

Community environmental issue essay sample

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Community Environmental Issue

Central Texas, especially Travis County, has been under drought conditions since La Niña, a weather pattern where the surface temperatures are cooler in the Pacific ocean, thus creating drier weather in the southern part of the United States, in 2011 (StateImpact, n. d.). Although this type of weather pattern is typically combated with the arrival of El Niño, which has the opposite effect, it failed to occur in winter of 2012 and central Texas was left with the driest conditions it has experienced since the lowest drought on record in the 1950s (StateImpact, n. d.). Couple this drought with the challenges that central Texas faces with water quality and it is clear that the region needs to make changes in order to sustain a healthy, abundant, water sources for the generations to come. Water Usage in Central Texas

As a result of a three year drought Lake Travis and Lake Buchanan, the two main reservoirs for central Texas' water supply, are at an all time low at just 35% full (Central Texas Sustainability Indicators Project, 2009). Storms in central Texas during July 2013 brought 2 to 4 inches of rain to the majority of the Texas hill country and as much as 8 inches in certain spots yet rain fall is significantly below the typical averages (StateImpact, n. d.). Currently, Lake Travis and Lake Buchanan hold 702, 157 acre feet of water versus their capacity of 2. 01 million acre feet. In 2011 inflows were the lowest in history at about 10% of average, in 2012 inflows were the fifth lowest in history at about 32% of average, and in 2013 inflows have been on pace to near the all time low of 2011 until recent rains have resulted in moderate improvement. These historic lows of inflows and water retention creates a situation where water conservation and awareness is increasingly important yet 15% of

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central Texans and 19.3% of Travis county residents have indicated that they have no idea where their water comes from (Central Texas Sustainability Indicators Project, 2009). In addition, despite these historic lows, the demand for water has remained unchanged and consumption as increased (StateImpact, n. d.). The Central Texas Sustainability Project (2009) indicates that although water consumption and conservation awareness has increased by 13% and 40% of citizens state they are concerned about water usage, long term trends remain unchanged. It is clear that the citizens of central Texas, specifically Travis county, must take action to conserve water before demand over powers supply. Water Quality in Central Texas

In addition to water reserves at an all time low in central Texas there is an added layer of concern as it relates to water quality. The United States Environmental Protection Agency, or EPA, divides water pollution into two categories: point and nonpoint source pollution. Point source pollution comes from a specific place, such as a water treatment plant, while nonpoint source pollution comes from many sources which are not as easy to detect or control (Berg, Hager, & Hassenzahl, 2009). Nonpoint pollutants are the leading cause of water pollution in central Texas and have been known to cause issues with drinking water. Common nonpoint pollutants include fertilizers, herbicides, insecticides, oil, grease, and pet or livestock waste. According to The Central Texas Sustainability Project (2009) 40,000 people were served by a public water provider while the provider was in violation of EPA water quality rules.

This is a major concern for all citizens, and it is critical that the issue be addressed by reducing pollutants with small changes to the way things are done. Applying the appropriate amount of pesticide, properly disposing of oil and grease, and disposing of pet waste properly are all small steps one can take to reduce the amount of nonpoint pollution that contributes to lower water qualities in central Texas. A call to action. One thing is certain, water management and conservation are crucial elements to the sustainability of water in the central Texas region. According to the Central Texas Sustainability Project (2009) water in central Texas is not distributed to match current consumption and growth patterns and there is a disconnect between where water comes from and how it is delivered to citizens. It is important that current citizens recognize the need to use water in a responsible way that does not harm the essential functions of the natural ecosystem in order to preserve for generations to come. .

References

Berg, L. R., Hager, M. C, Hassenzahl, D. M. (2011). Visualizing environmental science (3rd ed.). Hoboken, NJ: John Wiley & Sons in collaboration with the National Geographic Society Central Texas Sustainability Indicators Project. (2009). 2009 Indicators report. Retrieved from http://www.centex-indicators.org/annual_rep/ar2009.pdf. StateImpact. (n. d.). Retrieved from <http://stateimpact.npr.org/texas/tag/drought/>