

1106-VL-2775 **Csilla Szabo*** (cszabo@bard.edu). *Network Model for Water and Energy Infrastructure.*

Water and energy sustainability continues to be a challenge faced across the world. With continued urbanization and changes in the Earth's climate, these challenges will likely multiply in the decades to come. The resource networks of energy and water are directly linked and vital to the success of a country. The complexity of this network is a challenge for governments of developing nations. Here we model the existing flow networks of water and energy as a multi-layered network. We analyze the synchronization of this network to build a more resilient and robust infrastructure. (Received September 16, 2014)