Techniques for Restoring Incised and Eroded Stream Channels

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Project Objectives

• Restore plant community function to a riparian zone along a degraded stream channel
• Improve upland plant community bordering riparian zone
• Use of various earthen and rock structures
• COMMON LOGIC: Stop/trap water!
• 1-Rock Dams
• Filter Dams
• Earthen Dams
• Plug and Spread
• Native round bale
1-Rock Dam
Filter Dam

River Rock (4-8")

Rock (1-2')

Rock (3-4')

Flow

Bedrock
Earthen Dam/Spillway

Intermittent Pool

Spillway

Flow

Earthen Dam
Plug and Spread

Plug

Bay

Intermittent Pool

Flow
Name of Structure

Date of when photo was taken
DPC = days post construction
DOC = day of construction

Amount of rain structure had received to date of photo
1-Rock Dam

May 20, 2014 DOC
No Rain
Filter Dam 3: North Channel

June 23, 2014 43 DPC

6.05”
Filter Dam 3: North Channel

May 14, 2015 360 DPC

21.58”
Plug and Spread 1

May 14, 2015 379 DPC

21.58”
Treatment Progression
Treatment Progression
Treatment Progression
Treatment Progression

8 native grass species!!
Conclusions

- Short term vs long term vegetation response
- Sacrifice plant species over stabilizing system
- Long term vegetation monitoring
- Created a “string of pearls”
- Slow water, not trap
Questions?