The winter of 2015 – 2016 is predicted to have the strongest El Niño weather pattern since the winter of 1997 – 1998. El Niño weather patterns typically, but not always, bring above average rainfall to Central California. Priest Valley in far southern San Benito County has one of the longest running records for annual precipitation in San Benito County extending back to 1900. San Francisco has annual precipitation records dating back to 1850. Prior to 1850, the only records of regional precipitation that we have are historic accounts of early European settlers dating back to as early as 1777 with establishment of the Spanish Missions. Further estimation of annual average rainfall before 1850 can be made by coring old trees and measuring the growth ring width. This is called dendrochronology. A thick growth ring indicates a wet year. A thin growth ring indicates a dry year. By sampling old blue oak trees throughout the region, the annual average rainfall record has been able to be extended back to 1450, giving us clearer insight into the frequency and intensity of droughts. The current drought is the worst drought since records began in 1850, but the drought of 1841 – 1846 may have possibly been even worse.

Historic instrumental weather data (1850 to present):

DWR California Data Exchange Center -

http://cdec.water.ca.gov/cdecstation/

RAWS (Remote Automated Weather Stations) -

http://www.raws.dri.edu/wraws/ccaF.html

Blue oak dendrochronology (pre-1850 historic climate):

http://tenaya.ucsd.edu/~dettinge/2013EI000518.pdf

Factoid finding the study – The oldest living blue oak found is on Wright Mountain (Joaquin Ridge) in southern San Benito County. It is 459 years old.

El Niño – La Niña (El Niño Southern Oscillation):

http://ggweather.com/enso/oni.htm

http://ggweather.com/enso2014/



Take your best guess at what the total annual rainfall will be for the 2016 water year (October 1, 2015 – September 30, 2016) for the location Priest Valley. The winner will receive a new manual rain gauge. Priest Valley average annual precipitation is 19.8 inches. In comparison, average annual precipitation for Hollister is 13.4 inches.

2016 precipitation		Preferred contact	
prediction (inches)	Name	(phone # or email)	Mailing address