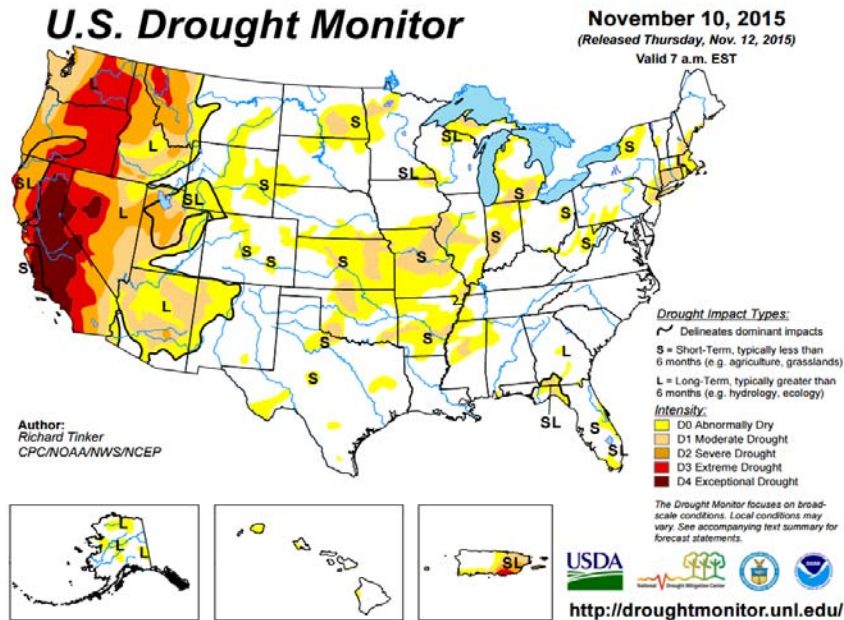


# Water Scarcity

## The Challenge:



## How Our Industry Can Help:

### Treating Contaminants.

Drought conditions can result in a higher concentration of contaminants in the water, such as arsenic and nitrates/nitrites. This is an opportunity for Point-of-Use and Point-of-Entry (POU/POE) - whole house or at the tap water treatment - to help keep drinking water safe.

### Water Reuse.

Water reuse is going to become a solution when dealing with water scarcity in which the water treatment industry technologies can assist in filtration and disinfection.

### Sustainability Standards.

The WQA Sustainability Certification Program is currently the only environmental certification program in the world to earn ANSI accreditation to ISO 17065 and ISO 14024 for Type I Environmental Labeling. This provides independent, third-party verification that a product is environmentally responsible in all phases of its life cycle: from raw materials, production, distribution, use-phase, and all the way through to end-of-life disposal.

### Product Certification.

The American National Standards Institute (ANSI) accredits certification bodies (ex. WQA Gold Seal and WQA Sustainability Programs) to test and certify products to the material safety requirement and contaminant reduction claim(s) as specified by the standard. Products that display the certification body's seal provides assurance that they have been rigorously tested and meet the requirements of the standard, program policies, and plant inspection policies. Visit WQA.org for a full list of WQA certified products.

### Professional Certification.

Professional certification allows consumers to reach professionals that have an expertise on the POU/POE systems - whole house or at the tap water treatment - water quality improvement industry and can educate consumers on high efficiency technologies. Visit WQA.org to find a water treatment provider and certified professionals in your area.

# Water Scarcity

## Point-of-Use & Point-of-Entry Technologies Provide Feasible Solutions

Drought relief has continued to be a major priority in the western United States, with the United States Drought Monitoring reporting that the drought conditions are **effecting more than 50 million people**. With drought conditions resulting in a higher concentration of contaminants in the water, such as arsenic and nitrates/nitrites, water quality is a major concern.

Fortunately, there is an available approach that can go far in making sure everyone has access to safer and healthier water. The use of Point-of-Use and Point-of-Entry (POU/POE) systems - whole house or at the tap water treatment - can ensure that everyone has water that is up to standard.

By helping those in crisis to receive the treatment they need exactly where they need it, the United States can realize its goals of public health in a cost-effective and reliable way.

## Drought Effects Around the Country

*Washington Times Daily* (May 20, 2015) reported in a poll taken of California residents, 89 percent of Californians describe the state's current drought as a serious situation. 70 percent say a water rate increase of 15 to 25 percent would be a "serious issue". The *Salt Lake Tribune* (Feb. 07, 2015) reported that Utah's limited snowpack is already melting and *Idaho State Journal* (May 12, 2015) noted similarly low levels in Idaho.

### Arsenic

**Potential Health Effects:**

- Serious skin problems, endocrine disruptor
- Causes Cancer—skin, bladder, lung, kidney, liver, prostate
- Harms cardiovascular & nervous systems

**Treatment Methods (POU/POE):**

Iron oxide/hydroxides	Titanium oxy/hydroxide
Activated alumina	Anion Exchange (strong base anion exchange resins)
Iron based specialty media impregnated or coated with iron oxide/hydroxides	Manganese greensand
Distillation	Reverse osmosis (RO)

### Nitrate/Nitrite

**Potential Health Effects:**

- Methemoglobinemia (blue baby syndrome)
- Most potential health effects are seen in infants under the age of 6 months

**Treatment Methods (POU/POE):**

Reverse Osmosis with thin film composite membrane	Nitrate "Selective" Anion Exchange resins
Anion exchange (Type I and II, Cl form, subject to completing sulfates)	Distillation
	Electrodialysis

## About WQA:

The Water Quality Association (WQA) has thousands of members nationwide and internationally, including major corporations as well as family-owned businesses that are involved in the water treatment industry.

Dedicated to consumer education and public awareness, the Water Quality Association is a not-for-profit trade group of businesses that provide treatment solutions for safe, clean water throughout the world – in homes, schools, commercial and industrial settings, and more. WQA promotes best practices for superior products and environmental sustainability with the guidance of respected, independent standards. Its labs conduct rigorous testing and certification, and training programs promote professionalism and ethics. Learn more: [wqa.org](http://wqa.org)