CABIN FIELD PROTOCOL CHECKLIST

⚠			🕒
DO NOT ENTER THE STREAM		**Arrive at Site**	MUST BE DONE FIRST
	□	Inspect site for hazards and discuss with team.	
	□	Fill out site inspection sheet after discussing with team *(last page of field sheet).*	
	□	Perform visual scan to assess suitability (riffle, water level, etc.).	
	□	Pre chosen sites: confirm basin name, site code, coordinates, test or potential reference status.	
	□	Visually estimate reach, 6 x bankfull width.	
	□	Decide where benthic/water sampling will occur within reach. Consult old field sheets if applicable.	
	□	Ensure safety gear is easily accessible.	
	□	Record field crew, site code, and sampling date at the top of each page of field sheets.	
		Kick Net Sampling	
	□	Choose riffle/run habitat for kick net sample.	
	□	Plan kick path (zig-zag pattern to capture micro-habitats, move in upstream direction, avoid hazards).	
	□	Perform 3 minute kick according to CABIN protocol requirements *(see Field Manual, pp. 31-32).*	
		Benthic Macroinvertebrate Samples	ANYTIME AFTER BENTHIC MACORINVERTEBRATE COLLECTION
	□	Carefully transfer benthic sample from kick net to sample jars so that no sample is lost.	
	□	Thoroughly rinse off larger rocks, sticks and freshly fallen leaves.	
	□	If needed, use bucket swirling technique to remove excess debris.	
	□	Label jars according to CABIN best practices (lid, inside, outside).	
	□	Add correct preservative ratio, wearing appropriate PPE (safety glasses, gloves, etc.).	
	□	Fill in all fields in the benthic macroinvertebrate section of the field sheet.	
UPSTREAM OF KICK		**Water Quality**	
	□	Measure water quality upstream of all disturbed areas.	
	□	Position field probes in the main flow of the stream/river.	
	□	Allow field probes and thermometer (if applicable) to stabilize before recording values.	
	□	Record field probe measurements and time on the field sheet.	
	□	Label water sample bottles before sampling with site code, date, and time.	
	□	Collect and store water samples following CABIN best practices *(see Field Manual, pp. 30).*	
		Site Description, Location and Drawing	
	□	Fill in geographical description/notes and land-use section.	
	□	Fill in primary site data section.	
	□	Complete location data section.	
	□	Draw a map of the site from an aerial view.	
	□	Include the following on the drawing: direction of flow, north arrow, kick area, reach, site access and notable stream features.	

Environment and Climate Change Canada | Environnement et Changement climatique Canada

Canada

CABIN FIELD PROTOCOL CHECKLIST

REPRESENTATIVE OF ENTIRE REACH		**Site Photos**	ANYTIME AFTER BENTHIC MACROINVERTEBRATE COLLECTION
	□	Take site photos in order (field sheet, upstream, downstream, across, substrate *with ruler*).	
	□	Indicate on field sheet which photos were taken plus any additional photos.	
		Reach Characteristics	
	□	Identify all in-stream habitat types present in reach (riffle, rapids, straight run, pool/back eddy).	
	□	Determine % canopy cover.	
	□	Determine % macrophyte coverage.	
	□	Identify types of streamside vegetation present.	
	□	Determine dominant streamside vegetation.	
	□	Determine periphyton coverage category of substrate (can be done with pebble count).	
		Slope	
	□	Measure slope over a minimum of 20 meters.	
	□	Follow CABIN best practices for collecting slope measures *(see Field Manual pp. 43-46).*	
	□	Read heights on survey rod and record on field sheet in correct boxes using consistent units.	
	□	Confirm measurements are within expected range (most often < 0.1 m/m).	
IN RIFFLE WHERE KICK SAMPLE WAS TAKEN		**Channel Measurements**	
	□	Identify bankfull level in collaboration with team *(see Field Manual, p. 40).*	
	□	Measure bankfull width, wetted width, and bankfull-wetted height.	
	□	Determine target velocity sampling locations across the stream channel noting potential obstructions.	
	□	Measure velocity and depths standing downstream of measurements.	
	□	Record velocity and depth values on field sheet and indicate velocity device used.	
	□	Confirm measurements are reasonable *.	
		Substrate	
	□	Perform unbiased, randomized pebble count (100 rocks).	
	□	Measure the intermediate axis of rocks in correct units (cm).	
	□	Identify and record substrate categories for bedrock, organic material, and sand/silt (if applicable).	
	□	Assess embeddedness of 10 rocks.	
	□	Determine surrounding material category (substrate size class).	
		Review Field Sheet	END OF SAMPLING
	□	Review of field sheet performed by second team member.	
	□	Confirm field sheet is complete, units are correct and measurement values are reasonable.	
	□	Explain empty fields where data is not collected.	
		Leave Site	
	□	Pack up equipment properly, secure samples for transport.	
	□	Look around site for any equipment and personal belongings, leave no trace.	

* VELOCITY NOTES: Velocity will feel different depending on sampler's size and experience level

0 - 0.1 m/s	Basically still; ensure you are sampling in erosional (riffle) habitat
0.2 m/s	Moving but slow
0.3-0.4 m/s	Moving well but easily wadeable
0.5 m/s	Feels fast in deeper water (above the knee)
0.75 m/s	Feels fast even in shallower water (below-knee)
> 1 m/s	Challenging to wade