



PRUNUSKE CHATHAM, INC.

OPUS ONE NAPA RIVER BANK STABILIZATION, 2002 TO 2003

Client: Opus One Winery

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PCI prepared a channel stability assessment of the Opus One reach of the Napa River for the purpose of developing a master plan for future management of river bank erosion. The goal of the assessment was to identify locations along the bank that were vulnerable to significant bank erosion and to identify and implement treatments in support of long term planning for management of the Napa River along Opus One property.

The bank stability assessment performed by PCI revealed several sites of concern for stability, including several hundred feet of bank along the upstream end, several short sections of bank instability downstream of the winery, and two top of bank locations. PCI prepared a description of the erosion mechanism for each site including the potential for ongoing bank erosion.



PCI assessed fluvial geomorphic conditions present in the project reach. This included assessment of aerial photography, and evaluation of the bankfull flow, channel, and flood plain geometry. The geomorphic assessment was used to support identification of candidate treatments and in evaluation of regulatory considerations associated with candidate treatments.

PCI prepared a final master implementation plan describing the treatments selected for each reach, site specific design needs, the permit requirements for each treatment project, regulatory considerations, implementation budget, and monitoring. PCI implemented portions of the plan using treatments for bank stabilization including regrading of banks, installation of brush mattresses and culvert removal (converted to a boulder step pool channel); bank revegetation with native riparian trees, native grass seed, willow pole planting, and erosion control blanket.

