

## 4, Conceptual Restoration and Access Projects

### 4.1 MEETING WATERSHED GOALS AND COMMUNITY OBJECTIVES

Each proposed project is described in conceptual terms in this chapter. In most cases, a project concept can be applied to multiple locations along the Truckee River corridor. These project concepts were developed to address the opportunities and constraints identified in Chapter 3. The plan includes three types of projects: restoration projects, access projects, and the multiuse trail. For each project, a brief description is provided, followed by a discussion of key issues, potential benefits, additional studies required for stronger understanding of project feasibility or precise location, potential partner agencies, and an order-of-magnitude cost estimate. Cost-estimate categories are as follows:

- \$ = 0 to \$100,000
- \$\$ = \$100,000 to \$500,000
- \$\$\$ = \$500,000 to \$1 million
- \$\$\$\$ = greater than \$1 million

Cost estimates take into consideration additional studies, environmental compliance and permitting, design and engineering, and construction and are based on the general information gathered for this master plan effort.

Table 4-1 summarizes the proposed projects and their goals.



Wetland/riparian floodplain restoration, 2003



Cottonwood seedling



Class I recreation trail along Truckee River, 2005

# Truckee River Corridor Access Plan

TABLE 4-1 Project Goals and Proposed Projects Summary

	Respect and protect private- property rights	Coordinate multiple jurisdictions through a single management strategy	Identify restoration projects that will improve wildlife and aquatic habitat.	Restore riparian plant community	Enhance water quality	Identify a mixed-use recreation and transportation corridor from Squaw Valley to Truckee	Identify improvements for boating and angling access from the SR 89 bridge to the Town of Truckee	Identify local and regional connections to multiuse trails and recreation access points	Coordinate with other local and regional planning initiatives	Increase the educational and interpretive elements to highlight ecological, historic, cultural, and scenic qualities of the	Develop a base map for future planning efforts along the Truckee River from Tahoe City to the Placer County line
<b>RESTORATION PROJECTS</b>											
Restore Low Floodplain Terrace	Requires coordination with private entity	X	X	X	X				X		X
Protect and Restore River Bank and Improve River Access	X	X	X	X	X		X		X		X
Create Riparian/Wet Meadow Habitat	X	X	X	X	X				X		X
Improve Water Quality at Toe of Slope	X	X	X	X	X				X		X
Improve Water Quality within Trail Projects	X	X	X	X	X				X		X
<b>PUBLIC ACCESS – TRAILHEAD PROJECTS</b>											
Type "A" Trail Access – Trailhead / Parking Lot with amenities	X	X				X	X	X	X	X	X
Type "B" Trail Access – Limited amenities	X	X				X	X	X	X	X	X
<b>EXISTING BIKE PATH ENHANCEMENT PROJECTS</b>											
River Ranch Paved Parking Lot Improvement	Requires cooperation with private entity	X				Improves safety on existing corridor	X	Improves safety on existing corridor			X
River Ranch Unpaved Parking Area Improvement	Requires cooperation with private entity	X			X	Improves safety on existing corridor	X	Improves safety on existing corridor			X
Squaw Valley Road Crossing Improvements	X	X				X	X	X			X
<b>ROADWAY SHOULDER IMPROVEMENT PROJECTS</b>											
Silver Creek Campground Improvement	X	X					X	X	X		X
<b>INFORMATIONAL AND EDUCATIONAL SIGNS AND MATERIALS</b>											
Interpretive Signs	X	X							X	X	
Fishing, Boating, and Trail Access Signs	X	X				X	X	X	X	X	
River Access Brochure	X	X						X	X	X	
River Heritage Interpretive Trail	X	X							X	X	
<b>MULTIPLE-USE TRAIL PROJECTS</b>											
Class I Trail – Typical Cross-Section	X	X				X	X	X	X	X	X
Class I Trail on Steep Cross-Slope	X	X				X	X	X	X	X	X
Type "A" Cross-section – Bike Path with Adjacent Parking	X	X				X	X	X	X	X	X
Type "B" Cross-Section – Bike Path with Setback	X	X				X	X	X	X	X	X
Type "C" Cross-section – Bike Path on Steep Slope	X	X				X	X	X	X	X	X

# Truckee River Corridor Access Plan

## 4.2 RESTORATION PROJECTS

### A. RESTORE LOW FLOODPLAIN TERRACE

In several areas along the Truckee River, natural floodplain and riparian habitat have been lost with the development of commercial or industrial land uses. In at least two prominent locations, the Caltrans corporation yard and adjacent businesses, there appears to be adequate space to restore a portion of the floodplain. Moderate bank excavation and reshaping would be completed to create a floodplain terrace at a suitable elevation to sustain mountain alder, willow, and black cottonwood riparian species. Incorporation of root wads, logs, and boulders into the bank would restore instream woody material, reduce bank erosion, and provide fish cover. (see Exhibit 4-12)

#### KEY ISSUES

- Coordination with/approval of landowners
- Flood capacity
- Geomorphology and river hydraulics

#### POTENTIAL BENEFITS

- Restoration or expansion of riparian habitat
- Reduction in bank erosion
- Improved water quality
- Increase in fish habitat
- Improved scenic quality along river

#### ADDITIONAL STUDIES

- Property boundary survey
- River hydrology and hydraulics study
- Detailed design and construction documents
- Environmental compliance (National Environmental Policy Act [NEPA] and/or CEQA and/or TRPA)
- CWA Section 401 and Section 404 permits

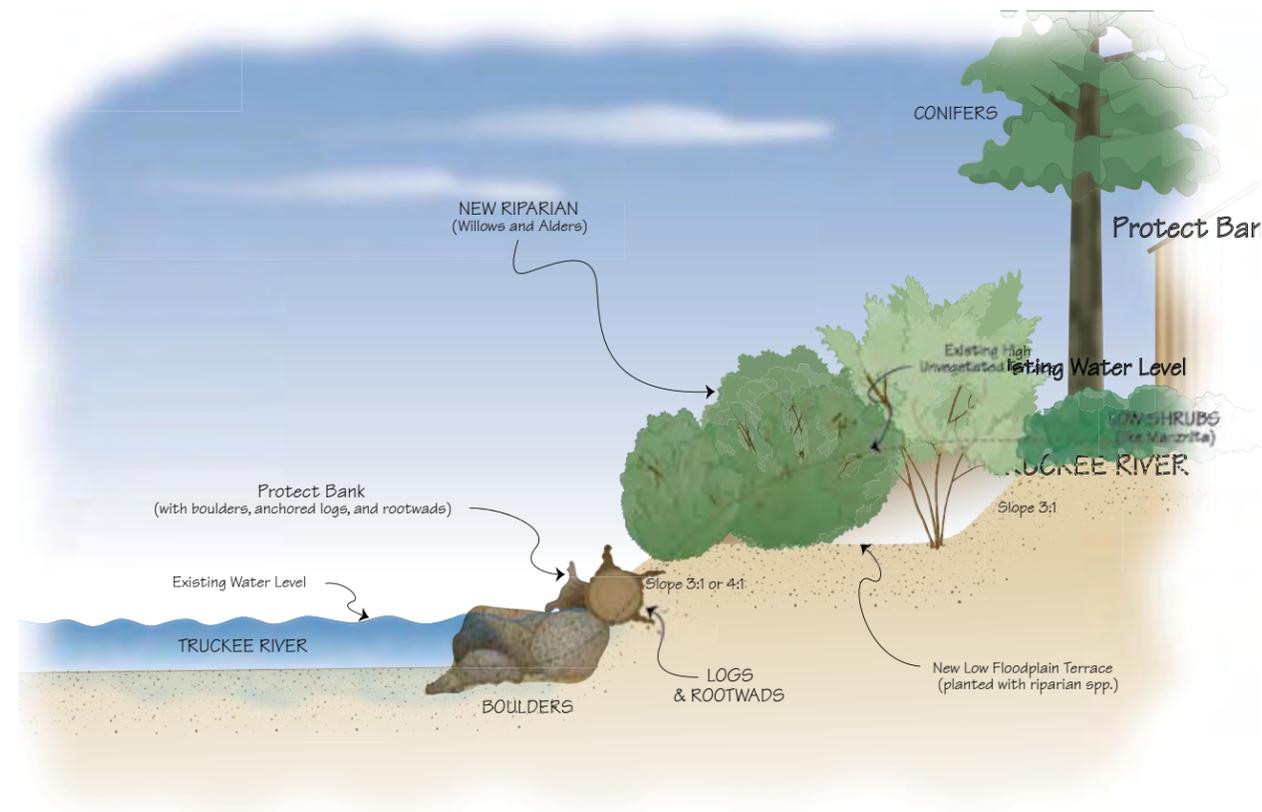
#### POTENTIAL PARTNER AGENCIES

Landowners, Placer County, USACE, USFS, USFWS, TRPA, Tahoe City Public Utility District (PUD), DFG, Placer County Resource Conservation District (RCD), Natural Resource Conservation Service, State Conservancies, Truckee River Watershed Council

#### COST ESTIMATE

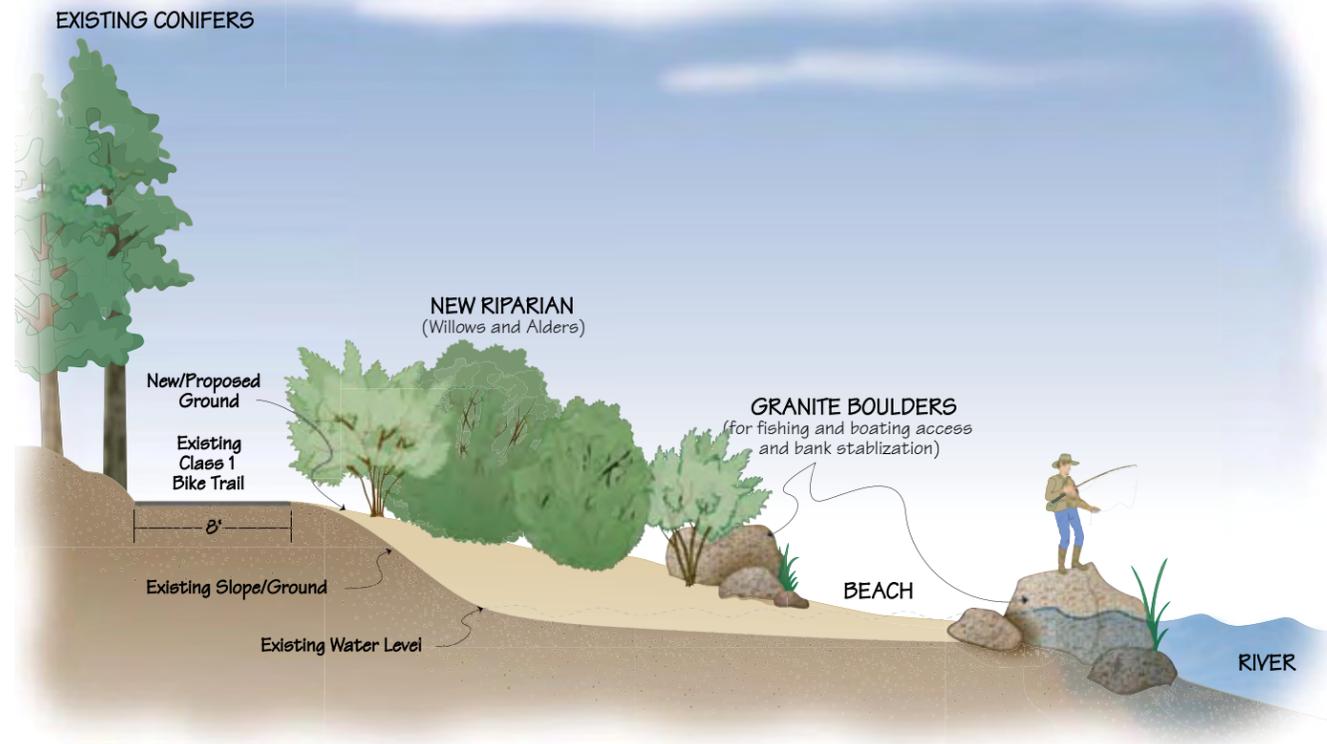
Total estimated cost: \$\$\$

EXHIBIT 4-1 Restore Low Floodplain Terrace - Typical Cross-Section



# Truckee River Corridor Access Plan

EXHIBIT 4-2 Restore River Bank and Provide Access - Typical Cross-Section



## B. PROTECT AND RESTORE RIVER BANK AND IMPROVE RIVER ACCESS

According to longtime river residents and early engineering plans, portions of the Truckee River have experienced channel widening through bank erosion. Erosion has reduced and degraded riparian habitat, reduced or eliminated the floodplain, undermined the existing bike trail, and degraded instream habitat. In areas with the greatest degradation, the river channel could be restored to a shape approximating its historic width through channel bank restoration, restoring a natural riparian floodplain, and careful placement of instream woody material. Boulders could also be carefully placed to provide recreational access to the river for fishing, sunbathing, and swimming. These boulders would also provide “hard” access points for rafters needing a rest stop. Based on observation, most people participating in recreation activities along the river will use a hard surface, like a boulder, to get to or from the river if one is available. If this type of use were encouraged, those using the river for recre-

ation would cause less damage to riparian vegetation and incur less bank erosion. (see Exhibits 4-9, 4-10, 4-12, and 4-13)

### KEY ISSUES

- Flood capacity and river hydraulics
- Temporary impacts on recreation
- Public concerns over perceived loss of access
- Lack of appropriate source material for rebuilding river bank

### POTENTIAL BENEFITS

- Restoration or expansion of riparian habitat
- Reduction in bank erosion
- Improved water quality
- Increase in fish habitat
- Improved river access
- Improved scenic quality along river

### ADDITIONAL STUDIES

- Historical analysis of river geomorphology
- River hydrology and hydraulics study
- Property boundary survey
- Detailed design and construction documents
- Environmental compliance (NEPA and/or CEQA and/or TRPA)
- CWA Section 401 and Section 404 permits

### POTENTIAL PARTNER AGENCIES

Landowners, Placer County, USACE, USFS, USFWS, TRPA, Tahoe City PUD, DFG, State Conservancies, Placer County RCD, Truckee River Watershed Council

### COST ESTIMATE

Total estimated cost: \$\$\$ to \$\$\$\$

EXHIBIT 4-3 Restore River Bank and Provide Access - Typical Plan View

