

# “THE GOOD THE BAD AND THE UGLY” STREAM RESTORATION WITHIN THE ILLINOIS BASIN<sup>1</sup>

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**Abstract:** Given the complexity of stream restoration within surface coal mined areas in the Illinois Basin Coal Field, many obstacles must be overcome to effectively and accurately offset losses to “waters of the U.S.”. The Corps has now had the chance to observe many of the mitigation projects which have been implemented as a result of their regulatory program. We will discuss lessons learned from these observations and potential pitfalls to avoid for future design and implementation plans. Some of the issues we will discuss are appropriate sizing of the channels, developing runoff coefficients for mined lands, appropriate structure types for streams, and stabilization of both the stream and the watershed feeding the stream. Timing of the implementation of mitigation plans in the field is a critical aspect of approved mitigation plans. Attempting to construct streams immediately following reclamation while watersheds are raw and in a sensitive state often leads to eroded banks and sedimentation of structures and any desirable substrate. Additionally, it’s imperative that field personnel are present on-site at all stages of stream construction and are educated about the mitigation plan and its’ implementing procedures.

**Additional Key Words:** stream restoration, 404 permitting, mitigation

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