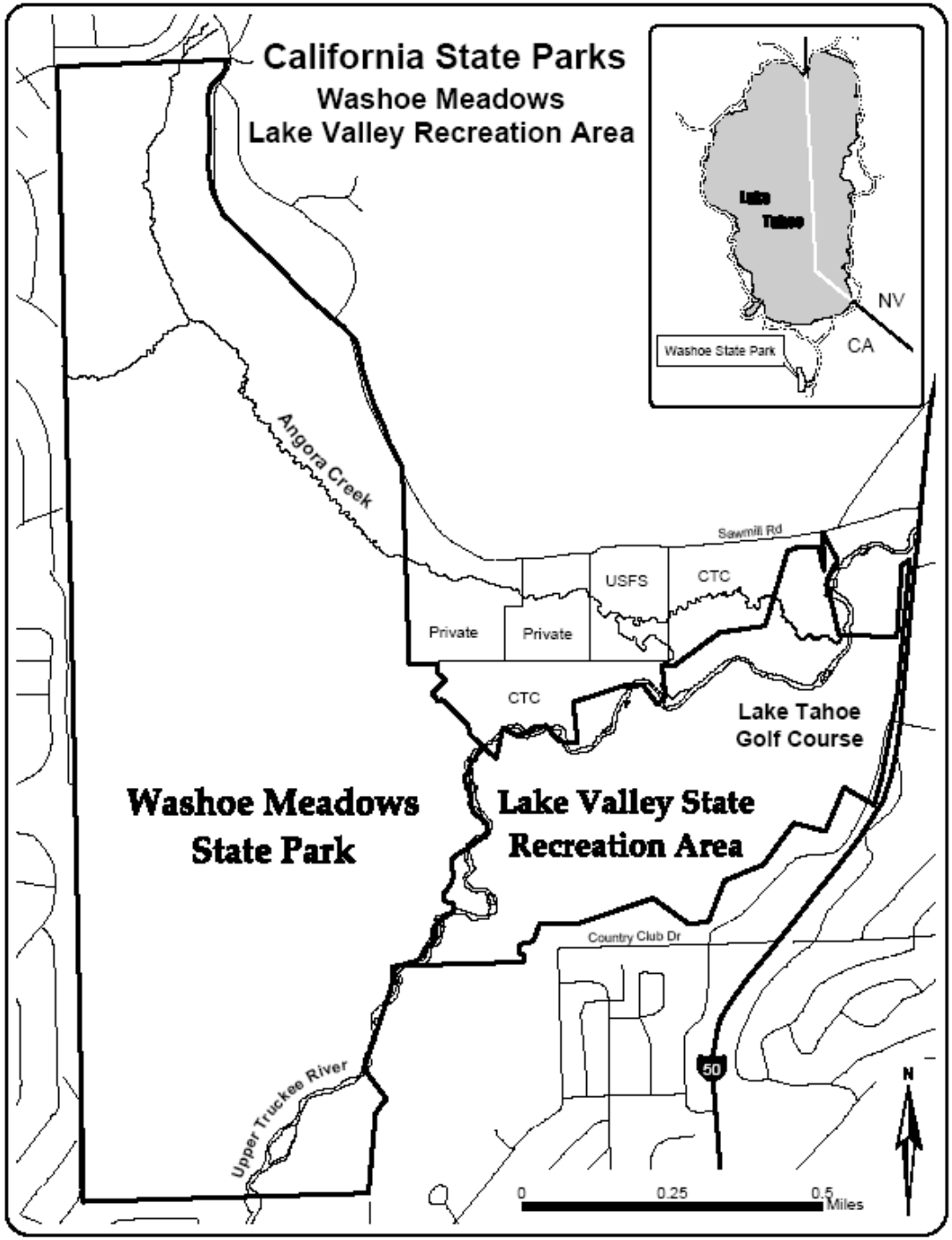
Angora Creek Restoration Monitoring Approach

Cyndie Walck

California State Parks


California State Parks
Washoe Meadows
Lake Valley Recreation Area
NV
CA
Washoe State Park
Angora Creek
Sawmill Rd
USFS
CTC
Private
Private
CTC
Lake Tahoe
Golf Course
Washoe Meadows
State Park
Lake Valley State
Recreation Area
Country Club Dr
Upper Truckee River
50
N
0
0.25
0.5
Miles

The Problem

- Reach of Angora Creek captured along sewer alignment
- Straightened steeper channel subsequently incised
- Bed and channel erosion/sediment production
- Water table dropped
- Vegetation drier
- Riparian and instream habitat impaired

Creek captured by sewer alignment

Creek flows directly over sewer: potential for direct contamination

Incision increases, adjacent meadow drier as water table drops

Undercut banks sloughing, channel widening, root zone not accessing GW

Infeeder channels also head-cutting

Headcut de-waters meadow

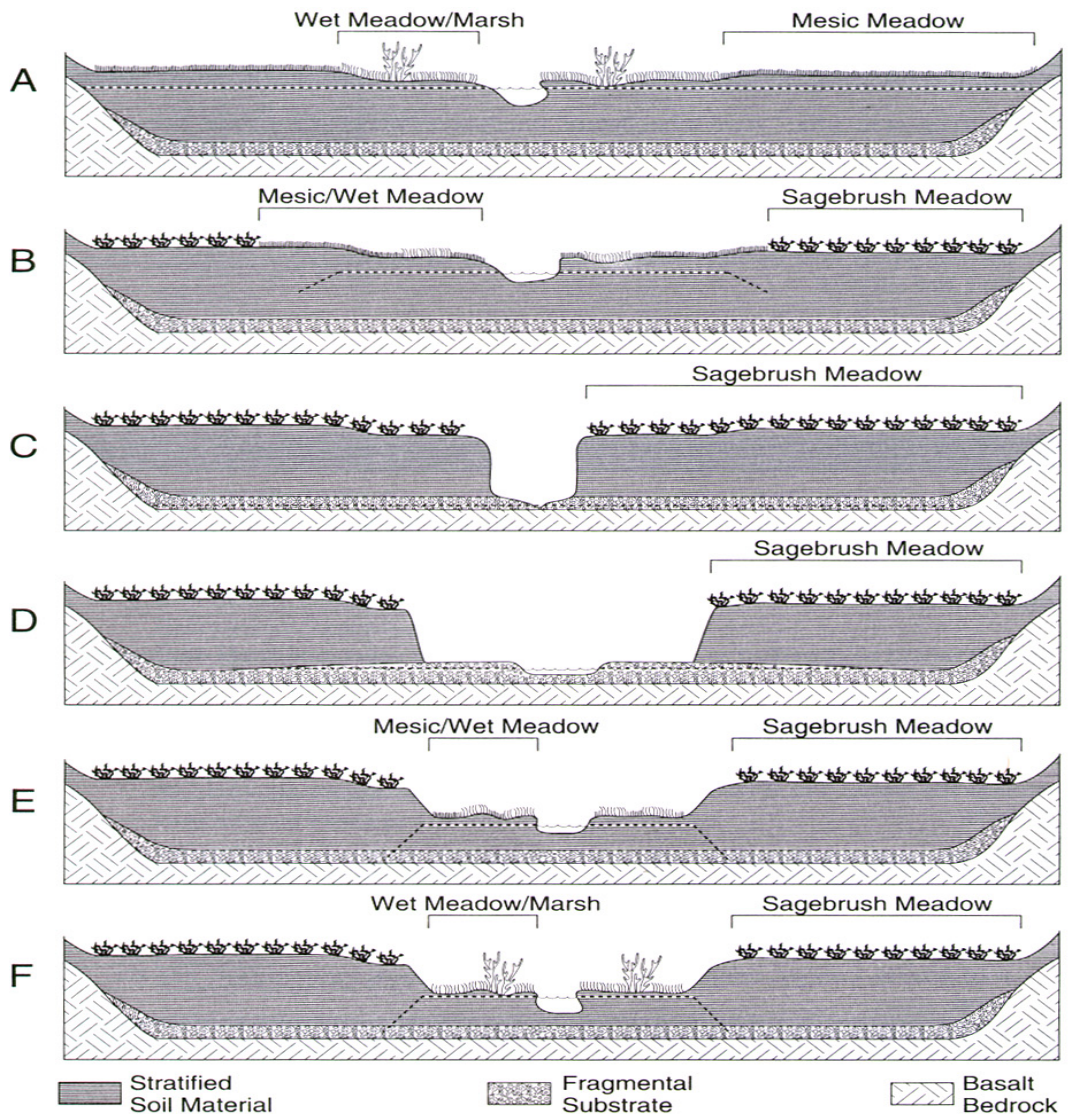


Figure 1. Succession of states for alluvial/nongraded valley-bottom type.

Project Goals

Over-arching goal : Restore geomorphic function and associated riparian habitat

Secondary/related goals:

- De-couple stream from sewer
- Prevent headcuts from migrating upstream
- Increase channel stability/ reduce erosion
- Reconnect stream to meadow
- Restore meadow water table
- Improve meadow vegetation
- Improve riparian and instream habitat
- Improve water quality