Riparian Vegetation
What’s the Difference?
Kinds and Amounts of VEGETATION
The Role of Vegetation in Riparian Function

- Protect banks
- Stabilize channels
- Dissipate energy:
  - Slow velocity
  - Drop sediment
  - Stabilize sediment
  - Build floodplain
Build Floodplain:

- Increase water storage capacity (sponge)
- Increase recharge
- Absorb floodwater
- Prolonged flow
Riparian Vegetation

1. Slow the water down
2. Retain water on the land longer
Root Length

![Graph showing root length comparing Nebraska Sedge, Baltic Rush, Douglas Sedge, and Nevada Bluegrass. The graph indicates the length of roots in different soil columns (12"x12"x16").](image)

Plant Vigor-Leaves and Roots

Caring for the Green Zone, Riparian Areas and Grazing Management
Alberta Riparian Habitat Management Project, “Cows and Fish Project”
Channel Stability Rating (Vegetation)

Winward 2000
Appendix B
3 Types of Vegetation
Colonizers
Colonizer Sedge
Water Hyssop (*Bacopa*)
Water Hyssop + Spikerush
Spikerush
Spikerush
Stabilizer – Emory sedge
Emory sedge
Switchgrass
*Panicum virgatum*
Switchgrass
Bushy bluestem
Bushy bluestem
Woody Vegetation
Sycamore (Platanus)
Heavy Browsing
Willow – Trunk sprouting
Cottonwood
Buttonbush (Cephalanthus)
Buttonbush – Heavy browsing
Indigobush (*Amorpha*)
Buttonbush + Indigobush
Little walnut (*Juglans*)
Baccharis Jara
Baccharis
Spikerush + Deergrass + Baccharis
Bricklebush
Burrobush
Live Trees + Dead Wood
Catch sediment
Bad News, and Good News
The Right Kinds and Amounts of Vegetation - Critical
Sugarberry \textit{(Celtis)}
Elm (Ulmus)
Concho River
1 Rainfall Event
7400 Ac/ft of Runoff
34,000 Tons Soil