The Stream Function Pyramid Framework
and Its Applications

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This presentation will discuss the ‘Stream Functions Pyramid Framework (SFPF)’ and potential applications. It was developed by Harman (et al) 2012 and is presented in the “A Function-Based Framework for Stream Assessment and Restoration Projects”. The SFPF organizes stream functions in a pyramid form. The Pyramid illustrates that stream functions are supported by lower level functions in a hierarchical structure. Furthermore, it illustrates how goal setting, stream assessment methodologies and stream restoration can address functions, in a specific order. This helps the practitioner match the project goal with the corresponding stream functions to avoid the problems where practitioners design ineffective projects because they ignore the underlying hydrology, hydraulic and geomorphic functions.

The USFWS has developed the “Functional-based Stream Restoration Project Study Process” to demonstration how the SFPF can be applied to stream restoration projects. Specifically, it describes how the SFPF can be used from study initiation when goals and objectives are established through assessment, design development and ultimately to monitoring.

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Presentation will also available remotely via Webex: https://usgs.webex.com/