Fort Worth District Regulatory Program Proposed “50-50” Stream Mitigation Method

Introduction

- Staff recognize there is a need to provide more in-channel replacement of functions for impacted streams.
- Building on methods developed by other Districts in USACE, including Savannah, Charleston & Little Rock, we have developed a proposed “50-50” stream mitigation method that addresses needs within the Fort Worth District.
- This method would apply on evaluation side only; no changes to existing MBI’s required.

Definitions

- **Riparian Buffer Credits (RBC)**: Credits generated from enhancement activities in stream buffer areas only. SWF banks with RBC, as of April 2013, include Fall-Off Creek MB, Patroon Bayou MB and Scoober Creek MB.

- **In-Channel Credits (ICC)**: Credits generated from specific activities within stream channels. SWF banks with ICC, as of April 2013, include Daisy MB, Mill Branch MB, and Wilbarger Creek MB.

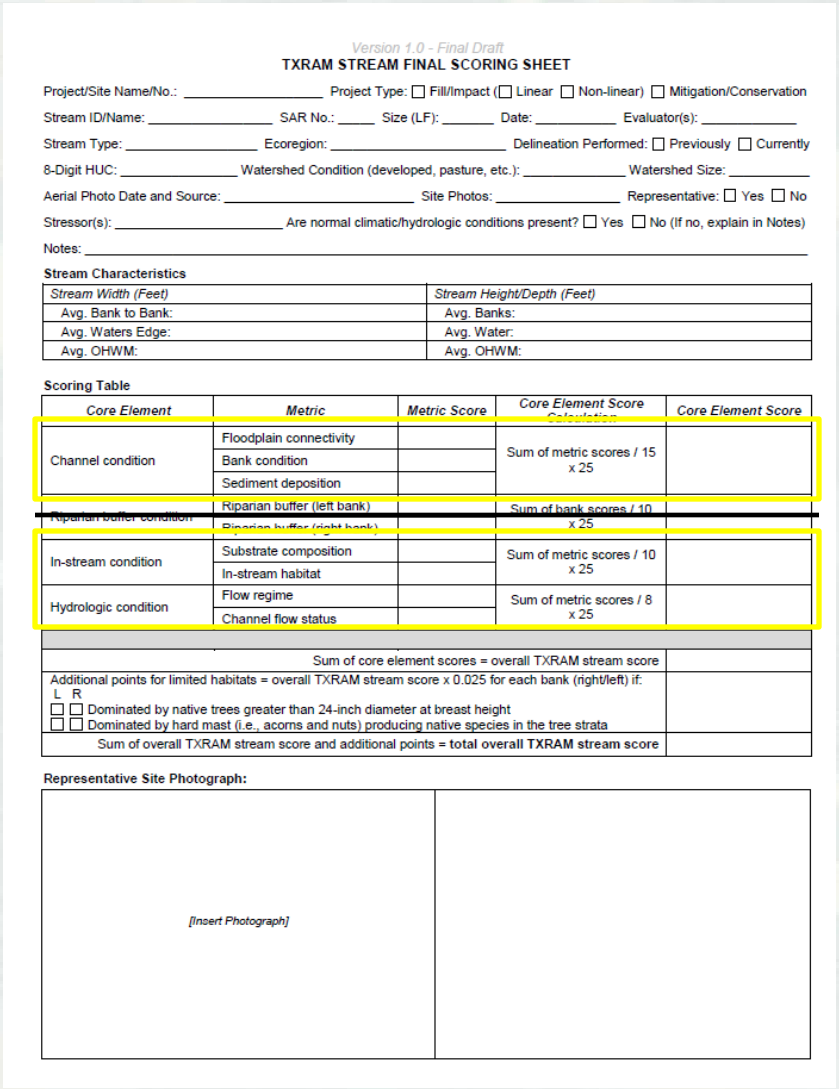
- **Stream Credits (SC)**: Certain credits generated from non-riparian buffer, non-in-channel activities; not generated in newer banks. SWF "legacy" banks with these credits include: Patroon Bayou MB, Trinity River MB, South Forks Trinity River MB, Steele Creek MB, and Anderson Tract MB.

Definitions (Cont.)

- **In-Channel Work (ICW)**: Minimum 50% of TXRAM lift for each stream assessment reach (SAR) occurs from in-channel metrics (ie. without Riparian Buffer Condition metric included).

- **In-Kind Mitigation (IKM)**: Perennial and intermittent stream impacts should be mitigated with in-kind replacement relative to stream type. Ephemeral stream impacts may be mitigated with either ephemeral or intermittent stream mitigation.

In Depth: In-Channel Work



Version 1.0 - Final Draft

TXRAM STREAM FINAL SCORING SHEET

Project/Site Name/No.: _____ Project Type: ☐ Fill/Impact (☐ Linear ☐ Non-linear) ☐ Mitigation/Conservation

Stream ID/Name: _____ SAR No.: _____ Size (LF): _____ Date: _____ Evaluator(s): _____

Stream Type: _____ Ecoregion: _____ Delineation Performed: ☐ Previously ☐ Currently

8-Digit HUC: _____ Watershed Condition (developed, pasture, etc.): _____ Watershed Size: _____

Aerial Photo Date and Source: _____ Site Photos: _____ Representative: ☐ Yes ☐ No

Stressor(s): _____ Are normal climatic/hydrologic conditions present? ☐ Yes ☐ No (If no, explain in Notes)

Notes: _____

Stream Characteristics

Stream Width (Feet)	*Stream Height/Depth (Feet)*
Avg. Bank to Bank:	Avg. Banks:
Avg. Waters Edge:	Avg. Water:
Avg. OHWM:	Avg. OHWM:

Scoring Table

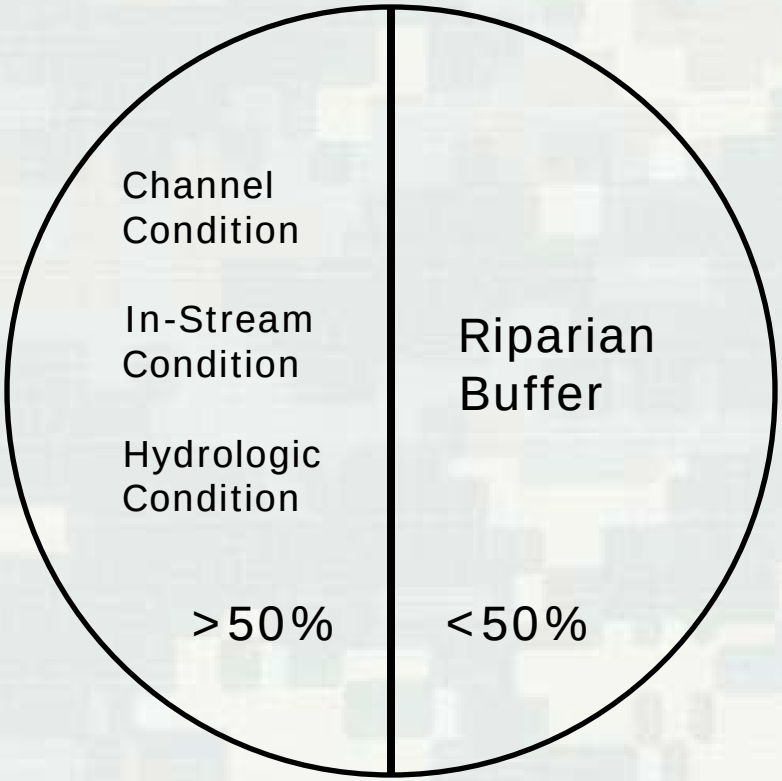
Core Element	*Metric*	*Metric Score*	*Core Element Score Calculation*	*Core Element Score*
Channel condition	Floodplain connectivity		Sum of metric scores / 15 x 25	
	Bank condition			
	Sediment deposition			
Riparian buffer condition	Riparian buffer (left bank)		Sum of bank scores / 10 x 25	
	Riparian buffer (right bank)			
In-stream condition	Substrate composition		Sum of metric scores / 10 x 25	
	In-stream habitat			
Hydrologic condition	Flow regime		Sum of metric scores / 8 x 25	
	Channel flow status			
			Sum of core element scores = overall TXRAM stream score	
			Additional points for limited habitats = overall TXRAM stream score x 0.025 for each bank (right/left) if: L R ☐ ☐ Dominated by native trees greater than 24-inch diameter at breast height ☐ ☐ Dominated by hard mast (i.e., acorns and nuts) producing native species in the tree strata	
			Sum of overall TXRAM stream score and additional points = **total overall TXRAM stream score**	

Representative Site Photograph:

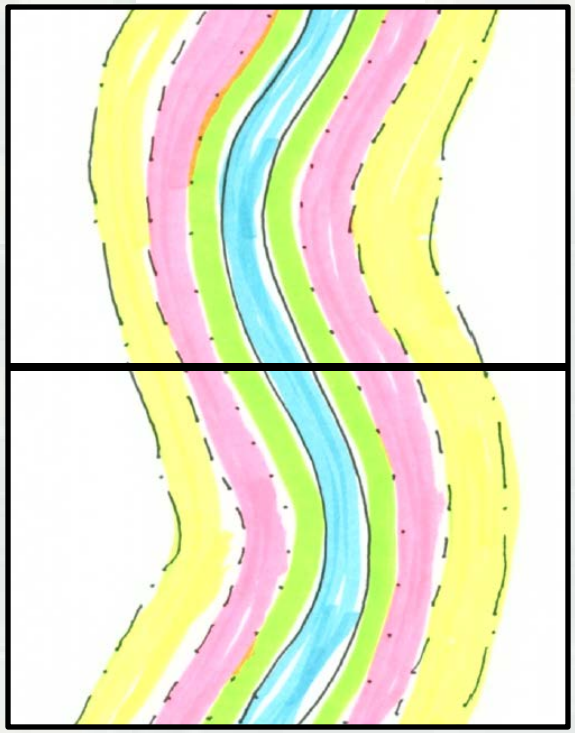
[Insert Photograph]	

Minimum 50% of TXRAM lift for each stream assessment reach (SAR) occurs from in-channel metrics (ie. without Riparian Buffer Condition metric included) to qualify.

In Depth: In-Channel Work (Continued)



In Depth: In-Channel Work (Continued) – Generating ICW Credits

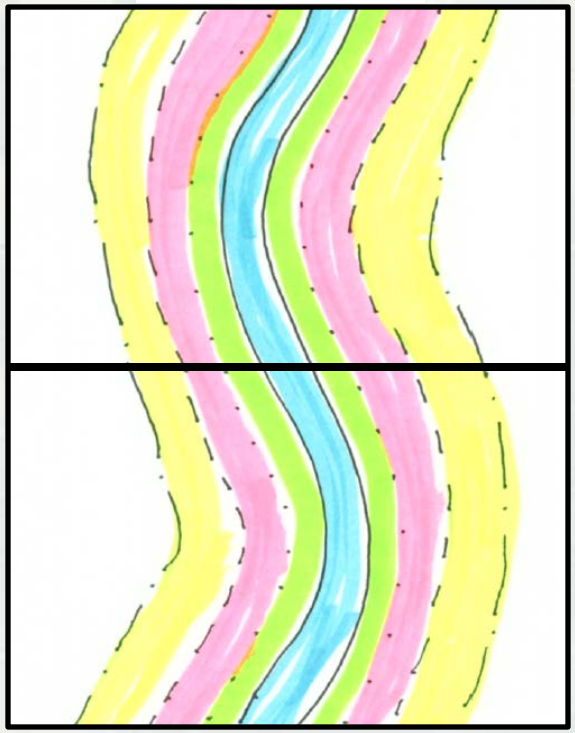


EXAMPLE

SAR 1: >50% TXRAM lift from in-channel metrics

SAR 2: <50% TXRAM lift from in-channel metrics

In Depth: In-Channel Work (Continued) – Generating ICW Credits



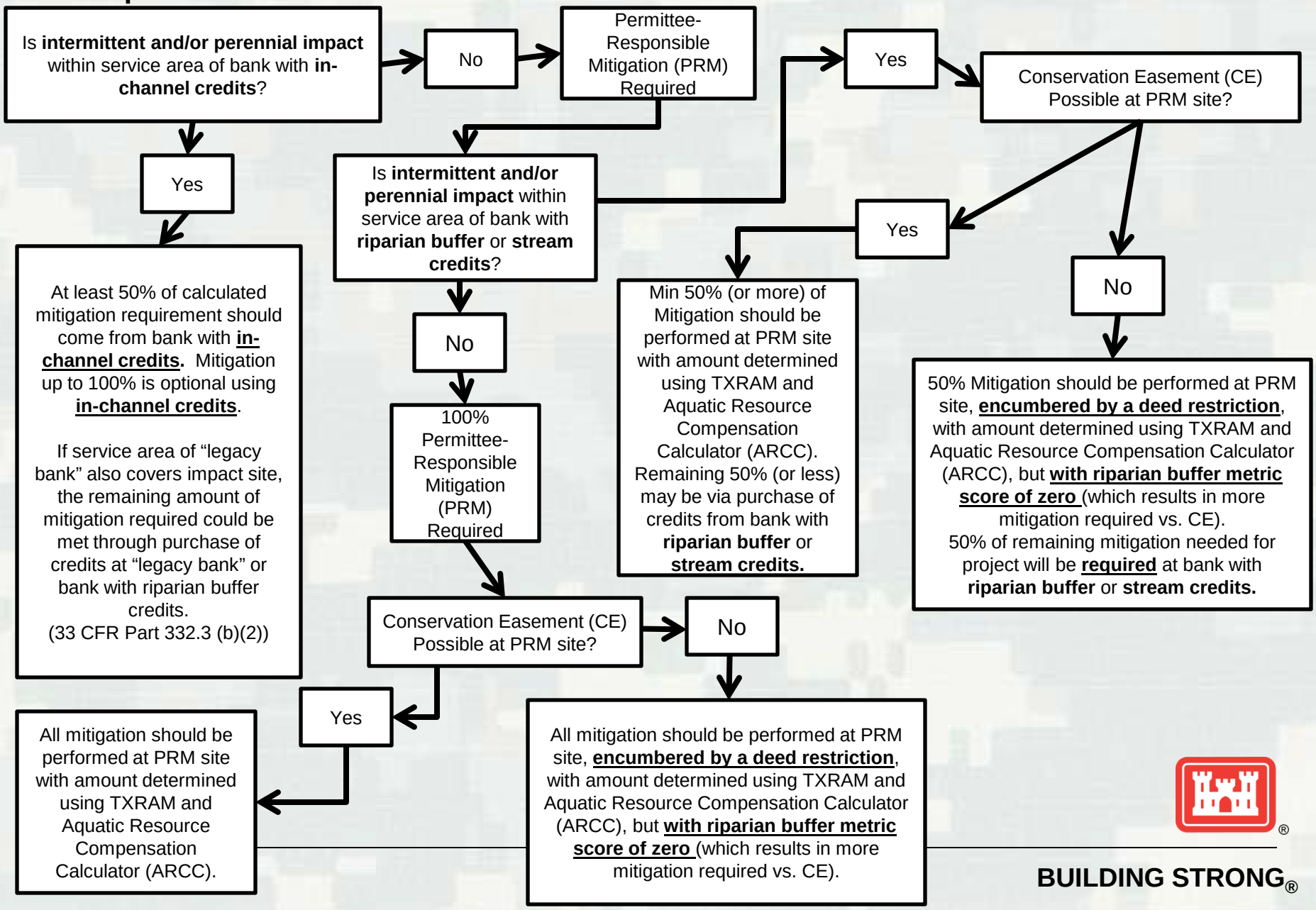
SAR 1: ICW

EXAMPLE

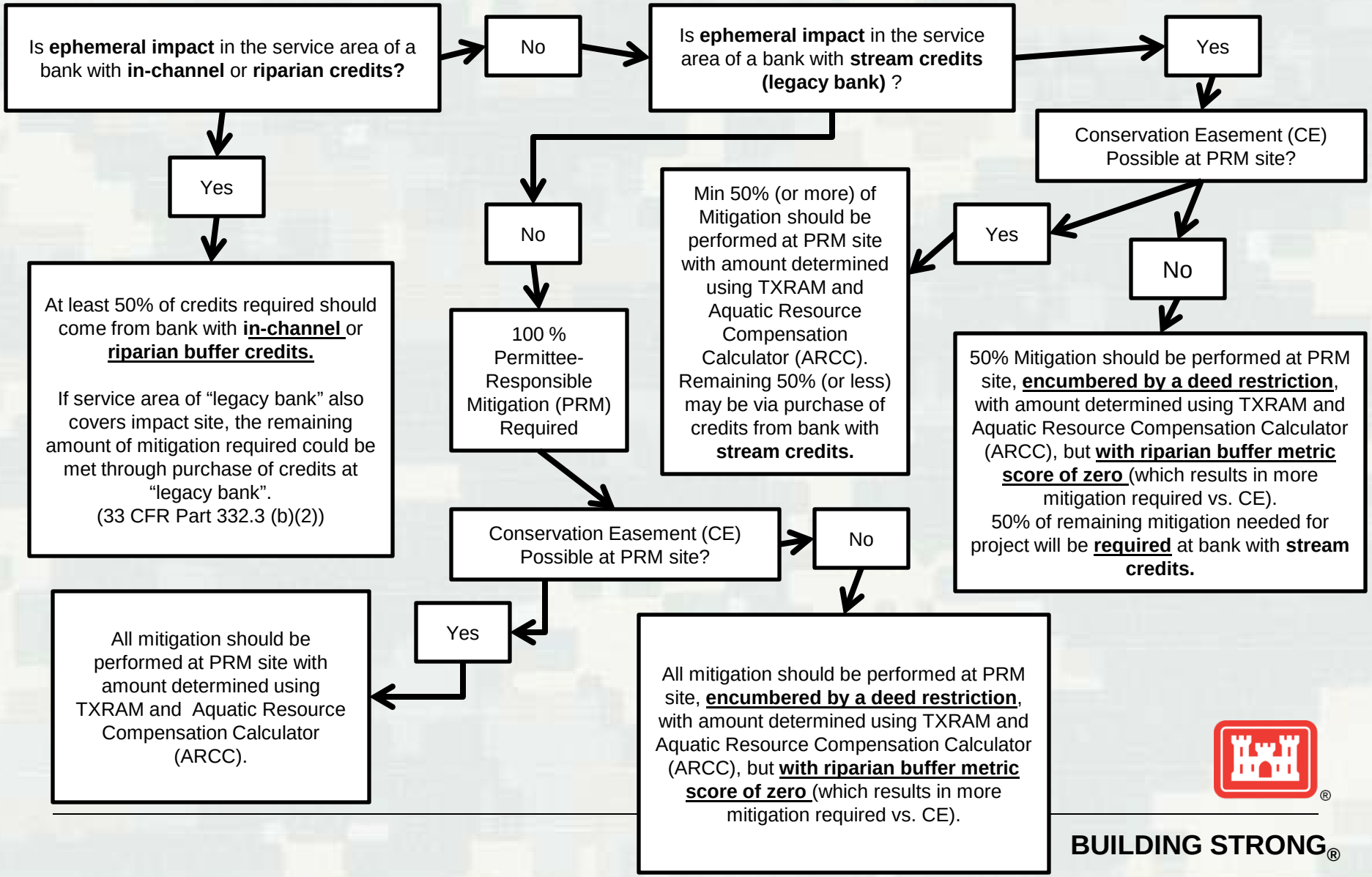
Once the 50% mark of in-channel work has been reached to allow for a SAR to qualify as ICW, the riparian buffer TXRAM points generated for this SAR would also be part of the overall amount of ICW credits awarded for that reach.

SAR 2: Only Riparian Buffer Credits Generated

Proposed Procedure For Intermittent and Perennial Streams



Proposed Procedure For Ephemeral Streams



Exceptions to the 50-50 Stream Mitigation Method

In accordance with the 2008 Mitigation Rule, the USACE maintains a preference for use of mitigation banks to achieve compensatory mitigation. However, if applicants are able to clearly demonstrate to the satisfaction of the USACE that permittee responsible mitigation would result in greater ecological value, as compared to use of a mitigation bank, the USACE may allow use of permittee responsible mitigation. However, any permittee responsible mitigation permitted would be held to the same standards as those required for mitigation banks. (See 33 CFR Part 332.3 (b)(2))

Questions?