

Case Studies in Natural Channel Design

Black River Watershed Conference
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Cave Banks



Cave Banks

- 400 ft X 70 ft
- Irene - 2,500 yd³
- Erosion – property, habitat
- River undercut toe
- Erosion from top down



Cave Banks

- Partnership
 - Landowners
 - Town of Wells
 - USFWS
 - HCSWCD
- Stabilize stream bank



Cave Banks

- Build bench
 - Protect toe
 - Tree root balls
 - Rubble
- Regrade bank
- Hydroseeding



Cave Banks



Griffin Road



Griffin Road

- 300 ft of 30 ft riverbank
- ↓ 700 ft in 8 mi
- Erosion – infrastructure, utilities, property



Griffin Road

- Partnership
 - USFWS
 - Hamilton County Highway Dept.
 - Town of Wells Highway Dept.
 - HCSWCD
- Restore habitat
- Reduce erosion
- Produce cooler, deeper channel
- Establish riparian vegetation



Griffin Road

- 3 J-hooks
- Bank full bench



Griffin Road



Browns Brook Bridge



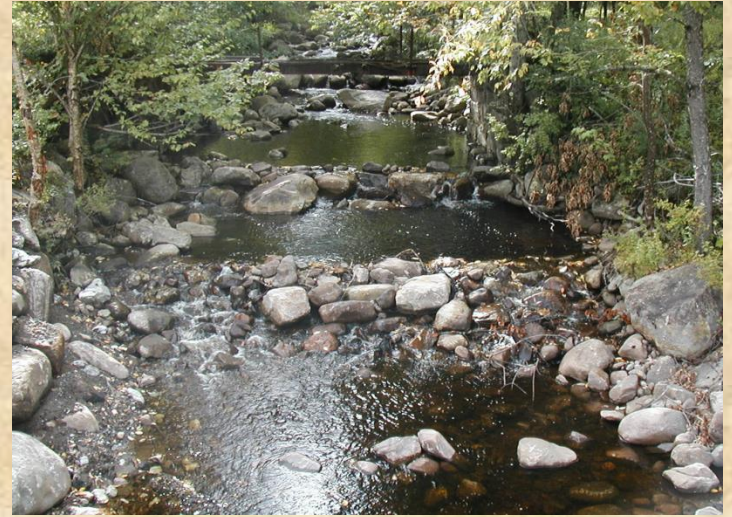
Browns Brook Bridge

- Tropical Storm Lee & Hurricane Irene
- Weakened bridge abutment
- Partnership
 - USFWS
 - Hamilton County Highway Dept.
 - HCSWCD



Browns Brook Bridge

- ↓ scouring of bridge abutment
- 4 rock cross veins
- 1st vein = sets grade, creates pool, protects abutments
- Remaining veins = return flow to natural stream grade



Browns Brook Bridge

