## Standard Checklist

Name of Riparian - Wetland Area: Carmel River Watershed - Rancho Cañada Area

Date: 11/22/0		Segment/Reach ID: 5-Carmel River at Cal-Am's Rancho Cañada Well				
Miles:	Acres:	Coordinates:	U	5714881 E 5716903 E	2091391 N 2091660 N	
ID Team Observers: Thomas Christensen and Larry Hampson						

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

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

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

## Remarks

Primary riparian vegetation includes: black cottonwood, red and arroyo willow, white alder, and western sycamore. This reach is constrained on the north bank because of Rancho Cañada's Golf Course's rip-rap installation, designed to protect against streambank erosion. Riparian vegetation is developing nicely on this bank stabilization project. There are limited opportunities for large wood recruitment from the north bank because trees are still young. Riparian vegetation in this reach is vulnerable to impacts from groundwater extraction from Cal-Am's Cañada production well. However, supplemental irrigation occurs on the north and south bank to mitigate the groundwater extraction.

## Summary Determination

**Functional Rating:** 

Proper Functioning Condition	
Functional – At Risk	<u>X</u>
Nonfunctional	
Unknown	

Trend for Functional – At Risk:

Upward	X
Downward	
Not Apparent	

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

If yes, what are those factors?

Flow regulations	Mining activities	Upstream channel conditions
Channelization	Road encroachment	Oil field water discharg
Augmented flows	Other (specify) ground	dwater extraction by Cañada Well

