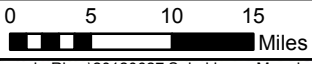
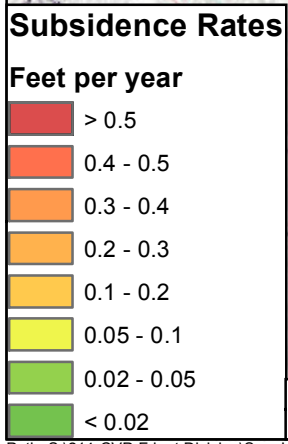
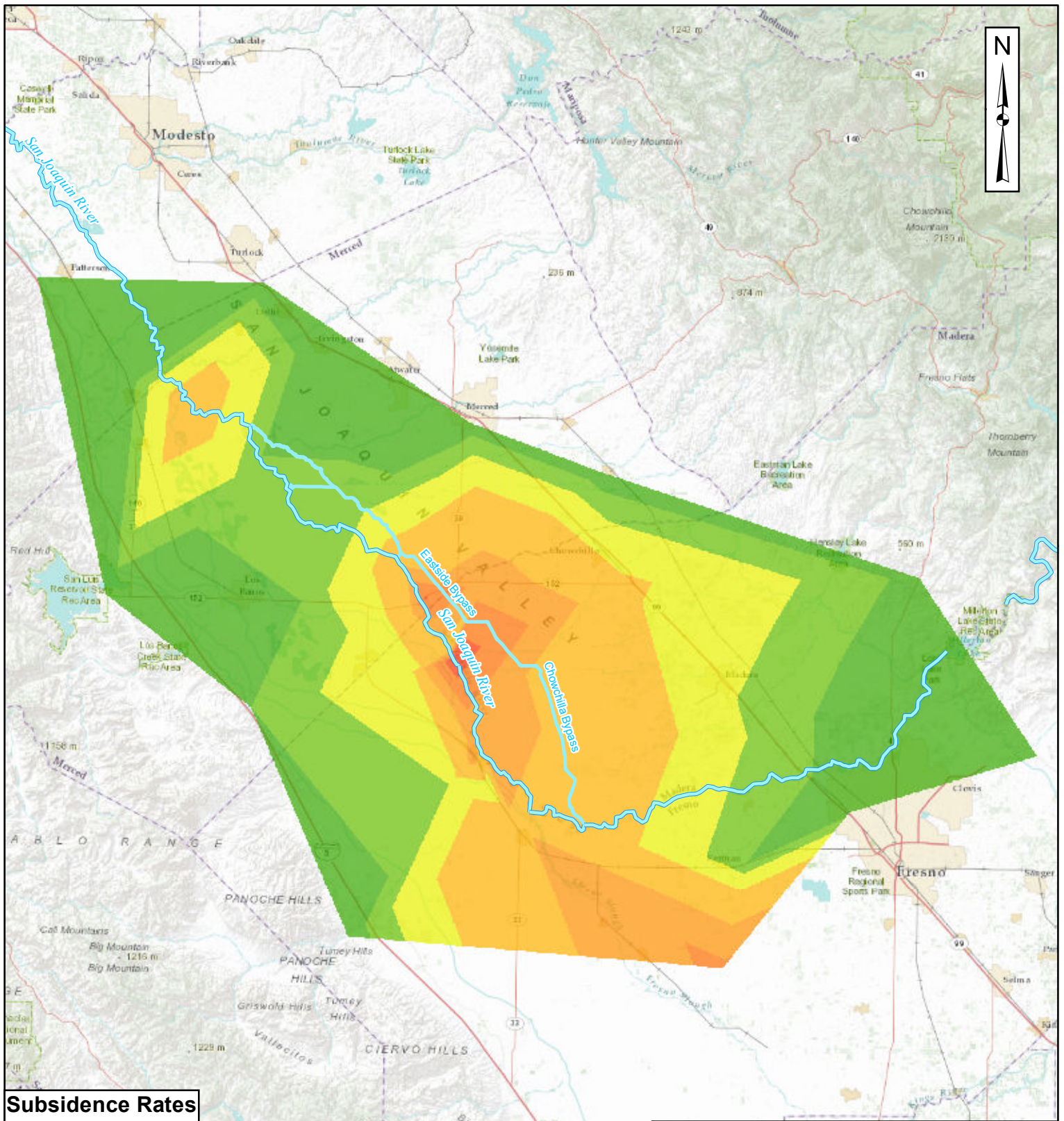


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Combined Reclamation, USACE and RBF Data

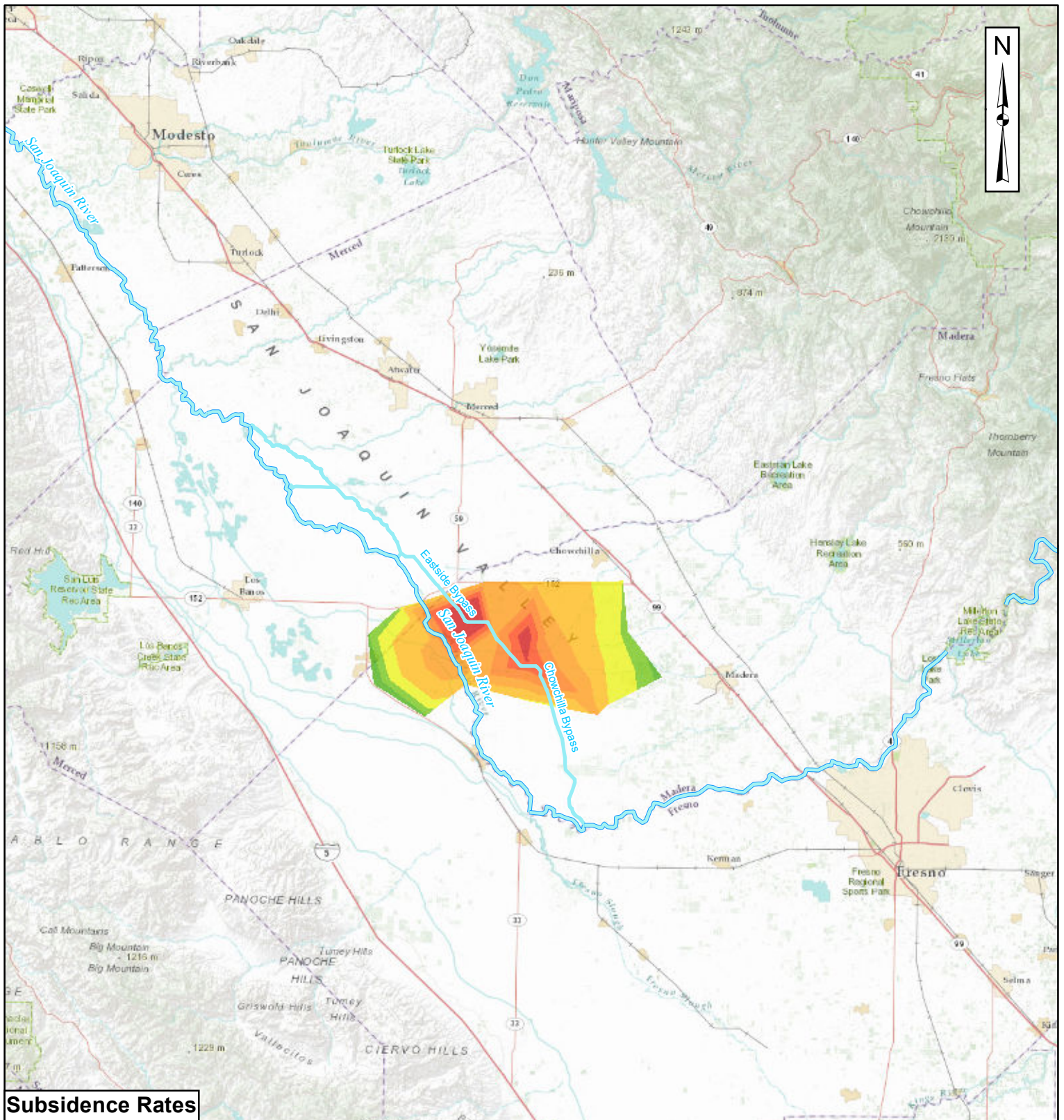
Information shown was compiled from various sources including COE, NGS, USGS, RBF and BOR and is intended to give a general estimate of potential subsidence rates across the Central Valley. It was difficult to correlate the various data sets as the date ranges, accuracies and point locations were not consistent and in some cases indeterminable. USGS Interferogram data was not used in this map due to difficulty correlating its non-point data to the other data sets. To determine actual subsidence rates a programmatic study would be required.



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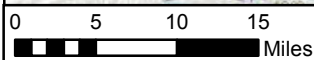
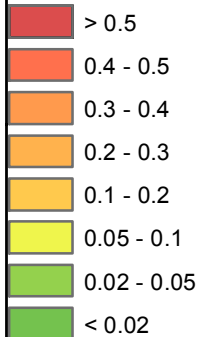
**Reclamation Subsidence
NGS Stations to 2011**

Subsidence rates calculated by comparing 2011 survey values at NGS Stations with published elevation values and dates. Elevation were assumed to have been updated at published date, however this may not always be the case for all NGS Stations. Discrepancies between the published and actual elevation date would have a significant affect on the accuracy of the subsidence rate calculations.



Subsidence Rates

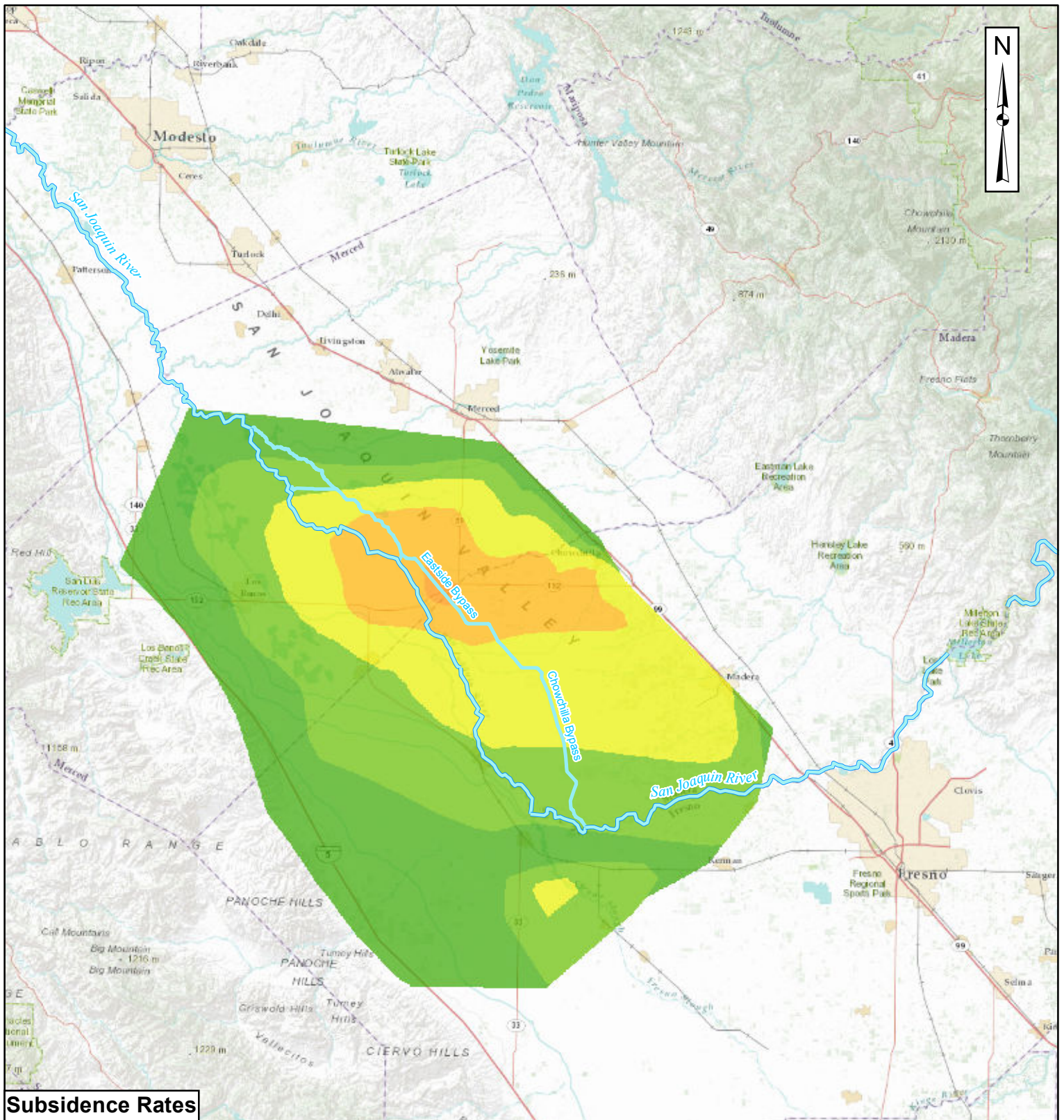
Feet per year



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**RBF Subsidence
2008 to 2010**

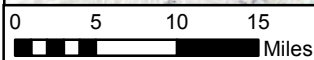
Subsidence rates are from RBF Consulting drawing "TO19 Preliminary Subsidence Map" (July 13, 2010 - DRAFT). The RBF drawing compares elevation changes at several points surveyed in 2008 and 2010. The elevation change was divided by 2 years to give an estimated annual rate of change.



Subsidence Rates

Feet per year

- > 0.5
- 0.4 - 0.5
- 0.3 - 0.4
- 0.2 - 0.3
- 0.1 - 0.2
- 0.05 - 0.1
- 0.02 - 0.05
- < 0.02



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**USACE Subsidence
1931 to 2001**

Subsidence rates from US Army Corps of Engineers Comprehensive Study Information Paper "Subsidence in the Central Valley", Figure 2 (December 2002). These rates were calculated by comparing benchmark elevation changes from their last published date to 2001 surveyed values. Published dates ranged from 1931 to 1998 for the benchmarks used in the survey.

