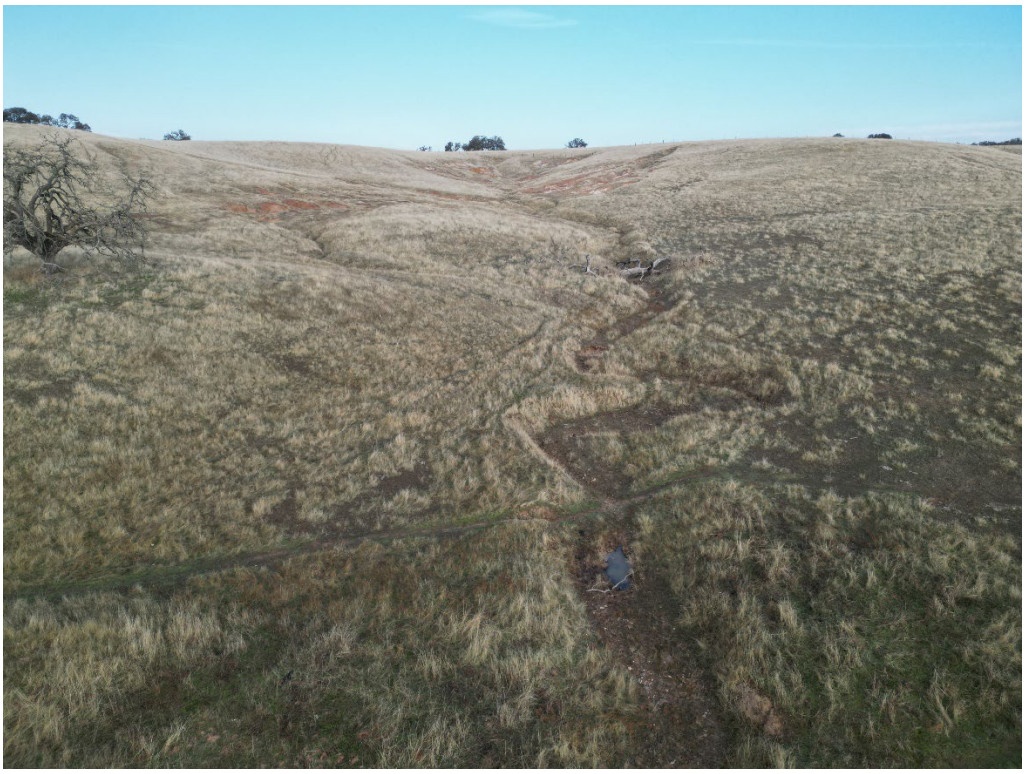
Sacramento Valley Conservancy Deer Creek Hills Preserve – Sloughhouse Resource Conservation Restoration Partnership Beaver Dam Analog and Post Assisted Log Structure Designs and Restoration Site Photos:

Shown below are some generalized structure designs pertinent to the planned Crevise Creek Restoration Project; these images depict channel spanning post assisted log structure designs, wicker-weave beaver dam analog structure designs, representative before and after implementation photos which serve as an example of the potential outcomes of this restoration initiative, and pre-project implementation site photos taken aerially.

SVC plans to utilize the same or similar designs as those depicted in this document and plans to follow a restoration implementation methodology in line with NRCS and the Low-Tech Process-Based Restoration of Riverscapes Design Manual published by the Utah State University Restoration Consortium and USDA Working Lands for Wildlife. Access to this manual is linked below:

https://lowtechpbr.restoration.usu.edu/manual/

Pre-Implementation Site Photos:



Representative Structure Designs:

Figure 6 - Representative photos of the diversity of possible BDA shapes, sizes, locations, and building material. (A) post-assisted and willow weave (B) postless, sage and juniper (C) postless willow, using existing willow for stability (D) postless, juniper (E) post-assisted and juniper (F) postless willow and juniper (G) postless juniper (H) postless sage.

Figure 5 - PALS can be built in a range of shapes, sizes and in different channel locations. (A) bank-attached, (B) mid-channel, (C) channel-spanning, (D) channel-spanning, (F) mid-channel, (F) channel-spanning, (G) bank-attached, and (H) channel-spanning

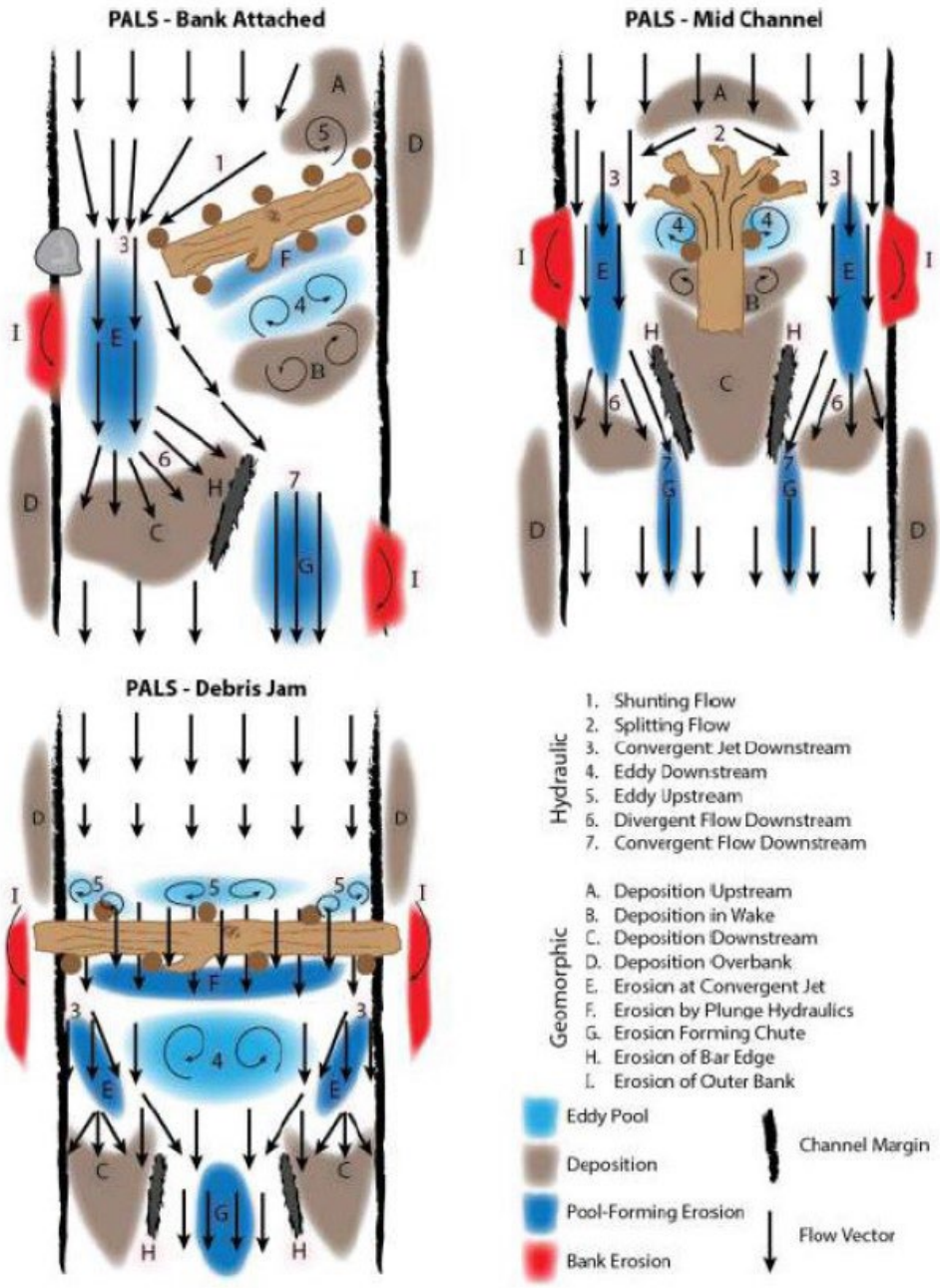


Figure 10 - Hypothesized hydraulic and geomorphic responses associated with bank-attached, mid-channel, and debris jam post-assisted log structures (PALS) from Figure 3.5 from Camp (2015a). Note: what is labeled as 'debris-jam' is referred to in this chapter as 'channel-spanning'.

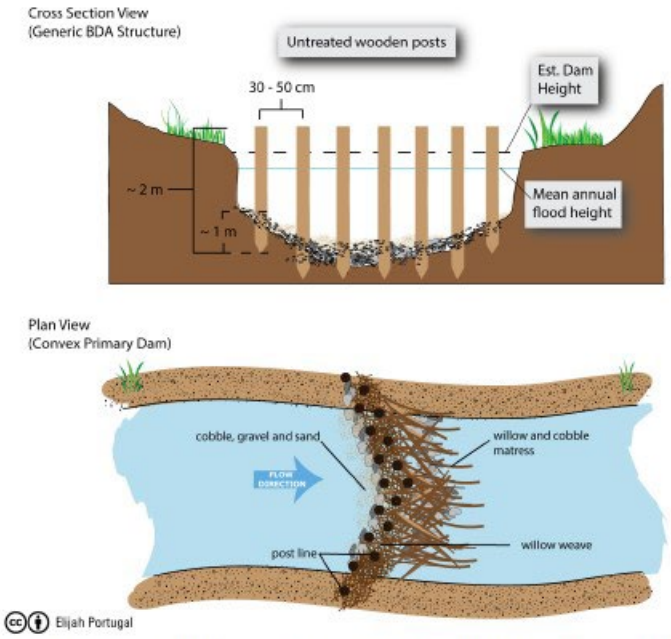
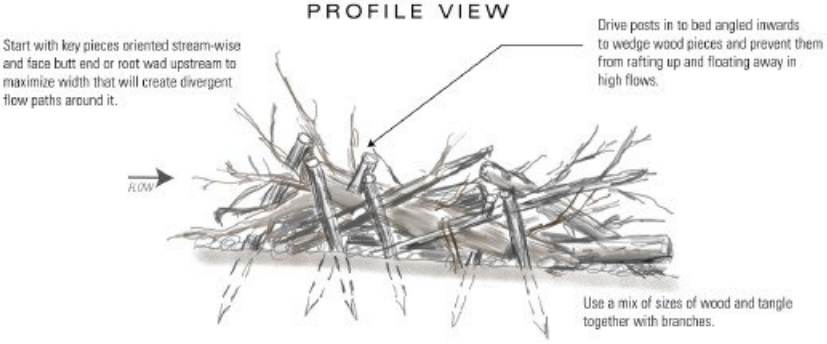


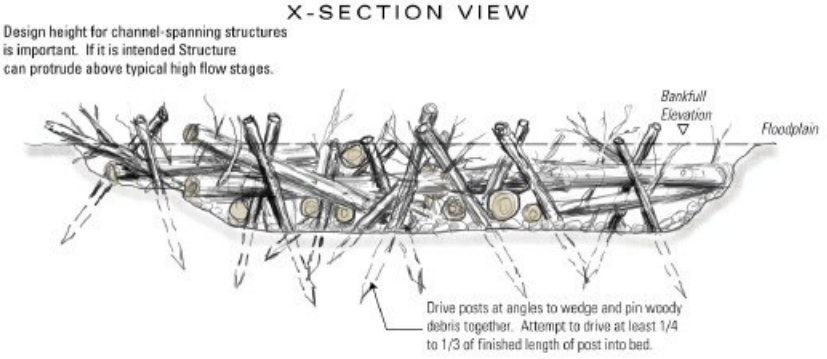
Figure 21 – Conceptual illustration of BDAs incorporating a downstream "mattress" and double post line. In practice BDAs can be built with or without posts and using a range of natural materials. Illustration credit: Elijah Portugal.

Channel Spanning PALS

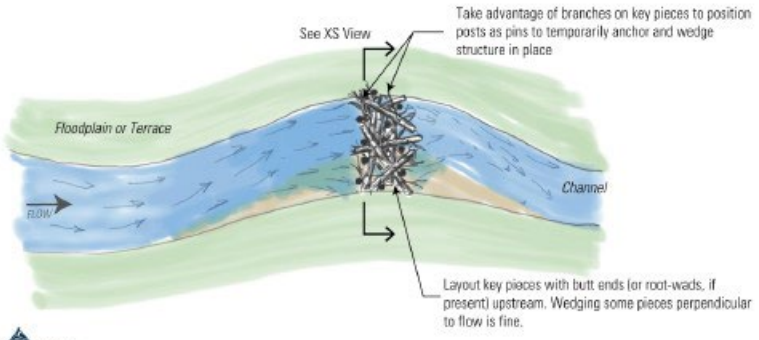
PROFILE VIEW



X-SECTION VIEW



PLANFORM VIEW



NOT-TO-SCALE