



PLACER COUNTY GRAND JURY

Examination of Fire Hydrant Inspection and Maintenance

June 26, 2015

Examination of Fire Hydrant Inspection and Maintenance

Summary

The Grand Jury conducted an investigation into whether fire hydrants in Placer County are being properly inspected and maintained and determined that the current system, though not standard throughout the county, is working.

Background

The 2013-2014 Grand Jury reported on a hydrant with inadequate flow located near an elementary school. The specific issue has been resolved. However, this led to a concern by the Grand Jury that fire hydrants may not be receiving adequate inspection and maintenance.

Investigation Methods

- Grand Jury members interviewed staff from both fire agencies and water agencies.
- Both rural and urban districts were included.

Facts

- Inspection and maintenance of fire hydrants in Placer County is provided by a patchwork of public and private entities.
- Within Placer County, fire services are provided by cities, a dozen special districts, Cal Fire, and the federal government.
- There are both public and private water providers.
- Water service providers are as diverse as the topography and the population of the county. There are in excess of 100 providers of water service.
- Some cities (such as Roseville and Lincoln) have their own water departments.

- Placer County Water Agency (PCWA) is a county-wide agency that provides water for a portion, albeit a significant portion, of the county's households and commercial enterprises.
- At the other end of the spectrum, a private service may supply only a handful of houses or a single business.
- Many households and some businesses rely on their own wells.
- The federal government is responsible for water service on federal land.
- PCWA has memorandums of understanding (MOUs) with all but two of the fire agencies serving the areas for which PCWA is the water purveyor. (Cal Fire and the South Placer Fire District are the two with which PCWA has no MOU.)
- The PCWA MOUs provide that the hydrants are the property of the fire agency, that the fire agency does the light maintenance, and that PCWA does the heavy maintenance, renewal and replacement.
- There are two types of fire hydrants: flow and draft. Each requires its own kind of hose coupling.
- Fire departments are generally responsible for color-coded painting of hydrant tops so that users can tell at a glance which coupling they need. Fire departments interviewed indicate that all hydrants within their districts are properly marked.
- The state Fire Code contains the requirements regarding placement and functionality of fire hydrants but no requirements for hydrant inspection and maintenance.
- The fire chiefs who were interviewed indicated that hydrants in their respective areas get inspected at least once every three years. They also indicated that inspecting every one or two years is preferred when resources are available.
- Some hydrants, such as those for high occupancy buildings or in commercial areas, are inspected every year as part of a targeted annual fire inspection programs.

- Because of the recent drought, not all inspections include a flow test, i.e., a measurement of the amount of water available in terms of volume per minute and in terms of how long the flow can be maintained.
- Some water agencies have virtual testing models which provide some assurances that adequate water will actually be there if a fire occurs.
- If problems are identified, getting the maintenance/repairs done does not appear to be a problem in areas with public water service.
- Local water and fire districts largely agree on how the tasks are to be split. One or the other will generally have insurance to cover hydrant replacement/repair in the event of a problem such as an auto accident.
- Availability of functioning hydrants is a primary factor in the Insurance Standards Organization (ISO) rating which determines property owners' fire insurance rates. The ISO reviews the ratings every three years.
- There is no county-wide master plan for regular inspection and maintenance of fire hydrants.

Findings

The Grand Jury found that:

- F1. Inspection and maintenance of hydrants within the county is not uniform. If a fire hydrant needs repair, replacement, etc., the responsiveness is not consistent.
- F2. Cost is often a factor for smaller private services such as those provided by homeowners associations and the like.
- F3. Availability of functioning hydrants is a primary factor in Insurance Standards Organization (ISO) ratings which determine property owners' fire insurance rates. This gives local districts an additional incentive to insure that their hydrants are maintained.
- F4. There is disagreement among some fire and water districts as to who actually owns the fire hydrants in some jurisdictions. Some water district personnel interviewed indicated

that the hydrants are owned by the fire department, while some fire department personnel indicated that hydrants are owned by the water agencies.

- F5. Improperly functioning fire hydrants are a threat to public health and safety.
- F6. Despite the lack of standardization, the Grand Jury did not identify any area in which hydrants are not kept operational.
- F7. The local water and fire districts seem to work well together to see that hydrants are maintained.
- F8. Some water and fire districts serving a given geographic area have entered into formal written agreements.
- F9. In some areas, there are less formal agreements between the fire and water agencies' respective management teams.
- F10. Generally, the fire district does inspection and light maintenance and the water districts do the heavier maintenance and repairs. Staff seemed to think that that arrangement makes sense in that it takes advantage of the skills of each agency's employees.
- F11. The Grand Jury did not find any specific inadequacies in the operation of fire hydrants.

Recommendations

The Grand Jury recommends that:

- R1. The Placer County CEO should consider whether a fire hydrant inspection and maintenance program be established to ensure uniformity throughout the county.

Request for Responses:

	<u>Recommendations</u>	<u>Response Due Date</u>
	<u>Requiring Response</u>	
Mr. David Boesch Placer County CEO 175 Fulweiler Avenue Auburn, CA 95603	R1	August 24, 2015

Copies Sent to:

Fire Districts

Alta Fire Protection Department 33950 Alta Bonnybrook Rd. Alta, CA 95701	Newcastle Fire Protection District P.O. Box 262 Newcastle, CA 95658
Auburn City Fire Department 1225 Lincoln Way Auburn, CA 95603	North Tahoe Fire Protection District P.O. Box 5879 Tahoe City, Ca 96145
California Department of Forestry 2840 Mt. Danaher Rd. Camino, CA 95709	Northstar Community Services District 910 Northstar Drive Truckee, CA 96161
Colfax City Fire Department P.O. Box 1233 Colfax, CA 95713	Penryn Fire Protection District P.O. Box 219 Penryn, CA 95663
Foresthill Fire Protection District P.O. Box 1099 Foresthill, CA 95631	Placer County Fire Protection Districts 13760 Lincoln Way Auburn, CA 95603
Lincoln City Fire Department 126 Joiner Parkway Lincoln, CA 95648	Placer Hills Fire Protection District P.O. Box 350 Meadow Vista, Ca 95722
Loomis Fire Protection District P.O. Box 606 Loomis, CA 95650	Rocklin City Fire Department 4060 Rocklin Road Rocklin, CA 95677

Roseville City Fire Department
401 Oak Street #402
Roseville, CA 95678

South Placer Fire Protection District
6900 Eureka Road
Granite Bay, Ca 95746

Squaw Valley Public Services District
P.O. Box 2522
Olympic Valley, CA 96146

Truckee Fire Department
P.O. Box 2768
Truckee, CA 96160

Public Water Agencies

Alpine Springs County Water District
270 Alpine Meadows Rd.
Alpine Meadows, CA 96146

Auburn Valley Community Service District
P.O. Box 8138
Auburn, Ca 95604

Christian Valley Park Community Service District
P.O. Box 3138
Auburn, Ca 95604

City of Lincoln
Water Department
600 Sixth Street
Lincoln, CA 95648

Heather Glen Community Service District
P.O. Box 715
Applegate, CA 95703

City of Roseville Water Department
311 Vernon Street
Roseville, CA 95678

Donner Summit Public Utility District
P.O. Box 610
Soda Springs, CA 95728

Foresthill PUD
P.O. Box 266
Foresthill, CA 95631

Georgetown Public Utility District
P.O. Box 4240
Georgetown, CA 95634

Meadow Vista County Water District
P.O. Box 278
Meadow Vista, CA 95722

Midway Heights County Water District
P.O. 596
Meadow Vista, CA 95722

Tahoe City Public Utility District
P.O Box 5249
Tahoe City, CA 96145

North Tahoe Public Utility District
P.O. Box 139
Tahoe Vista, CA 96148

Truckee Donner Public Utility District
11570 Donner Pass Road
Truckee, CA 96161-4947

PCWA
P.O. Box 6570
Auburn, CA 95604

Sierra Lake County Water District
P.O. Box 1039
Soda Springs, CA 95728

San Juan Water District
P.O. Box 2157
Granite Bay, Ca 95746

South Tahoe PUD
1275 Meadow Crest Drive
South Lake Tahoe, CA 96150

Squaw Valley Public Services District
P.O. Box 2026
Olympic Valley, Ca 96145-2026

Suburban Pines Community Service District
P.O. Box 576
Colfax, CA 95713