area of another stream (as identified by SNB)	Text	

tblVibertBoxAnalysis

Field Name	Description	Field Type	Code Reference

Field Name	Description	Field Type	Code Reference
AquaticActivityID		Numeric	
LocationDesc	Description of where in the unit box was placed (e.g., tail of pool)	Text	
LidDepth_cm	Depth of box lid when installed in streambed, measured in cm	Numeric	
WetWeight_Initial_gm	Initial wet weight of box before installation, measured in grams	Numeric	
WetWeight_Final_gm	Final wet weight of box upon removal, measured in grams	Numeric	
WetWeight_Net.gm	Net wet weight of box (Final - Initial) recorded in grams	Numeric	
WetWeight_Fines_Percent	Percentage of wet weight comprised of fines (material accumulated in the box after installation)	Numeric	
DryWeight_Total_gm	Total dry weight of the box upon drying after removal, measured in grams	Numeric	
WetWeight_Box_Rocks_gm	Dry weight of vibert box and rocks (larger than box openings) placed in box before installation, measured in grams	Numeric	
WetWeight_Box_Rocks_Percent	Percentage of dry weight of vibert box and rocks (larger than box openings) placed in box before installation	Numeric	
WetWeight_FineGravel_gm	Dry weight of fine gravel (> 2 mm) measured in grams	Numeric	
WetWeight_FineGravel_Percent	Percentage of dry weight of fine gravel (> 2 mm) measured in grams	Numeric	
WetWeight_Sand_gm	Dry weight of sand (< 2 mm, > 0.85 mm) measured in grams	Text	
WetWeight_Sand_Percent	Percentage of dry weight of sand (< 2 mm, > 0.85 mm)	Text	
WetWeight_Fines_gm	Dry weight of fines (< 0.85 mm) measured in grams	Numeric	
WetWeight_Fines_Percent	Percentage of dry weight of fines (< 0.85 mm)	Numeric	
Comments	General comments	Text	

tblWaterBodyComplex

Field Name	Description	Field Type	Code Reference
WaterBodyComplexID	Unique number of the water body complex	Numeric	
WaterBodyComplexName	Name of the water body complex	Text	
WaterBodyComplexType	Code representing the type of complex – lake or wetland	Text	
DrainageCd	Drainage system codes representing the drainage unit in which the complex belongs	Text	tblDrainageUnit

tblWaterBody

Field Name	Description	Field Type	Code Reference
WaterBodyID	Unique number assigned to each lake or stream	Numeric	
DrainageCd	Concatenation of drainage system codes	Text	tblDrainageUnit
WaterBodyTypeCd	Alphabetic code representing the type of water being identified - lake or stream	Text	LAKE = Lake RESV=Reservoir STRM=Stream
WaterBodyName	Official name of the stream or lake as determined by the *Gazetteer of Canada - New Brunswick*	Text	
WaterBodyName_Abrev	Abbreviated name or name + location indicator, such as upper, lower, east or west, for lakes within a complex (Intended for use on reports or maps)	Text	
WaterBodyName_Alt	Alternate or local name	Text	
WaterBodyComplexID	Indicates the Complex ID to which the lake belongs	Numeric	
Surveyed_Ind	Indicates whether the water body has been previously surveyed	Text	Y = Yes Blank = No
FlowsIntoWaterBodyID	Water body ID of the lake or stream into which the water body flows	Numeric	
FlowsIntoWaterBodyName	Name of the water body into which the water body flows	Text	
FlowsIntoDrainageCd	The receiving water body's drainage unit codes	Text	

tblWaterChemistryAnalysis

Field Name	Description	Field Type	Code Reference
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
DOE_Program	Water chemistry data may be collected by different programs within the NB Dept. of the Environment	Text	
DOE_ProjectNo	DOE project identifier	Text	
DOE_StationNo	DOE sampling site identifier	Text	
DOE_LabNo	Number assigned to the sample by the lab	Text	
DOE_FieldNo	Number assigned to the sample by DOE in the field	Text	
Assmt_Date	Date water sample was collected - format is YYYY.MM.DD	Numeric	
Assmt_Time	Time of day when water sample collected - 24 hour clock	Numeric	
SecchiDepth_m	Secchi disc measurement for determining water transparency. Measured in metres	Numeric	
SampleDepth_m	Depth at which the water sample was collected. Measured in metres	Numeric	
WaterTemp_C	Water temperature measured in C	Numeric	
DO	Dissolved oxygen (mg/L)	Text	
Toxic_Unit	Calculated field	Numeric	
L_Hard	Qualifies the data for hardness	Numeric	
Hard	Hardness, calculated (mg/L)	Text	
NO3	Nitrate, calculated (mg/L)	Numeric	
L_AL_X	Qualifies the data for aluminum, extracted	Text	cdWaterChemistryQualifier
AL_X	Aluminum, extracted	Numeric	
L_AL_XGF	Qualifies the data for aluminum, graphite furnace	Text	cdWaterChemistryQualifier
AL_XGF	Aluminum, graphite furnace method (g/L)	Numeric	
L_ALK_G	Qualifies the data for alkalinity, grans	Text	cdWaterChemistryQualifier
ALK_G	Alkalinity, Grans (mg/L)	Numeric	

Field Name	Description	Field Type	Code Reference
L_ALK_P	Qualifies the data for alkalinity, phenol	Text	cdWaterChemistryQualifier
ALK_P	Alkalinity, Phenol (mg/L)	Numeric	
L_ALK_T	Qualifies the data for alkalinity, total	Text	cdWaterChemistryQualifier
ALK_T	Alkalinity, Total ((mg/L)	Numeric	
L_AS_XGF	Qualifies the data for arsenic, graphite furnace	Text	cdWaterChemistryQualifier
AS_XGF	Arsenic, graphite furnace (g/L)	Numeric	
L_BA_X	Qualifies the data for barium, extracted	Text	cdWaterChemistryQualifier
BA_X	Arsenic, extracted	Numeric	
L_B_X	Qualifies the data for boron, extracted	Text	cdWaterChemistryQualifier
B_X	Boron, extracted	Numeric	
L_BR	Qualifies the data for bromide	Text	cdWaterChemistryQualifier
BR	Bromide	Numeric	
BICARB	Bicarbonate (mg/L)	Numeric	
CARB	Carbonate (mg/L)	Numeric	
L_CA_D	Qualifies the data for calcium	Text	cdWaterChemistryQualifier
CA_D	Calcium (mg/L)	Numeric	
L_CD_XGF	Qualifies the data for cadmium, graphite furnace	Text	cdWaterChemistryQualifier
CD_XGF	Cadmium, graphite furnace (?g/L)	Numeric	
L_CHL_A	Qualifies the data for *chlorophyll a*	Text	cdWaterChemistryQualifier
CHL_A	*Chlorophyll a*	Numeric	
L_CL	Qualifies the data for chloride	Text	cdWaterChemistryQualifier
CL	Chloride (mg/L)	Numeric	
L_CL_IC	Qualifies the data for chloride, ion chromatography	Text	cdWaterChemistryQualifier
CL_IC	Chloride, ion chromatography (mg/L)	Numeric	

Field Name	Description	Field Type	Code Reference
L_CLRA	Qualifies the data for color	Text	cdWaterChemistryQualifier
CLRA	Color (TCU)	Numeric	
L_CO_X	Qualifies the data for cobalt, extracted	Text	cdWaterChemistryQualifier
CO_X	Cobalt, extracted	Numeric	
L_COND	Qualifies the data for conductivity	Text	cdWaterChemistryQualifier
COND	Conductivity (sie/cm)	Numeric	
COND2	Conductivity (umho/cm)	Numeric	
L_CR_X	Qualifies the data for chromium, extracted	Text	cdWaterChemistryQualifier
CR_X	Chromium, extracted	Numeric	
L_CR_XGF	Qualifies the data for chromium, graphite furnace	Text	cdWaterChemistryQualifier
CR_XGF	Chromium, graphic furnace (g/L)	Numeric	
L_CU_X	Qualifies the data for copper., extracted	Text	cdWaterChemistryQualifier
CU_X	Copper, extracted (mg/L)	Numeric	
L_CU_XGF	Qualifies the data for copper, graphite furnace	Text	cdWaterChemistryQualifier
CU_XGF	Copper, graphite furnace (? g/L)	Numeric	
L_DOC	Qualifies the data for dissolved organic carbon	Text	cdWaterChemistryQualifier
DOC	Dissolved organic carbon	Numeric	
L_F	Qualifies the data for fluoride	Text	cdWaterChemistryQualifier
F	Fluoride (mg/L)	Numeric	
L_FE_X	Qualifies the data for iron, extracted	Text	cdWaterChemistryQualifier
FE_X	Iron, extracted (mg/L)	Numeric	
L_HG_T	Qualifies the data for mercury	Text	cdWaterChemistryQualifier
HG_T	Mercury	Numeric	
L_K	Qualifies the data for potassium	Text	cdWaterChemistryQualifier

Field Name	Description	Field Type	Code Reference
K	Potassium (mg/L)	Numeric	
L_MG_D	Qualifies the data for magnesium	Text	cdWaterChemistryQualifier
MG_D	Magnesium (mg/L)	Numeric	
L_MN_X	Qualifies the data for manganese, extracted	Text	cdWaterChemistryQualifier
MN_X	Manganese, extracted (mg/L)	Numeric	
L_NA	Qualifies the data for sodium	Text	cdWaterChemistryQualifier
NA	Sodium (mg/L)	Numeric	
L_NH3T	Qualifies the data for ammonia	Text	cdWaterChemistryQualifier
NH3T	Ammonia (mg/L)	Numeric	
L_NI_X	Qualifies the data for nickel, extracted	Text	cdWaterChemistryQualifier
NI_X	Nickel, extracted (mg/L)	Numeric	
L_NO2D	Qualifies the data for nitrite	Text	cdWaterChemistryQualifier
NO2D	Nitrite (mg/L)	Numeric	
L_NOX	Qualifies the data for nitrate/nitrite	Text	cdWaterChemistryQualifier
NOX	Nitrate/nitrite (mg/L)	Numeric	
L_PB_XGF	Qualifies the data for lead, graphic furnace	Text	cdWaterChemistryQualifier
PB_XGF	Lead, graphic furnace (?g/L)	Numeric	
L_PH	Qualifies the data for pH	Text	cdWaterChemistryQualifier
PH	pH	Numeric	
L_PH_GAL	Qualifies the data for pH, Grans alkalinity titration	Text	cdWaterChemistryQualifier
PH_GAL	pH, Grans alkalinity titration	Numeric	
0_PHOS	0-Phosphorous (mg/L)	Numeric	
SAT_PH	Saturation pH	Numeric	
SAT_NDX	Saturation Index	Numeric	
L_SB_XGF	Qualifies the data for antimony, graphite furnace	Text	cdWaterChemistryQualifier

Field Name	Description	Field Type	Code Reference
SB_XGF	Antimony, graphite furnace (?g/L)	Numeric	
L_SE_XGF	Qualifies the data for selenium, graphite furnace	Text	cdWaterChemistryQualifier
SE_XGF	Selinium, graphite furnace	Numeric	
Silica	Silica (mg/L)		
L_SO4	Qualifies the data for sulfate	Text	cdWaterChemistryQualifier
SO4	Sulfate (mg/L)	Numeric	
L_SO4_IC	Qualifies the data for sulfate, ion chromatography	Text	cdWaterChemistryQualifier
SO4_IC	Sulfate, ion chromatography (mg/L)	Numeric	
L_SS	Qualifies the data for suspended solids	Text	cdWaterChemistryQualifier
SS	Suspended solids (mg/L)	Numeric	
L_TDS	Qualifies the data for total dissolved solids	Text	cdWaterChemistryQualifier
TDS	Total dissolved solids, calculated (mg/L)	Numeric	
L_TKN	Qualifies the data for total Kjeldahl nitrogen	Text	cdWaterChemistryQualifier
TKN	Total Kjeldahl nitrogen (mg/L)	Numeric	
L_TL_XGF	Qualifies the data for thallium, graphite furnace	Text	cdWaterChemistryQualifier
TL_XGF	Thallium, graphite furnace	Numeric	
L_TOC	Qualifies the data for total organic carbon	Text	cdWaterChemistryQualifier
TOC	Total organic carbon (mg/L)	Numeric	
L_TP_L	Qualifies the data for total phosphorous	Text	cdWaterChemistryQualifier
TP_L	Total phosphorous (mg/L)	Numeric	
L_TURB	Qualifies the data for turbidity	Text	cdWaterChemistryQualifier
TURB	Turbidity (NTU)	Numeric	
L_ZN_X	Qualifies the data for zinc, extracted	Text	cdWaterChemistryQualifier
ZN_X	Zinc, extracted (mg/L)	Numeric	

Field Name	Description	Field Type	Code Reference
L_ZN_XGF	Qualifies the data for zinc, graphite furnace	Numeric	cdWaterChemistryQualifier
ZN_XGF	Zinc, graphite furnace	Text	

tblWaterMeasurement

Field Name	Description	Field Type	Code Reference
WaterMeasurementID	Unique number assigned to each measurement	Numeric	
AquaticActivityID	Unique identifier of the aquatic activity the results are associated with	Numeric	
HabitatUnitID	Habitat unit ID the measurement is associated with	Numeric	
WaterSourceCd	Source of water being measured	Text	cdWaterSource
SampleDepth_m	Depth of water sample in meters	Numeric	
WaterParameterCd	Code representing the parameter being measured	Numeric	cdWaterParameter
Measurement	Value or result of the measurement	Numeric	
UnitofMeasureCd	Code representing the unit of measure	Numeric	cdUnitofMeasure