

Appendix 1

This appendix contains the data cards developed by the Coastal First Nations — Great Bear Initiative for stream assessments by First Nations stewardship staff as part of their Regional Monitoring System stream assessment program. The cards include a Stream Transect card, Stream Assessment card, Stream Visit card, and Spawner Survey card.

Stream Transect

Stream Name: _____ Reach # _____

Entered in DMS: _____

Transect #	Location (m)	BF width (m)	Wet width (m)	BF depth (cm)	Max depth (cm)	Habitat type	
						<input type="checkbox"/> pool	<input type="checkbox"/> log jam
Canopy closure (m)		Moss on rocks		Undercut bank?		<input type="checkbox"/> riffle	<input type="checkbox"/> cascade
Left:	Right:	<input type="checkbox"/> little/no	<input type="checkbox"/> occasional	Left: <input type="checkbox"/> Yes	Right: <input type="checkbox"/> Yes	<input type="checkbox"/> glide	<input type="checkbox"/> other:
		<input type="checkbox"/> frequent	<input type="checkbox"/> abundant	<input type="checkbox"/> No	<input type="checkbox"/> No		
Pebble size: int axis (cm)							
Transect #	Location (m)	BF width (m)	Wet width (m)	BF depth (cm)	Max depth (cm)	Habitat type	
						<input type="checkbox"/> pool	<input type="checkbox"/> log jam
Canopy closure (m)		Moss on rocks		Undercut bank?		<input type="checkbox"/> riffle	<input type="checkbox"/> cascade
Left:	Right:	<input type="checkbox"/> little/no	<input type="checkbox"/> occasional	Left: <input type="checkbox"/> Yes	Right: <input type="checkbox"/> Yes	<input type="checkbox"/> glide	<input type="checkbox"/> other:
		<input type="checkbox"/> frequent	<input type="checkbox"/> abundant	<input type="checkbox"/> No	<input type="checkbox"/> No		
Pebble size: int axis (cm)							
Transect #	Location (m)	BF width (m)	Wet width (m)	BF depth (cm)	Max depth (cm)	Habitat type	
						<input type="checkbox"/> pool	<input type="checkbox"/> log jam
Canopy closure (m)		Moss on rocks		Undercut bank?		<input type="checkbox"/> riffle	<input type="checkbox"/> cascade
Left:	Right:	<input type="checkbox"/> little/no	<input type="checkbox"/> occasional	Left: <input type="checkbox"/> Yes	Right: <input type="checkbox"/> Yes	<input type="checkbox"/> glide	<input type="checkbox"/> other:
		<input type="checkbox"/> frequent	<input type="checkbox"/> abundant	<input type="checkbox"/> No	<input type="checkbox"/> No		
Pebble size: int axis (cm)							

Fig. A1.1 – The Stream transect card used to record stream characteristics at multiple cross-sectional transects within a reach.

Stream Assessment (side 1)

Date: _____

Entered in DMS: _____

Stream name		Location description		Latitude and longitude at mouth	
Previously assessed? <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> don't know		Section assessed (e.g., whole creek, to falls)		Access notes (to assist future surveys)	
Reach #	Reach start (landmark)			Reach start (lat/long)	
BF width (m)	Wet width (m)	Reach length (10xBF)	Gradient (%)	Habitat sequence	
# cover-LWD		# pool-LWD	Rep LWD W x L (m)	Logging?	
Main tree species			Main shrub/herb species		
1:	3:	1:	3:	5:	
2:		2:	4:	6:	
Comments and observations (include location, description, and photo numbers as appropriate)					

Fig. A1.2 – Side 1 of the Stream Assessment card used to record reach-level characteristics at each stream site.

Stream Assessment (side 2)

Entered in DMS: _____

POOLS									
Pool #	Length (m)	Width (m)	Tail depth (cm)	Max depth (cm)	Pool #	Length (m)	Width (m)	Tail depth (cm)	Max depth (cm)
<input type="checkbox"/> CULTURAL FEATURES (e.g., CMT, midden, fish weir, medicinal plants), <input type="checkbox"/> SALMON BARRIERS (e.g., falls, landslide, log jam, dam, culvert) <input type="checkbox"/> OTHER FEATURES (e.g., tributaries, multiple channels, extensive bars, islands)									
Type of feature or barrier		Location (lat/long, desc)			Detailed description of feature or barrier			Photo number(s)	

Fig. A1.3 – Side 2 of the Stream Assessment card.

Stream Visit (v. 2)

Date: _____

Entered in DMS: _____

Time		Stream name		Section visited		Other stream surveys today?	
						<input type="checkbox"/> Habitat Assess <input type="checkbox"/> Spawner <input type="checkbox"/> Logging	
Stream discharge		Turbidity	Colour note	Observed fish species		# Adult	# Juv
<input type="checkbox"/> low (0-30%) <input type="checkbox"/> mod (30-90%) <input type="checkbox"/> high (>90%)		<input type="checkbox"/> clear <input type="checkbox"/> lightly turbid <input type="checkbox"/> mod. turbid <input type="checkbox"/> turbid	<input type="checkbox"/> tea <input type="checkbox"/> silty <input type="checkbox"/> muddy <input type="checkbox"/> other:	1.			
				2.			
				3.			
Location of width/depth measurements (lat/long & desc)				Wetted width (m)	Max depth (cm)	Substrate embed (%)	
Test	Reach #	Test location (lat/long, desc, or transect #)		Temp (°C)	pH	Cond (µS/cm)	DO (mg/L)
1							
2							
3							
Type of equipment used for water quality measurements							
Wildlife signs (include type of sign, type of animal, location, and photo numbers)							
<i><input type="checkbox"/>Photos</i>							

Fig. A1.4 – The Stream Visit card, which is to be used along with the Stream Assessment card and Stream Transect card, or individually if time does not permit a full assessment.

Spawner Survey (v. 2)

Date: _____

Entered in DMS: _____

Start time	Stop time	DFO Area	Stream name		Observer(s)			
Target species		Inspection mode		Section inspected	Fish distribution			
<input type="checkbox"/> sockeye	<input type="checkbox"/> chum	<input type="checkbox"/> strwlk	<input type="checkbox"/> float					
<input type="checkbox"/> coho	<input type="checkbox"/> chinook	<input type="checkbox"/> bnkwlk	<input type="checkbox"/> snorkel					
<input type="checkbox"/> pink	<input type="checkbox"/> other	<input type="checkbox"/> heli	<input type="checkbox"/> fence					
		<input type="checkbox"/> plane	<input type="checkbox"/> other					
Start boundary				Stop boundary		Distance inspec'd		
Desc:				Desc:		(m)		
Coord:				Coord:				
Brightness	Prec type	Prec intens	Windy	Water temp	Bankfull	Colour	Stream visibility	
<input type="checkbox"/> full	<input type="checkbox"/> none	<input type="checkbox"/> light	<input type="checkbox"/> yes	(°C)	<input type="checkbox"/> extremely low	<input type="checkbox"/> clear	<input type="checkbox"/> iced	<input type="checkbox"/> low
<input type="checkbox"/> bright	<input type="checkbox"/> rain	<input type="checkbox"/> medium	<input type="checkbox"/> no		<input type="checkbox"/> below normal	<input type="checkbox"/> tea	<input type="checkbox"/> other	<input type="checkbox"/> medium
<input type="checkbox"/> medium	<input type="checkbox"/> snow	<input type="checkbox"/> heavy			<input type="checkbox"/> normal	<input type="checkbox"/> silty		<input type="checkbox"/> high
<input type="checkbox"/> dark					<input type="checkbox"/> above normal	<input type="checkbox"/> muddy		
Rationale for Estimated Adult Live								
Unusual Conditions								
<input type="checkbox"/> Photos								
General Comments								
<input type="checkbox"/> Photos								

Fig. A1.5 – The Spawner Survey card, which is to be used to collect information on spawning salmon.