

References for Channel Incision and Headcut Mitigation:

Compiled by Gabrielle David

1. References on Channel and Watershed Processes.....	2
1.1. Channel incision and gully processes:.....	2
1.2. Knickpoint/Headcut Processes:	6
1.3. Watershed Processes:.....	9
2. References for Channel Evolution Models:	9
3. Structures used to prevent headcut migration and channel incision.....	11
3.1. Grade Control Structures:	11
3.2. Structures used for habitat rehabilitation and grade control:	13
3.3. Step-Pool Function and Step-Pool Design:	15
3.4. Other Structures and Methods:.....	16
4. Watershed Management References	17
5. Journal Articles and Books on River Restoration	19

1. References on Channel and Watershed Processes

1.1. Channel incision and gully processes:

- Abt, S.R., Pauley, C.J., Hogan, S.A. and Johnson, T.L., 1994. Gully Potential in Soil-Covered Uranium Waste Impoundments. *Journal of Energy Engineering-ASCE*, 120(2): 51-66.
- Avni, Y., 2005. Gully incision as a key factor in desertification in an arid environment, the Negev highlands, Israel. *Catena*, 63(2-3): 185-220.
- Bariss, N., 1971. Gully formation in the loesses of central Nebraska. *Rocky Mountain Social Science Journal*, 8(2): 47-59.
- Bariss, N., 1977. Gullying in a semi-arid loess region of North America. *Great Plains-Rocky Mountain Geogr. Journal*, 6: 125 - 132.
- Bennett, S.J., Casali, J., Robinson, K.M. and Kadavy, K.C., 2000. Characteristics of actively eroding ephemeral gullies in an experimental channel. *Transactions of the ASAE*, 43(3): 641-649.
- Casali, J., Loizu, J., Campo, M.A., De Santisteban, L.M. and Álvarez-Mozos, J., 2006. Accuracy of methods for field assessment of rill and ephemeral gully erosion. *Catena* 67: 128-138.
- Casali, J., Bennett, S.J. and Robinson, K.M., 2000. Processes of ephemeral gully erosion. *International Journal of Sediment Research*, 15: 31-41.
- Casali, J., Gimenez, R. and Bennett, S., 2009. Gully erosion processes: monitoring and modelling. *Earth Surface Processes and Landforms*, 34(14): 1839-1840.
- Casali, J., Lopez, J.J. and Giraldez, J.V., 2003. A process-based model for channel degradation: application to ephemeral gully erosion. *Catena*, 50(2-4): 435-447.
- Daba, S., Rieger, W. and Strauss, P., 2003. Assessment of gully erosion in eastern Ethiopia using photogrammetric techniques. *Catena*, 50(2-4): 273-291.
- Daniels, R.B., 1966. Stream trenching and valley slope gullies. *USDA Technical Bulletin* 1348, pp. 51 - 87.
- Elliott, J.G., Gellis, A.C. and Aby, S.B., 1999. Evolution of arroyos; incised channels of the Southwestern United States. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 153-185.
- Emerson, J.W., 1971. Channelization - Case Study. *Science*, 173(3994): 325-&.
- Erskine, W.D., 1999. Oscillatory response versus progressive degradation of incised channels in southeastern Australia. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 67-95.

Gabris, G., Kertesz, A. and Zambo, L., 2003. Land use change and gully formation over the last 200 years in a hilly catchment. *Catena*, 50(2-4): 151-164.

Galang, M.A., Jackson, C.R., Morris, L.A., Markewitz, D. and Carter, E.A., 2007. Hydrologic behavior of gullies in the South Carolina Piedmont. *Proceedings of the 2007 Georgia Water Resources Conference*, University of Georgia, 4 pp.

Gay, G.R., Gay, H.H., Gay, W.H., Martinson, H.A., Meade, R.H. and Moody, J.A., 1998. Evolution of cutoffs across meander necks in Powder River, Montana, USA. *Earth Surface Processes and Landforms*, 23(7): 651-662.

Gellis, A.C., Emmet, W.W. and Leopold, L.B., 2005. Channel and hillslope processes revisited in the Arroyo de los Frijoles watershed near Santa Fe, New Mexico. U. S. Geological Survey, Reston, VA, 53 pp.

Gutierrez, A.G., Schnabel, S. and Contador, F.L., 2009. Gully Erosion, Land Use and Topographical Thresholds during the Last 60 Years in a Small Rangeland Catchment in Sw Spain. *Land Degradation & Development*, 20(5): 535-550.

Happ, S.C., Rittenhouse, G. and Dobson, G.C., 1941. Some principles of accelerated stream and valley sedimentation. *American Journal of Science*, 239(2): 159-160.

Harvey, M.D., Watson, C.C. and Schumm, S.A., 1985. *Gully Erosion*. USDI Bureau of Reclamation, Fort Collins, CO, 181 pp.

Heede, B.H., 1971. Characteristics and Processes of Soil Piping in Gullies. *Transactions-American Geophysical Union*, 52(4): 204-&.

Heede, B.H., 1991. Response of a Stream in Disequilibrium to Timber Harvest. *Environmental Management*, 15(2): 251-255.

Huang, C.H. and Laflen, J.M., 1996. Seepage and soil erosion for a clay loam soil. *Soil Science Society of America Journal*, 60(2): 408-416.

Hupp, C.R., 1999. Relations among riparian vegetation, channel incision processes and forms, and large woody debris. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 219-245.

Ionita, I., 2003. Hydraulic efficiency of the discontinuous gullies. *Catena*, 50(2-4): 369-379.

Ireland, H.A., 1939. "Lyell" gully, a record of a century of erosion. *Journal of Geology*, 47(1): 47-63.

Istanbulluoglu, E., Bras, R.L., Flores-Cervantes, H. and Tucker, G.E., 2005. Implications of bank failures and fluvial erosion for gully development: Field observations and modeling. *Journal of Geophysical Research-Earth Surface*, 110(F1): F01014.

Kirkby, M.J. and Bracken, L.J., 2009. Gully processes and gully dynamics. *Earth Surface Processes and Landforms*, 34(14): 1841-1851.

- Martinez-Casasnovas, J.A., 2003. A spatial information technology approach for the mapping and quantification of gully erosion. *Catena*, 50(2-4): 293-308.
- Marzloff, I. and Poesen, J., 2009. The potential of 3D gully monitoring with GIS using high-resolution aerial photography and a digital photogrammetry system. *Geomorphology*, 111(1-2): 48-60.
- Marzloff, I. and Ries, J.B., 2007. Gully erosion monitoring in semi-arid landscapes. *Zeitschrift Fur Geomorphologie*, 51(4): 405-425.
- Menendez-Duarte, R., Marquinez, J., Fernandez-Menendez, S. and Santos, R., 2007. Incised channels and gully erosion in Northern Iberian Peninsula: Controls and geomorphic setting. *Catena*, 71(2): 267-278.
- Morgan, R.P.C. and Mngomezulu, D., 2003. Threshold conditions for initiation of valley-side gullies in the Middle Veld of Swaziland. *Catena*, 50(2-4): 401-414.
- Nyssen, J., Poesen, J., Veyret-Picot, M., Moeyersons, J., Haile, M., Deckers, J., Dewit, J., Naudts, J., Teka, K. and Govers, G., 2006. Assessment of gully erosion rates through interviews and measurements: a case study from northern Ethiopia. *Earth Surface Processes and Landforms*, 31(2): 167-185.
- Patton, P.C. and Schumm, S.A., 1975. Gully Erosion, Northwestern Colorado - Threshold Phenomenon. *Geology*, 3(2): 88-90.
- Patton, P.C. and Schumm, S.A., 1981. Ephemeral-Stream Processes - Implications for Studies of Quaternary Valley Fills. *Quaternary Research*, 15(1): 24-43.
- Poesen, J., Nachtergaele, J., Verstraeten, G. and Valentin, C., 2003. Gully erosion and environmental change: importance and research needs. *Catena*, 50(2-4): 91-133.
- Rodzic, J., Furtak, T. and Zglobicki, W., 2009. The impact of snowmelt and heavy rainfall runoff on erosion rates in a gully system, Lublin Upland, Poland. *Earth Surface Processes and Landforms*, 34(14): 1938-1950.
- Schumm, S.A., 1999. Causes and controls of channel incision. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, United Kingdom, pp. 19-33.
- Seeger, M., Marzloff, I. and Ries, J.B., 2009. Identification of gully-development processes in semi-arid NE-Spain. *Zeitschrift Fur Geomorphologie*, 53(4): 417-431.
- Seginer, I., 1966. Gully development and sediment yield. *Journal of Hydrology*, 4: 236-253.
- Shields, F.D., Lizotte, R.E., Knight, S.S., Cooper, C.M. and Wilcox, D., 2010. The stream channel incision syndrome and water quality. *Ecological Engineering*, 36(1): 78-90.
- Simon, A., Curini, A., Darby, S.E. and Langendoen, E.J., 1999. Streambank mechanics and the role of bank and near-bank processes in incised channels. In: S.E. Darby and A. Simon (Editors), *Incised River*

Channels: Processes, Forms, Engineering and Management. John Wiley & Sons : Chichester, United Kingdom, pp. 123-152.

Simon, A. and Darby, S.E., 1999. The nature and significance of incised river channels. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 1-18.

Smiley, P.C., Knight, S.S., Shields, F.D. and Cooper, C.M., 2009. Influence of gully erosion control on amphibian and reptile communities within riparian zones of channelized streams. *Ecohydrology*, 2(3): 303-312.

Strunk, H., 2003. Soil degradation and overland flow as causes of gully erosion on mountain pastures and in forests. *Catena*, 50(2-4): 185-198.

Tsujimoto, T., 1999. Sediment transport processes and channel incision; mixed size sediment transport, degradation and armouring. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 37-66.

Valentin, C., Poesen, J. and Li, Y., 2005. Gully erosion: A global issue - Preface. *Catena*, 63(2-3): 129-131.

Valentin, C., Poesen, J. and Li, Y., 2005. Gully erosion: Impacts, factors and control. *Catena*, 63(2-3): 132-153.

Vandekerckhove, L., Muys, B., Poesen, J., De Weerd, B. and Coppe, N., 2001. A method for dendrochronological assessment of medium-term gully erosion rates. *Catena*, 45(2): 123-161.

Vanwalleghem, T., Bork, H.R., Poesen, J., Dotterweich, M., Schmidtchen, G., Deckers, J., Scheers, S. and Martens, M., 2006. Prehistoric and Roman gully erosion in the European loess belt: a case study from central Belgium. *Holocene*, 16(3): 393-401.

Vanwalleghem, T., Bork, H.R., Poesen, J., Schmidtchen, G., Dotterweich, M., Nachtergaele, J., Bork, H., Deckers, J., Bruschi, B., Bungeneers, J. and De Bie, A., 2005. Rapid development and infilling of a buried gully under cropland, central Belgium. *Catena*, 63(2-3): 221-243.

Vanwalleghem, T., Poesen, J., Nachtergaele, J. and Verstraeten, G., 2005. Characteristics, controlling factors and importance of deep gullies under cropland on loess-derived soils. *Geomorphology*, 69(1-4): 76-91.

Vanwalleghem, T., Poesen, J., Van Den Eeckhaut, M., Nachtergaele, J. and Deckers, J., 2005. Reconstructing rainfall and land-use conditions leading to the development of old gullies. *Holocene*, 15(3): 378-386.

Vanwalleghem, T., Van Den Eeckhaut, M., Poesen, J., Deckers, J., Nachtergaele, J., Van Oost, K. and Slenters, C., 2003. Characteristics and controlling factors of old gullies under forest in a temperate humid climate: a case study from the Meerdaal Forest (Central Belgium). *Geomorphology*, 56(1-2): 15-29.

Vanwalleghem, T., Van Den Eeckhaut, M., Poesen, J., Govers, G. and Deckers, J., 2008. Spatial analysis of factors controlling the presence of closed depressions and gullies under forest: Application of rare event logistic regression. *Geomorphology*, 95(3-4): 504-517.

Wilson, G.V., Cullum, R.F. and Romkens, M.J.M., 2008. Ephemeral gully erosion by preferential flow through a discontinuous soil-pipe. *Catena*, 73(1): 98-106.

1.2. Knickpoint/Headcut Processes:

Archibold, O.W., Lévesque, L.M.J., de Boer, D.H., Aitken, A.E. and Delanoy, L., 2003. Gully retreat in a semi-urban catchment in Saskatoon, Saskatchewan. *Applied Geography*, 23: 261.

Benda, L., Hassan, M.A., Church, M. and May, C.L., 2005. Geomorphology of steepland headwaters: The transition from hillslopes to channels. *Journal of the American Water Resources Association*, 41(4): 835-851.

Bennett, S.J., 1999. Effect of slope on the growth and migration of headcuts in rills. *Geomorphology*, 30(3): 273-290.

Bennett, S.J. and Alonso, C.V., 2005. Kinematics of flow within headcut scour holes on hillslopes. *Water Resources Research*, 41(9): W09418.

Bennett, S.J. and Alonso, C.V., 2006. Turbulent flow and bed pressure within headcut scour holes due to plane reattached jets. *Journal of Hydraulic Research*, 44(4): 510-521.

Bennett, S.J., Alonso, C.V., Prasad, S.N. and Romkens, M.J.M., 2000. Experiments on headcut growth and migration in concentrated flows typical of upland areas. *Water Resources Research*, 36(7): 1911-1922.

Bennett, S.J. and Casali, J., 2001. Effect of initial step height on headcut development in upland concentrated flows. *Water Resources Research*, 37(5): 1475-1484.

Berlin, M.M. and Anderson, R.S., 2009. Steepened channels upstream of knickpoints: Controls on relict landscape response. *Journal of Geophysical Research-Earth Surface*, 114: F03018.

Deploey, J., 1989. A Model for Headcut Retreat in Rills and Gullies. In: A. Yair and S. Berkowicz, Editors, *Arid and Semi-arid Environments: Geomorphological and Pedological Aspects*, *Catena Suppl.* 14: 81-86.

Dey, A.K., Tsujimoto, T. and Kitamura, T., 2007. Experimental investigations on different modes of headcut migration. *Journal of Hydraulic Research*, 45(3): 333-346.

Faulkner, H., Alexander, R., Teeuw, R. and Zukowsky, P., 2004. Variations in soil dispersivity across a gully head displaying shallow sub-surface pipes, and the role of shallow pipes in rill initiation. *Earth Surface Processes and Landforms*, 29(9): 1143-1160.

Flores-Cervantes, J.H., Istanbuluoglu, E. and Bras, R.L., 2006. Development of gullies on the landscape: A model of headcut retreat resulting from plunge pool erosion. *Journal of Geophysical Research-Earth Surface*, 111(F1): F01010.

Frenette, R. and Pestov, I., 2005. Flow and erosive stresses at the base of a headcut. *Journal of Hydraulic Engineering-ASCE*, 131(2): 139-141.

Gordon, L.M., Bennett, S.J., Wells, R.R. and Alonso, C.V., 2007. Effect of soil stratification on the development and migration of headcuts in upland concentrated flows. *Water Resources Research*, 43(7): W07412.

Hanson, G.J., Robinson, K.M. and Cook, K.R., 1997. Headcut migration analysis of a compacted soil. *Transactions of the ASAE*, 40(2): 355-361.

Hanson, G.J., Robinson, K.M. and Cook, K.R., 2001. Prediction of headcut migration using a deterministic approach. *Transactions of the ASAE*, 44(3): 525-531.

Jia, Y., Kitamura, T. and Wang, S.S.Y., 2001. Simulation of scour process in plunging pool of loose bed-material. *Journal of Hydraulic Engineering-ASCE*, 127(3): 219-229.

Lenzi, M.A., Marion, A. and Comiti, F., 2003. Interference processes on scouring at bed sills. *Earth Surface Processes and Landforms*, 28(1): 99-110.

Lenzi, M.A., Marion, A., Comiti, F. and Gaudio, R., 2002. Local scouring in low and high gradient streams at bed sills. *Journal of Hydraulic Research*, 40(6): 731-739.

Machado, L.I., 1994. Mechanics of Jet Scour Downstream of a Headcut - Discussion. *Journal of Hydraulic Research*, 32(6): 951-953.

Montgomery, D.R., 1999. Erosional processes at an abrupt channel head; implications for channel entrenchment and discontinuous gully formation. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom: 247-276.

Moore, J.S., 1997. Field procedures for the headcut erodibility index. *Transactions of the ASAE*, 40(2): 325-336.

Papanicolaou, A.N., Wilson, C.G., Dermisis, D.C., Thomas, J. and Elhakeem, M., 2008. The effects of headcut and knickpoint propagation on bridges in Iowa. IHRB Project TR-541, IIHR - Hydroscience and Engineering.

Parker, G. and Izumi, N., 2000. Purely erosional cyclic and solitary steps created by flow over a cohesive bed. *Journal of Fluid Mechanics*, 419: 203-238.

Robinson, K.M., Bennett, S.J., Casali, J. and Hanson, G.J., 2000. Processes of headcut growth and migration in rills and gullies. *International Journal of Sediment Research*, 15: 69-82.

- Robinson, K.M. and Hanson, G.J., 1994. A Deterministic Headcut Advance Model. *Transactions of the ASAE*, 37(5): 1437-1443.
- Robinson, K.M. and Hanson, G.J., 1995. Large-Scale Headcut Erosion Testing. *Transactions of the ASAE*, 38(2): 429-434.
- Robinson, K.M. and Hanson, G.J., 1996. Gully headcut advance. *Transactions of the ASAE*, 39(1): 33-38.
- Robinson, K.M., Hanson, G.J. and Cook, K.R., 2002. Scour below an overfall: Part I. Investigation. *Transactions of the ASAE*, 45(4): 949-956.
- Stein, O.R. and Alonso, C.V., 1994. Mechanics of Jet Scour Downstream of a Headcut - Reply. *Journal of Hydraulic Research*, 32(6): 953-953.
- Stein, O.R., Alonso, C.V. and Julien, P.Y., 1993. Mechanics of Jet Scour Downstream of a Headcut. *Journal of Hydraulic Research*, 31(6): 723-738.
- Stein, O.R. and Julien, P.Y., 1993. Criterion Delineating the Mode of Headcut Migration. *Journal of Hydraulic Engineering-ASCE*, 119(1): 37-50.
- Tucker, G.E., Arnold, L., Bras, R.L., Flores, H., Istanbuloglu, E. and Solyom, P., 2006. Headwater channel dynamics in semiarid rangelands, Colorado high plains, USA. *Geological Society of America Bulletin*, 118(7-8): 959-974.
- Vandekerckhove, L., Poesen, J. and Govers, G., 2003. Medium-term gully headcut retreat rates in Southeast Spain determined from aerial photographs and ground measurements. *Catena*, 50(2-4): 329-352.
- Vide, J.P.M., 1994. Mechanics of Jet Scour Downstream of a Headcut - Discussion. *Journal of Hydraulic Research*, 32(6): 954-957.
- Wang, Z.I. and Bowles, D.S., 2007. A numerical method for simulating one-dimensional headcut migration and overtopping breaching in cohesive and zoned embankments. *Water Resources Research*, 43(5): W05411.
- Wells, R.R., Alonso, C.V. and Bennett, S.J., 2009. Morphodynamics of Headcut Development and Soil Erosion in Upland Concentrated Flows. *Soil Science Society of America Journal*, 73(2): 521-530.
- Wells, R.R., Bennett, S.J. and Alonso, C.V., 2009. Effect of soil texture, tailwater height, and pore-water pressure on the morphodynamics of migrating headcuts in upland concentrated flows. *Earth Surface Processes and Landforms*, 34(14): 1867-1877.
- Wijdenes, D.J.O., Poesen, J., Vandekerckhove, L. and Ghesquiere, M., 2000. Spatial distribution of gully head activity and sediment supply along an ephemeral channel in a Mediterranean environment. *Catena*, 39(3): 147-167.

Zhu, Y., Visser, P.J. and Vrijling, J.K., 2004. A model for prediction of headcut migration. Proceedings of the Ninth International Symposium on River Sedimentation, Yichang, China, pp. 2146 - 2152.

1.3. Watershed Processes:

Bull, W.B., 1997. Discontinuous ephemeral streams. *Geomorphology*, 19(3-4): 227-276.

De Ploey, J., 1990. Modelling the erosional susceptibility of catchments in terms of energy. *Catena*, 17: 175 - 183.

Debano, L.F. and Schmidt, L.J., 1989. Interrelationship between watershed condition and health of riparian areas in Southwestern United States, Practical approaches to riparian resource management: an educational workshop. American Fisheries Society, Bethesda, MD, pp. 45 - 52.

Fryirs, K., Spink, A. and Brierley, G., 2009. Post-European settlement response gradients of river sensitivity and recovery across the upper Hunter catchment, Australia. *Earth Surface Processes and Landforms*, 34(7): 897-918.

Shields, F.D., Knight, S.S. and Cooper, C.M., 2000. Cyclic perturbation of lowland river channels and ecological response. *Regulated Rivers-Research & Management*, 16(4): 307-325.

Stavi, I., Perevolotsky, A. and Avni, Y., 2010. Effects of gully formation and headcut retreat on primary production in an arid rangeland: Natural desertification in action. *Journal of Arid Environments*, 74(2): 221-228.

Svoray, T. and Markovitch, H., 2009. Catchment scale analysis of the effect of topography, tillage direction and unpaved roads on ephemeral gully incision. *Earth Surface Processes and Landforms*, 34(14): 1970-1984.

Vandekerckhove, L., Poesen, J., Wijdenes, D.O. and Gyssels, G., 2001. Short-term bank gully retreat rates in Mediterranean environments. *Catena*, 44(2): 133-161.

2. References for Channel Evolution Models:

Beechie, T.J., Pollock, M.M. and Baker, S., 2008. Channel incision, evolution and potential recovery in the Walla Walla and Tucannon River basins, northwestern USA. *Earth Surface Processes and Landforms*, 33(5): 784-800.

Doyle, M.W. and Shields, F.D., 2000. Incorporation of bed texture into a channel evolution model. *Geomorphology*, 34(3-4): 291-309.

Doyle, M.W., Stanley, E.H. and Harbor, J.M., 2002. Geomorphic analogies for assessing probable channel response to dam removal. *Journal of the American Water Resources Association*, 38(6): 1567-1579.

Evans, J.E., 2007. Sediment impacts of the 1994 failure of IVEX dam (Chagrin River, NE Ohio): A test of channel evolution models. *Journal of Great Lakes Research*, 33: 90-102.

Harvey, M.D. and Watson, C.C., 1986. Fluvial Processes and Morphological Thresholds in Incised Channel Restoration, *Water Resources Bulletin WARBAQ*, 22: 359-368.

Hupp, C.R., 1992. Riparian Vegetation Recovery Patterns Following Stream Channelization - a Geomorphic Perspective. *Ecology*, 73(4): 1209-1226.

Hupp, C.R. and Simon, A., 1991. Bank Accretion and the Development of Vegetated Depositional Surfaces Along Modified Alluvial Channels. *Geomorphology*, 4(2): 111-124.

Langendoen, E.J. and Alonso, C.V., 2008. Modeling the Evolution of Incised Streams: I. Model Formulation and Validation of Flow and Streambed Evolution Components. *Journal of Hydraulic Engineering*, 134: 749-762.

Leyland, J. and Darby, S.E., 2009. Effects of Holocene climate and sea-level changes on coastal gully evolution: insights from numerical modelling. *Earth Surface Processes and Landforms*, 34(14): 1878-1893.

Patton, P.C. and Schumm, S.A., 1981. Ephemeral-Stream Processes - Implications for Studies of Quaternary Valley Fills. *Quaternary Research*, 15(1): 24-43.

Schumm, S.A. and Hadley, R.F., 1957. Arroyos and the Semiarid Cycle of Erosion. *American Journal of Science*, 255(3): 161-174.

Schumm, S.A., 1979. Geomorphic Thresholds - Concept and Its Applications. *Transactions of the Institute of British Geographers*, 4(4): 485-515.

Shields Jr, F.D., 1999. Stream Corridor Restoration: Principles, Processes, and Practices (New Federal Interagency). *Journal of Hydraulic Engineering*, 125(5): 440.

Simon, A. and Hupp, C. R., 1986. Channel widening characteristics and bank slope development along a reach of Cane Creek, West Tennessee. *USGS Water-Supply Paper: Reston, VA, United States*, pp. 113-126.

Simon, A. and Rinaldi, M., 2006. Disturbance, stream incision, and channel evolution: The roles of excess transport capacity and boundary materials in controlling channel response. *Geomorphology*, 79(3-4): 361-383.

Simon, A., 1989. A Model of Channel Response in Disturbed Alluvial Channels. *Earth Surface Processes and Landforms*, 14(1): 11-26.

Thorne, C.R., 1999. Bank processes and channel evolution in the incised rivers of north-central Mississippi. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 97-121.

Thorne, C.R., Alonso, C., Bettess, R., Borah, D., Darby, S., Diplas, P., Julien, P., Knight, D., Li, L.G., Pizzuto, J., Quick, M., Simon, A., Stevens, M., Wang, S., and Watson, C., 1998. River width adjustment. I: Processes and mechanisms. *Journal of Hydraulic Engineering-ASCE*, 124(9): 881-902.

Thorne, C.R., Alonso, C., Bettess, R., Borah, D., Darby, S., Diplas, P., Julien, P., Knight, D., Li, L.G., Pizzuto, J., Quick, M., Simon, A., Stevens, M., Wang, S., Watson, C., Kovacs, A., Mosselman, E., Schippa, L., and Wiele, S., 1998. River width adjustment. II: modeling. *Journal of Hydraulic Engineering-ASCE*, 124(9): 903-917.

Watson, C.C., Biedenharn, D.S. and Bledsoe, B.R., 2002. Use of incised channel evolution models in understanding rehabilitation alternatives. *Journal of the American Water Resources Association*, 38(1): 151-160.

Wohl, E.E., 1999. Incised bedrock channels. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 187-218.

3. Structures used to prevent headcut migration and channel incision

3.1. Grade Control Structures:

2004. The Virginia stream restoration and stabilization best management practices guide. Department of Conservation and Recreation and Department of Environmental Quality, Richmond, 207 pp.

Barnhardt, M.L., 1989. A 50-year-old gully reclamation project revisited, *Journal of Soil and Water Conservation*. Soil Conservation Society of America : Ankeny, IA, United States, pp. 562-565.

Biedenharn, D.S. and Hubbard, L.S., 2001. Design considerations for siting grade control structures. US Army Corps of Engineers, 11 pp.

Conesa-Garcia, C. and Garcia-Lorenzo, R., 2008. Bed texture changes caused by check dams on ephemeral channels in Mediterranean semiarid environments. *Zeitschrift Fur Geomorphologie*, 52(4): 437-461.

Conesa-Garcia, C. and Garcia-Lorenzo, R., 2009. Effectiveness of check dams in the control of general transitory bed scouring in semiarid catchment areas (South-East Spain). *Water and Environment Journal*, 23(1): 1-14.

Conesa-Garcia, C. and Garcia-Lorenzo, R., 2009. Local Scour Estimation at Check Dams in Torrential Streams in South East Spain. *Geografiska Annaler Series a-Physical Geography*, 91A(3): 159-177.

Conesa-Garcia, C., Lopez-Bermudez, F. and Garcia-Lorenzo, R., 2007. Bed stability variations after check dam construction in torrential channels (South-East Spain). *Earth Surface Processes and Landforms*, 32(14): 2165-2184.

Gellis, A.C., Cheama, A., Laahty, V. and Lalio, S., 1995. Assessment of Gully-Control Structures in the Rio-Nutria Watershed, Zuni Reservation, New-Mexico. *Water Resources Bulletin*, 31(4): 633-646.

Heede, B.H., 1960. A study of early gully-control structures in the Colorado Front Range. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO, 42 pp.

Heede, B.H., 1976. Gully development and control: the status of our knowledge. USDA Forest Service, Fort Collins, CO.

Heede, B.H. and Mufich, J.G., 1974. Field and Computer Procedures for Gully Control by Check Dams. *Journal of Environmental Management*, 2(1): 1-49.

Holburn, E., Russell, K. and Holmquist-Johnson, C.L., 2008. Reclamation Managing Water in the West: River Spanning Rock Structures Field Investigation 2008. USDI Bureau of Reclamation, Denver, CO, 131 pp.

Lenzi, M.A. and Comiti, F., 2003. Local scouring and morphological adjustments in steep channels with check-dam sequences. *Geomorphology*, 55(1-4): 97-109.

Lenzi, M.A., Comiti, F. and Marion, A., 2004. Local scouring at bed sills in a mountain river: Plima River, Italian Alps. *Journal of Hydraulic Engineering-ASCE*, 130(3): 267-269.

Lenzi, M.A., Marion, A. and Comiti, F., 2003. Local scouring at grade-control structures in alluvial mountain rivers. *Water Resources Research*, 39(7): ESG 1-1 – ESG 1-12.

Marion, A., Lenzi, M.A. and Comiti, F., 2004. Effect of sill spacing and sediment size grading on scouring at grade-control structures. *Earth Surface Processes and Landforms*, 29(8): 983-993.

Mooney, D.M., Holmquist-Johnson, C.L. and Broderick, S., 2007. Reclamation Managing Water in the West: Rock Ramp Design Guidelines. USDI Bureau of Reclamation, Denver, CO, 102 pp.

Mooney, D.M., Holmquist-Johnson, C.L. and Holburn, E., 2007. Reclamation Managing Water in the West: Qualitative Evaluation of Rock Weir Field Performance and Failure Mechanisms. USDI Bureau of Reclamation, Denver, 49 pp.

Morris, S. and Moses, T., 1998. Channel and streambank stabilization in a steep colluvial valley, Lake Oswego, OR. In: *Winning solutions for Risky Problems*, Steamboat Springs, Colorado, International Erosion Control Association. *Proceedings of Conference*, 29th, Reno, Nevada: 365 - 371.

Nakato, T., 1998. A review of international literature of design practice and experience with low-head alluvial-channel grade-control structures. U.S. Army Engineer, Iowa Institute of Hydraulic Research, Iowa City, 80 pp.

National Engineering Handbook, 2007. Technical Supplements. Part 654: 14G and 14P.

Neilson, F.M. and Waller, T.N., 1991. Annotated bibliography on grade control structures, USAE Waterways Experiment Station, Vicksburg, MS.

Nyssen, J., Veyret-Picot, M., Poesen, J., Moeyersons, J., Haile, M., Deckers, J. and Govers, G., 2004. The effectiveness of loose rock check dams for gully control in Tigray, northern Ethiopia. *Soil Use and Management*, 20(1): 55-64.

Simon, A. and Darby, S.E., 2002. Effectiveness of grade-control structures in reducing erosion along incised river channels: the case of Hotophia Creek, Mississippi. *Geomorphology*, 42(3-4): 229-254.

Temple, D. and Moore, J., 1997. Headcut advance prediction for earth spillways. *Transactions of the ASAE*, 40(3): 557-562.

Watson, C.C. and Biedenharn, D.S., 1999. Design and effectiveness of grade control structures in incised river channels of North Mississippi, USA. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 395-422.

Watson, C.C., Thornton, C.I., Holmquist-Johnson, C.L. and Robeson, M.D., 2002. Development of design criteria for siting and spacing of grade control structures. Colorado State University, Engineering Research Station, Fort Collins, CO.

Zhang, J.Y., Li, Y., Xuan, G.X., Wang, X.G. and Li, J., 2009. Overtopping breaching of cohesive homogeneous earth dam with different cohesive strength. *Science in China Series E-Technological Sciences*, 52(10): 3024-3029.

3.2. Structures used for habitat rehabilitation and grade control:

Booth, D.B., 2005. Challenges and prospects for restoring urban streams: a perspective from the Pacific Northwest of North America. *Journal of the North American Benthological Society*, 24(3): 724-737.

Borg, D., Rutherford, I. and Stewardson, M., 2007. The geomorphic and ecological effectiveness of habitat rehabilitation works: Continuous measurement of scour and fill around large logs in sand-bed streams. *Geomorphology*, 89(1-2): 205-216.

Chapman, D.W., 1995. Efficacy of structural manipulations of instream habitat in the Columbia River Basin. *Rivers*, 5(4): 279 - 293.

Crispin, V., House, R. and Roberts, D., 1993. Changes in Instream Habitat, Large Woody Debris, and Salmon Habitat after the Restructuring of a Coastal Oregon Stream. *North American Journal of Fisheries Management*, 13: 96-102.

Debano, L.F. and Heede, B.H., 1987. Enhancement of Riparian Ecosystems with Channel Structures. *Water Resources Bulletin*, 23(3): 463-470.

Debano, L.F. and Schmidt, L.J., 1990. Potential for Enhancing Riparian Habitats in the Southwestern United-States with Watershed Practices. *Forest Ecology and Management*, 33-4(1-4): 385-403.

Frissell, C.A. and Nawa, R.K., 1992. Incidence and Causes of Physical Failure of Artificial Habitat Structures in Streams of Western Oregon and Washington. *North American Journal of Fisheries Management*, 12: 182-197.

House, R., 1996. An evaluation of stream restoration structures in a coastal Oregon stream, 1981-1993. *North American Journal of Fisheries Management*, 16: 272-281.

House, R.A. and Boehne, P.L., 1985. Evaluation of Instream Enhancement Structures for Salmonid Spawning and Rearing in a Coastal Oregon Stream. *North American Journal of Fisheries Management*, 5: 283-295.

House, R.A. and Boehne, P.L., 1986. Effects of Instream Structures on Salmonid Habitat and Populations in Tobe Creek, Oregon. *North American Journal of Fisheries Management*, 6: 38-46.

Mao, L., Andreoli, A., Comiti, F. and Lenzi, M.A., 2008. Geomorphic effects of large wood jams on a sub-antarctic mountain stream. *River Research and Applications*, 24(3): 249-266.

Newbury, R. and Gaboury, M., 1993. Exploration and Rehabilitation of Hydraulic Habitats in Streams Using Principles of Fluvial Behavior. *Freshwater Biology*, 29(2): 195-210.

Newbury, R., Gaboury, M. and Bates, D., 1997. The art of river restoration: Constructing riffles and pools in channelized streams, *River Restoration - Plenary Lectures International Conference*, pp. 85 - 111.

Newbury, R.W. and Gaboury, M.N., 1994. Stream analysis and fish habitat design: A field manual. Newbury Hydraulics Ltd., Gibsons, British Columbia, 272 pp.

Papanicolaou, A.N. and Maxwell, A.R., 2000. Hydraulic performance of fish bypass-pools for irrigation diversion channels. *Journal of Irrigation and Drainage Engineering-ASCE*, 126(5): 314-321.

Platts, W.S. and Nelson, R.L., 1985. Stream Habitat and Fisheries Response to Livestock Grazing and Instream Improvement Structures, Big-Creek, Utah. *Journal of Soil and Water Conservation*, 40(4): 374-379.

Pollock, M.M., Beechie, T.J. and Jordan, C.E., 2007. Geomorphic changes upstream of beaver dams in Bridge Creek, an incised stream channel in the interior Columbia River basin, eastern Oregon. *Earth Surface Processes and Landforms*, 32(8): 1174-1185.

Reeves, G.H., Hall, J.D., Roelofs, T.D., Hickman, T.L. and Baker, C.O., 1991. Rehabilitating and modifying stream habitats, influences of forest and rangeland management on salmonid fishes and their habitats. *American Fisheries Society Special Publication*, pp. 519-557.

Roni, P., Beechie, T. J., Bilby, R. E., Leonetti, F. E., Pollock, M. M. and Pess, G. R. 2002. A review of stream restoration techniques and a hierarchical strategy for prioritizing restoration in Pacific Northwest watersheds. *North American Journal of Fisheries Management*, 22(1): 1-20.

- Roni, P., Bennett, T., Morley, S., Pess, G. R., Hanson, K., Van Slyke, D. and Olmstead, P. 2006. Rehabilitation of bedrock stream channels: the effects of boulder weir placement on aquatic habitat and biota. *River Research and Applications*, 22: 967 - 980.
- Schmetterling, D.A. and Pierce, R.W., 1999. Success of Instream Habitat Structures After a 50-Year Flood in Gold Creek, Montana. *Restoration Ecology*, 7: 369-375.
- Shields, F.D., Cooper, C.M. and Knight, S.S., 1993. Initial Habitat Response to Incised Channel Rehabilitation. *Aquatic Conservation-Marine and Freshwater Ecosystems*, 3(2): 93-103.
- Shields, F.D., Knight, S.S. and Cooper, C.M., 1994. Effects of Channel Incision on Base-Flow Stream Habitats and Fishes. *Environmental Management*, 18(1): 43-57.
- Shields, F.D., Knight, S.S. and Cooper, C.M., 1995. Incised Stream Physical Habitat Restoration with Stone Weirs. *Regulated Rivers-Research & Management*, 10(2-4): 181-198.
- Shields, F.D., Knight, S.S. and Cooper, C.M., 1997. Rehabilitation of warmwater stream ecosystems following channel incision. *Ecological Engineering*, 8(2): 93-116.
- Shields, F.D., Knight, S.S. and Cooper, C.M., 1998. Rehabilitation of aquatic habitats in warmwater streams damaged by channel incision in Mississippi. *Hydrobiologia*, 382: 63-86.
- Shields, F.D., Knight, S.S. and Cooper, C.M., 2000. Warmwater stream bank protection and fish habitat: A comparative study. *Environmental Management*, 26(3): 317-328.
- Shields, F.D., Knight, S.S., Cooper, C.M. and Testa, S., 2000. Large woody debris structures for incised channel rehabilitation, *Water Resources ASCE*, 10 pp.
- Thompson, D.M., 2002. Channel-bed scour with high versus low deflectors. *Journal of Hydraulic Engineering-ASCE*, 128(6): 640-643.
- Thompson, D.M., 2002. Long-term effect of instream habitat-improvement structures on channel morphology along the Blackledge and Salmon rivers, Connecticut, USA. *Environmental Management*, 29(2): 250-265.
- Thompson, D.M., 2005. The Long-Term Stability and Morphologic Influence of the Use of Instream Structures in Channel-Restoration Design, *Water*. ASCE.
- Thompson, D.M. and Stull, G.N., 2002. The development and historic use of habitat structures in channel restoration in the United States: the grand experiment in fisheries management. *Geographie Physique et Quaternaire*, 56(1): 45-60.

3.3. Step-Pool Function and Step-Pool Design:

- Chin, A., 1989. Step Pools in Stream Channels. *Progress in Physical Geography*, 13(3): 390-407.

Chin, A., Anderson, S., Collison, A., Ellis-Sugai, B.J., Haltiner, J.P., Hogervorst, J.B., Kondolf, G.M., O'Hirok, L.S., Purcell, A.H., Riley, A.L. and Wohl, E., 2009. Linking Theory and Practice for Restoration of Step-Pool Streams. *Environmental Management*, 43(4): 645-661.

Chin, A., Purcell, A.H., Quan, J.W.Y. and Resh, V.H., 2009. Assessing geomorphological and ecological responses in restored step-pool systems. In: L.A. James, S.L. Rathburn and G.R. Whittecar (Editors), *Management and Restoration of Fluvial Systems with Broad Historical Changes and Human Impacts*. Geological Society of America Special Paper 451: 199-214.

Comiti, F., Andreoli, A. and Lenzi, M.A., 2005. Morphological effects of local scouring in step-pool streams. *Earth Surface Processes and Landforms*, 30(12): 1567-1581.

Comiti, F., Mao, L., Lenzi, M.A. and Siligardi, M., 2009. Artificial Steps to Stabilize Mountain Rivers: A Post-Project Ecological Assessment. *River Research and Applications*, 25(5): 639-659.

Heede, B.H., 1985. Channel Adjustments to the Removal of Log Steps - an Experiment in a Mountain Stream. *Environmental Management*, 9(5): 427-432.

Lenzi, M.A., 2002. Stream bed stabilization using boulder check dams that mimic step-pool morphology features in Northern Italy. *Geomorphology*, 45(3-4): 243-260.

Maxwell, A.R., Papanicolaou, A.N., Hotchkiss, R.H., Barber, M.E. and Schafer, J., 2001. Step-pool morphology in high-gradient countersunk culverts. *Hydrology, Hydraulics, and Water Quality; Roadside Safety Features*(1743): 49-56.

Moses, T. and Lower, M., 2004. Natural Channel Design of Step-Pool Watercourses Using the "Keystone" Concept, World Water Congress. ASCE, 11 pp.

Scheuerlein, H., 1998. Morphological dynamics of step-pool systems in mountain streams and their importance for riparian ecosystems. In Jayawardena, A. W., Lee, J. H., Wang, Z. Y. (Eds.), *River Sedimentation: Theory and Applications*: Rotterdam, A.A. Balkema, pp. 205-210.

Wyrick, J.R. and Pasternack, G.B., 2008. Modeling energy dissipation and hydraulic jump regime responses to channel nonuniformity at river steps. *Journal of Geophysical Research-Earth Surface*, 113(F3): F03003.

3.4. Other Structures and Methods:

Abt, S.R., Hamilton, G.B., Watson, C.C. and Smith, J., 1994. Riprap Sizing for Modified Ars-Type Basin. *Journal of Hydraulic Engineering-Asce*, 120(2): 260-267.

Heede, B.H., 1975. Submerged burlap strips aided rehabilitation of disturbed semiarid sites in Colorado and New Mexico. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, 8 pp.

Heede, B.H., 1980. Rehabilitation of disturbed watersheds through vegetation treatment and physical structures. In: D.M. Baumgartner (Editor), *Interior West Watershed Management*. Washington State University, Spokane, Washington, pp. 257 - 268.

Heede, B.H. and Deban, L.F., 1984. Gully Rehabilitation - a 3-Stage Process in a Sodic Soil. *Soil Science Society of America Journal*, 48(6): 1416-1422.

Pederson, J.L., Petersen, P.A. and Dierket, J.L., 2006. Gullying and erosion control at archaeological sites in Grand Canyon, Arizona. *Earth Surface Processes and Landforms*, 31(4): 507-525.

Peterson, J.R., Flanagan, D.C. and Robinson, K.M., 2003. Channel evolution and erosion in pam-treated and untreated experimental waterways. *Transactions of the ASAE*, 46(4): 1023-1031.

Pollock, M.M., Beechie, T.J. and Jordan, C.E., 2007. Geomorphic changes upstream of beaver dams in Bridge Creek, an incised stream channel in the interior Columbia River basin, eastern Oregon. *Earth Surface Processes and Landforms*, 32(8): 1174-1185.

Shields, F.D., Morin, N. and Cooper, C.M., 2004. Large woody debris structures for sand-bed channels. *Journal of Hydraulic Engineering-ASCE*, 130(3): 208-217.

Shields, F.D., Pezeshki, S.R., Wilson, G.V., Wu, W.M. and Dabney, S.M., 2008. Rehabilitation of an Incised Stream Using Plant Materials: the Dominance of Geomorphic Processes. *Ecology and Society*, 13(2): 54.

4. Watershed Management References

Armstrong, J.L. and Mackenzie, D.H., 2002. Sediment yields and turbidity records from small upland subcatchments in the Warragamba Dam Catchment, southern New South Wales. *Australian Journal of Soil Research*, 40(4): 557-579.

Bravard, J.P., Landon, N., Peiry, J.L. and Piegay, H., 1999. Principles of engineering geomorphology for managing channel erosion and bedload transport, examples from French rivers. *Geomorphology*, 31(1-4): 291-311.

Bravard, J.-P., Kondolf, G.M. and Piegay, H., 1999. Environmental and societal effects of channel incision and remedial strategies. In: S.E. Darby and A. Simon (Editors), *Incised River Channels: Processes, Forms, Engineering and Management*. John Wiley & Sons : Chichester, United Kingdom, pp. 303-341.

Chin, A. and Gregory, K.J., 2001. Urbanization and adjustment of ephemeral stream channels. *Annals of the Association of American Geographers*, 91(4): 595-608.

Chin, A. and Gregory, K.J., 2005. Managing urban river channel adjustments. *Geomorphology*, 69(1-4): 28-45.

Croke, J., 2001. Gully initiation and road-to-stream linkage in a forested catchment, southeastern Australia. *Earth Surface Processes and Landforms*, 26: 205-217.

Darby, S.E. and Thorne, C.R., 2000. A river runs through it: morphological and landowner sensitivities along the Upper Missouri River, Montana, USA. *Transactions of the Institute of British Geographers*, 25(1): 91-107.

Florsheim, J.L., Mount, J.F. and Rutten, L.T., 2001. Effect of baselevel change on floodplain and fan sediment storage and ephemeral tributary channel morphology, Navarro River, California. *Earth Surface Processes and Landforms*, 26(2): 219-232.

Fullerton, W.T. and Long, S.G., 1989. Wetland creation in a river valley disturbed by dredge boat mining, Wetlands: Concerns and Successes. American Water Resources Association, Tampa, Florida, pp. 297 - 396.

Gellis, A.C., Cheama, A. and Lalio, S.M., 2001. Developing a geomorphic approach for ranking watersheds for rehabilitation, Zuni Indian Reservation, New Mexico. *Geomorphology*, 37(1-2): 105-134.

Govers, G., Poesen, J. and Goossens, D., 2004. Soil erosion - processes, damage, and countermeasures. In: P. Schonning, S. Elmholt and B.T. Christensen (Editors), *Managing soil quality: challenges in modern agriculture*. CAB International, pp. 199-217.

Harvey, M.D., Watson, C.C. and Schumm, S.A., 1985. Stream channel restoration criteria, Second hydrology symposium on surface coal mining in the Northern Great Plains. Carter Mining Company, Gillette, Wyoming; USA, pp. 61-73.

Heede, B.H., 1978. Designing Gully Control-Systems for Eroding Watersheds. *Environmental Management*, 2(6): 509-522.

Heede, B.H., 1979. Deteriorated Watersheds Can Be Restored - Case-Study. *Environmental Management*, 3(3): 271-281.

Martin, S.C. and Morton, H.L., 1993. Mesquite Control Increases Grass Density and Reduces Soil Loss in Southern Arizona. *Journal of Range Management*, 46(2): 170-175.

Nagle, G.N. and Ritchie, J.C., 2004. Wheat field erosion rates and channel bottom sediment sources in an intensively cropped northeastern oregon drainage basin. *Land Degradation & Development*, 15(1): 15-26.

Peterson, H.V. and Branson, F.A., 1962. Effects of land treatments on erosion and vegetation on range lands in parts of Arizona and New Mexico. *Journal of Range Management*, 15(4): 220-6.

Sear, D.A., Newson, M.D. and Brookes, A., 1995. Sediment-related river maintenance; the role of fluvial geomorphology. *Earth Surface Processes and Landforms*, 20: 629-647.

Wohl, E., Cooper, D., Poff, L., Rahel, F., Staley, D. and Winters, D., 2007. Assessment of stream ecosystem function and sensitivity in the Bighorn National Forest, Wyoming. *Environmental Management*, 40(2): 284-302.

5. Journal Articles and Books on River Restoration

Bernhardt, E.S., Palmer, M.A., Allan, J.D., Alexander, G., Barnas, K., Brooks, S., Carr, J., Clayton, S., Dahm, C., Follstad-Shah, J., Galat, D., Gloss, S., Goodwin, P., Hart, D., Hassett, B., Jenkinson, R., Katz, S., Kondolf, G.M., Lake, P.S., Lave, R., Meyer, J.L., O'Donnell, T.K., Pagano, L., Powell, B. and Sudduth, E., 2005. Ecology - Synthesizing US river restoration efforts. *Science*, 308(5722): 636-637.

Bernhardt, E.S., Sudduth, E.B., Palmer, M.A., Allan, J.D., Meyer, J.L., Alexander, G., Follstad-Shah, J., Hassett, B., Jenkinson, R., Lave, R., Rumps, J. and Pagano, L., 2007. Restoring rivers one reach at a time: Results from a survey of US river restoration practitioners. *Restoration Ecology*, 15(3): 482-493.

Booth, D.B., Karr, J.R., Schauman, S., Konrad, C.P., Morley, S.A., Larson, M.G. and Burges, S.J., 2004. Reviving urban streams: Land use, hydrology, biology, and human behavior. *Journal of the American Water Resources Association*, 40(5): 1351-1364.

Brookes, A. and Shields, F.D. (Editors), 1996. *River Channel Restoration: Guiding Principles for Sustainable Projects*. John Wiley & Sons Ltd., Chichester, England, 433 pp.

Chin, A., Daniels, M.D., Urban, M.A., Piegay, H., Gregory, K.J., Bigler, W., Butt, A.Z., Grable, J.L., Gregory, S.V., Lafrenz, M., Laurencio, L.R. and Wohl, E., 2008. Perceptions of wood in rivers and challenges for stream restoration in the United States. *Environmental Management*, 41(6): 893-903.

Darby, S.E. and Simon, A., 1999. *Incised river channels : processes, forms, engineering, and management*. John Wiley & Sons Ltd., Chichester ; New York, viii, 442 pp.

Downs, P.W. and Kondolf, G.M., 2002. Post-project appraisals in adaptive management of river channel restoration. *Environmental Management*, 29(4): 477-496.

Gregory, K.J. and Chin, A., 2002. Urban stream channel hazards. *Area*, 34(3): 312-321.

Jenkinson, R.G., Barnas, K. A., Braatne, J. H., Bernhardt, E. S., Palmer, M. A. and Allan, J. D. 2006. Stream restoration databases and case studies: A guide to information resources and their utility in advancing the science and practice of restoration. *Restoration Ecology*, 14(2): 177-186.

Kondolf, G.M., Boulton, A.J., O'Daniel, S., Poole, G.C., Rachel, F.J., Stanley, E.H., Wohl, E., Bang, A., Carlstrom, J., Cristoni, C., Huber, H., Koljonen, S., Louhi, P. and Nakamura, K., 2006. Process-based ecological river restoration: Visualizing three-dimensional connectivity and dynamic vectors to recover lost linkages. *Ecology and Society*, 11(2): 17 pp.

Kondolf, G.M. and Micheli, E.R., 1995. Evaluating Stream Restoration Projects. *Environmental Management*, 19(1): 1-15.

Palmer, M., Allan, J.D., Meyer, J. and Bernhardt, E.S., 2007. River restoration in the twenty-first century: Data and experiential future efforts. *Restoration Ecology*, 15(3): 472-481.

- Palmer, M.A., Bernhardt, E.S., Allan, J.D., Lake, P.S., Alexander, G., Brooks, S., Carr, J., Clayton, S., Dahm, C.N., Shah, J.F., Galat, D.L., Loss, S.G., Goodwin, P., Hart, D.D., Hassett, B., Jenkinson, R., Kondolf, G.M., Lave, R., Meyer, J.L., O'Donnell, T.K., Pagano, L. and Sudduth, E., 2005. Standards for ecologically successful river restoration. *Journal of Applied Ecology*, 42(2): 208-217.
- Scholz, J.G. and Booth, D.B., 2001. Monitoring urban streams: Strategies and protocols for humid-region lowland systems. *Environmental Monitoring and Assessment*, 71(2): 143-164.
- Schumm, S.A., Harvey, M.D. and Watson, C.C., 1984. *Incised channels; morphology, dynamics and control*. Water Resources Publications : Littleton, CO, United States.
- Shields, F.D., Cooper, C.M. and Knight, S.S., 1995. Experiment in Stream Restoration. *Journal of Hydraulic Engineering-ASCE*, 121(6): 494-502.
- Simon, A. and Downs, P.W., 1995. An Interdisciplinary Approach to Evaluation of Potential Instability in Alluvial Channels. *Geomorphology*, 12(3): 215-232.
- Thorne, C.R., Hey, R.D. and Newson, M. (Editors), 1997. *Applied Fluvial Geomorphology for River Engineering and Management*. John Wiley & Sons Ltd., Chichester, England, 376 pp.
- Wang, S.S.Y., Langendoen, E.J. and Shields, F.D., Jr. (Editors), 1997. Management of landscapes disturbed by channel incision. *Proceedings of the Conference on Management of Landscapes Disturbed by Channel Incision held at The University of Mississippi. The Center for Computational Hydroscience and Engineering, Oxford Campus, 1134 pp.*
- Wohl, E., Angermeier, P.L., Bledsoe, B., Kondolf, G.M., MacDonnell, L., Merritt, D.M., Palmer, M.A., Poff, N.L. and Tarboton, D., 2005. River restoration. *Water Resources Research*, 41(10): W10301.