

Watershed Health & Resiliency

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Colorado Springs Utilities: Watershed Planning Source Water Protection PM

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Watershed Management





Mason Reservoir: South Slope of Pikes Peak

Watershed Health & Resiliency



The capacity to recover quickly from difficulties. To "spring back"



Photo by: Meagan Frank - Waldo Canyon Fire

Forms of Resiliency



Resiliency of a Watershed

Community

Engineered

Ecological

Economic

Drivers of Resiliency







Ecological Shifts



Desirable State Engineered Mngt.
+
Disturbance

Complexity
Variability
Diversity

Undesirable State

Complexity
Variability
Diversity

Ecological Shifts



Jan. 30th CU Boulder Today. "Colorado's wildfire-stricken forests showing limited recovery



Researcher Rother at the site of the 2000 Walker Ranch fire in Boulder County. Eighty percent of plots surveyed there contained no new trees.

Ecological Resilience



We rely on it because shifts have greater negative implications for human economies and societies



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Collaboration and Compromise

"We need to manage for change rather than against change"

- Gunderson 1995

"Everyone walks away unhappy."

- Klanke 2017



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Europe



Anacostia River



Philippines



Colorado River at Mexico Border



What can you do?



"B = f(P, E) which says that behavior is a function of the person in interaction with his or her environment."

- Lewin 1951

The Human Factor of Watershed Health and Resilience
Communication, collaboration and negotiation
Conflict management
Leaders that can understand social and ecological systems

"To date we have failed to provide a clear vision of how a sustainable future is preferable to our present."

- Doug McKenzie-Mohr

Need to provide clear vision – why we do what we do and be realistic about outcomes

Find values and objectives that serve a common purpose