

Standard Checklist

Name of Riparian-Wetland Area: Potrero Creek

Date: June 17, 2004 Segment/Reach ID: Reach 1 PFC 104

Miles: _____ Elevation: 56? ft. GPS: N 36, 31, 609 W 121, 52, 061

ID Team Observers: Clive Sanders, Danica Zupic Time: 11:30 am

Yes	No	N/A	HYDROLOGY
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1) Floodplain above bankfull is inundated in "relatively frequent" events
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2) Where beaver dams are present they are active and stable
<input checked="" type="checkbox"/>	<input type="checkbox"/>		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4) Riparian-wetland area is widening or has achieved potential extent
<input type="checkbox"/>	<input checked="" type="checkbox"/>		5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9) Streambank Vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high-streamflow events
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10) Riparian-wetland plants exhibit high vigor
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11) Adequate riparian-wetland vegetative cover is present to protect banks and dissipate energy during high flows
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
<input type="checkbox"/>	<input checked="" type="checkbox"/>		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14) Point bars are revegetating with riparian-wetland vegetation
<input checked="" type="checkbox"/>	<input type="checkbox"/>		15) Lateral stream movement is associated with natural sinuosity
<input type="checkbox"/>	<input checked="" type="checkbox"/>		16) System is vertically stable
<input checked="" type="checkbox"/>	<input type="checkbox"/>		17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Summary Determination

Functional Rating:

Proper Functioning Condition
Functional—At Risk
Nonfunctional
Unknown

<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Trend for Functional—At Risk:

Upward
Downward
Not Apparent

<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes
No

<input type="checkbox"/>
<input type="checkbox"/>

If yes, what are those factors?

- | | | |
|-------------------------------------------|------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Flow regulations | <input type="checkbox"/> Mining activities | <input type="checkbox"/> Upstream channel conditions |
| <input type="checkbox"/> Channelization | <input type="checkbox"/> Road encroachment | <input type="checkbox"/> Oil field water discharge |
| <input type="checkbox"/> Augmented flows | <input type="checkbox"/> Other (specify) _____ | |



Picture 1



Picture 2



Picture 3

Remarks

The reach has a great variety and abundance of vegetation in the creek and the surrounding riparian-wetland area, however, the creek banks are extremely steep which makes the system vulnerable to bank erosion and root destabilization. Visible efforts have been made to stabilize the banks with matting, concrete, sandbags filled with concrete and concrete "dragon's teeth" structures. These have apparently worked in the past, but it may be time for them to be reinforced.

The concrete foundations of a removed culvert are starting to erode and undercutting is occurring (See Picture 1).

There is serious erosion just downstream where part of a bank collapsed, and headcutting and incising is occurring in the creek bed (See Pictures 1 and 2).

The ground and banks around the "dragon's teeth" structures are starting to erode (See Pictures 5 and 6).

There is a pile of concrete mix, gravel and mulch sitting on the bank that is sliding into the creek bed (See Picture 4). The rest of the creek bed has a cobble composition perfect for spawning grounds.

The concreted bridge foundation at the end of the reach is being undercut (See Pictures 1).

Despite all of this the system looks fairly stable and well vegetated. End: N 36,31.746 W 121,52.047 at bridge with large culvert (5ft diameter) upstream of the tennis courts.

Checklist Comments

#1 The bankfull is very high and the floodplain is not frequently inundated

#5 The upland (Picture 2 and 4) is contributing sand and gravel, although the system seems to be handling it for now

#9, 11 Although there is dense vegetation the banks are so steep that many of the plants are becoming dangerously undercut with the majority of root systems exposed. It seems that there is not much that can be done about this, as many measures have already been implemented to deter further erosion.

#13 The floodplain has great characteristics to dissipate energy, but the channel is very steep and incising, and not able to dissipate very much energy despite LWD.

#16 The system is not vertically stable where the bank caved in, there is significant incising, and erosion.



Picture 4



Picture 5



Picture 6



Picture 7