Use of the Proper Functioning Condition Assessment Protocol in Restoration

2016 Colorado River Terrestrial and Riparian Meeting
Laughlin, Nevada

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Environmental Protection Office
Parker, AZ

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Restoration: Planting Native Vegetation?

1. Select site
2. Clear ground
3. Plant Native Vegetation
4. Wetland Function Restored?

The 2015 Site consisted of an upland area, dominated by saltcedar and shrubs, with remnant mesquite from a 25 year old project.

A Lake is adjacent to the site, with a strip of wetland plants, and a ten foot high bank.

It was difficult to view the area with photos, because the vegetation was so thick. Our plan consisted of removing saltcedar and planting a row of trees along the shore.

Landscaping Details:

Open up this area; Clear saltcedar and brush, leave natives

Pull back sand and soil, avoid mesquite and screwbean.

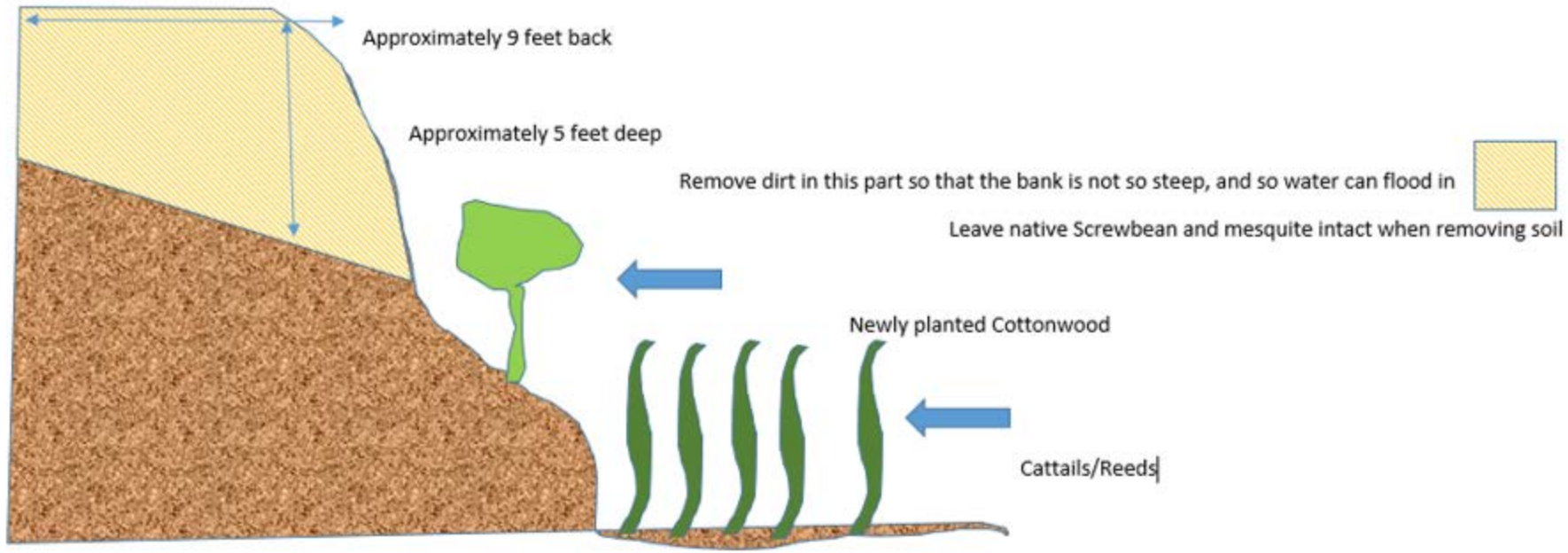
Exotic plant: remove and carry plant materials across road to spoil pile (consider digging burn hole for bamboo?)

Remove excess soil/sand so the sides are not so steep; be careful not to bury mesquite. Can spread out the sand in low spots, or take to spoil pile on other side of road, if necessary. Don't stack it up on the side of the road.

Red flagging means remove plant

Yellow flagging: leave plant

Profile or side view of the bank (shoreline)



02/18/2015 11:25AM

CASE
CASE
02/18/2015 11:26AM

Before:

After

02/20/2015 10:36AM

02/21/2015 08:48AM

02/21/2015 09:22AM

02/21/2015 09:51AM

02/21/2015 10:59AM

03/27/2015 10:43AM

02/26/2015 12:00PM

02/27/2015 09:10AM

03/19/2015 10:44AM

04/13/2015 03:11PM

04/13/2015 03:38PM

06/30/2015 01:11PM

06/30/2015 01:37PM

06/30/2015 01:36PM

06/25/2015 10:10AM

06/30/2015 01:16PM

Potential:

Capability:

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

Yes	No	N/A	VEGETATION
			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events

SUMMARY DETERMINATION

Functional Rating

___ Proper Functioning Condition

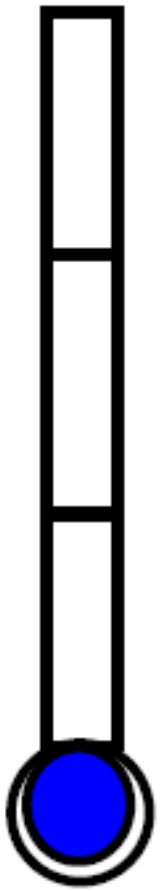
___ Functional - At Risk

___ Nonfunctional

___ Unknown

Trend for Functional - At Risk:

___ Upward
___ Downward
___ Not Apparent



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

Yes ___
No ___

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify)

(Revised 1998) (5/2008)

1) The PFC cannot be done alone, it must be done by a team (preferably experts, however it is designed to be used with the public and volunteer groups.)
2) Main categories are Hydrology, Vegetation, and Landform or Erosion/Deposition
3) There are two assessments, one for Lotic and one for Lentic areas.
4) Both the Potential and Capability of a site are considered in the assessment.

Potential: “the highest ecological status given no political, social or economical constraints.”

Capability “the highest ecological status an area can attain given political, social, or economical constraints.” Capability only apples to constraints that the land manager(s) cannot eliminate or
change through a management action within their authority.