The Potential for Water Hedging to Increase Resilience

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This presentation will detail a potential market mechanism for addressing the opposite of hurricanes: drought. Water shortages, which will become more common and more severe due to climate change, pose challenges for a number of industries and government units, from municipal water and sewer agencies to the power sector, which needs ample water for cooling purposes. The ability to financially hedge against the risk of insufficient water will only become more critical, allowing water providers to: replace lost revenues due to lower water use stemming from conservation measures; insure against higher raw material costs when water use is necessary in applications and drought pricing goes into effect or hedge against decreased output and revenues when the cost of water becomes too high; and hedge against the cost of replacement produce (such as purchasing electricity on the spot market) when environmental or regulatory concerns no longer enable production due to low flow or high water temperature conditions. The presentation will use North Carolina's RTP region as a case study, detailing how prepared municipal water agencies in the region are using historical and long–term future projections. The discussion will then focus on how potential financial hedging could aid in drought situations.