Instructions for June 2006 Draft PRE-PROJECT checklist SB – **BIOENGINEERED STREAMBANK STABILIZATION**

To be used for streambank stabilization features utilizing live plant materials.

Questions regarding whether or not a specific action is a treatment goal should be answered using a project's contract/statement of work. Targeted outcomes should be based on project deliverables.
Yes = the question applies and the answer is yes, comment if needed. Partially = cannot be answered definitively yes or no, comment suggested. No = the question applies and the answer is no, comment if needed. Don't know = answer unknown and cannot be found; preferable to blank. Not Applicable = the question does not apply to the feature or the component in question was not part of the approved contract. Also for sub-questions when the primary question was answered A. See Manual Part III and XI for guidance. See below for 3-letter code key; see glossary for definitions.

THE **"TREATMENT AREA"** MUST BE IDENTIFIED USING THE PROTOCOL FOR DOCUMENTING THE LOCATION OF HABITAT RESTORATION FEATURES. IT IS ESSENTIAL THAT SOMEONE CONDUCTING POST-TREATMENT MONITORING BE ABLE TO RELOCATE PRECISELY THE SAME LOCATION WHERE THE FOLLOWING DATA WERE COLLECTED.

BANK questions should be answered regardless of goals.

1. Meander measurement for the length of streambank proposed to be treated. For bioengineered streambank stabilization features, this will be the length of the bioengineered feature or the length of bank to be stabilized, whichever is greater. A narrative description of the "treatment area" in relation to the proposed feature location is suggested.

a. Measure length of streambank that appears unstable **within** the treatment area. If there is adjacent unstable bank not treated by the project, include a comment so it can later be identified as "untreated".

Look for evidence of active erosion in or adjacent to the proposed treatment area.
a. Location of erosion within, upstream and/or downstream of the proposed treatment area AND left and/or right

bank (looking downstream).

b. Determine using visual evidence and knowledge of land use and erosion processes.

- 3. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager.
- 4. The average bank angle at the proposed treatment site will be reported in departure from horizontal with 0° on the bank, regardless of which bank. A vertical bank is 90°. A 1:1 slope is 45°. A 1½ : 1 slope is 33.69°. And, a 2:1 slope is 26.65°. For undercut banks, also record the horizontal distance undercut to the tenth of a foot in the comments. *Describe K. Vyverberg's folding rule/protractor method of bank measurement when available.*



A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager.
a. Enter the targeted bank angle specified in the project description or contract. A vertical bank is 90°, a 1:1 slope is 45°, a 1½ : 1 slope is 33.69°, and a 2:1 slope is 26.65°. If not available, enter D.

VEGETATION TYPE & COVER questions should be answered regardless of goals.

- 6. Enter the *one* vegetation type that has the greatest percent cover within the treatment area. a. Record whether the dominant vegetation type is composed of native or non-native species.
- 7. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager. a. Enter the targeted dominant vegetation type based on the project goals.
- 8. Total vegetation cover refers to the percent of ground within the treatment area that is *not* bare soil. Estimate visually.
- 9. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager.
 - a. Record targeted percent cover based on project goals. If targeted percent cover is not specified, enter D.
 - b. Yes indicates there is a situation where percent cover may already be high (e.g. 100% grass) but increasing percent cover of the targeted vegetation (e.g. trees) is a goal.
- 10. Measure the percent over-channel canopy cover within the treatment area using a densiometer (see Manual Appendix M). Total canopy cover should represent the *average* throughout the treatment area. For treatment areas longer than 100 feet, canopy measurements should be taken every 50 feet; from the center of the channel, in the center of each 50-foot section. For exceptionally long treatment areas, canopy measurements can be taken every 75-100 feet. Note: percent cover will be the same for features located on opposing banks.

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11. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager. a. Record the targeted percent canopy.

SUBSTRATE questions should be answered regardless of goals.

- 12. Enter the 1^{st} and then the 2^{nd} dominant substrates in the proposed treatment area (e.g., GRV / COB).
- 13. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager. a. Enter the 1st and then 2nd targeted dominant substrates specified in the project description or contract. If not available, enter D.

LWD questions should be answered regardless of goals.

- 14. Count the amount of large woody debris in the targeted treatment area in the two specified size classes. The first entry is for logs with a diameter of at least one foot that are between 6 and 20 feet in length, the second for logs with a diameter of at least one foot that are over 20 feet in length (e.g. 1 / 4).
- 15. A specific goal stated in the contract or proposal, or verbalized by project proponent or contract manager.

CHANNEL questions should be answered regardless of goals.

- 16. List all channel problems *in the vicinity of* the proposed treatment area, *not at a stream or reach level*. List all that apply. Record problems even if they are irrelevant to the project goals.
- 17. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager. a. List all targeted or desired channel conditions specified in the project description or contract.

Code definitions					
AGG	Aggradation	GRV	Gravel	SHR	Shrub
BAR	Lack of stabilizing	GRZ	Grazing/grazing animal	SIN	Sinuosity
	vegetation, bare	HDC	Headcutting	SLC	Silt/clay
BED	Bedrock	HRB	Herbaceous	SND	Sand
BOL	Boulder	HYD	Hydrologic processes	STB	Stability
BRD	Braiding	INC	Incision	STT	Straightening
CNR	Concentrated runoff	LBK	Left bank	TOG	To grade
COB	Cobble	NAR	Narrowing	TRE	Tree
DNS	Downstream	NNS	Non-native species	UCB	Undercut banks
EMG	Emergent groundwater	NON	None	UND	Undercutting
FLO	Flow obstructions	NTS	Native species	UPS	Upstream
FPD	Floodplain deposition	OTH	Other	USG	Unstable soils/geology
GRA	Grass	RBK	Right bank	WID	Width/Widening
GRC	Grade control	SCU	Side cutting	WIN	Within treatment area