

Dictionary Section	Abbreviated Database Column Heading	Un-Abbreviated Column Heading	Type	Definition	Unit of Measurement
Lake Reference	Lake_Name	Lake Name	Alphanumeric	Local lake name	
	Lake_Level	Lake Level	Numeric	On gauged lakes, lake level is the geodetic level (i.e., above sea level) of the lake the day the assessment was completed. This will help people utilizing data understand at what water level the data was collected. This field should be left blank if the lake level is unknown or if the lake is not gauged.	
	Secchi_dept	Secchi Depth	Numeric	Secchi depth is a measure of the point where a 20 cm weighted white line disappears from view when lowered from the shaded side of a vessel and that point where it reappears upon raising it. This measurement should be made at mid-day as it results are more variable at dawn and dusk. Secchi depths vary depending upon the time of year measured and productivity of a lake, and in lakes with increased particulate matter (e.g., algae).	Meter
	Organizati	Organization	Alphanumeric	Organization is the government, non-profit organization, or companies who are responsible for collection of the field data.	
	Date	Date	Alphanumeric	Date field data was collected.	
	Time	Time	Time	Time field data was collected.	
	Crew	Crew	Alphanumeric	The initials of all field crew, including boat skippers, should be included.	
	Weather	Weather	Categorical	The weather is a categorical field. Available options include Light Rain, Heavy Rain, Snow/Sleet, Over Cast, Clear, Partly Cloudy, and other. This field should be filled in with the most appropriate weather observed throughout the day. If the Other category is chosen, field assessors should identify the weather in the comments field.	
	Air_Temp	Air Temperature	Numeric	Air temperature is the temperature observed during the assessment.	Celsius
	Water_Temp	Water Temperature	Numeric	Water temperature is the water temperature observed during the assessment. This field is not mandatory.	Celsius
Jurisdicti	Jurisdiction	Alphanumeric	Jurisdiction is the governmental entity that has predominant governance over the shoreline being assessed. Typically, this would be a local government, regional district or native band. In some cases, the shoreline may occur along crown land or within a provincial park. If possible, field assessors should break segments at all major changes in jurisdiction to allow for better management of shore line segments. If a segment break is not included at a change in jurisdiction, the jurisdiction with the predominant length of shoreline should be listed here and the secondary jurisdiction should be noted in the comments field.		
Comments	Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the data field above.		
Segment Class	Segmnt_Num	Shoreline Segment Number	Numeric	The shoreline segment number is a field that identifies the shore segment. Typically, shore segments begin a 1 and continue until the entire shoreline has been mapped. A shore segment is an area of with similar land use, shore type, vegetation, and substrates.	
	Shore_Type	Shore Type	Categorical	Shore type is a categorical field that describes the predominant shore type that occurs along the length of the shore segment (i.e., the highest percentage of the linear shoreline length). Shore types include Cliff/Bluff, Rocky Shore, Gravel, Sand, Stream Mouth, Wetland, and Other. If other is selected, comments should be included to describe the shore type observed.	
	Shore_Modif	Shore Type Modifier	Categorical	The shore type modifier field is used to describe significant shoreline activities that influence the shoreline. The field is categorical and choices include Log Yard, Small Marina (6-20 slips), Large Marina (greater than 20 slips), Railway, Roadway, None, and Other. If other is selected, the comments field should be used to identify the modifier. If the field is left blank, users should assume that there is no shoreline modifier.	
	Slope	Slope	Categorical	Slope is a categorical determination of the slope or gradient of the shoreline. Categories include Low (less than 5%), Moderate (5-20%), Steep (20-60%), Very Steep (>60%), and Bench. A bench is a shoreline that rises, typically steep or very steep, has a flat area typically greater than 15 horizontal meters, and then becomes steep or very steep again. On bluff shore types, where the shoreline rises sharply and then flattens, the categorical statement should describe the steep portion of the shoreline (i.e., do not use bench).	
	Land_Use	Land Use	Categorical	Land use is a categorical field that is used to describe the dominant land use observed along the segment. Categories include Agriculture, Commercial, Conservation, Forestry, Industrial, Institution, Multi-Family, Natural Area, Park, Recreation, Single Family, Rural, and Urban Park. Land use can be determined based upon a combination of field observation, review of zoning and bylaw maps, and air photo interpretation. Please refer to detailed definitions of the different land use types to better understand the different categories.	
	Lev_of_Imp	Level of Impact	Categorical	Level of impact is a categorical field that is used to describe the general disturbances that are observed along the shoreline. Disturbances are considered any anthropogenic influence that has altered shoreline including foreshore substrates, vegetation, or the shoreline (e.g., retaining walls). Level of impact is considered both looking at the length of the shore line (i.e., along the segment) and the depth of the shore zone area to between 15 to 50 m back. In more rural settings, typically the assessment area is greater (i.e., 50 m) and in more developed shorelines, typically the assessment area is less (i.e., 15 m). In cases of roadways or railways, one should generally assess the location of the rail or roadway along the segment. To facilitate interpretation of this category, air photo interpretation is recommended to better estimate disturbance. Disturbance categories include High (>40%), Medium (10-40%), Low (<10%), or None. Consistency of determination is very important and assessors should consistently use the same criteria to determine the level of impact.	
	Livest_Acc	Livestock Disturbance	Categorical	Livestock access is a categorical field that is used to determine whether livestock, such as cattle, have access to the foreshore. Choices include Yes or No or blank. If the field is left blank, one should assume that cattle do not have access.	
	Disturbed	Percentage of the shoreline that is disturbed	Numeric	Percentage of the shoreline that is disturbed is a measurement of the approximate length and depth of the shore zone that has been disturbed. Assessors should use a combination of field observations and air photo interpretation to determine the percentage disturbed. Generally, the percentage disturbed should correspond to the level of impact (i.e., a high percentage of disturbance should translate into a High level of impact). The summation of the Percentage Disturbed and the Percentage Natural should equal 100%.	%
	Natural	Percentage of the shoreline that is natural	Numeric	Percentage of the shoreline that is natural is a measurement of the approximate length and depth of the shore zone that remains in a natural condition. Assessors should use a combination of field observations and air photo interpretation to determine the percentage disturbed. Generally, the percentage natural should correspond to the level of impact. The summation of the Percentage Disturbed and the Percentage Natural should equal 100%.	%
	PhotoNum	Photo Number	Alphanumeric	Photo number is a field that is used to enter in digital or still photos taken during the assessment.	
	Tape_Numb	Tape Number	Alphanumeric	Original Video tape number	
	Video_Time	Video Time	Alphanumeric	Delineates that start and stop time of the video segments. Assessors may also just enter in the start time of the segment, as it is generally inferred that the start time of one segment corresponds with the stop time of a previous segment.	
Cmmnt_Clas	Class Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the class data fields above.		

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Shore Type	Cliff_Bluf	Cliff and/or Bluff Shore Type	Numeric	The Cliff / Bluff field contains the percentage of the segment, based upon the shore segment length that is a cliff or bluff shore type. A cliff shore type is typically very steep with substantial vertical elements. A bluff shore type is typically steep or very steep, and then flat for a substantial distance, typically formed by the fast recession of water levels during glacial periods.	%
	Rocky	Rocky Shore Type	Numeric	The Rocky Shoreline field contains the percentage of the segment, based upon the shore segment length that is rocky. Rocky shores consist mostly of boulders and bedrock, with components of large cobble and some gravels. These shores tend to occur on steeper shorelines. Previous versions of the data dictionary called these shorelines low rocky shorelines or possible (but less so) vegetated shorelines.	%
	Gravel	Gravel Shore Type	Numeric	The Gravel shore type field contains the percentage of the segment, based upon the shore segment length that is a gravel beach. Gravel beach shorelines tend to occur on Low or Moderate slopes, and substrates are predominantly gravels and cobbles. These shore types may also contain small percentages of gravels and or bedrock. Often times, gravels beaches and rocky shores occur along one segment, with gravel shore types occurring in depositional areas (i.e., in bays) and rocky shores (i.e., at points) occurring in erosion areas.	%
	Sand	Sand Shore Type	Numeric	The Sand shore type field contains the percentage of the shoreline, based upon the shore segment length that is a sand beach. Sand beach shorelines tend to occur in low gradient shorelines and are predominated by sands and small gravels. These shore types may also contain some gravel shoreline areas in places that are more exposed to wind and wave action (e.g., points).	%
	Stream_mou	Stream Mouth Shore Type	Numeric	The Stream Mouth shore type field contains the percentage of the shoreline, based upon the shore segment length that is a stream mouth. A stream mouth is defined as the space where there is a confluence between a lake and a stream or a river and the stream has direct influence on sediment movements and deposition or is part of the active floodplain. Typically, the stream mouth segment is larger for rivers and smaller for creeks. A separate segment should be created for significant fisheries streams, such as those known to contain spawning populations of anadromous salmon.	%
	Wetland	Wetland Shore Type	Numeric	The Wetland shore type field contains the percentage of the shoreline, based upon the shore segment length that is a shore marsh wetland. A wetland segment typically occurs on low gradient sites, the littoral zones is wide and shallow, substrates are predominantly silts, organics, or clays, and there is emergent vegetation present.	%
	Other	Other Shore Type	Numeric	The Other shore type field allows assessors to enter in shore types that do not fit into one of the general categories above. If the other shore type field is used, assessors should add comments to describe the shore type and provide justification for use of the other field. Examples of other shore types may include constructed boat access canals.	%
	Stype_comm	Shore Type Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the shore type data fields above.	
Landuse	Agricultur	Agriculture Land Use	Numeric	The agriculture land use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for crop based agricultural or as active livestock range lands (i.e., extensive holding areas, large numbers of cattle). Livestock pastures that are not active rangelands (i.e., a few cows or horses) are not considered an agriculture land use (see rural).	%
	Commercial	Commercial Land Use	Numeric	The Commercial Land use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for commercial purposes. Commercial purposes include retail, hotels, food establishments, marinas with fuel, stores, etc. Commercial areas tend to occur along highly impacted shorelines.	%
	Conservati	Conservation Land Use	Numeric	The Conservation Land use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for conservation of critical or important habitats. Examples of conservation shorelines include lands held by the Land Conservancy, biological reserves, etc. Conservation lands cannot occur on privately held shorelines, unless conservation covenants or other agreements are in place to protect areas in perpetuity.	%
	Forestry	Forestry Land Use	Numeric	The Forestry Land use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for forestry. These areas are typically Crown Lands that are part of active cut blocks. Log Yards are not considered a Forestry Land use as they are Industrial.	%
	Industrial	Industrial Land Use	Numeric	The Industrial Land use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for industrial purposes. Examples of industrial purposes include log yards, processing facilities, lumber mills, etc. These shorelines are typically heavily impacted.	%
	Institutio	Institutional Land Use	Numeric	The Institutional Land Use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for institutional purposes. Examples of institutional land uses include schools, public libraries, etc.	%
	Multi_Fami	Multi-Family Residential	Numeric	The Multi-Family Land Use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for multi-family residences. Multi-family developments are typically condominiums or town homes.	%
	Natural_Ar	Natural Areas	Numeric	The Natural Areas Land use field is the percentage of the shoreline, based upon the shore segment length that is predominantly natural crown lands. These areas do not occur in provincial parklands and cannot be privately held.	%
	Park	Park	Numeric	The Park Land Use field is the percentage of the shoreline, based upon the shore segment length that is predominantly natural areas parklands. These parks areas can be provincial, federal, or municipal parks. These parks tend to be predominantly natural and are different from urban parks, which are used intensively for recreational purposes (e.g., public beaches).	%
	Recreation	Recreation Land Use	Numeric	The Recreation Land Use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for recreational purposes. Examples include public or private campgrounds, areas of known cabin rentals, etc. In some cases recreational shoreline may also be referred to as single family land uses, depending upon how much are known about them. Generally, if a shoreline contains privately held cabins that are rented out occasionally, these should be referred to as single family land uses rather than recreational.	%
	Rural	Rural Land Use	Numeric	The Rural Land Use field is the percentage of the shoreline, based upon the shore segment length that is predominantly used for rural purposes. These shorelines are typically large lots, private estates, or hobby farms. Differentiation between rural and single family land use can be difficult when lots are narrow but deep (i.e., appear dense on the shoreline but extend quite far back). When doubt exists between a rural designation and a single family land use, assessors should be consistent in their judgments and refer back to local government zoning or bylaws to help decide on the appropriate land use type.	%
	Single_Fam	Single Family Residential	Numeric	The Single Family Residential Land Use is the percentage of the shoreline, based upon the shore segments length that is predominantly used for single family residential purposes. Typically, single family residential occurs in more densely developed areas. However, seasonal use cottages or cabins can often be considered single family residential areas if the dwellings have associated outbuildings, docks, and other features consistent with more densely developed areas.	%
	Urban_Park	Urban Park	Numeric	The Urban Park Land Use is the percentage of the shoreline, based upon the shore segments length that is predominantly used as an urban park. Examples of this land use include public beaches, picnic areas, etc. Shorelines dominated by this land use tend to have limited riparian vegetation and contain extensive areas of turf in the under story.	%
Landu_Comm	Land Use Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the shore type data fields above.		

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Substrates	Marl	Marl Substrate	Numeric	The Marl substrate field allows assessors to enter the relative percentage of marl occurring along the shoreline. Marl is a substrate that is typically white in color associated with clear lakes and consists of loose clay, precipitated calcium carbonate, mollusk/invertebrate shells, and other impurities.	%
	Mud	Mud Substrate	Numeric	The Mud substrate field allows assessors to enter the relative percentage of mud occurring along the segment. Mud is a substrate that is typically dark in color and consists of a mixture of silts, clays, and finely decayed organic material that is not typically discernable.	%
	Organic	Organic Substrate	Numeric	The Organic substrate field allows assessors to enter the relative percentage of organic materials that occur along the shoreline. Organic substrates are typically associated with wetland sites and consist of detritus material that is identifiable to some extent (e.g., sticks, leaves, etc.).	%
	Fines	Fine Substrate	Numeric	The Fines substrate field allows assessors to enter the relative percentage of fines that occur along the shoreline. Fines consist of silts and clays and these substrates are typically less than 1 mm in size. Fines are differentiated from mud because there is little to no organic content.	%
	Sand	Sand Substrate	Numeric	The Sand substrates field allows assessors to enter the relative percentage of sands that occur along the shoreline. Sands are any particle that contains granular particles visible to the naked eye. These particles are typically .06 to 2 mm in size.	%
	Gravel	Gravel Substrate	Numeric	The Grave substrates field allows assessors to enter the relative percentage of gravels that occur along the shoreline. Gravels are particles that range from 2 mm to approximately 64 mm. Thus, they are the size of a lady bug to the size of a tennis ball or orange. This field should only be used when substrates are difficult to identify and assessors cannot determine whether fine and course gravels.	%
	Gravel_Fin	Fine Gravel Substrate	Numeric	The Fine Gravel substrates field allows assessors to enter the relative percentage of fine gravels that occur along the shoreline. Fine gravels are particles that are 2 mm to approximately 16 mm or the size of a ladybug to the size of a grape. This field should only be used when assessors have good visibility and can confidently identify fine gravels. If this field is used, the generally gravel category should not be used.	%
	Gravel_Coa	Coarse Gravel Substrate	Numeric	The Coarse Gravel substrates field allows assessors to enter the relative percentage of course gravels that occur along the shoreline. Coarse gravels are particles that are 16 mm to approximately 64 mm or the size of a grape to the size of a tennis ball or orange. This field should only be used when assessors have good visibility and can confidently identify coarse gravels. If this field is used, the generally gravel category should not be used.	%
	Cobble	Cobble Substrate	Numeric	The Cobble substrates field allows assessors to enter the relative percentage of cobbles that occur along the shoreline. Cobbles are particles that are 64 to 256 mm in size (Tennis ball to basketball).	%
	Cobble_Fin	Fine Cobble Substrate	Numeric	The Fine Cobble substrates field allows assessors to enter the relative percentage of fine cobbles that occur along the shoreline. Fine cobbles are particles that are 64 to 128 mm in size (tennis ball to coconut). This field should only be used when assessors have good visibility and can confidently identify fine cobbles. If this field is used, the general cobble category should not be used.	%
	Cobble_Coa	Coarse Cobble Substrate	Numeric	The Coarse Cobble substrates field allows assessors to enter the relative percentage of course cobbles that occur along the shoreline. Coarse cobbles are particles that are 128 to 256 mm in size (coconut to basketball). This field should only be used when assessors have good visibility and can confidently identify coarse cobbles. If this field is used, the general cobble category should not be used.	%
	Boulder	Boulder Substrate	Numeric	The Boulder substrates field allows assessors to enter the relative percentage of boulders that occur along the shoreline. Boulders are particles that are greater than 256 mm in size (bigger than a basketball). These substrates can not typically be lifted by one person as they are too heavy.	%
	Bedrock	Bedrock Substrate	Numeric	The Bedrock substrates field allows assessors to enter the relative percentage of bedrock that occurs along the shoreline. Bedrock is consider any rock where blocks are larger than 4 m or is solid, un-weathered underlying rock.	%
	Embeddedne	Embeddedness	Categorical	Embeddedness is a categorical field that allows assessors to enter the approximate embeddedness of substrates. Embeddedness is a measure of the degree to which boulders, cobbles and other large materials are covered by fine sediments. Categories for embeddedness include None (0%), Low (0 to 25%), Medium (25-75%), High (>75%), or Unknown. When assessors are unclear of the embeddedness they should either complete measurements of foreshore substrates or leave the field as unknown.	
Shape	Shape of Substrate	Categorical	Shape is a categorical field that allows assessors to identify the shape of larger particles such as cobble or boulders. Angular shapes refer to naturally occurring angular rock material that has not been substantially weathered. Blast rock refers to angular blast rock materials, such as rip rap. Smooth materials are rocks that are generally rounded. This field should be used to describe the predominant substrates that occur along the shoreline (e.g., if 85 % of the substrates are round and smooth, and 10% are blast rock, the field should be used to describe the 85%).		
Commnt_Sub	Substrate Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the data field above.		

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Vegetation Band 1	B1_Class	Vegetation Band 1 Land Cover Class	Categorical	<p>The Vegetation Band 1 Land Cover Class is a description of the predominant vegetation class present. Categories are largely derived from the Sensitive Habitat Inventory and Mapping Module 4. The Coniferous Class occurs where tree cover is at least 20% of the shore zone area and at least 80% of the trees are coniferous. The Broadleaf Class occurs where the tree cover is at least 20% and at least 65% of the trees are broadleaf or deciduous. The Mixed Forest Class occurs where tree cover is at least 20% and there are no more than 80% coniferous trees and no more than 65% broadleaf trees. The Shrubs Class occurs where tree coverage is less than 10% and there shrubs cover at least of 20%. Shrubs are defined as multi-stemmed woody perennial plants. The Herbs / Grasses Class occur where there is at less than 10% tree coverage and less than 20% of shrubs. The Exposes Soil Class occurs where recent disturbance, either anthropogenic or natural, has occurred and mineral soils are exposes. The Landscape Class refers to urbanized areas where most natural vegetation has been replaced by at least 30% coverage of ornamental trees, shrubs, and other vegetation. The Lawn Class occurs in urbanized areas where turf grasses cover at least 30% of the shore zone area and landscaping with ornamental shrubs or trees is less than 30% coverage. The Natural Wetland Class occurs where shore marshes dominate the shore zone area and they have not been significantly influenced by human disturbance. The Disturbed Wetland Class occurs where shore marshes predominate the shore zone area and they have experience significant disturbance (i.e., greater than 30%). The Row Crops Class occurs in agricultural areas where crops are growing. If sites are agricultural, but are not used for row crops (e.g., pasture lands), they should be described as Herbs/Grasses and comments should be used to indicate the agricultural nature of the shore segment. Un-vegetated Sites occur where there is less than 5% vegetation cover and at least 50% of the vegetation cover is mosses or lichens. Un-vegetated sites tend to occur on rocky, exposed shorelines.</p>	
	B1_Stage	Vegetation Band 1 Stage	Categorical	<p>The Vegetation Band 1 Stage is a description of the structural stage of the dominant vegetation. Categories are largely derived from the Sensitive Habitat Inventory and Mapping Module 3 and the Field Manual for Describing Terrestrial Ecosystems. The Sparse Stage describes sites that are in the primary or secondary stages of succession, with vegetation consisting mostly of lichens and mosses, and the total shrub coverage is less than 20% and tree coverage is less than 10%. The Grass Herb Stage describes sites where shore zones are dominated by grasses and herbs, as a result of persistent disturbance of natural conditions (e.g., grasslands). The Low Shrubs stage describes sites that are dominated by shrubby vegetation less than 2 m in height. The Tall Shrubs Stage is dominated by vegetation that is 2 to 10 m in height and seedlings and advance regeneration may be present. The Pole / Sapling Stage describes sites that contain trees greater than 10 m in height, typically densely stocked, and there is little evidence of self thinning or vertical structure. The Young Forest Stage describes sites that are typically less than 40 years old (but could be as great as 50 to 80 years depending upon the forest community), self thinning is evident, and the forest canopy has begun to differentiate into distinct layers. The Mature Forest Stage describes sites that are typically 40 to 80 years old (but could be as high as 140 years), and the under story is well developed with a second cycle of shade trees. The Old Forest Stage describes sites that are typically greater than 80 years old and the stands are structurally complex. Old Forests contain abundant coarse woody debris at varying stages of decay. Old Forests are at least 80 years in age, but may be as old as 250 years and should be considered relative to the forest community assessors are in.</p>	

Vegetation Band 1

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Vegeta	B1Shrub_Co	Vegetation Band 1 Shrub Coverage	Categorical	The Shrub Coverage categorically describes shrub coverage within the shore zone. Sparse sites have less than 10% shrub coverage. Moderate shrub coverage occurs on sites that have between 10 to 50% coverage. Abundant shrub coverage occurs on sites that have greater than 50% shrub coverage.	
	B1Tree_Cov	Vegetation Band 1 Tree Coverage	Categorical	The Tree Coverage categorically describes Tree coverage within the shore zone. Sparse sites have less than 10% Tree coverage. Moderate Tree coverage occurs on sites that have between 10 to 50% coverage. Abundant Tree coverage occurs on sites that have greater than 50% Tree coverage.	
	B1_Distrib	Vegetation Band 1 Distribution	Categorical	The Distribution field is used to describe whether the vegetation band described is continuous along the entire shore segment. Categories include Continuous and Patchy (for sites where the dominant vegetation band occurs in patches along the segment). An example of a patchy distribution is a shore segment where most areas are extensively landscaped, with the exception of a few shore lots which remain relatively natural. In this case, the dominant landscaped area would be described and comments would be used to identify residual natural areas.	
	B1_Bandwi	Vegetation Band 1 Width	Numeric	The Vegetation Band 1 Bandwidth field is used to provide an estimate of the approximate width of the band being described. In cases where bandwidth varies along the segment, a representative width should be used to describe the shore segment. The intent of this field is to provide a general description of the width of the vegetation band that is being described and users of the database need to consider this when assessing data within the database.	
	B1_Overhan	Overhanging Vegetation	Numeric	The Overhanging Vegetation field is used to describe the percentage of the shore segment length that contains significant overhanging vegetation. Overhanging vegetation should be considered as if the lake was at full pool or the mean annual high water level.	
	Aquatic_Ve	Aquatic Vegetation	Numeric	The Aquatic Vegetation field is used to describe the percentage of the shoreline that contains emergent, submergent, and floating aquatic vegetation.	
	Submergent	Submergent Vegetation Quantity	Numeric	The Submergent Vegetation field is used to describe the percentage of the shoreline segment that contains submergent vegetation. Submergent vegetation includes species such as milfoil, Potamogeton spp., etc.	
	Submerg_Ve	Submergent Vegetation Presence	Categorical	The Submergent Vegetation Presence field is used to indicate whether submergent vegetation is present along the segment. In cases where assessors cannot determine the percentage of the segment but are aware it is present, this field should be used.	
	Emergent_v	Emergent Vegetation Quantity	Numeric	The Emergent Vegetation field is used to describe the percentage of the shoreline segment that contains emergent vegetation. Emergent vegetation includes species such as cattails, bulrushes, various sedges, etc.	
	Emerged_Ve	Emergent Vegetation Presence	Categorical	The Emergent Vegetation Presence field is used to indicate whether emergent vegetation is present along the segment. In cases where assessors cannot determine the percentage of the segment but are aware it is present, this field should be used.	
	Floating_v	Floating Vegetation Quantity	Numeric	The Floating Vegetation field is used to describe the percentage of the shoreline segment that contains floating vegetation. Floating vegetation includes species such as pond lilies, etc.	
	Floating_V	Floating Vegetation Presence	Categorical	The Floating Vegetation Presence field is used to indicate whether floating vegetation is present along the segment. In cases where assessors cannot determine the percentage of the segment but are aware it is present, this field should be used.	
		AVeg_Cmt	Aquatic Vegetation Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the data field above.
	B1_Commnt	Vegetation Band 1 Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the data field above.	
Vegetation Band 2	B2_Class	Vegetation Band 2 Land Cover Class	Categorical	See Vegetation Band 1 Class for a description.	
	B2_Stage	Vegetation Band 2 Stage	Categorical	See Vegetation Band 1 Stage for a description.	
	B2Shrub_Co	Vegetation Band 2 Shrub Coverage	Categorical	See Vegetation Band 1 Shrub Cover for a description.	
	B2Tree_Cov	Vegetation Band 2 Tree Coverage	Categorical	See Vegetation Band 1 Tree Cover for a description.	
	B2_Distrib	Vegetation Band 2 Distribution	Categorical	See Vegetation Band 1 Distribution for a description.	
	B2_Bandwid	Vegetation Band 2 Width	Categorical	See Vegetation Band 1 Width for a description.	
		B2_Commnt	Vegetation Band 2 Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the data field above.

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Littoral Zone	Littoral_Z	Littoral Zone Width Categories	Categorical	The Littoral Zone Width Category provides a general classification of the littoral zone. Wide littoral zones are greater than 50 m. Moderate littoral zones are 10 to 50 m in width, and Narrow littoral zones are less than 10 m wide.	
	LWD	Large Woody Debris Presence	Categorical	The Large Woody debris presence field allows assessors to indicate whether LWD is present along the segment. Categories include <5 Pieces, 5 to 25 Pieces, and >25 Pieces.	
	LWD_Number	Large Woody Debris Count	Numeric	The Large Woody debris count field allows assessors to enter the total number of large woody debris pieces counted along the shore segment. Only significant pieces of large woody debris, which are contributing to fish habitat, should be counted.	
	Width_Litt	Littoral Width	Numeric	The Littoral Width field allows assessors to enter the average littoral width of the segment. This field can be determined using air photo interpretation or field measurements. Typically, the field is rounded to the nearest 5 m as the number is intended to be representative of the segment.	
	Commnt_Lit	Littoral Zone Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the data field above.	
Modifications	Retain_Wal	Retaining Wall Count	Numeric	The Retaining Wall Count field is the total number of retaining walls occurring along the segment. Retaining walls should only be counted if they are within 5 to 10 m of the high water level. Retaining walls must have a vertical element that is greater than 30 cm and must be retaining earth to some degree. On steep sloping sites, more than one retaining wall may be present (i.e., the property is tiered). In these cases each retaining wall is counted.	#
	PerRetain_	Percent Retaining Wall	Numeric	The Percent Retaining Wall field indicates that approximate percentage of the shore segment length where retaining walls occur.	%
	Retain_Mat	Retaining Wall Material	Categorical	The Retaining Wall Material field is a categorical field describing the materials used to construct the retaining wall. Retaining walls can be made of concrete, rock and wire mesh (gabion), wood, sheet metal, sand bags, or mixed (if more than one material is used to construct retaining walls in a segment).	
	Docks	Docks Count	Numeric	The Docks Count field is the total number of pile supported or floating docks or swimming platforms that occur along the segment. Properties may have more than one dock present and each different structure is considered a separate dock. For instance, a property could have one swimming float and one dock.	#
	Docks_km	Docks per Kilometer	Numeric	The Docks per Kilometer field is determined during post processing. This field is calculated by dividing the total number of docks observed by the total length of the shore segment.	%
	Boat_House	Boat House Count	Numeric	The Boat House Count field is used to count boat houses that occur along the segment. Boat Houses are structures that are specifically designed to house boats or watercraft. Boat Houses can either be located on land or as structures over the water. If only structures over the water are counted, assessors should be consistent and make note of this so end users are aware of what definition was used for a boat house. If structures on land are considered as boat houses, a rail or boat launch should be present that land owners use to launch the boat to the lake. Garages that house boats should not be counted as boat houses because there is not an associated launch structure.	#
	Groynes	Groynes Count	Numeric	The Groyne Count field is used to count any structure that is perpendicular to the shoreline that is impacting regular sediment drift along the shoreline. Groynes can be constructed out of concrete, rock, piles, wood, or other materials. Docks or other structures that are acting as groynes, and affecting sediment movement should be included in the groyne count. Rock lines that are too small to significantly impact sediment movement should not be counted as a groyne.	#
	Groynes_km	Groynes per Kilometer	Numeric	The Groynes per Kilometer field is determined during post processing of data. This field is calculated by dividing the total number of groynes observed by the total length of the shore segment.	%
	Boat_Launc	Boat Launch Count	Numeric	The Boat Launch Count field is the total number of boat launches that were observed along the shoreline. Generally, only permanent boat launches are counted (e.g., made of concrete). However, on small systems assessors may choose to count gravel boat launches as these may be the only type present. Assessors should document criteria used to determine what constitutes a boat launch during the assessment.	#
	PerRail_mo	Percent Rail Modifier	Numeric	The Percent Rail Modifier field is used to describe the percentage of the linear shore segment length that contains railways in close proximity to the shoreline.	%
	PerRoad_mo	Percent Road Modifier	Numeric	The Percent Road Modifier field is used to describe the percentage of the linear shore segment length that contains a roadway in close proximity to the shoreline.	%
	Marin_Rail	Marine Rail Count	Numeric	The Marine Rail Count field is the total number of marine rails that occur along a shore segment. Marine Rails are a track system that is used to remove boats from a lake during the winter months.	#
	Marinas	Marina Count	Numeric	The Marinas Field is the total number of large and small marinas that were documented along the shoreline. A marina is considered to be any pile supported or floating structure that has slips for 6 or more boats.	#
	Sub_modifi	Sustrate Modification Presence	Categorical	The Substrate Modification Presence field is used to document whether substrate modification is occurring along the shore segment. Substrate modification includes any type of importation of sands, significant movement of natural substrates (e.g., to construct groynes), or earthworks.	
	PerSub_mod	Percent Substrate Modification	Numeric	The Percent Substrate Modification field is the estimated percentage of the shore segment where substrate modification has occurred.	%
Commnt_Mod	Modifications Comments	Alphanumeric	The comments field allows assessors to enter applicable information that is not included in the data field above.		
Flora and Fauna	Veterans	Veteran Trees	Categorical	The Veteran Tree field is a categorical field to describe the number of veteran trees that occur along the shore segment. Veteran trees are defined as a tree that is significantly older than the dominant forest cover and provides increased structural diversity. Categories include No, Less than 5 Trees, 5 to 25 Trees, and Greater than 25 trees.	
	Snags	Snags	Categorical	The Snags field is a categorical field to describe the number of dead standing snags that occur along the shore segment. Snags are defined as dead standing trees that provide increased structural diversity. Categories include No, Less than 5 Trees, 5 to 25 Trees, and Greater than 25 trees.	
	Cmmnt_Flra	Flora Comments	Alphanumeric	The Flora comments field allows users to enter in comments regarding flora observed within the shore segment.	
	Cmmnt_Faun	Fauna Comments	Alphanumeric	The Fauna comments field allows users to enter in comments regarding fauna observed within the shore segment.	