In the early morning hours of October 9, 2017, Sheriff's officers banged on 6B neighborhood doors telling us to evacuate immediately. The McCourtney Fire was sweeping toward our homes.

76 acres burned and 13 nearby structures were lost.

In the aftermath of the fire, we tested our 3 neighborhood fire hydrants and were shocked and dismayed that none of them worked. It became evident that the hydrants had not been maintained for decades.

Our neighbors rallied, contributing money, labor and many hours to repair our water systems and increase our fire preparedness.

The repair of our hydrants - each with a different water source and supply infrastructure - became the incentive to organize our 6B and Friends Firewise Community.

The following is a brief summary of our work to make our 3 fire protection water systems functional.

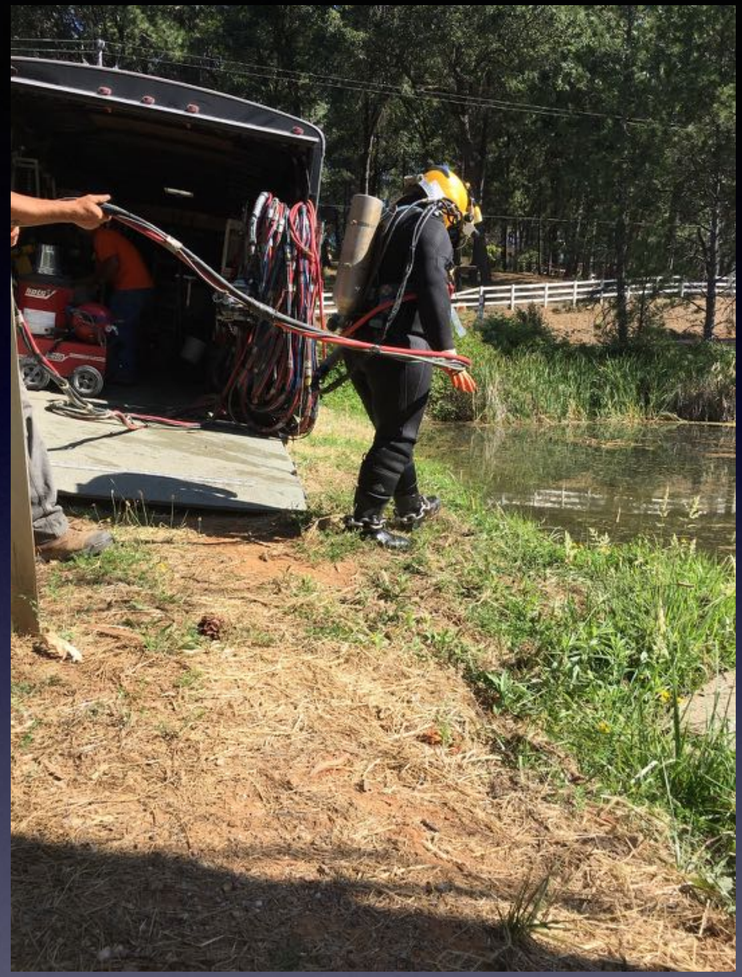
Hydrant #1 produced only a trickle of water from its pond source.

We contracted with Hansen Bros to troubleshoot our hydrant. They diagnosed and repaired two broken internal parts.

But even after the hydrant was repaired, it still delivered only a tiny amount of water from the pond.

To determine where the output pipe was located in the pond, a neighbor devised a way to push compressed air backwards from the hydrant into the pond. Bubbles indicated the underwater placement of the output pipe.

Before this test, we could only guess where the output pipe might be situated.



We then hired Big Valley Divers to investigate the output pipe and determine why the hydrant produced such low flow.

Using only his sense of touch due to zero visibility, our diver found the problem. He brought to the surface a 6” diameter wooden plug that had been placed in the output pipe. No wonder water flow to the hydrant was impaired!

The crew replaced the wooden plug with a custom PVC screen designed to provide optimal flow and relatively clear water to the hydrant.

Finally, excellent flow and clear-ish water flowed from Hydrant #1!

Hydrant #2 produced very muddy water when first tested.
(Hydrant #2 sources its water from a different pond than Hydrant #1.)

After testing the valve and then flushing the line for 45 minutes, clean water finally gushed out. Mucky, dirty water can destroy the pump of a water truck fighting fires so it is important that the hydrants provide relatively clear water.

Hydrant #2 still needed a bit more TLC. After 40 years, the hydrant valve housing was beginning to lean toward the ravine.
We hired Hansen Bros (again) to dismantle….

… and re-position the valve housing to make it level and stable.

Hydrant #3 sources its water from a 4,000 gallon tank that is automatically filled by its own well pump.

During our inspection we found broken water pipes, damaged electrical wiring and a non-functioning autofill device. Peters' Drilling and Pump Service technicians repaired these problems and moved the electrical conduit underground.

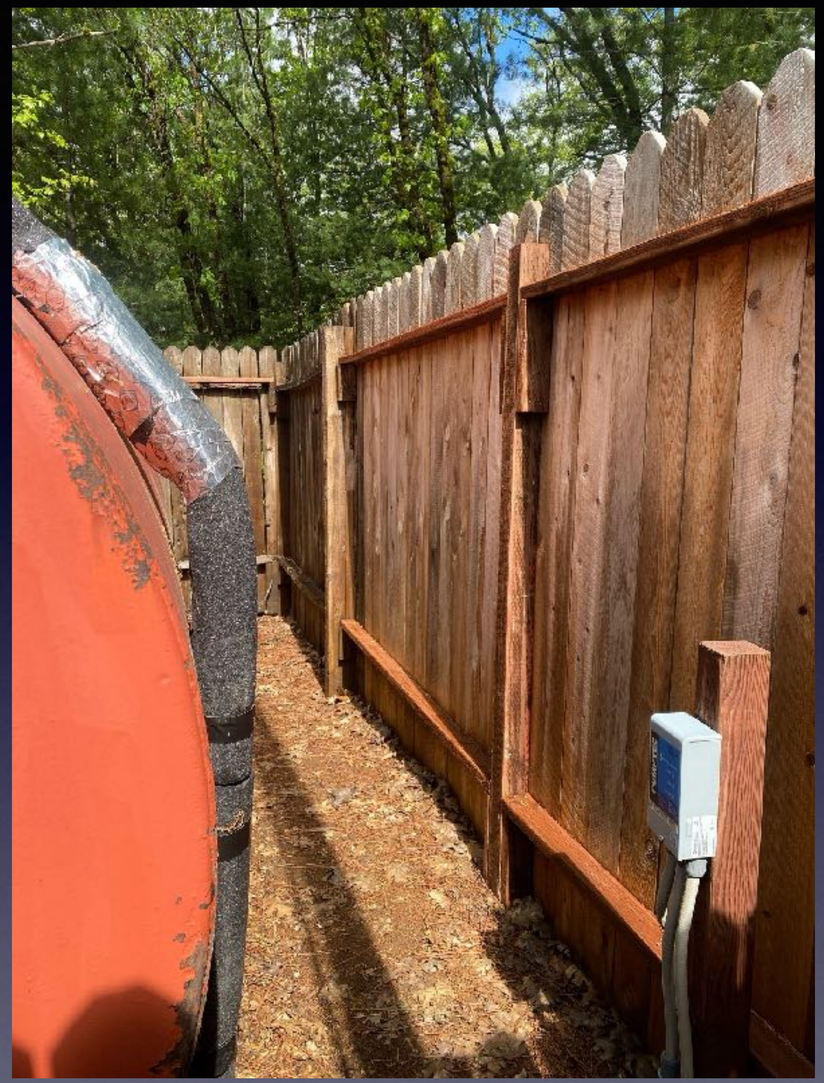
We insulated the pipes and wellhead to prevent future frost damage.

Before

After

(The 4,000 gallon tank is behind the fence.)

Before



After

Before

After

Accomplishments: By July of 2019, all 3 water systems were functioning and ready to supply water to fight fires.
We were on our way to obtaining our Firewise Community certification.

Looking forward: Volunteers now monitor the flow and clarity through each hydrant twice a year. We retain a $3,000 rainy-day balance for future maintenance and emergency repair costs.

Many thanks: We are lucky to have the support and expertise of community-minded neighbors who've donated hundreds of hours of labor and a total of $15,200 to pay our contractors and buy materials and maintenance tools.

Special thanks to retired Fire Marshal, Terry McMahan, for his indispensable advice, knowledge and moral support throughout this project.