

Downstream ecosystems aided by Beaver dams

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U.S. scientists say beavers, known for their beneficial environmental effects near their dams, are also critical in maintaining downstream ecosystems.

U.S. Geological Survey and Rocky Mountain National Park researchers found ponds created by beaver dams raised downstream groundwater levels in the Colorado River Valley. And that, said the scientists, keeps soil water levels high and provides moisture to plants in the otherwise dry valley bottom.

Cherie Westbrook of Colorado State University and colleagues, along with U.S. Geological Survey scientists, conducted a three-year study in the national park examining valley ecosystems downstream in the Colorado River.

The researchers suggest elevated moisture levels found in soil surrounding beaver dams would otherwise require water from a very large natural flood to achieve the same expansive water availability to the valley bottom.

Additionally, beaver dams built away from river channels further redirect water, enhancing the depth, extent, and duration of inundation associated with smaller floods. The dams were also found to sustain plant and animal life during the dry summer season.

The study appears in the journal *Water Resources Research*.

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