Restoration + people

Carson & Laura
Authors

Joe Paine: Mobile district of Army Corps of Engineers

Steve Newton: Project manager, engineer with CH2M Hill in Birmingham

Doug Baughman: Environmental scientist with CH2M Hill in Atlanta
From our friend Martin Doyle:

"I can build a wiggly stream," said Martin W. Doyle, a professor of river science and policy at Duke University who's studied and worked on restoration projects. "All over Baltimore County, all over North Carolina, there's lots of wiggly streams that don't do jack."
G. Mathias Kondolf: Department of Landscape Architecture and Environmental Planning, University of California

Chia-Ning Yang: Department of Landscape Architecture, California State Polytechnic University

Randall L. Fuller: Department of Biology, Colgate University, Hamilton, New York
Chattahoochee River Restoration

- 2004 USACE Environmental Assessment
- 2004 USFW Final FWCA Report on Section 206 Aquatic Ecosystem Restoration Project
- 2005 Eubanks and Buckalew
City Mills

Eagle & Phenix
Removal Process & Results

• Before dam removal
• Modeling
• Blowing it up
• Result
“Longest urban whitewater course in the world”
Monitoring?

Nick Norwood - Poetry

Nick Norwood's poems have appeared in a wide range of journals, including The Paris Review, Shenandoah, Southwestern American Literature, The Wallace Stevens Journal, Poetry Daily, and many others. His third full volume of poetry, Gravel and Hawk, won the Hollis Summers Prize in Poetry and was published by Ohio University Press in 2012. His other books are A Palace for the Heart (2004) and The Soft Blare (2003), and the limited edition, fine press book Wrestle (2007), which he produced in collaboration with the artist Erika Adams. He teaches at Columbus State University in Georgia. His website can be found here.

Eagle & Phenix Dam
Columbus, Georgia

An immense weight of water piles behind the old millrace and dam, its rough stonework and masonry, tip a cutting edge the river laps over smooth as Tiffany glass; Dark jade frothing in a white lacy cacophony, a motion picture of time passing, relentless

and loud but jeweled with the rope pearl necklaces of its own spray, veiled in mists for herons to lope through as in plates by Audobon.

They're tearing it down to make way for whitewater rafting, mill life long dead, downtown become a haven for recreation, bars, bike shops,

a bus station barbecue joint; the mill itself become a hive of loft apartments, a poet

and an old man.
Restoration examples

Cheonggyecheon Stream in South Korea

(from Landscape Performance Series)

http://landscapeperformance.org
Meadow Creek, Charlottesville, VA
Boneyard Creek, Champaign, IL

Note: Improved habitat value of the site from “poor/marginal” to “suboptimal”.
Tassajara Creek, Dublin, California
Buffalo Bayou Promenade, Houston, TX
Activity

1. Name one thing you use streams for (either as a kid or for funsies).
2. Name one concern/worry you have about streams or potential restorations.
uses

- canoeing 2
- damming
- swimming 2
- kayaking 2
- rinsing feet
- collecting rocks, etc
- sitting
- fishing/birding 1
- camping
- finding macroinverts
- tubing
- property value 3

concerns

- nonpoint pollution 1 2 3
- failure of restoration projects
- invasive species 1
- poor installation
- doing more harm than good (worse than before) 2
- sustainable design (human access) 3
- unkowns (water quality…)
- change of perception
- loss of favorite spots 3
- unseen substrate
- future of the system
Restore this stream!

- Medium-size suburban stream, moderately-impaired with erosion, sedimentation, nutrients, pathogens but some sunfish & bass, crayfish
- Houses nearby, some located in historic floodplains
- Old hydroelectric dam, now shuttered
3 groups

1. Ecologically-minded group (think Greenway commission meets UOWN meets..)
2. Outdoorsy, athletic group
3. Homeowners near stream
Questions

● Did the Corps leave out any important steps in their dam removal process? (community involvement??)
  ○ Can a restoration project be successful without community buy-in?
• Did the Chattahoochee dam removal project accomplish its objectives?
  ○ Do you think all of the “potential ecological benefits” like increasing threatened species habitat were achieved?
Is hydrologic regime a sufficient metric to determine “habitat”?

- Or is focusing on hydrology similar to focusing on channel form, e.g., missing out on a large portion of the story?
Do you agree with Kondolf & Yang’s view that human-centered stream restoration can have enormous uncertainty?

○ How does this compare to the uncertainty of an ecological- or geomorphological-based project?