



## DRCA White Paper

# Building Resilience and Emergency Preparedness at the State and Local Levels of Government to Ensure the Effective and Efficient Delivery of Critical Commodities following Disasters

### Background:

When a community experiences major damage from a natural disaster, FEMA is tasked with the mission supporting the impacted state government in their effort to provide immediate response and recovery assistance to those in need. FEMA procures and distributes immediate needs commodities such as food, water, generators, tarps, shelter, etc. following large scale events, but DRCA's membership believes that FEMA should utilize a broader range of immediate needs commodities to meet the demands and requirements of impacted communities following significant disasters. This white paper focuses on the effective and efficient delivery of food and water following large scale events as this has been a formidable challenge over the last 20 years.

Various bottled water products, and shelf stable "just add water" meals ("LTS meals") are effective options because they offer different shelf lives. These products address several pain points that are experienced in disaster response at multiple levels:

- **Shelf life:** Current solutions must be rotated and managed frequently, costing both money and personnel. Shelf life can range from 3-5 years for MREs, 1-2 years for conventional shelf stable meals, or hours to days for freshly prepared meals. Bottled water's shelf life ranges from 3-5 years up to 20 years dependent upon the supplier.
- **Availability:** Contractors supply the meals and bottled water they have in inventory when a disaster strikes and are unable, in most cases, to back-fill and produce inventory quickly enough to meet the volume demands in the hours immediately following a large, federally declared disaster. Meals and water that are not already stored in contractor's inventory or distribution centers run the risk of not being available post-disaster. In the past, vendors have promised millions of meals and bottles of water and been unable to physically produce them when they were needed, per the Tribute Contracting experience in 2017.
- **Price:** If available, meals and bottled water procured after a disaster can be subject to mark-ups in pricing compared to meals & water procured in advance.
- **Freight:** Expedited freight from manufacturer to the affected area can cost 4 x standard freight before an event.
- **"The Last Mile:"** Depending on local infrastructure and road conditions, it can be incredibly difficult to get meals and bottled water "the last mile" to affected people. Puerto Rico after Hurricane Maria in 2017 is a good example of this problem.
- **Food & Water Quality:** Individuals and families impacted by disasters can be physically and emotionally exhausted, so it is important to provide them with water and nutritional, healthy meals of high quality vs. low-nutrition cookies, crackers, candy, canned fruits, etc.
- **Situational Fit:** Some types of food can be a good solution for their intended purpose, but a poor fit for disaster relief. A good example is MREs, which serve our armed forces as they perform their active duties requiring many thousands of calories, but may not serve disaster victims as well. (NOTE: This was a problem during Hurricane Katrina as most of the MRE's distributed were military meals with 5,000 calories)



- **Waste:** Without the ability to forecast or predict future disasters, it is challenging to accurately estimate the number of meals and bottled water the government will need to provide to those in need following future large-scale disasters. Meals and water with shorter shelf lives often expire before the inventory can be rotated, or they have a chance to be consumed.

Incorporating various meal solutions (including LTS) and multiple bottled water solutions into an overall emergency meal plan can help cut costs, reduce complexity, provide flexibility, and nutritional, healthy options in the immediate aftermath of a natural disaster.

LTS meals have been utilized throughout the past decade by individual consumers seeking to prepare for emergencies and natural disasters. Over the last decade, LTS meals have been gaining popularity in a number of situations in response to natural disasters and has become a trusted component of disaster planning:

- Wildfire fighting
- Electrical Utilities
- Assisted Living facilities
- Hospitals
- Municipalities
- Counties

#### **Challenges:**

While advancing bottled water products and various meals options can be an effective solution to the pain points described above, there can be significant challenges to implementing a plan that includes them, chief among them budget, timing, and awareness.

- **Budget:** FEMA can procure meals and bottled water directly or obligate federal dollars to States to procure meals and water following federally declared disaster declarations. In some cases, State governments do not purchase enough meals or water in preparation for future disasters because they rely too heavily on FEMA to provide these commodities immediately following large disasters.
- **Timing:** Funds for emergency meals and water are often not available until *after* a disaster has occurred, which is a significant impediment to procuring supplies *before* a disaster happens.
- **Awareness:** Counties and Municipalities, as part-time emergency responders, may not be aware of all the emergency food and water options that are available to them in emergencies and natural disasters.
- **Education:** Some State and local governments are more educated on meal and bottled water options than others. Despite a few trade shows and conferences each year, there aren't many opportunities for State and local officials to learn about industry capabilities, innovations and new product offerings.

#### **Solution**

**With FEMA's new 2018 – 2022 Strategic Plan, the first Strategic Goal is to Build a Culture of Preparedness, since one of the biggest lessons of 2017 was that "no one department or agency can undertake this effort alone". The first step towards this goal is to "Incentivize investments that reduce risk, including pre-disaster mitigation, and reduce disaster costs at all levels." DRCA members believe that meals and bottle water can be layered into existing emergency plans to provide increasing flexibility and preparedness following natural disasters.**



Since most individual localities have less experience preparing for natural disasters than FEMA, they look to FEMA for guidance. FEMA's mission is to support State governments when they are overwhelmed, but the agency does expect the States to do their best to adequately prepare for, respond to and recover from disasters as best they can. FEMA's Strategic Plan states, "Every \$1 that the Federal Government invests in mitigation saves taxpayers an average of \$6 in future spending." If State governments effectively managed their inventory level of disaster commodities such as meal and water options, they would be in a better position to physically respond to disasters after they occurred which would ease the burden on FEMA.

With current practices and industry capacity, it may take a few years to build upon appropriate level of inventory. DRCA members encourage FEMA to encourage individual localities to allocate a portion of their annual budget for critical commodities towards the acquisition of meals and bottled water.

Natural disasters occur intermittingly, so communities should have the opportunity to slowly acquire a local source of emergency meals in between large-scale events. When a disaster does occur, the extent to which the community had built up a store of critical commodities such as food and water will be the extent to which that community can effectively pay a fraction of the cost for those commodities, compared to cost of acquiring the meals and bottle water immediately following the event. They will also be able to get those commodities to survivors of the disaster, even if local transportation systems have been compromised.

DRCA's membership welcomes the opportunity to work with FEMA and state and local governments to develop a plan to pre-position critical commodities such as food and water for individual communities which would be valuable for both FEMA and the affected communities. This would aid in removing the timing and organizational inefficiencies inherent in the current distribution model for critical commodities including emergency meals and water. A more decentralized and consistent method would also be important to decrease mobilization and operational timeframes, allowing for more immediate reaction.

### **Conclusion**

Provision of critical commodities such as emergency meals and water post-disaster is currently fraught with difficulties, ranging from inventory management shortfalls, to freight to logistics challenges associated with the "last mile." While not an immediate and all-inclusive solution, incorporating meals and water solutions into existing emergency planning and procurement over time can lessen the overall costs and impacts of natural disasters.

DRCA is interested in working with FEMA and relevant governmental agencies in a coordinated effort to address this issue and drive efficiencies to improve disaster response. Our membership believes there is an opportunity to create a model and pre-positioning program which would improve readiness, simplify the process and speed up recovery efforts.