Without intervention, poor fish and wildlife habitat conditions will persist, conceivably for centuries.

REHABILITATION GOALS FOR RESURRECTION CREEK

To recover fish and wildlife habitat by rehabilitating:

- Historic floodplain
- Stream channels
- Riparian areas
Increase flood prone to bankfull width ratio from 1:1 to ≥6:1.

- Decrease channel slope from 1.7% to 1.3%
- Increase sinuosity from 1:1 to 1.4.
- Increase channel length by 15%
**Restore fish habitat by increasing:**

- Pools from 3 to 23 per river mile
- Side channel flow from <1% to 20%
- Large in-stream wood from 8 to 330 pieces/river mile
- Spawning gravel from 160 to 2,000 yd² per river mile

**Flood Plains & Riparian Vegetation**

- Restore soil to the floodplain.
- Decrease riparian tree densities (thin)
- Restore tree composition to:
  - 50% spruce
  - 40% cottonwood
  - 10% birch and hemlock
- Reestablish ground cover.
Restore wildlife habitat by increasing:

- Floodplain coarse wood from 16 to 120 pieces / acre
- Snags from 2 to ~10 per acre

LONG TERM OBJECTIVES

>100 YEARS

Restore the riparian forest to a mix of old and young trees
Design and Implementation

Design Templates Derived from Reference Conditions
Pool Tail Riffle Cross Section

Pool Tail Riffle Dimensions

Length of Meander Range

550 ft.

720 ft.

400 ft.

330 ft.

Meander Belt Width Range
Pool Tail or Glide Slope
0.4%

Riffle Slope 1.6%

Pool Head or Plunge Slope
33%

Average Water Surface Slope ~3%

Residual Pool Depths >3 ft.

Pool Spacing 275’ – 360’
Contracting

Time and Equipment
“Construction Contract”
NOTES:

1) Excavate toe log trenches perpendicular to flow and into bank below bed surface at maximum predicted flow depth. 2) Excavate tension log trenches 25 & 50% to flow and to bed surface elevation. Top of tension log elevation should exceed 3-5 year discharge return interval elevation. 3) Place weave additional trees, logs, large boulders, slash or root-wads in apex of structure. 4) Place ample slash and small woody debris on the up-stream bank interface of the structure.