Reference: GLOBE® 2005 Appendix- 2 Soil

## SOIL CHARACTERIZATION SURVEY ACTIVITY

Spray bottle

Task: Use an auger to expose a soil profile to determine soil characteristics within the riparian zone.

		Need
So	il au	Iger

Riparian Soil Survey data form

In the Field:

Exposing the Soil Profile

- 1. Identify a location where an auger can be used to expose a soil profile.
- 2. Remove the surface vegetation.
- 3. Place the auger at the top of the soil and turn the auger one complete revolution (360°) to dig into the ground. Do not turn the auger more than one complete circle (360°) to prevent the soil from being compacted.
- 4. Remove the auger with the sample from the hole
- 5. Keeping the soil sample inside the auger, identify if you have more than one soil horizon in your sample. If no, use the soil characterization key to identify your sample. If yes, use the soil characterization key to identify all different soil horizons.
- 6. For each soil horizon found, collect a small sample in your hand (about the size of a ping-pong ball). Using the spray bottle, moisten the soil and work between your fingers until it is the same moisture throughout. Begin the soil characterization key (on the back).

## SOIL CHARACTERIZATION KEY

START			YOUR ANSWERS
A	Soil remains loose and single-grained; can only be heaped into a pyramid.	$\rightarrow$ YES $\rightarrow$ NO	SAND
в	The soil contains sufficient silt and clay to become somewhat cohesive; can be shaped into a ball that easily falls apart.		LOAMY SAND
		→ NO	
С	Same as for loamy sand but can be shaped by rolling into a short, thick cylinder.	$\rightarrow$ YES $\rightarrow$ NO	SILT LOAM
D	About equal sand, silt, and clay means the soil can be rolled into a cylinder about 15 cm long that breaks when bent.	$\rightarrow$ YES $\rightarrow$ NO	LOAM
E	As for loam, although soil can be bent into a U, but no further, without being broken.	$\rightarrow$ YES $\rightarrow$ NO	CLAY LOAM
F	Soil can be bent into a circle that shows cracks.	$\rightarrow$ YES $\rightarrow$ NO	LIGHT CLAY
	↓		
G	Soil can be bent into a circle without showing cracks.	→ YES →	HEAVY CLAY
	e letters refers to the corresponding image in ure 1 below.	My soil ty	pe is:
Fig	ure 1 A B C D C C C C C D C		

Method and drawing after Ilaco (1985)