ASSOCIATION OF
METROPOLITAN
WATER AGENCIES

April 8, 2013

National Institute of Standards and Technology
100 Bureau Drive, Stop 8930
Gaithersburg, MD 20899

The Association of Metropolitan Water Agencies (AMWA) appreciates the opportunity to respond to the National Institute of Standards and Technology (NIST) request for information, published in the *Federal Register* on February 26, 2013, titled "Developing a Framework to Improve Critical Infrastructure Cybersecurity."

AMWA is an organization of the largest publicly owned drinking water utilities in the United States, collectively serving more than 130 million people with safe drinking water.

As NIST develops the Framework, AMWA urges the agency to recognize that drinking water systems are unique compared to one another and compared to other sectors. For instance, the vast majority of drinking water utilities are publicly owned, either as part of municipal or county governments or as distinct public authorities. Some utilities provide both water and wastewater service, some provide only one or the other. Also, some water systems own and operate water treatment plants whereas others, known as consecutive systems, only distribute potable water.

Further, cybersecurity standards can relate to both ICS and IT. Many water utilities have industrial control systems (ICS) that are separate or isolated from general information technology (IT) (enterprise systems), and therefore we recommend the Framework recognize and accommodate this distinction.

A very important factor that makes water systems unique is that utility IT services may not be based in-house, but rather operated by a separate city or county department. This affects the degree of control and oversight water systems have over their information systems.

Many utilities rely on ICS to operate monitoring, reservoirs, raw water intake, treatment and finished water distribution infrastructure. Somewhat unique to the water sector is that while these systems may be highly automated, the infrastructure can be operated manually in the event of an incident. This prevents prolonged inoperability so that safe water continues to flow.

Water systems have other built-in resiliencies, too. Should treatment be interrupted, most systems to one extent or another can rely on stored water, multiple water sources or additional treatment plants.

AMWA recognizes that the Framework will not include mandates, but to improve the likelihood of utilities voluntarily adopting the practices identified in it, we encourage NIST to select practices that are cost-effective and not unreasonably burdensome. Water and wastewater systems face billions of dollars in costs to replace and rehabilitate aging infrastructure, not to mention increasing regulatory compliance costs. No utility is immune from such challenges, nor from intense pressure against increasing rates. So we urge NIST to take these factors into account.

AMWA also recommends that the practices in the Framework be implementable by water systems of all sizes and with varying degrees of expertise. While the largest water systems have in-house expertise, voluntary adoption of the practices will be more likely across the sector if they are selected and presented with non-technical users in mind.

Finally, we urge and invite the agency to contact us directly to get early feedback from our members before the preliminary Framework is released. Early feedback will facilitate support and buy-in from our sector.

Sincerely,

Diane VanDe Hei
Executive Director