Fire
Tech Tips

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Water Bag System

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A Family of Bags

In an effort to standardize the various water bags used by wildland firefighters and other workers involved with natural resource activities, Missoula Technology & Development Center (MTDC) has designed a "family" of water bags, ranging in size from 1 gallon (3.8 *l*) to 55 gallons (208 *l*). Originally, the need for this system was due to the declining quality of water found in many areas (greater incidence of Giardia and other disease-carrying bacteria and virus pathogens) and the increasing costs of supplying water for firefighting. Later, a comfortably and efficient manner of carrying water and a new emphasis on the importance of fluid replenishment (to combat heat stress) were added to the earlier concerns.

One-gallon flexible water bag.

Bags are color-coded and stenciled to clearly distinguish between drinking and suppression water.

Durable Enough for Many Uses

Designed to transport water to remote locations by air, road and foot, the bags have application possibilities beyond wildland firefighting. For example, the drinking water bags would be useful for any remote crew, or for disaster relief; suppression water bags could supply water needed on remote job sites for cement work or carrying back large water samples. The bags are sturdy enough to withstand the rough handling and rugged terrain associated with wildland activities; with

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this in mind, MTDC developed a system which incorporates a tough, durable nylon duck outer bag and a replaceable plastic inner liner.

Color-Coding & Available Sizes

To avoid confusion, drinking water bags are blue, and fire suppression (general use) bags are yellow. Additionally, blue drinking water bags are stenciled “DRINKING WATER” or “DRINKING WATER ONLY”, and yellow suppression water bags are stenciled “NOT FOR DRINKING”.

One-gallon bags with a disposable plastic liner.

Drinking Water Bags

MTDC responded to input from the field regarding the inadequacies of the previous group of drinking water containers. In particular, a need was identified for a safe, effective way to carry up to 5 gallons of water by an individual. Large canteens and different sized cubitainers are awkward and uncomfortable to carry, so the 1-gallon and 5-gallon drinking water bags were developed. The 5-gallon bag comes with a replacement liner and can be carried by the shoulder straps provided, or by attaching the bag to the harness of the firefighter field pack (NFES #1372). The person carrying the new water bag benefits from better weight distribution and frees up their hands.

The 55-gallon drinking water bag is intended to be transported by helicopter long line remote hook or by truck. It is primarily used as a refill source for the smaller water bags. A replacement liner and the necessary fittings and attachments are included, conveniently stored in the outer pocket.

Five-gallon drinking water bag is a convenient source for refilling canteens on the fireline.

Suppression Water Bags

Two sizes of suppression water bags have been developed by MTDC; the 5-gallon bag and the 55-gallon bag. Because the load rides higher on the back, the 5-gallon suppression bag is more comfortable to carry than previous bags. The bag comes with a replacement liner and connects to existing trombone pumps.

Like the 55-gallon drinking water bag, the 55-gallon suppression water bag is transportable by truck or helicopter. The 55-gallon bag can be safely carried by type III helicopters without having to download the bag in high density altitude situations.

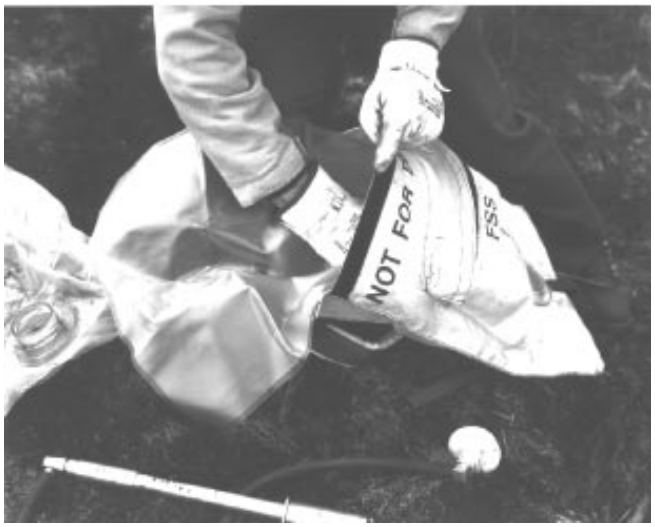
Comfortable and durable, the 5-gallon suppression water bag can be attached to the firefighter backpack harness.

The 55-gallon water bags, prepared for slingload transport by helicopter. NOTE: The necessary swivel hooks have been attached to the o-rings (swivel hooks are NOT included with 55-gallon water bags).

Easily transported in light trucks, the 55-gallon water bags allow you to get water where you need it.

Refurbishment

While current refurbishment costs are prohibitively high—due to the difficulty in cleaning rigid plastic water containers and cubitainers—the new system of water bags allows for easy, inexpensive maintenance. All outer bags can be cleaned and rips or tears can be repaired with the use of an industrial sewing machine; the inner liners for the suppression bags can be repaired or replaced. However, to insure that drinking water supplied to the crews is safe and pure, used drinking water inner liners should always be replaced.



Replacing a suppression water bag liner in the field.

Water Bag System

Description	NSN	NFES #	Color-Code
1 gal, drinking	8465-01-185-5511	1551	Blue
5 gal, drinking	8465-01-310-1259	0912	Blue
55 gal, drinking	8465-01-369-3557	0435	Blue
5 gal, suppression	8465-01-321-1678	1197	Yellow
55 gal, suppression	8465-01-369-2148	0437	Yellow

Tech Tips

More information on the individual bags is available through Tech Tips, and any questions can be directed to

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