

## The Challenge of Process-based Restoration

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Process-based restoration aims to re-establish normative rates and magnitudes of various natural processes (physical, chemical, biological), recognizing that natural processes are expressed through natural landscape controls (e.g., climate, geology, geomorphology, etc.) to form and sustain unique ecosystems at varying scales. The Skagit Watershed Council has adopted guiding principles for restoration and protection of natural processes that form and sustain salmon habitats. Application of the guiding principles helps to minimize common restoration mistakes, e.g. where restored habitat conditions are: 1) not consistent with naturally occurring habitat or 2) not sustainable over time. However, constraints posed by humans can limit opportunities for restoration within entire watersheds, or larger landscapes, and limit whether process-based restoration can occur at individual sites. This should lead us to wonder how we apply the guiding principles for restoration in Puget Sound watersheds where many natural processes are managed and changed.

The intent of this presentation is to start a conversation on how we might apply sound ecological guiding principles to achieve commonly stated goals such as salmon recovery in the Skagit watershed and Puget Sound. I explore how concepts relating to context, perspective, uncertainty, and roles/responsibility for individuals and society all influence restoration over time at landscape and site scales. Are we fooling ourselves? Will this really work? If not, will we achieve salmon recovery? If so, will we achieve salmon recovery?