

TECHNICAL NOTES

U.S. Department of Agriculture

Natural Resources Conservation Service

TN – ENGINEERING – CA-17

Davis, CA
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Updated Guidance for “The Practical Streambank Bioengineering Guide”

Purpose

This document presents a correction to Table 3.2 of “The Practical Streambank Bioengineering Guide”.

Introduction

It was brought to our attention that Table 3.2 Maximum tractive forces in “The Practical Streambank Bioengineering Guide” did not correspond to the information in the NEDC Soil Bioengineering, National Employee Development Center course material. After discussing this with Chris Hoag (Co-Author of “The Practical Streambank Bioengineering Guide”) and being referred to Jon Fripp (Civil Engineer – Stream Mechanics at the National Design, Construction and Soil Mechanics Center) it has been determined that the units provided in Table 3.2 were provided in N/m² and not the lbs/ft² that are units are labeled on Table 3.2.

Correction to Table 3.2 of “The Practical Streambank Bioengineering Guide”

Table 3.2 will be corrected in the next version of this publication.

Table 3.2 with the units matching the numbers provided is as follows:

Table 3.2 Maximum Tractive Forces for Bioengineering with Corrected Units

| Technique | Force (lbs/ft ²) | |
|-----------------------------|--------------------------------|-------------------|
| | Immediately after Construction | After 3-4 seasons |
| Reed plantings (herbaceous) | .2 | 1.5 |
| Deciduous trees plantings | 1.0 | 6.1 |
| Willow Wattle | 3.0 | 4.0 |
| Brush Layer | 1.0 | 7.1 |
| Brush mattress | 2.5 | 15.2 |
| Riprap with live cuttings | 10.0 | 15.2 |

Adapted from Schiechl and Stern (1994)

This corrected version of Table 3.2 will be used until “The Practical Streambank Bioengineering Guide is updated and released.