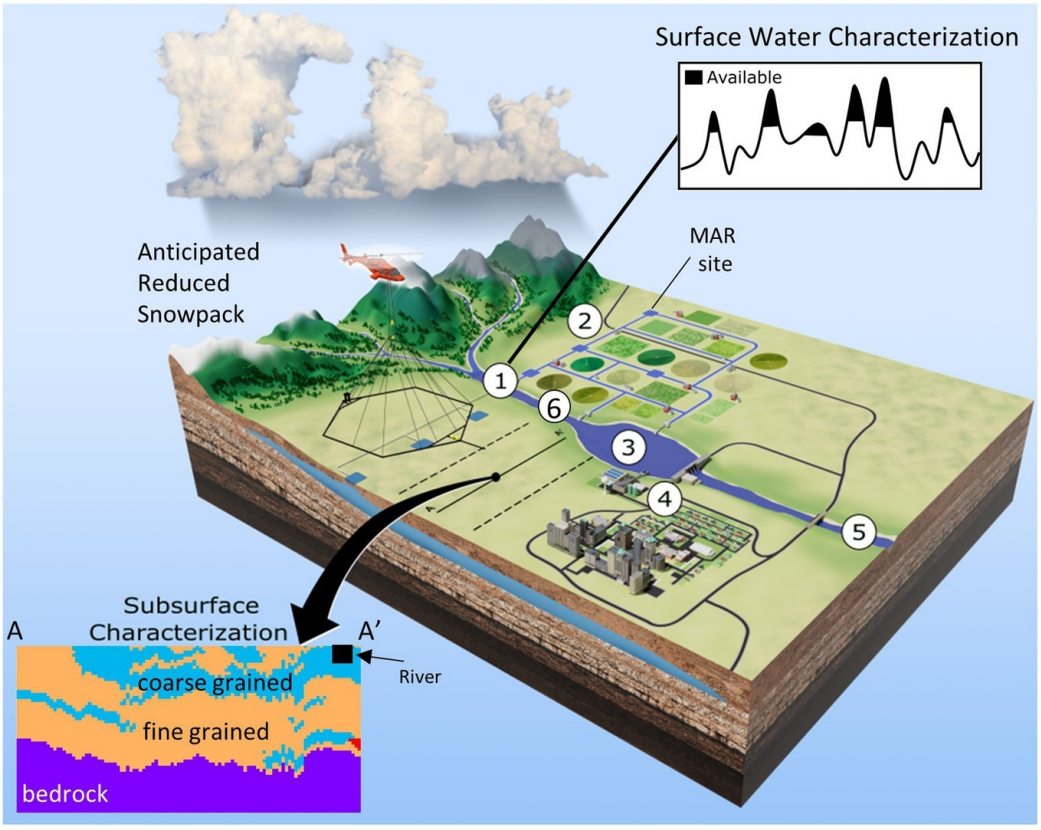


1. Potential diversion location.
2. Existing canal infrastructure.
3. Multi-purpose Reservoir
4. Municipal surface water supply
5. Downstream surface water obligations.
6. Ecologically-sensitive stream reach.

Publication

Managed aquifer recharge as a strategy to redistribute excess surface flow to baseflow in snowmelt hydrologic regimes

Haley & Aldrich hydrogeologist Adam Mangel, Ph.D., has co-authored a paper published in the journal *Frontiers in Water* that examines a novel approach to managing variable water supplies.

In "Managed aquifer recharge as a strategy to redistribute excess surface flow to baseflow in snowmelt hydrologic regimes," Adam and his co-authors — Stephen B. Ferencz and Frederick Day-Lewis of the Pacific Northwest National Laboratory — evaluate a novel approach to managing water supply in regions that rely on seasonal snowmelt. These regions face large fluctuations in available surface water that often don't line up with demand, a situation that's expected to become more difficult to manage as climate changes shift snowfall and melt patterns.

The researchers explore the idea of managed aquifer recharge (MAR) for enhancing baseflow, a water management strategy that aims to increase streamflow during periods of low flow by storing excess water in aquifers during periods of high flow. They present a method for using regional groundwater models to identify potential MAR sites that can benefit surface water systems. They also discuss challenges and opportunities for implementing MAR for enhanced baseflow in the real world, including the costs and benefits relevant to selecting MAR sites.

Read the full article.

HALEY ALDRICH