

The Critical Impact of Wildfires on Water

As temperatures begin to soar, so will the number of wildfires in our State. And with our extreme drought conditions, this year's wildfire season is expected to be more severe than even last year, meaning we all need to use extra caution when enjoying the diverse outdoors in Arizona.

Wildfires can have a devastating impact on many things, but many people do not realize that wildfires can directly impact our water in the Valley. When wildfires destroy forest vegetation, they leave behind large amounts of ash, heavy metals, organic materials, and sediments flowing into rivers and accumulating in reservoirs.



Outside the Valley is the 8.3 million-acre watershed that channels the snowmelt and rainfall into streams, creeks, and the Salt and Verde Rivers that flow into Lake Roosevelt and other Salt River Project (SRP) reservoirs. These are vital water sources for the AMWUA cities, and the health of this watershed is critical to life in the desert. Not only do we face challenges due to our long-standing drought, but forest fires also impact the quality and sustainability of our water supply.

In the last decade, more than a quarter of the forests in SRP's watershed has been destroyed by fire. The 2015 Sunflower fire in the Verde River watershed, which took place during the monsoon season, lasted for 16 days and resulted in highly turbid water coming down the River and entering water treatment plants here in the Valley. As a result, those treatment plants had to increase chemical use to clean the water by more than 50 percent for over two months. SRP had to divert ash and debris-laden water into the rivers as it was untreatable by the water treatment plants during this time.

This highlights how a healthy forest acts as a storage and filtration system. In the winter, the canopy prevents the snowpack from melting too fast. Slowing the rate at which the snow melts provides the Valley with a steady water supply when we need it the most – in spring and summer. Scorched forests expose snow to excessive sunlight, causing it to melt more quickly and increasing the likelihood of floods. Waste from runoff settles at the base of the dams, reducing reservoir capacity and affecting water quality.

The AMWUA cities have long recognized the critical connection between the watershed and the Valley's water supply. They have contributed funding for continuing efforts by SRP, the Nature Conservancy, and others to protect the watershed and reduce the risk of catastrophic fires.

Last year, 2,520 wildfires burned nearly one million acres across our State, making it one of the worst fire seasons in a decade, and this season could be worse. Sadly, humans caused more than 80 percent of those fires, and the ongoing drought and lack of rain also contributed to the increase in fires, another troubling sign for what's to come.

So we all need to do our part to protect our forests by practicing care outdoors, in our State Parks, and even right at home. Please enjoy Arizona's great outdoors but use extreme caution when it comes to fire. Our diligence will protect our valuable forest areas and will ensure the sustainability of our quality water supplies.

To learn more, watch [SRP's six-part video tour](#) of the Salt and Verde River Watersheds.

For over 50 years, the Arizona Municipal Water Users Association has worked to protect our member cities' ability to provide assured, safe, and sustainable water supplies to their communities. For more water information, visit www.amwua.org.