California Water Shortages: Causes and Impacts of the Droughts in the Western US.

From 2012-2015, California has undergone the most severe drought since instrumental records were kept. Water resources have been dwindling in that region for over a decade as well. In addition, the population has grown in California in the past four years by an additional 4%. The demand for water has increased while the supply has dwindled leading to the most severe statewide water restrictions in California’s history.

This panel will explore both the possible causes for this historic drought and the current and potential future impacts on both the land and people. Discussions will include both long and short-term climate and ecological factors that have contributed to the lower amounts of precipitation over the last decade with some focus on the past 3 years. We will also discuss the impact of the lower water availability and restrictions placed on farms and irrigation in this region. California farms produce nearly half of the US grown fruits, nuts and vegetables alone. The possibility exists for disruptions in the food production in various regions impacting both the economy overall in California and the US as well as the livelihood of the producers.

In addition, much of the water sources for the coastal cities in California come from further inland in the water depleted areas. Demand for water from California citizens is likely to increase as population increases leaving regulators to make difficult choices between supplying rural populations, urban populations, farms and the energy industry.

As a result of the slowly worsening drought, some progress has been made in proposing ideas or solutions to some of the impacts. Work on more drought resistant crops and more efficient power plant and domestic product designs have been introduced. Even if the drought comes to an end in the next several months to several years, consideration of better water management may prove to be a smart investment for a region not historically prone to an abundance of water.