LLUSTRATED EXAMPLES OF 5 STREAMBANK STABILIZATION PROJECTS,

WITH COMPARISON OF BEFORE AND AFTER CONSTRUCTION, ILLUSTRATING COMMON BIOENGINEERED BANK STABILIZATION TECHNIQUES

FOR THE PURPOSE OF REPAIRING EROSION SITES AND RE-ESTABLISHING RIPARIAN BUFFER FOR FISH AND OTHER SPECIES HABITAT

TEN MILE: FIGURES 1-2-3
RUSSIAN RIVER: FIGURES 4-5-6
ROCIOLI: FIGURES 7-8
MAD RIVER: FIGURES 9-10-11
LIVE WILLOWE BRUSH MATTRESS: FIGURES 12-13-14

Figure 1

TEN MILE #1: HIGH ERODING BANK WITH LOSS OF RIPARIAN

A Live Willow Brush Mattress with a quarried boulder toe was installed. It was covered with a light layer of gravel to prevent desiccation and increase rooting. October, 1988.

Figure 2:

TEN MILE #2: FIRST YEAR CONSTRUCTION

Figure 3

TEN MILE #3: EIGHT YEARS POST CONSTERUCTION: RIPARIAN COMPLEXITY HAS BEEN ESTABLISHED ALONG BANK WITH OVERHANGING SHADE

Figure 4

RUSSIAN RIVER #1: ERODING BANK AND LOSS OF HABITAT AND RIPARIAN

This is the second season's growth at the upstream end looking downstream.

Figure 5

RUSSIAN RIVER #2: SECOND YEAR POST CONSTRUCTION

Figure 6

RUSSIAN RIVER #3: EIGHT YEARS POST CONSTRUCTION

Figure 7

ROCIOLI #1: ERODING BANK; LOSS OF RIPARIAN HABITAT

Figure 8

ROICIOLI #2: FIVE YEARS POST CONSTRUCTION: RIPARIAN RE-ESTABLISED WITH PIONEER WILLOW; BANK STABILIZED. BEGINNING OF HABITAT COMPLEXITY

Figure 9

MAD RIVER #1: HIGH ERODING BANK

Figure 10

MAD RIVER #2: ONE YEAR POST CONSTRUCTION: START OF NEW SPRING GROWTH AMONG STRUCTURES

Figure 11

MAD RIVER #3: FOUR YEARS POST CONSTRUCTION: BANK STABILIZED; HABITAT COMPLEXITY BEGINNING TO ESTABLISH

The reshaped section was stabilized with a Live Willow Brush Mattress, pinned down at the toe by a Woven Willow Wall. On the right, another Boulder Wing Deflector.

Figure 12

LIVE WILLOW BRUSH MATTRESS #1: EARLY PLANTING OF COMMON BANK PROTECTION

Figure 13

LIVE WILLOW BRUSH MATTRESS: ONE YEAR POST CONSTRUCTION

Figure 14

LIVE WILLOW BRUSH MATTRESS: TWO YEARS POST CONSTRUCTION;