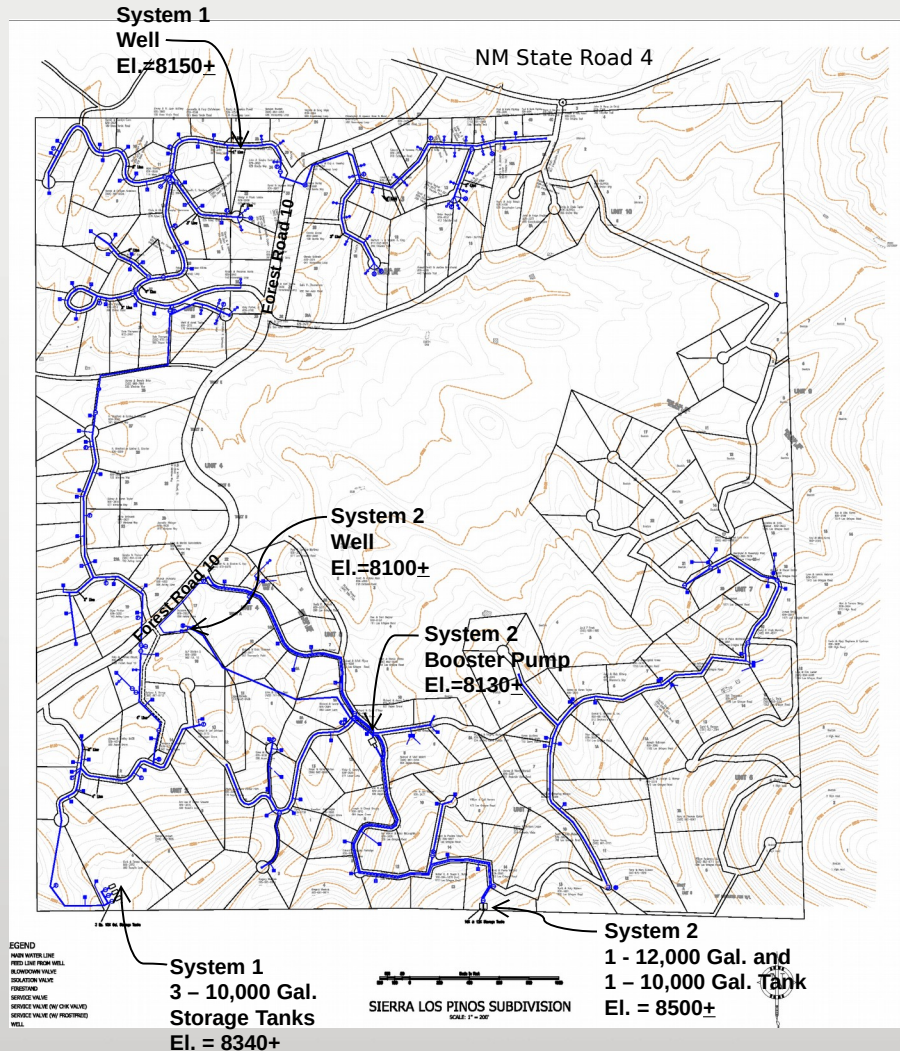


Sierra los Piños Property Owners Association Water System Planning Recommendations

10 March 2020





Existing Water System Features

- Two Independent Water Systems - 160' Elevation (70 psi \pm) Difference
- Old Existing 2 - 4" Dia. Mains
- 52,000 Gallon Storage Capacity
- Limited Fire Protection

Existing System Layout Plan

Existing Water System Concerns

- Consistent Water Quality
- Reliable Delivery of Pressurized Flow
- Good Recordkeeping and Document Control
- Old Water Mains with Significant System Leakage
- Volunteer Operation and Maintenance
- Limited Funding for Future Improvements

Recent System Improvements

- Miscellaneous Line Repairs
- Isolation Valve Installations
- System Troubleshooting
- Preventive Maintenance
 - Exercise Hydrants and Valves
 - Periodic System Flushing
 - Inspect Pumps and Controls
 - Storage Tank Inspections

Immediate Short-Term System Improvements

- Replace Existing System 2 - Pressure Regulating Valve below Booster Pump Station
- Install In-line Valves and Hydrants to Isolate Existing Leaks
- Purchase Portable Clamp-on Flow Meter
- Upgrade Existing Telemetry
- Repair or Re-coat Existing System 2 Steel Tank
- Repair Significant System Leaks
- Estimated Cost - \$150,000 - \$200,000

Proposed Medium-Term System Improvements

- Increase System 1 Storage Capacity – Construct New 20,000 Gallon Tank Near Existing Hovenweep Well
- Increase System 2 Storage Capacity – Construct New 100,000 Gallon Water Storage Tank
- Interconnect Systems 1 and 2 for Redundancy
- Replace Existing Water Mains with New 6” Dia. Mains, Valves, and Fire Hydrants – Phase 1
- Upgrade Well Submersible Pumps and Booster Station Centrifugal Pump as Needed
- Estimated Cost (\$2 - 3 Million)

Proposed Long-Term System Improvements

- Replace Existing Water Mains with New 6" Dia. Mains, Valves, and Fire Hydrants – Phase 2
- Build New 100,000 Gallon System 1 Water Storage Tank
- Upgrade Well Submersible Pumps as Needed
- Estimated Cost (\$3 - 5 Million)