Building Weather-Ready Nations – The New International Need

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A confluence of natural and societal factors is creating an international need to build nations that are ready, responsive and resilient to extreme weather, water, and climate events. The U.S. National Weather Service, with responsibility for saving lives, protecting property, and enhancing a U.S. economy increasingly impacted by weather, is on the leading edge of efforts to create a Weather-Ready Nation in the U.S., and assisting the World Meteorological Organization and its members to create Weather-Ready Nations.

In this presentation, Dr. Louis Uccellini, Director of the U.S. National Weather Service, addresses the factors that are leading to increased risk from these events in the U.S. and around the world; key policy and societal drivers that are creating an urgency for change; and, implications for science, technology, and the forecast process. At the same time, the accuracy and precision of weather forecasts are continuously improving, allowing for better forecasts on decision-relevant timescales, in some cases out to a week in advance. The U.S. National Weather Service is addressing the increasing demand for weather, water, and climate information and capitalizing on improved forecasts, reflected in its strategic goal to build a Weather-Ready Nation – actions that are being replicated around the globe. Simultaneously the World Meteorological Organization, a specialized UN body and the UN authoritative voice on weather, water and climate, is developing a new strategic plan that embraces a science-based service approach in a seamless manner along the weather, water, climate continuum. The science to service basis for the new WMO strategic direction embraces a more earth system science approach to the seamless prediction from climate scales down to the mesoscale as well as communicating the risks and impacts to society all of which lead to better information for global decision makers.