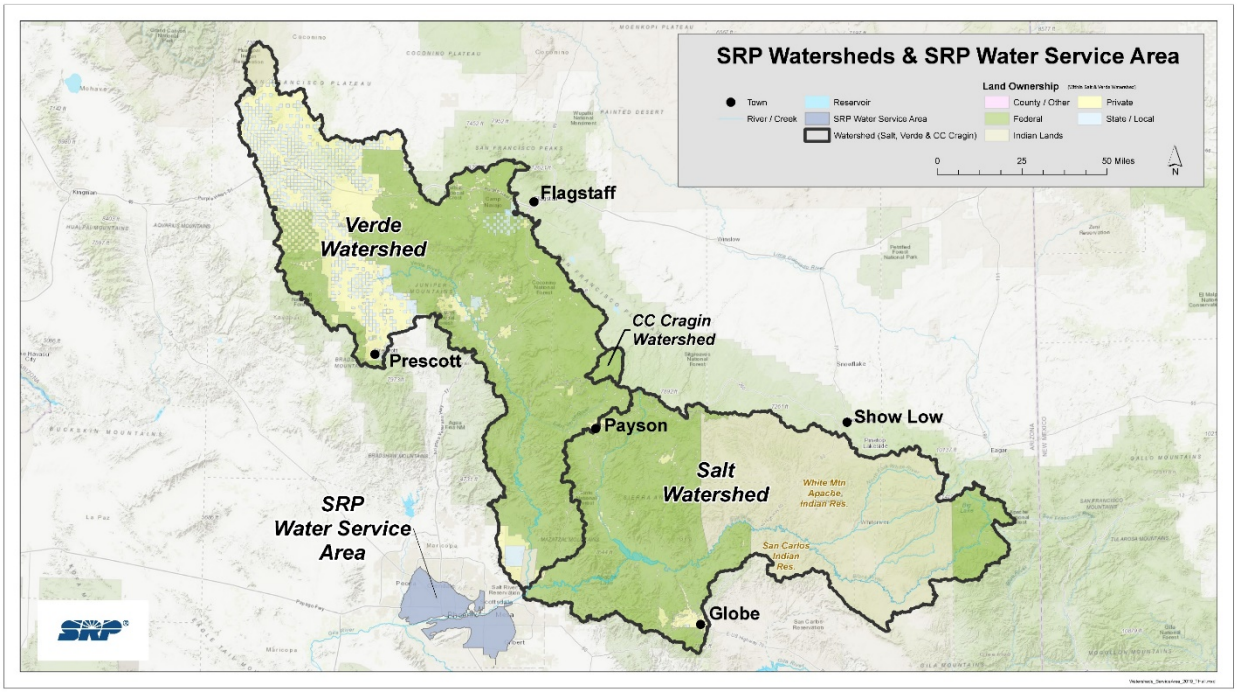
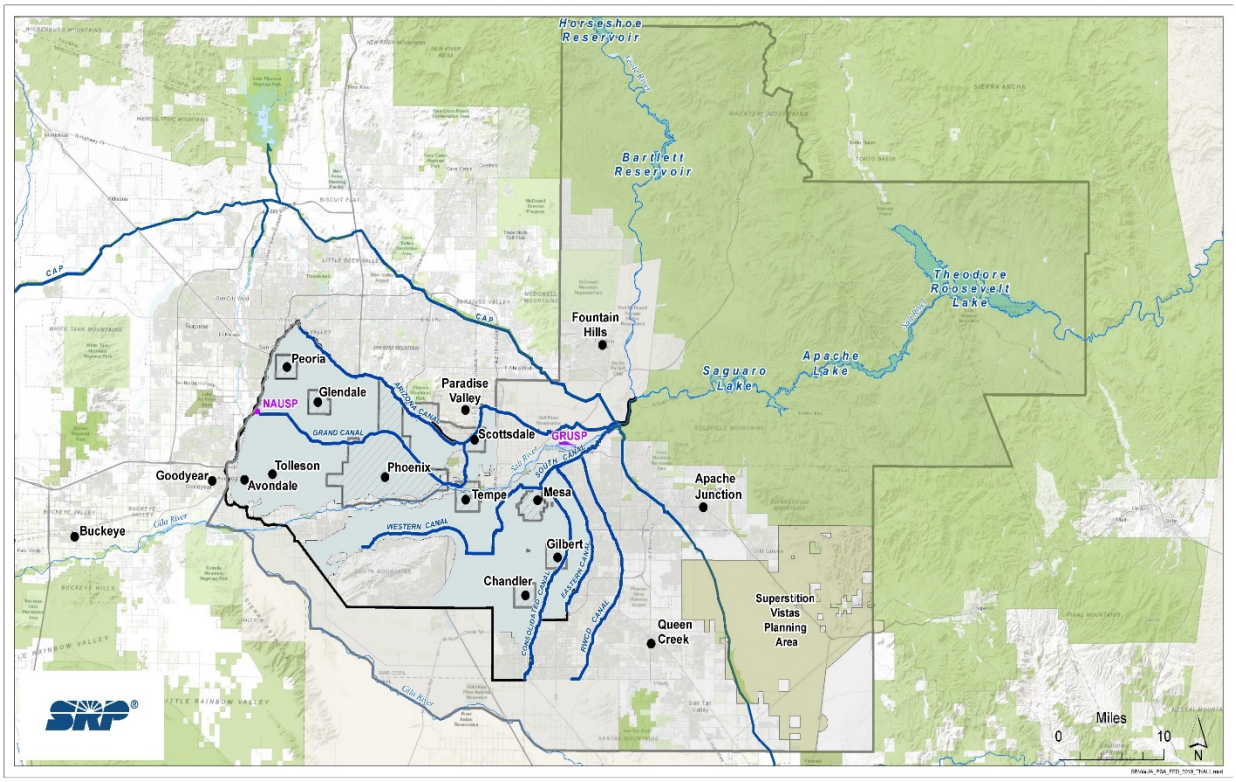
Salt River Project History

SRP is the Phoenix Metropolitan area's largest water provider and one of the Nation's largest community based not for profit public power utility that consists of two entities: the Salt River Valley Water Users' Association (Association) and the Salt River Project Agricultural Improvement and Power District (District). The Association was formed in 1903 by a group of local farmers within the Salt River Valley as a means to contract with the U.S. Bureau of Reclamation (Bureau) for the construction and repayment of the costs incurred in building and acquiring the works of the Federal Reclamation Project. In 1917, the Bureau turned over the care, operation, and maintenance of the Federal Reclamation Project to the Association. The United States continues to hold title to all Federal Reclamation Project facilities and maintains a supervisory role and regulatory authority over those facilities. The District is an agricultural improvement district organized in 1937 for the purpose, in part, of providing financial support for the Association. The District and the Association continue to collectively and collaboratively operate the Federal Reclamation Project. This enduring partnership balanced the economic risks of the project and ensured the Valley's success by providing a reliable and sustainable water supply.

The Federal Reclamation Project water storage and delivery system is comprised of seven reservoirs: four reservoirs on the Salt River; two reservoirs on the Verde River; and C.C. Cragin Reservoir on East Clear Creek. Water collected behind these federal dams drain from the 13,000 square mile Salt and Verde River watershed and the 70 square mile East Clear Creek watershed.



SRP serves a population of approximately two million people and delivers approximately 750,000 acre feet of water annually to municipalities, agricultural users, urban irrigation water users and a wide variety of contractual water users that include Native American communities and irrigation districts.



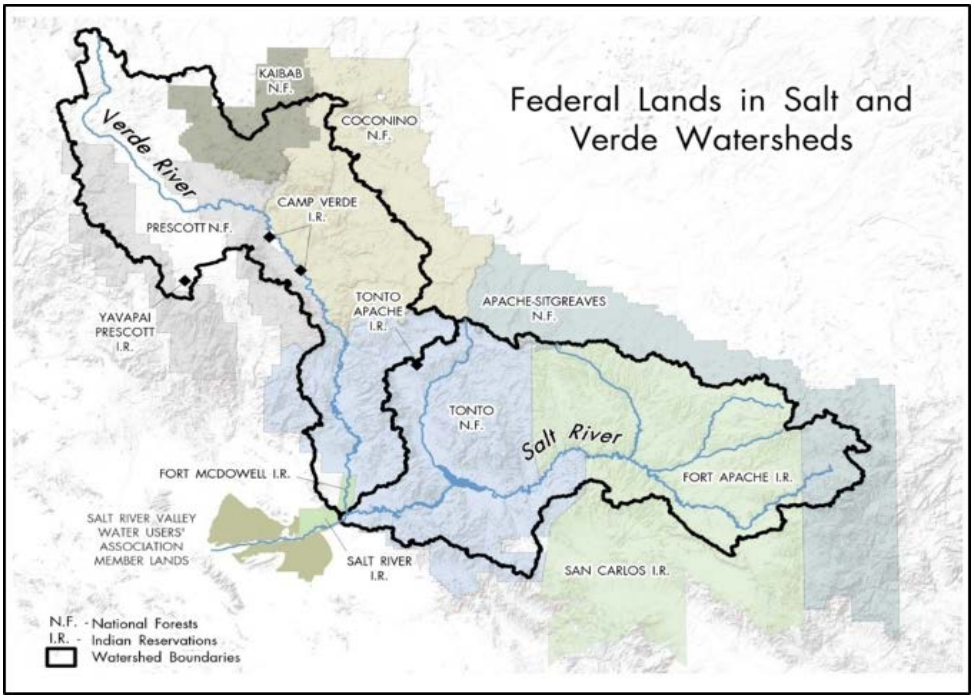
SRP's Water Management

Water management in the arid southwest is based on the premise of being prepared for drought. In the SRP watersheds, water runoff is extremely variable. For example, over a two day period in February of this year more runoff was recorded entering into the SRP reservoir system than last year's entire winter runoff season that stretches from January 1st- May 31st. Due to this variability, maximizing water storage in the SRP reservoirs is critical to even out the peaks and valleys of runoff to ensure a reliable and sustainable supply of water is available for the next drought. SRP also works collaboratively with cities, state and federal agencies to actively store water underground as further insurance against drought. To date, approximately two million acre feet of water has been stored in underground aquifers within the SRP water service territory. This is enough water to serve the annual needs of well over ten million people. Additionally, the use of high-capacity groundwater wells allows SRP to access this stored water when needed. This type of conjunctive management between groundwater and surface water systems further improves the resiliency of SRP's water supply for the customers and shareholders we serve.

SRP and Forest Health

The early farmers and settlers of the Salt River Project clearly realized the connection between a healthy watershed and a healthy water supply. In 1897 under the President McKinley administration, Congress enacted the Organic Act or the Forest Management Act. The Act stated that "No public forest reservation shall be established, except to improve and protect the forest within the reservation…or for the purpose of securing favorable conditions of water flows and to furnish a continuous supply of timber for the use and necessities of citizens of the United States." That same year the Arizona Territorial Legislature requested Congress reserve unclaimed timber lands within the watersheds above the Salt River Valley to protect the water flows. In 1898,

President McKinley signed a proclamation which eventually developed into the Apache-Sitgreaves National Forest, and in 1905 created the Tonto National Forest to set aside lands primarily for the protection of the watershed supplying the Salt River Federal Reclamation Project. Today, SRP watersheds are in five national forests with almost 60 percent of the land area within the Salt and Verde River watersheds and 100 percent of the East Clear Creek watershed being managed by the U.S. Forest Service (Forest Service). Over 25% of the lands are forested Indian reservation lands managed by the Tribes and BIA. These lands also need restoration.

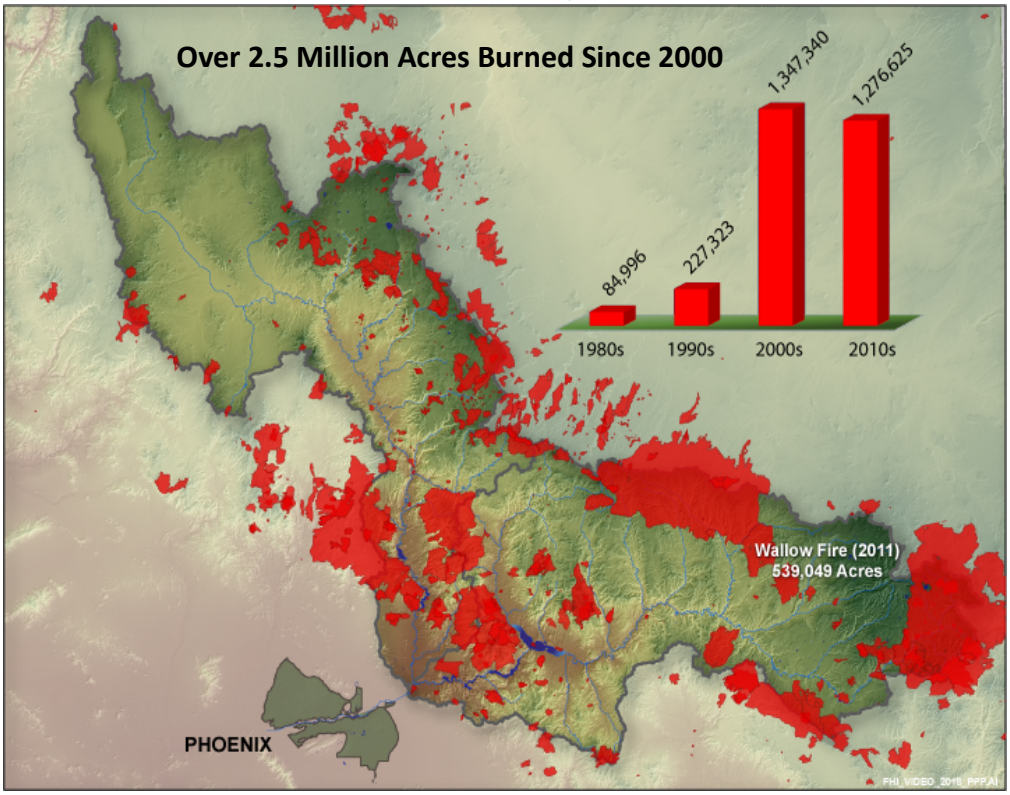


The Forest Service's forest restoration goal of thinning 50,000 acres per year supports the agency's mission to protect the water supply of the Salt River Project from the devastating impacts of catastrophic wildfires. The health of these watersheds and prevention of catastrophic wildfire is integral to the success of the Federal Reclamation Project. Accordingly, SRP and Reclamation believe that the United States ownership of the Federal Reclamation Project and SRP's responsibility for the care, operation and maintenance of the Project includes an interest in ensuring the health of the National Forest System lands within those watersheds.

Watershed Protection Challenges

Catastrophic wildfires in SRP's watersheds have increased substantially over the past 20 years. In the forested watershed lands in northern and central Arizona there are over one million acres of forest thinning that needs to be accomplished. Arizona lacks the forest product industry infrastructure to produce high value products, and existing industry doesn't have the capacity to ramp up to 50,000 acres a year. In addition, the Forest Service needs transformative action and policies that encourage private investment, the necessary resources to accomplish restoration goals, modernization of policies and actions that reflect the economics associated with the removal of low value forest material, and added commitment to supporting the primary purpose of the National Forest System lands to secure and protect water flows.

Extent of Wildfires on SRP Watersheds (1980-2018)



Request for Proposal and Memorandum of Agreement

Following six years of stagnation in the number of forested acres restored, SRP in 2018 realized that the Forest Service needed help in attracting new and capable forest product industry to Arizona. SRP initiated discussions with the Forest Service to create a Partnership to develop a large-scale forest thinning request for proposal (RFP) in Arizona. SRP expanded the partnership to include the Bureau, and the Arizona Commerce Authority because of their expertise in attracting industry and a focus on economic development. Industry reluctance to invest in Arizona is due to a lack of certainty around availability of a long-term wood supply and limited market value associated with the high number of small diameter trees plaguing Arizona's forests. SRP believes that it is critical that these issues are addressed expeditiously to protect our National Forest System lands.

Together, the partners are actively developing an RFP for large-scale forest thinning contracts in Arizona and is expected to be issued in the spring of 2019. The goal of the RFP is to recruit the appropriate forest product industry that has the capability to thin large portions of forests in northern Arizona, and help reach the Forest Service's strategic goal of thinning 50,000 acres per year. The partners participation is anticipated to create new efficiencies for potential bidders, spark innovation, and provide further certainty on product availability and resource support for new and existing industry. This partnership is a one-of-a-kind, first in the nation, approach to forest restoration that may be the first project to utilize the 20-year stewardship contracting authority given to the Forest Service in the 2018 Omnibus bill. SRP was a strong advocate for the inclusion of the 20-year stewardship contracting authority and the end of "fire-borrowing." SRP is grateful to Congress for passing these provisions.

A Memorandum of Agreement (MOA) was prepared that outlines the roles and responsibilities of the partners. The MOA stipulates that SRP will participate in the development of the RFP, the evaluation of the RFP proposals and review the selected contractors before the Forest Service issues contracts. The MOA also specifies the use of other agreements among the partners in order to expedite thinning implementation and provide consistency through the duration of the contracts.

Cragin Watershed

To further expedite thinning and reduce the threat of catastrophic fire on SRP's watersheds, in 2014 SRP signed a Proclamation and Memorandum of Understanding with the Forest Service, Bureau, Town of Payson, and the National Forest Foundation to expedite the environmental planning process to remove hazardous fuels on the Cragin Watershed. On July 27, 2018, the Forest Service signed the Final Decision Notice for the Cragin Watershed Protection Project Environmental Assessment. The Final Decision allows the Forest Service to move forward with about 37,000 acres of forest thinning activities.

Cragin, while a small watershed, is critical for the Town of Payson's water supply. SRP conducted a cost benefit analysis in conjunction with the Electric Power Research Institute. The study estimated that if the Cragin watershed were to experience a catastrophic wildfire it could cause upwards of $194 million in damage to infrastructure and water supplies. The study also concludes that it will take approximately $27 million to implement all fuel reduction activities across Cragin. Cost avoidance analysis is needed by the Forest Service in its evaluation of the value of restoration to the federal government. This study confirmed that benefits of restoration lie with the restored acre and not in the limited value of the timber. Current Forest Service policy does not easily recognize avoided costs which results in payment by industry for low value wood that is not reflective of the wood market value and discourages private investment.

U.S. Forest Service Modernization Efforts

In 2017, SRP entered into a partnership with The Nature Conservancy to thin 20,000 acres on the Verde watershed and to support the development of new modernization efforts for the Forest Service. Innovation is needed that aligns Forest Service business practices with industry needs to increase the pace of forest thinning. This includes removing outdated policies and adding efficiencies that improve the economics of removing low value woody material and by-products. Modernization efforts include eliminating the costly and time-consuming practice of painting trees to be left during harvesting. The project has developed a digital guide that "mark" timber stands. The guide works like the navigation system in your vehicle, assisting harvesters in selecting trees to be removed. The project has demonstrated a tenfold increase in the number of acres that can be "marked" per day using the guide compared to the traditional practice of painting trees. Another example is allowing harvested logs to be staged in the forest for longer periods, which reduces water content and increases hauling efficiency. The project's analysis indicates that logs left to dry for longer can realize savings of $160 per load.

Solutions

SRP, as leader in forest restoration, works diligently with stakeholders to ensure alignment on mutual goals and consistent messaging about Arizona's needs. SRP is actively involved in protecting the health of the watersheds that serve SRP customers and shareholders, with a primary goal of expediting forest restoration efforts through collaboration, targeted investments

and fundraising, project and policy development, and educational programs that show the clear link between the interests of valley cities and businesses and the health of our forests. SRP also continues to invest in scientific research to better understand and communicate the importance of forest restoration treatments on the hydrologic function.

In Arizona, we need national and regional support for increased resources dedicated to forest restoration. In addition, we need support for modernization efforts that focus on value of a restored acre and not in the value of timber and support for a metric that focuses on the number of acres thinned every year. Finally, we need national and regional support for long-term, large-scale forest restoration agreements with partners that have the resources, dedication, and the willingness to make a long-term commitment to restoring our National Forests.

As one of the nation's most successful reclamation projects, SRP and its partnership with the federal government is an exemplary example of local, private and public partnerships that benefit all parties. SRP looks forward to the next 100 years and its steadfast commitment to the care, operation and maintenance of the Salt River Federal Reclamation Project and the watersheds that supply the Project.