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## **BULLETIN: WATER FLOW TESTS FOR FIRE PROTECTION SYSTEMS DURING DROUGHT CONDITIONS**

Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Forms](#) or [DSA Publications](#) webpage.

### **PURPOSE**

To address water flow test requirements and procedures when the State declares a drought emergency, this bulletin clarifies test time frames and that there are alternates to water flow tests and that when alternates are not available older water flow test data may be used.

### **BACKGROUND**

The design of fire protection systems such as fire hydrants and automatic fire sprinkler systems requires certain information about available water pressures and flow rates that are usually obtained by water flow tests. These tests result in water usage that is not generally reclaimed.

Historically, in accordance with amendments to National Fire Protection Association (NFPA) Standard 13, Installation of Sprinkler Systems by the Office of the State Fire Marshal (SFM), DSA has required the water flow tests be no older than six months at time of project submittal. Section 4.5.1.1 of NFPA 13, 2022 edition, requires the flow test to be conducted no more than 12 months from the time of submittal, and allows the authority having jurisdiction to exercise discretion when determining how current the water flow test data must be achieved. In addition, current codes and standards permit and accept alternate design means for determining or obtaining water flow data.

### **DECLARATION**

In lieu of performing actual water flow tests for initial project design purposes, DSA currently accepts, and will continue to accept, one of the following:

A letter signed by the local fire authority or water purveyor certifying the available flows and pressures, or

A computer model hydraulic analysis by the applicable water agency (or licensed civil or fire protection engineer) that determines the available flows and pressures. This analysis shall be performed using knowledge of the flows and pressures in the distribution system network, and account for future expected growth and water supply demands of the community.

DSA will accept water flow tests for the purposes of determining building fire suppression capability, design of fire hydrant systems or automatic fire sprinkler systems, conducted up to six months prior to the date a project is submitted. Where the State has declared a drought emergency, water flow test data may be from up to 12 months prior to project submittal.

All steps should be taken to collect discharged water for use elsewhere.

This direction will remain in effect until rescinded or revised by newer codes and standards.

### **ADDITIONAL RESOURCES**

- 2022 California Fire Code (CFC)
- 2022 NFPA 13 and NFPA 24 as amended in CBC Chapter 35
- DSA Project Submittal Guideline (*GL 1: Automatic Fire Sprinkler Systems*)

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A DSA Bulletin is a notification to its stakeholders regarding any issue intended to be directed to a broad group of external stakeholders as well as DSA staff.