

TACTICAL USE OF FIRE SUPPRESSANT WATER ADDITIVES **8431** (September 2003)

Incident Commanders may utilize USFS-approved water additives after considering the following:

- Water additives hold aerial application of water in a satisfactory drop pattern and minimize dispersion and evaporation. Ground-applied water additives hold the water in suspension where it is applied, whether on vertical or horizontal surfaces. They are ineffective in retarding fire spread once the moisture is evaporated.
- The principal use of water additives should be in direct support of ground resources or for structure protection, not for long-term holding actions.
- Use of water additives should be considered when canopy penetration by long-term retardant is a problem.
- Product cost and differ application methods should guide decisions about which products to use in varying tactical situations.

AERIAL APPLICATION OF FIRE SUPPRESSANT WATER ADDITIVES: PATTERNS AND COVERAGE LEVELS **8431.1** (September 2003)

(to be written)

APPLICATION OF FIRE SUPPRESSANT WATER ADDITIVES WITH GROUND APPARATUS **8431.2** (September 2003)

Application of water enhancers by fire engines is most cost-effective when the product is applied to the walls and roofs of structures that are likely to be destroyed by an approaching wildfire. The water enhancer provides a thick coating of suspended water that does not run off of the building, but rather stays in place, allowing the suspended water molecules to absorb radiant and convected heat and prevent ignition of the underlying flammable materials.

[\(see HB Table of Contents\)](#)

[\(see Forms or Forms Samples\)](#)