The Catron and Nash Story: Urban Development as a Stream Restoration Tool[AFS]

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In Western Montana, population growth and urban development are accelerating and affecting aquatic systems. For many aquatic biologists, active participation in community planning is critical to stream protection and restoration. Engaging in community planning and regulatory processes is an alternative means of restoring streams and aquatic habitats. Nash Spring Creek and East Catron Creek are suburban streams that were historically channelized for agriculture and more recently threatened by suburban development. Through the Natural Streambed and Land Preservation Act (310) permitting process, specifications and terms for realignment and restoration were directly negotiated with developers. In each case, the primary goal was to reconstruct each stream in a more naturally functioning state with improved habitat conditions. To document the affects of the reconstruction on fish, we conducted electrofishing surveys in several reaches of both streams. In Catron Creek, fish densities severely declined within a year of realignment. However, in some reaches fish densities and diversity increased over time. In Nash Spring Creek, total fish numbers recovered rapidly to levels similar to an unimpacted reach. However, channel realignment resulted in a shift of fish community structure. Pressures on aquatic resources created by suburban development are inevitable. However, biologists can instigate stream restoration and mitigate impacts by actively engaging in community planning and permitting processes.