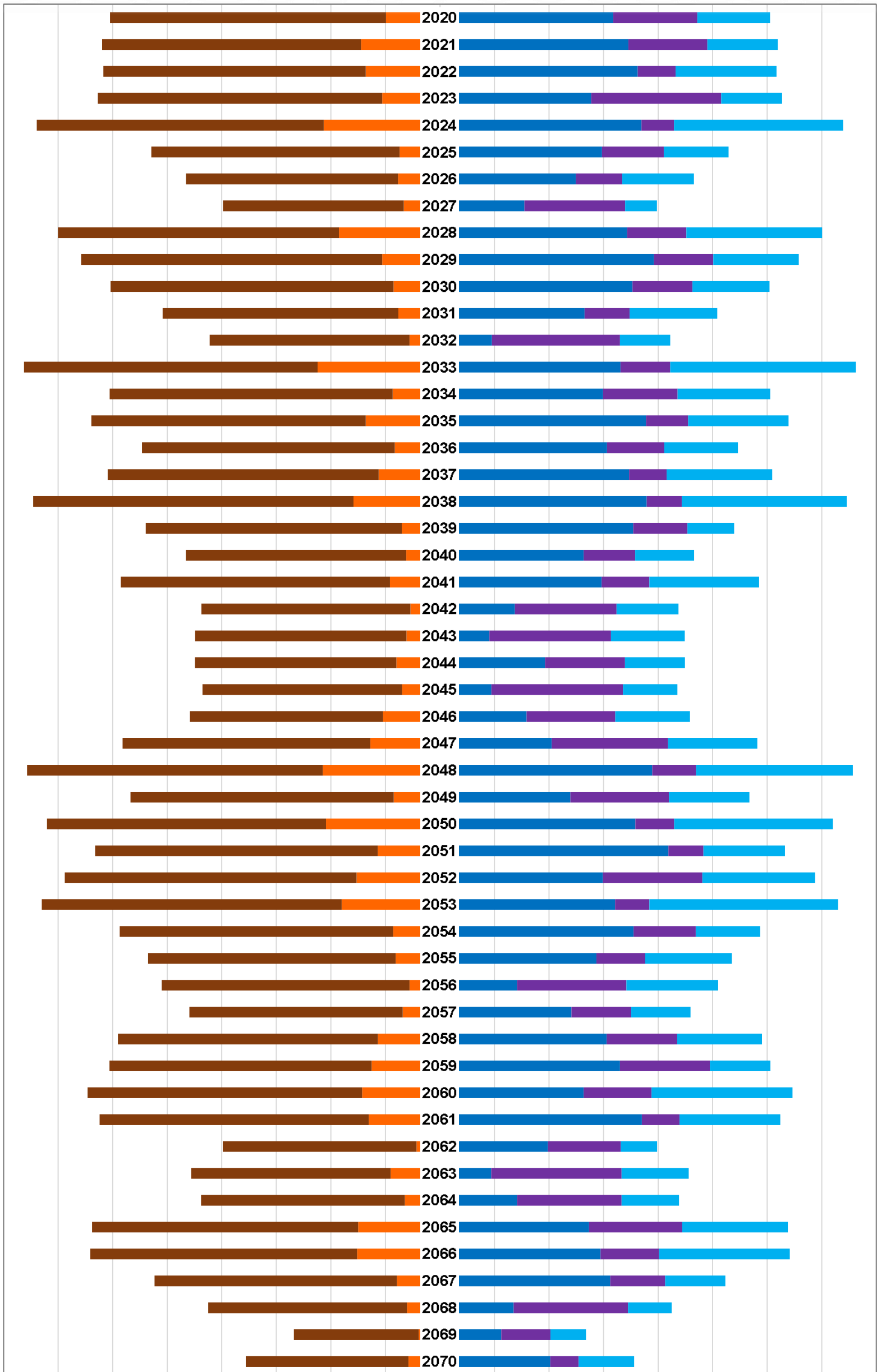


**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

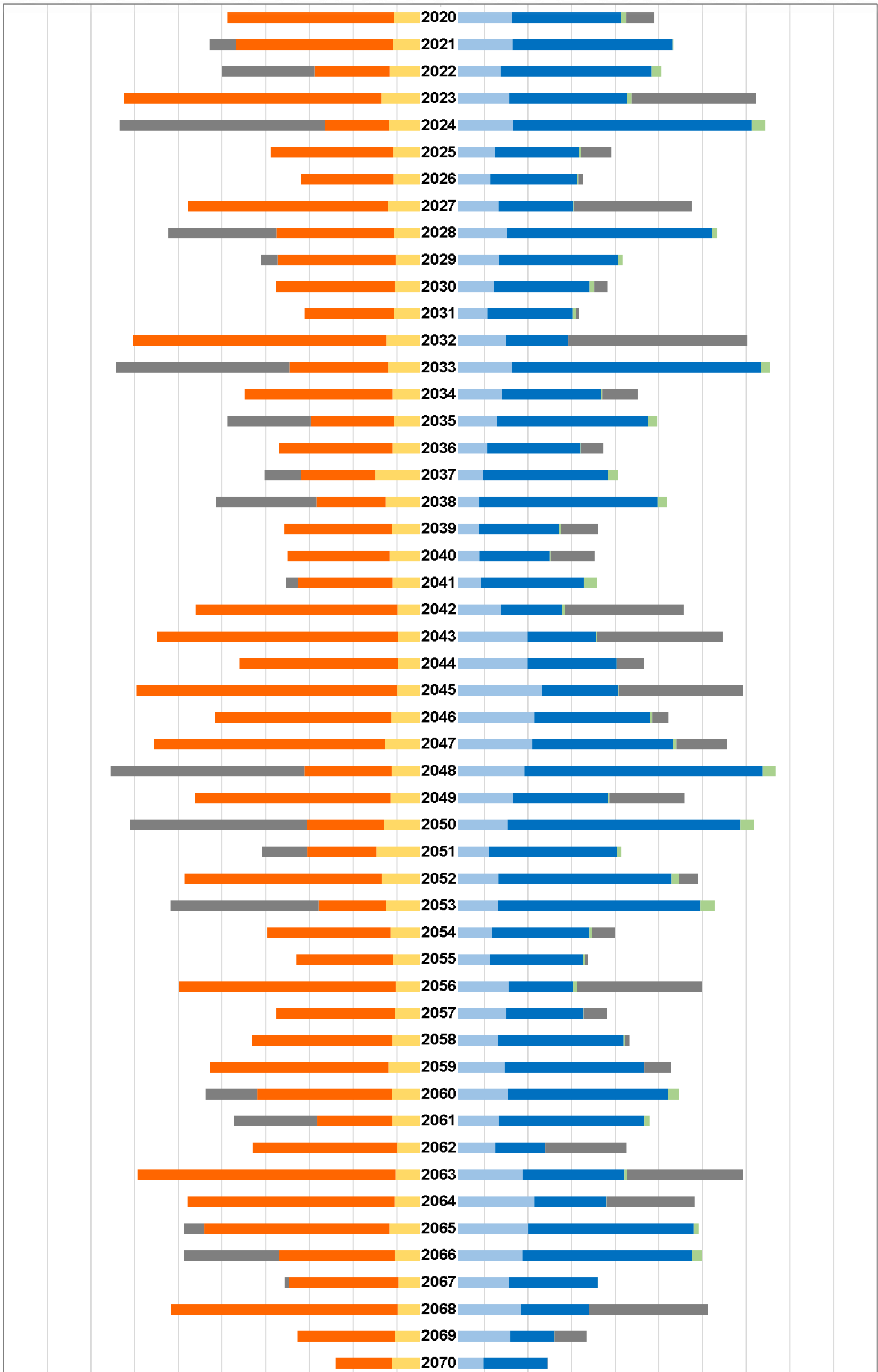
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000



■ Lateral Subsurface Outflow     ■ Lateral Subsurface Inflow  
■ Pumping     ■ Net Deep Percolation  
■ Stream Leakage Inflow     ■ GW Storage Change



**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

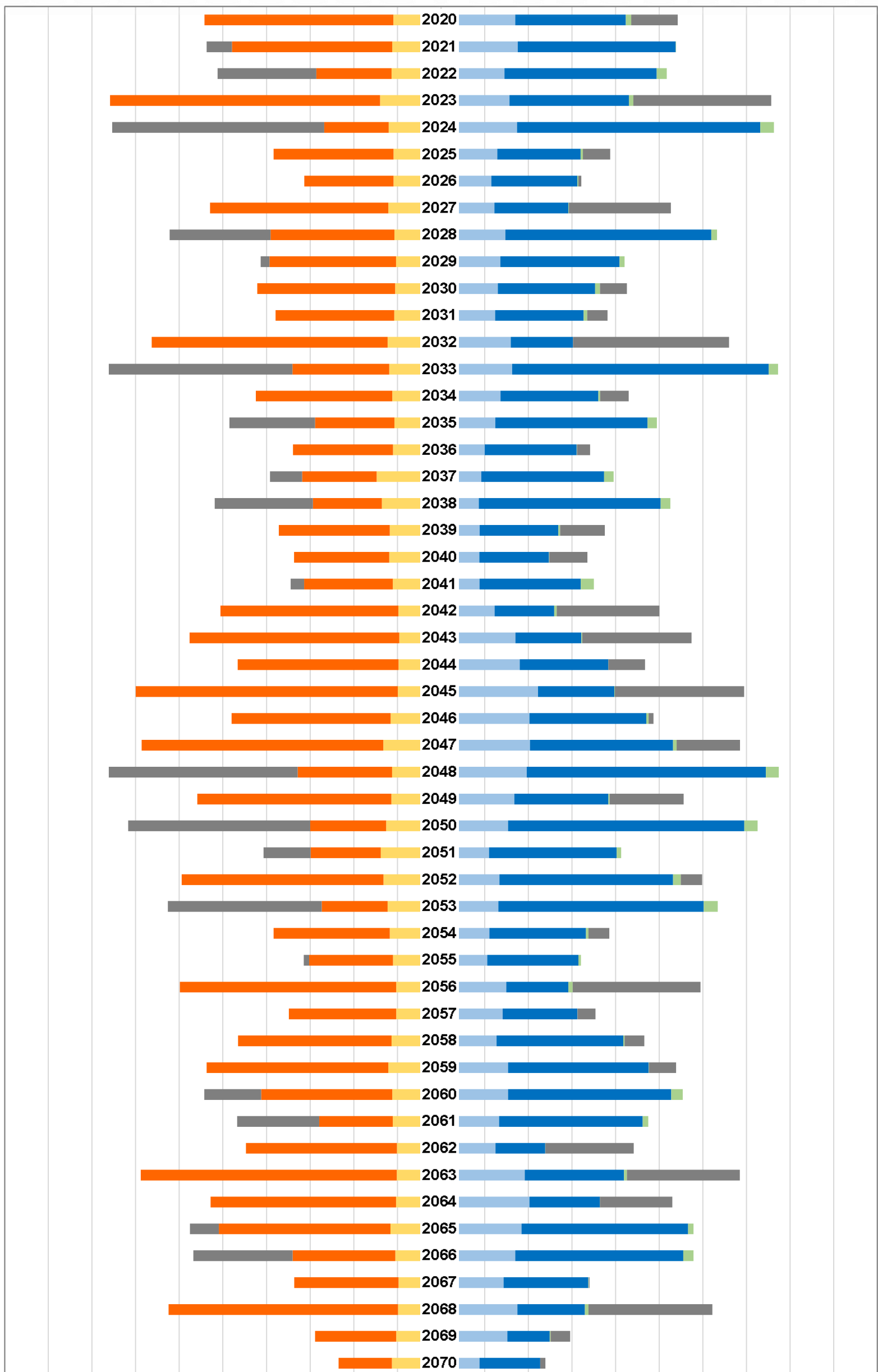
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

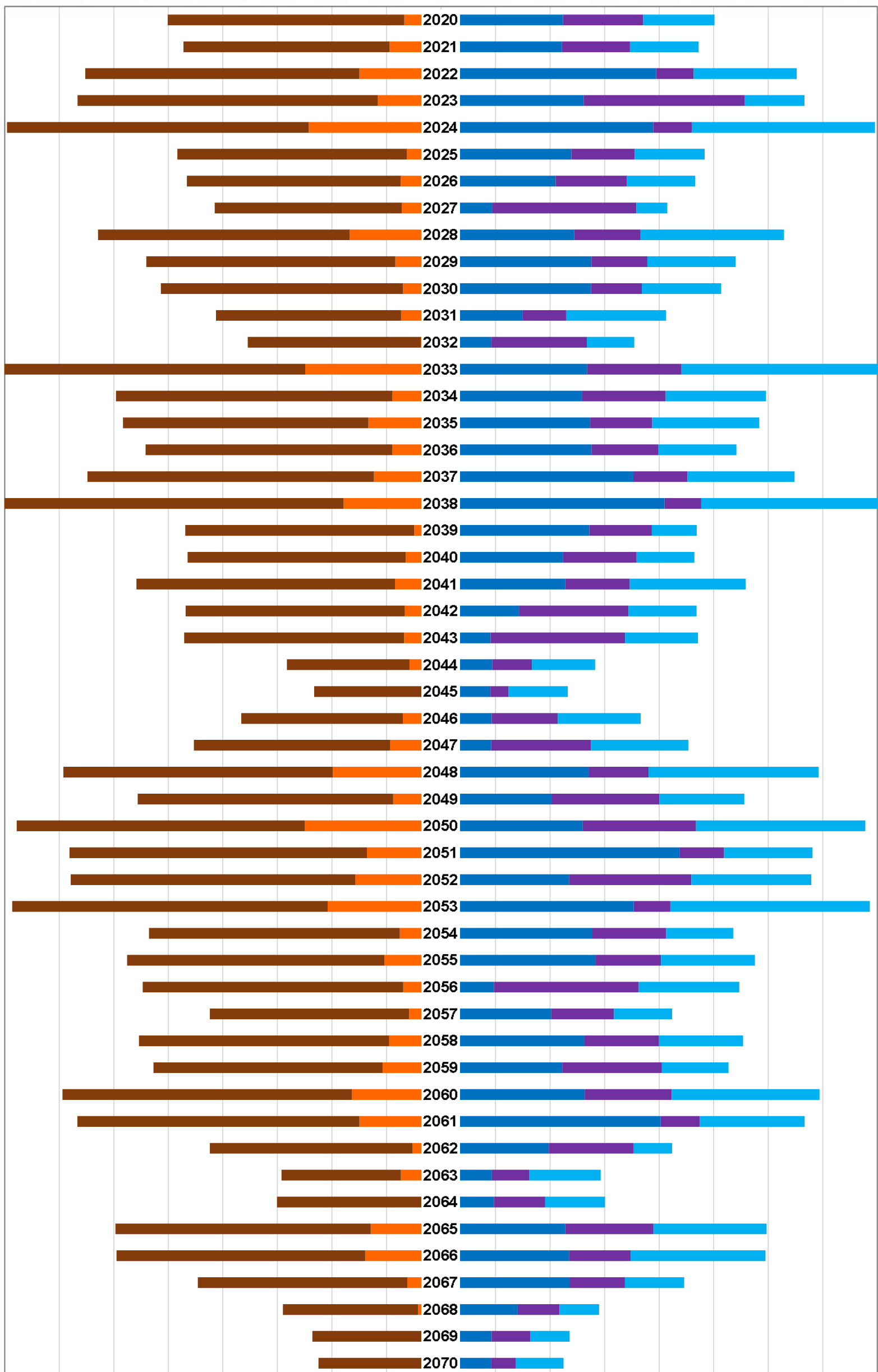
-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000



Lateral Subsurface Outflow      Lateral Subsurface Inflow  
 Pumping      Net Deep Percolation  
 Stream Leakage Inflow      GW Storage Change

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

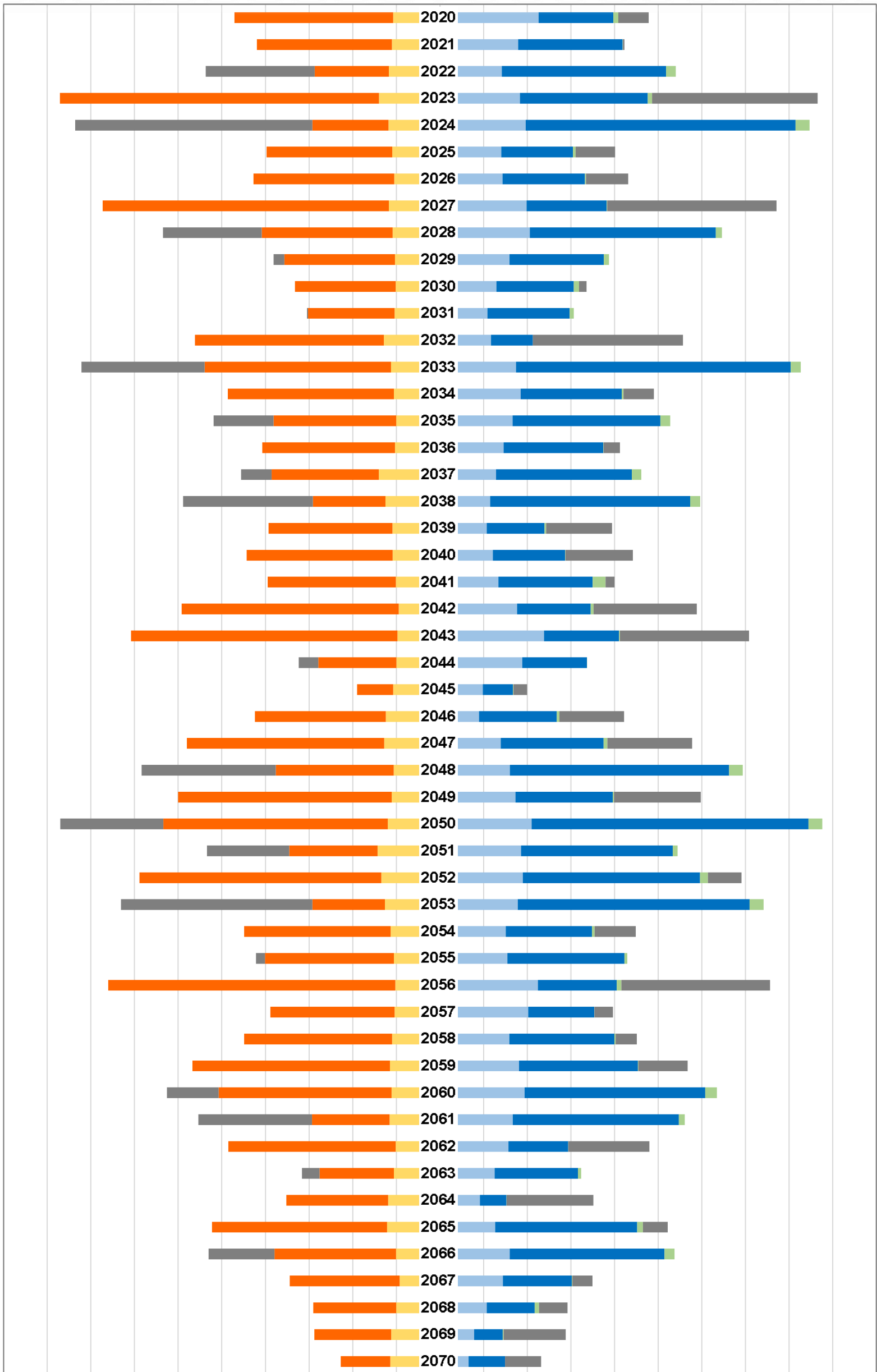
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

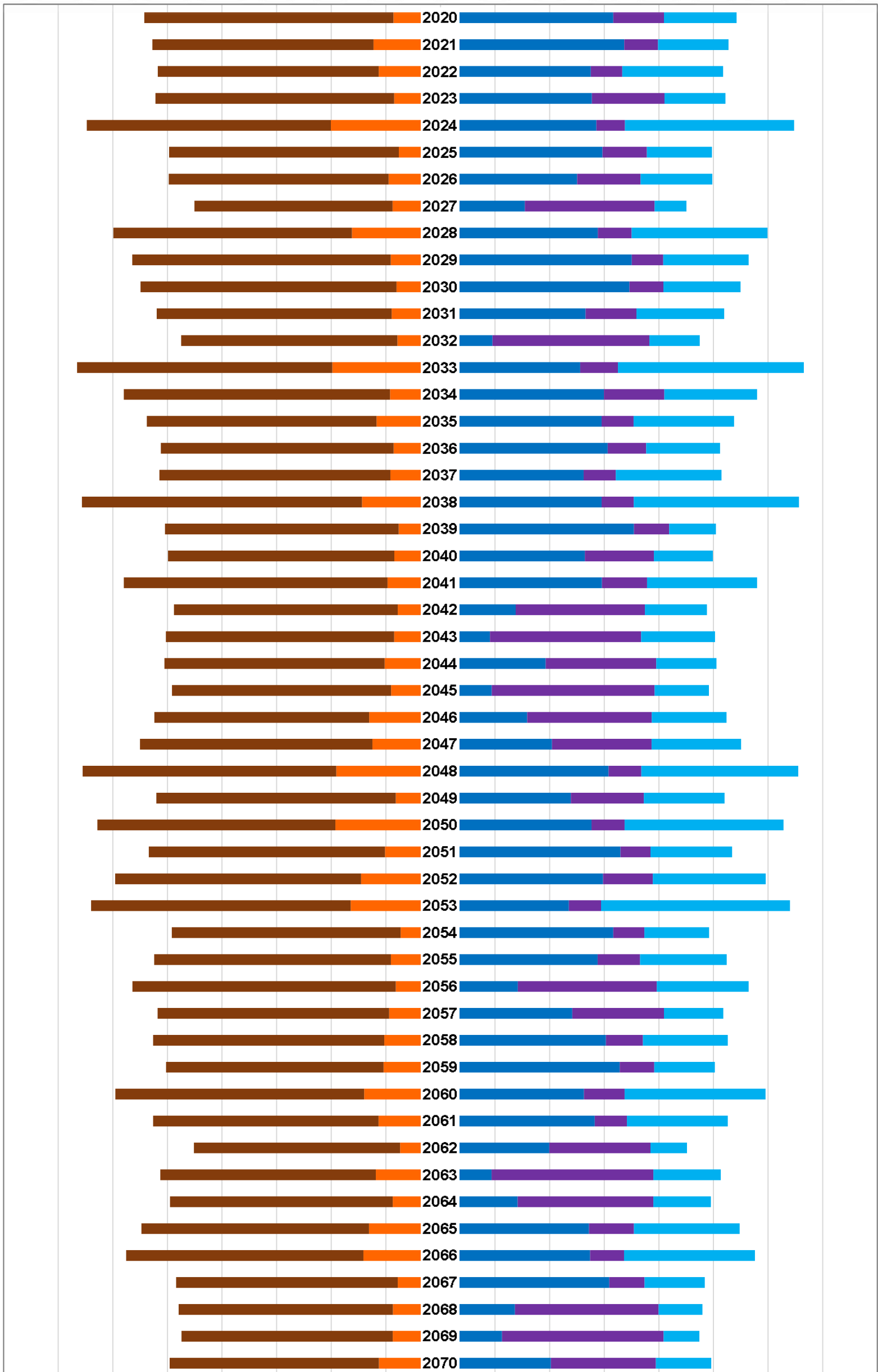
-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000



■ Lateral Subsurface Outflow    ■ Lateral Subsurface Inflow  
■ Pumping    ■ Net Deep Percolation  
■ Stream Leakage Inflow    ■ GW Storage Change

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

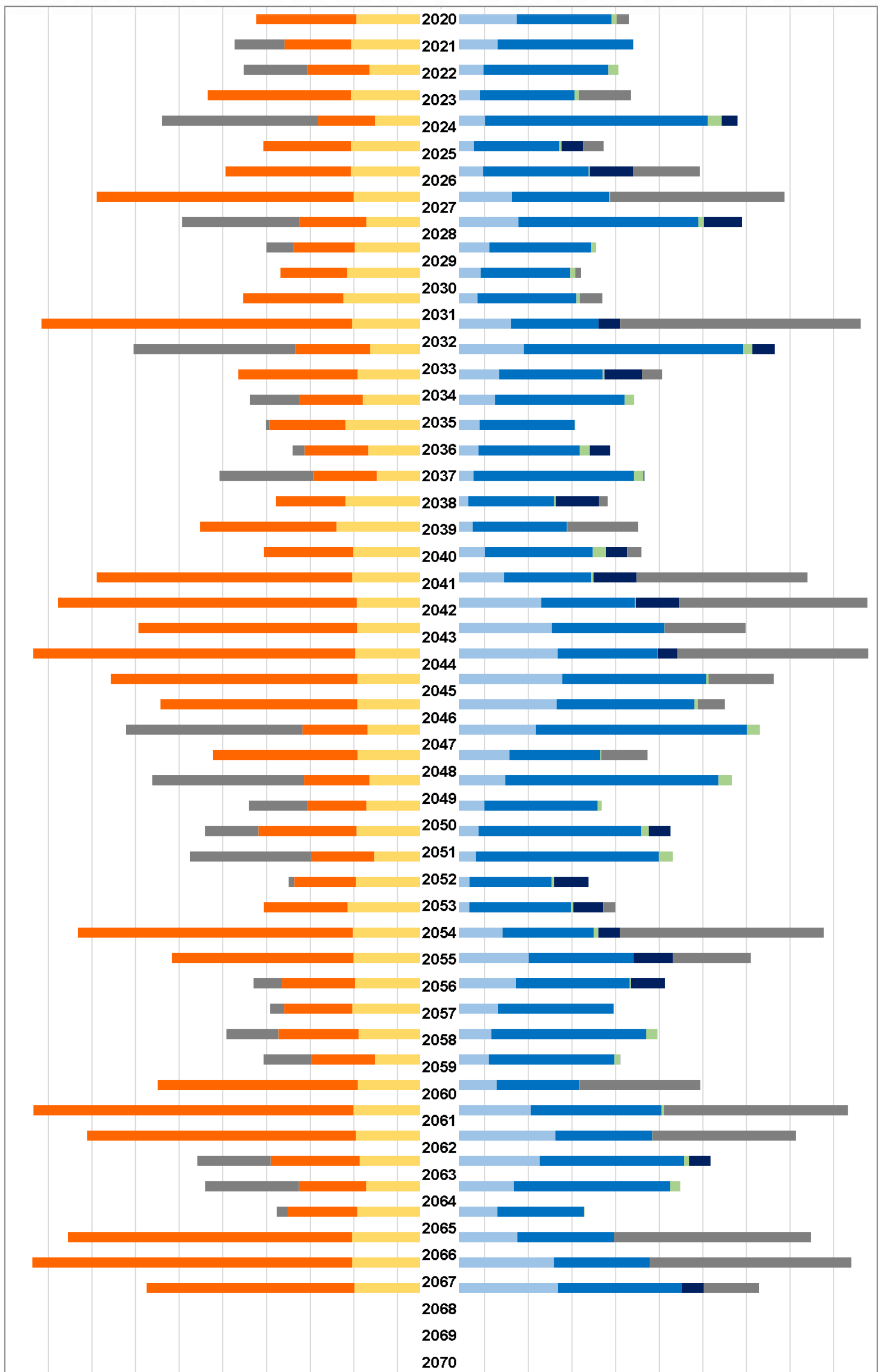
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

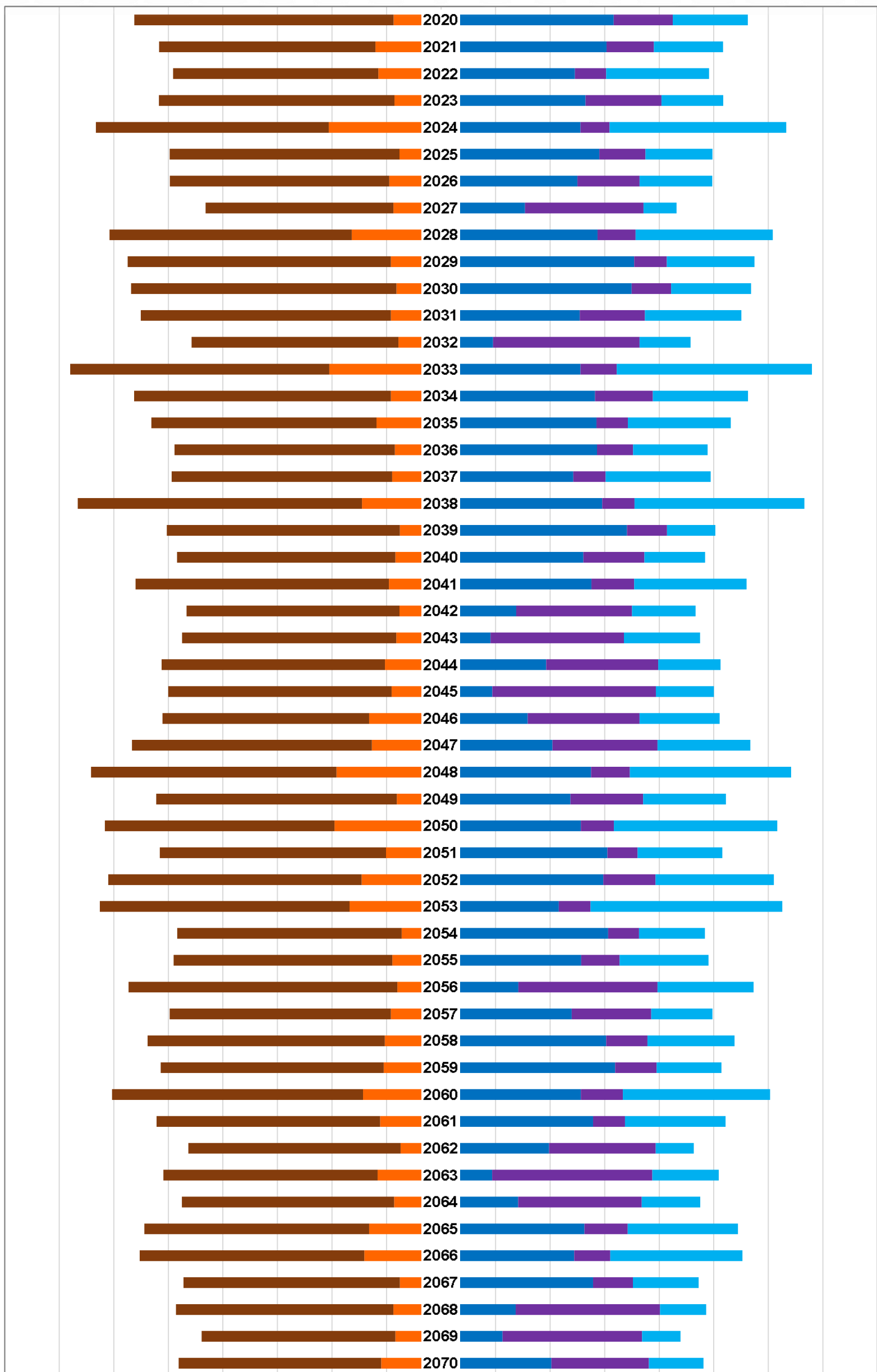
-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000



■ Lateral Subsurface Outflow    ■ Lateral Subsurface Inflow  
■ Pumping    ■ Net Deep Percolation  
■ Stream Leakage Inflow    ■ Injection  
■ GW Storage Change

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

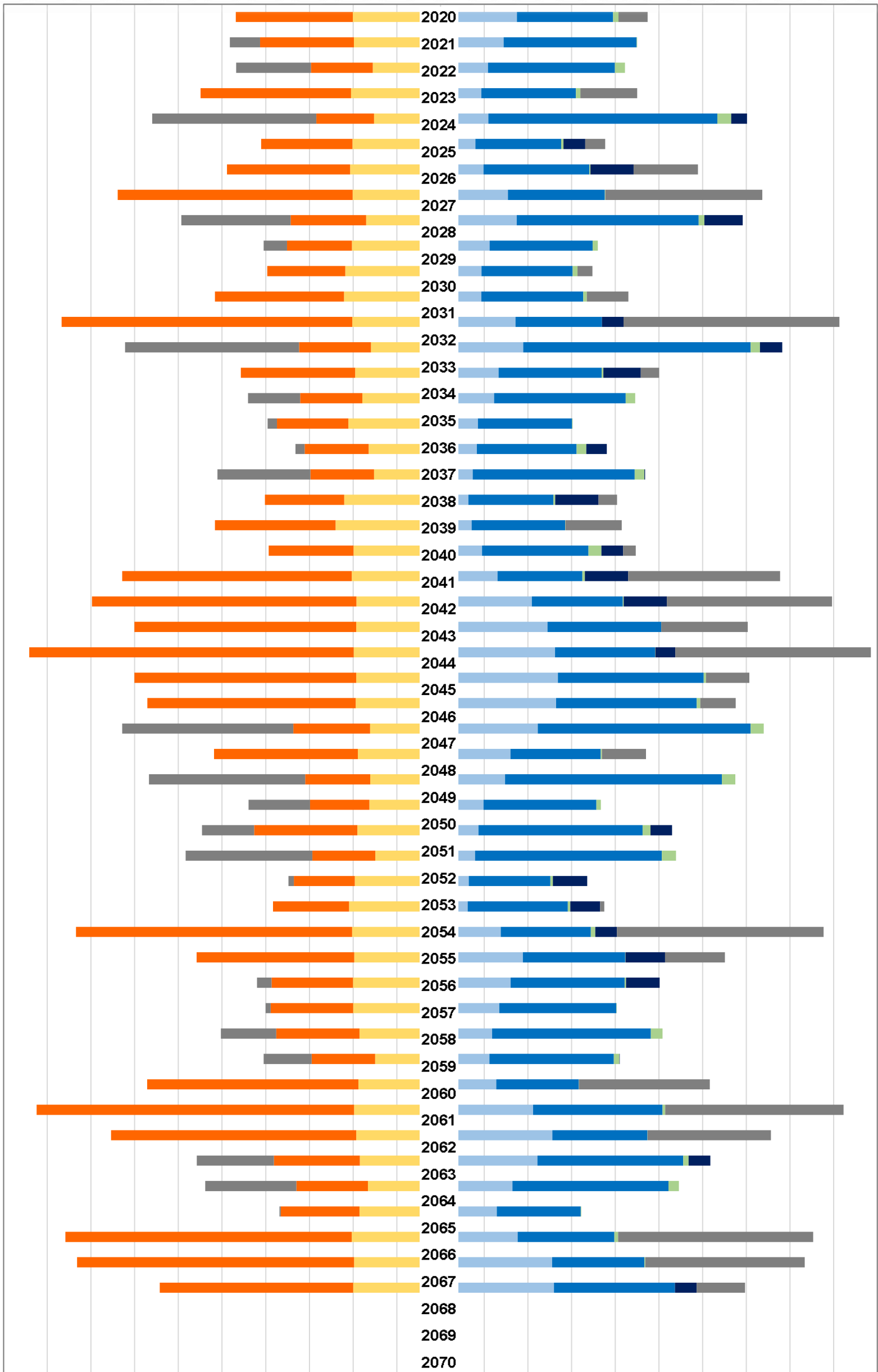
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000

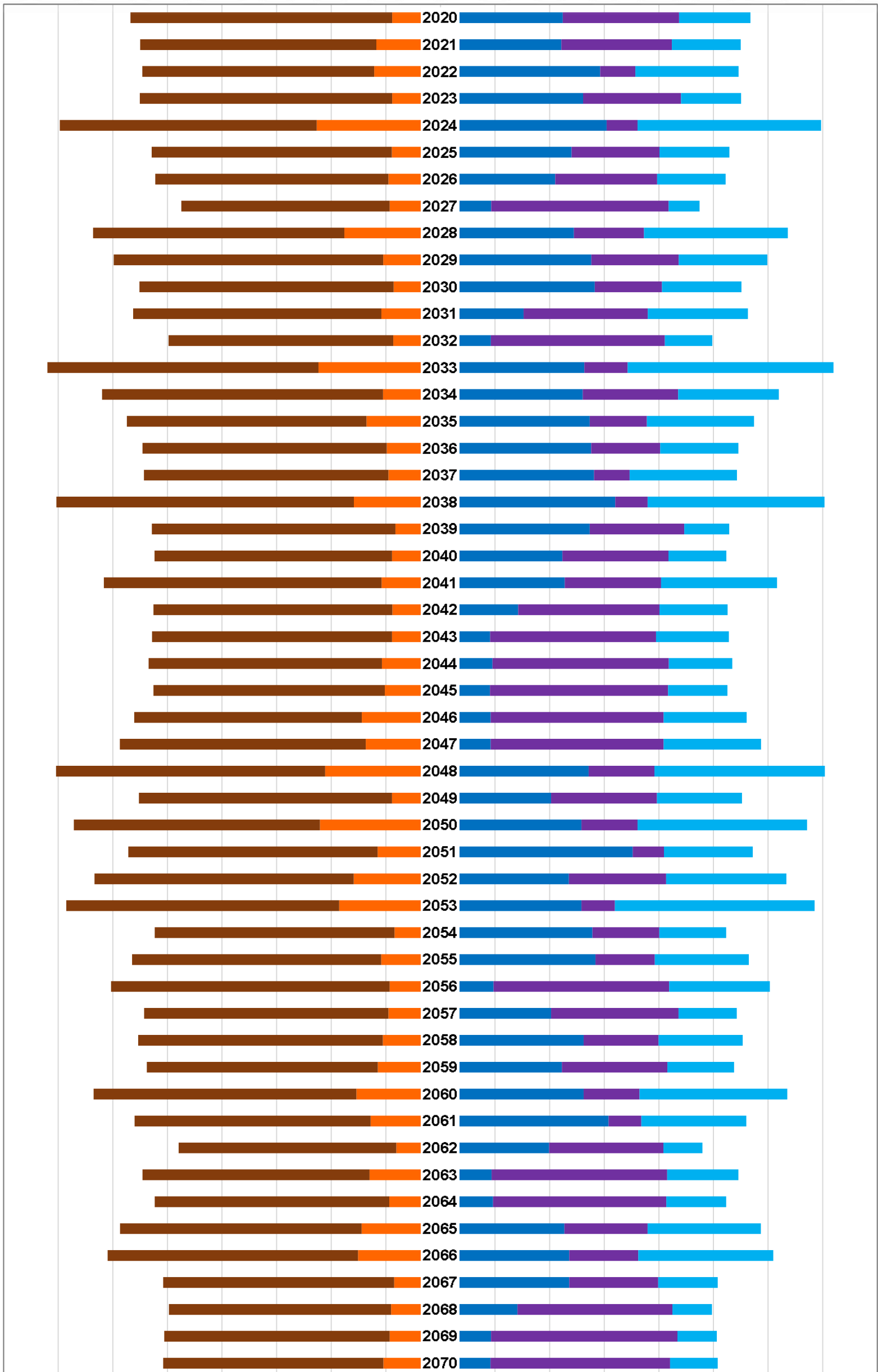


■ Lateral Subsurface Outflow    ■ Lateral Subsurface Inflow  
■ Pumping    ■ Net Deep Percolation  
■ Stream Leakage Inflow    ■ Injection  
■ GW Storage Change



**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

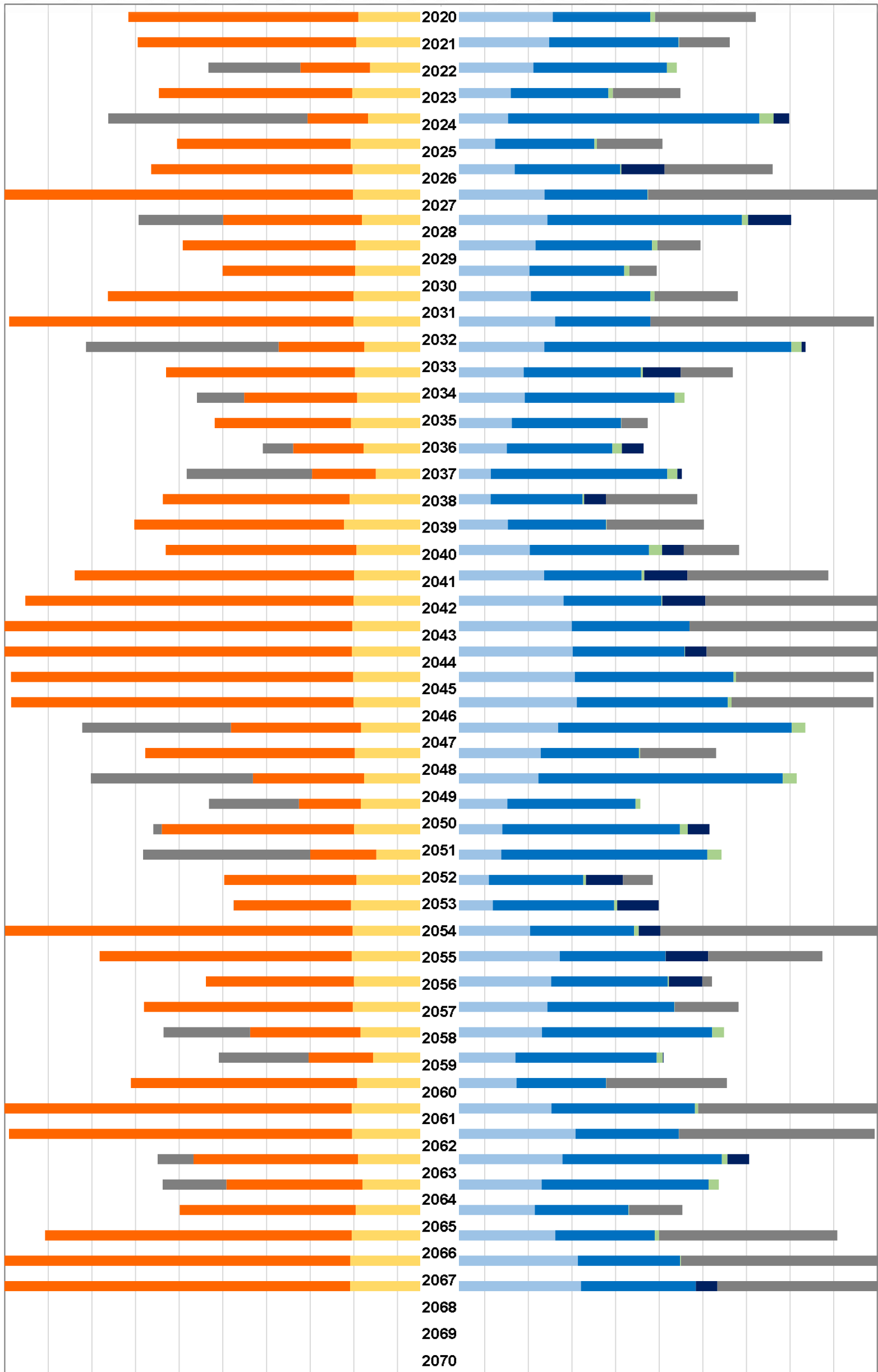
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

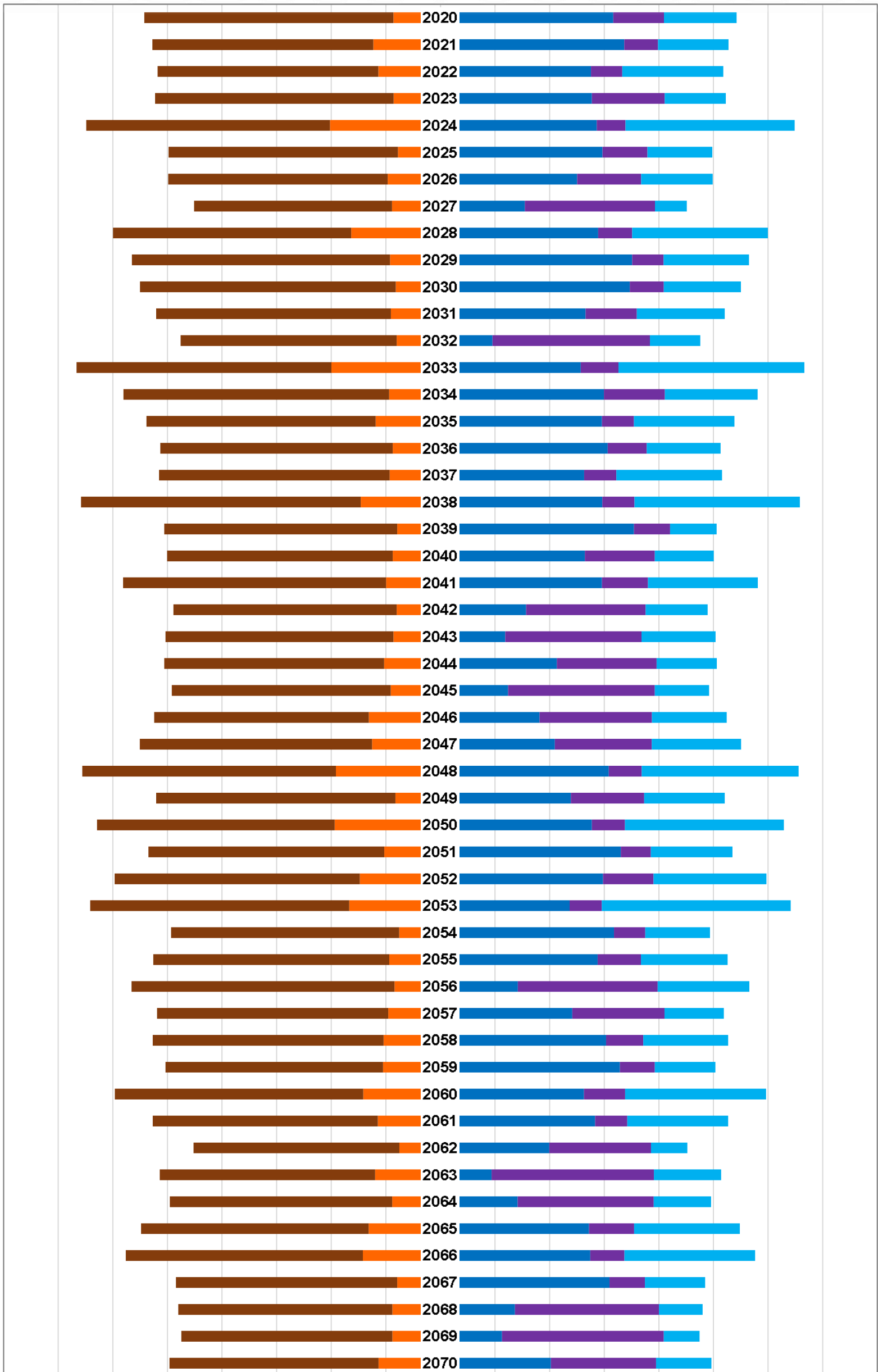
-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000



■ Lateral Subsurface Outflow    ■ Lateral Subsurface Inflow  
■ Pumping    ■ Net Deep Percolation  
■ Stream Leakage Inflow    ■ Injection  
■ GW Storage Change

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

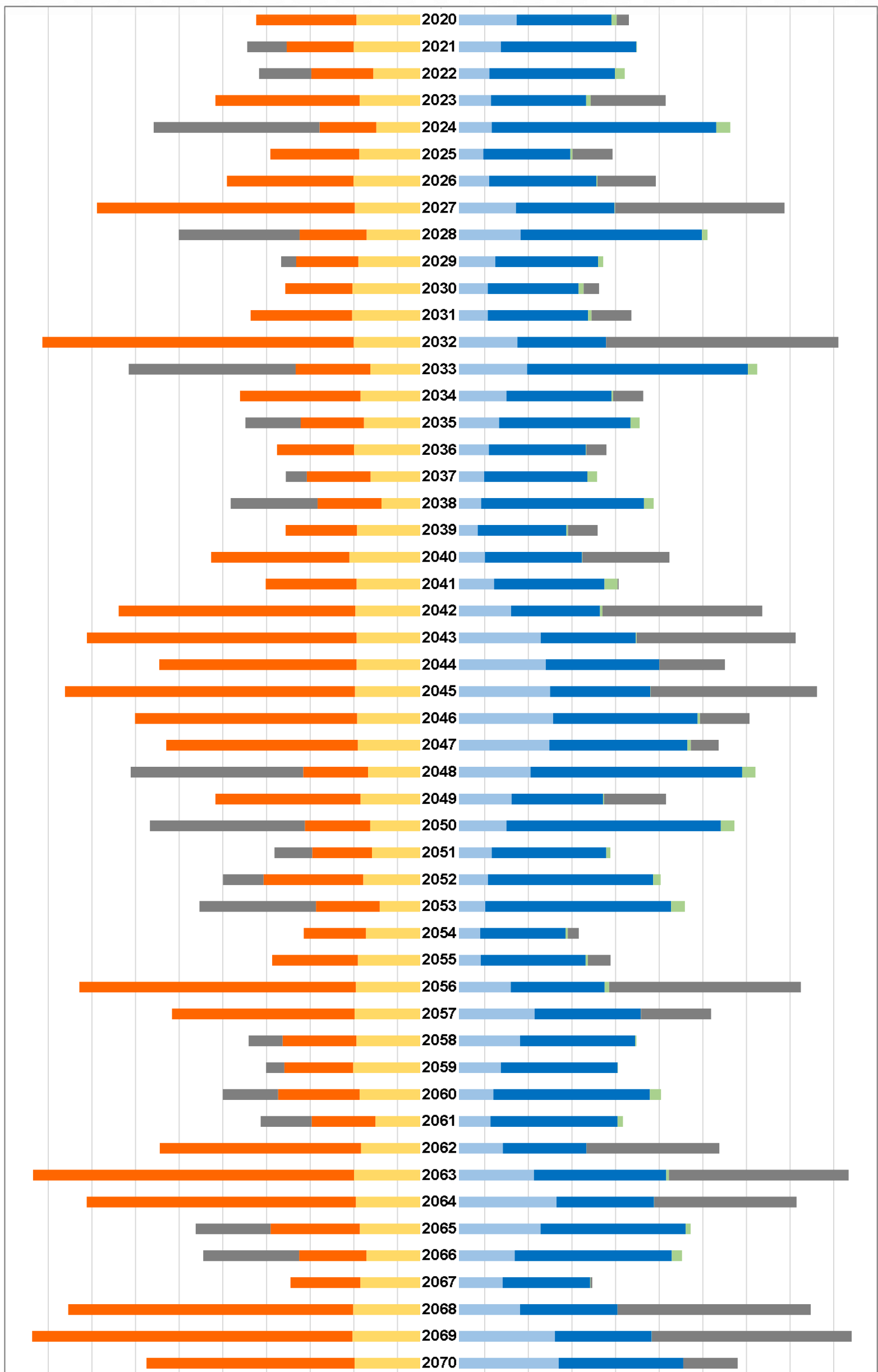
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

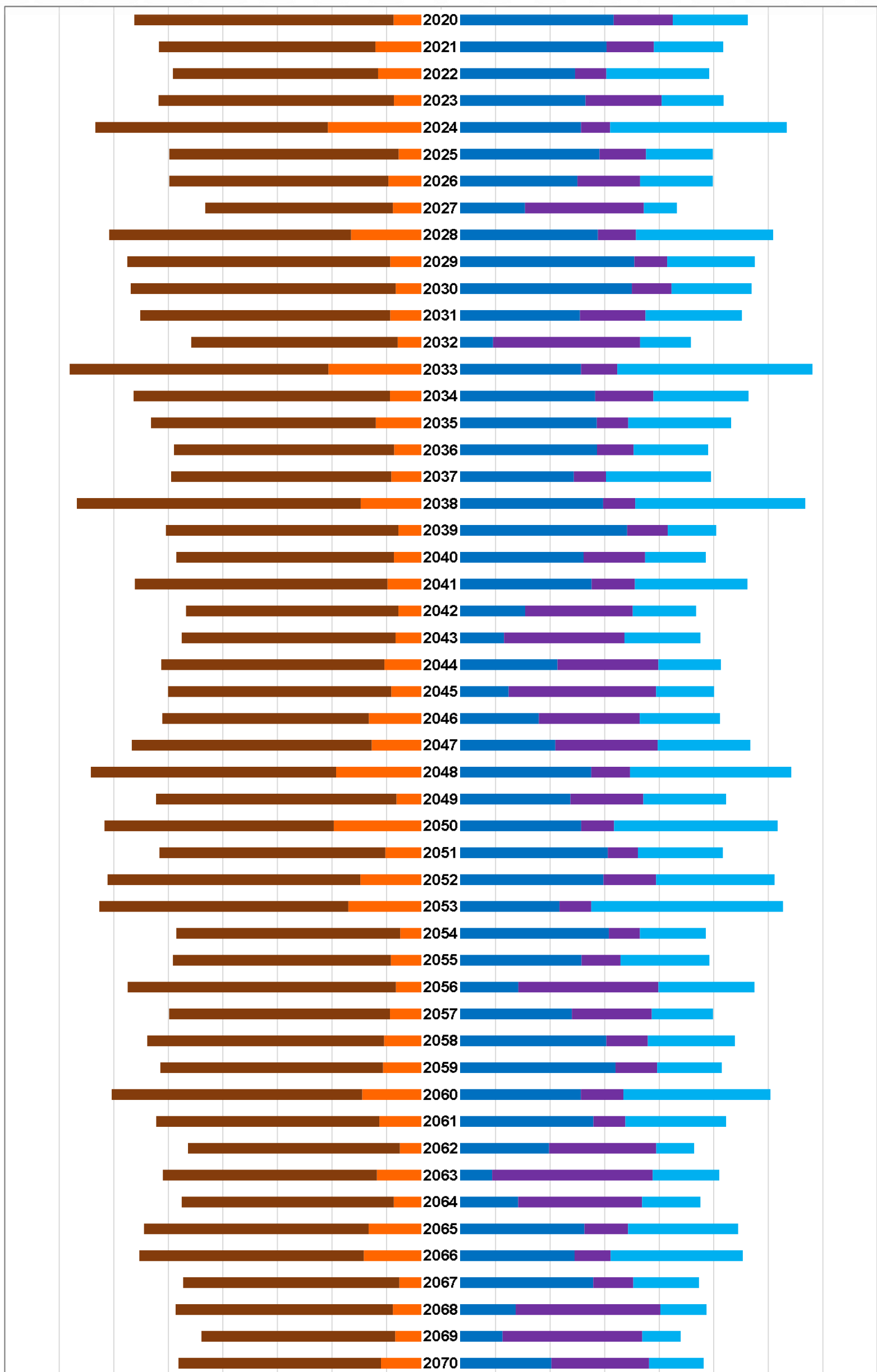
-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000



Lateral Subsurface Outflow
  Lateral Subsurface Inflow  
 Pumping
  Net Deep Percolation  
 Stream Leakage Inflow
  GW Storage Change

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

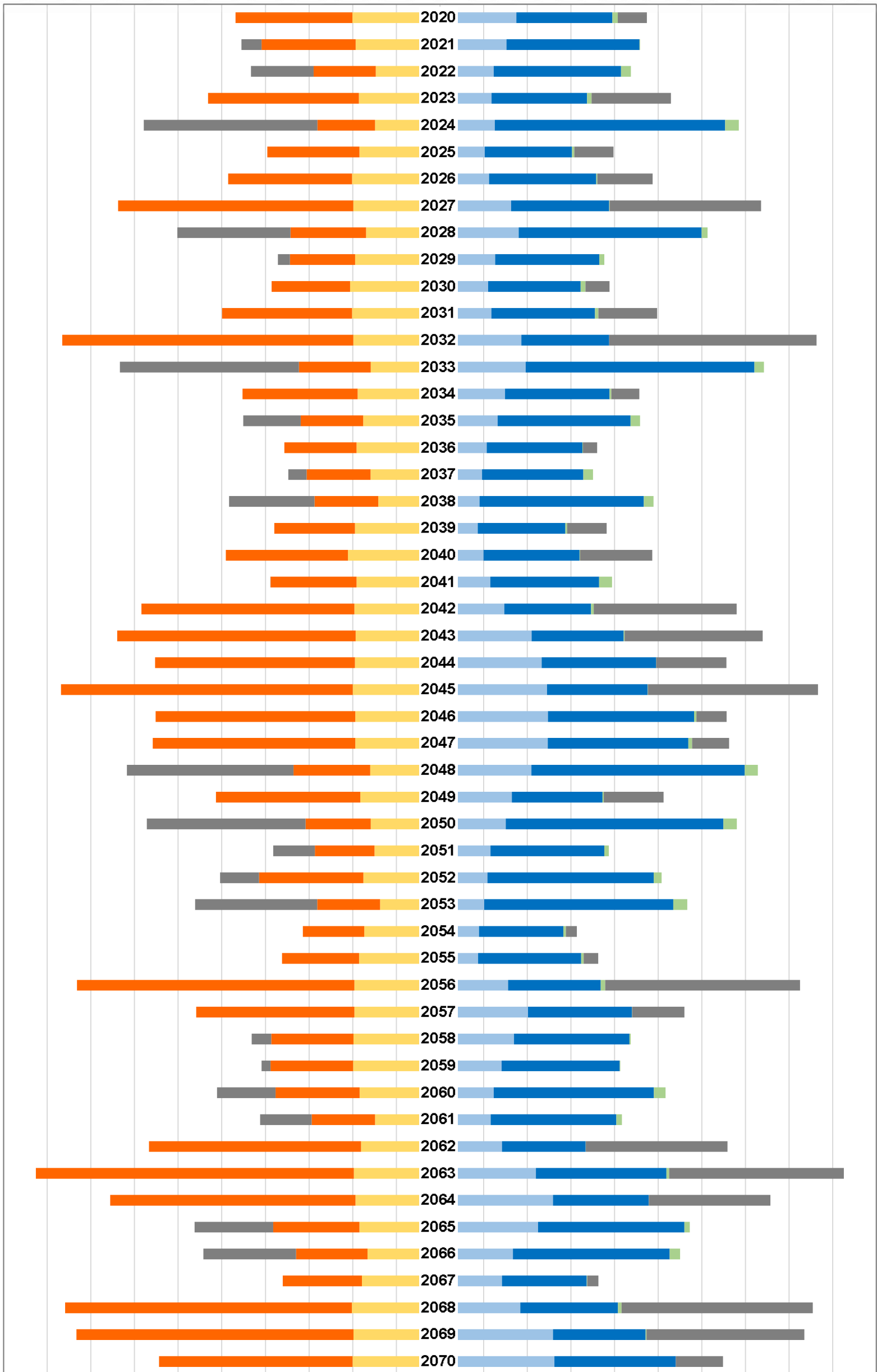
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

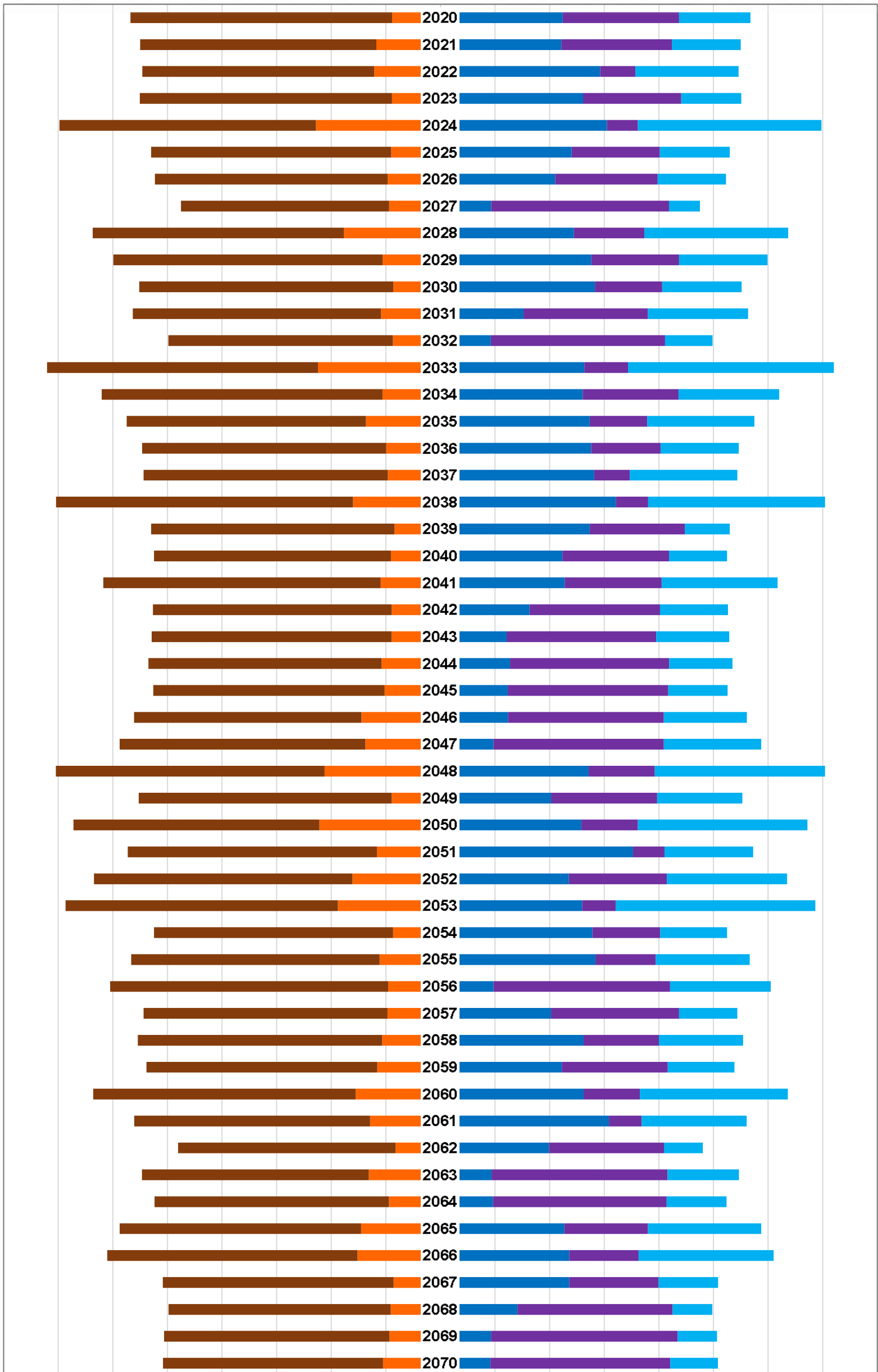
-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000



Lateral Subsurface Outflow      Lateral Subsurface Inflow  
 Pumping      Net Deep Percolation  
 Stream Leakage Inflow      GW Storage Change

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

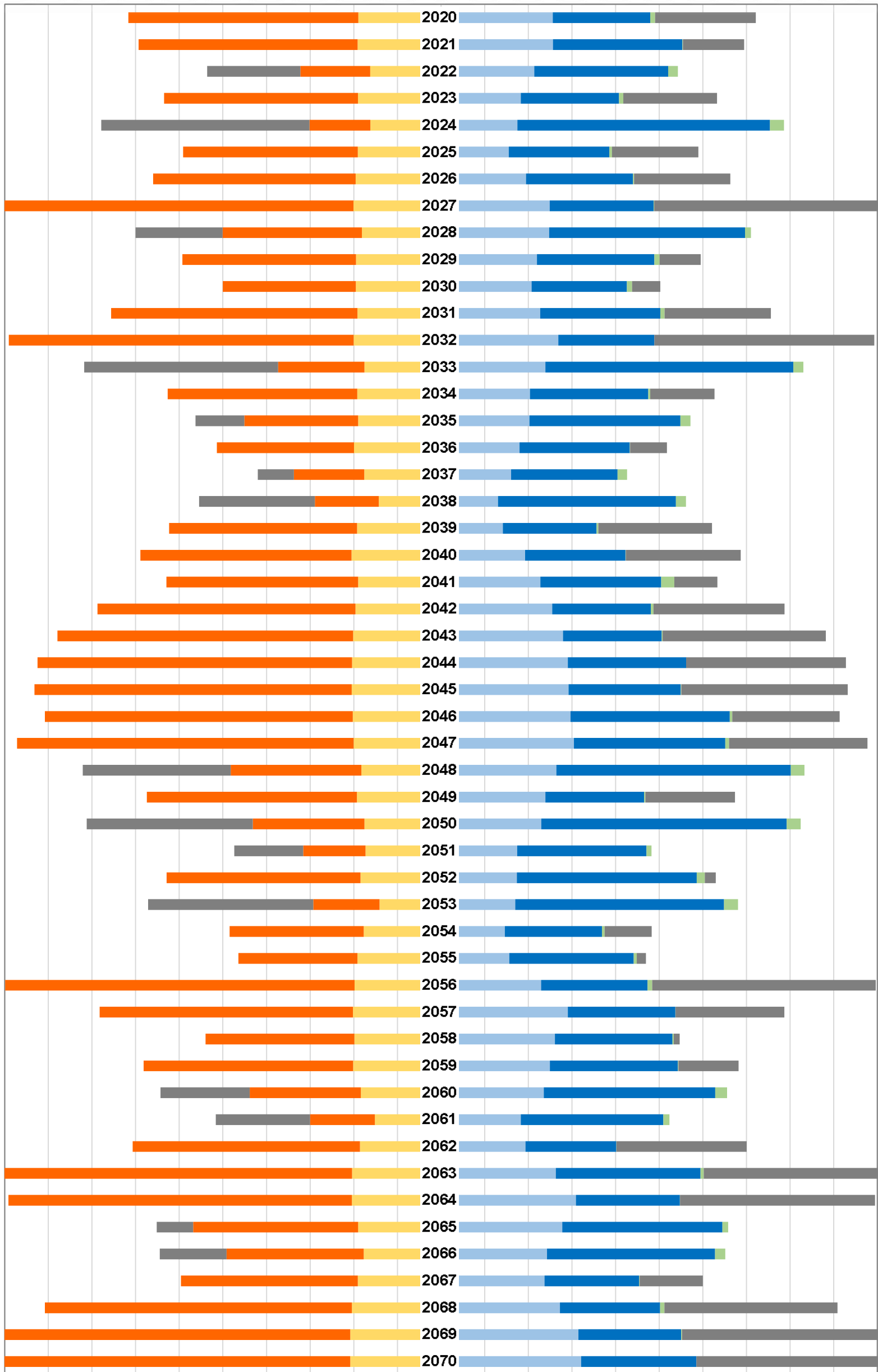
-2,000 -1,750 -1,500 -1,250 -1,000 -750 -500 -250 0 250 500 750 1,000 1,250 1,500 1,750 2,000



■ Deep Percolation      ■ Surface Water  
■ Evapotranspiration      ■ Pumping  
■ Precipitation

**Outflow** **Volume (Thousand Acre-Feet)** **Inflow**

-1,000 -900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200 300 400 500 600 700 800 900 1,000

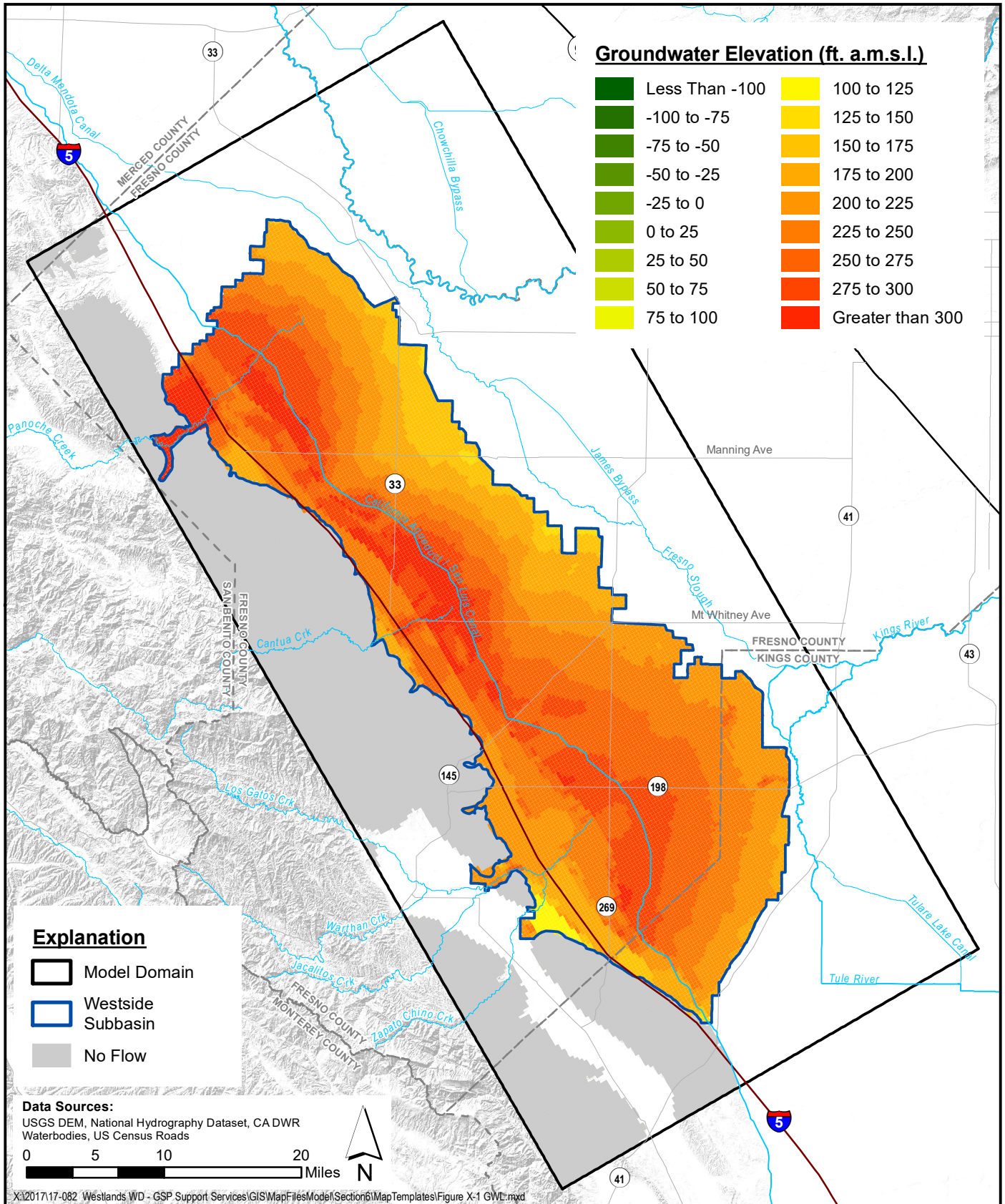


Lateral Subsurface Outflow
  Lateral Subsurface Inflow  
 Pumping
  Net Deep Percolation  
 Stream Leakage Inflow
  GW Storage Change



# **Appendix E:**

## **No Climate Change Model Projection Spatial Model Output**



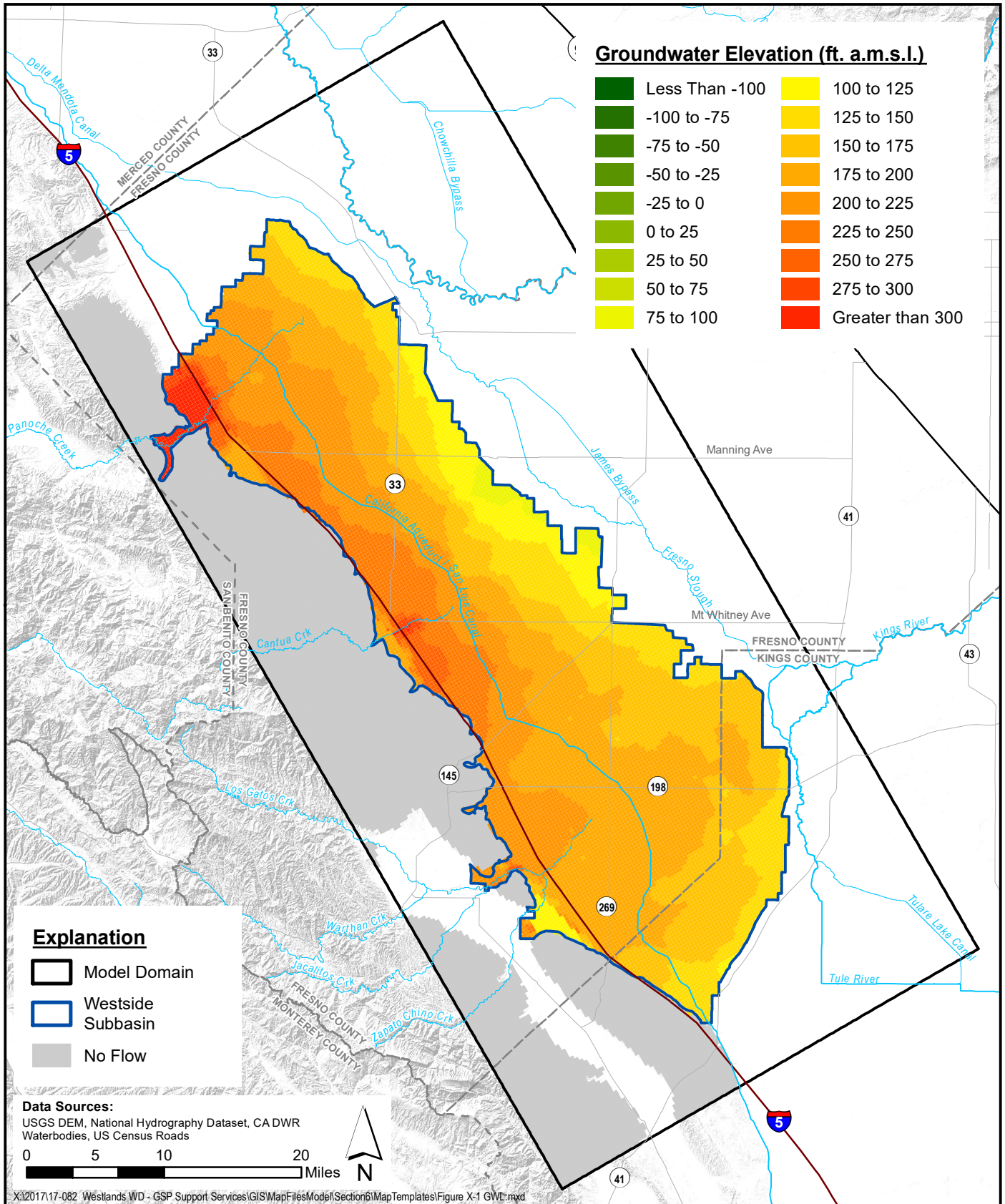
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - Baseline (January 2040)**

Figure E-1



SGMA Sustainability Analyses  
 Westside Subbasin



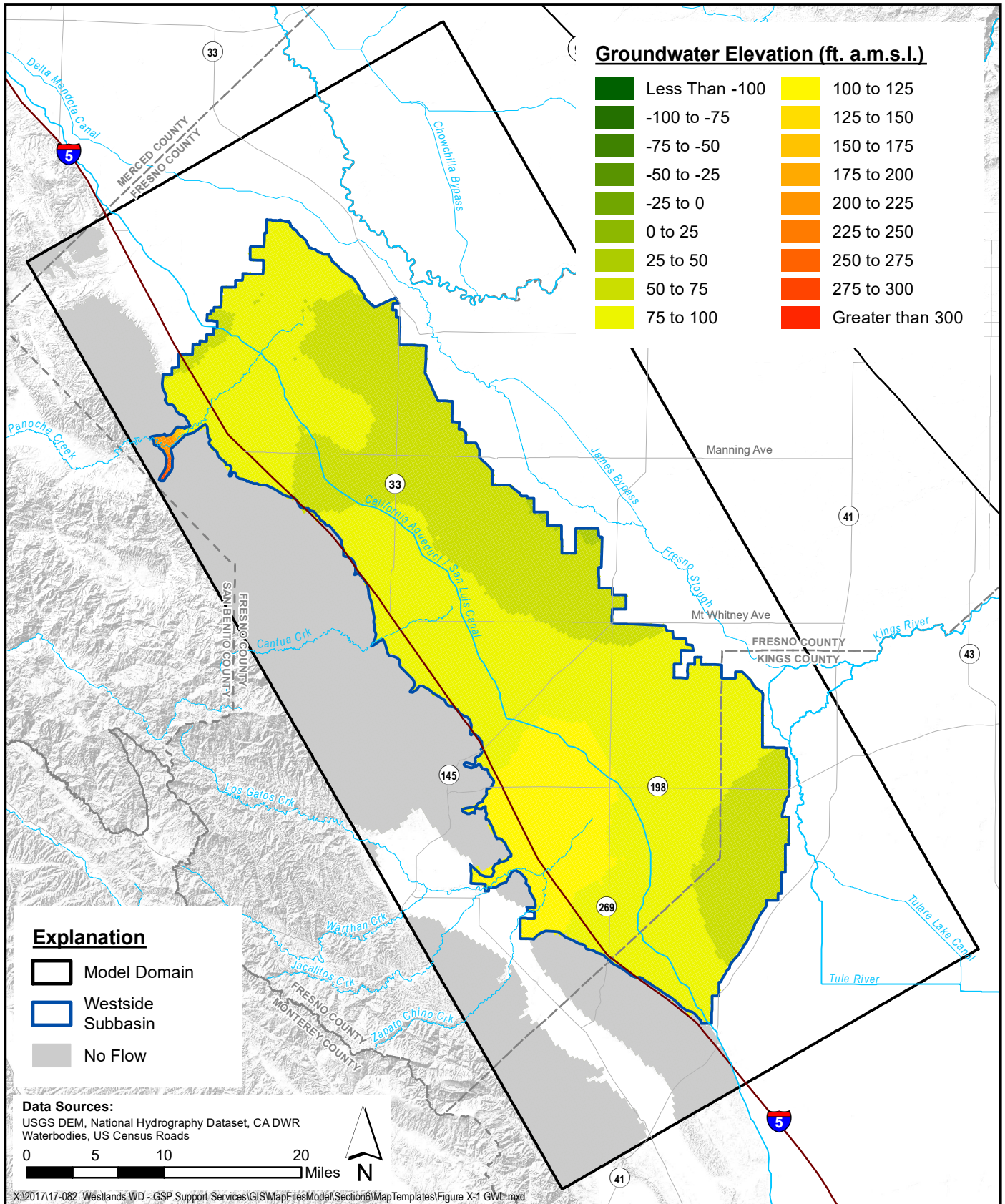


**Simulated Groundwater Elevation - Upper Aquifer  
 Climate Change - Baseline (January 2040)**

Figure E-2



SGMA Sustainability Analyses  
 Westside Subbasin



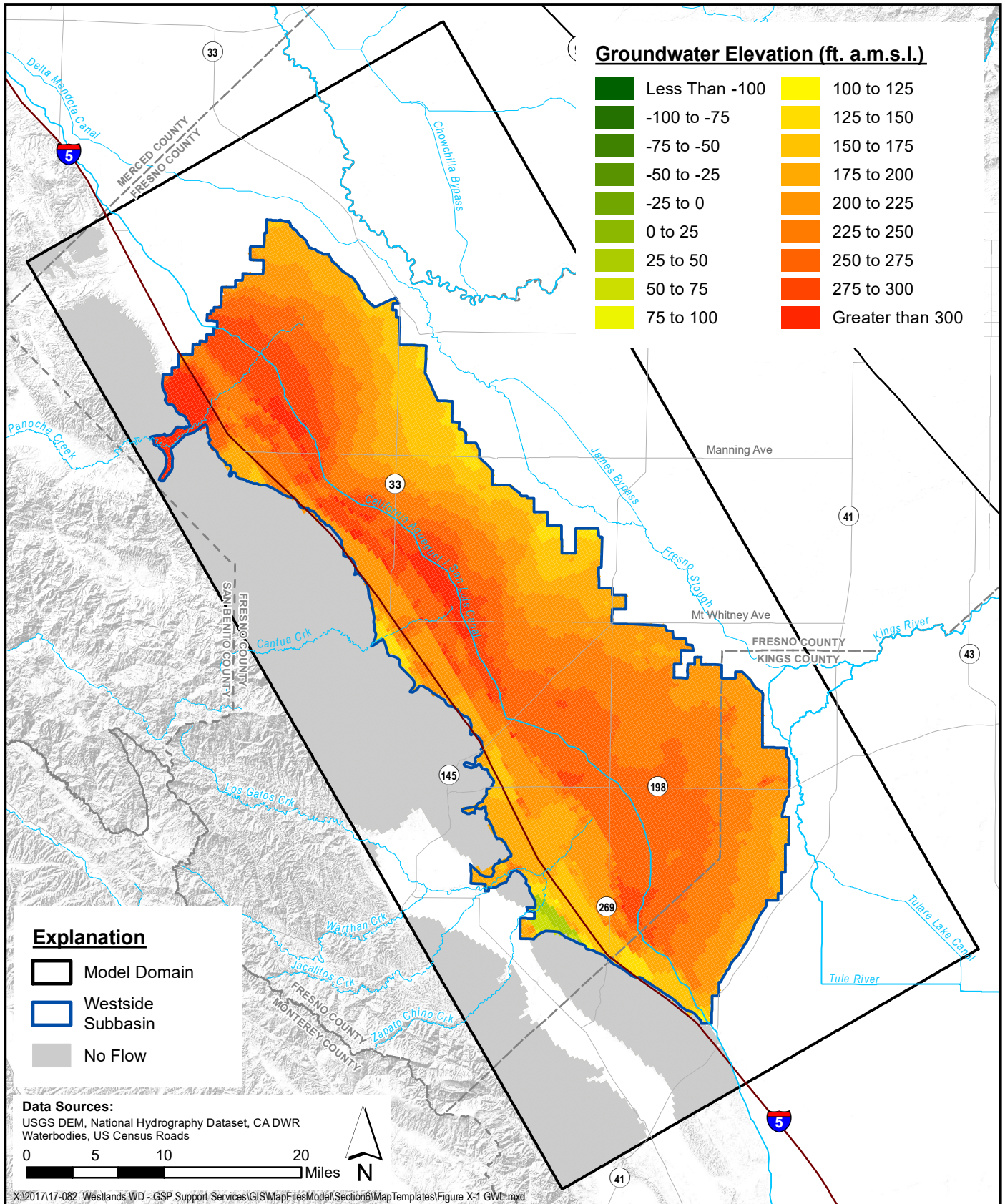
**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - Baseline (January 2040)**

Figure E-3



SGMA Sustainability Analyses  
 Westside Subbasin





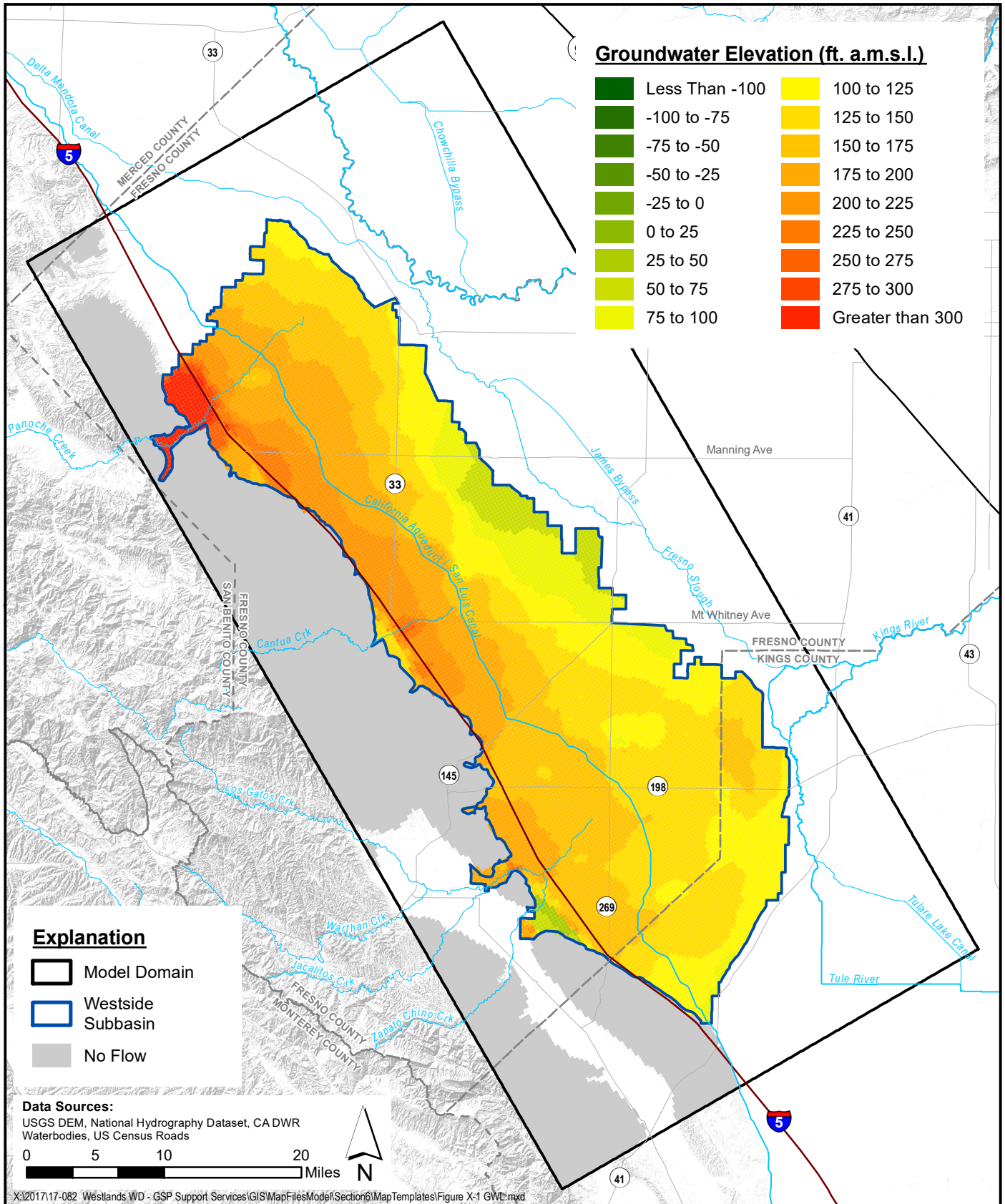
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - Baseline (January 2071)**

Figure E-4



SGMA Sustainability Analyses  
 Westside Subbasin





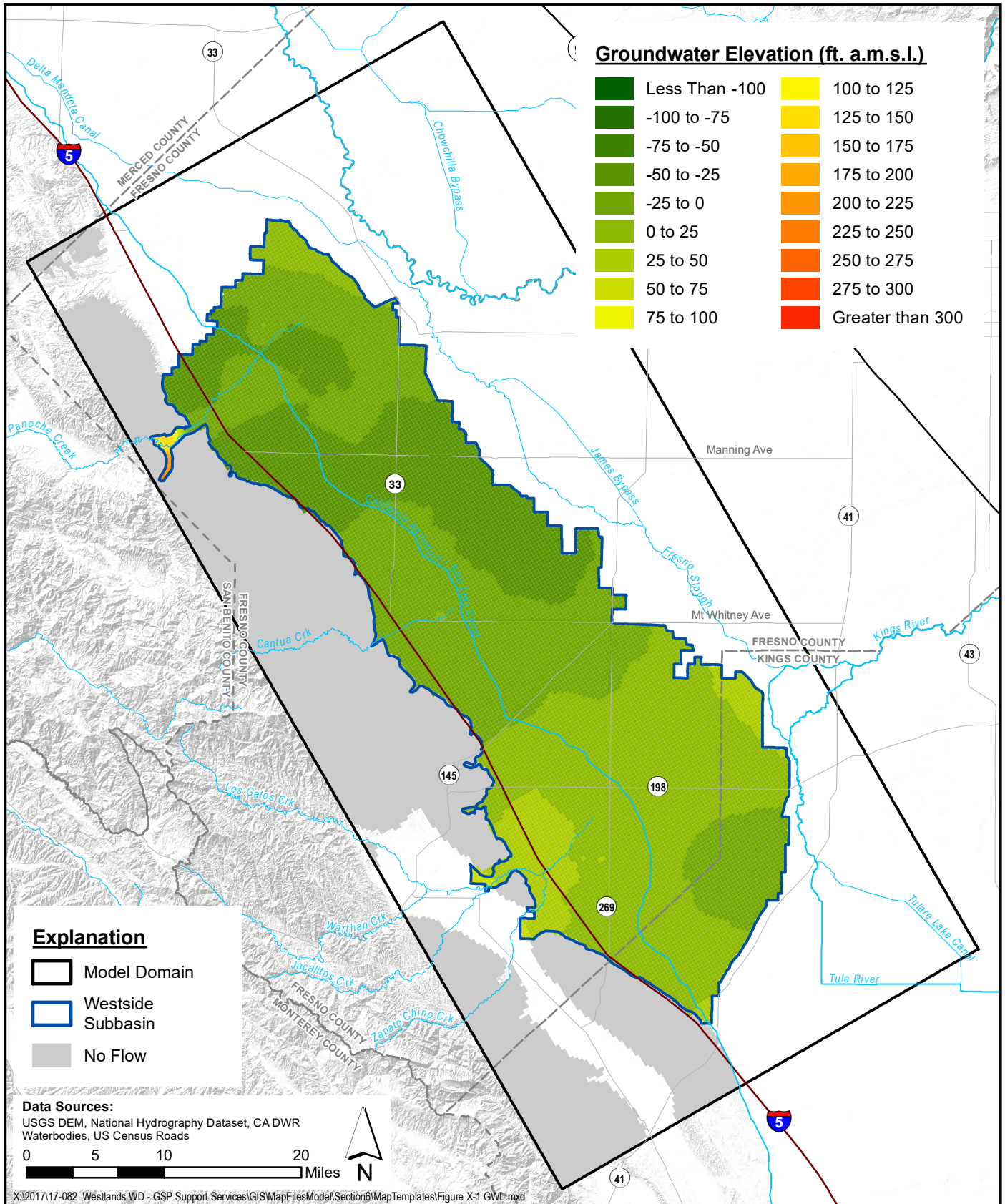
**Simulated Groundwater Elevation - Upper Aquifer  
 No Climate Change - Baseline (January 2071)**

Figure E-5



SGMA Sustainability Analyses  
 Westside Subbasin



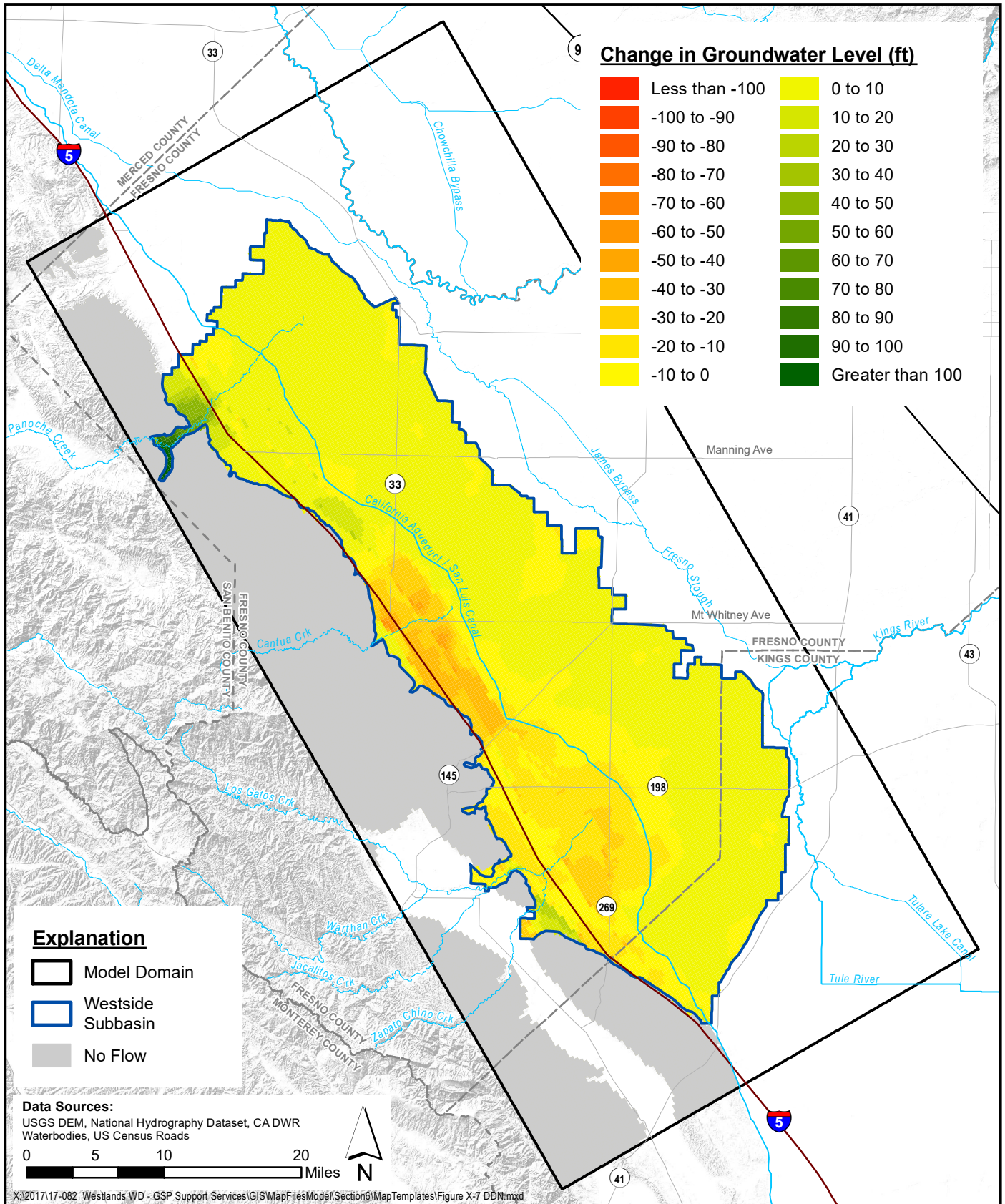


**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - Baseline (January 2071)**

Figure E-6



SGMA Sustainability Analyses  
 Westside Subbasin



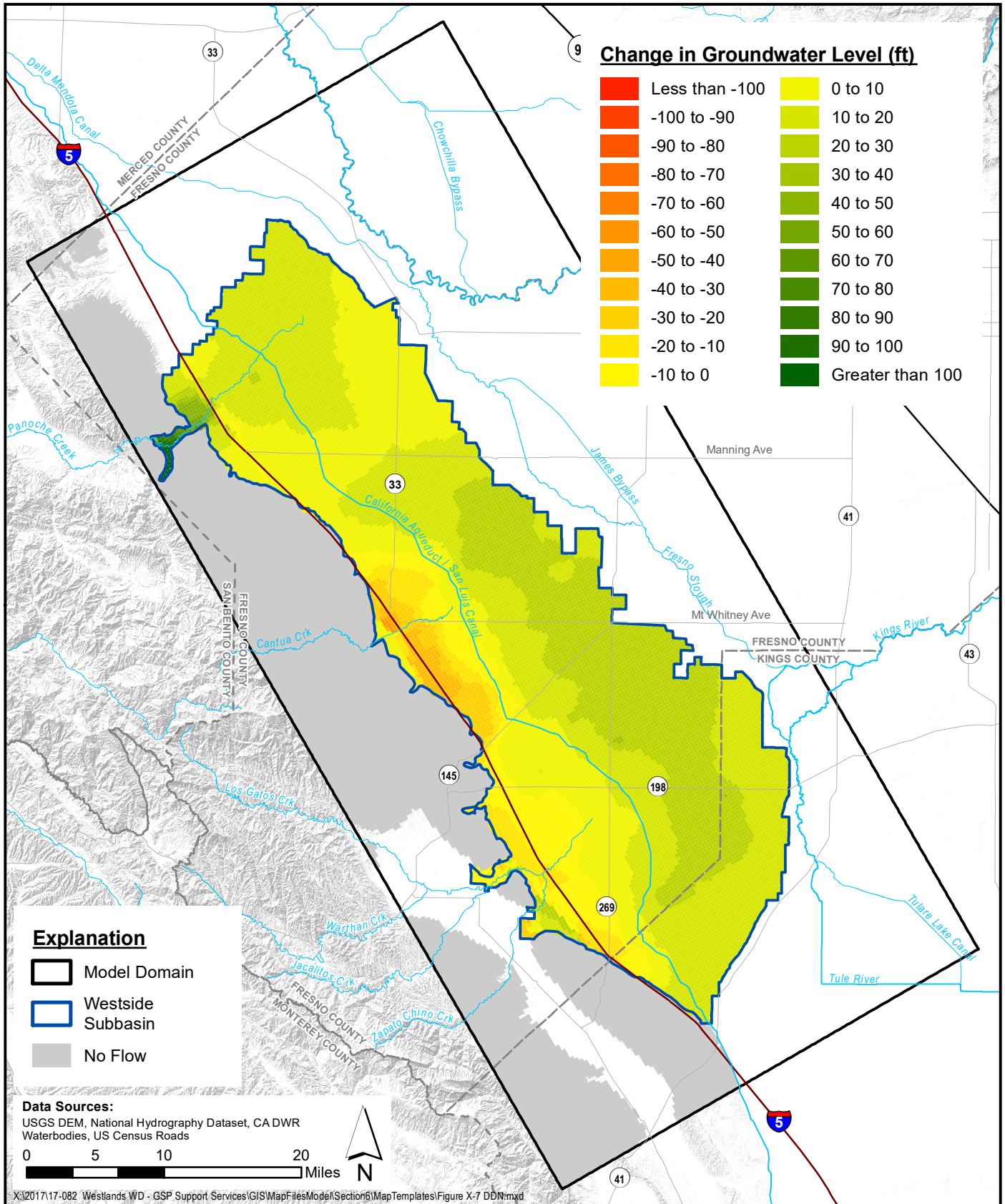
**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - Baseline (2020 - 2040)**

Figure E-7



SGMA Sustainability Analyses  
 Westside Subbasin





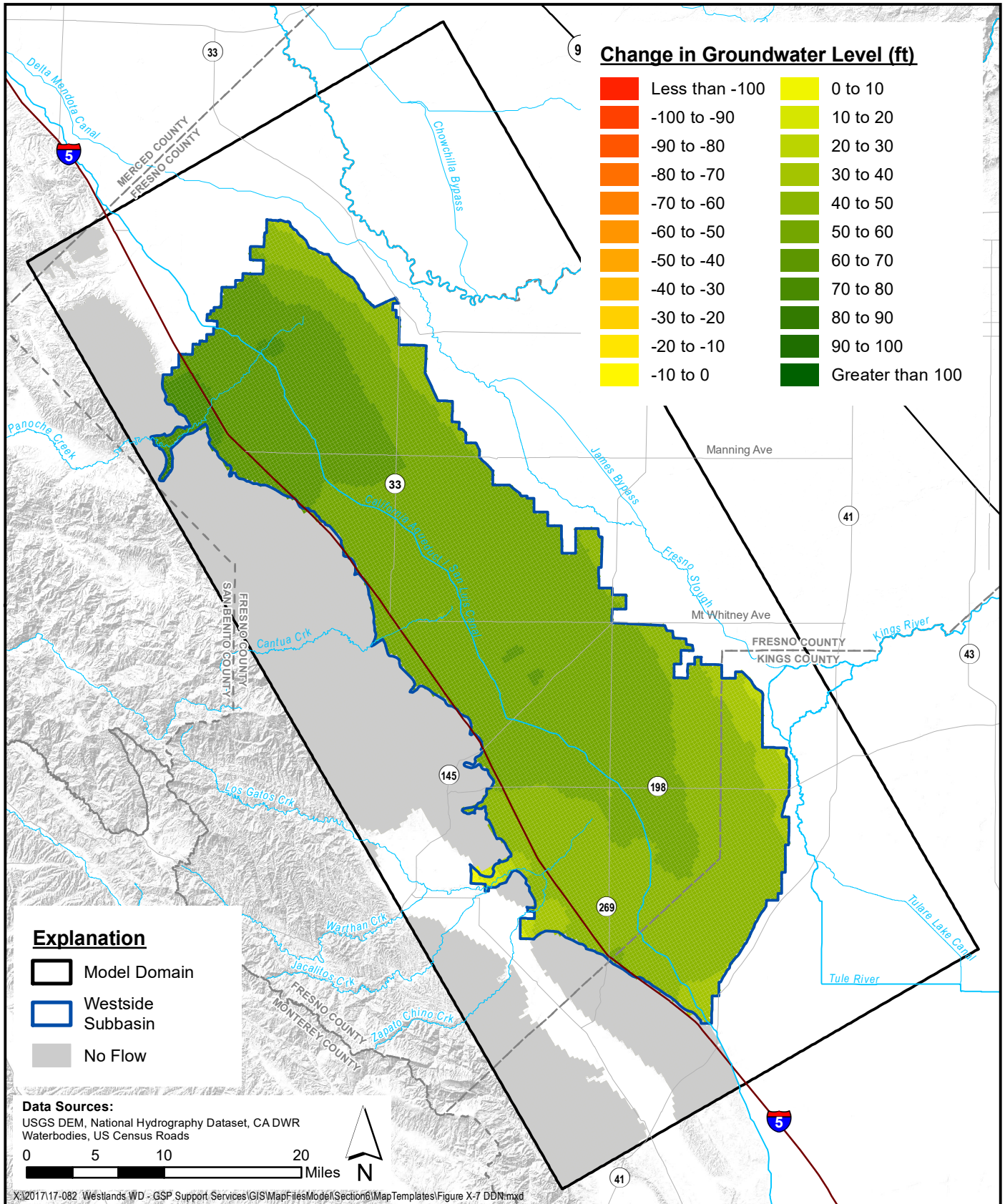
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - Baseline (2020 - 2040)**

Figure E-8



SGMA Sustainability Analyses  
 Westside Subbasin



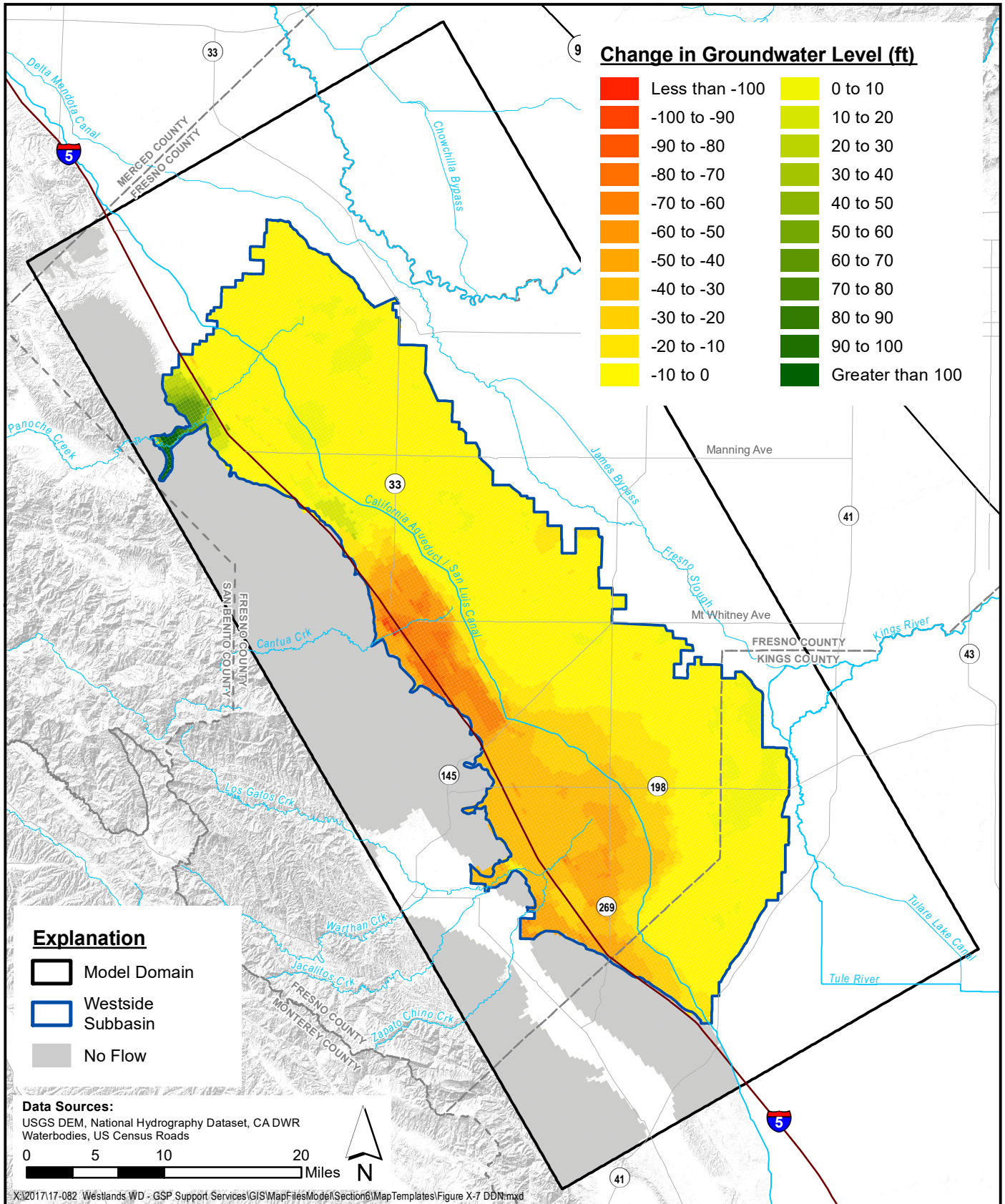


**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - Baseline (2020 - 2040)**

Figure E-9



SGMA Sustainability Analyses  
 Westside Subbasin



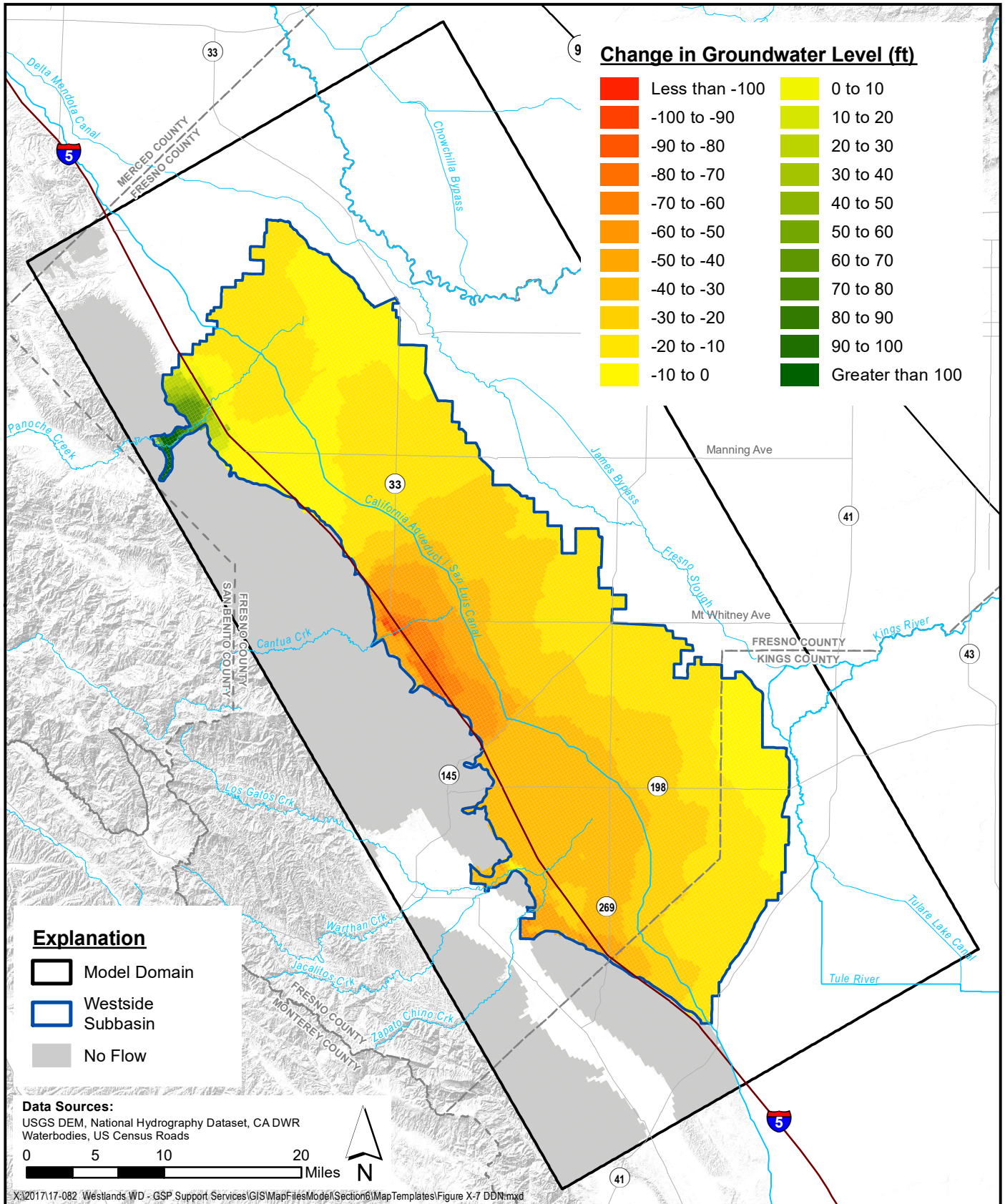
**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - Baseline (2020 - 2070)**

Figure E-10



SGMA Sustainability Analyses  
 Westside Subbasin



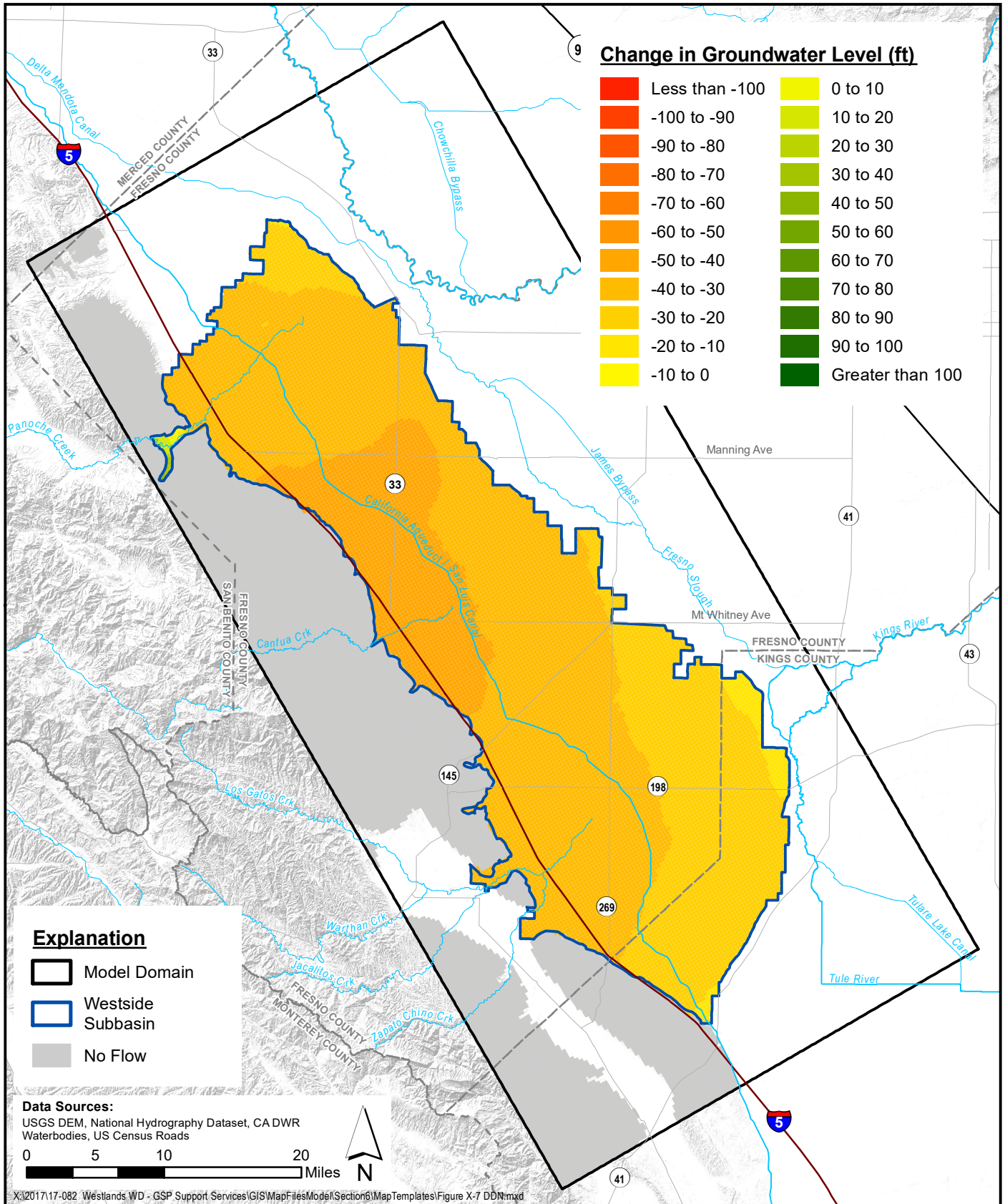


**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - Baseline (2020 - 2070)**

Figure E-11



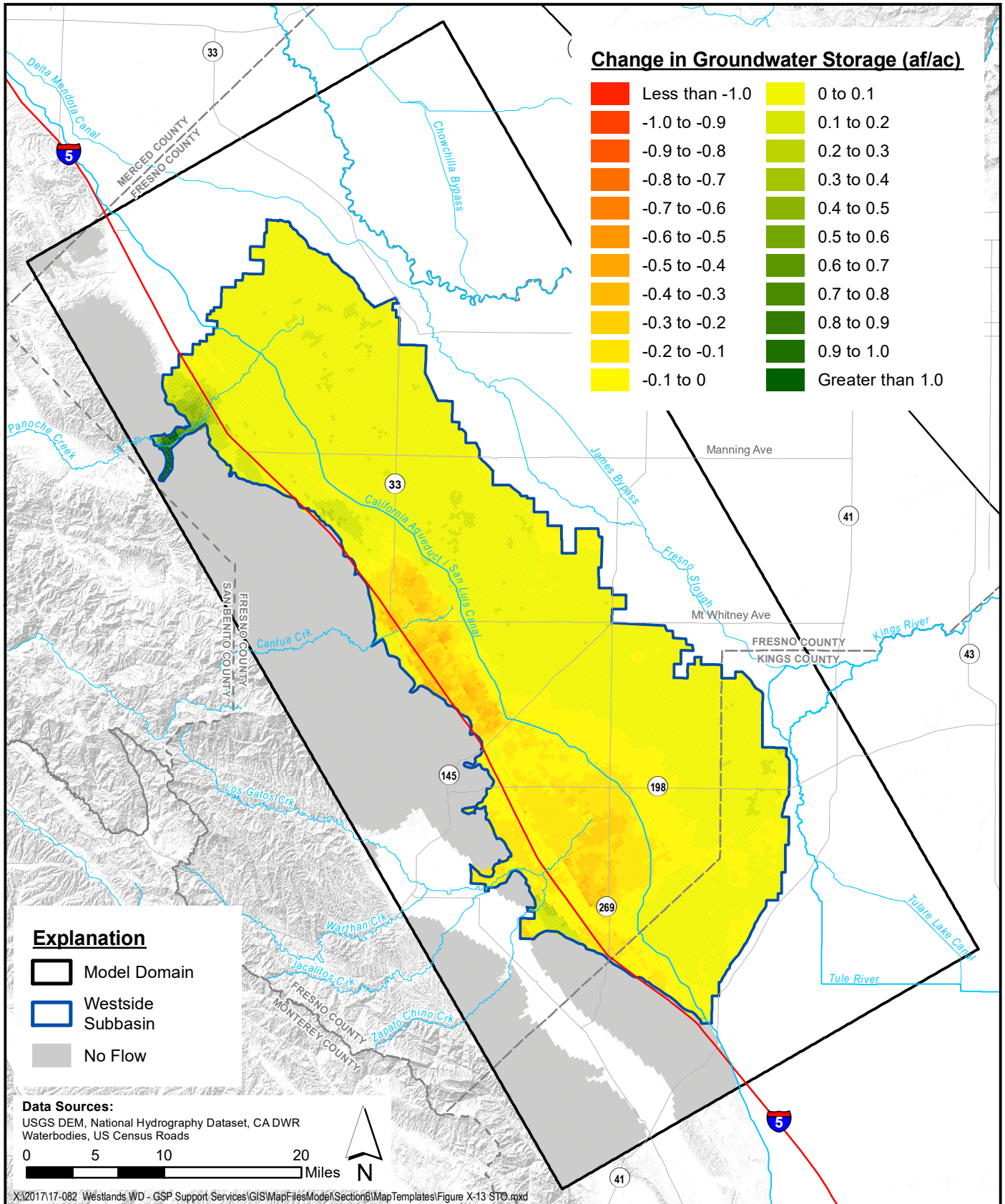
SGMA Sustainability Analyses  
 Westside Subbasin



**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - Baseline (2020 - 2070)**

Figure E-12



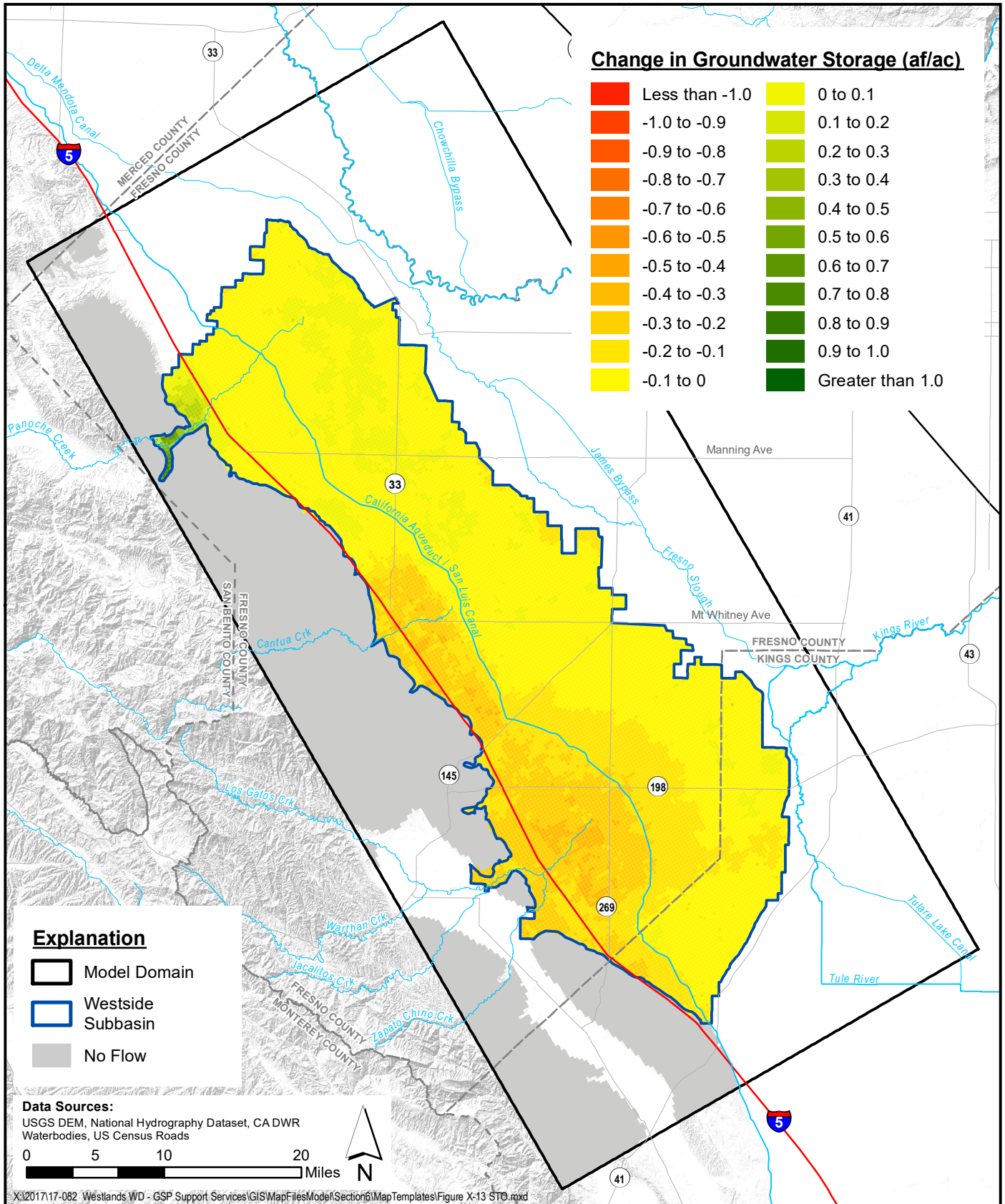


**Simulated Change in Groundwater Storage  
 No Climate Change - Baseline (2020 - 2040)**

Figure E-13



SGMA Sustainability Analyses  
 Westside Subbasin



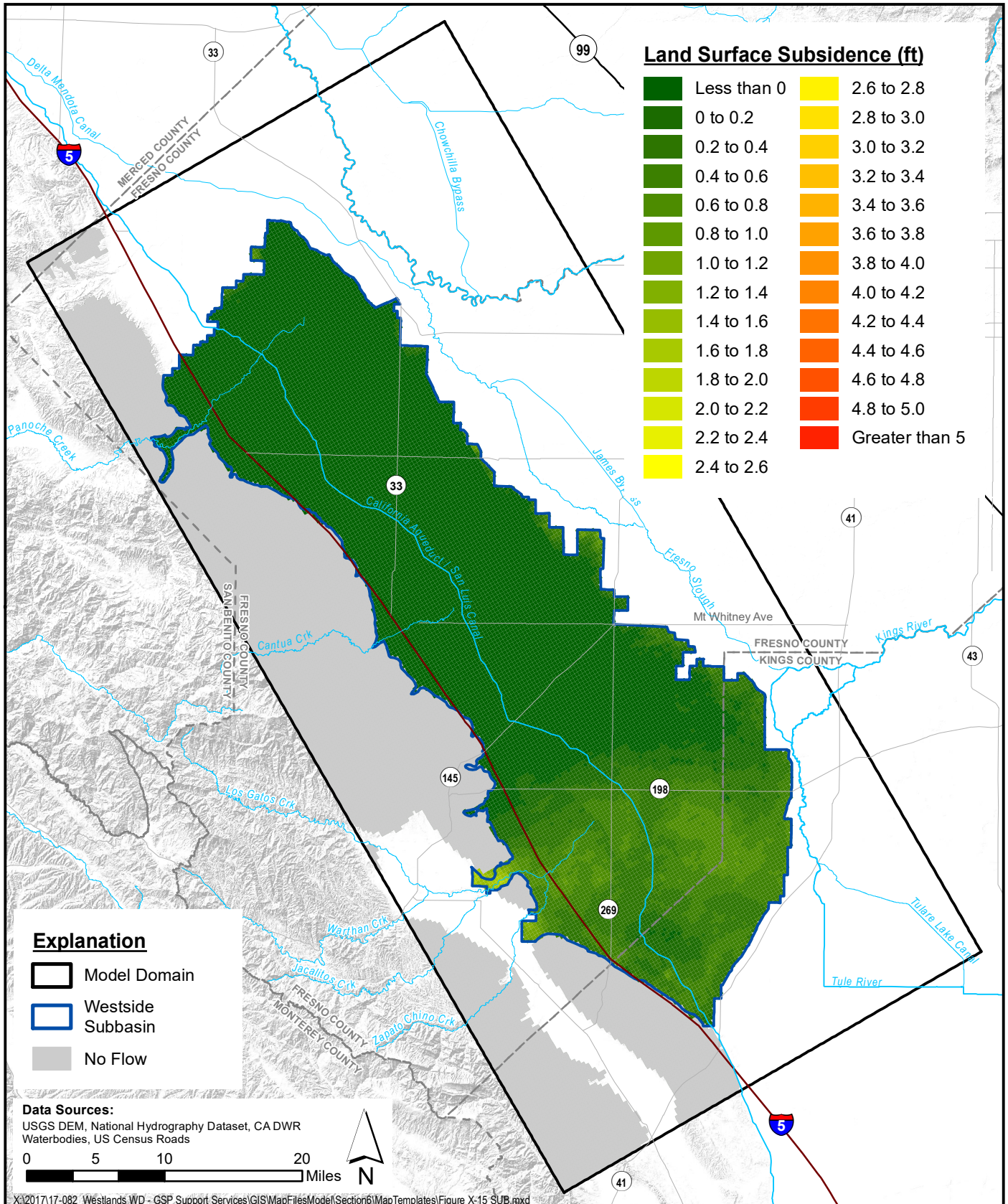
**Simulated Change in Groundwater Storage  
 No Climate Change - Baseline (2020 - 2070)**

Figure E-14



SGMA Sustainability Analyses  
 Westside Subbasin



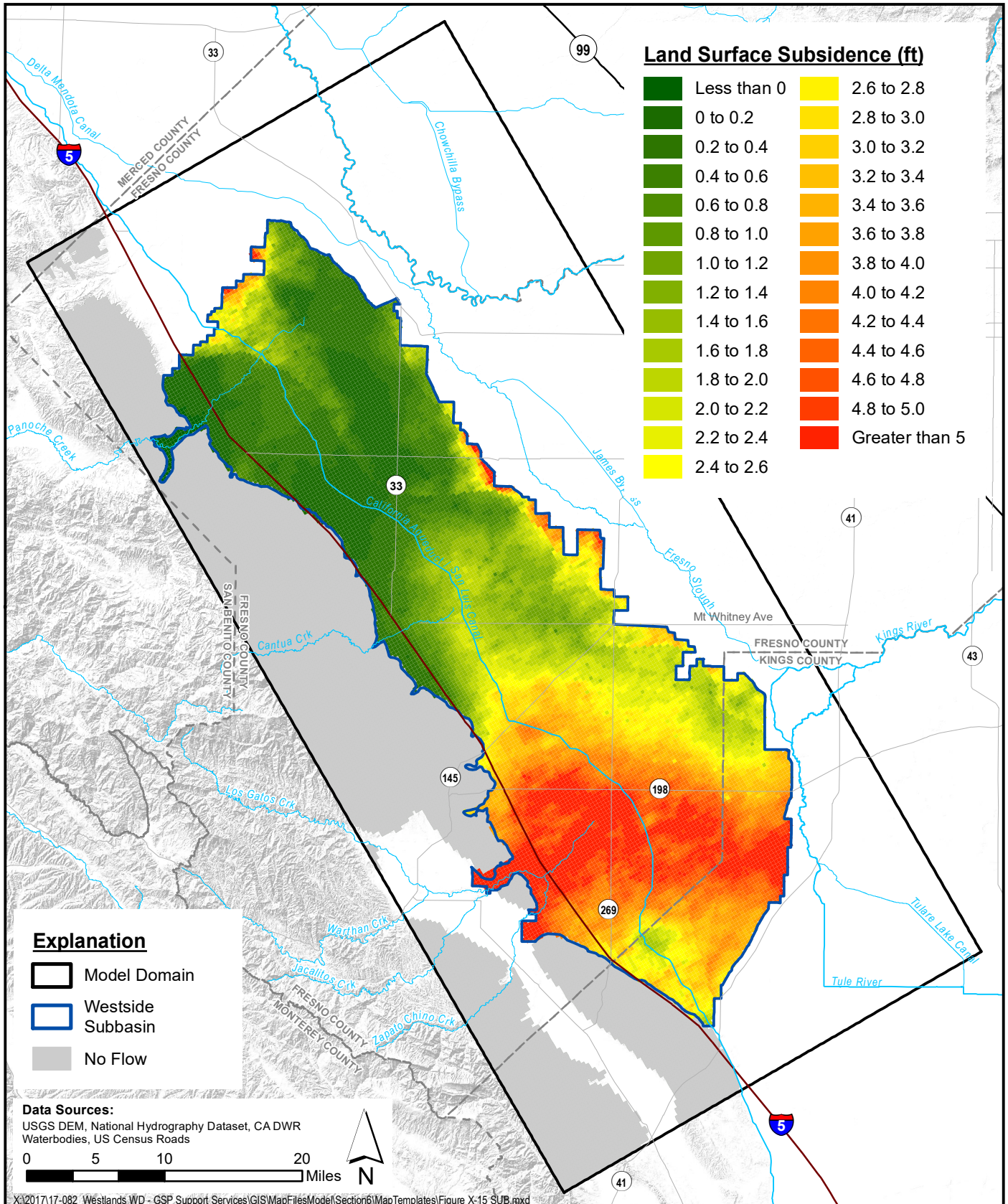


**Simulated Land Surface Subsidence  
 No Climate Change - Baseline (2020 - 2040)**

*SGMA Sustainability Analyses  
 Westside Subbasin*

**Figure E-15**





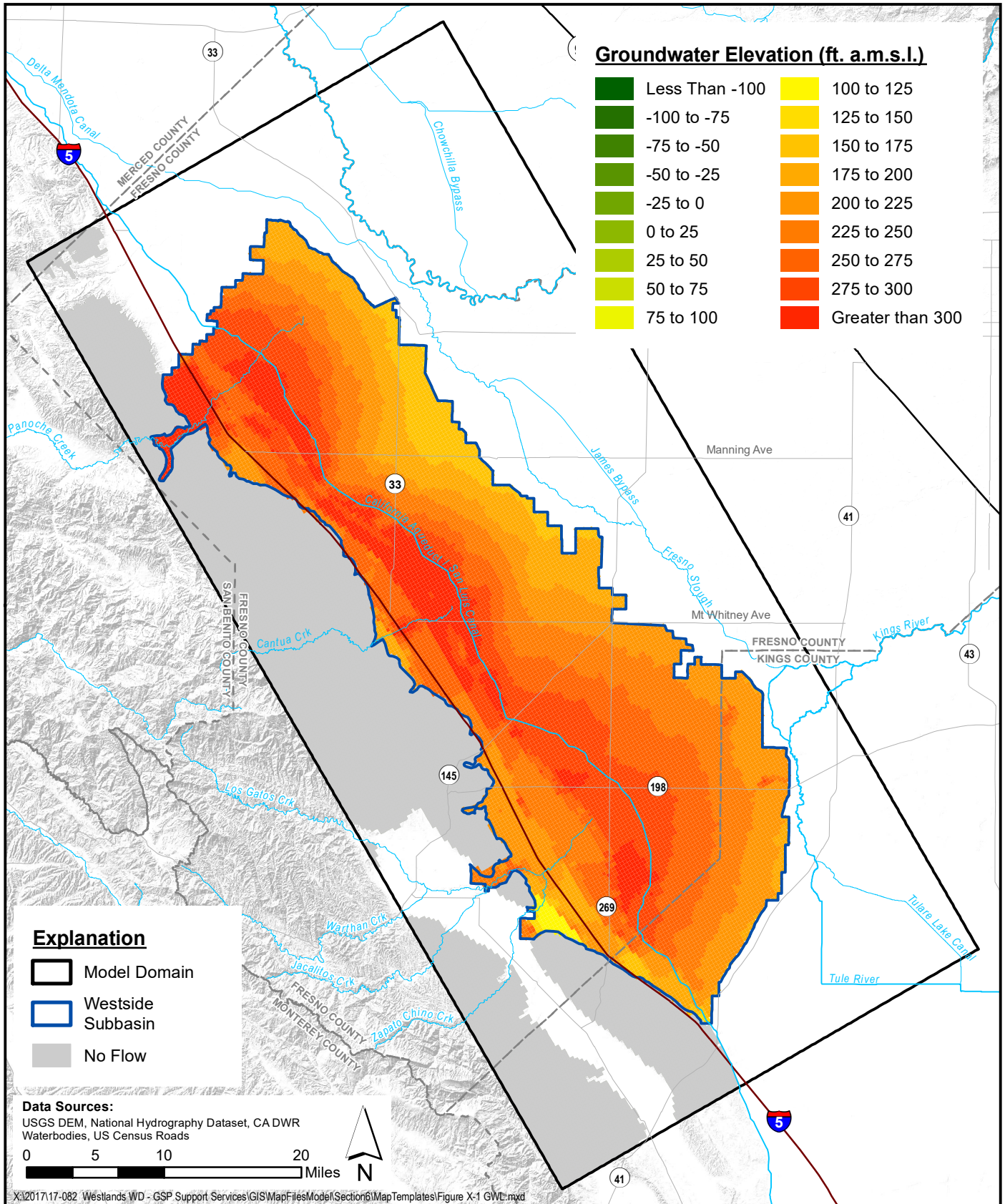
**Simulated Land Surface Subsidence  
 No Climate Change - Baseline (2020 - 2070)**

Figure E-16



SGMA Sustainability Analyses  
 Westside Subbasin





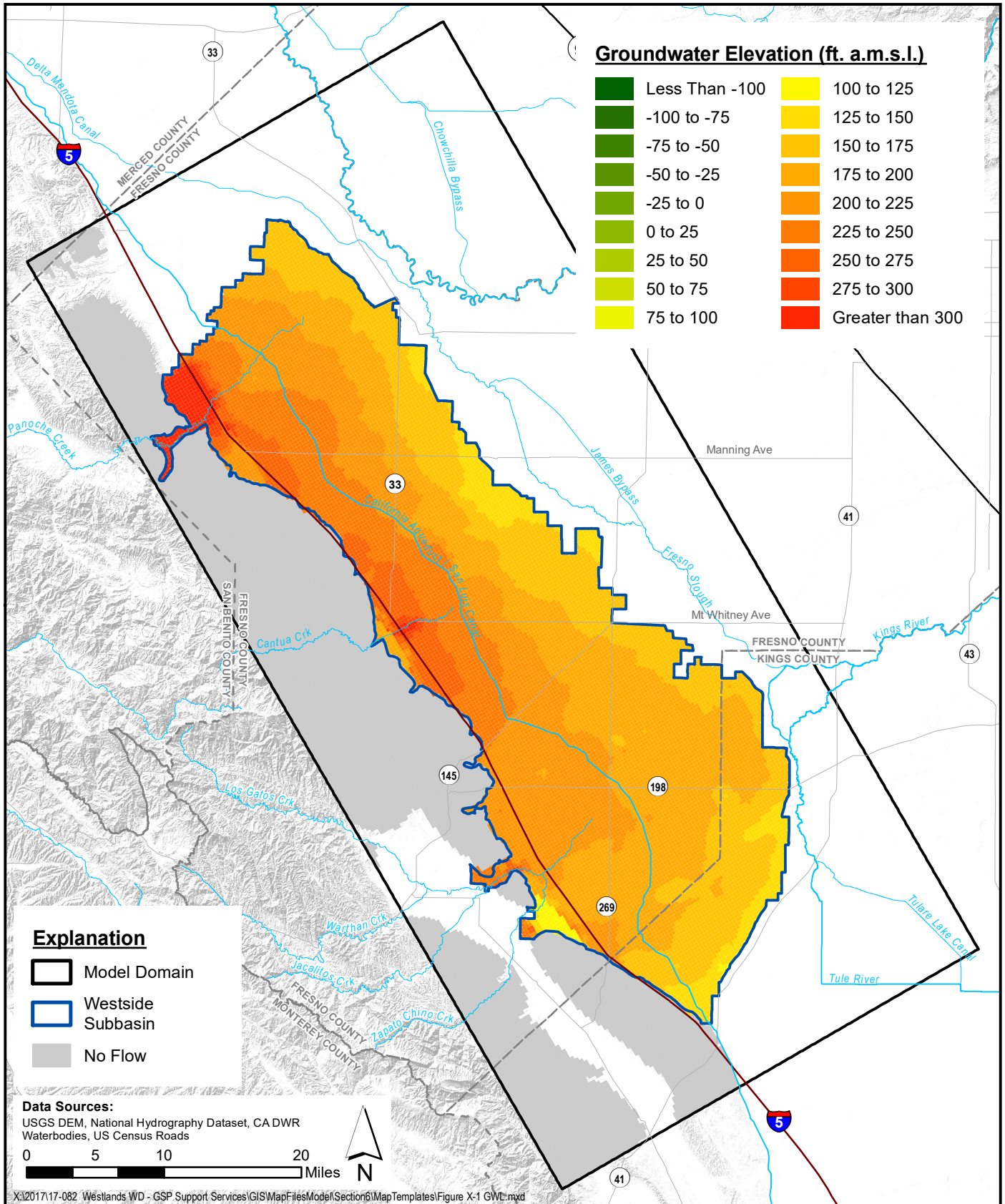
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No. 2 (January 2040)**

Figure E-17



SGMA Sustainability Analyses  
 Westside Subbasin



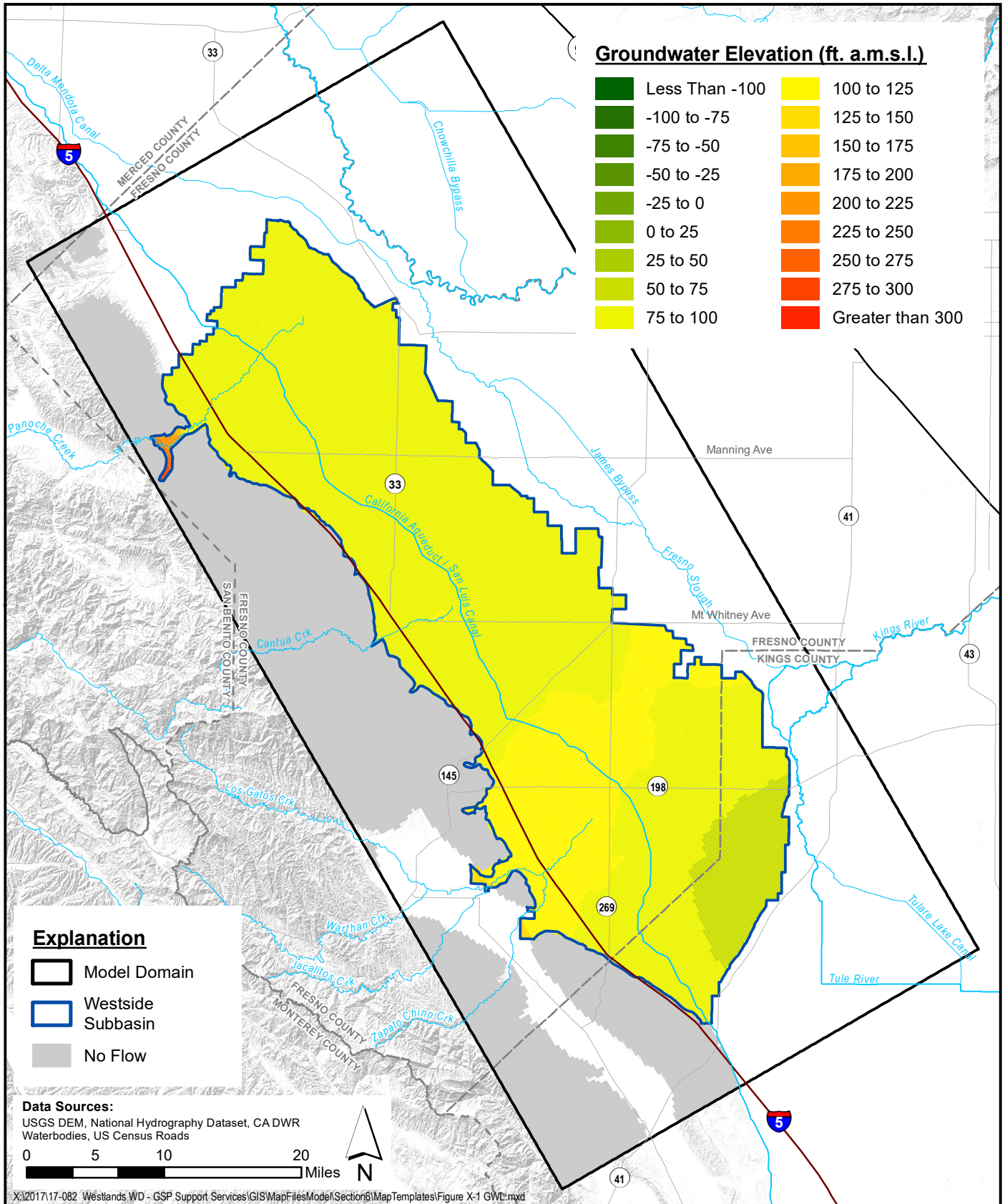


**Simulated Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.2 (January 2040)**

Figure E-18



SGMA Sustainability Analyses  
 Westside Subbasin



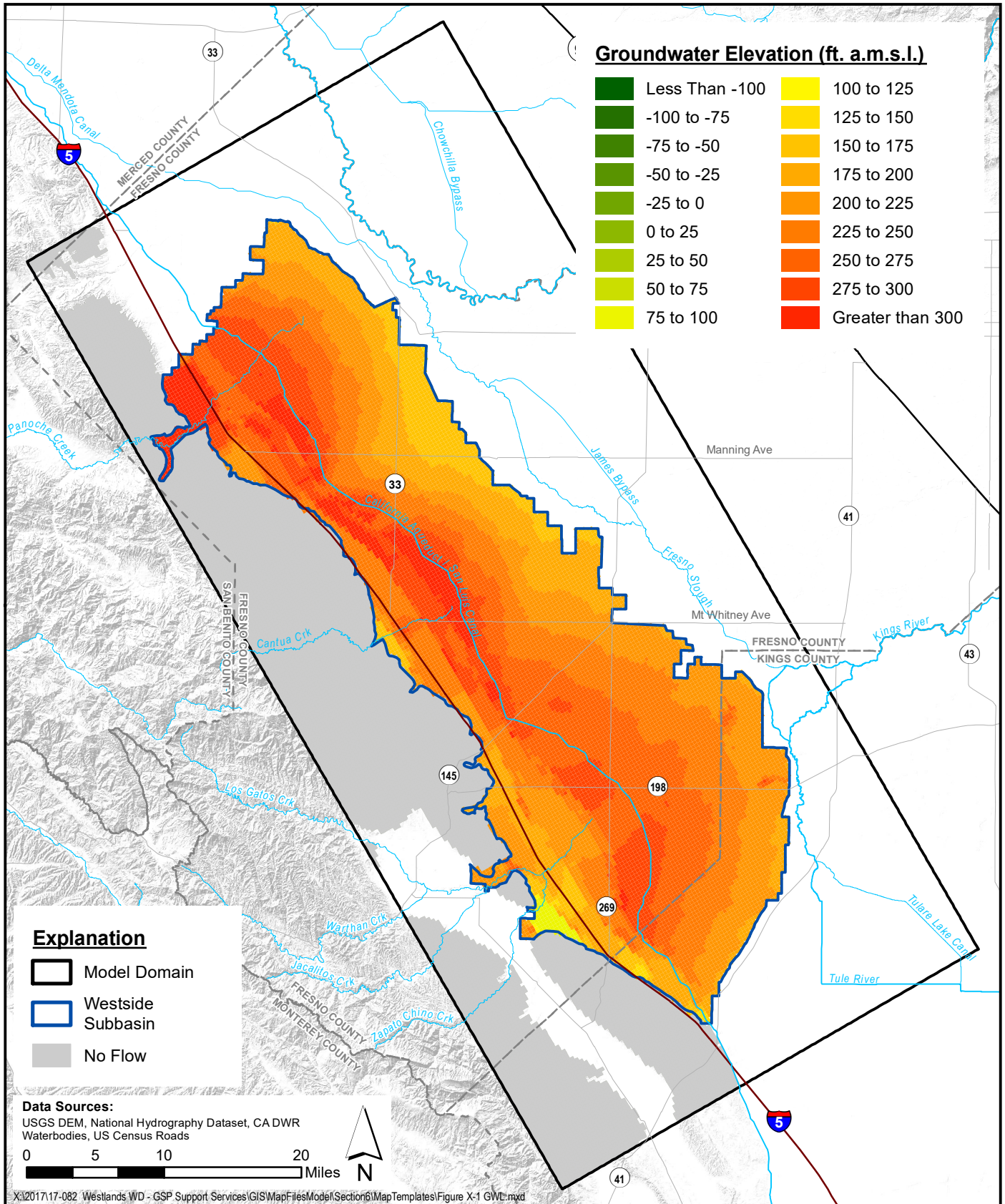
**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.2 (January 2040)**

Figure E-19



SGMA Sustainability Analyses  
 Westside Subbasin





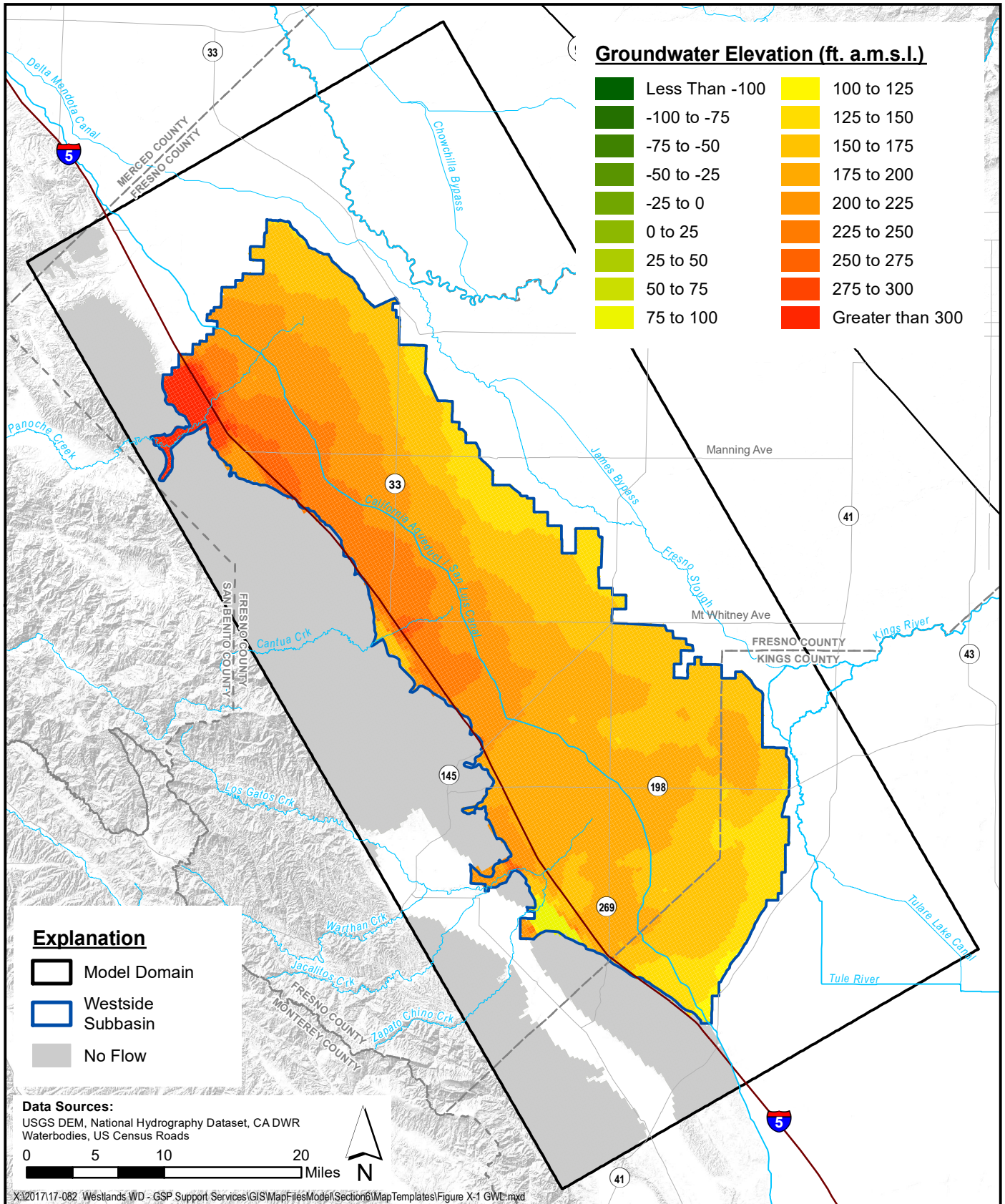
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.2 (January 2071)**

Figure E-20



SGMA Sustainability Analyses  
 Westside Subbasin



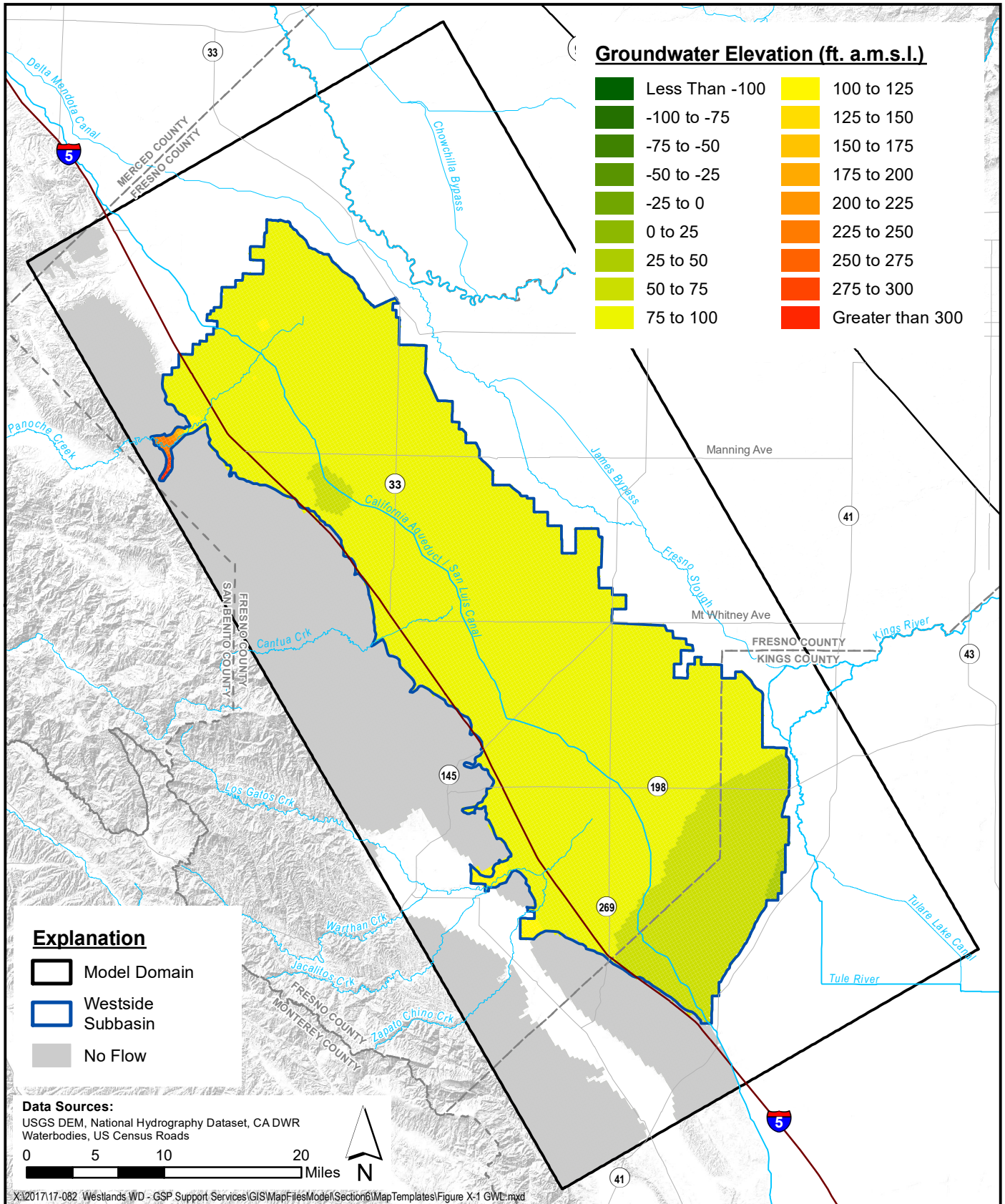


**Simulated Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.2 (Upper 2070)**

Figure E-21



SGMA Sustainability Analyses  
 Westside Subbasin



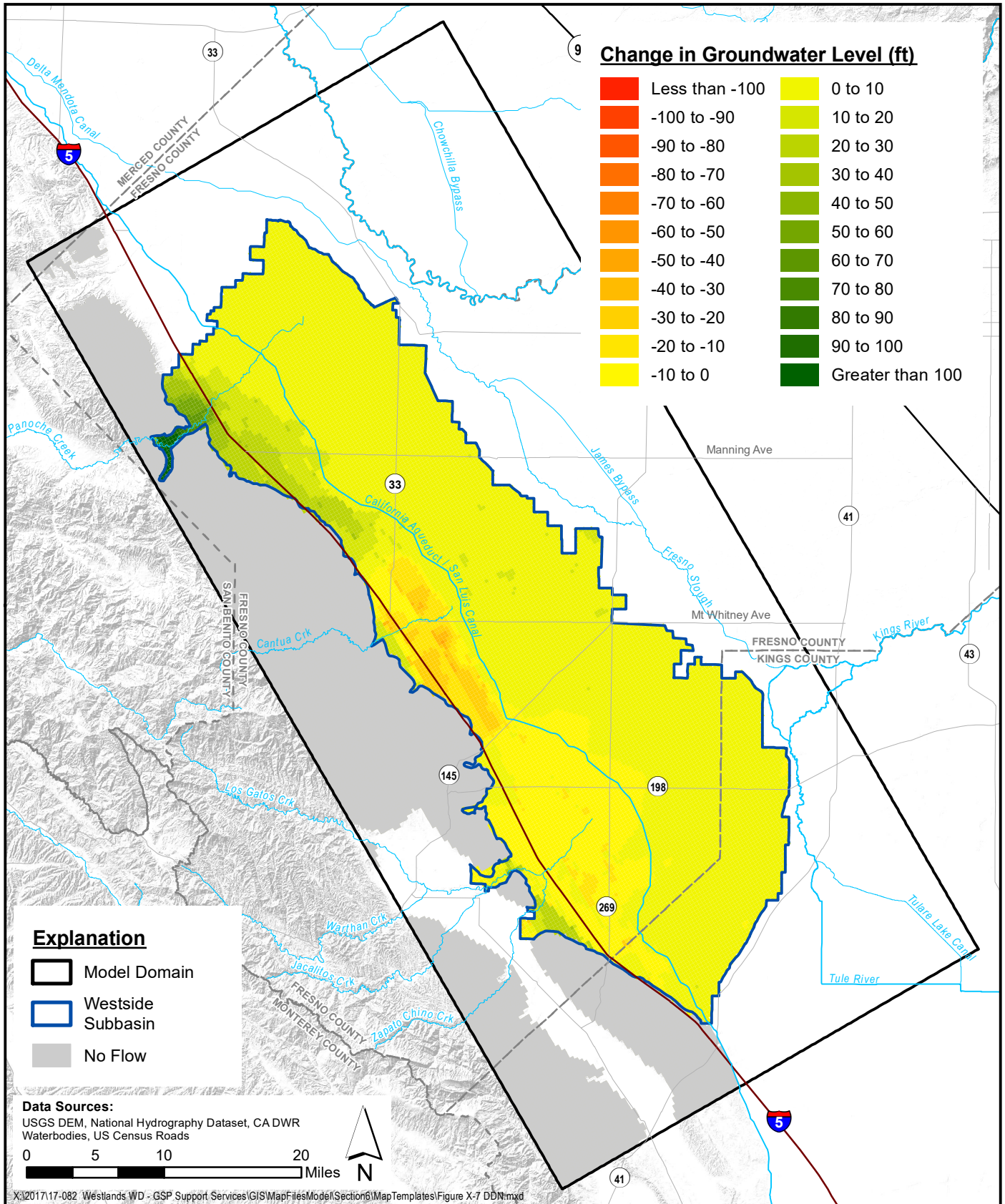
**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.2 (Upper 2070)**

Figure E-22



SGMA Sustainability Analyses  
 Westside Subbasin





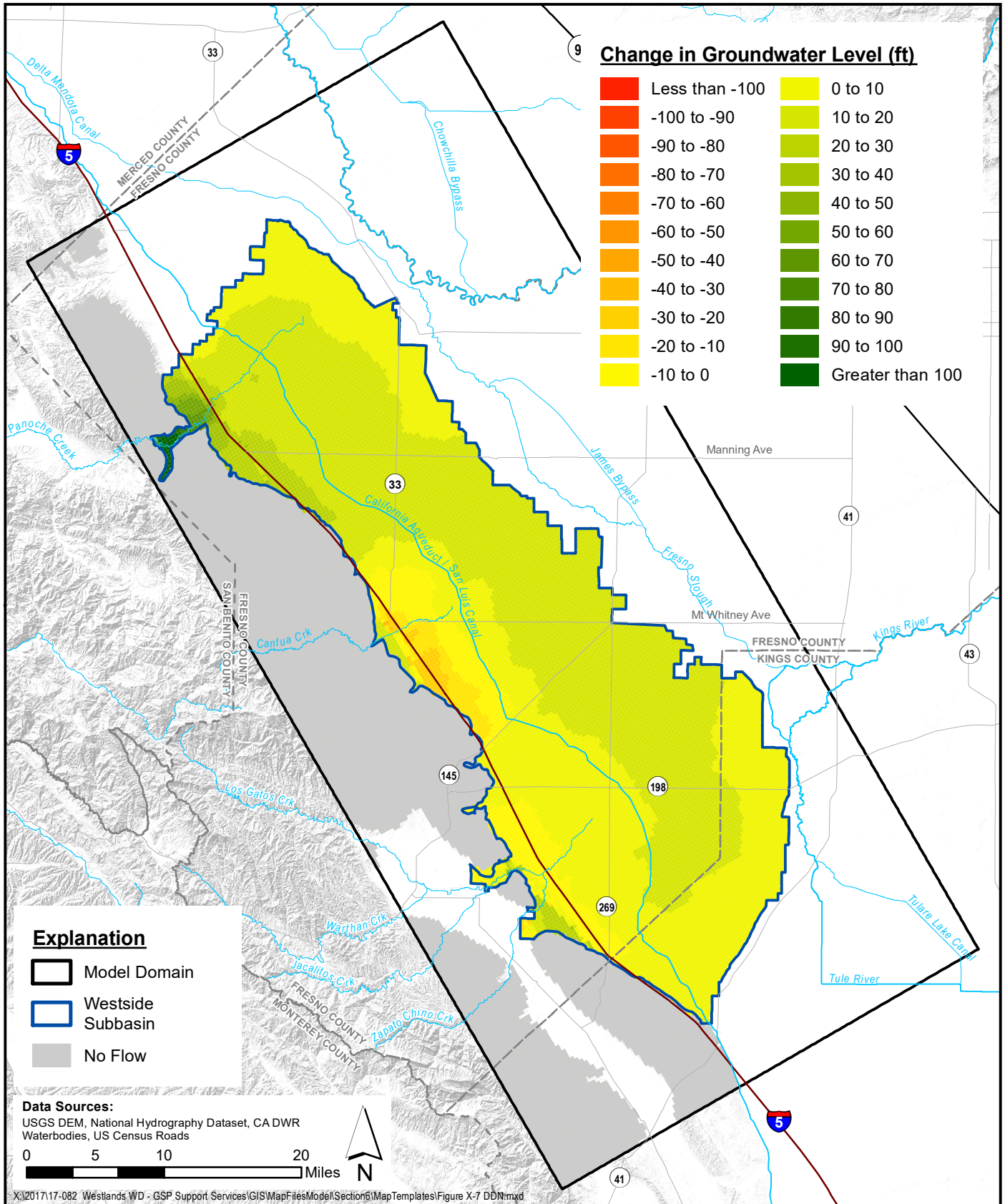
**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.2 (2020 - 2040)**

Figure E-23



SGMA Sustainability Analyses  
 Westside Subbasin



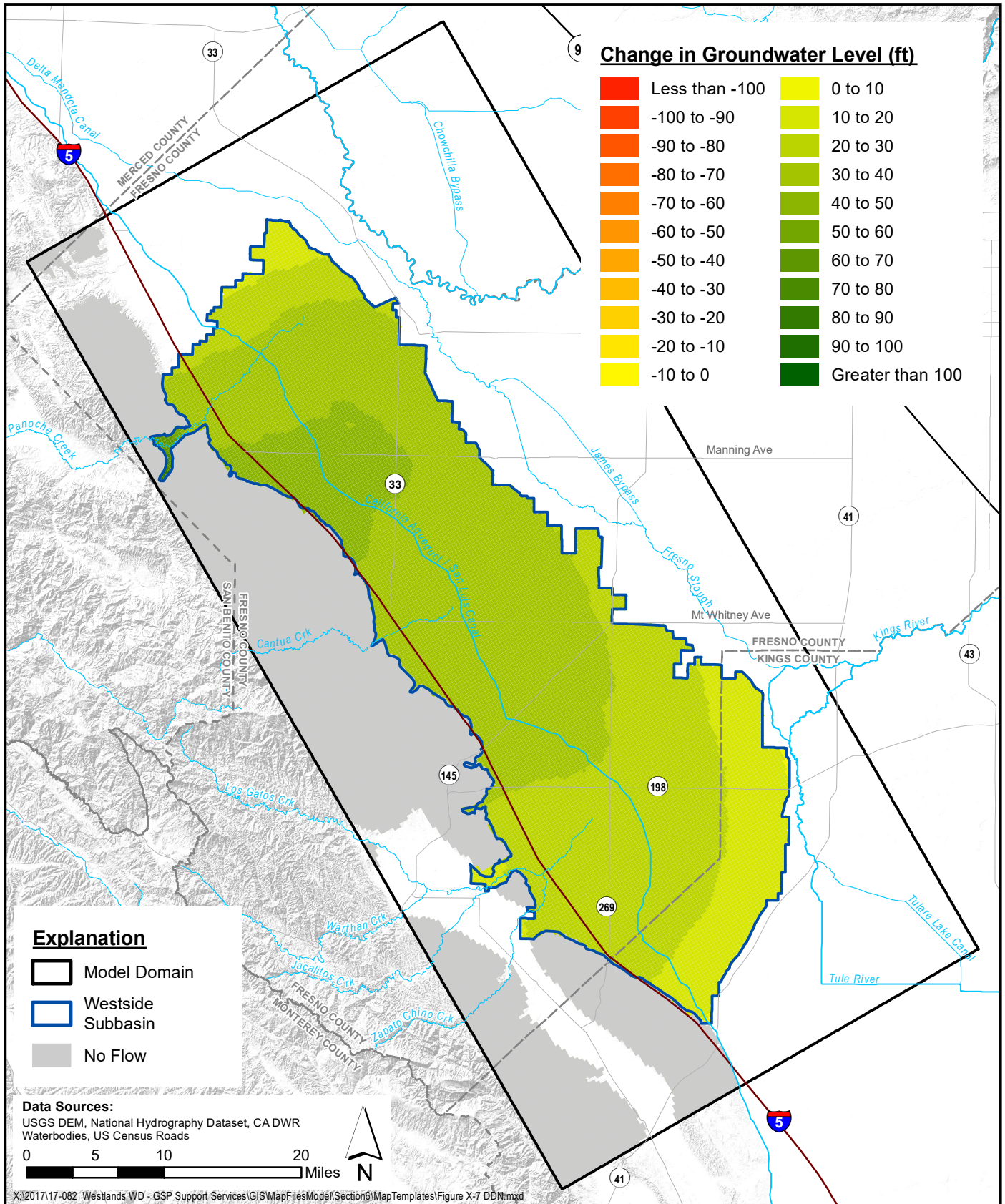


**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.2 (2020 - 2040)**

Figure E-24



SGMA Sustainability Analyses  
 Westside Subbasin



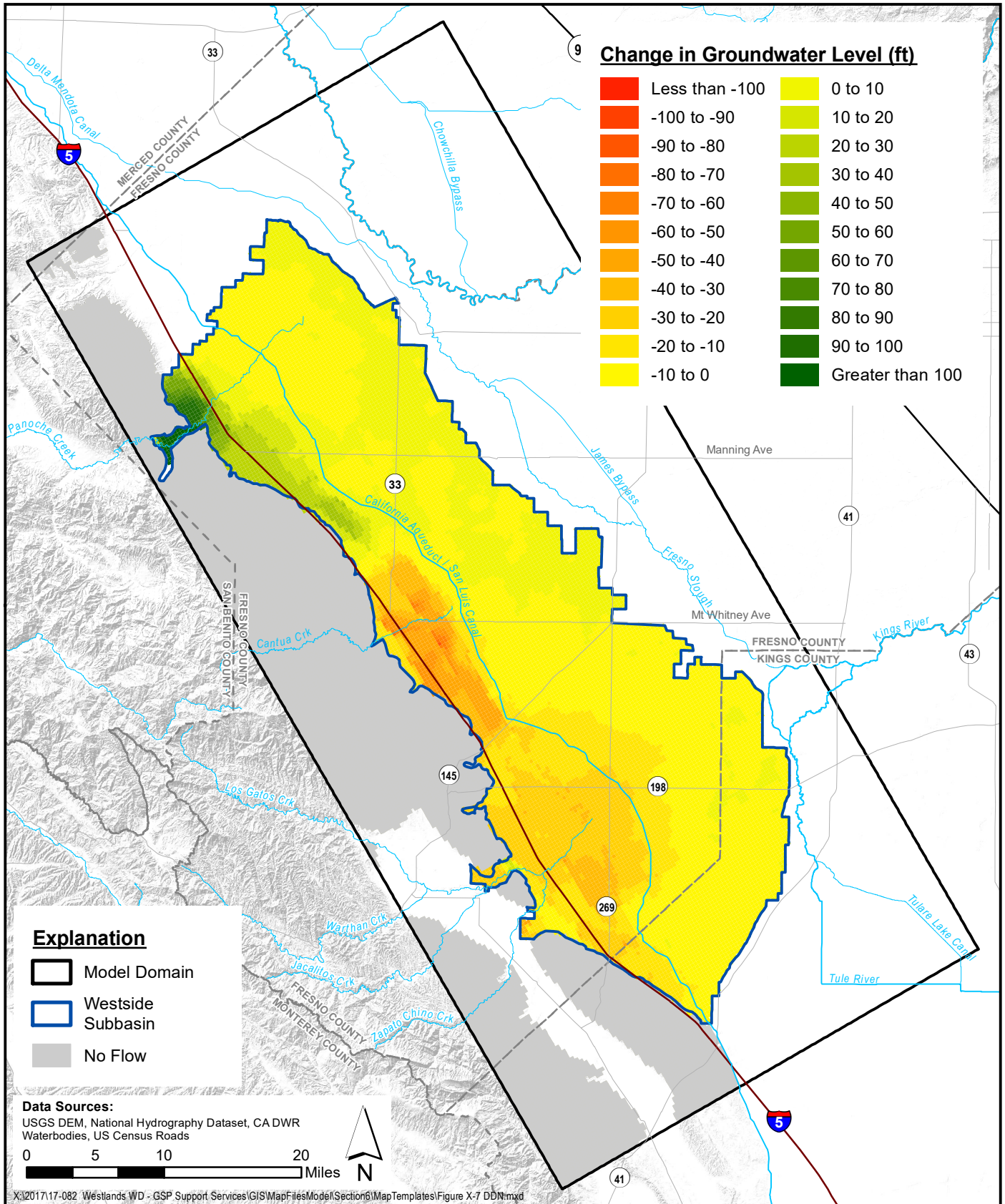
**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.2 (2020 - 2040)**

Figure E-25



SGMA Sustainability Analyses  
 Westside Subbasin



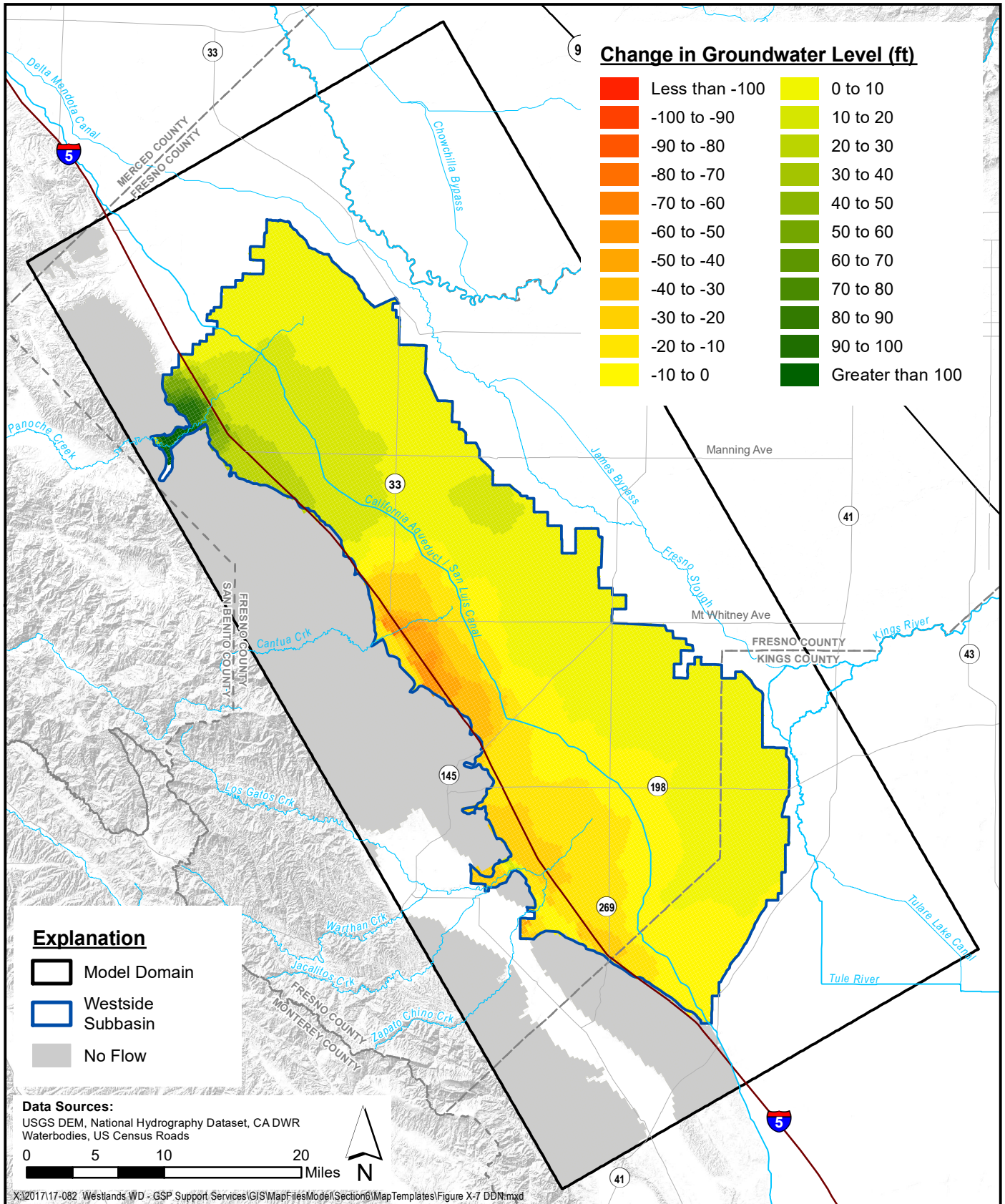


**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.2 (2020 - 2070)**

Figure E-26



SGMA Sustainability Analyses  
 Westside Subbasin



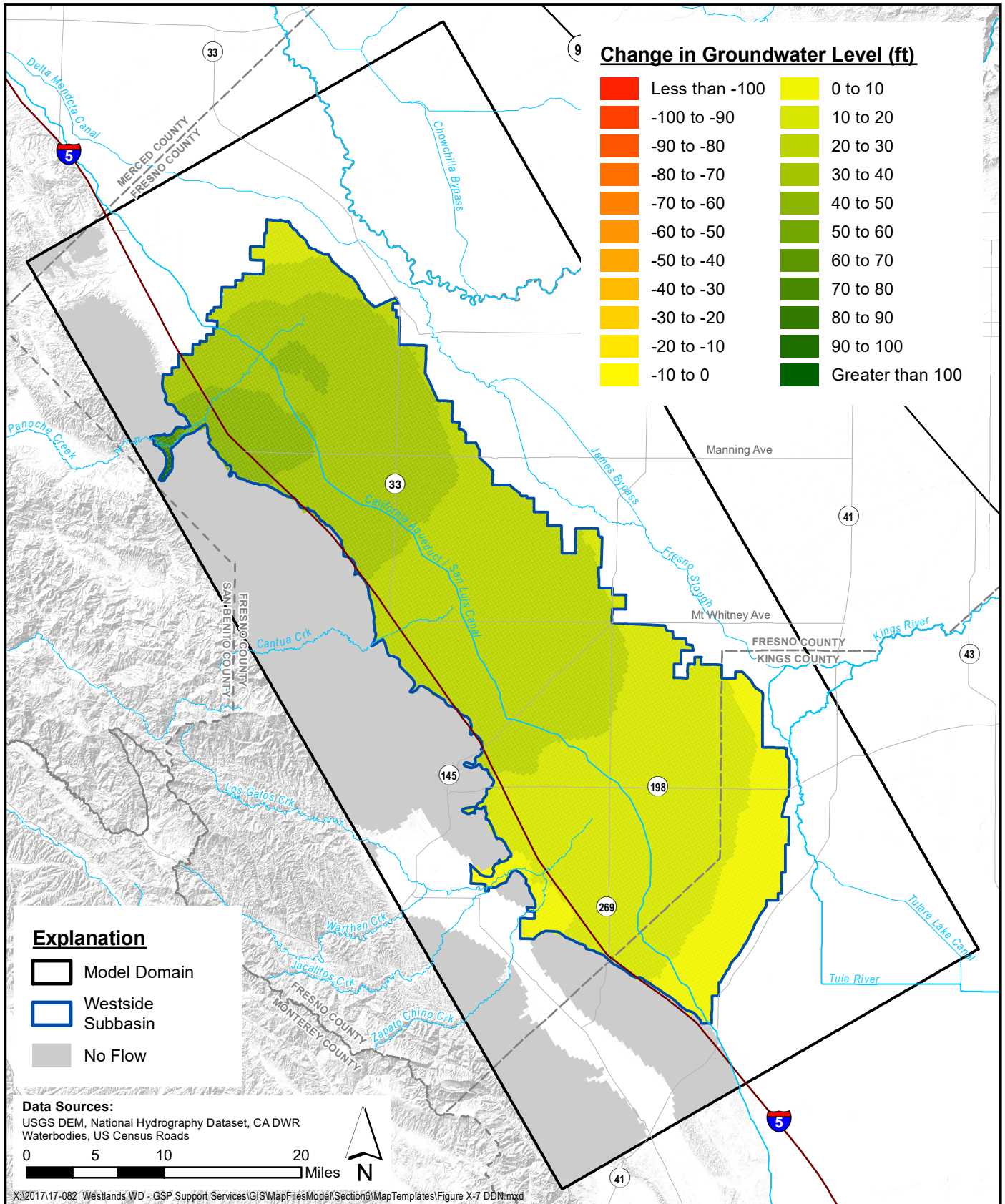
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.2 (2020 - 2070)**

Figure E-27



SGMA Sustainability Analyses  
 Westside Subbasin



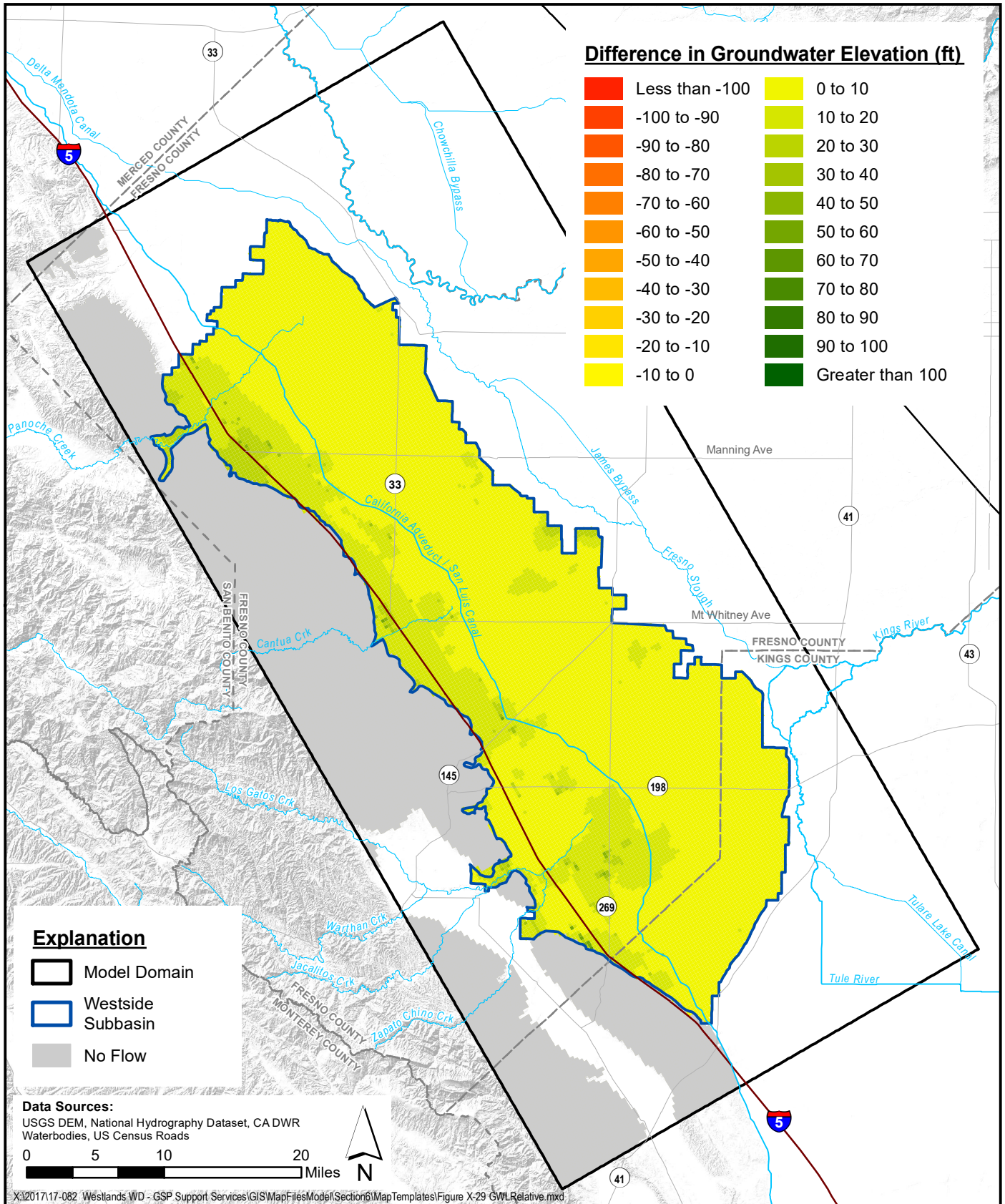


**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.2 (2020 - 2070)**

Figure E-28



SGMA Sustainability Analyses  
 Westside Subbasin



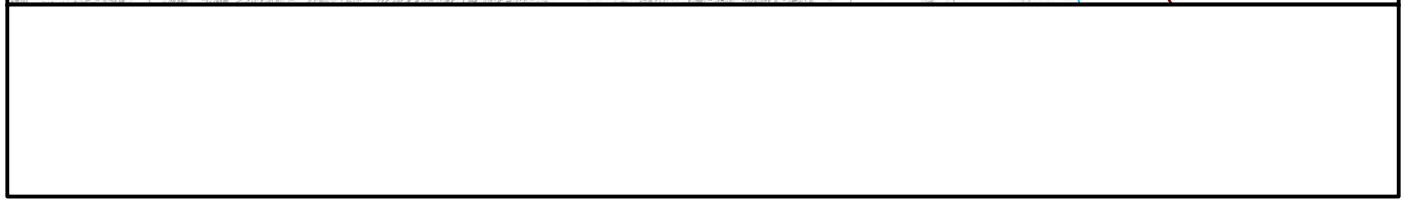
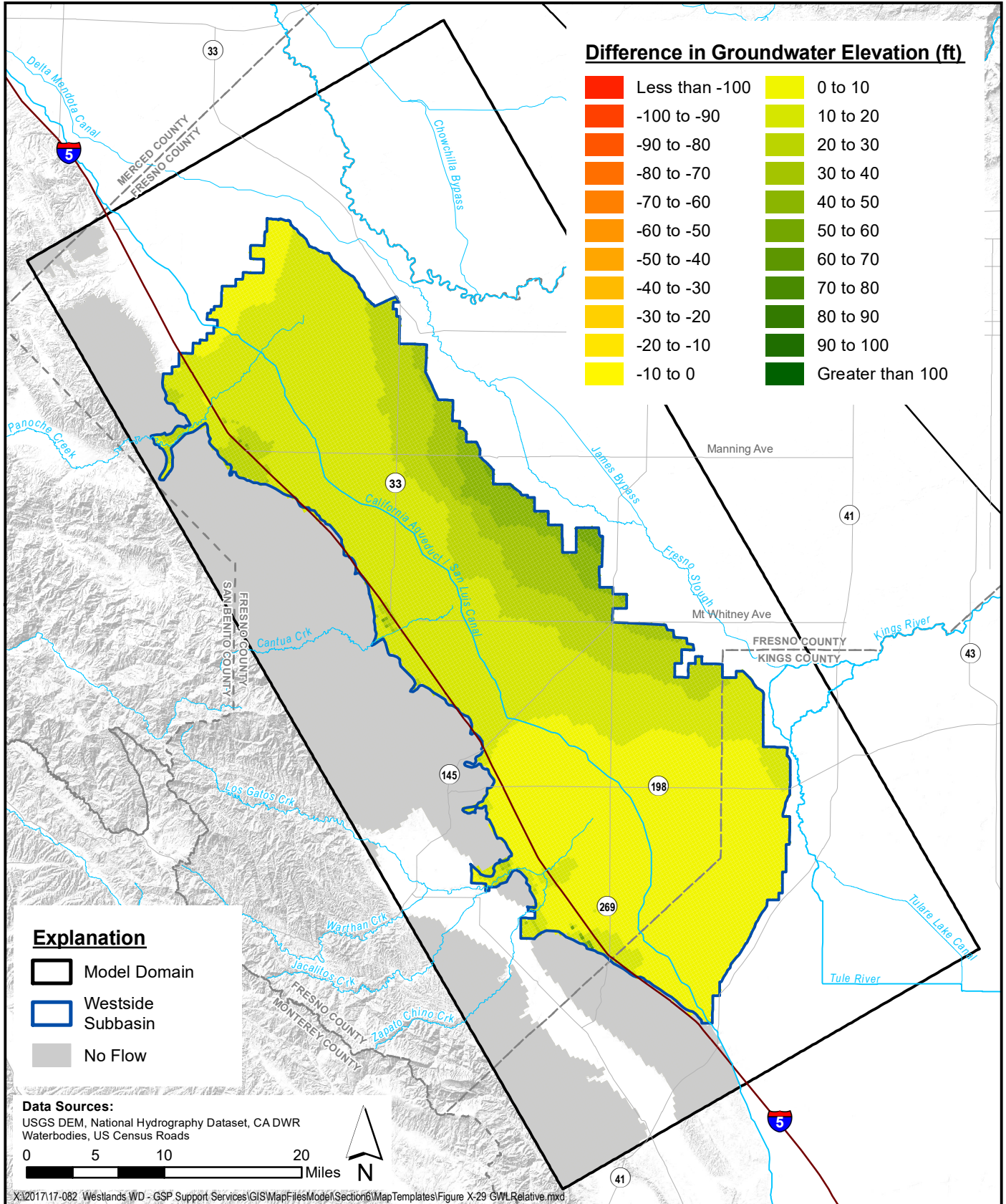
**Project Impacts on Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.2 (2020 - 2040)**

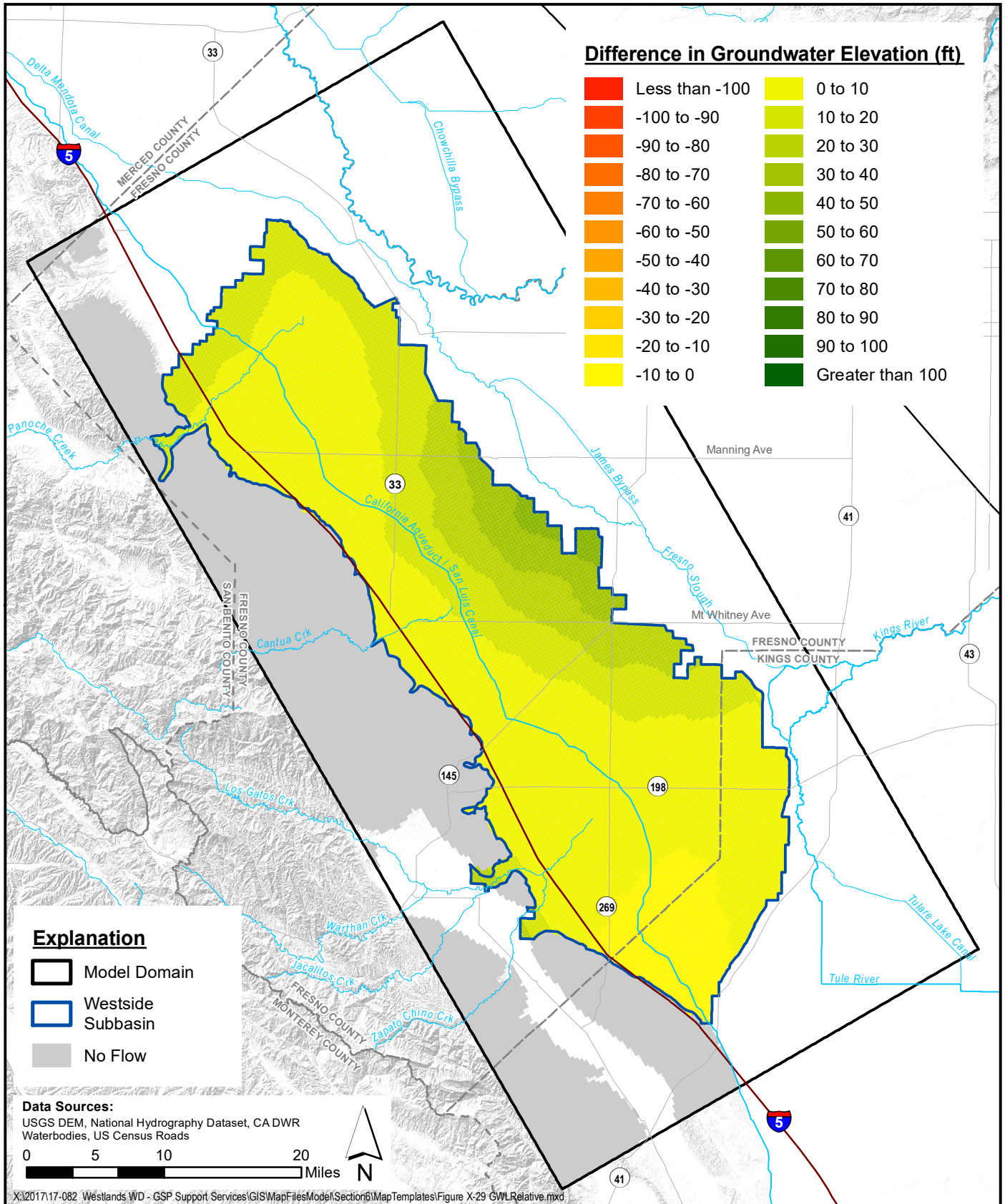
Figure E-29



SGMA Sustainability Analyses  
 Westside Subbasin







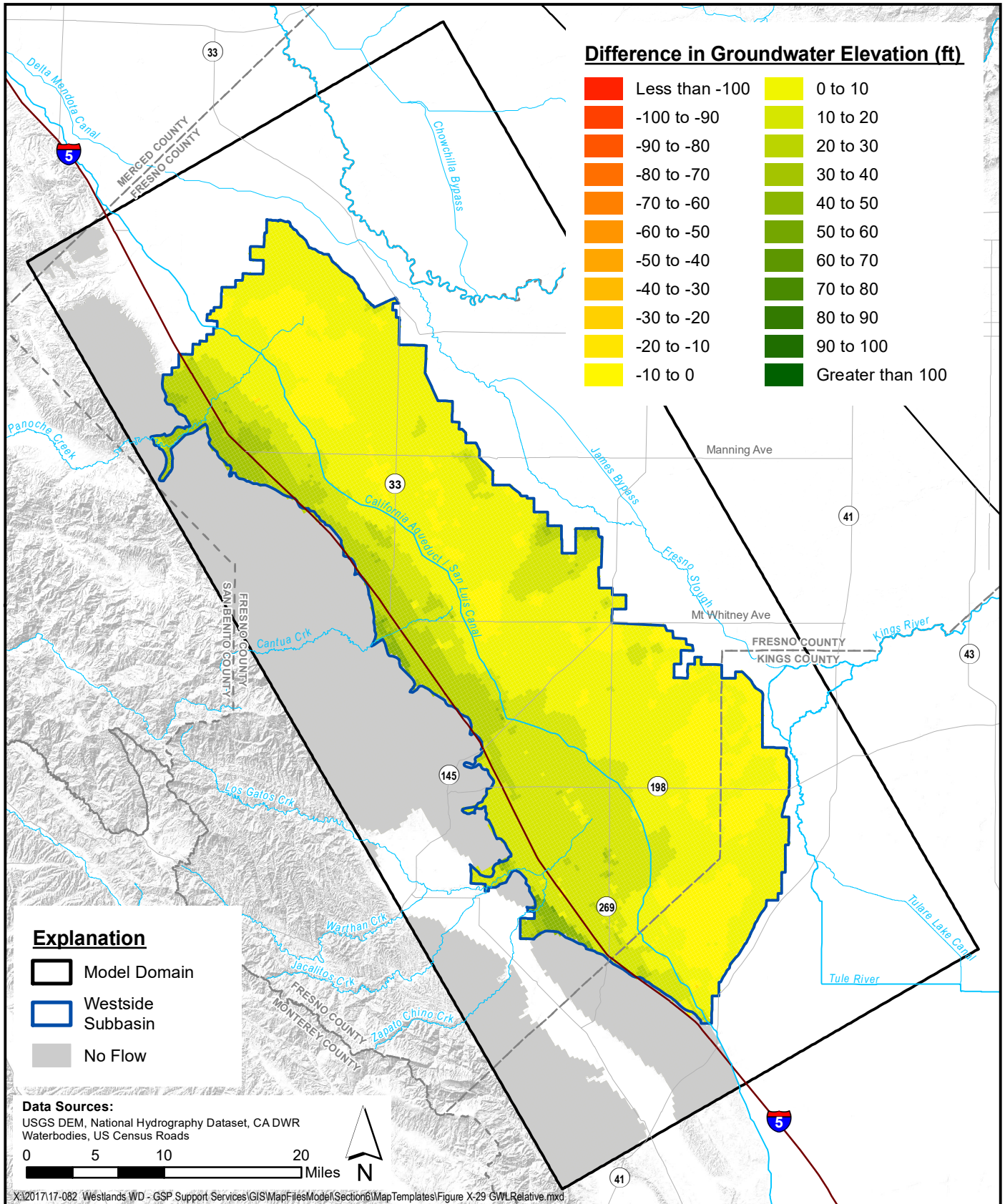
**Project Impacts on Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.2 (2020 - 2040)**

Figure E-31



SGMA Sustainability Analyses  
 Westside Subbasin





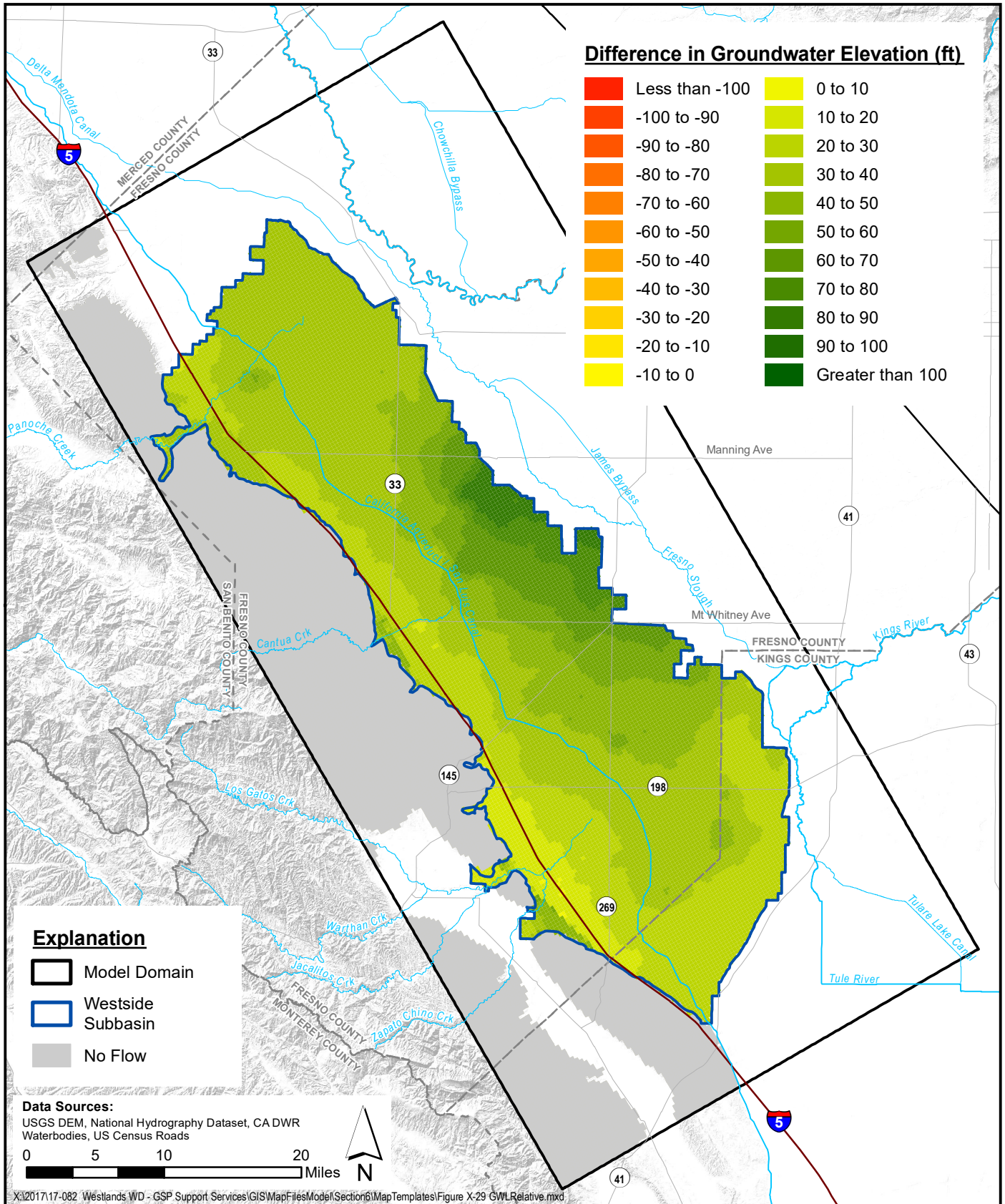
**Project Impacts on Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.2 (2020 - 2070)**

Figure E-32



SGMA Sustainability Analyses  
 Westside Subbasin





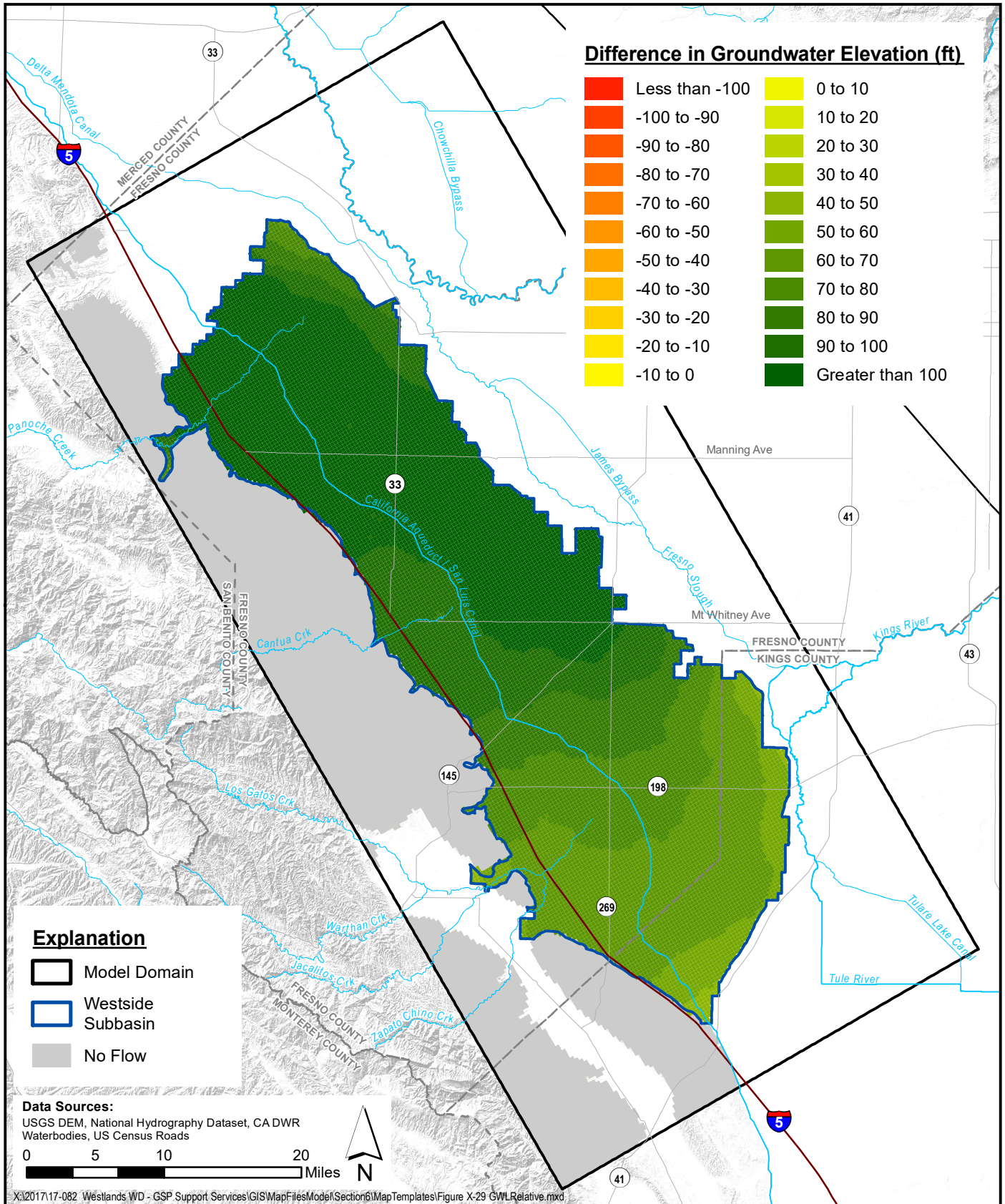
**Project Impacts on Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.2 (2020 - 2070)**

Figure E-33



SGMA Sustainability Analyses  
 Westside Subbasin



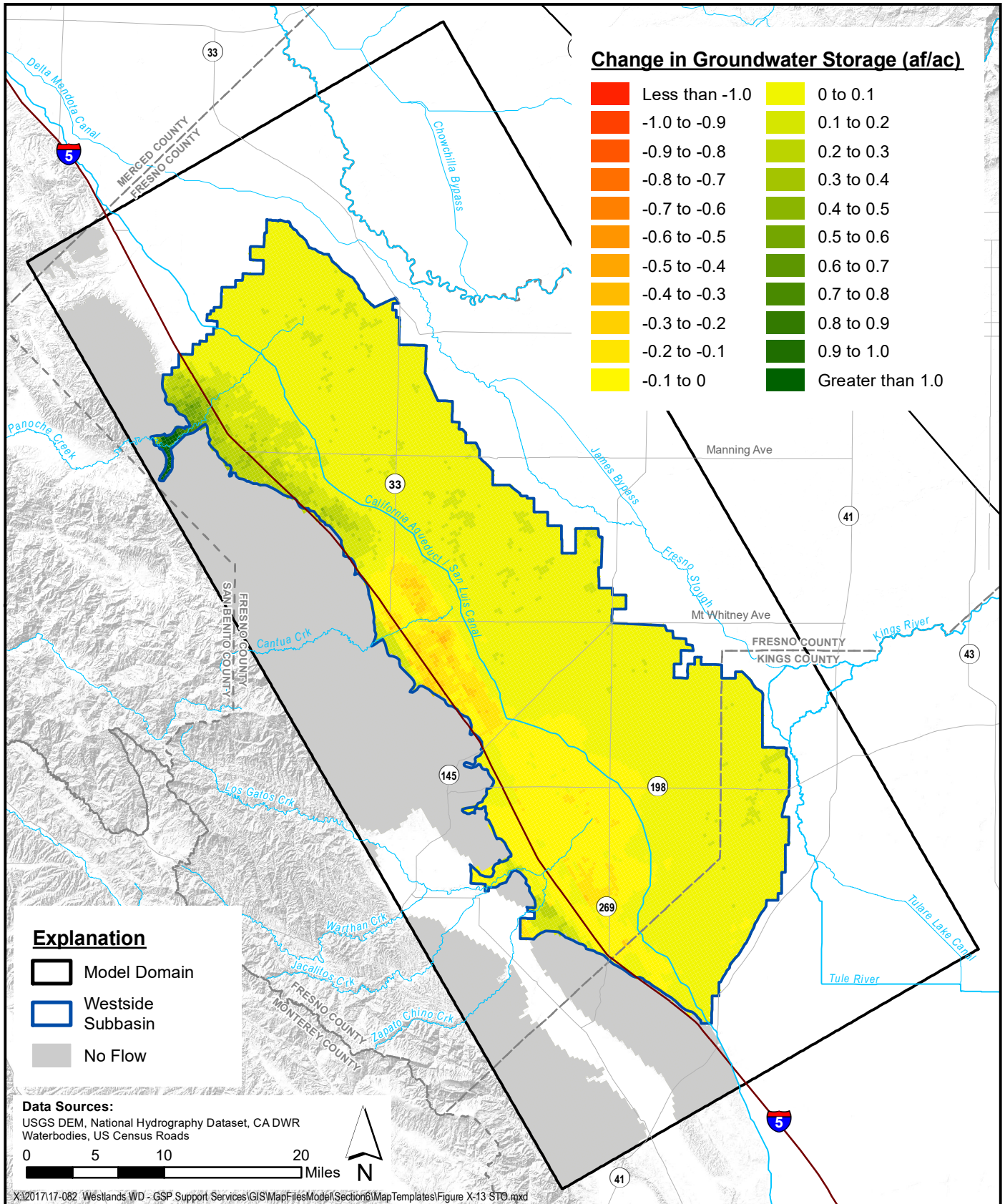


**Project Impacts on Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.2 (2020 - 2070)**

Figure E-34



SGMA Sustainability Analyses  
 Westside Subbasin



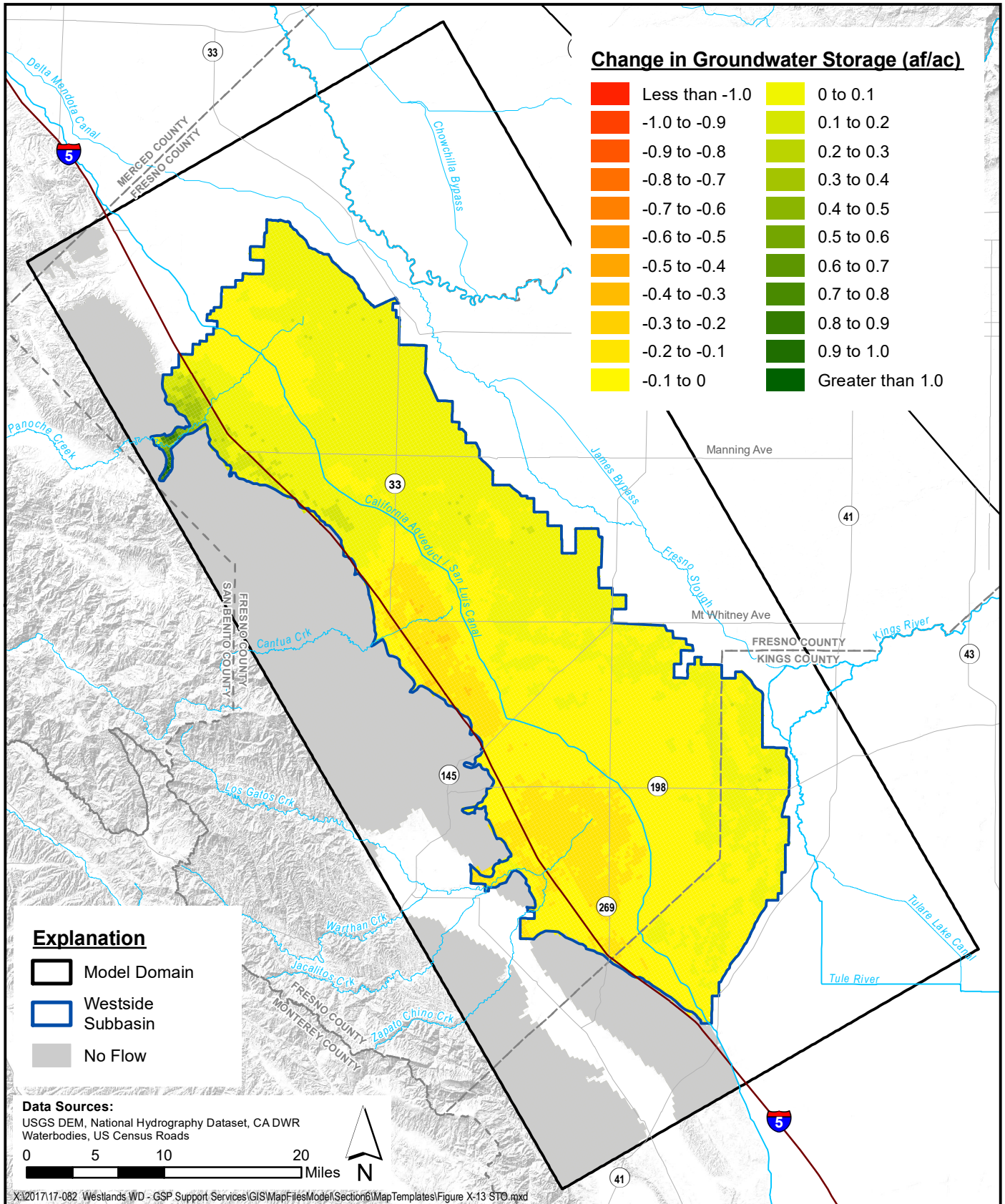
**Simulated Change in Groundwater Storage  
 No Climate Change - PMA No.2 (2020 - 2040)**

Figure E-35



SGMA Sustainability Analyses  
 Westside Subbasin





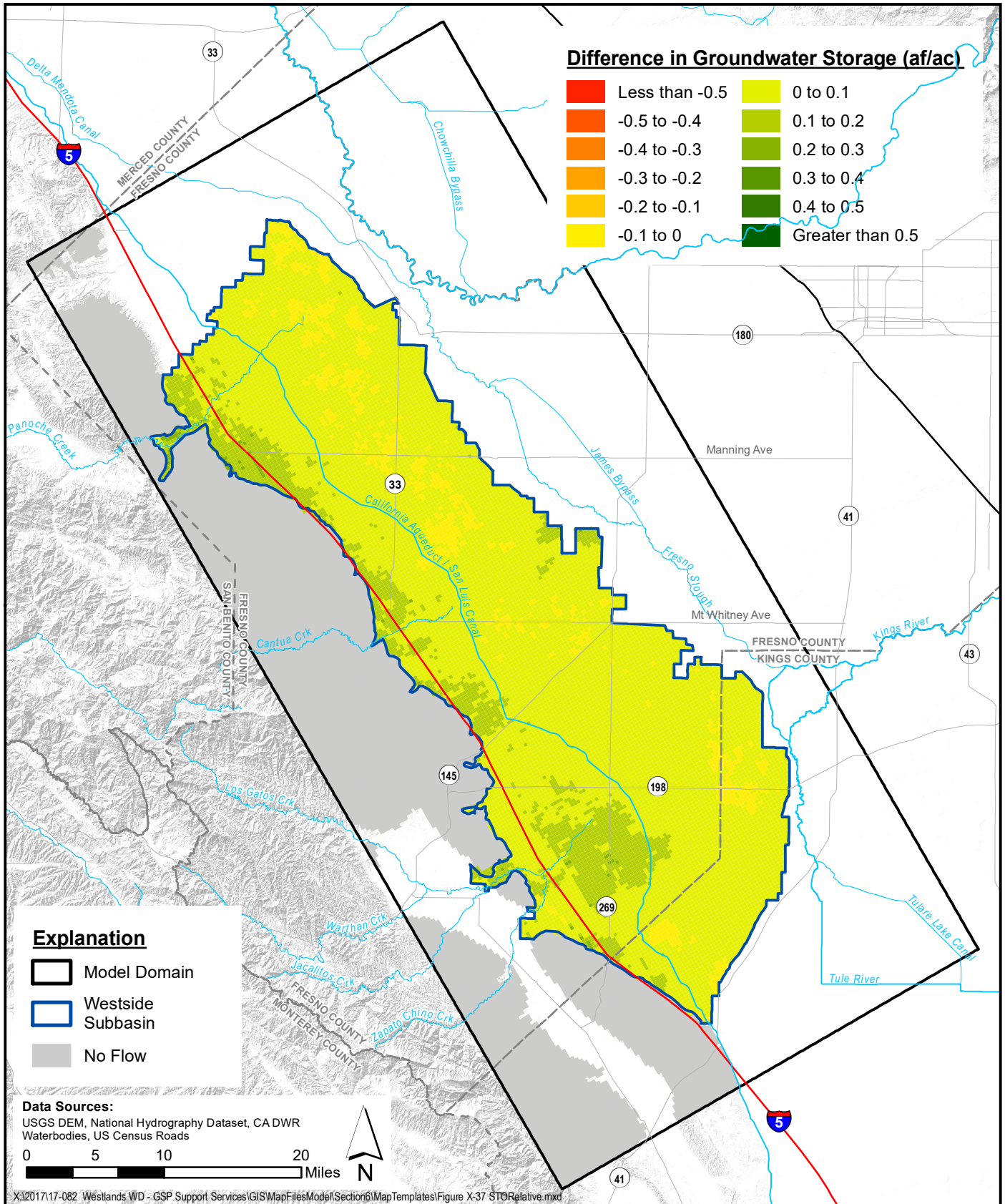
**Simulated Change in Groundwater Storage  
 No Climate Change - PMA No.2 (2020 - 2070)**

Figure E-36

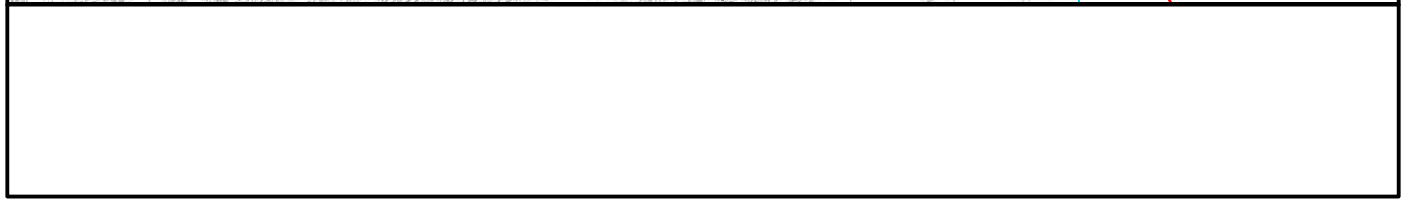
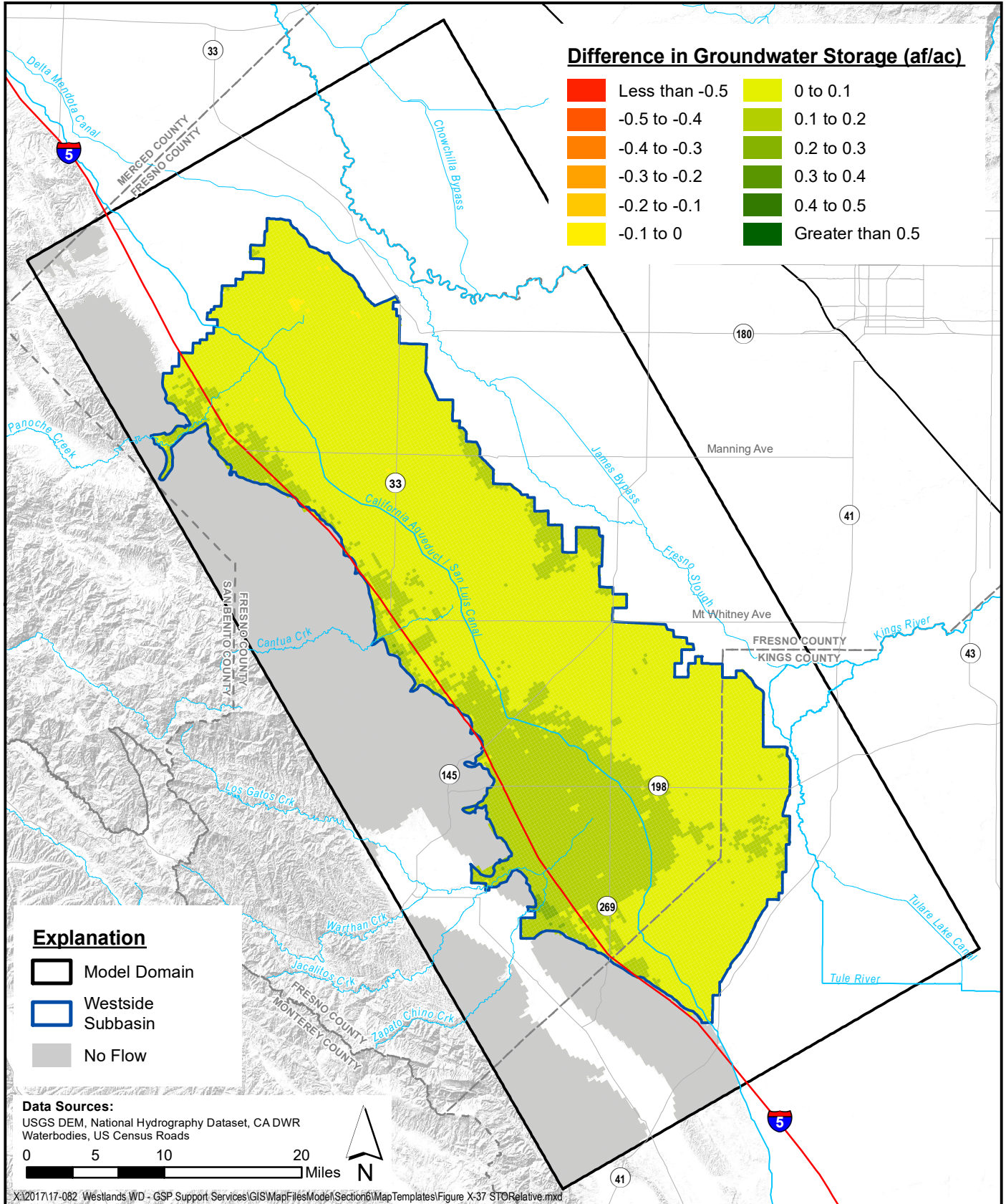


SGMA Sustainability Analyses  
 Westside Subbasin

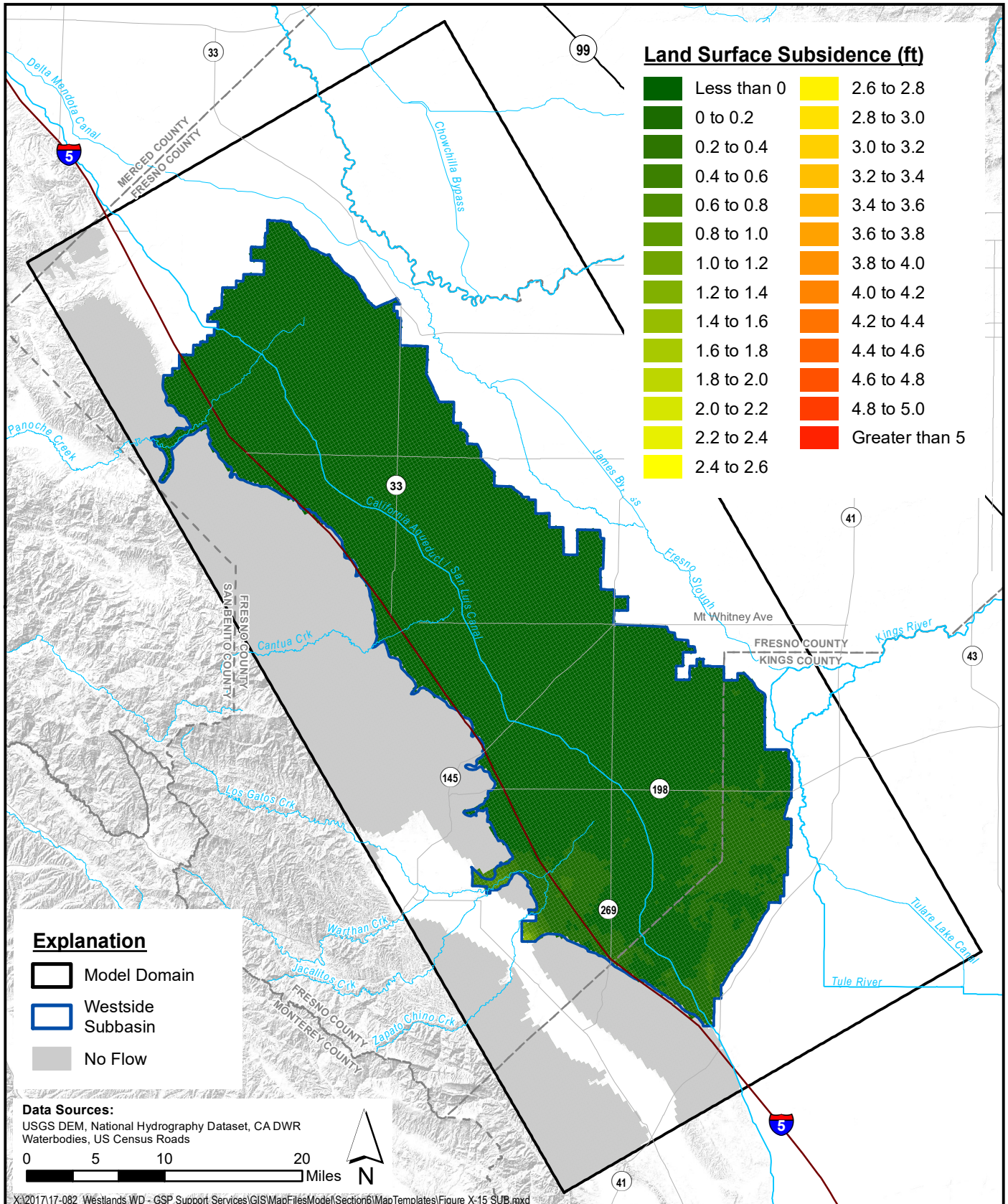




Westside Subbasin





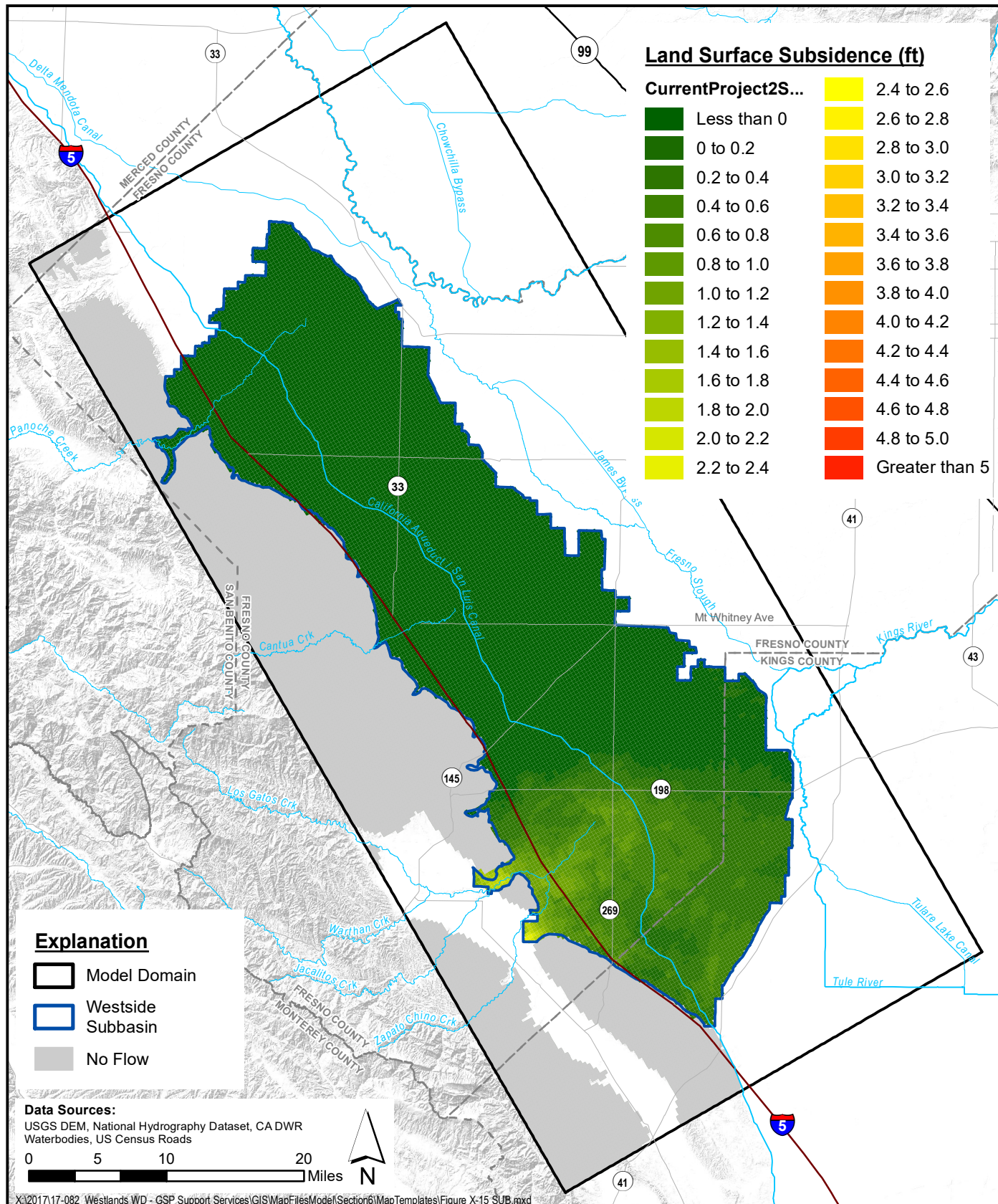


**Simulated Land Surface Subsidence  
 No Climate Change - PMA No.2 (2020 - 2040)**

*SGMA Sustainability Analyses  
 Westside Subbasin*

**Figure E-39**





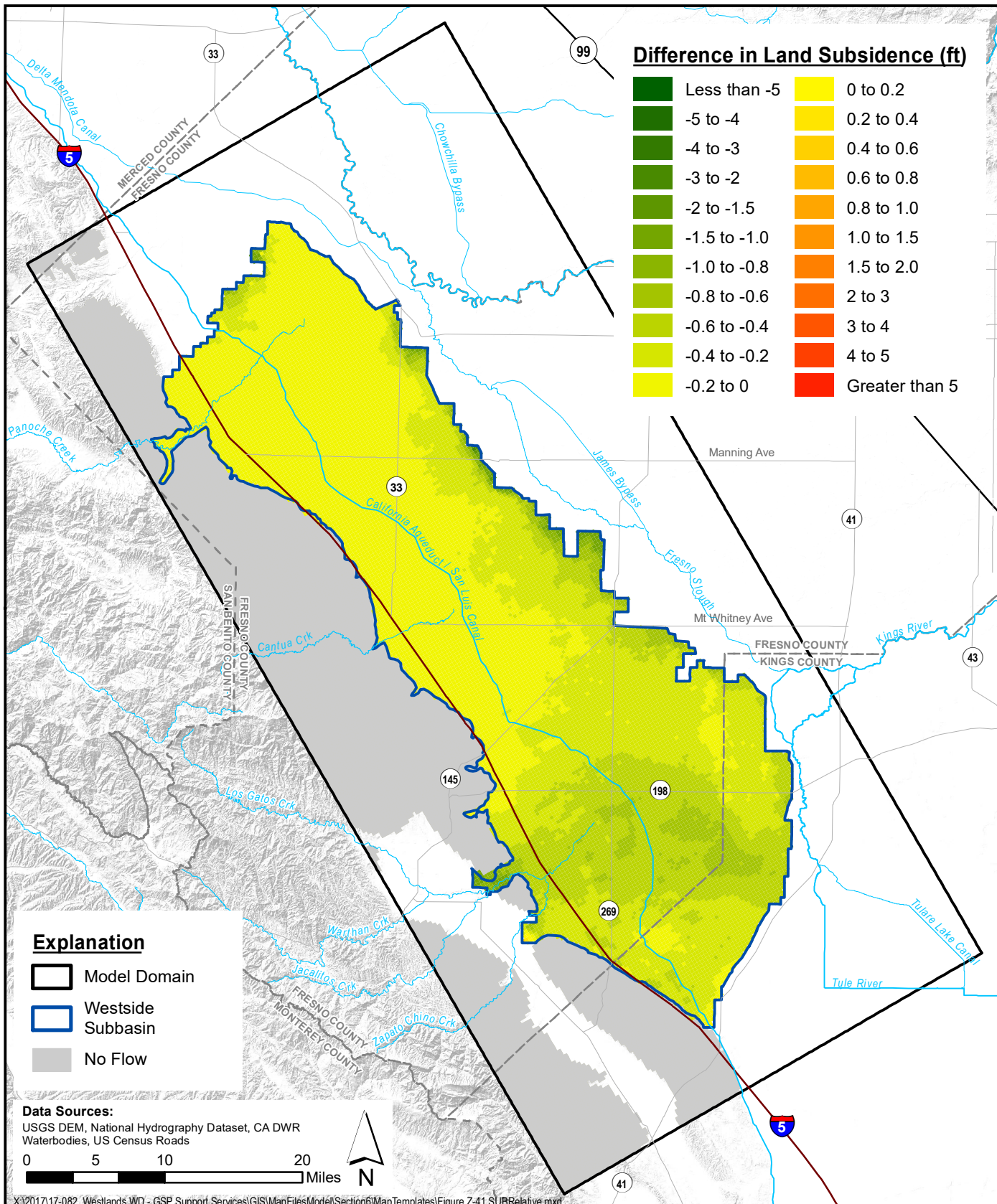
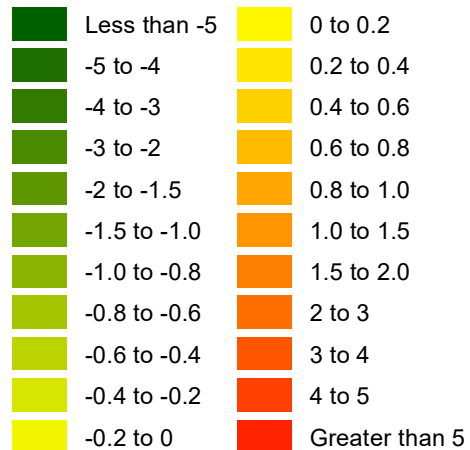
**Simulated Land Surface Subsidence  
 No Climate Change - PMA No.2 (2020 - 2070)**

SGMA Sustainability Analyses  
 Westside Subbasin

Figure E-40



### Difference in Land Subsidence (ft)

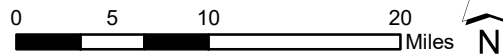


### Explanation

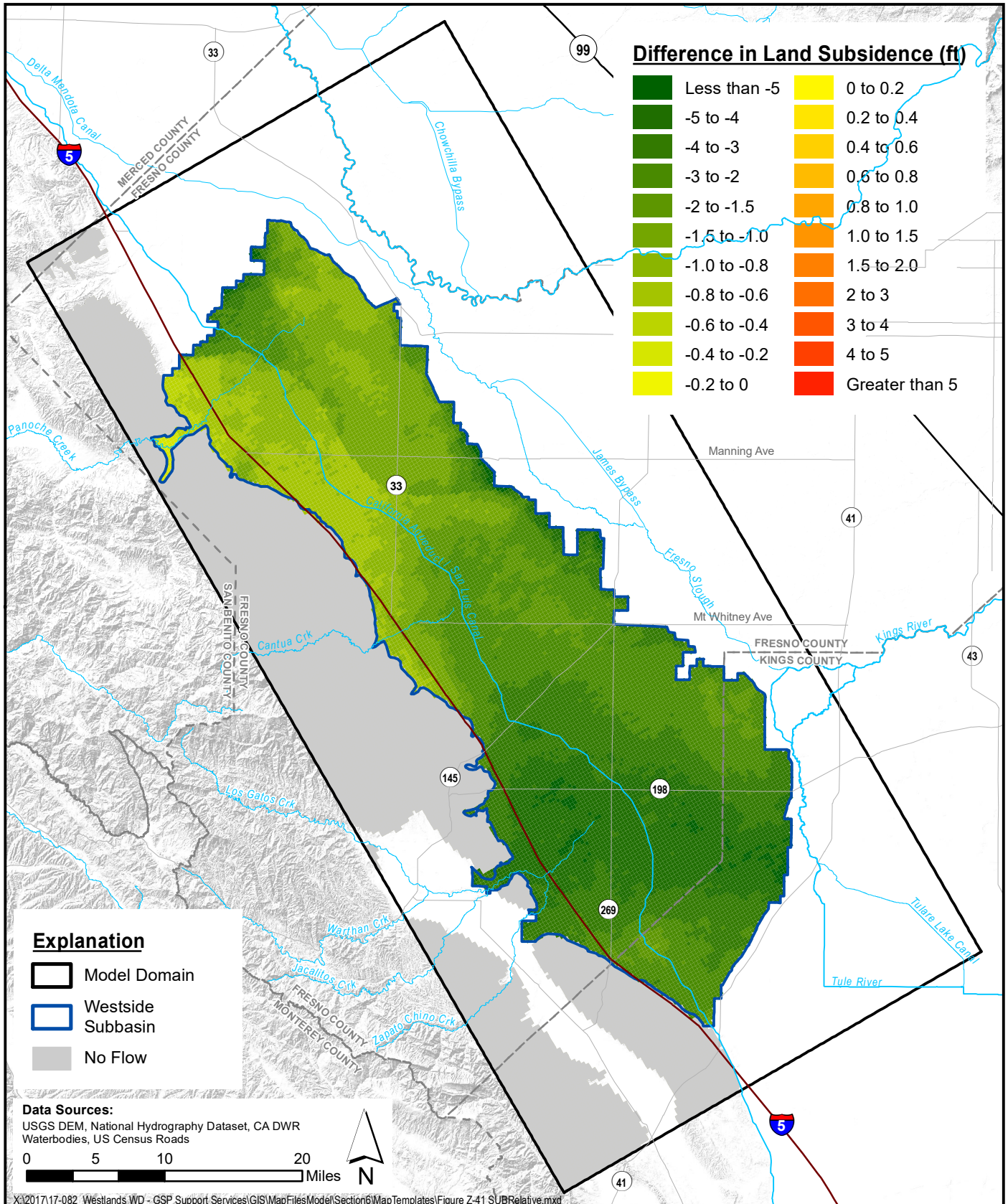
- Model Domain
- Westside Subbasin
- No Flow

### Data Sources:

USGS DEM, National Hydrography Dataset, CA DWR  
Waterbodies, US Census Roads





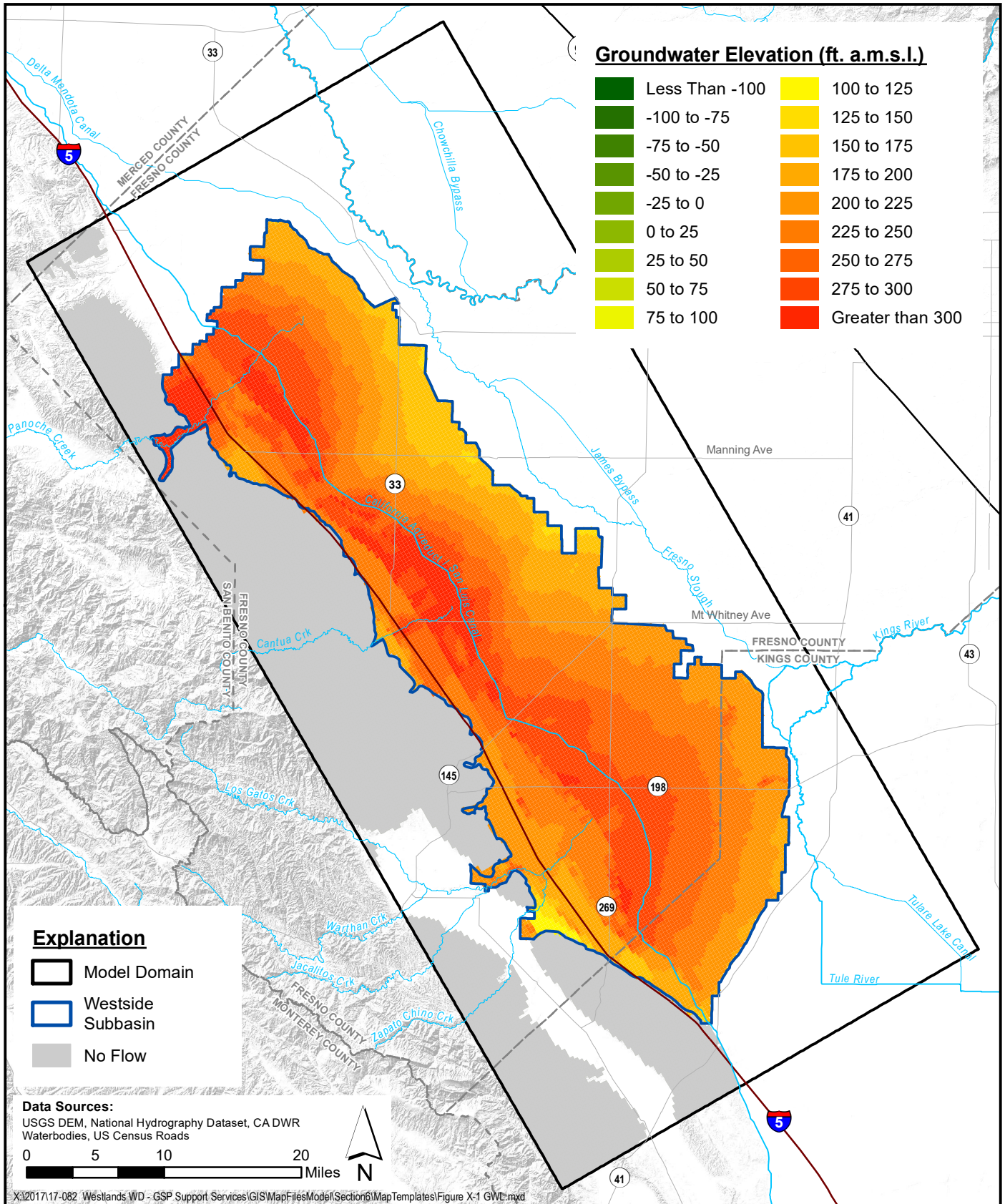


**Scalmanini**  
 Consulting Engineers

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Figure E-42





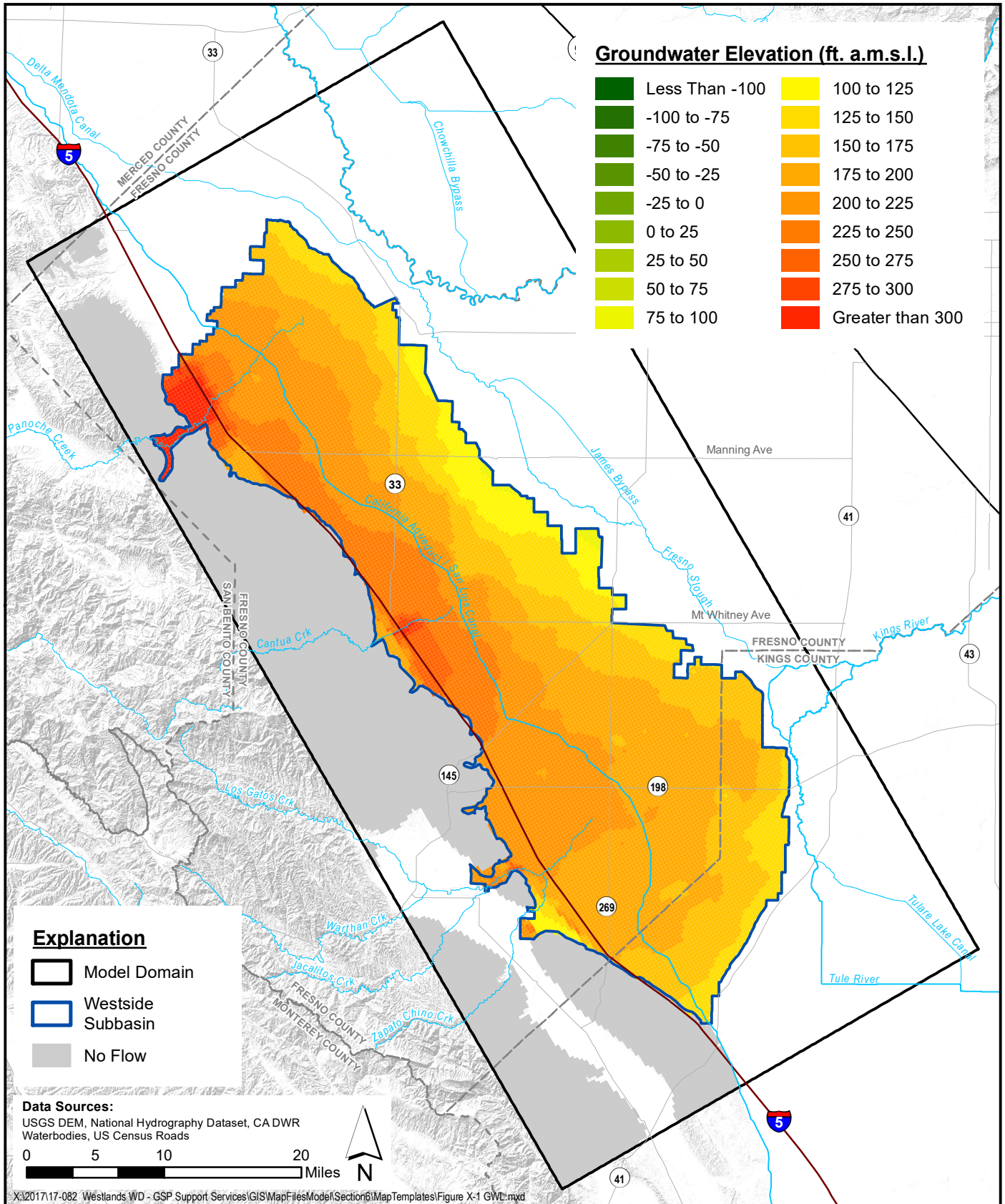
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.3 (January 2040)**

Figure E-43



SGMA Sustainability Analyses  
 Westside Subbasin





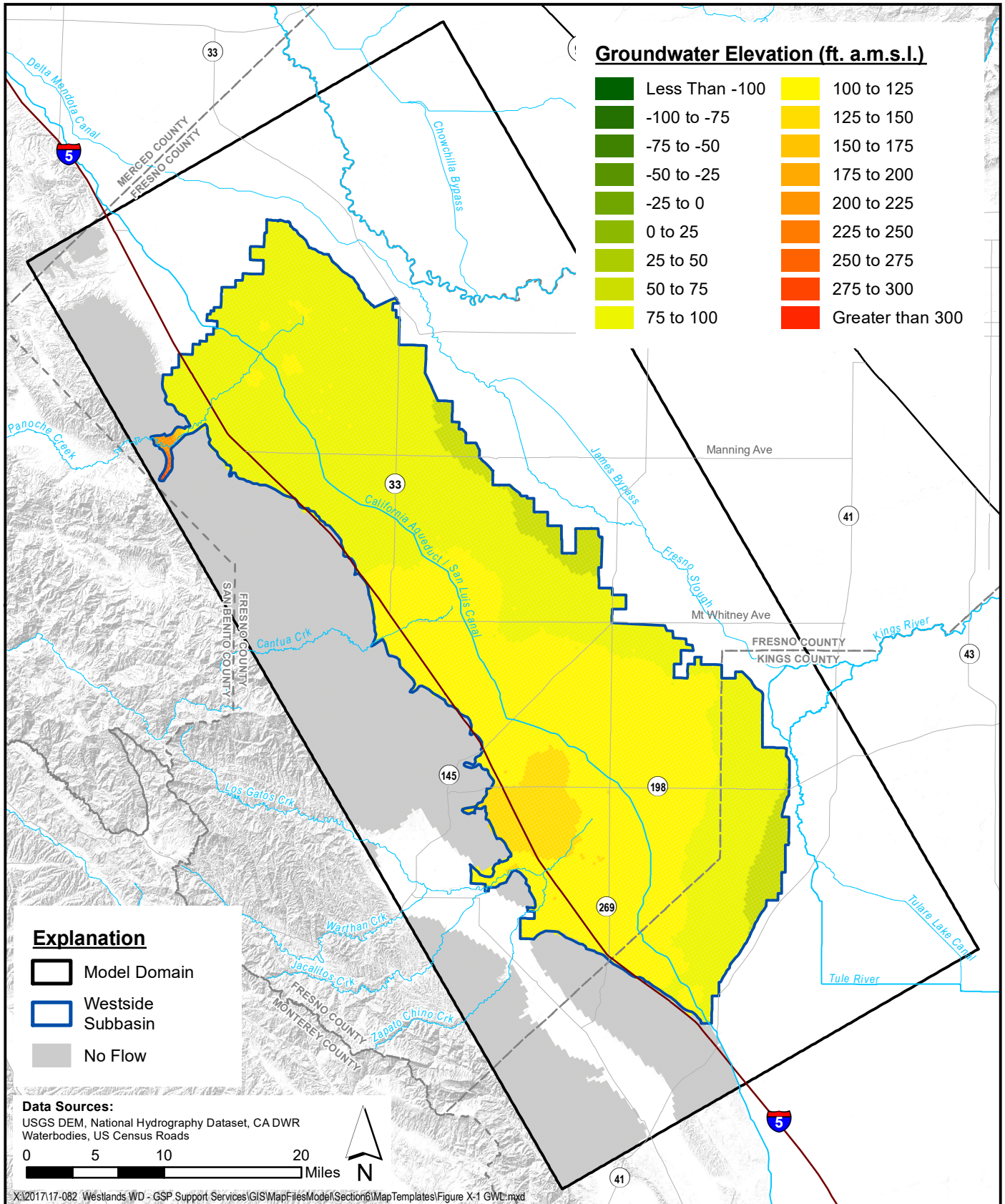
**Simulated Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.3 (January 2040)**

Figure E-44



SGMA Sustainability Analyses  
 Westside Subbasin



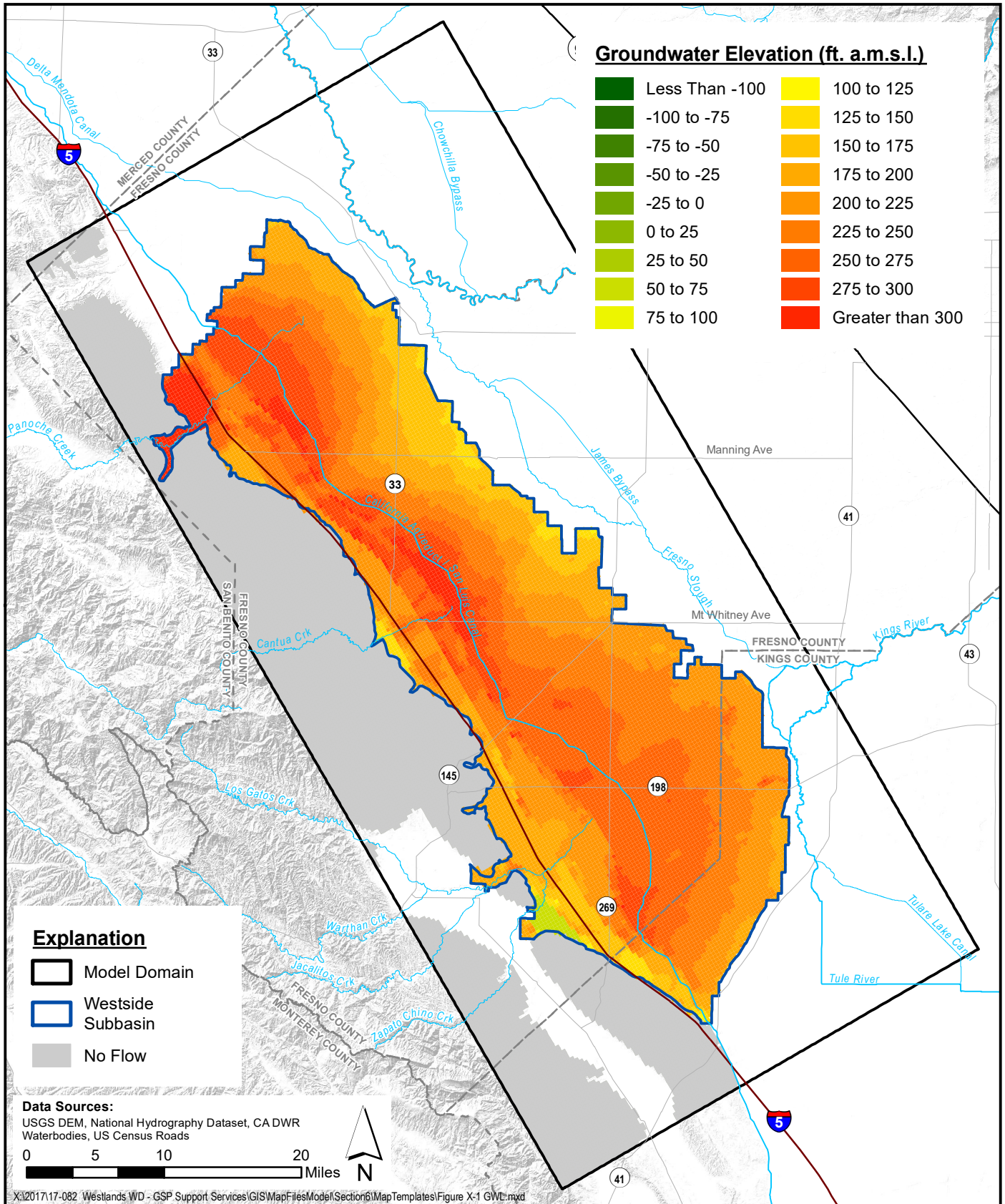


**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.3 (January 2040)**

Figure E-45



SGMA Sustainability Analyses  
 Westside Subbasin



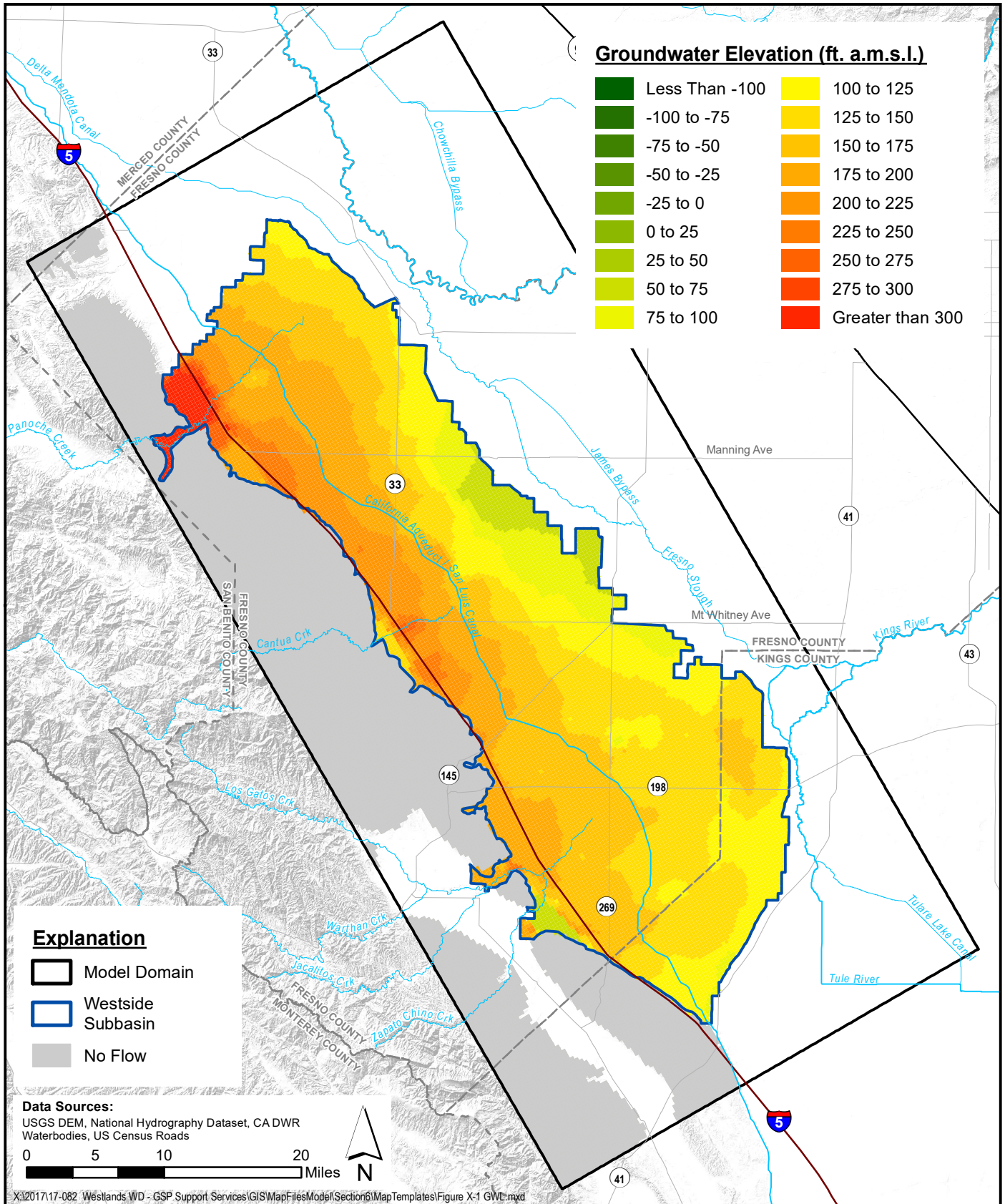
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.3 (January 2071)**

Figure E-46



SGMA Sustainability Analyses  
 Westside Subbasin





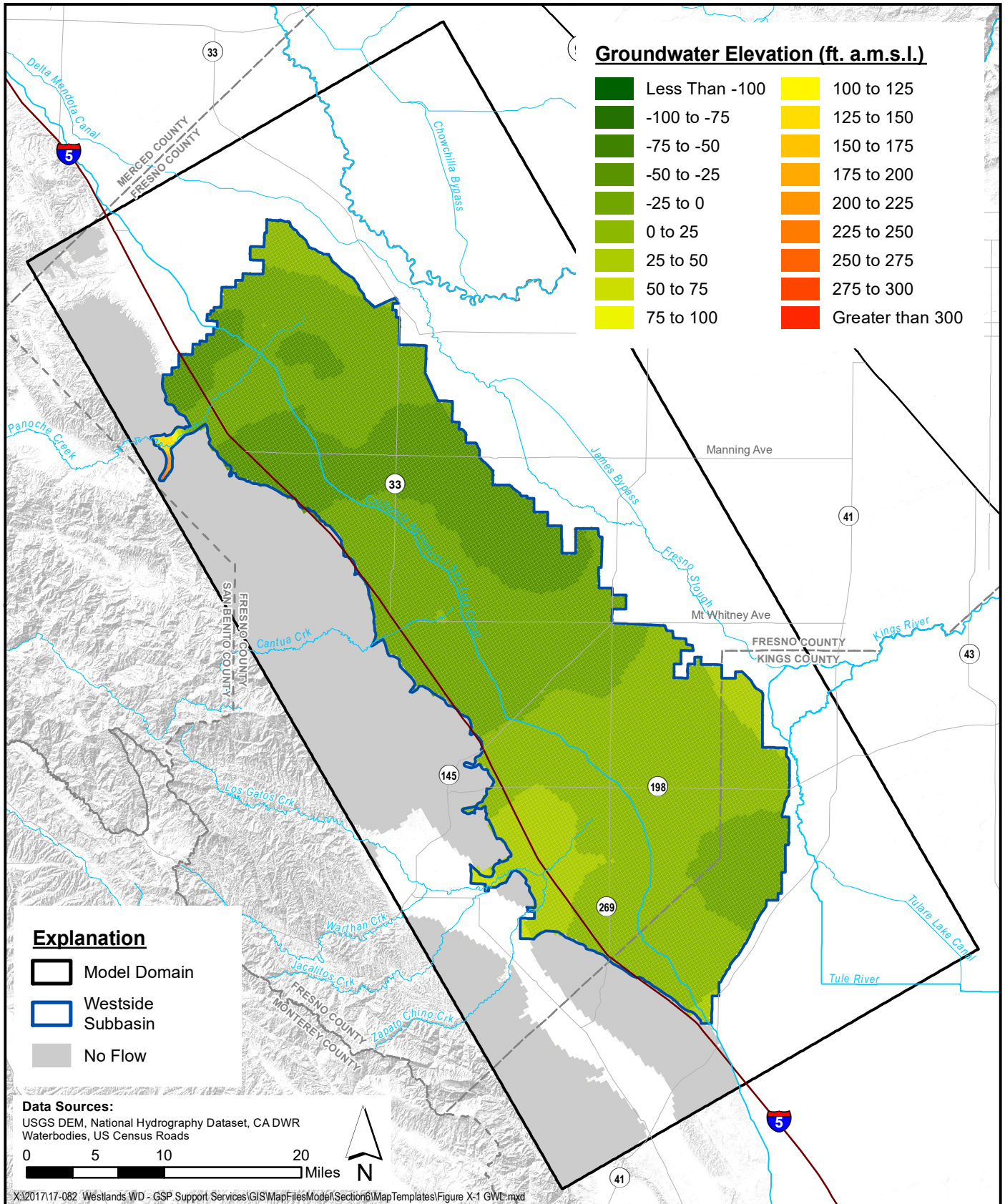
**Simulated Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.3 (January 2071)**

Figure E-47



SGMA Sustainability Analyses  
 Westside Subbasin





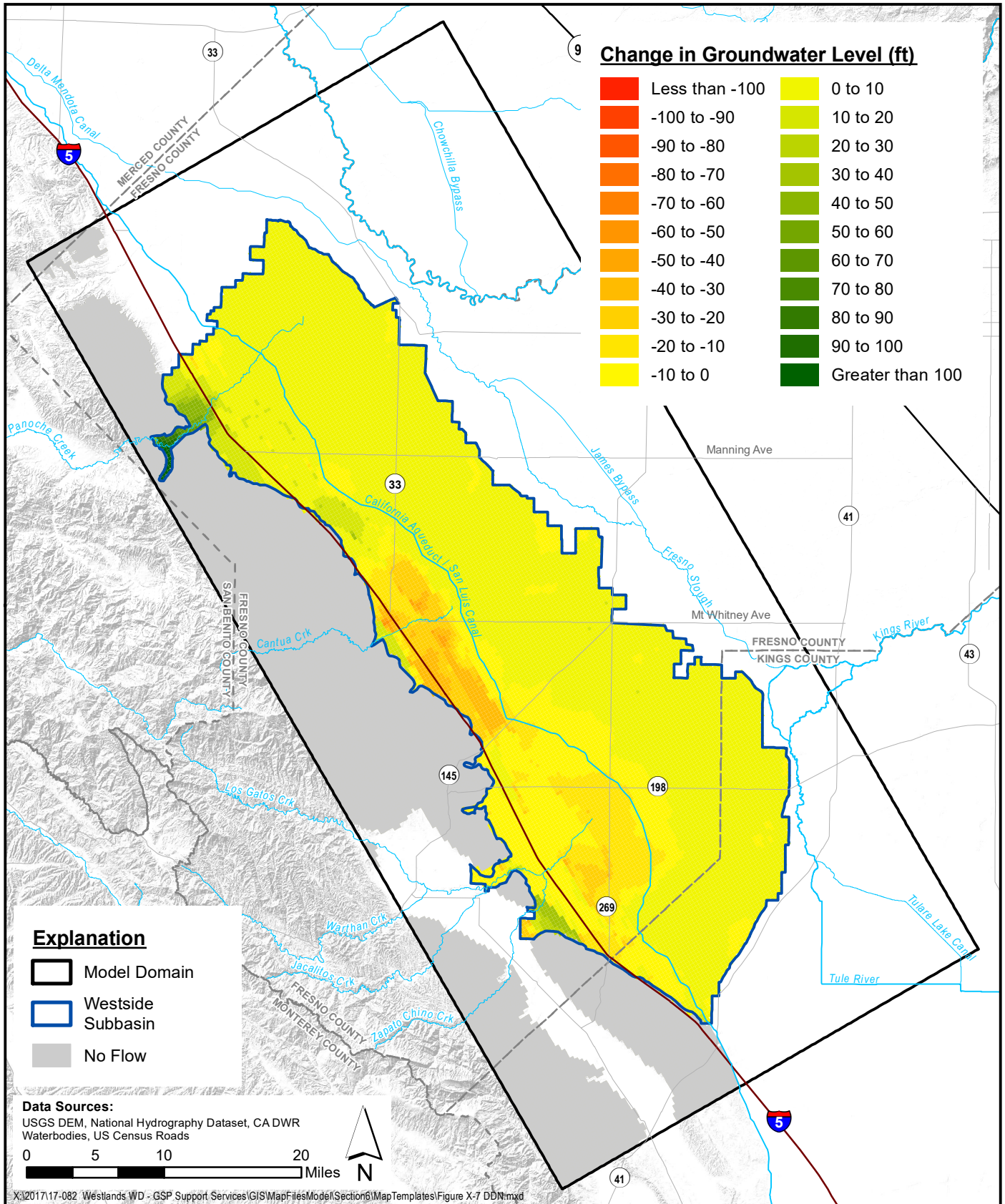
**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.3 (January 2071)**

Figure E-48



SGMA Sustainability Analyses  
 Westside Subbasin



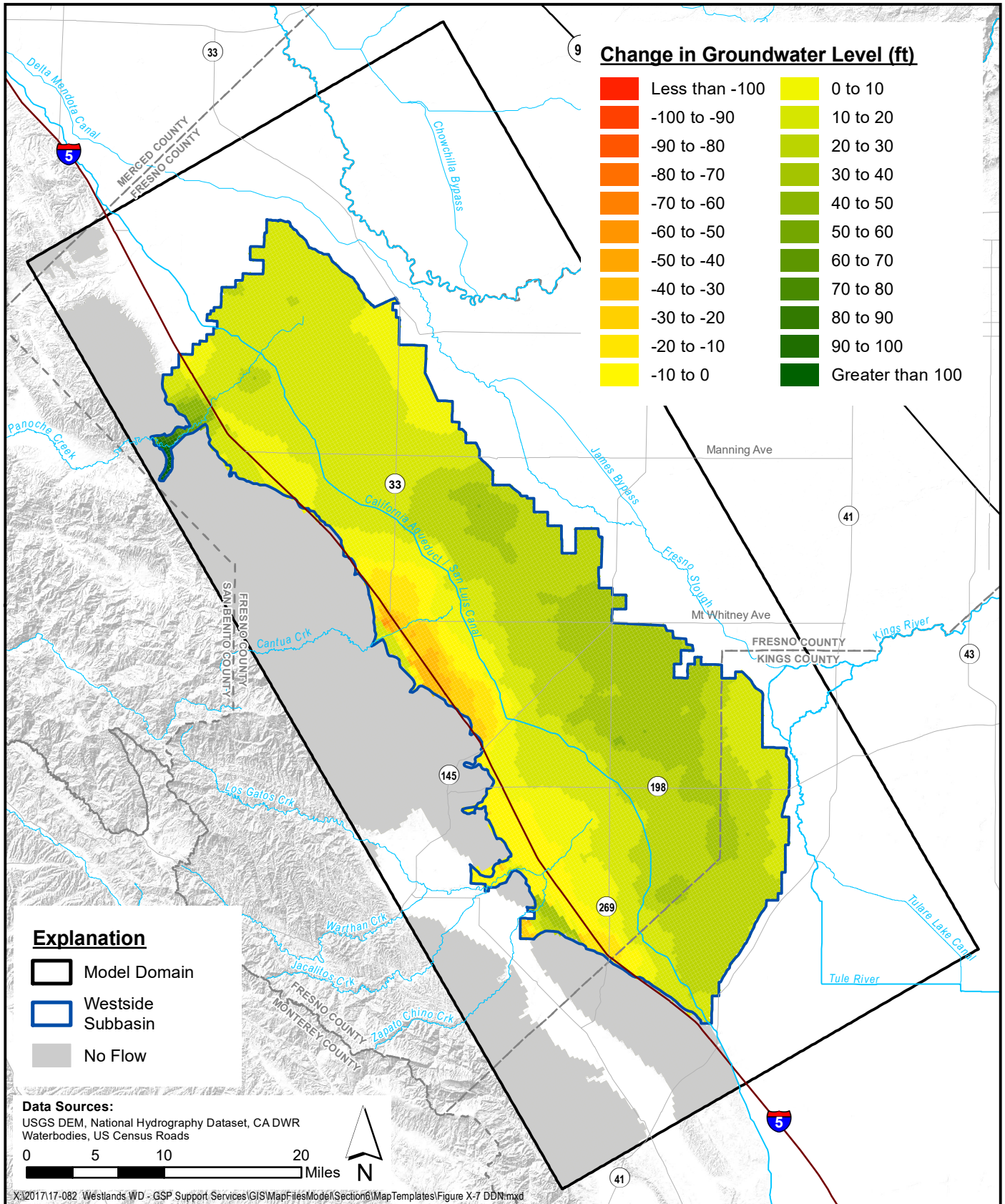


**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.3 (2020 - 2040)**

Figure E-49



SGMA Sustainability Analyses  
 Westside Subbasin



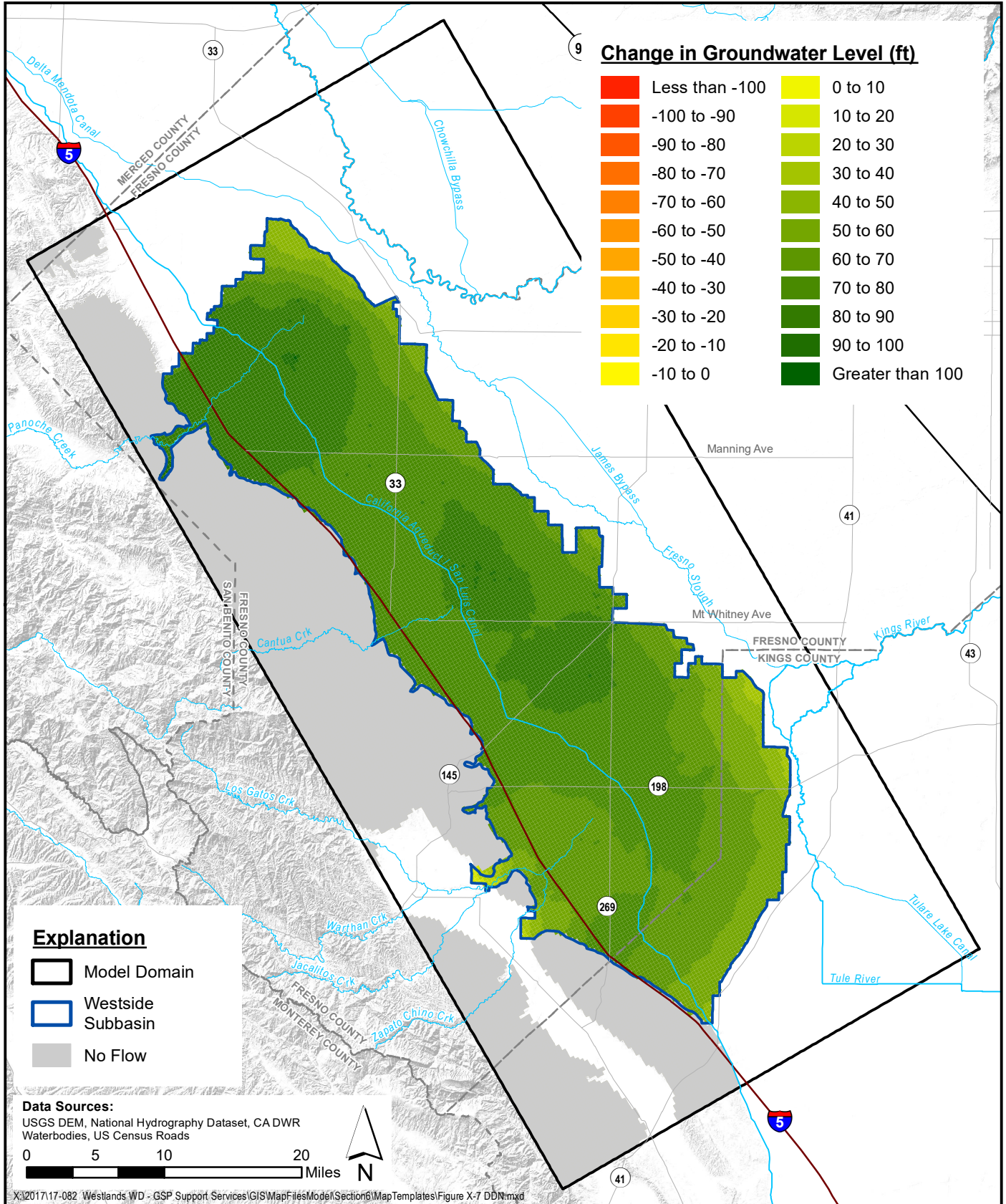
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.3 (2020 - 2040)**

Figure E-50



SGMA Sustainability Analyses  
 Westside Subbasin



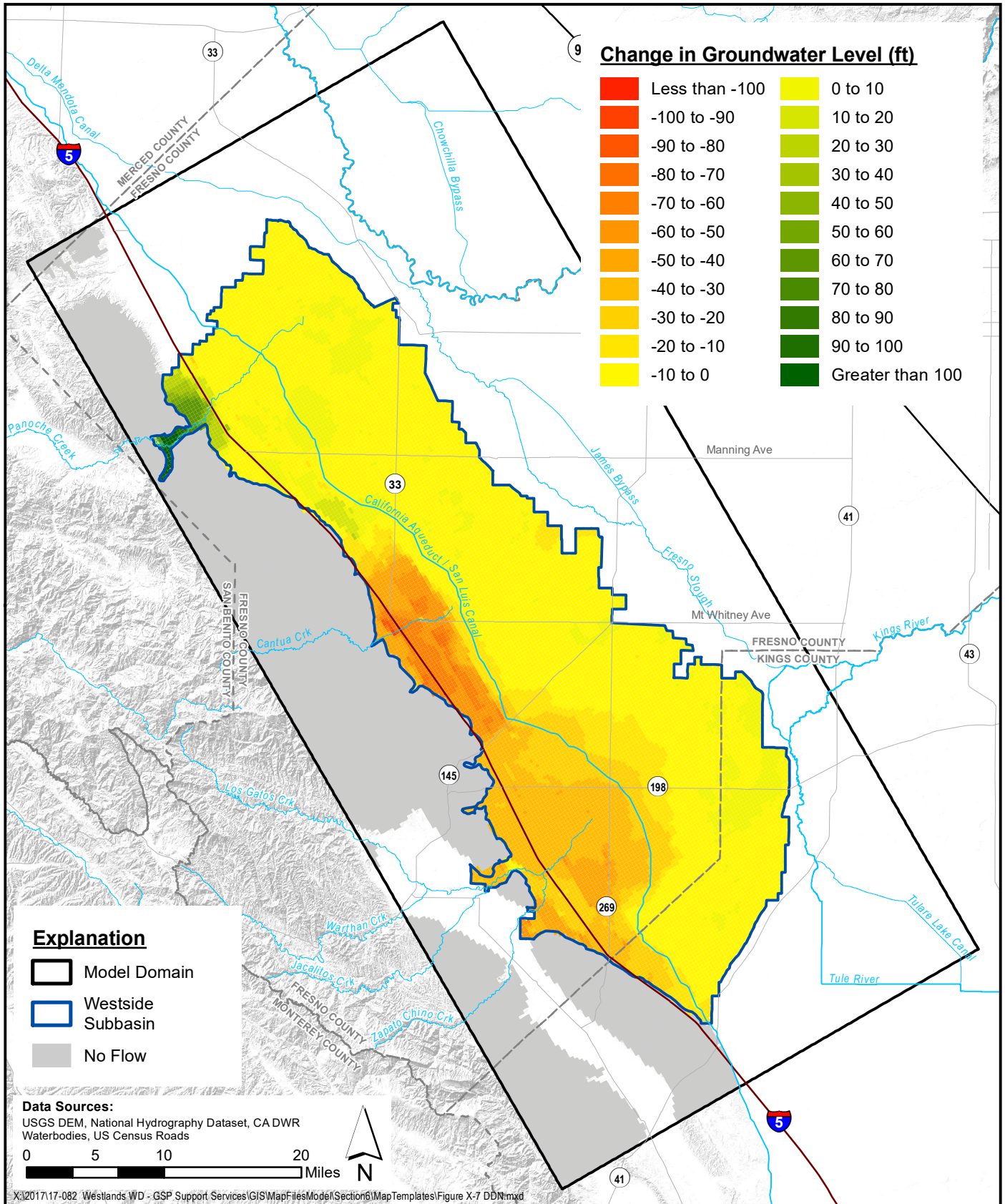


**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.3 (2020 - 2040)**

Figure E-51



SGMA Sustainability Analyses  
 Westside Subbasin



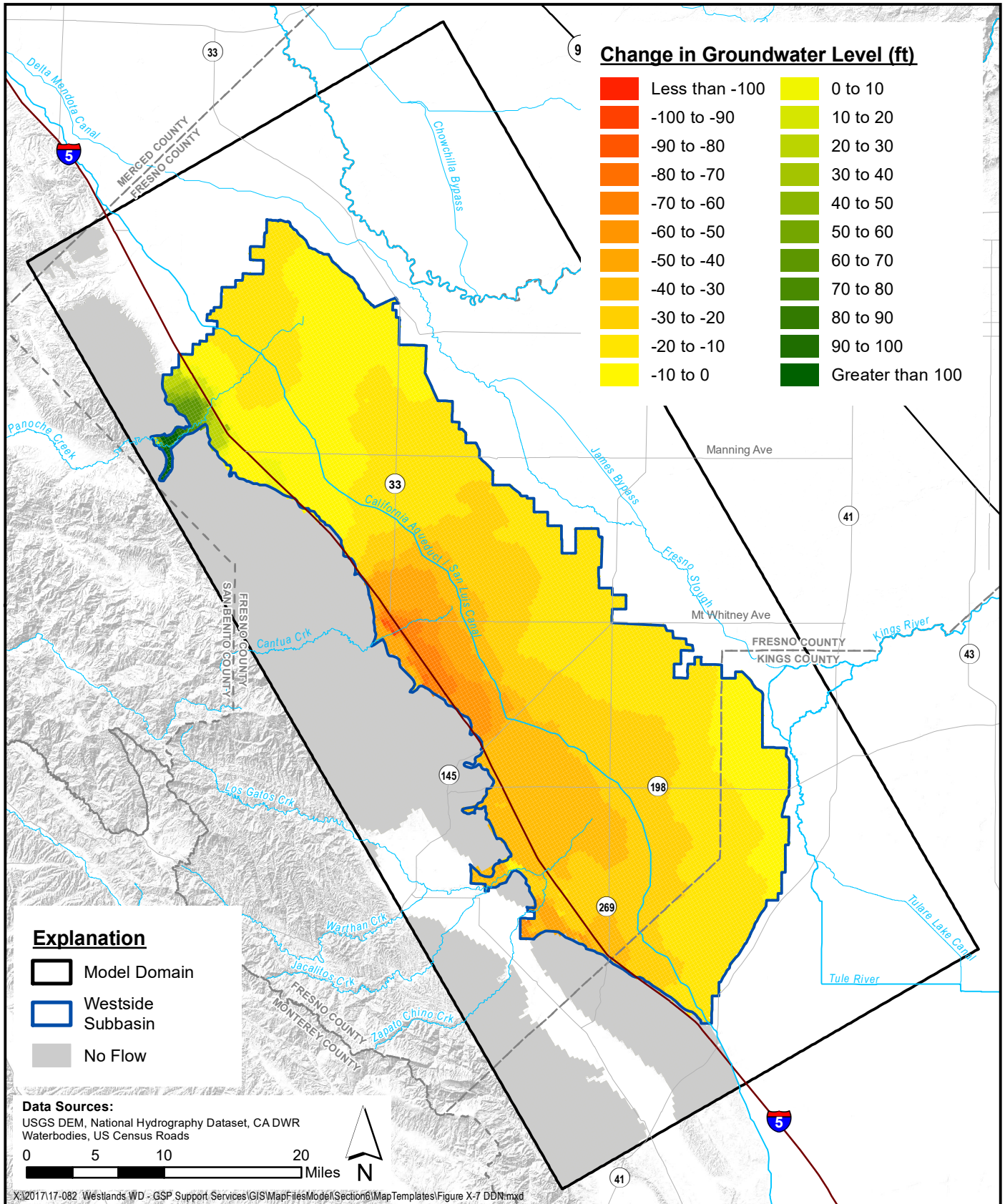
**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.3 (2020 - 2070)**

Figure E-52



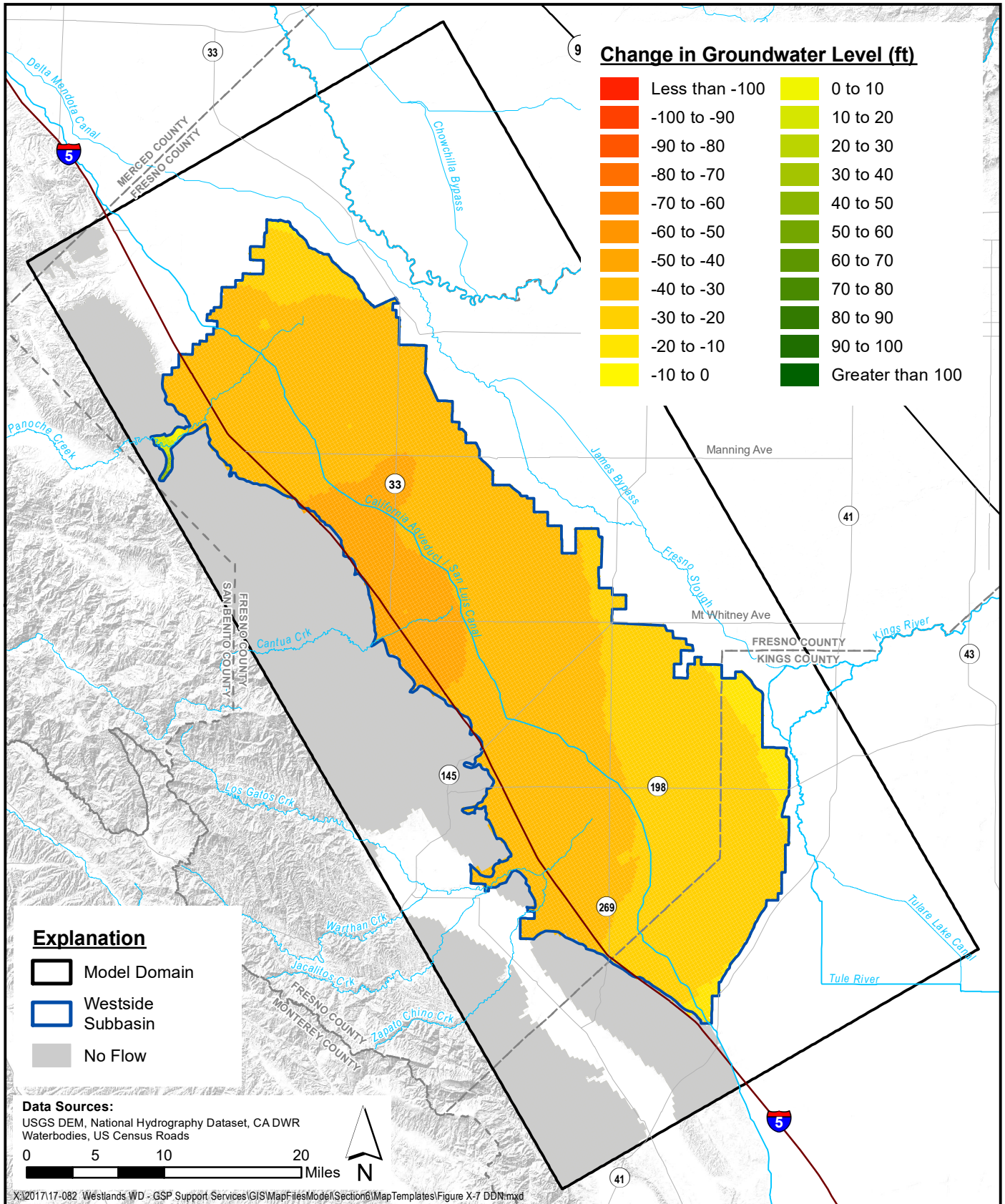
SGMA Sustainability Analyses  
 Westside Subbasin





**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.3 (2020 - 2070)**

Figure E-53



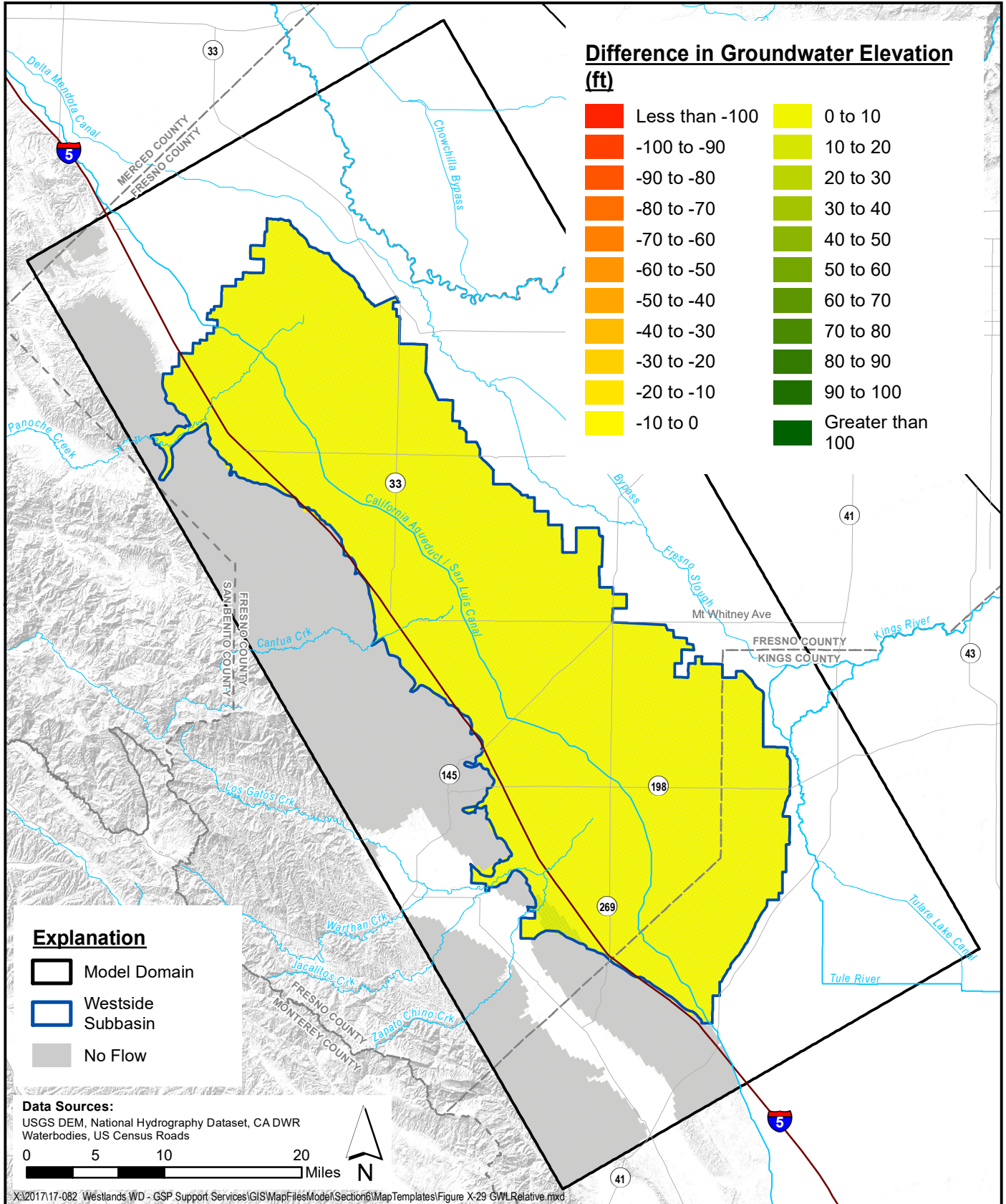
**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.3 (2020 - 2070)**

Figure E-54



SGMA Sustainability Analyses  
 Westside Subbasin



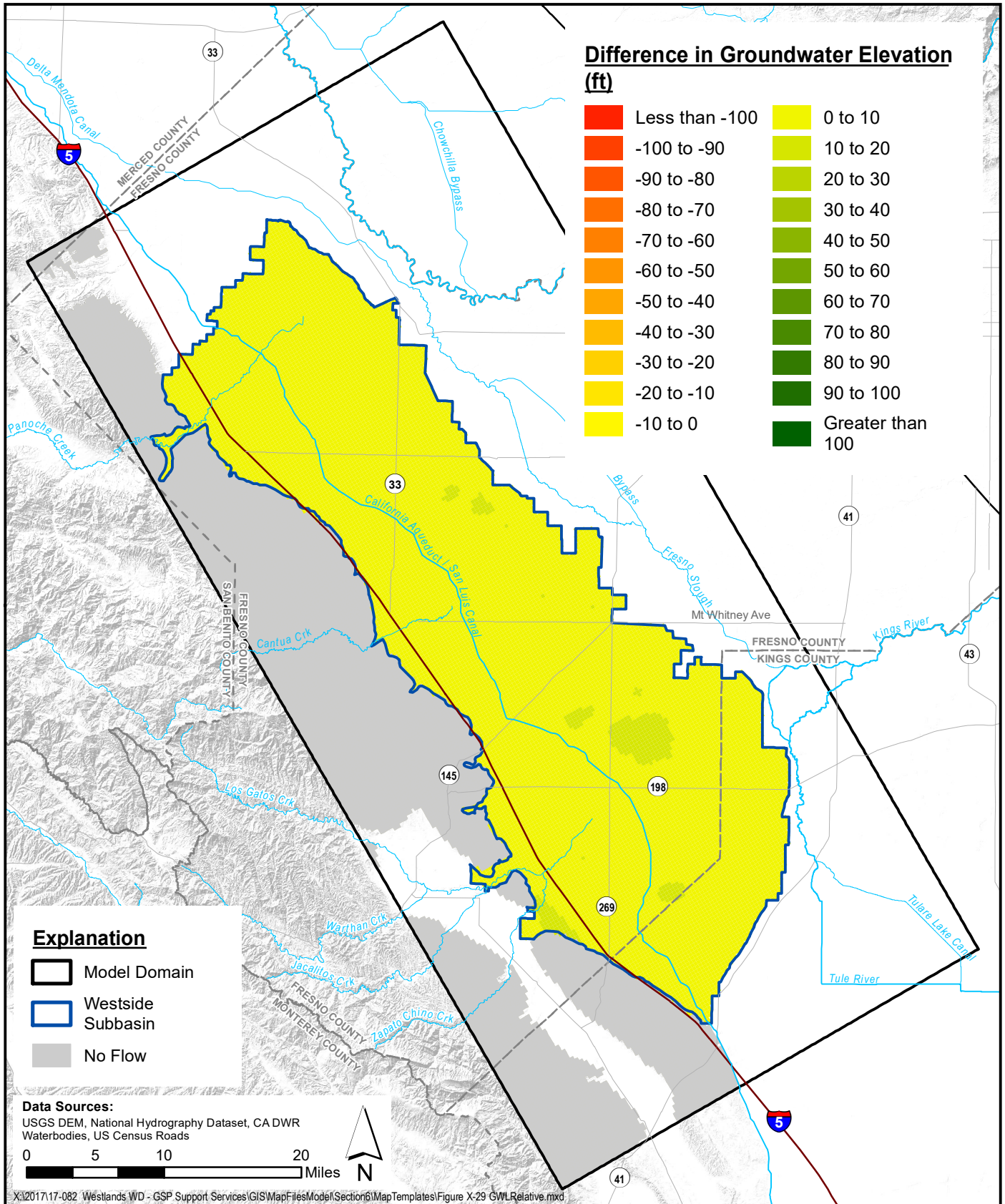


**Project Impacts on Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.3 (2020 - 2040)**

Figure E-55



SGMA Sustainability Analyses  
 Westside Subbasin



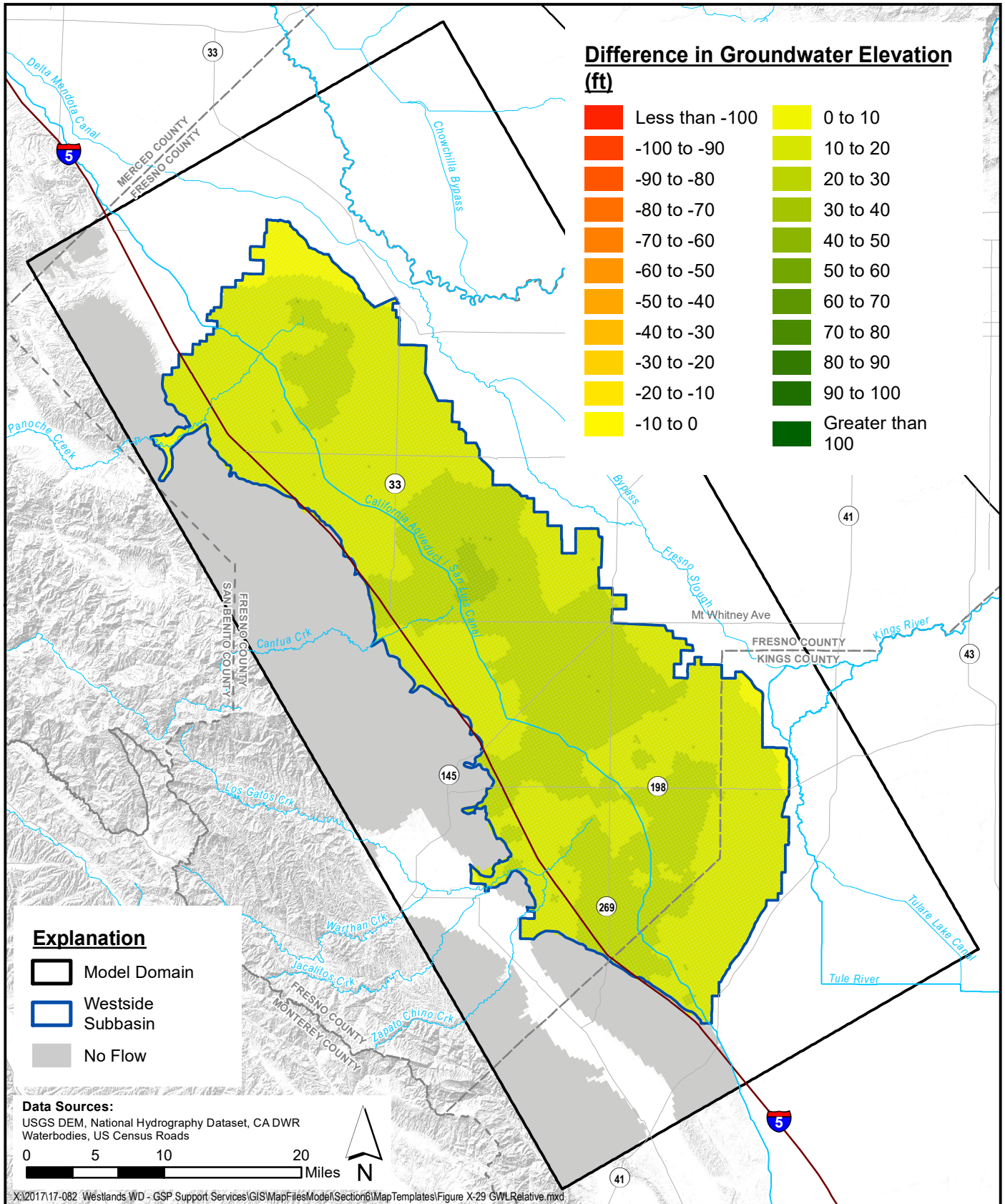
**Project Impacts on Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.3 (2020 - 2040)**

Figure E-56



SGMA Sustainability Analyses  
 Westside Subbasin



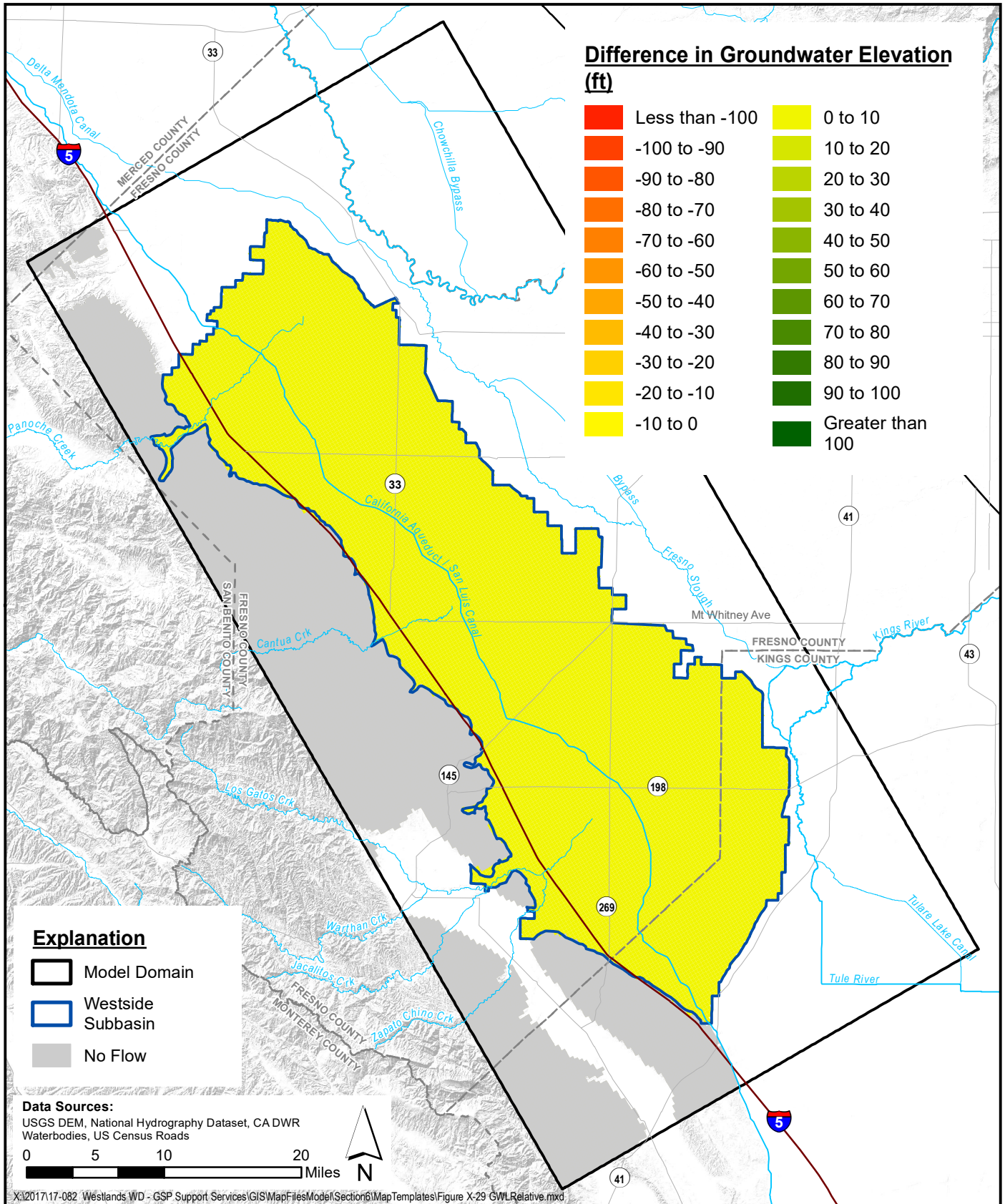


**Project Impacts on Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.3 (2020 - 2040)**

Figure E-57



SGMA Sustainability Analyses  
 Westside Subbasin



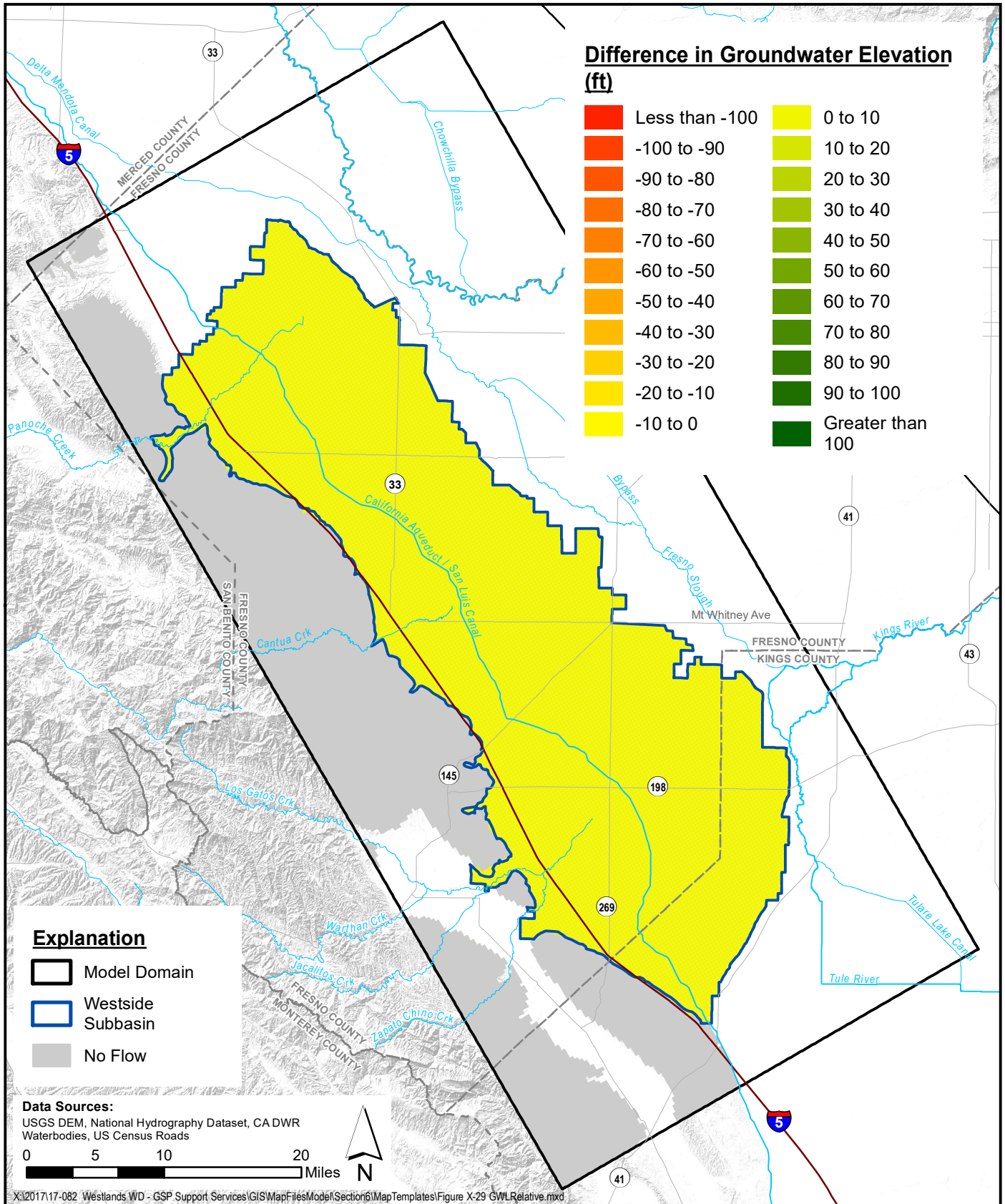
**Project Impacts on Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.3 (2020 - 2070)**

Figure E-58



SGMA Sustainability Analyses  
 Westside Subbasin



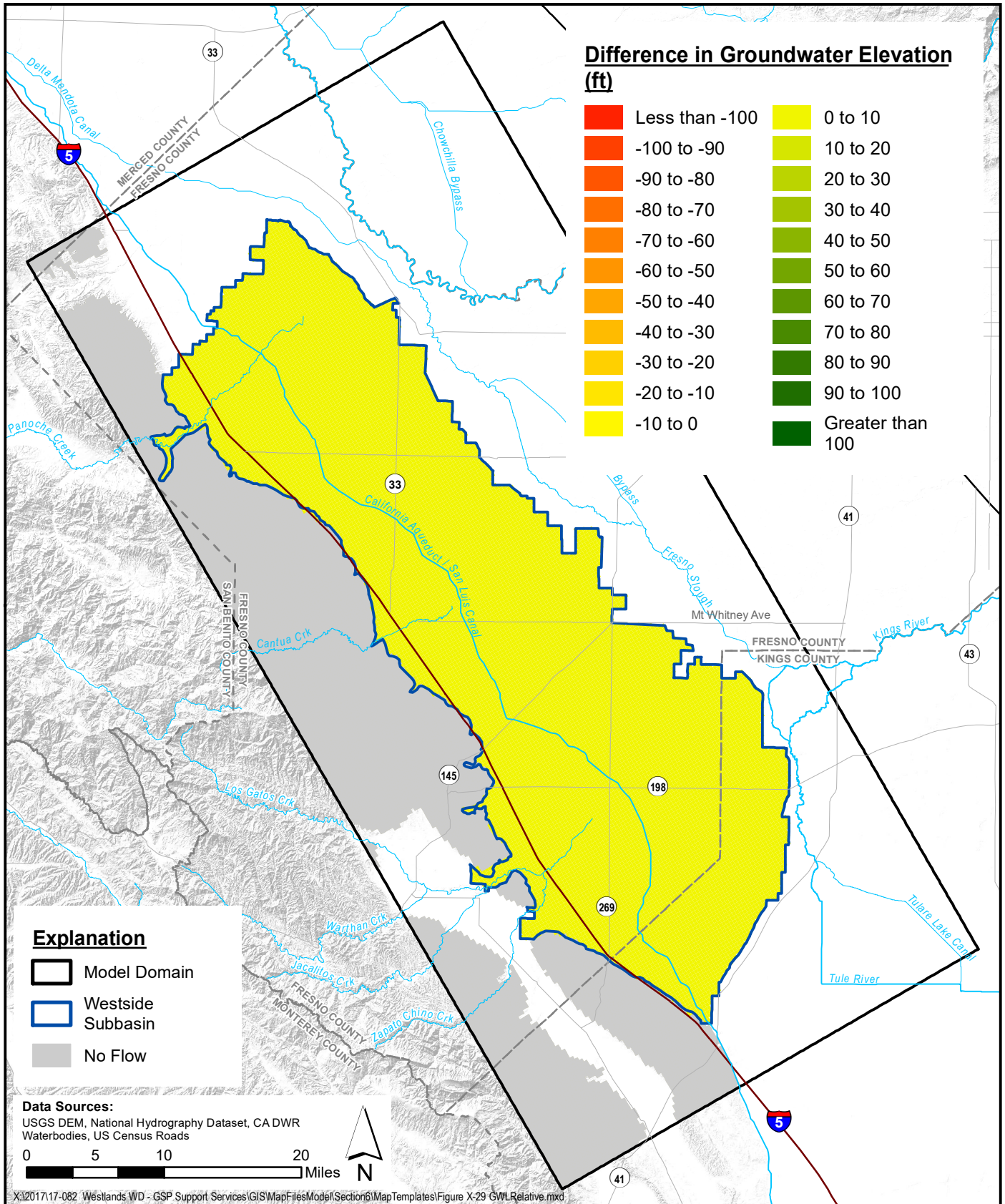


**Project Impacts on Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.3 (2020 - 2070)**

Figure E-59



SGMA Sustainability Analyses  
 Westside Subbasin



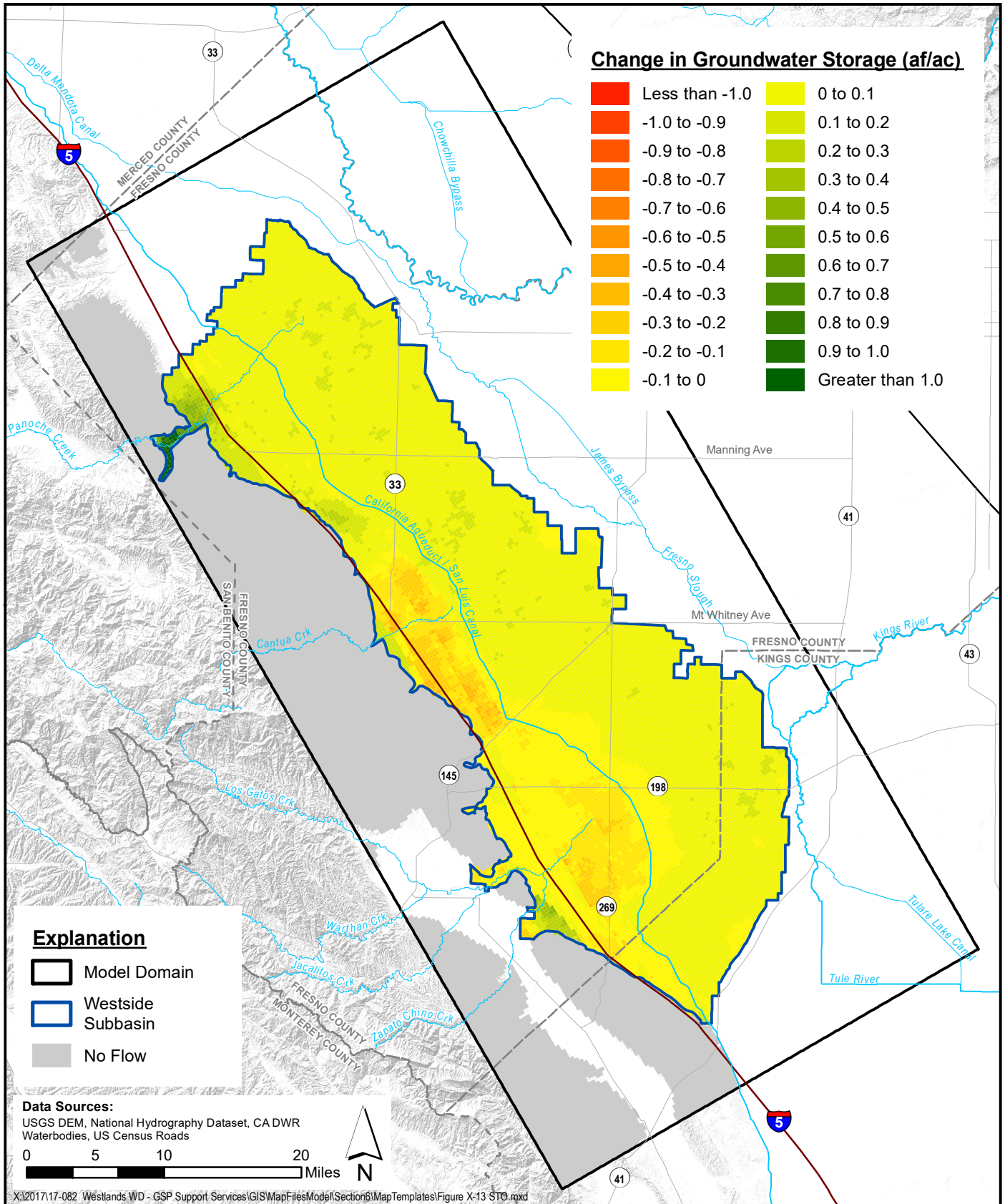
**Project Impacts on Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.3 (2020 - 2070)**

Figure E-60



SGMA Sustainability Analyses  
 Westside Subbasin



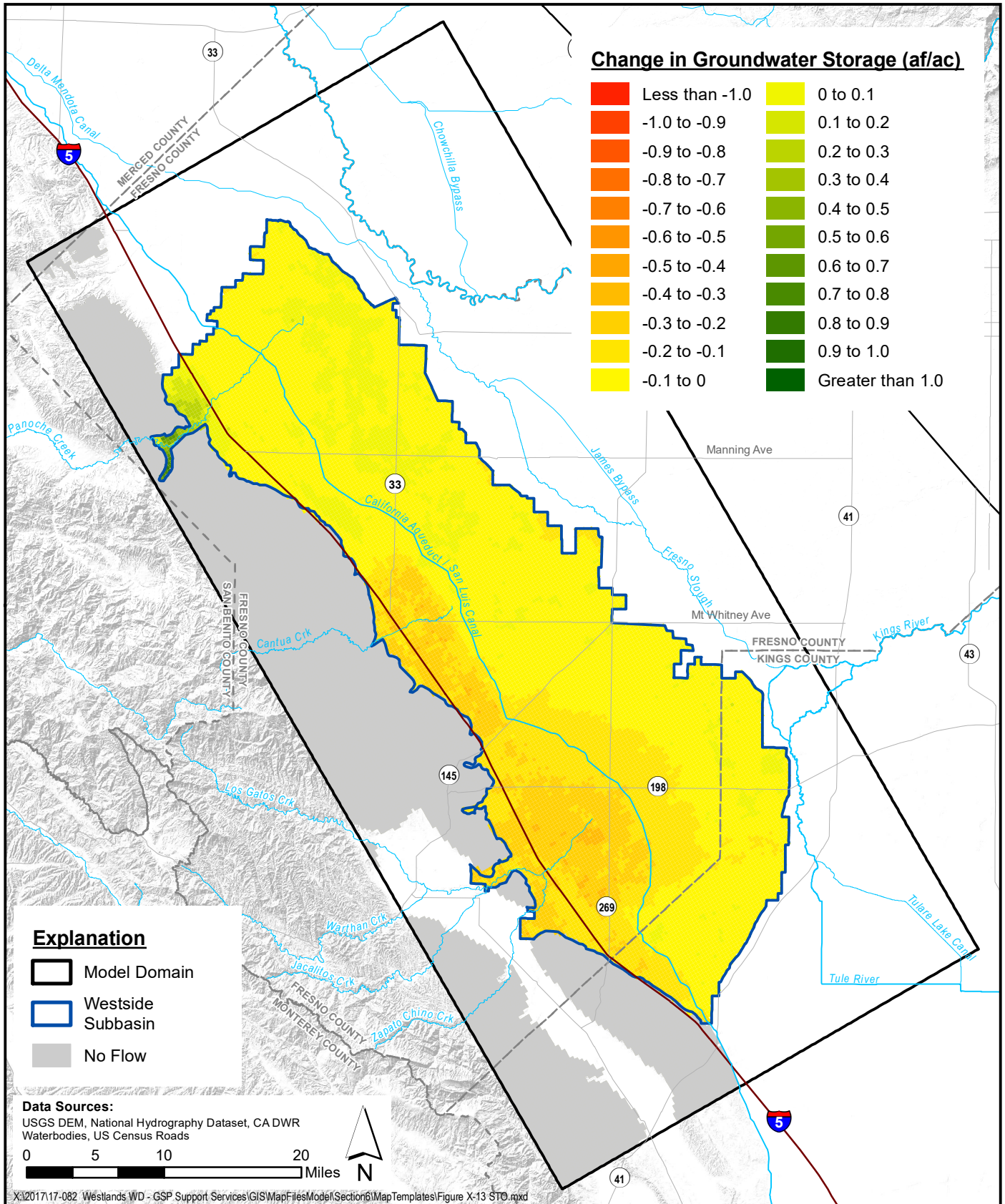


**Simulated Change in Groundwater Storage  
 No Climate Change - PMA No.3 (2020 - 2040)**

Figure E-61



SGMA Sustainability Analyses  
 Westside Subbasin



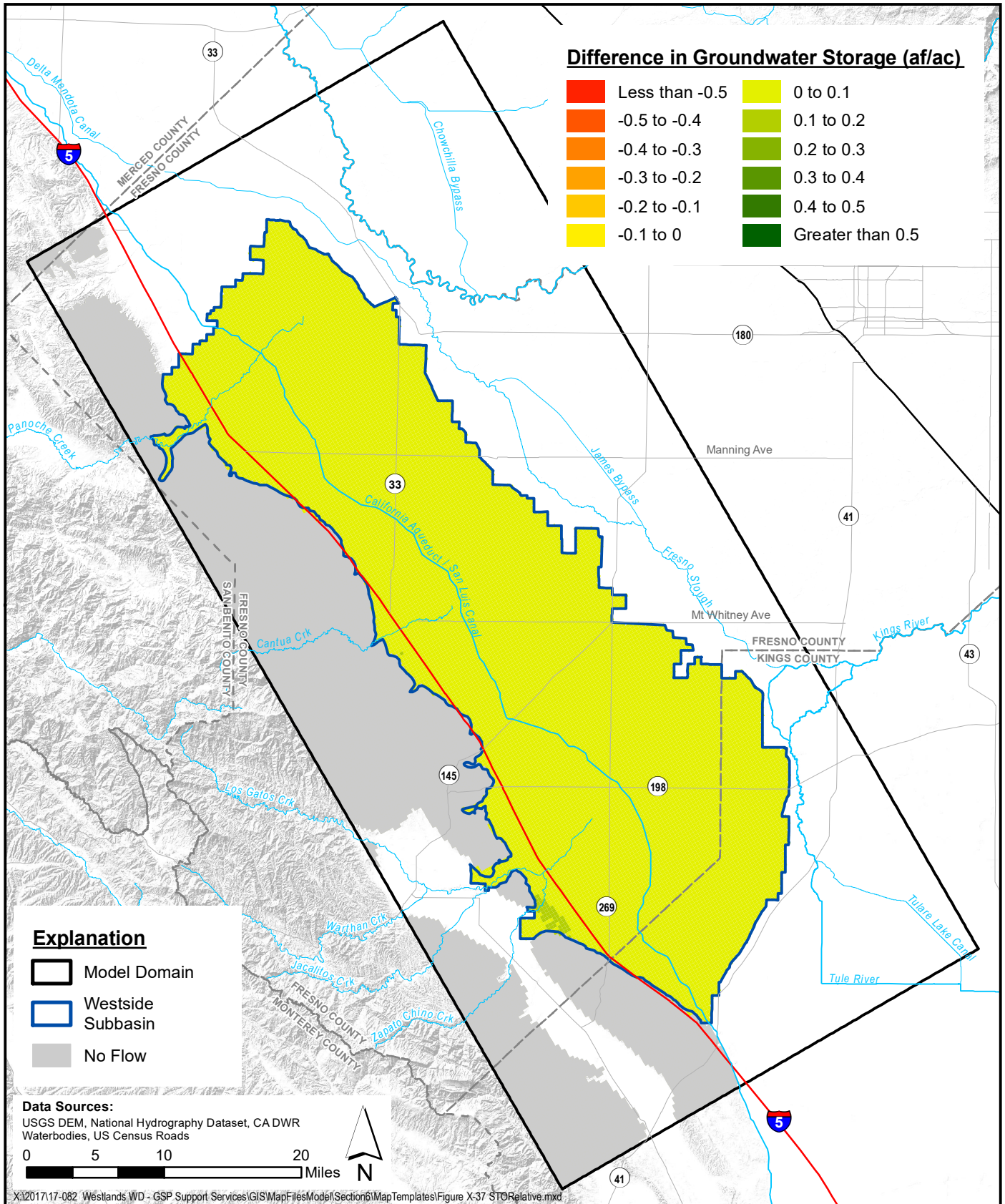
**Simulated Change in Groundwater Storage  
 No Climate Change - PMA No.3 (2020 - 2070)**

Figure E-62



SGMA Sustainability Analyses  
 Westside Subbasin



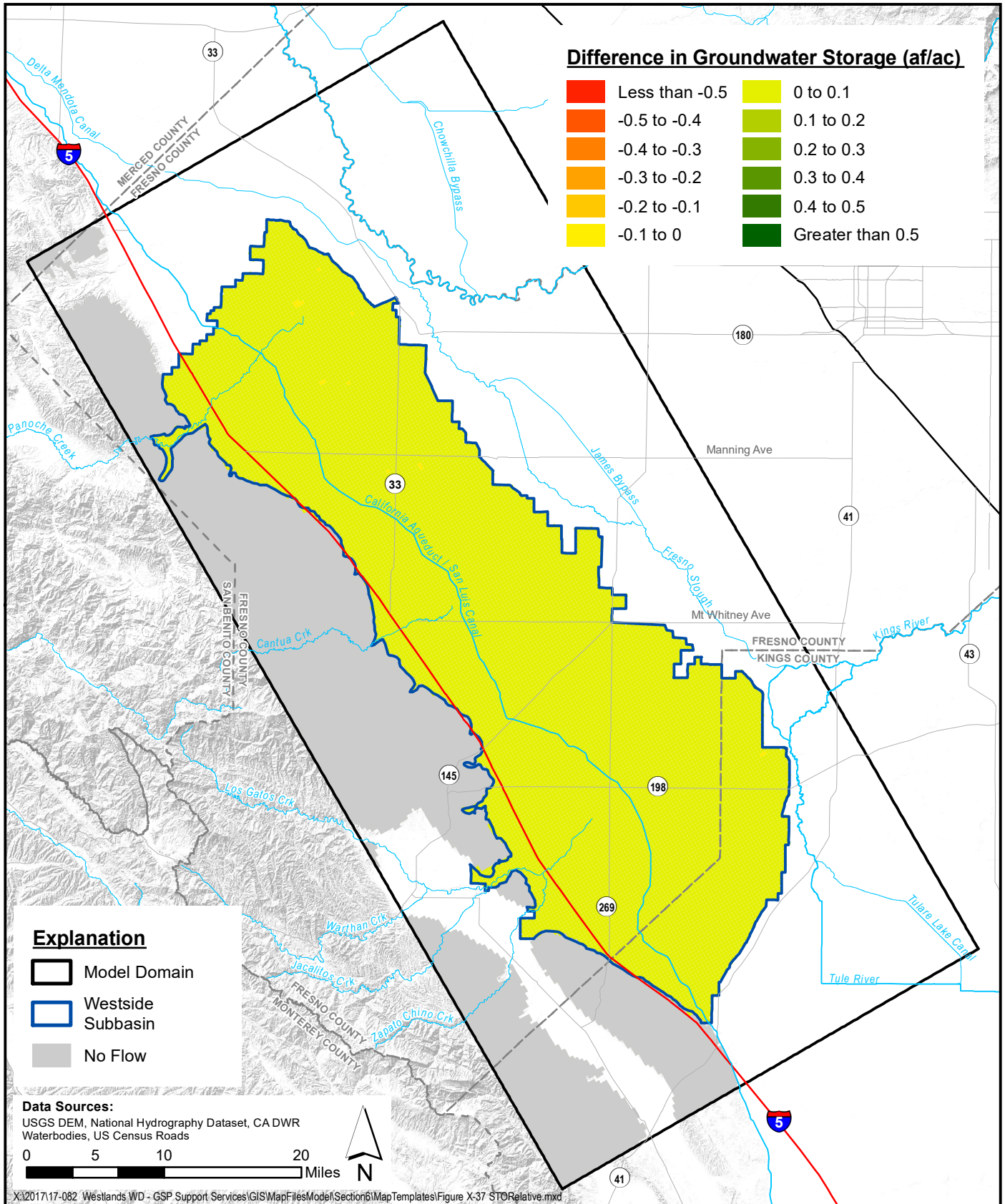


**Project Impacts on Groundwater Storage  
 No Climate Change - PMA No.3 (2020 - 2040)**

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**Figure E-63**





**Project Impacts on Groundwater Storage  
 No Climate Change - PMA No.3 (2020 - 2070)**

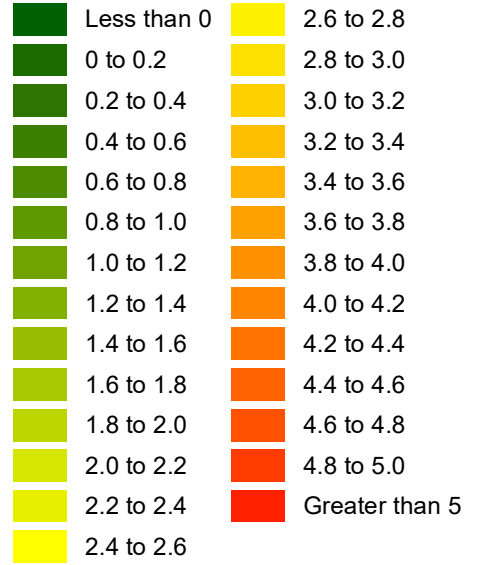
*SGMA Sustainability Analyses  
 Westside Subbasin*

**Figure E-64**








### Land Surface Subsidence (ft)

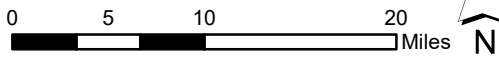


### Explanation

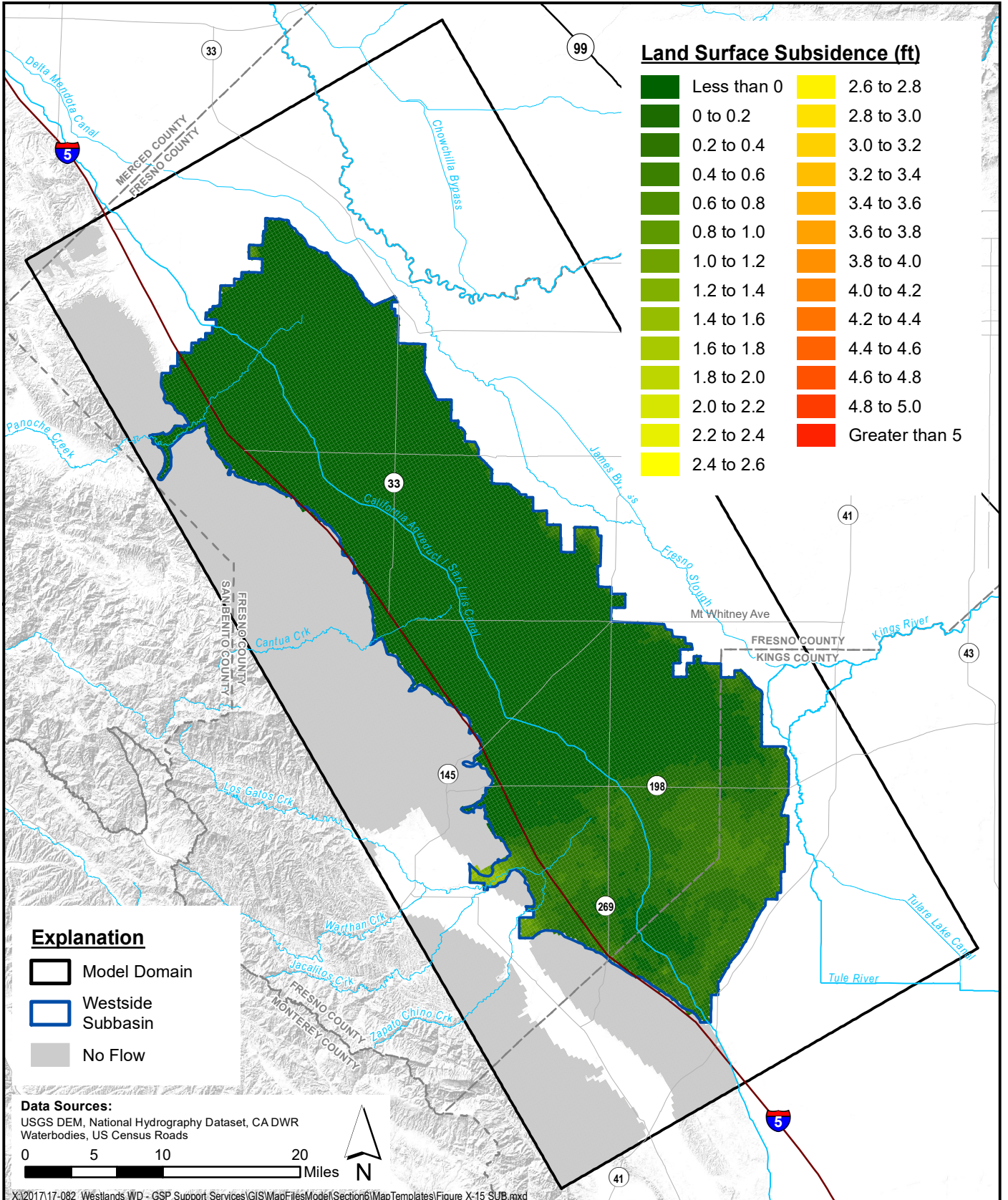
-  Model Domain
-  Westside Subbasin
-  No Flow

### Data Sources:

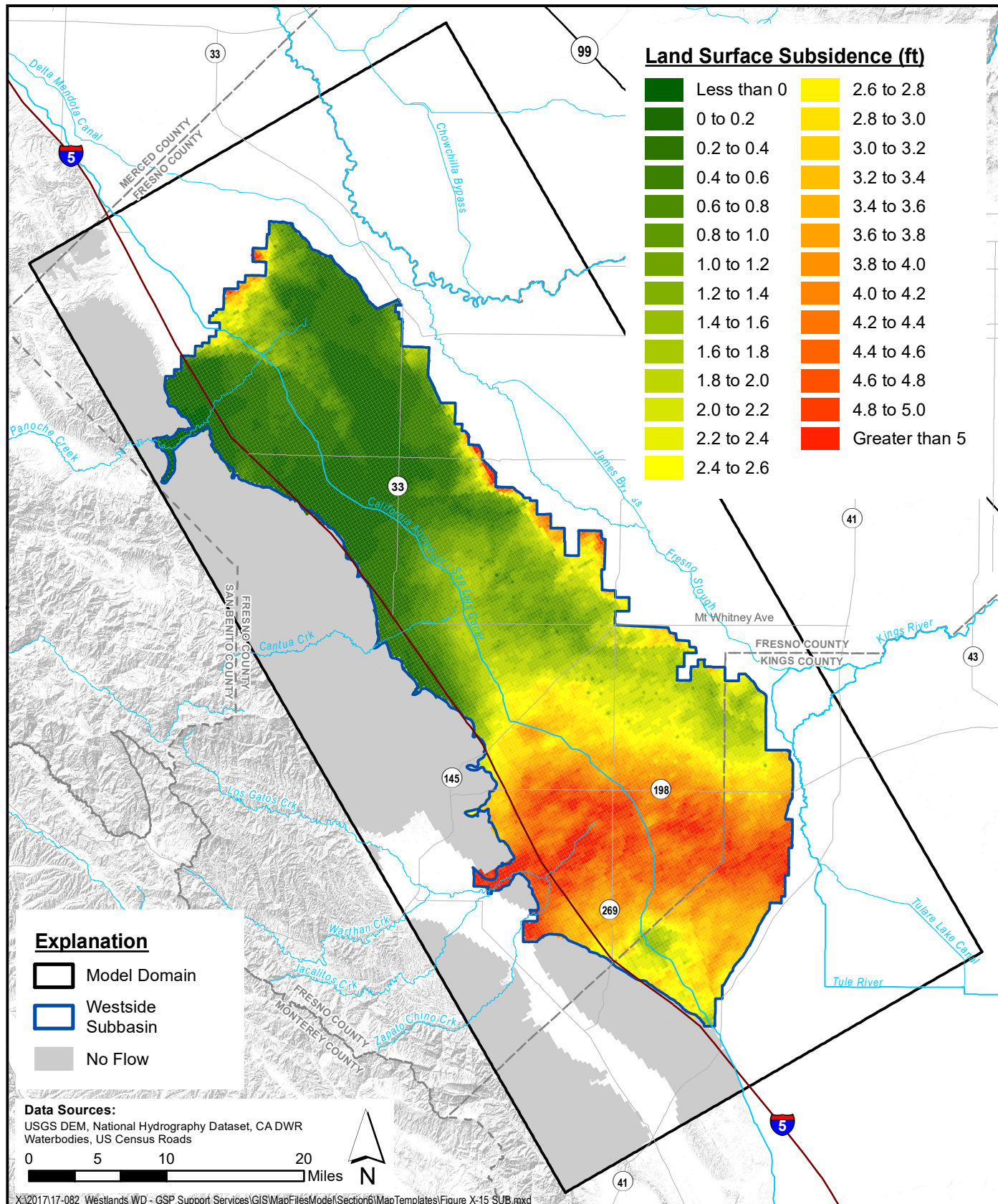
USGS DEM, National Hydrography Dataset, CA DWR  
Waterbodies, US Census Roads



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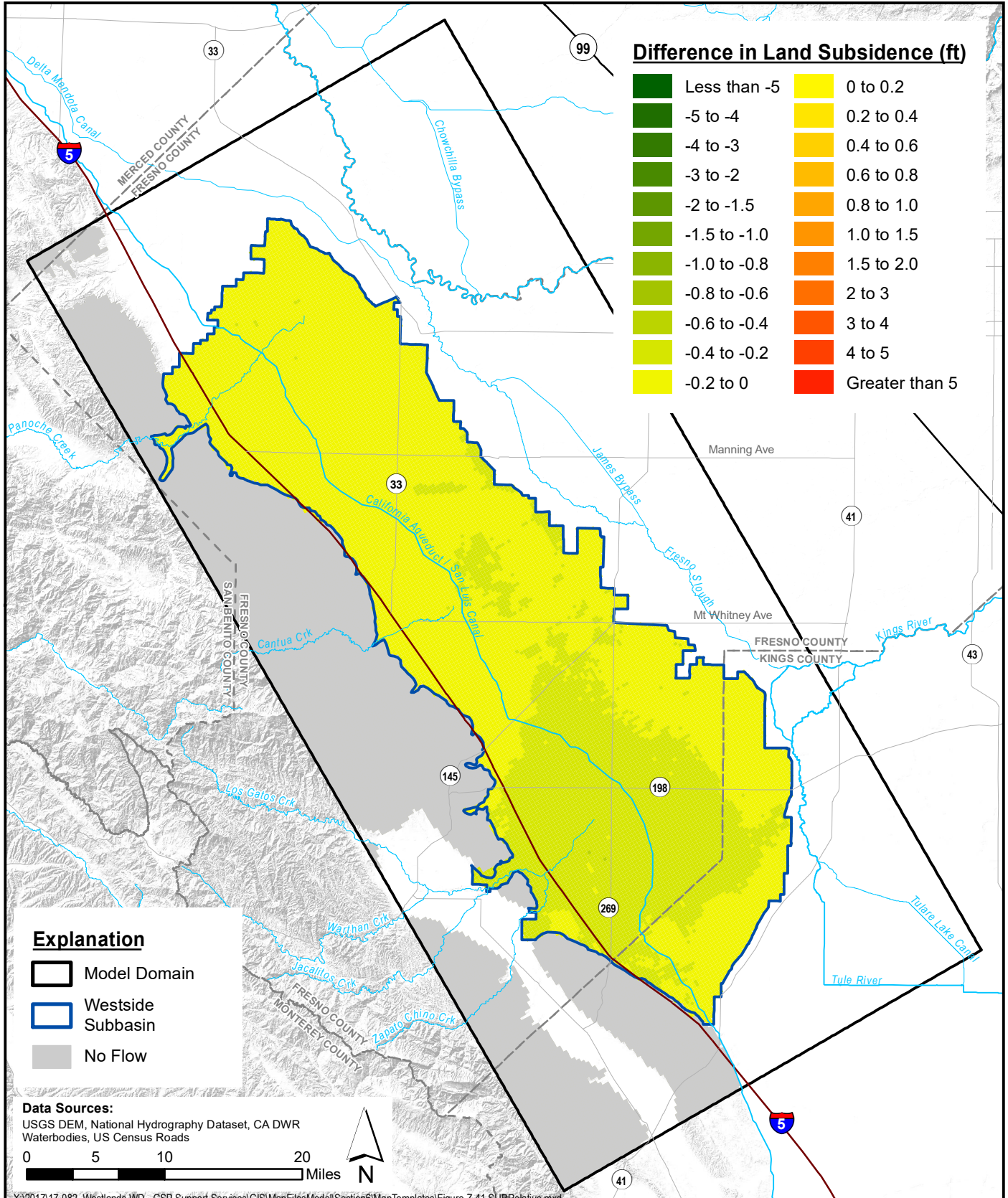
**Simulated Land Surface Subsidence  
 No Climate Change - PMA No.3 (2020 - 2070)**

*SGMA Sustainability Analyses  
 Westside Subbasin*

**Figure E-66**





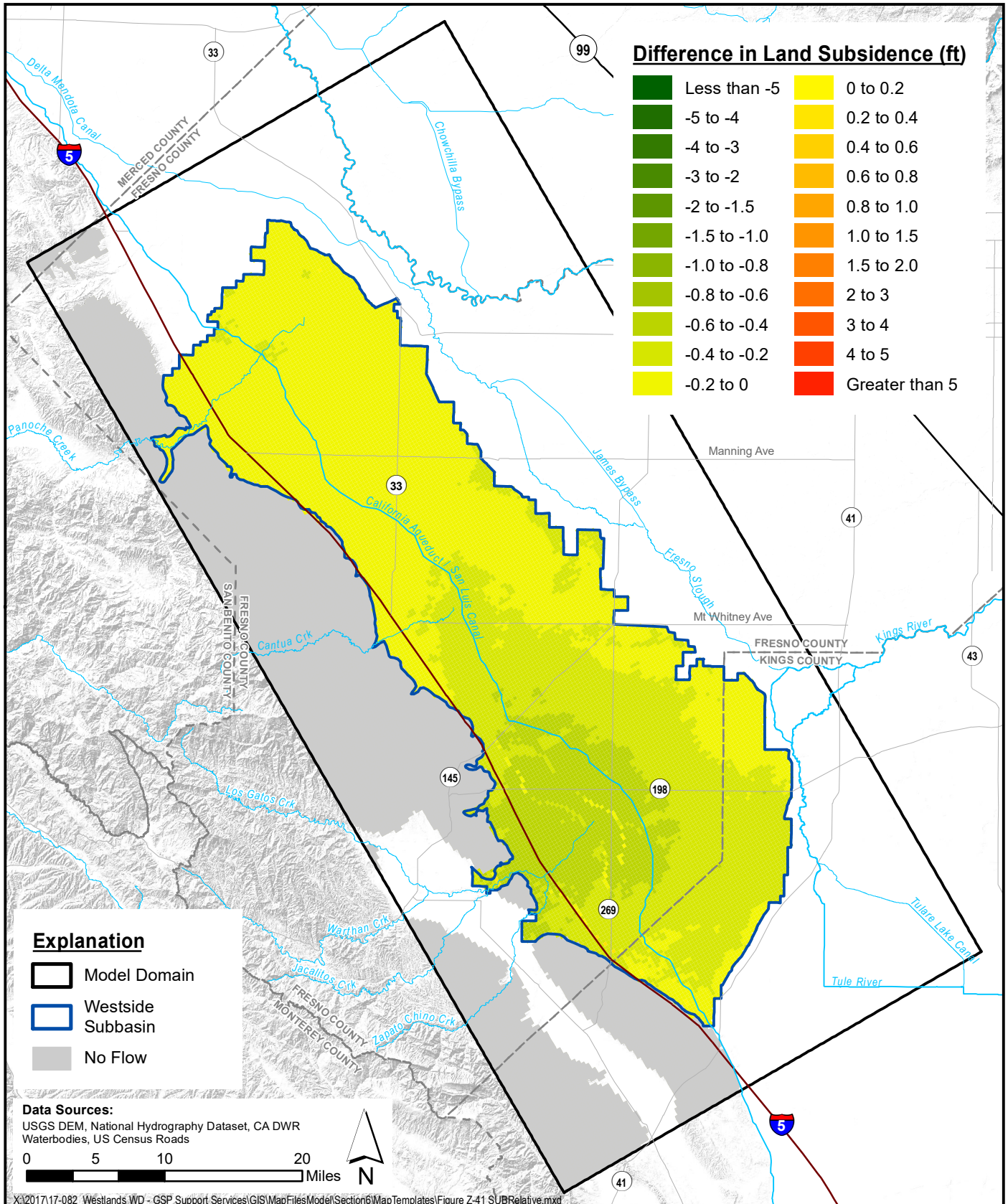


**Project Impact on Land Subsidence  
 No Climate Change - PMA No. 3 (2020 - 2040)**

Figure E-67



*SGMA Sustainability Analyses  
 Westside Subbasin*



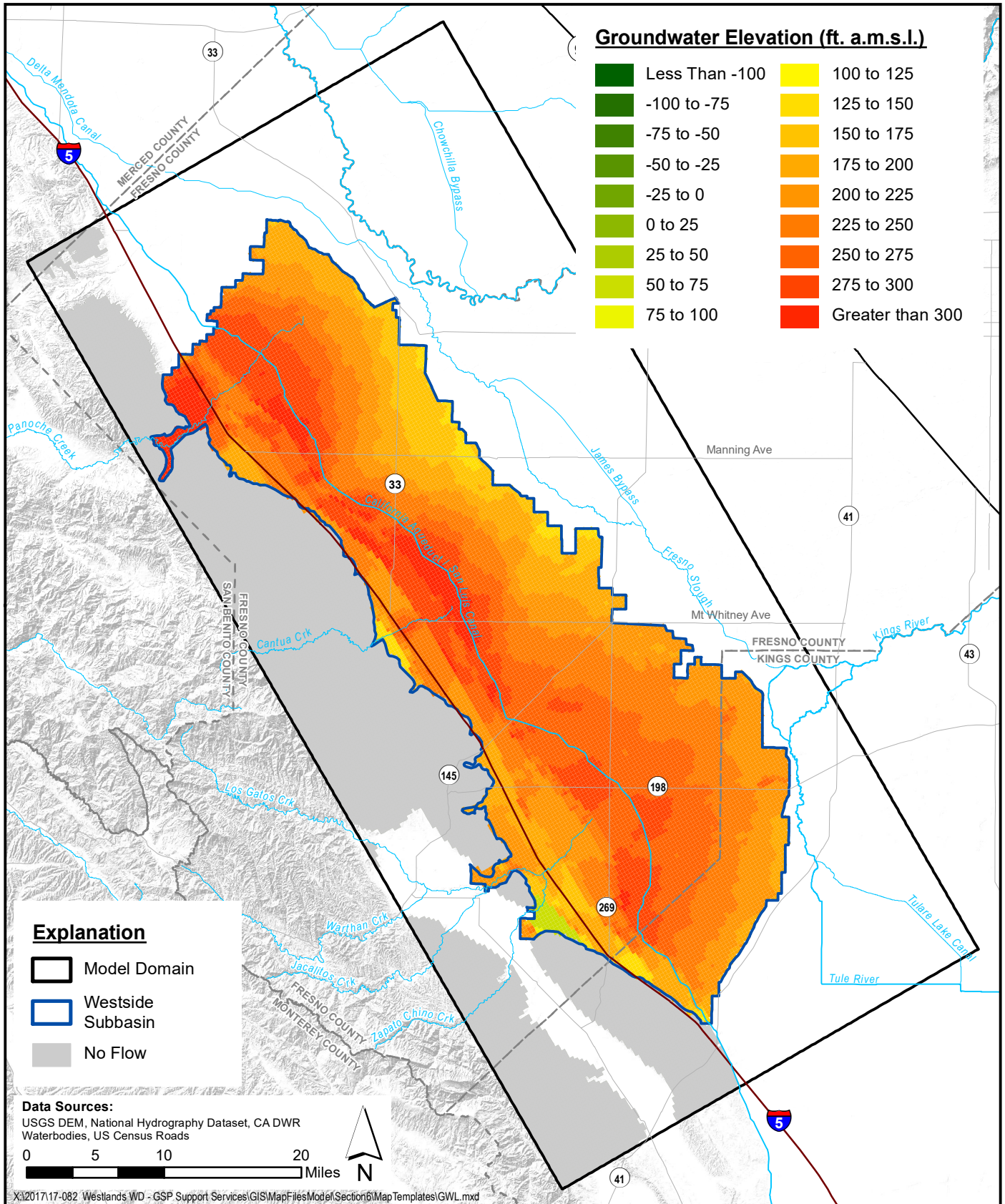
**Project Impact on Land Subsidence  
 No Climate Change - PMA No. 3 (2020 - 2070)**

Figure E-68



SGMA Sustainability Analyses  
 Westside Subbasin





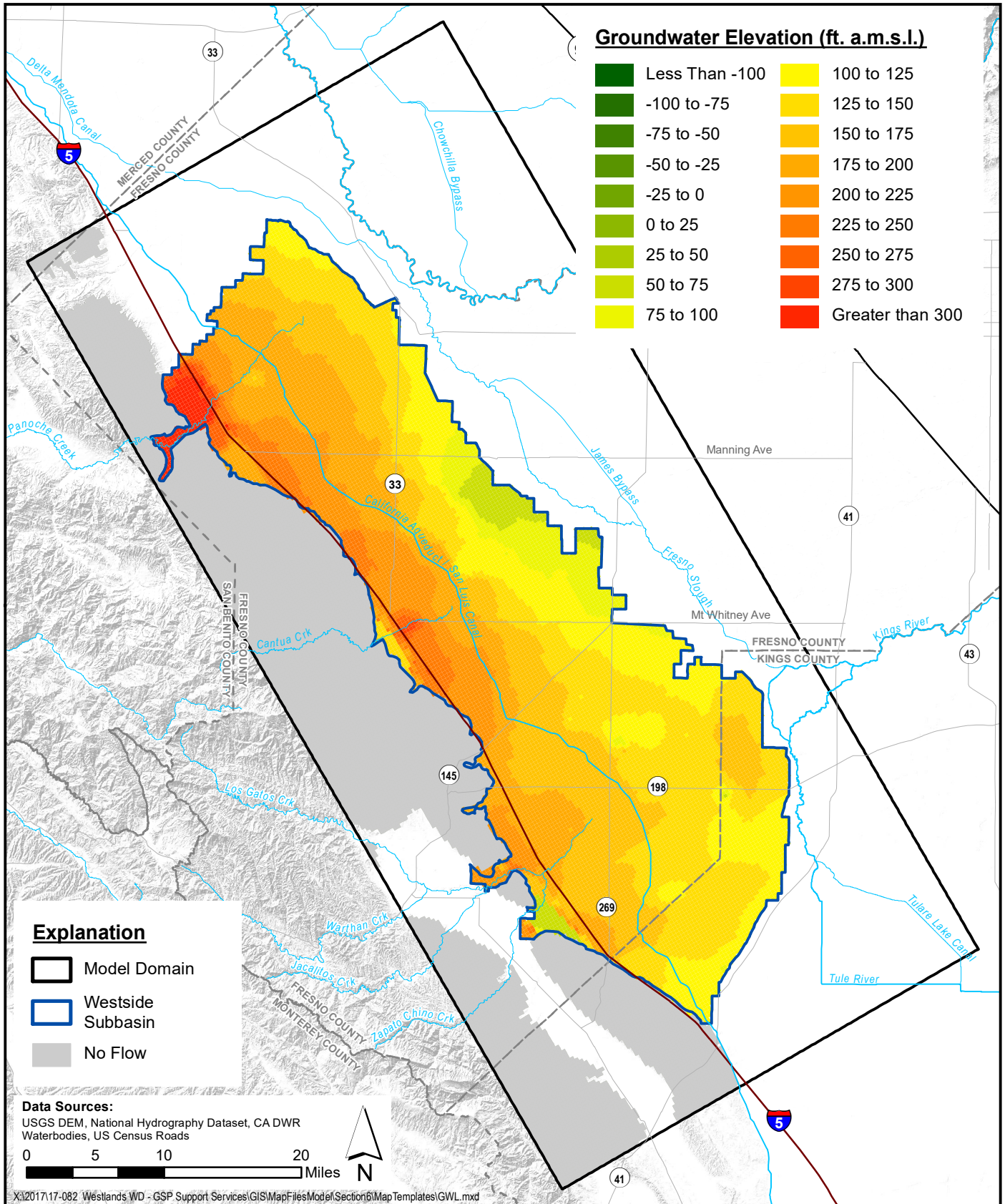
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.4 (March 2047)**

Figure E-69



SGMA Sustainability Analyses  
 Westside Subbasin





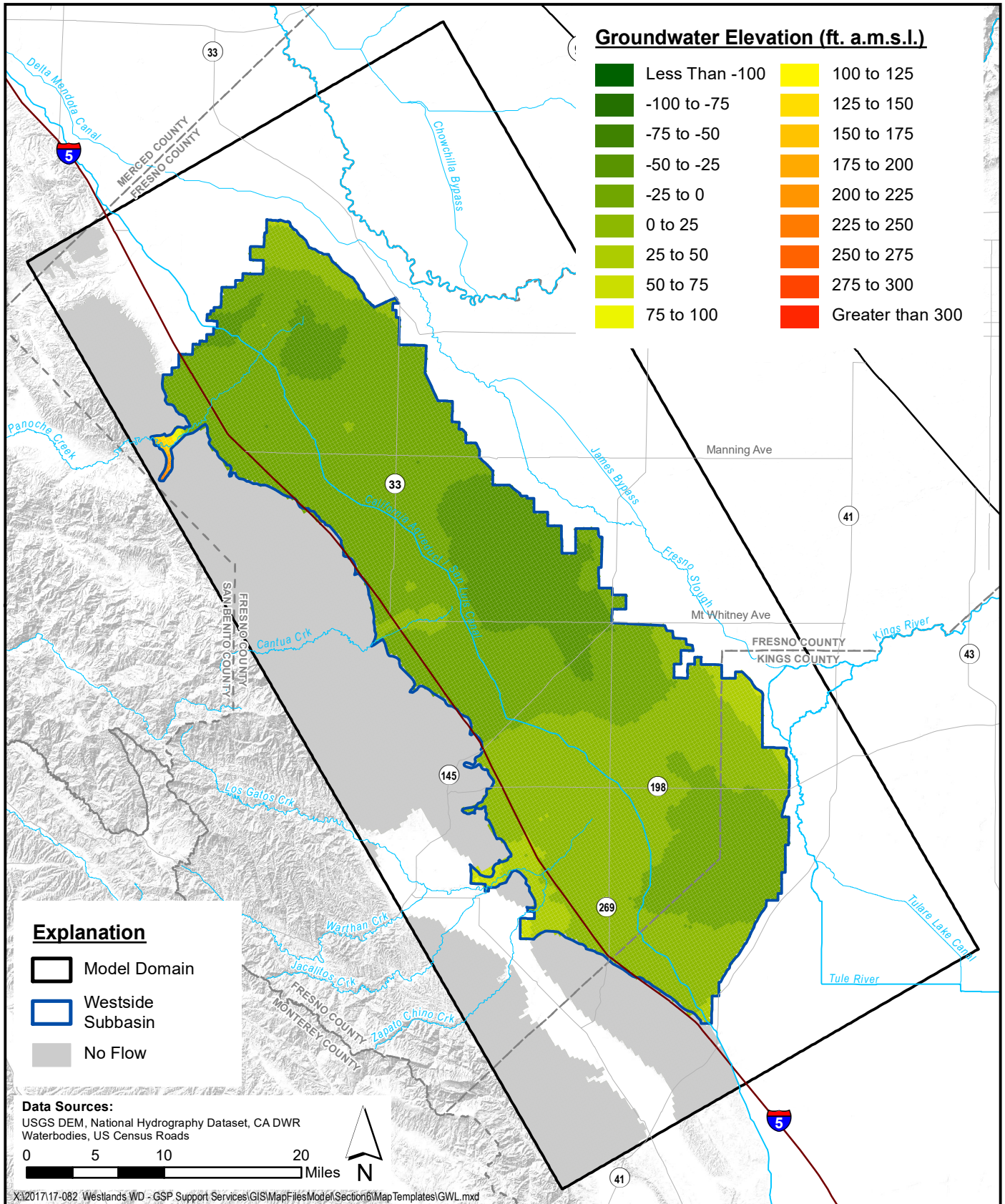
**Simulated Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.4 (March 2047)**

Figure E-70



SGMA Sustainability Analyses  
 Westside Subbasin





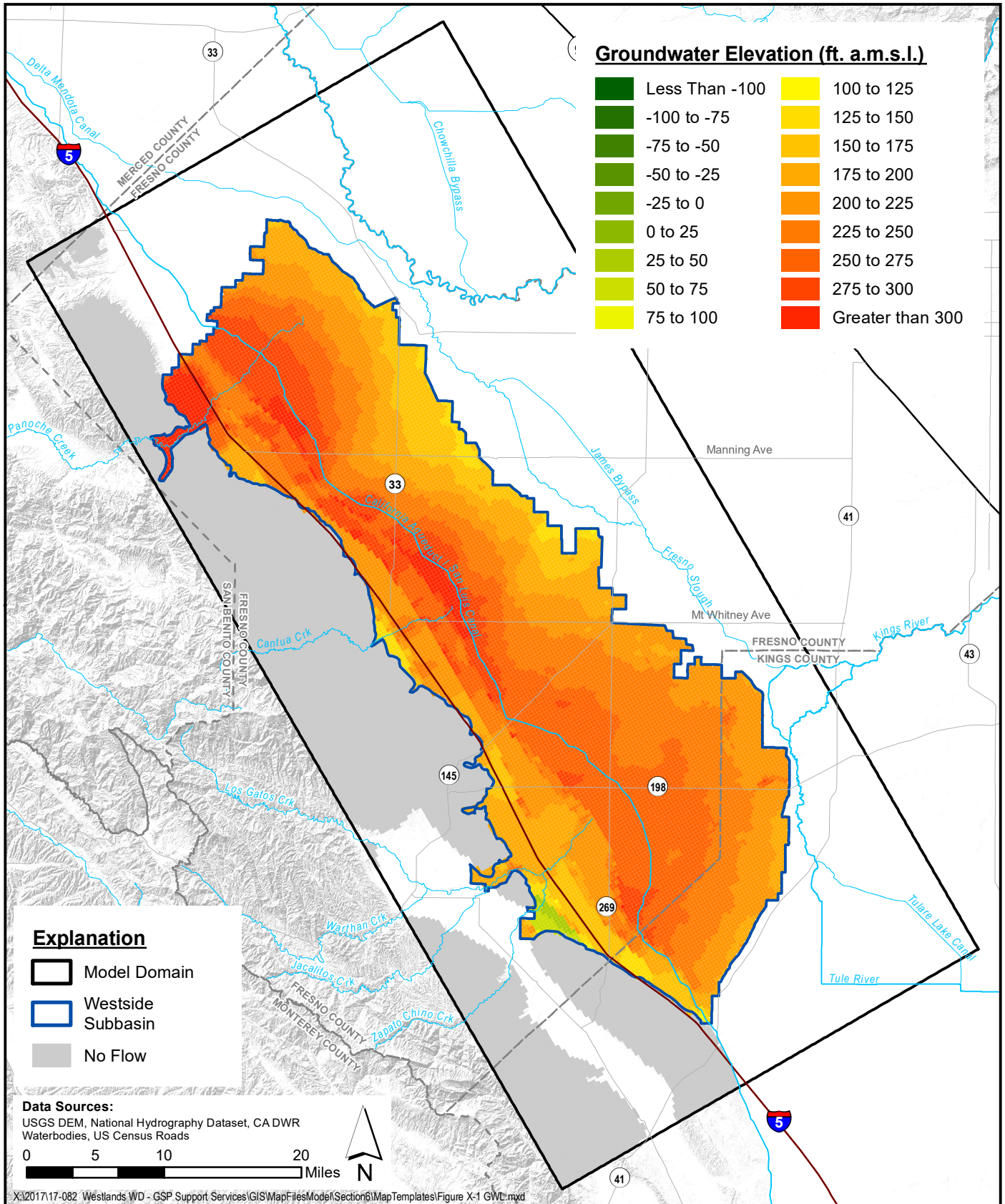
**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.4 (March 2047)**

Figure E-71



SGMA Sustainability Analyses  
 Westside Subbasin





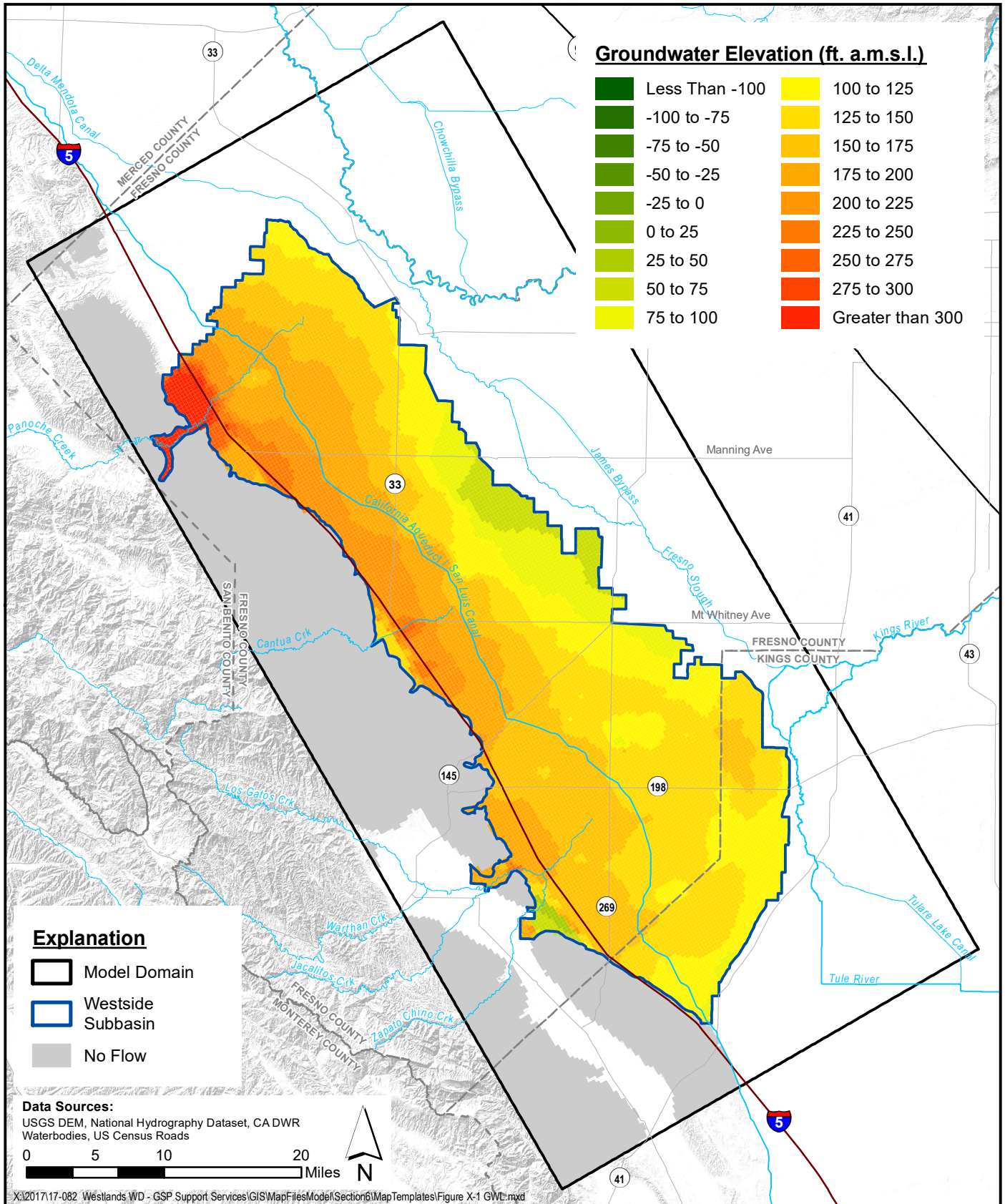
**Simulated Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.4 (January 2071)**

Figure E-72



SGMA Sustainability Analyses  
 Westside Subbasin





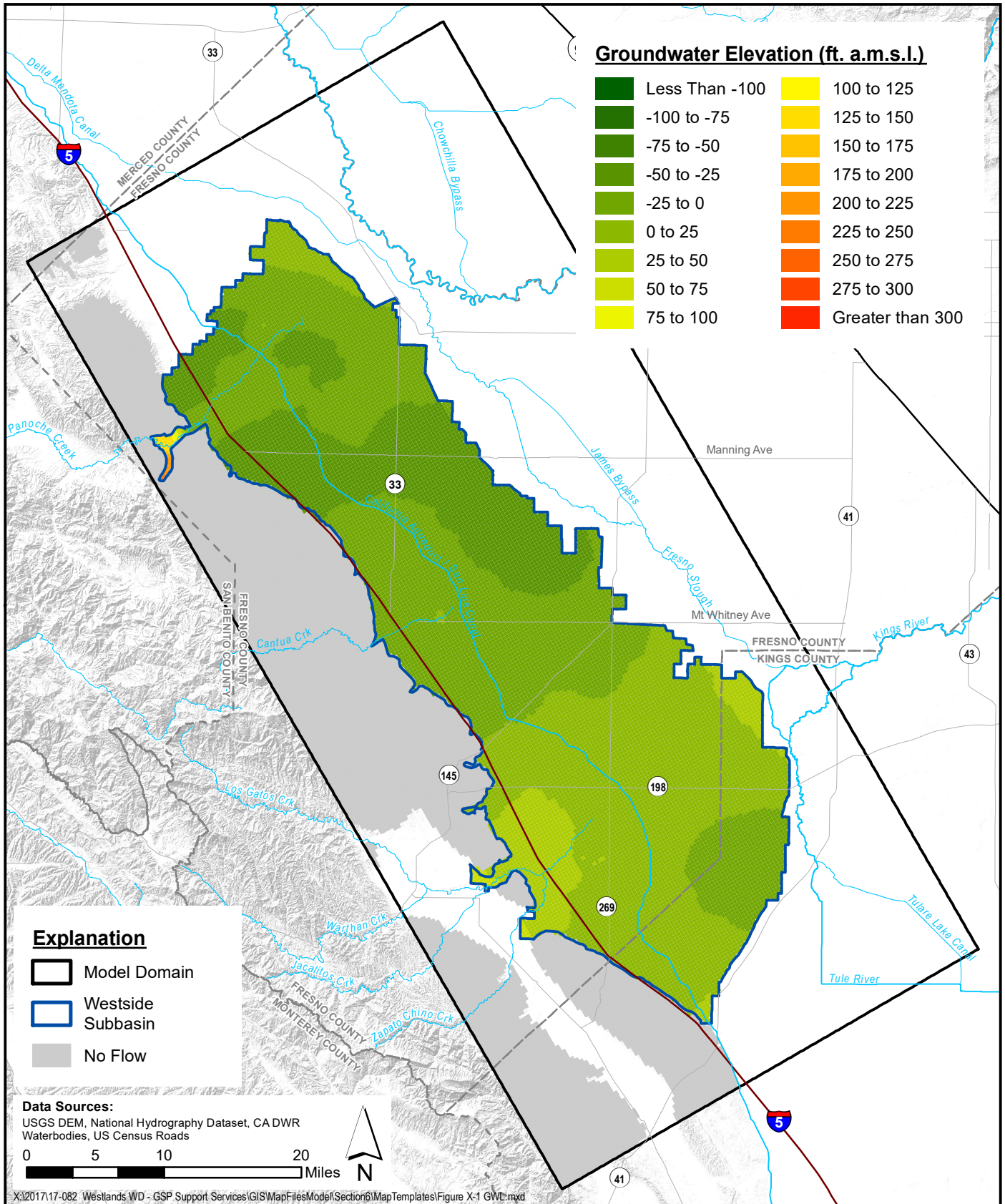
**Simulated Groundwater Elevation - Upper Aquifer  
 Climate Change - PMA No.4 (January 2071)**

Figure E-73



SGMA Sustainability Analyses  
 Westside Subbasin





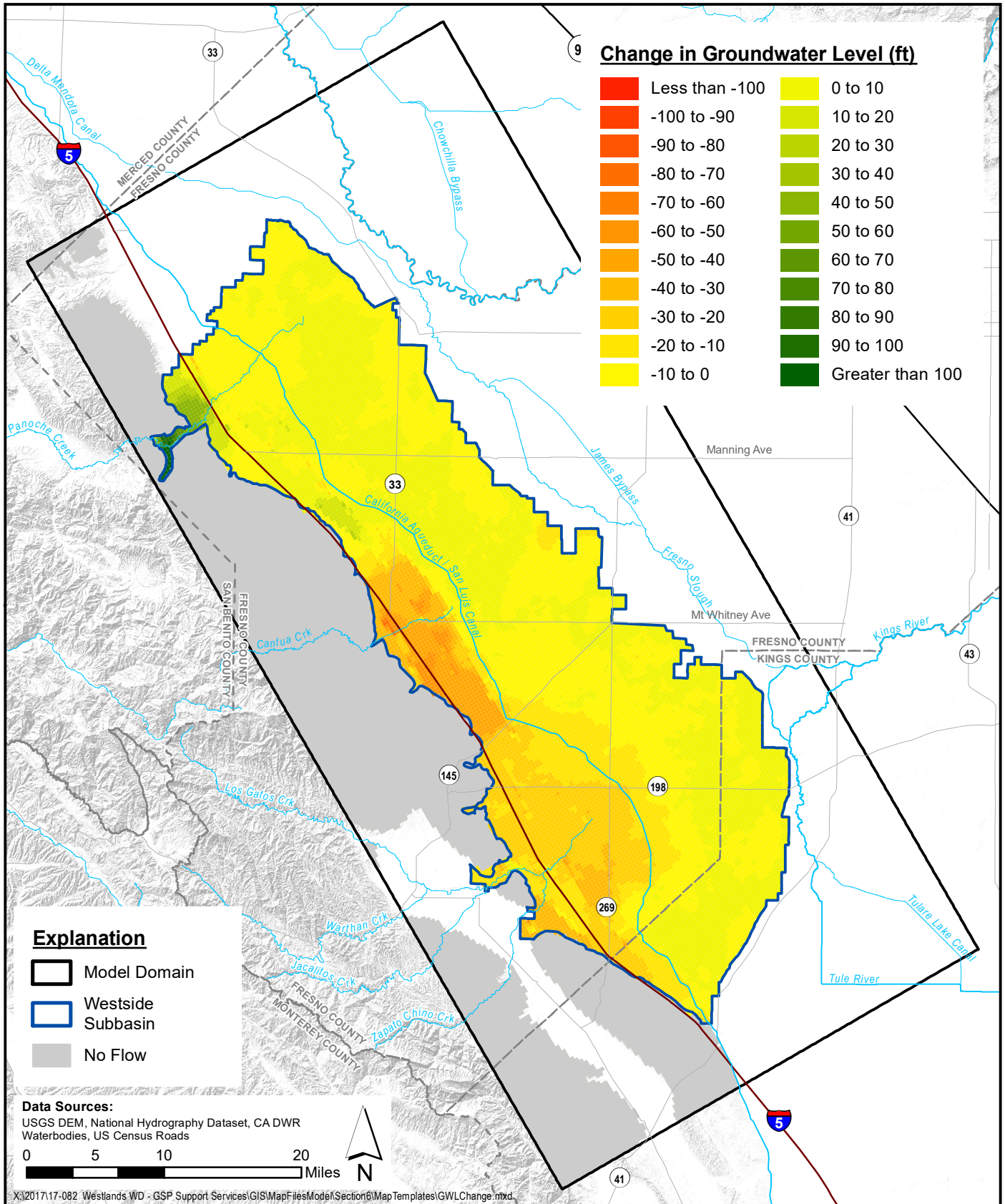
**Simulated Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.4 (January 2071)**

Figure E-74



SGMA Sustainability Analyses  
 Westside Subbasin



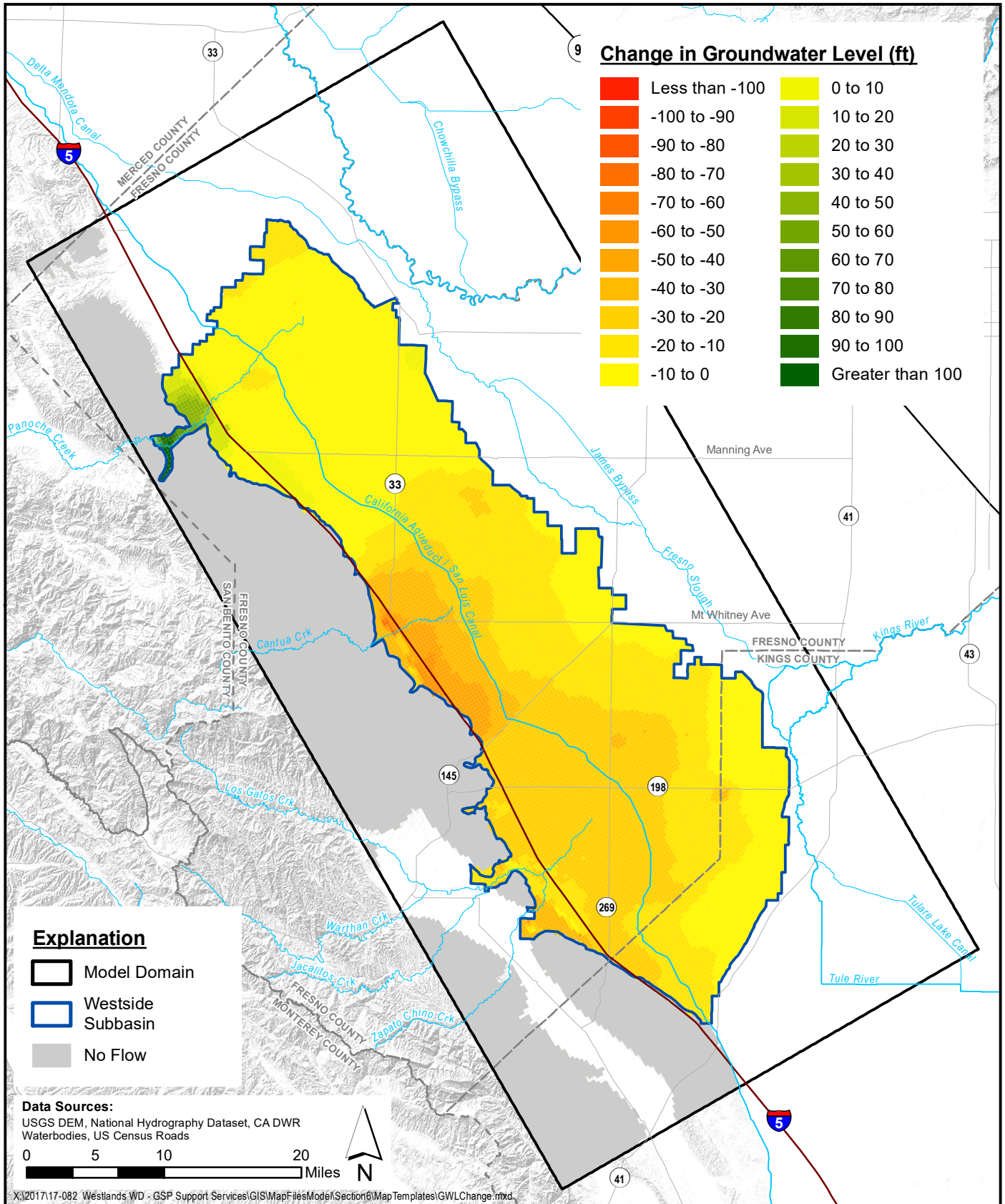


**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.4 (2020 - 2047)**

Figure E-75



SGMA Sustainability Analyses  
 Westside Subbasin



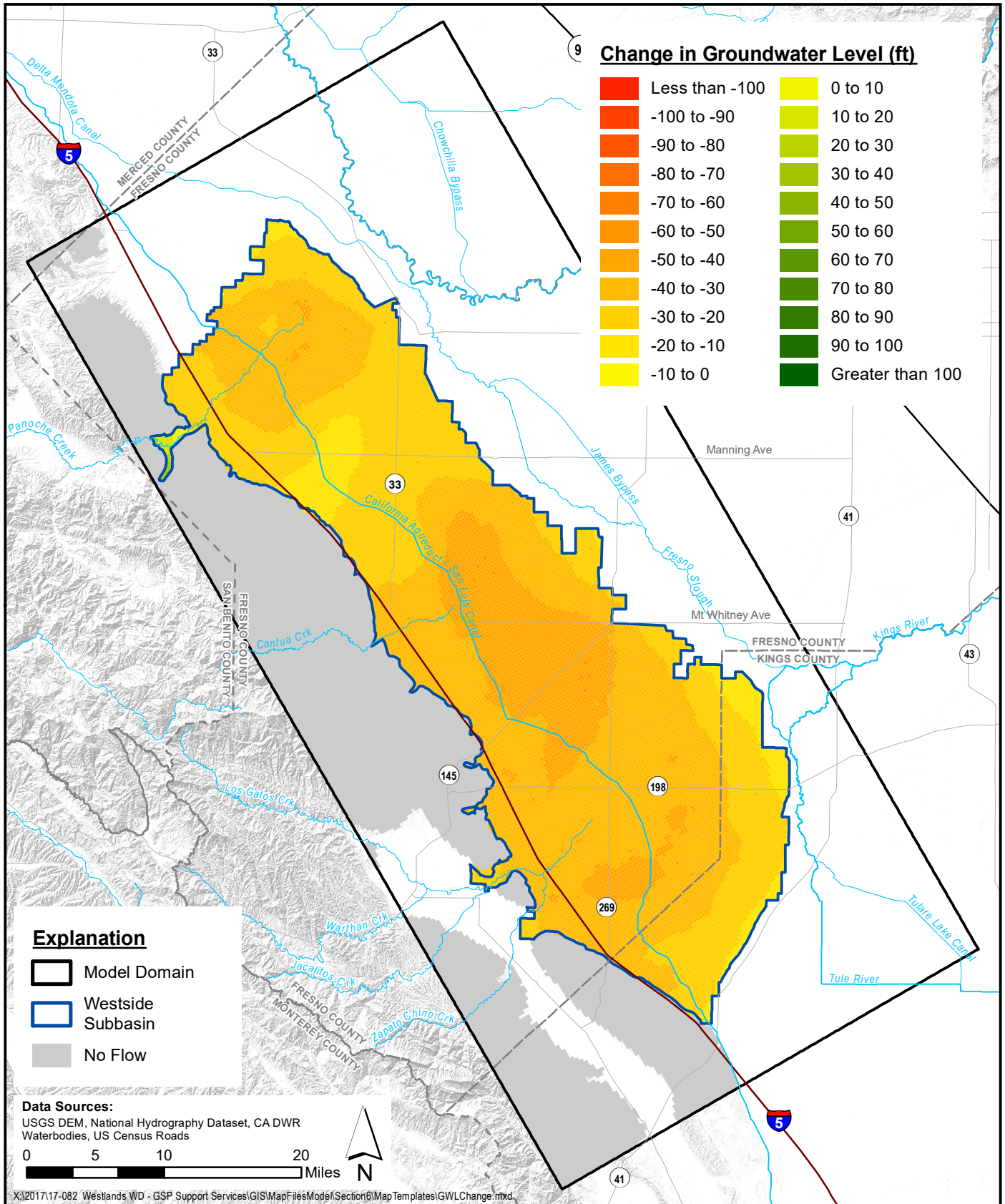
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.4 (2020 - 2047)**

Figure E-76



SGMA Sustainability Analyses  
 Westside Subbasin



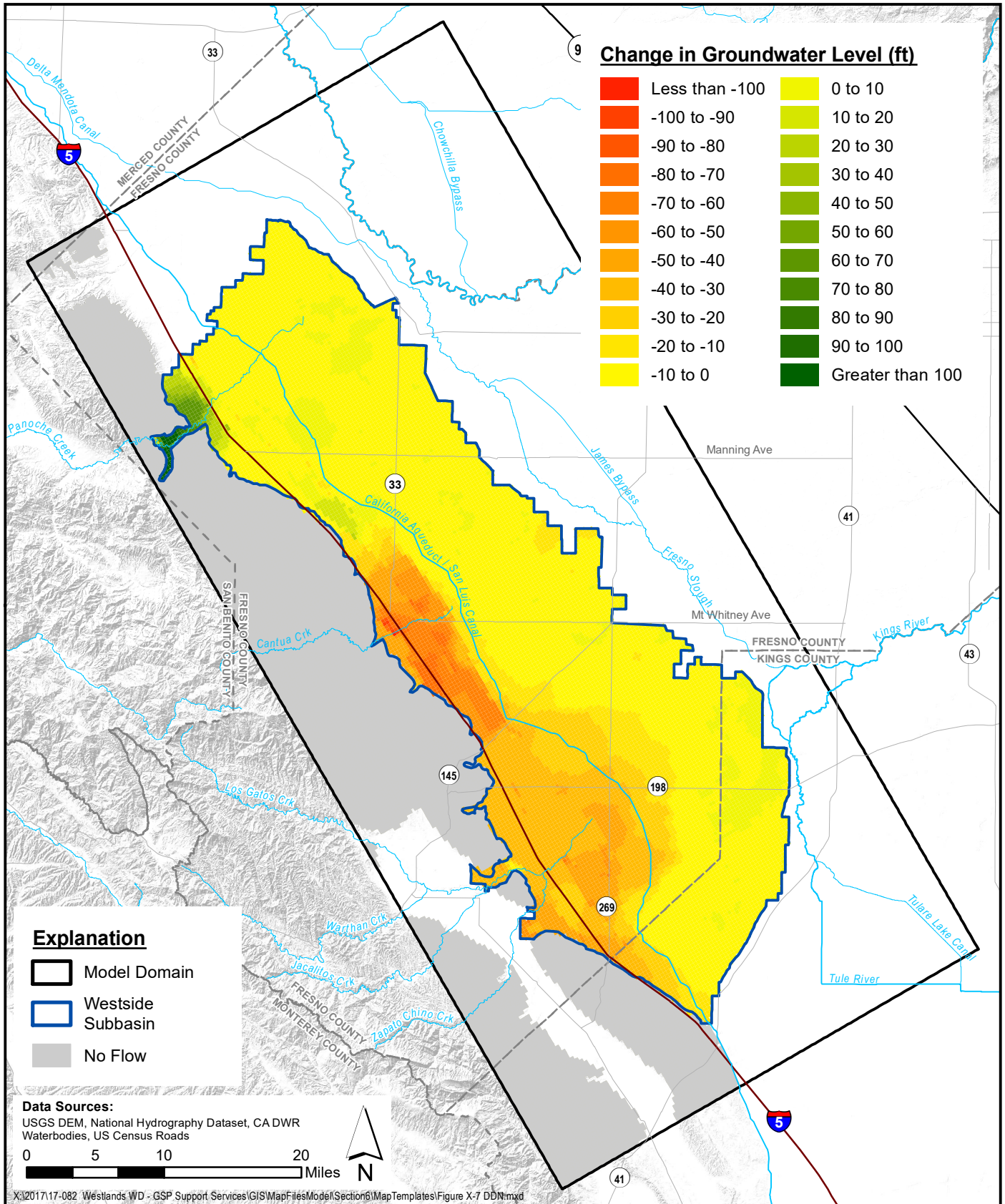


**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.4 (2020 - 2047)**

Figure E-77



SGMA Sustainability Analyses  
 Westside Subbasin



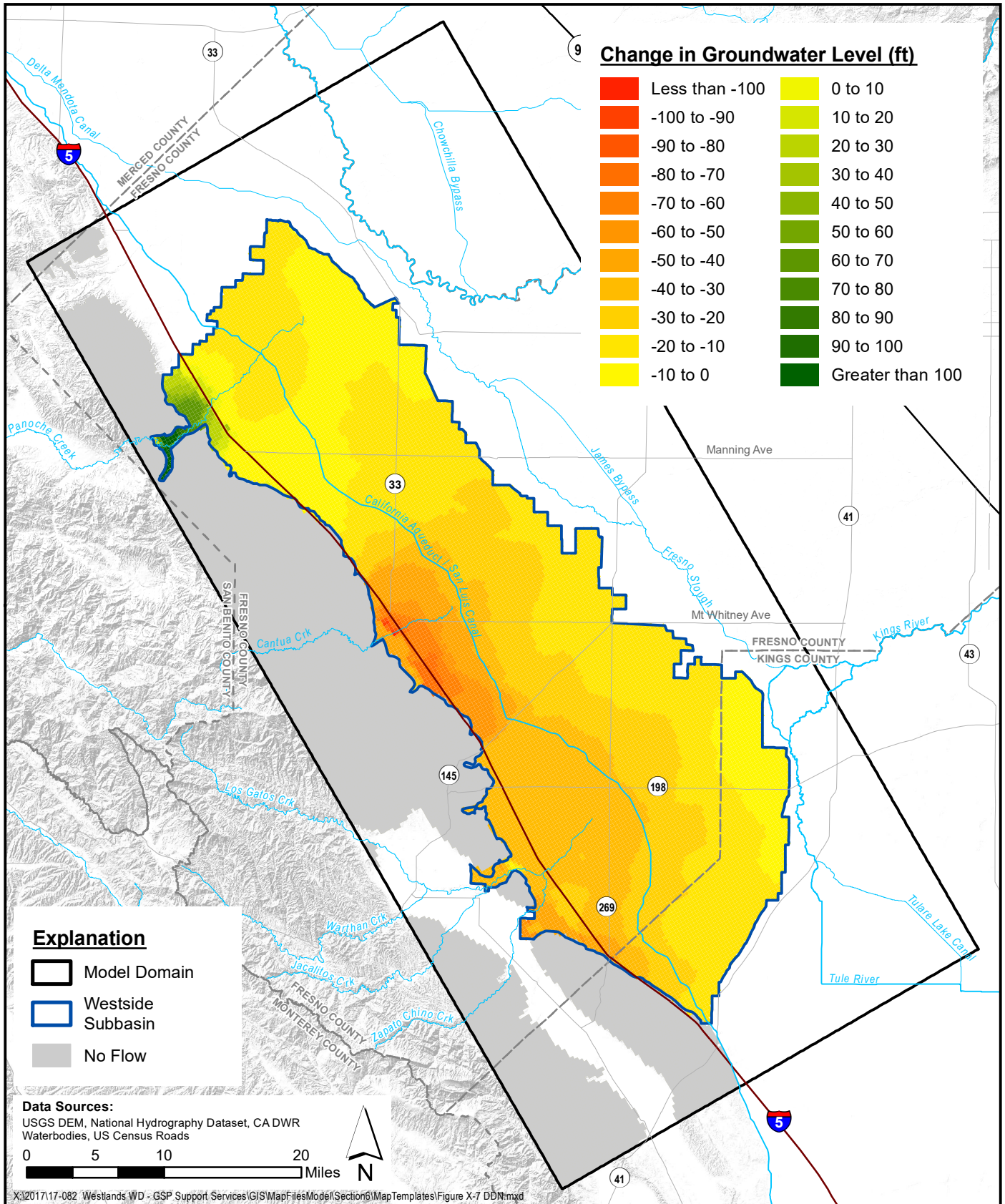
**Simulated Change in Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.4 (2020 - 2070)**

Figure E-78



SGMA Sustainability Analyses  
 Westside Subbasin



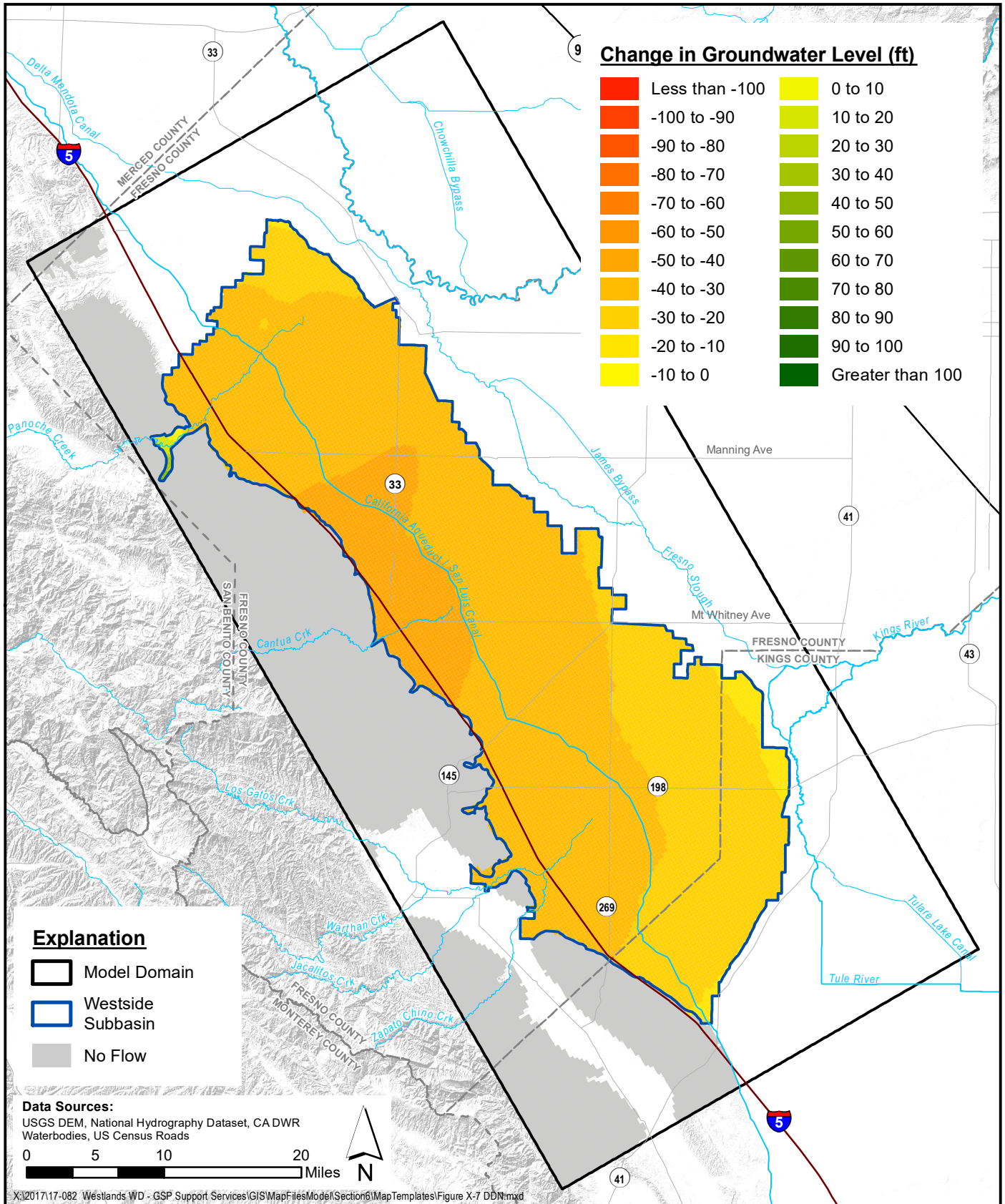


**Simulated Change in Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.4 (2020 - 2070)**

Figure E-79



SGMA Sustainability Analyses  
 Westside Subbasin



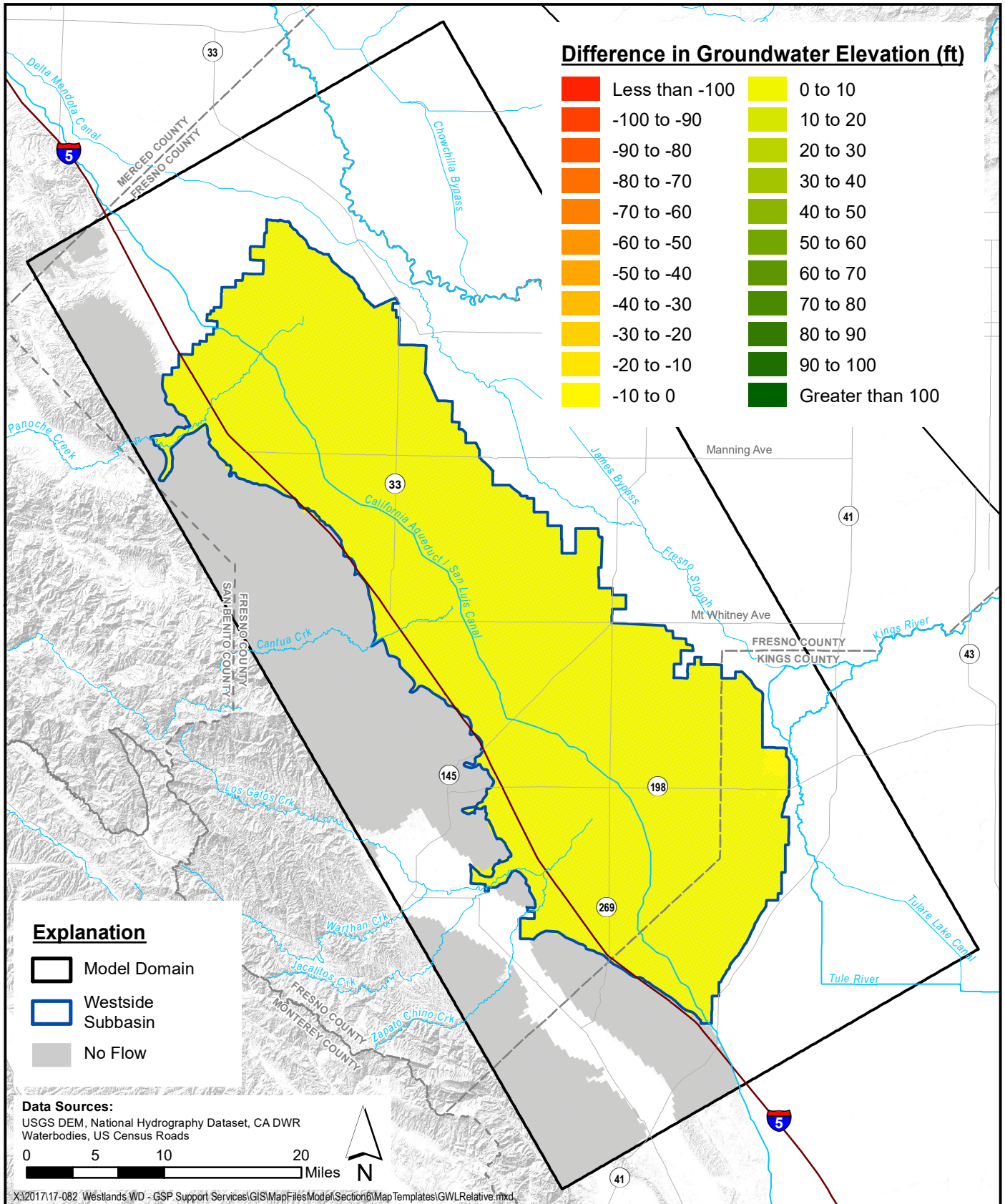
**Simulated Change in Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.4 (2020 - 2070)**

**Figure E-80**



SGMA Sustainability Analyses  
 Westside Subbasin



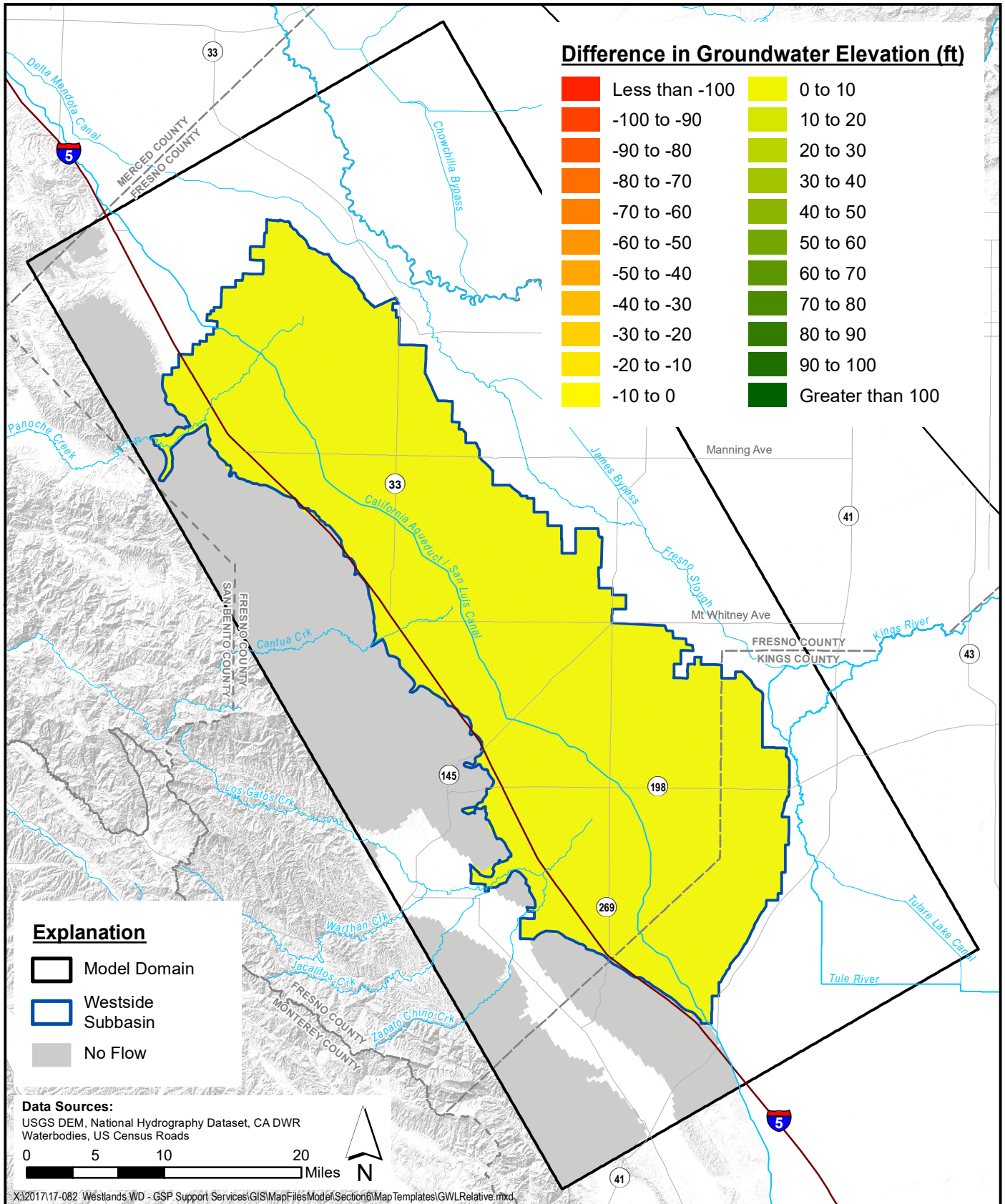


**Project Impacts on Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.4 (2020 - 2047)**

Figure E-81



SGMA Sustainability Analyses  
 Westside Subbasin



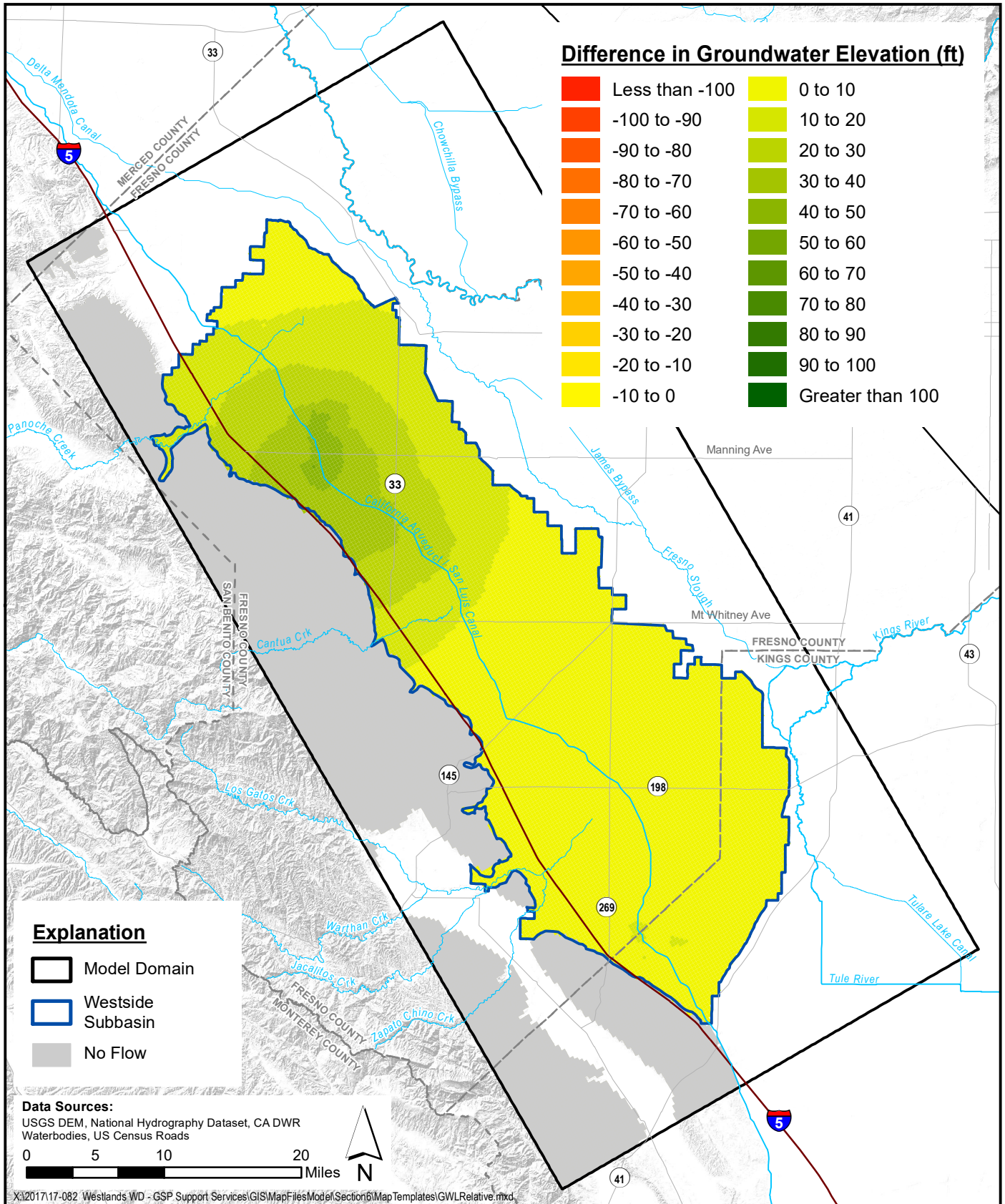
**Project Impacts on Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.4 (2020 - 2047)**

Figure E-82



SGMA Sustainability Analyses  
 Westside Subbasin



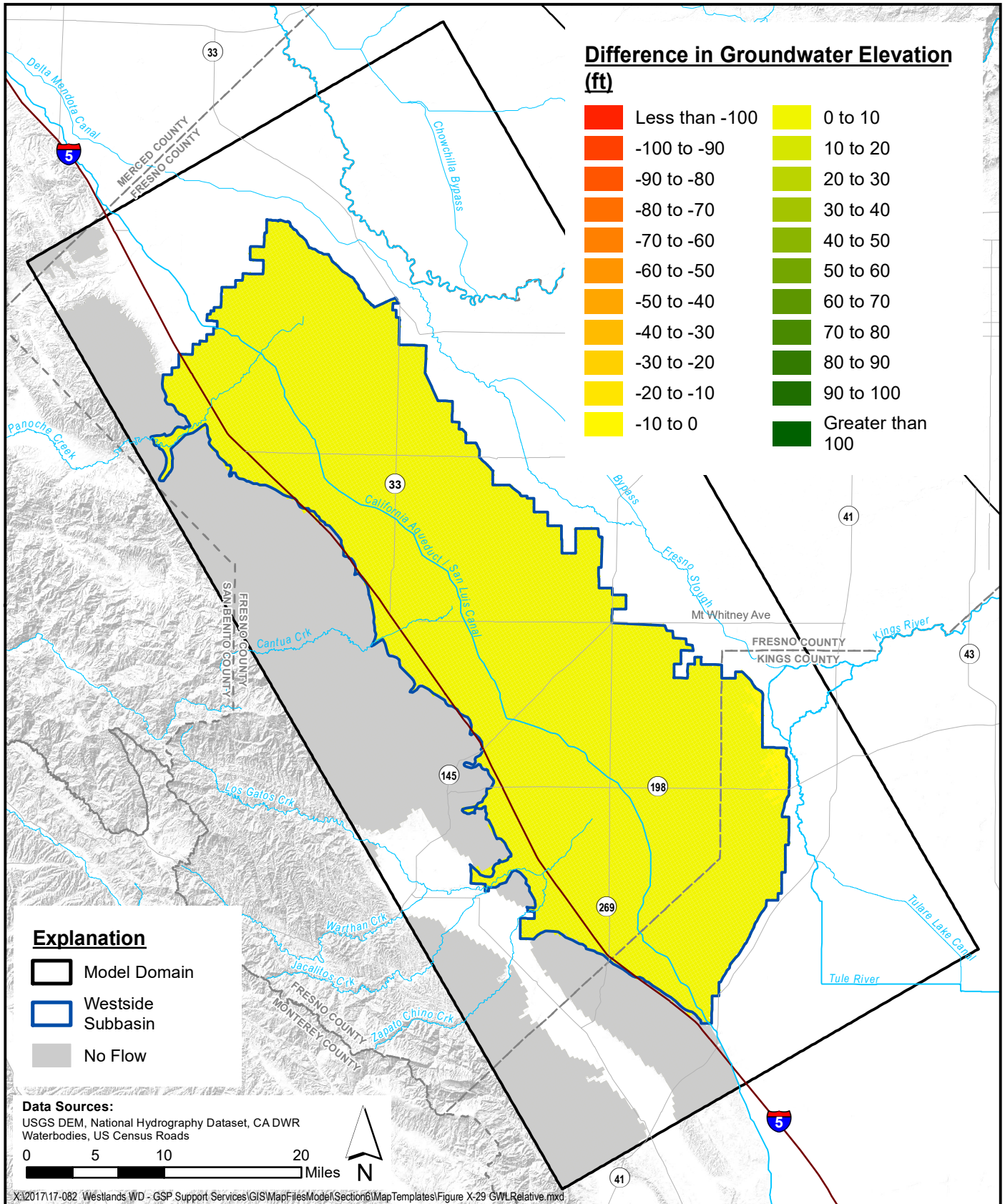


**Project Impacts on Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.4 (2020 - 2047)**

Figure E-83



SGMA Sustainability Analyses  
 Westside Subbasin



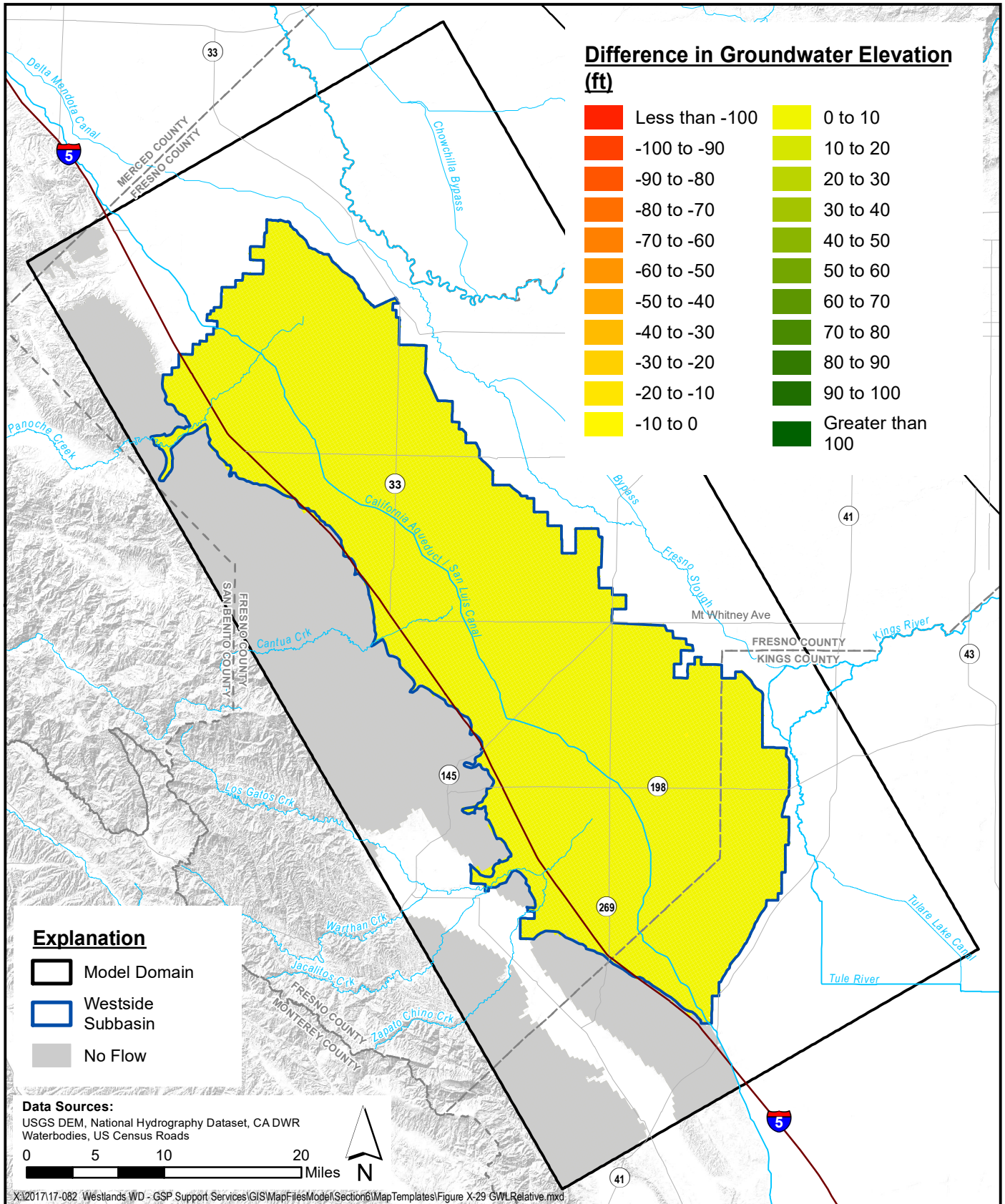
**Project Impacts on Groundwater Elevation - Shallow Zone  
 No Climate Change - PMA No.4 (2020 - 2070)**

Figure E-84



SGMA Sustainability Analyses  
 Westside Subbasin



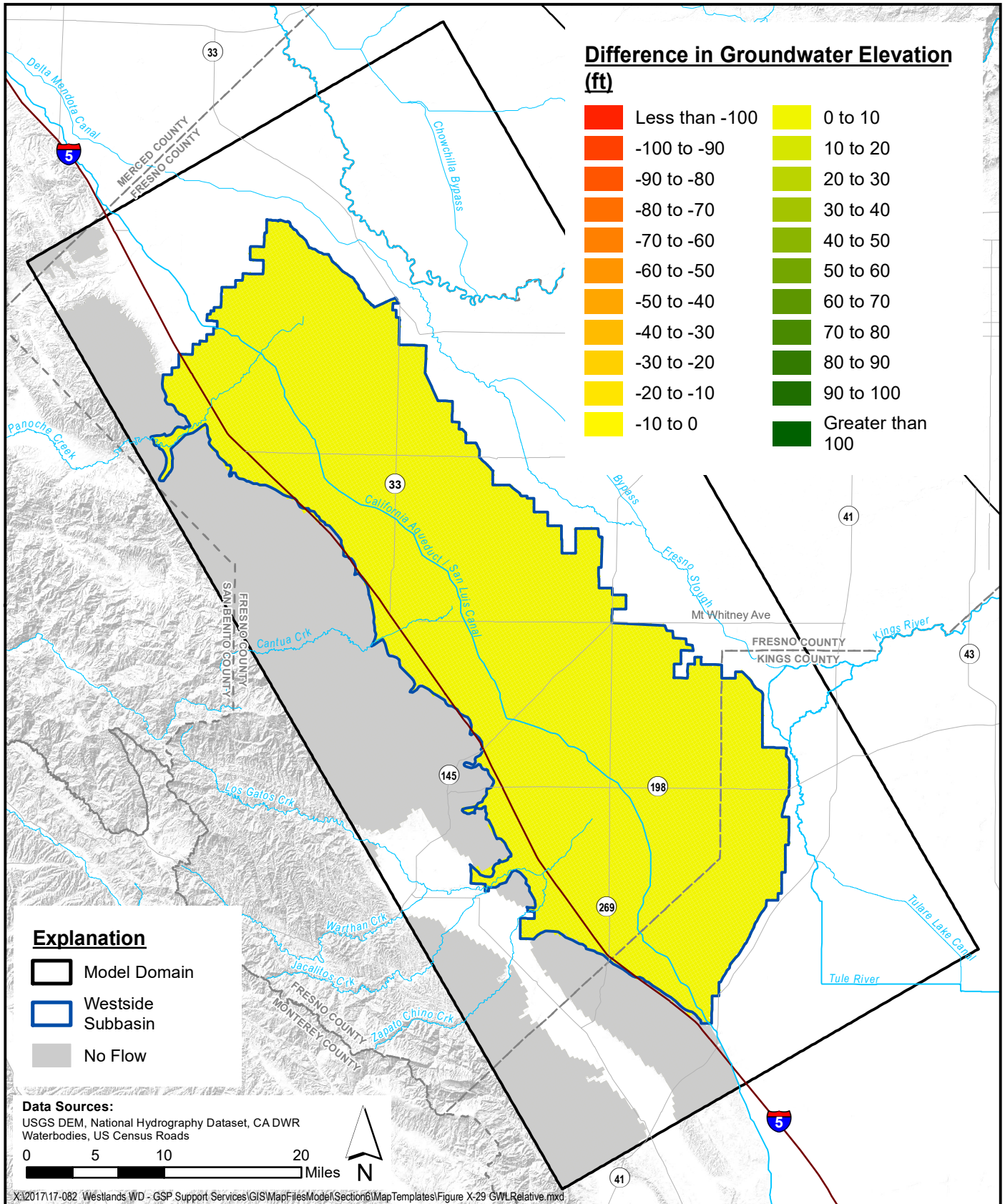


**Project Impacts on Groundwater Elevation - Upper Aquifer  
 No Climate Change - PMA No.4 (2020 - 2070)**

Figure E-85



SGMA Sustainability Analyses  
 Westside Subbasin



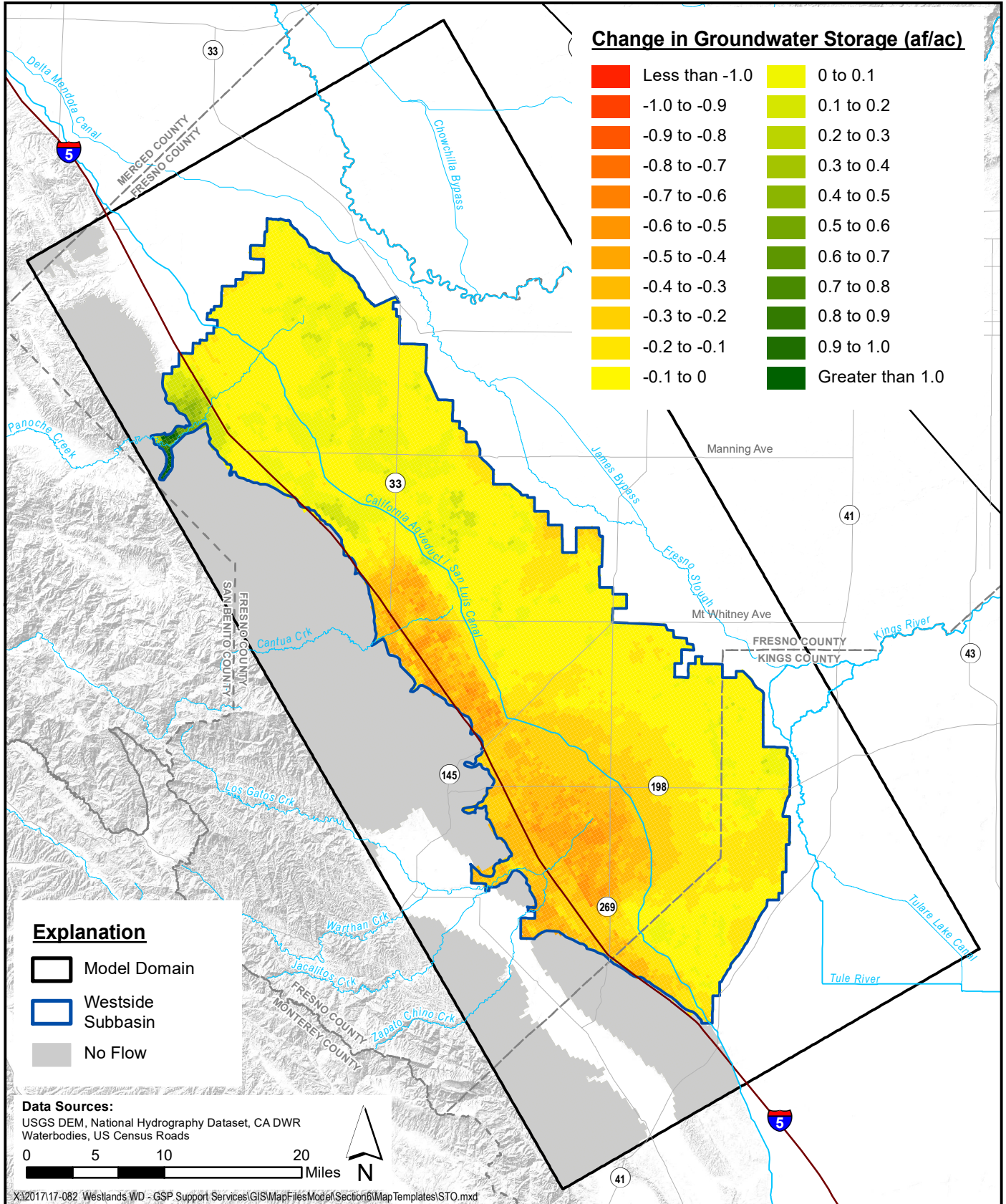
**Project Impacts on Groundwater Elevation - Lower Aquifer  
 No Climate Change - PMA No.4 (2020 - 2070)**

Figure E-86



SGMA Sustainability Analyses  
 Westside Subbasin



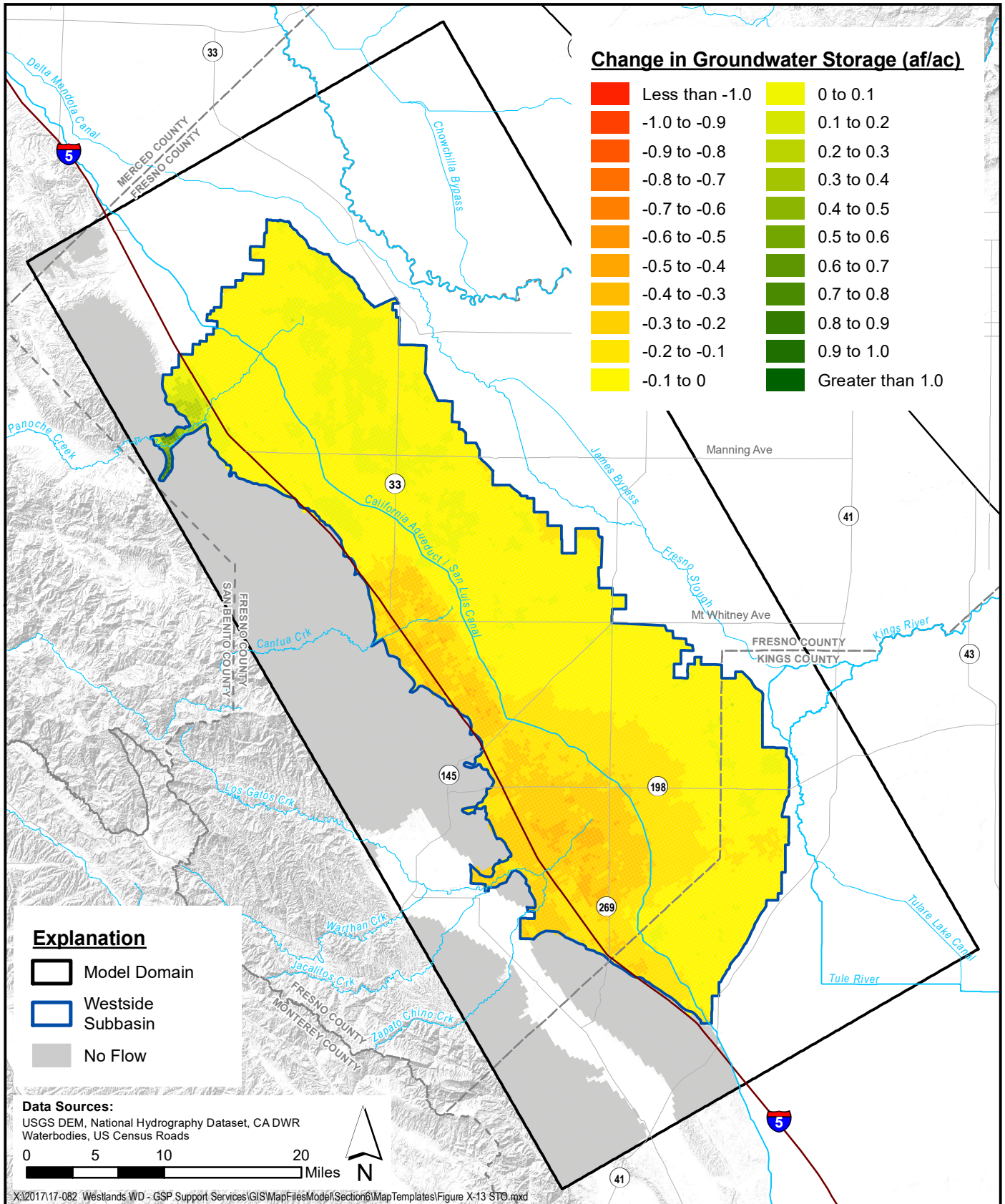


**Simulated Change in Groundwater Storage  
 No Climate Change - PMA No.4 (2020 - 2047)**

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 Westside Subbasin*

Figure E-87





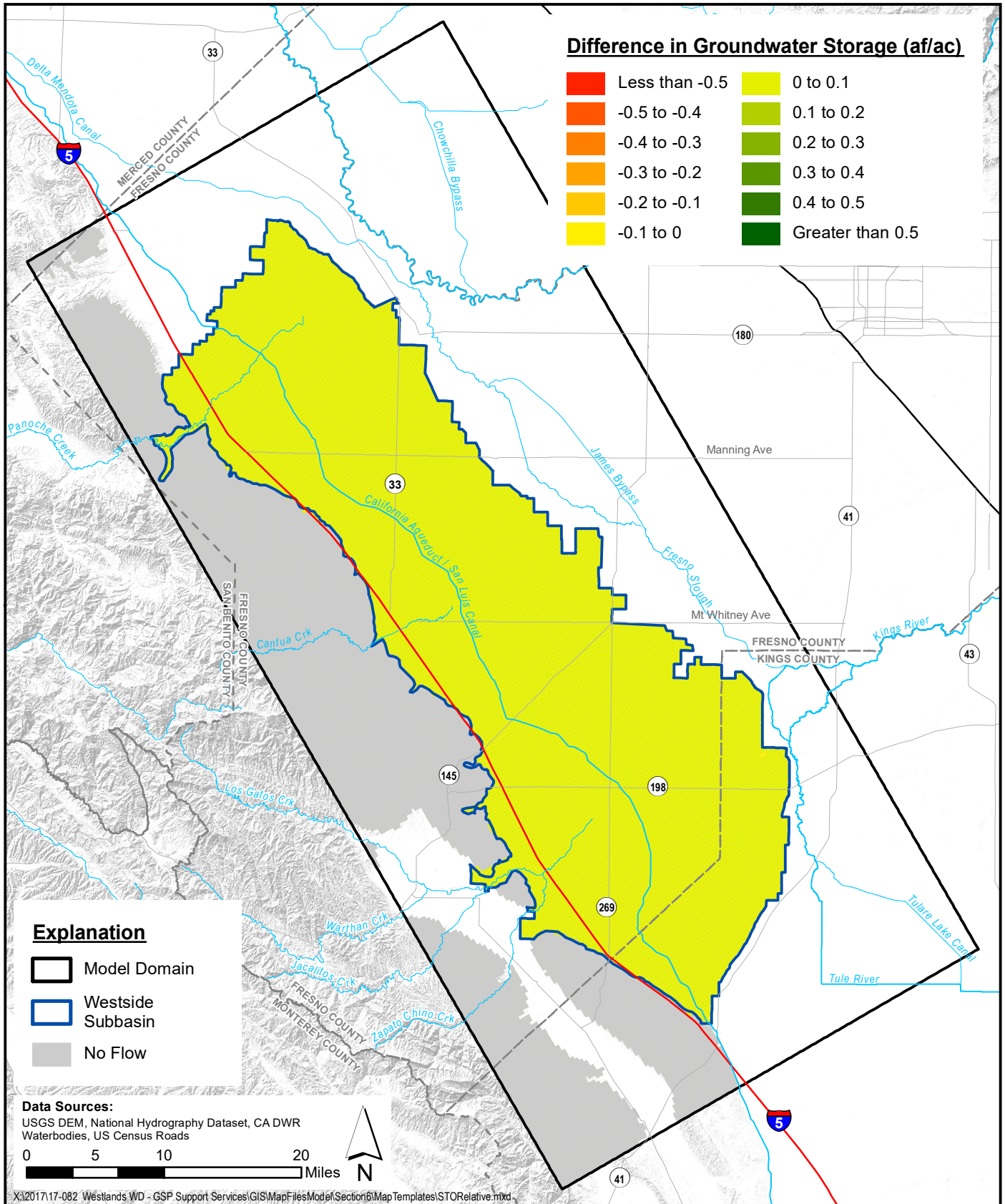
**Simulated Change in Groundwater Storage  
 No Climate Change - PMA No.4 (2020 - 2070)**

Figure E-88



SGMA Sustainability Analyses  
 Westside Subbasin



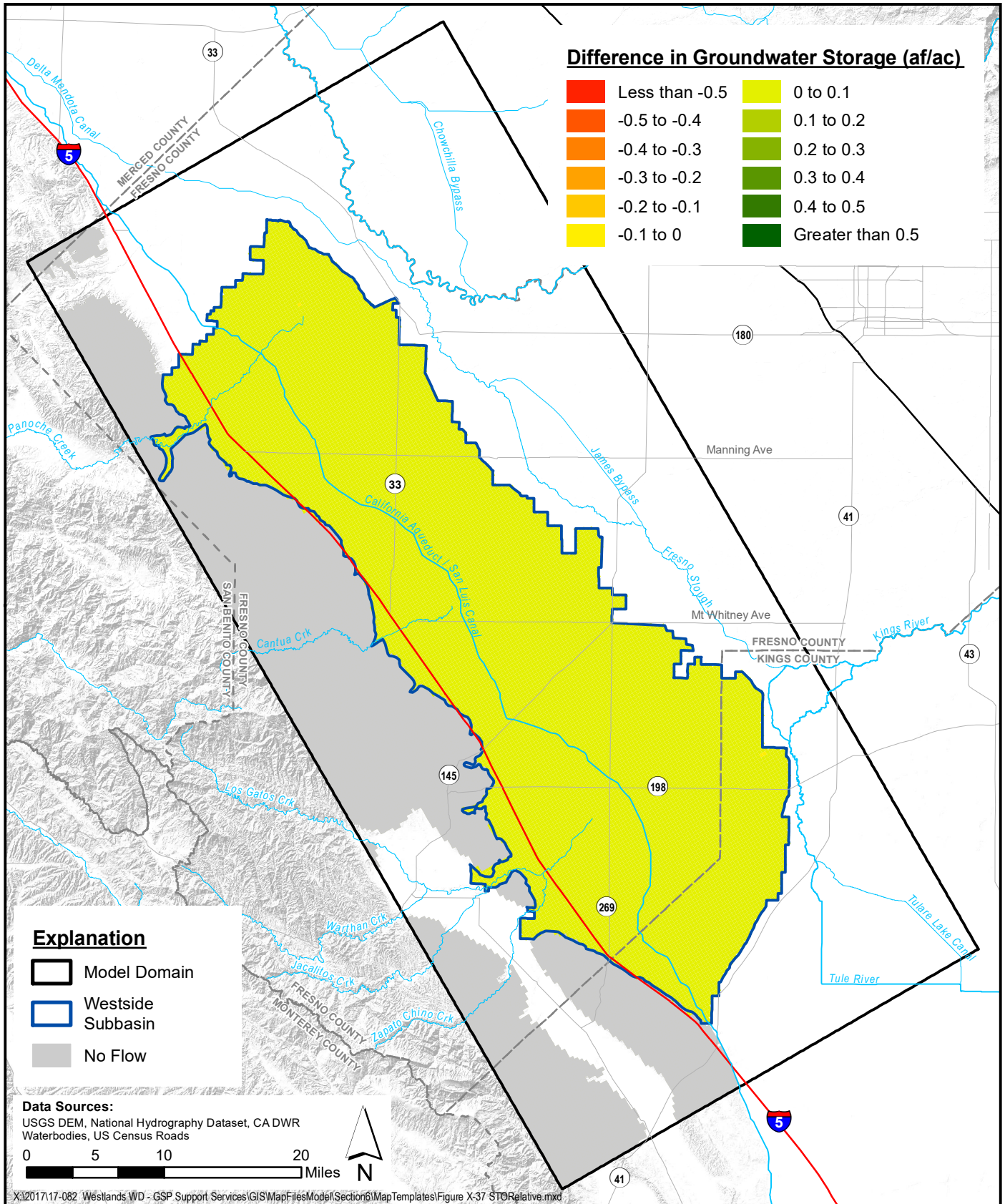


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**Project Impacts on Groundwater Storage  
 No Climate Change - PMA No.4 (2020 - 2047)**  
 SGMA Sustainability Analyses  
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Figure E 89



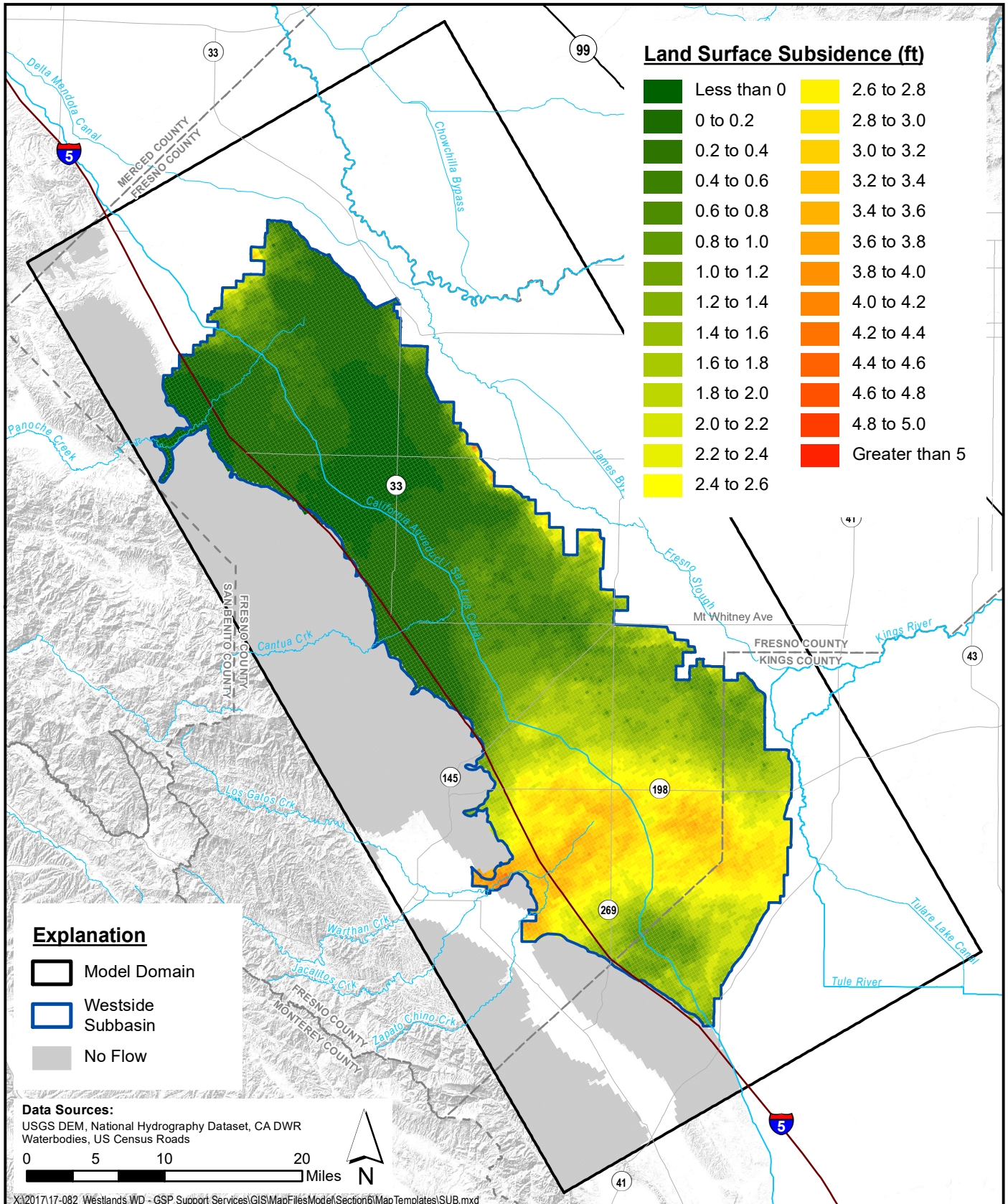
**Project Impacts on Groundwater Storage  
 No Climate Change - PMA No.4 (2020 - 2070)**

*SGMA Sustainability Analyses  
 Westside Subbasin*

**Figure E-90**







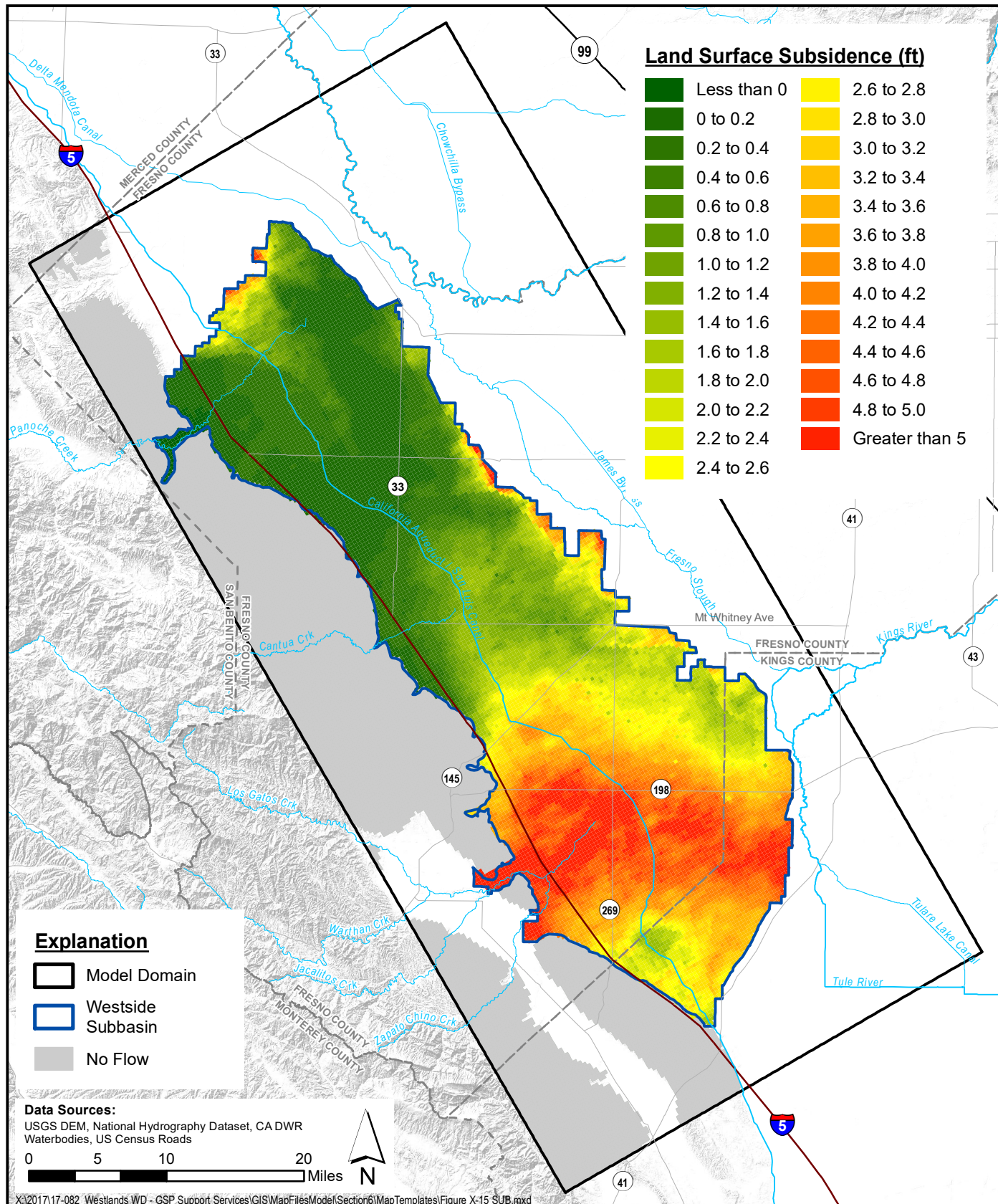
**Simulated Land Surface Subsidence  
 No Climate Change - PMA No.4 (2020 - 2047)**

Figure E-91



SGMA Sustainability Analyses  
 Westside Subbasin





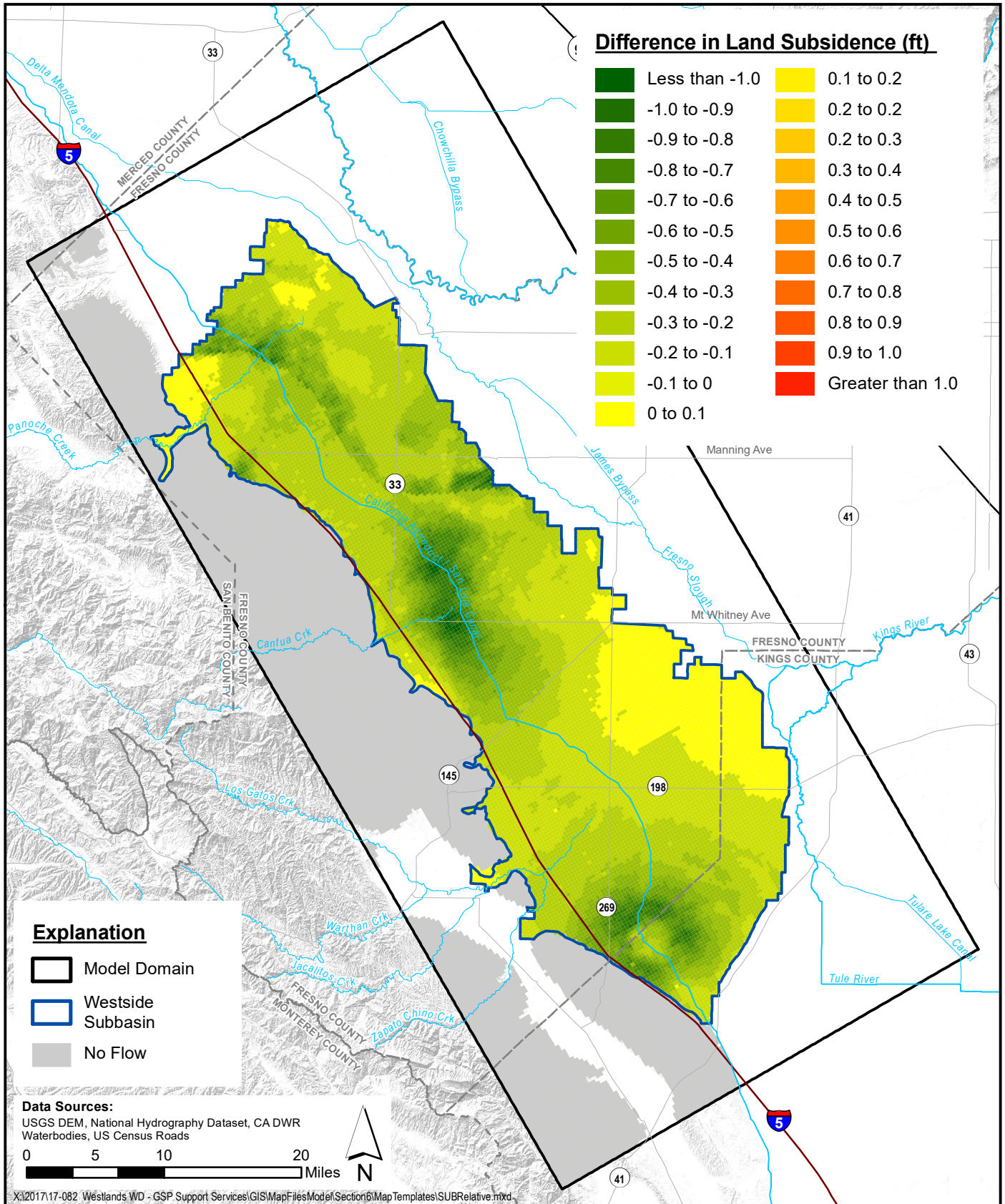
**Simulated Land Surface Subsidence  
 No Climate Change - PMA No.4 (2020 - 2070)**

*SGMA Sustainability Analyses  
 Westside Subbasin*

**Figure E-92**





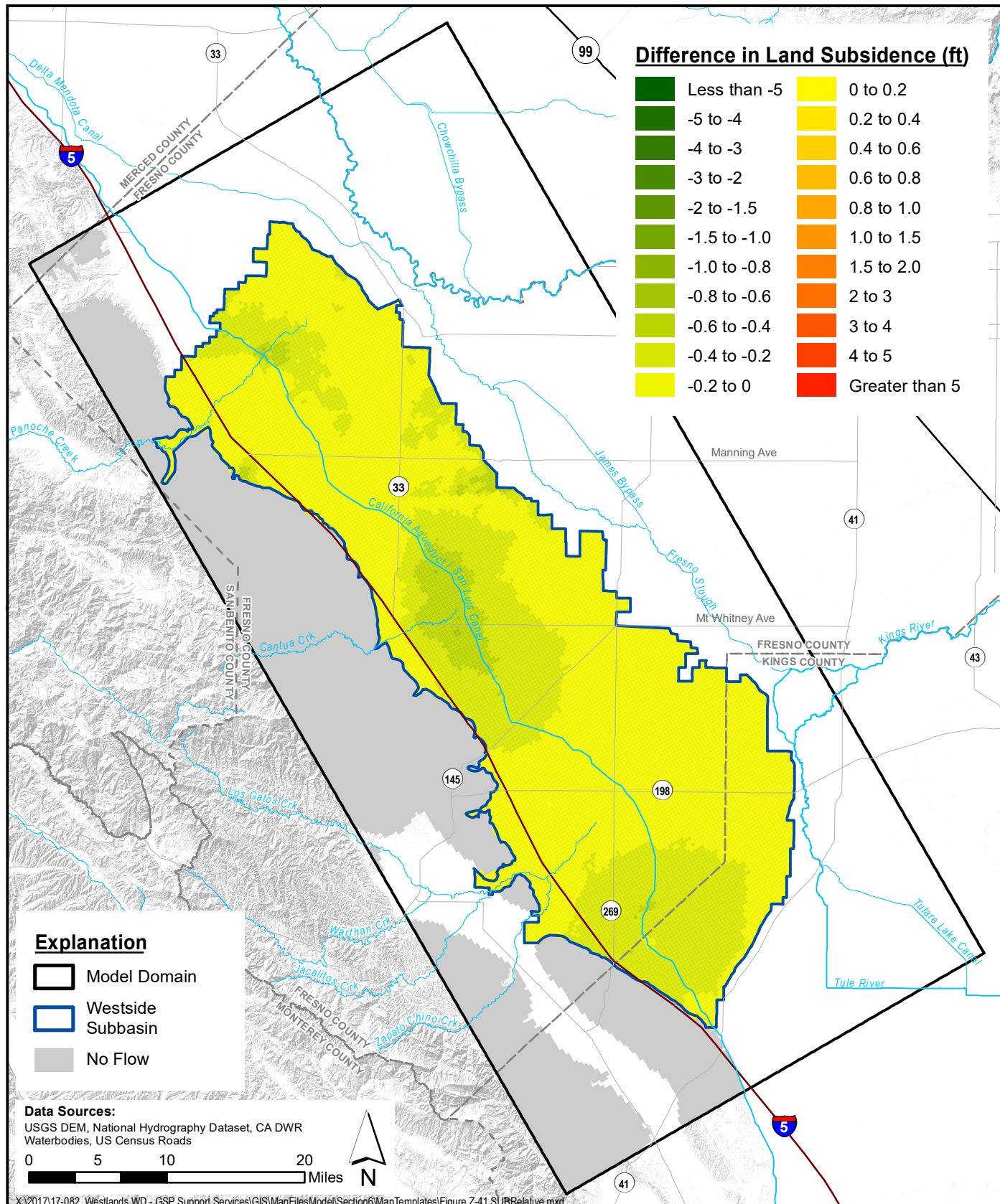


**Project Impact on Land Surface Subsidence  
 No Climate Change - PMA No.4 (2020 - 2047)**

SGMA Sustainability Analyses  
 Westside Subbasin

Figure E-93





**Project Impact on Land Subsidence  
 No Climate Change - PMA No. 4 (2020 - 2070)**

Figure E-94

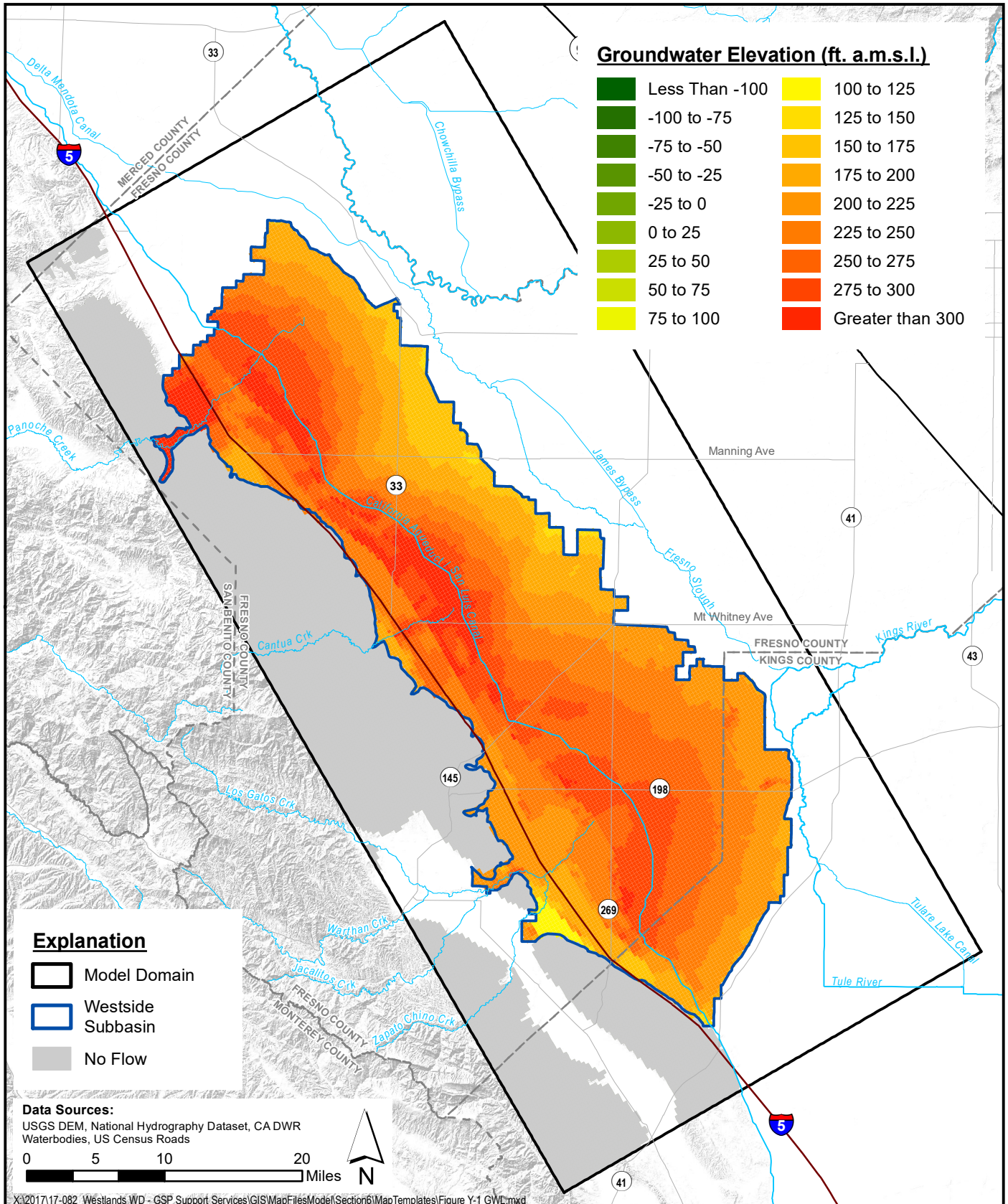


SGMA Sustainability Analyses  
 Westside Subbasin



# **Appendix F:**

**2030 Climate Change Model Projection  
Spatial Model Output**



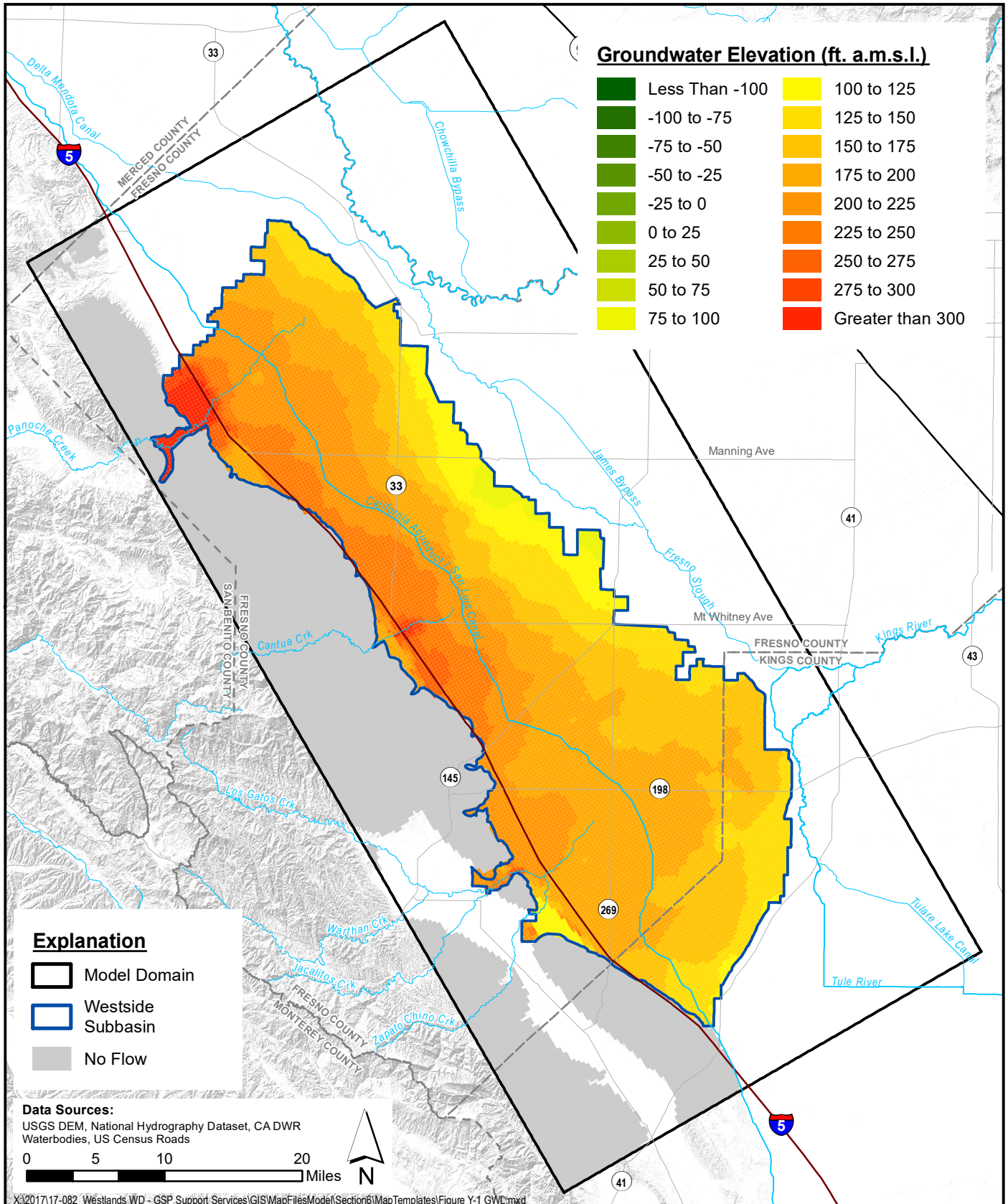
**Simulated Groundwater Elevation - Shallow Zone  
 2030 Climate Change - Baseline (January 2040)**

Figure F-1



SGMA Sustainability Analyses  
 Westside Subbasin



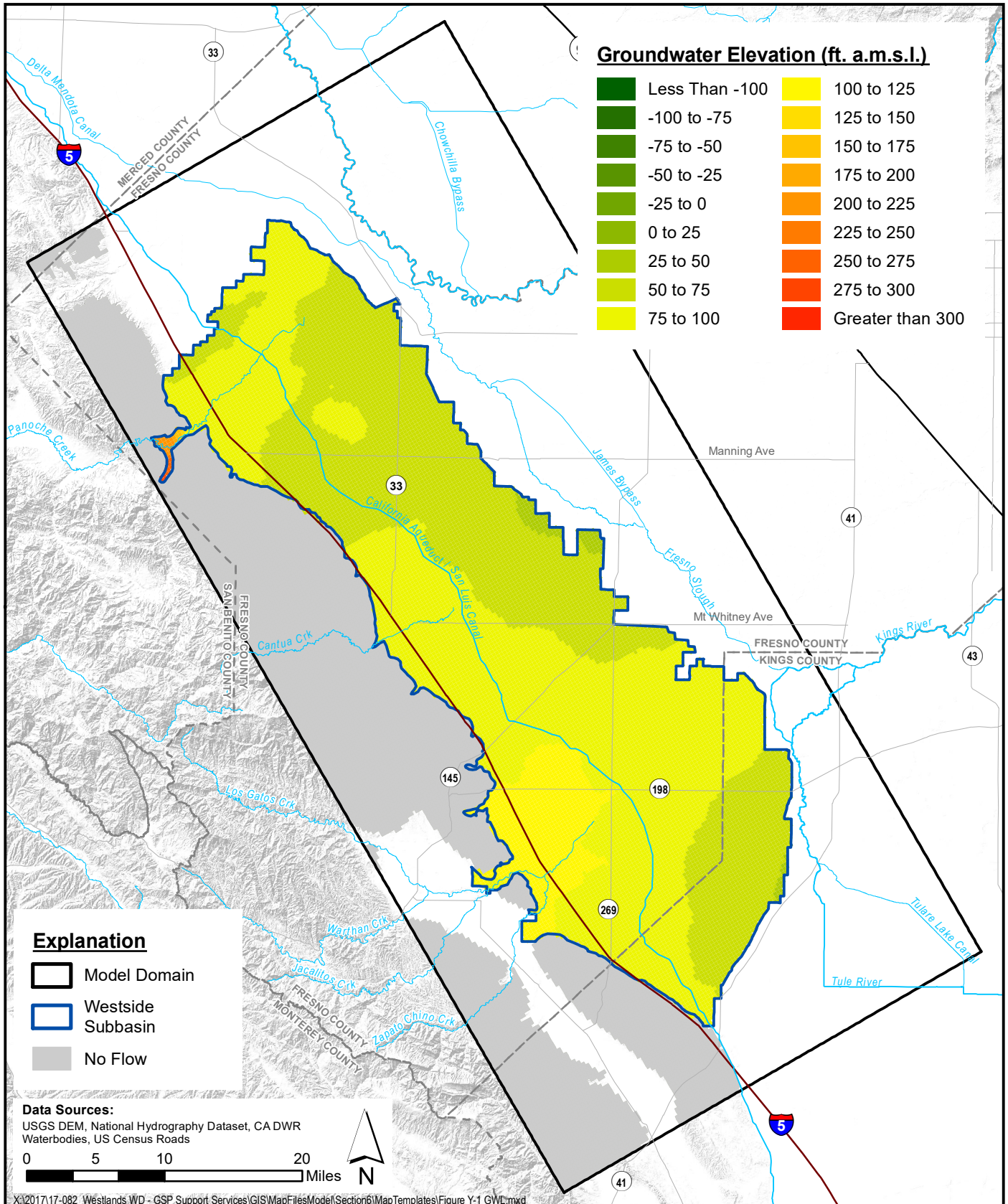


**Simulated Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - Baseline (January 2040)**

Figure F-2



SGMA Sustainability Analyses  
 Westside Subbasin



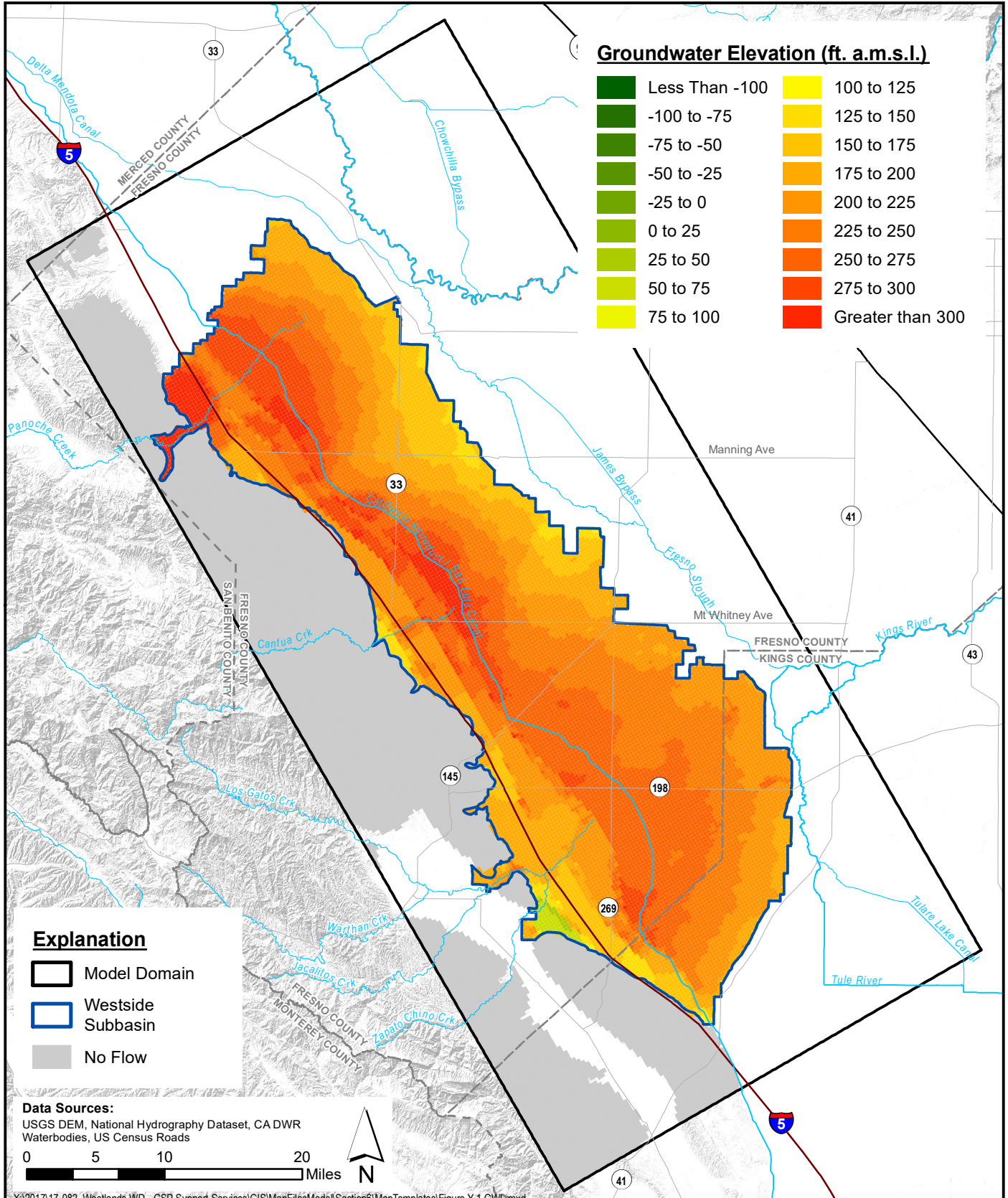
**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - Baseline (January 2040)**

Figure F-3



SGMA Sustainability Analyses  
 Westside Subbasin





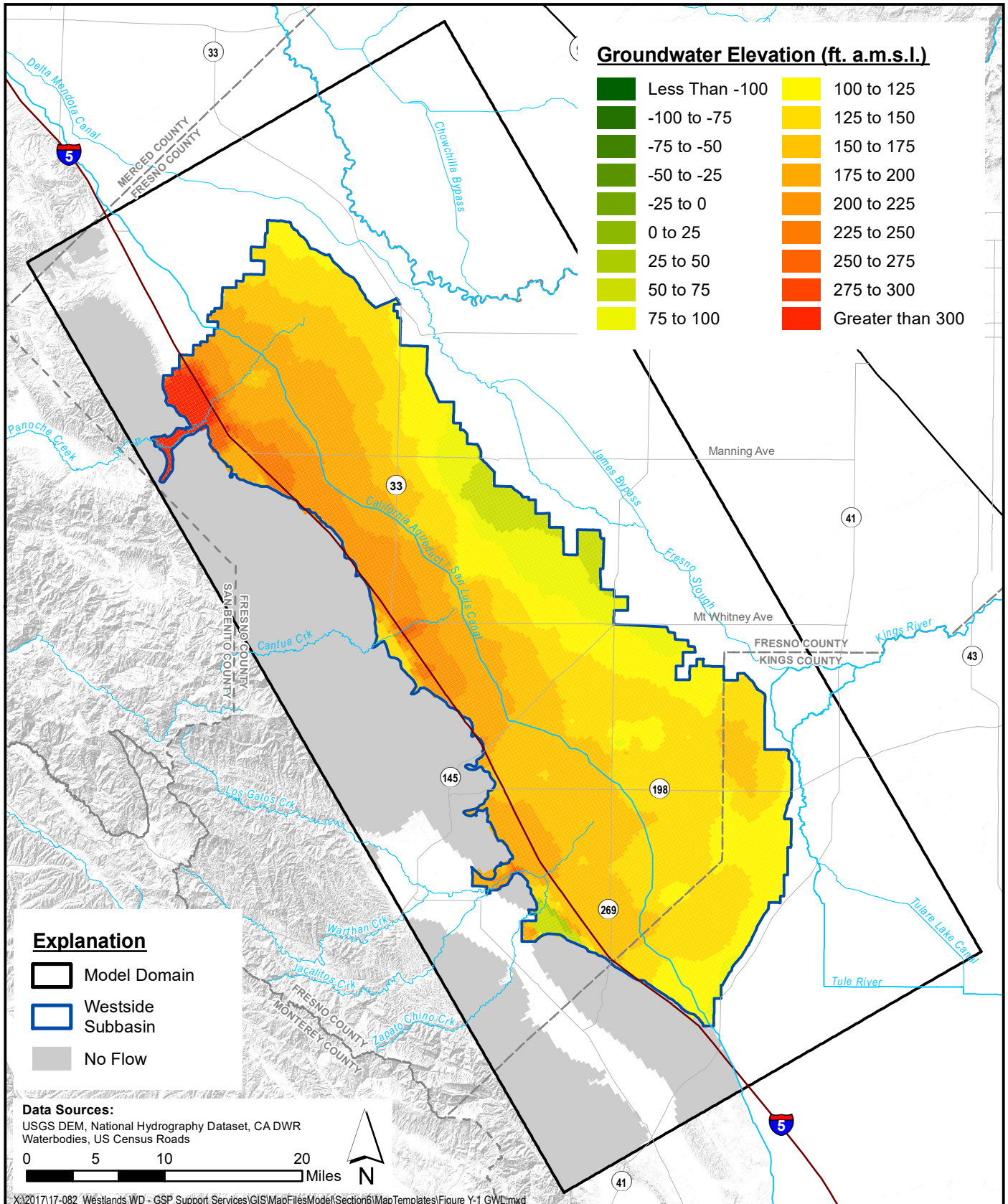
**Simulated Groundwater Elevation - Shallow Zone  
 2030 Climate Change - Baseline (January 2071)**

Figure F-4



SGMA Sustainability Analyses  
 Westside Subbasin





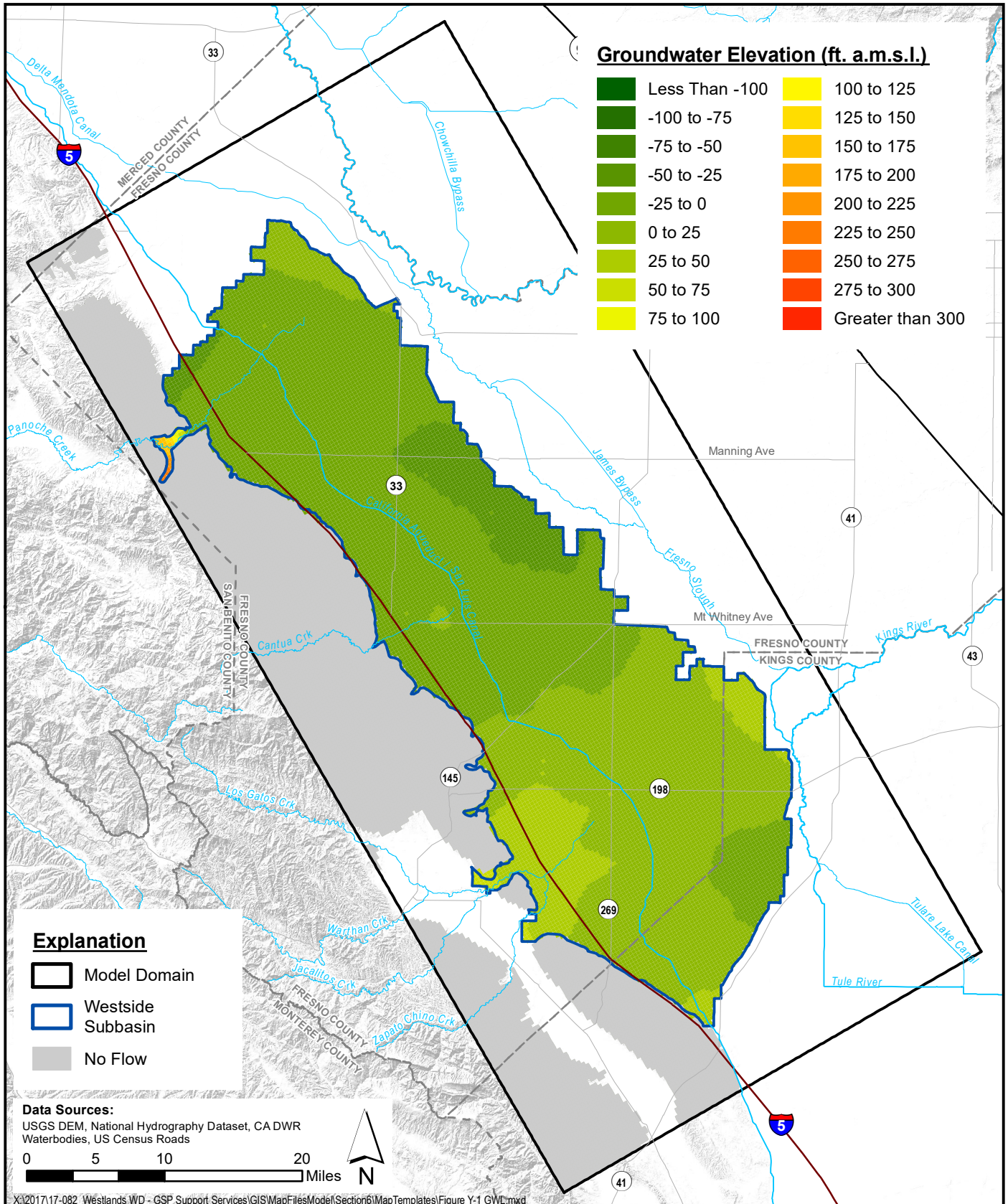
**Simulated Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - Baseline (January 2071)**

Figure F-5



SGMA Sustainability Analyses  
 Westside Subbasin



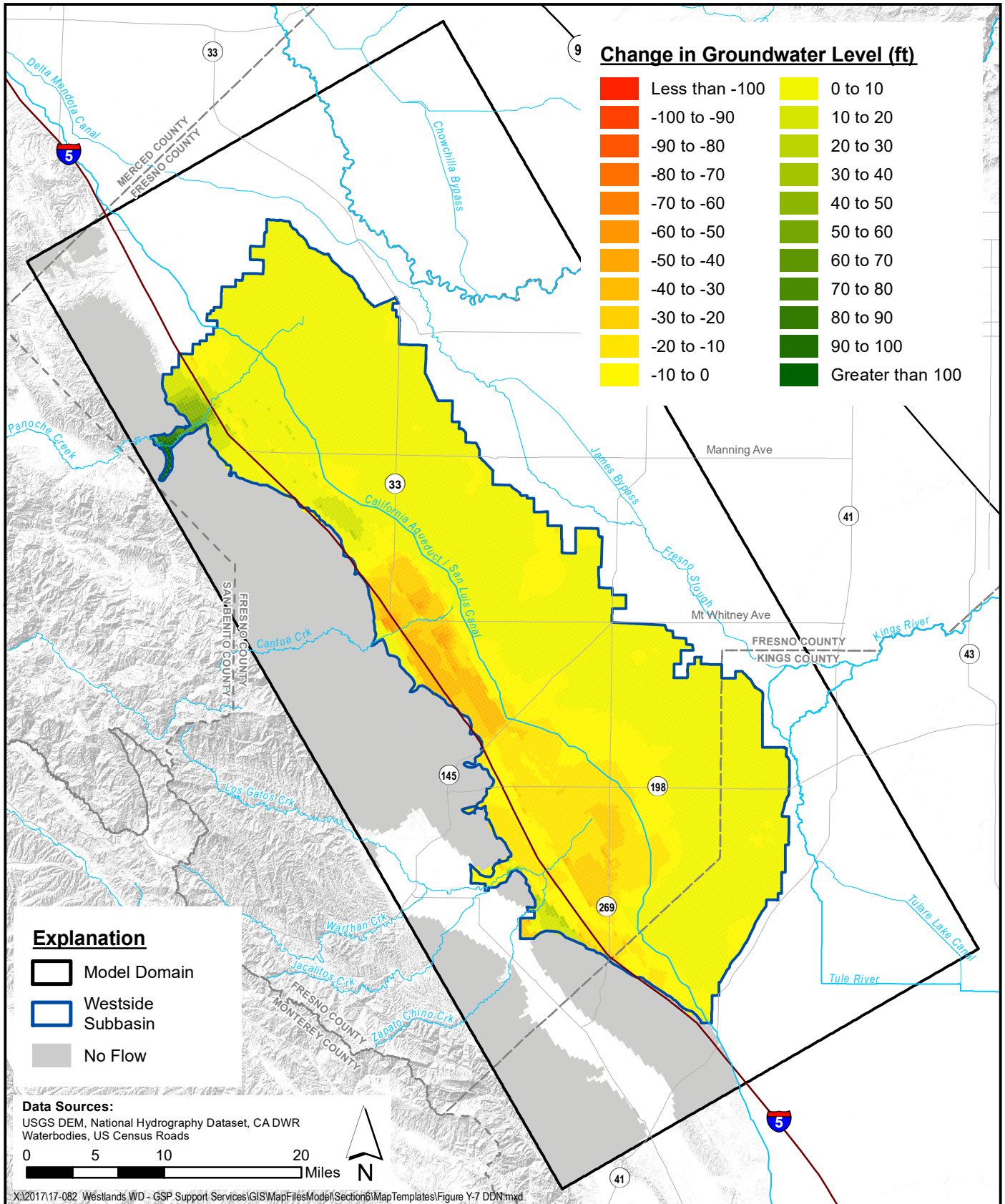


**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - Baseline (January 2071)**

Figure F-6



SGMA Sustainability Analyses  
 Westside Subbasin



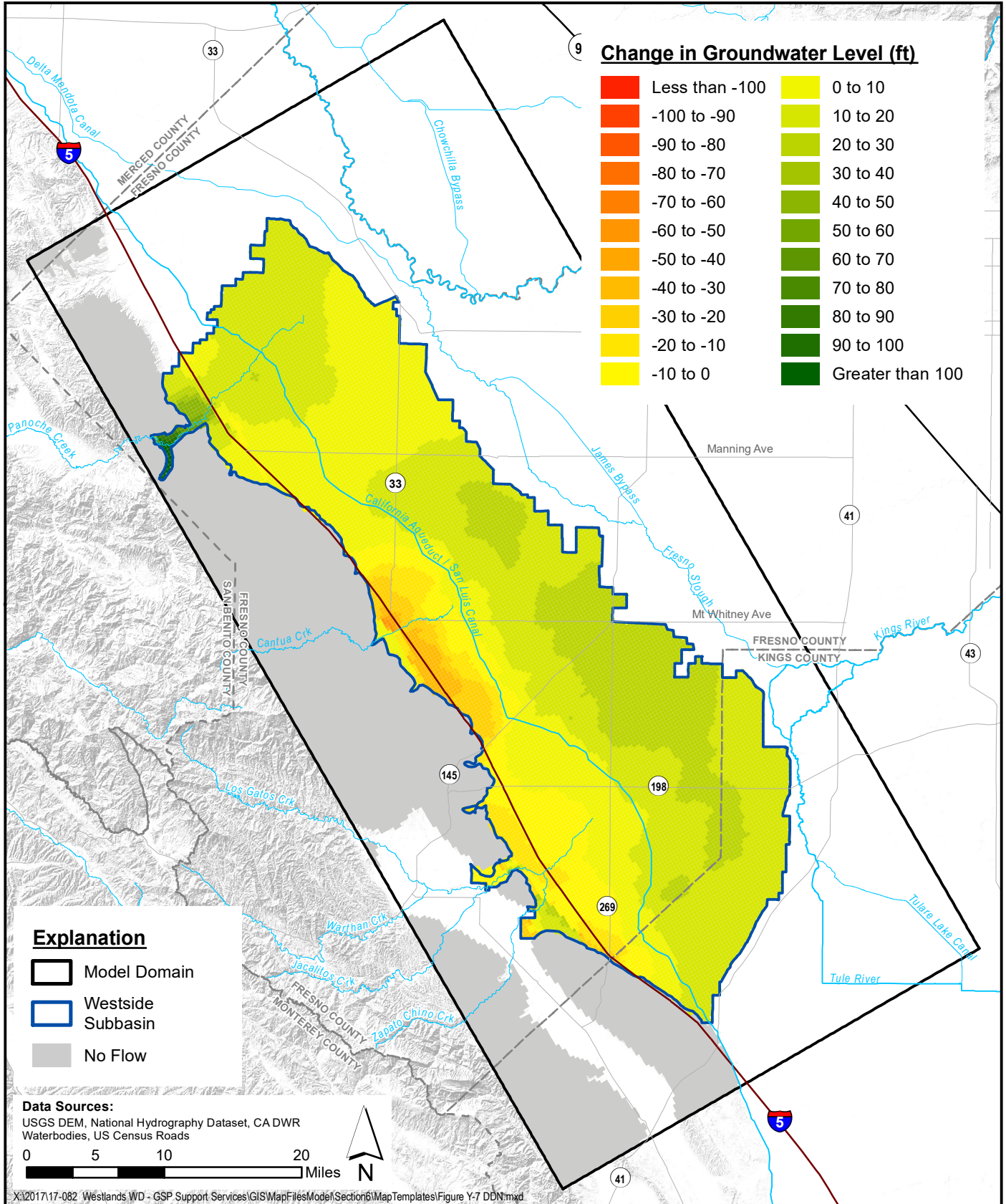
**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - Baseline (2020 - 2040)**

Figure F-7



SGMA Sustainability Analyses  
 Westside Subbasin





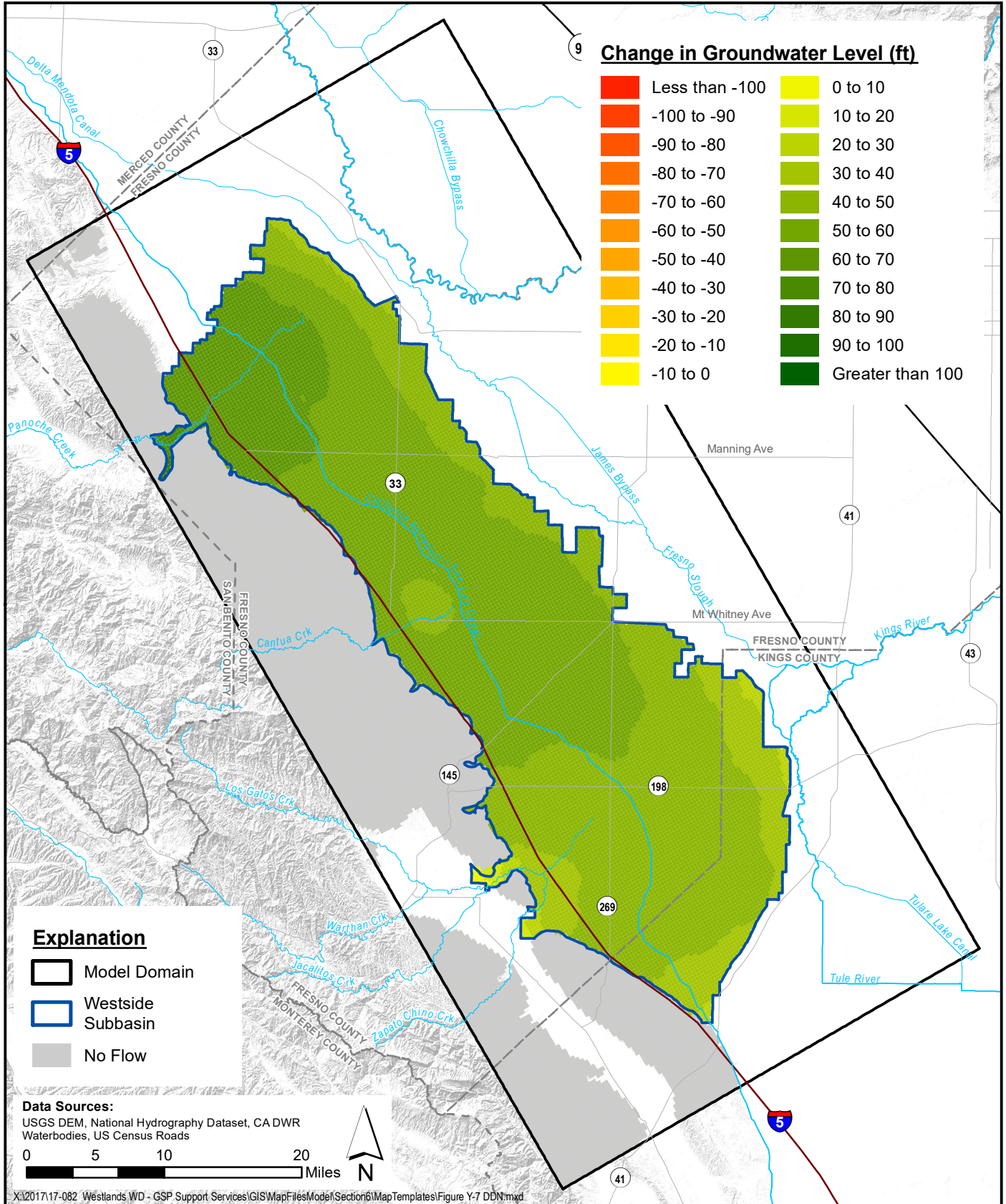
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - Baseline (2020 - 2040)**

Figure F-8



SGMA Sustainability Analyses  
 Westside Subbasin





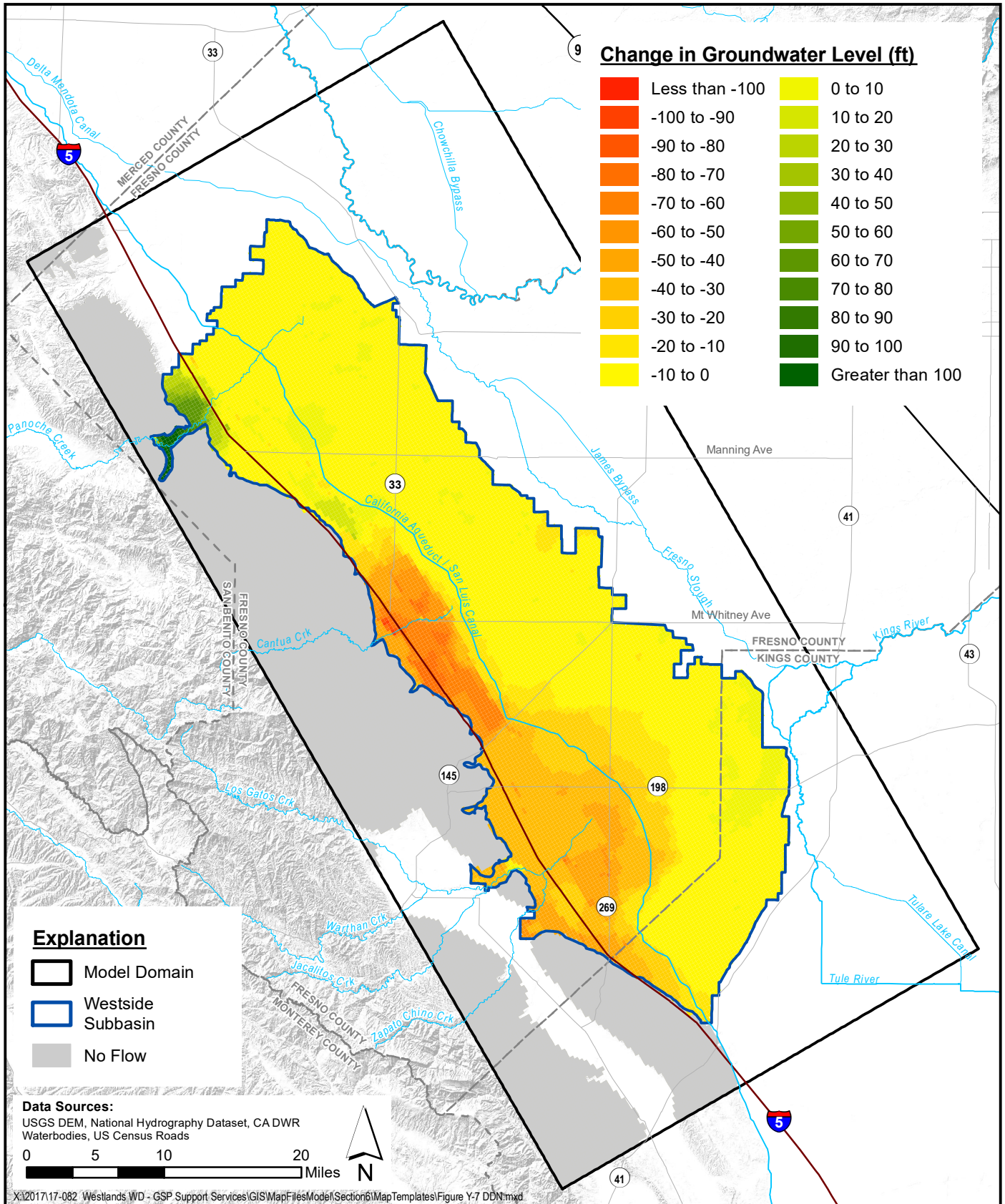
**Simulated Change in Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - Baseline (2020 - 2040)**

Figure F-9



SGMA Sustainability Analyses  
 Westside Subbasin



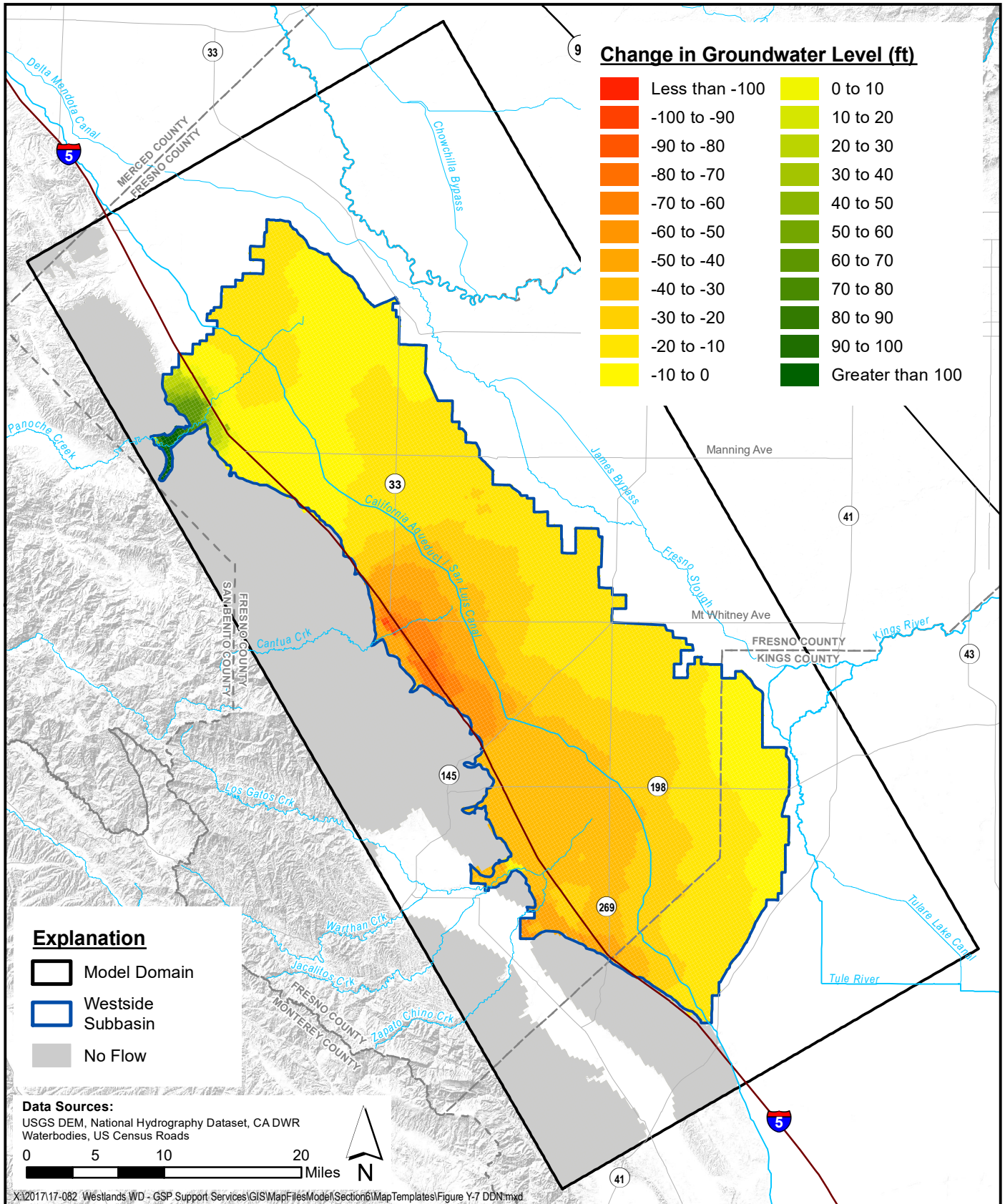


**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - Baseline (2020 - 2070)**

Figure F-10



SGMA Sustainability Analyses  
 Westside Subbasin



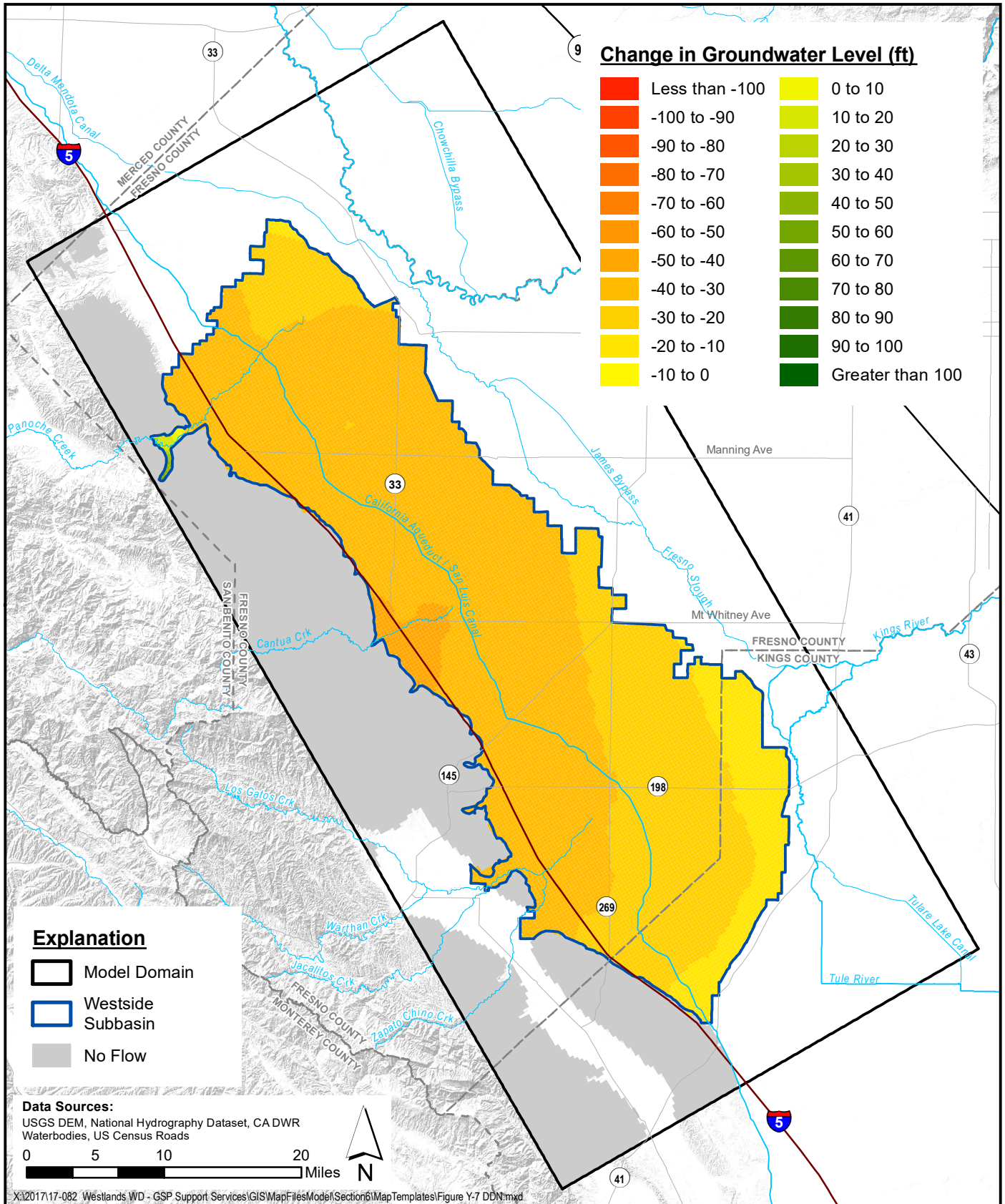
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - Baseline (2020 - 2070)**

Figure F-11



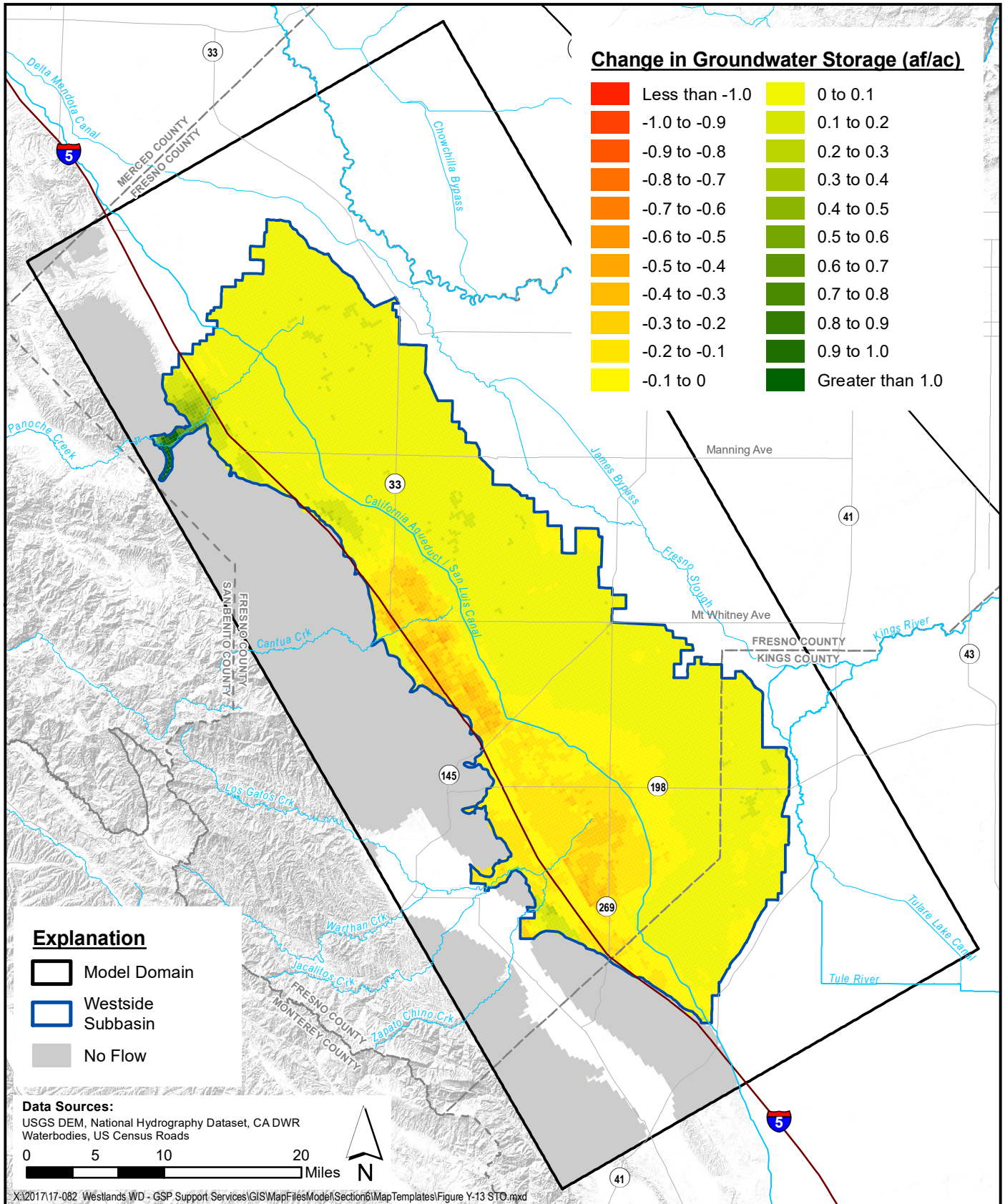
SGMA Sustainability Analyses  
 Westside Subbasin





**Simulated Change in Groundwater Elevation - Lower Aquifer 2030 Climate Change - Baseline (2020 - 2070)**

Figure F-12



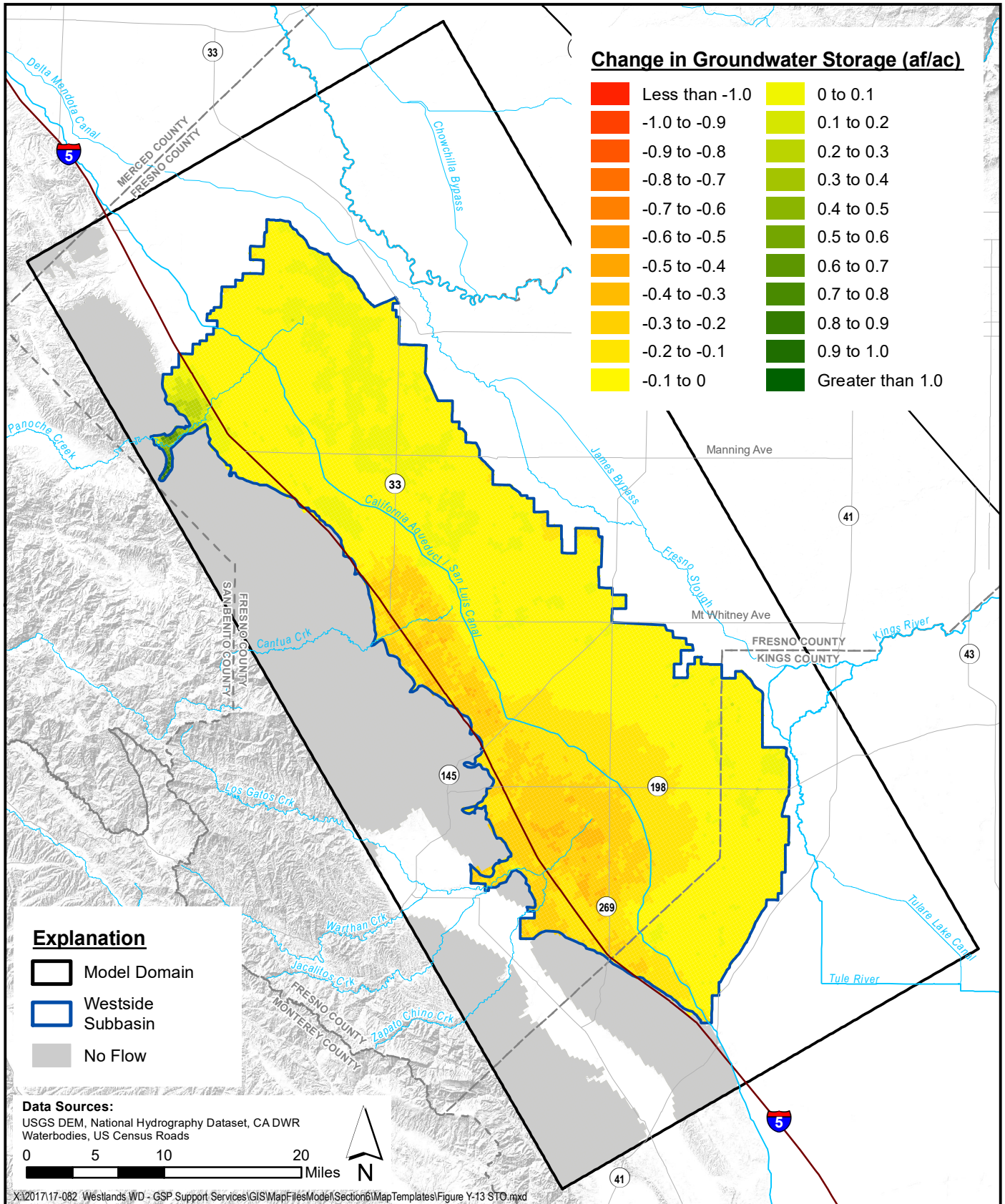
**Simulated Change in Groundwater Storage  
 2030 Climate Change - Baseline (2020 - 2040)**

Figure F-13



SGMA Sustainability Analyses  
 Westside Subbasin



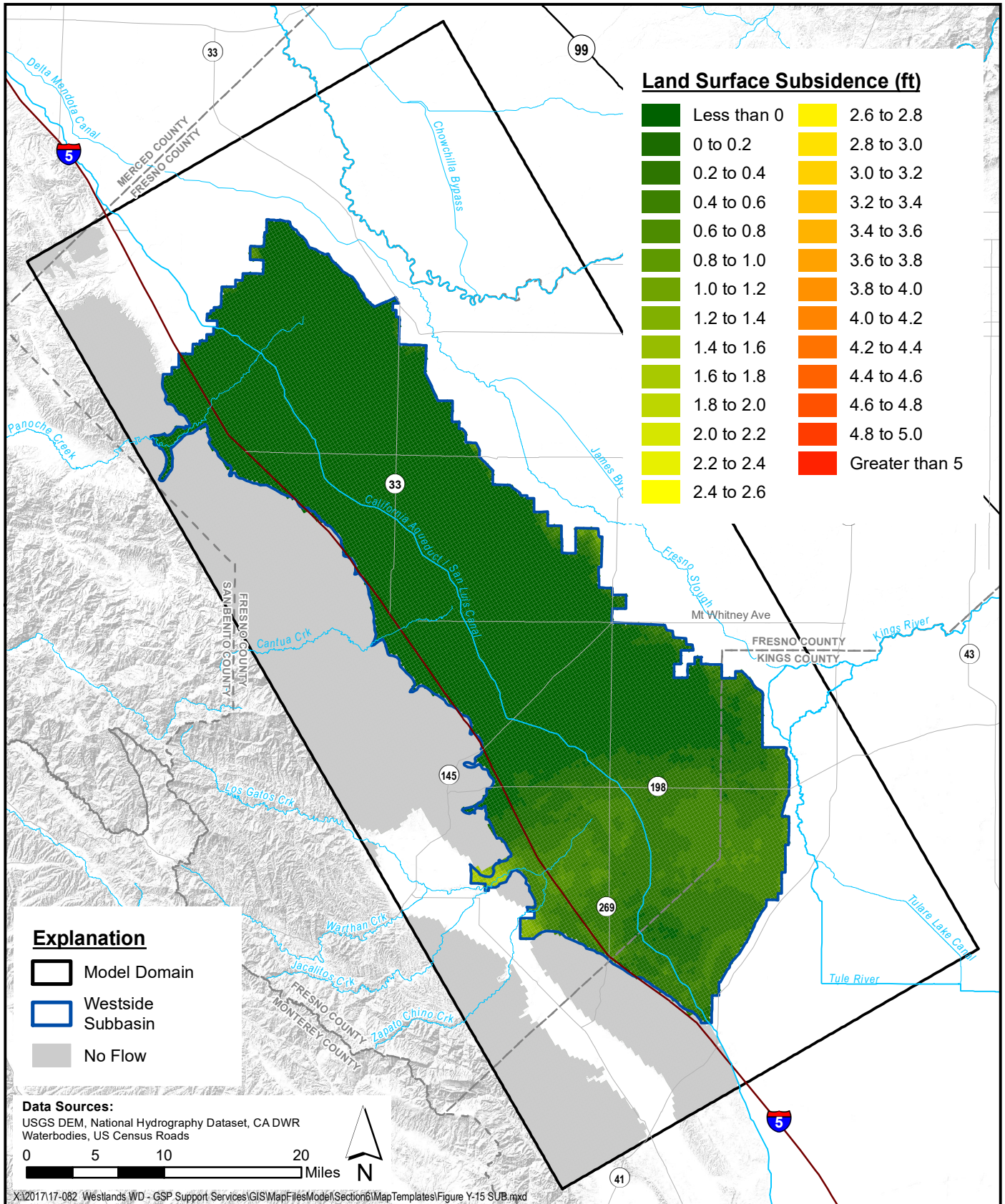


**Simulated Change in Groundwater Storage  
 2030 Climate Change - Baseline (2020 - 2070)**

Figure F-14



SGMA Sustainability Analyses  
 Westside Subbasin



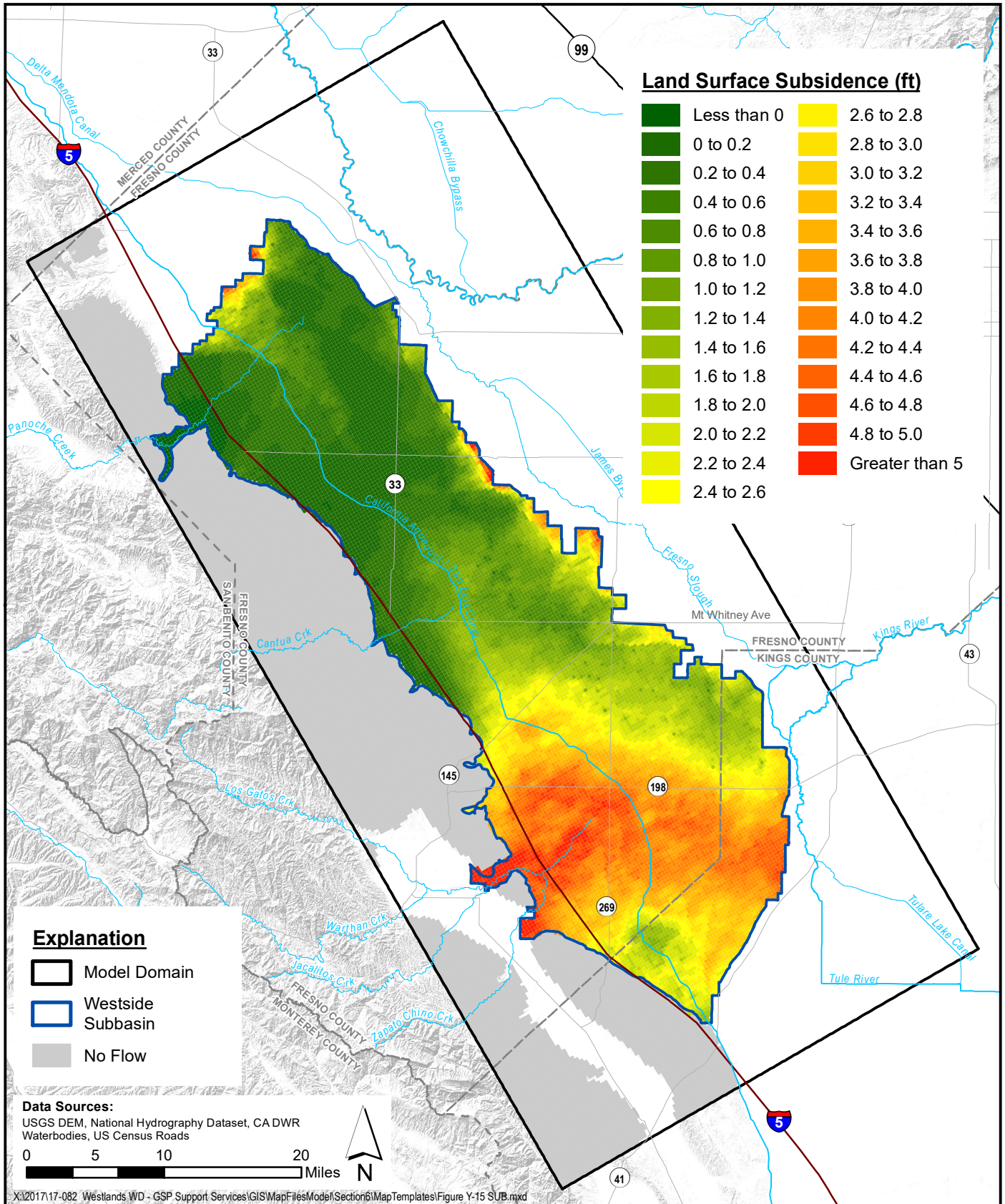
**Simulated Land Surface Subsidence  
 2030 Climate Change - Baseline (2020 - 2040)**

Figure F-15



SGMA Sustainability Analyses  
 Westside Subbasin





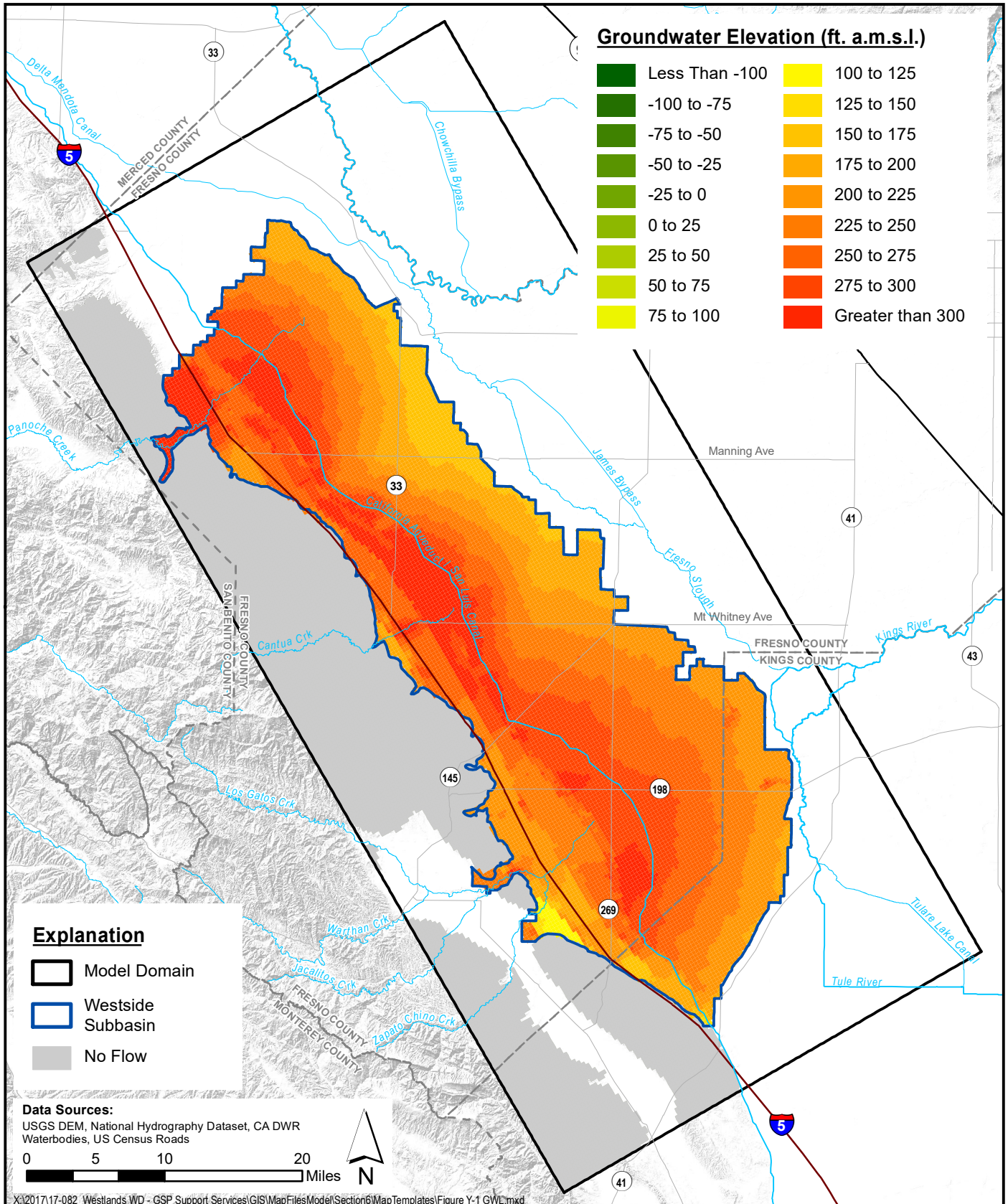
**Simulated Land Surface Subsidence  
 2030 Climate Change - Baseline (2020 - 2070)**

Figure F-16



SGMA Sustainability Analyses  
 Westside Subbasin





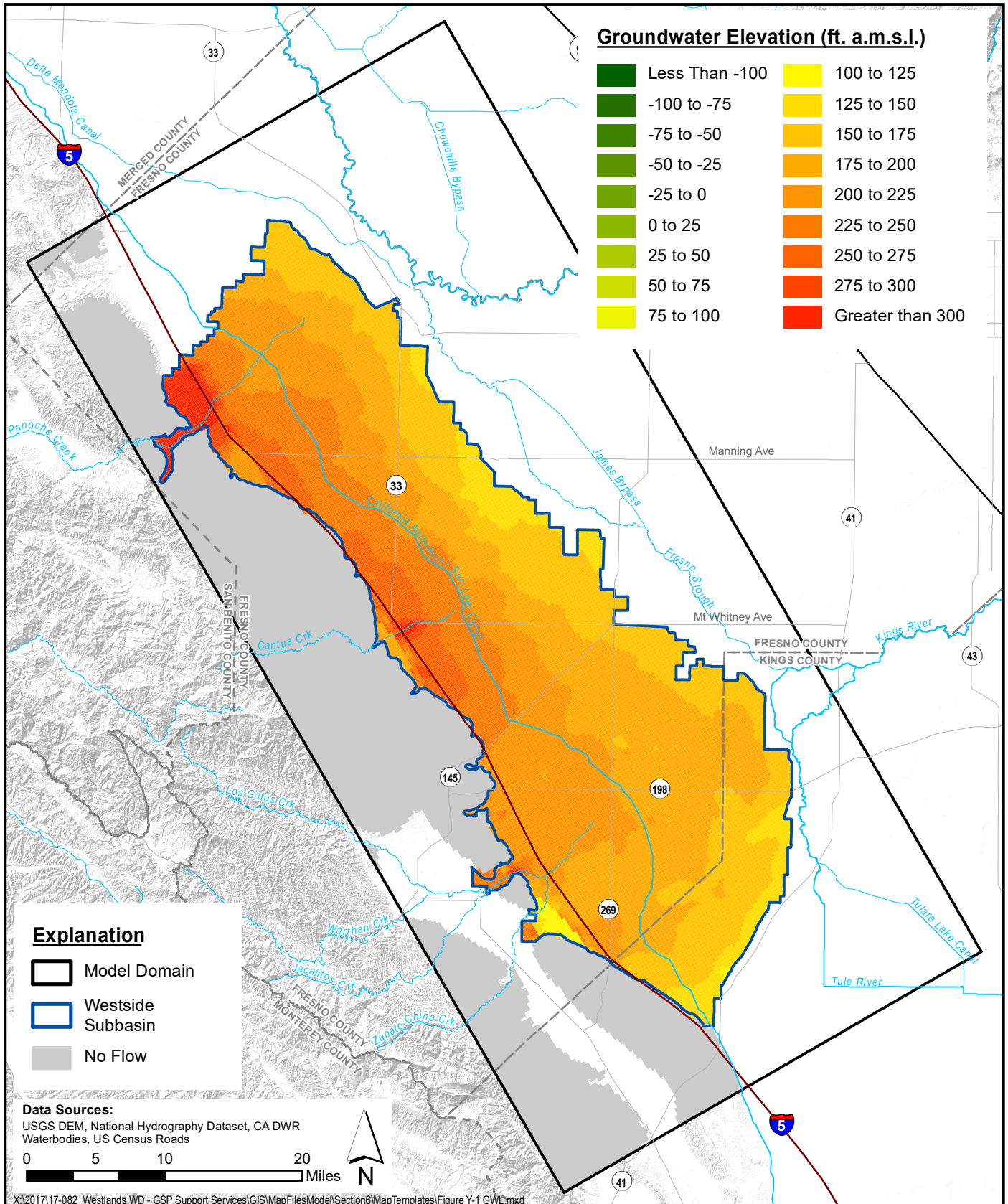
**Simulated Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.2 (January 2040)**

Figure F-17



SGMA Sustainability Analyses  
 Westside Subbasin



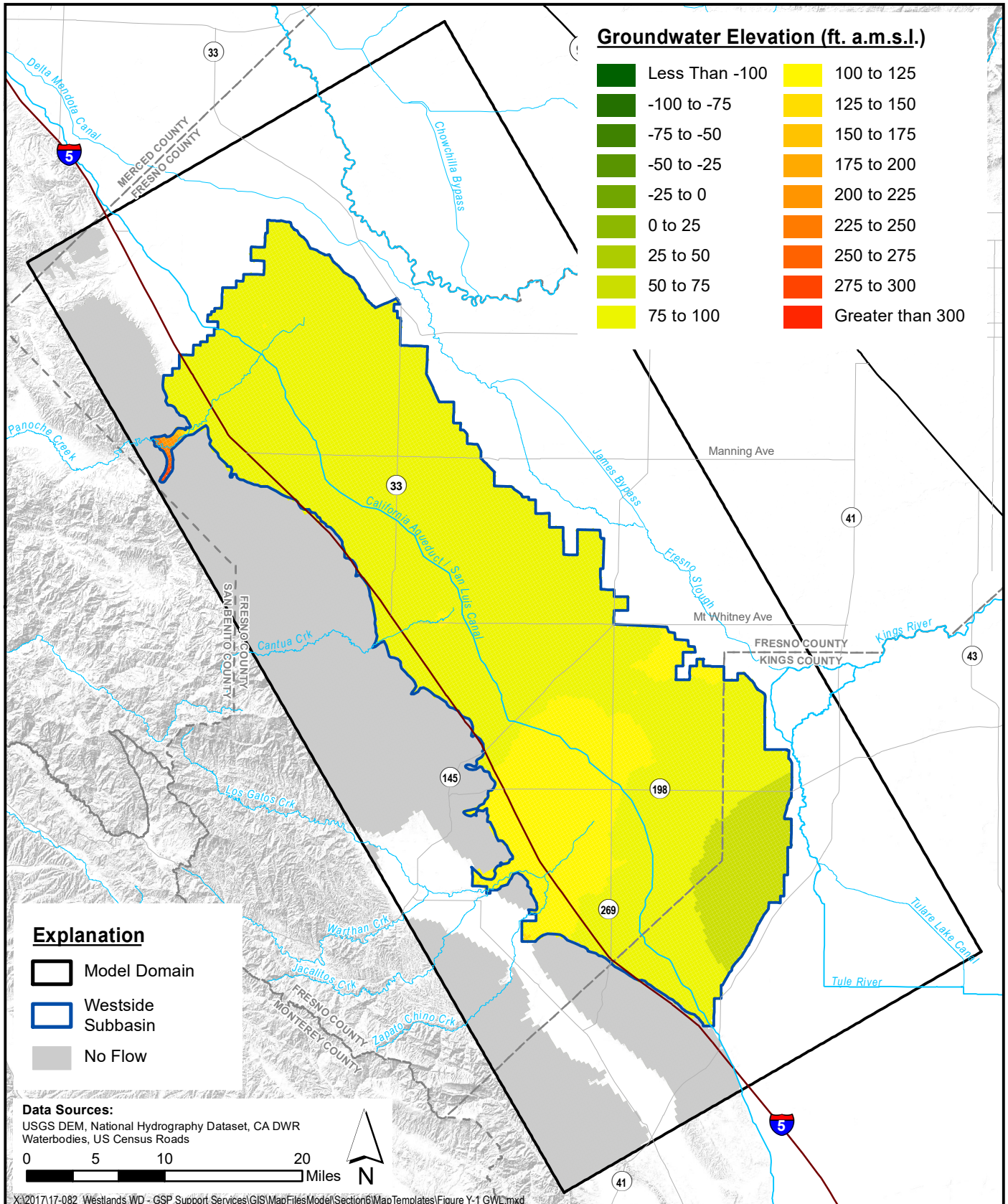


**Simulated Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.2 (January 2040)**

Figure F-18



SGMA Sustainability Analyses  
 Westside Subbasin



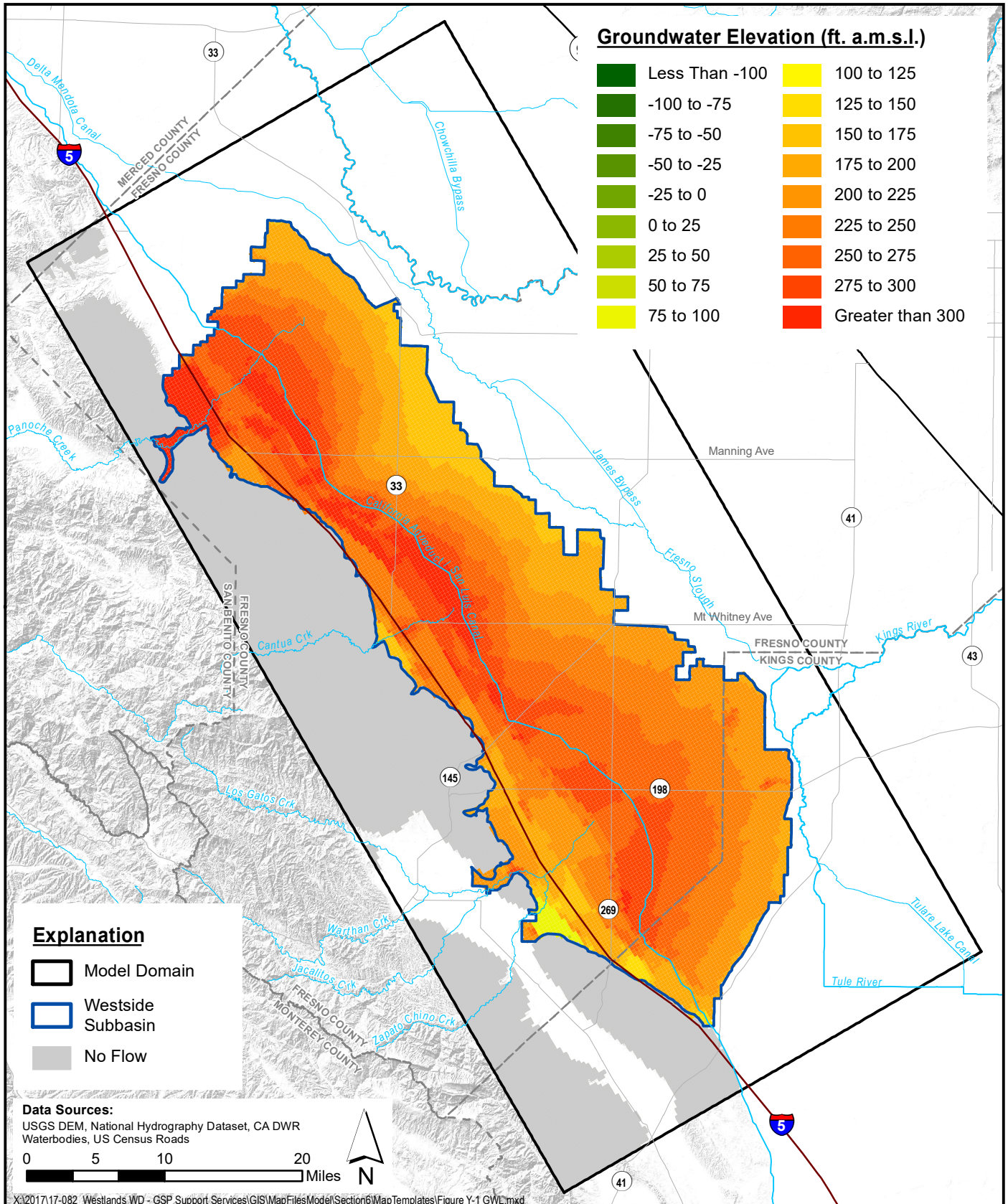
**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.2 (January 2040)**

Figure F-19



SGMA Sustainability Analyses  
 Westside Subbasin



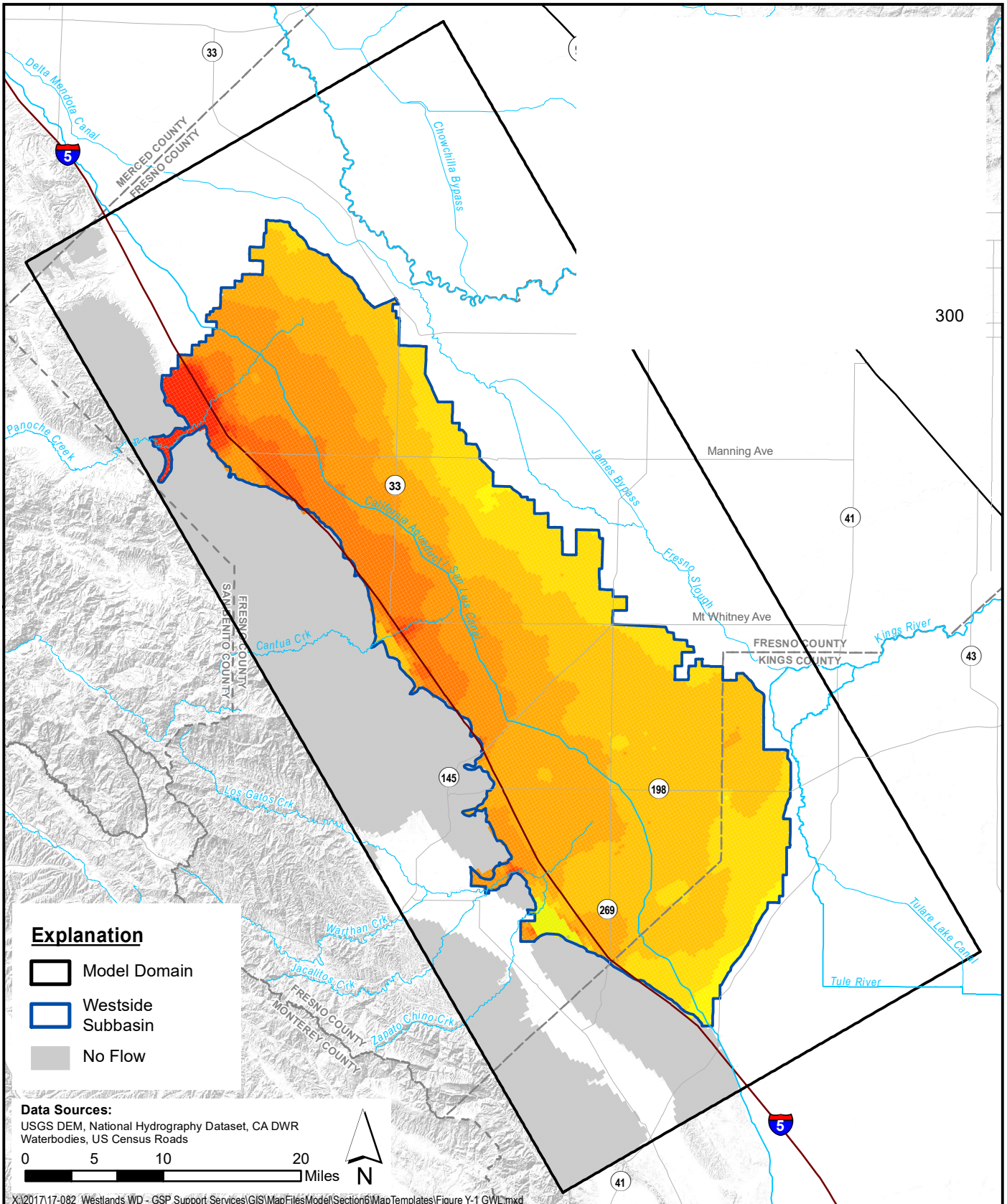


**Simulated Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.2 (January 2071)**

Figure F-20



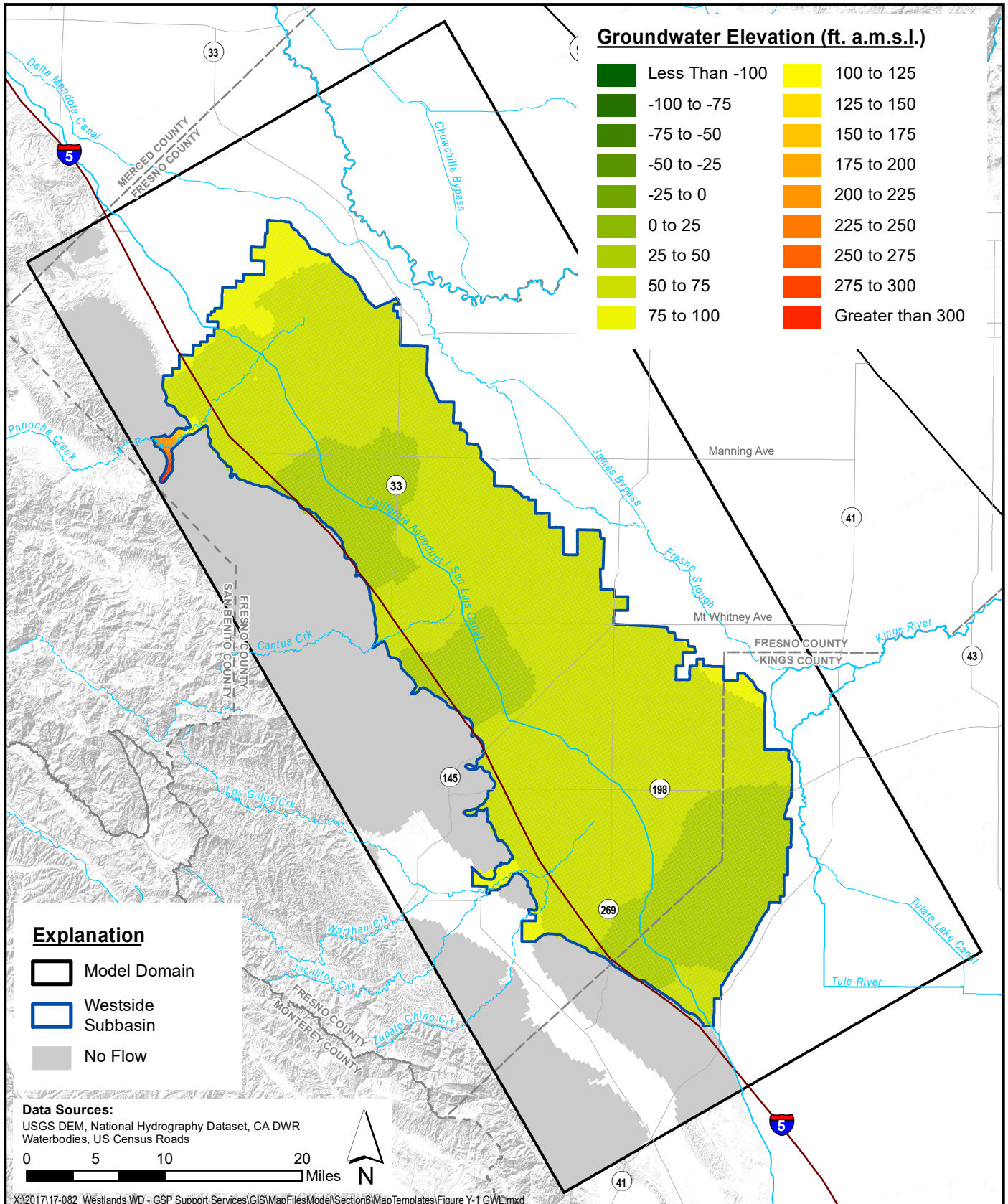
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**Scalmanini**  
 Consulting Engineers

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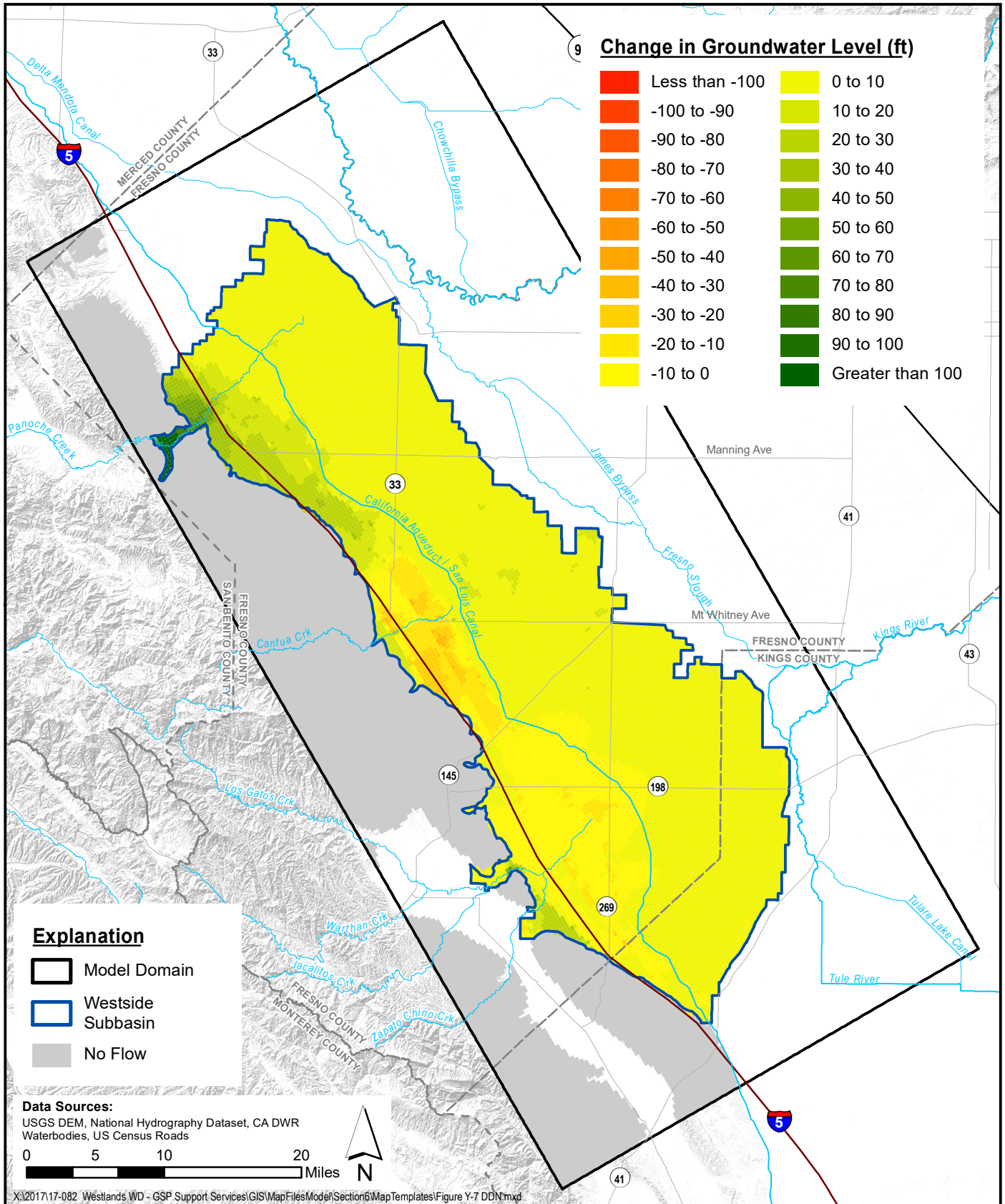
**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.2 (January 2071)**

Figure F-22



SGMA Sustainability Analyses  
 Westside Subbasin





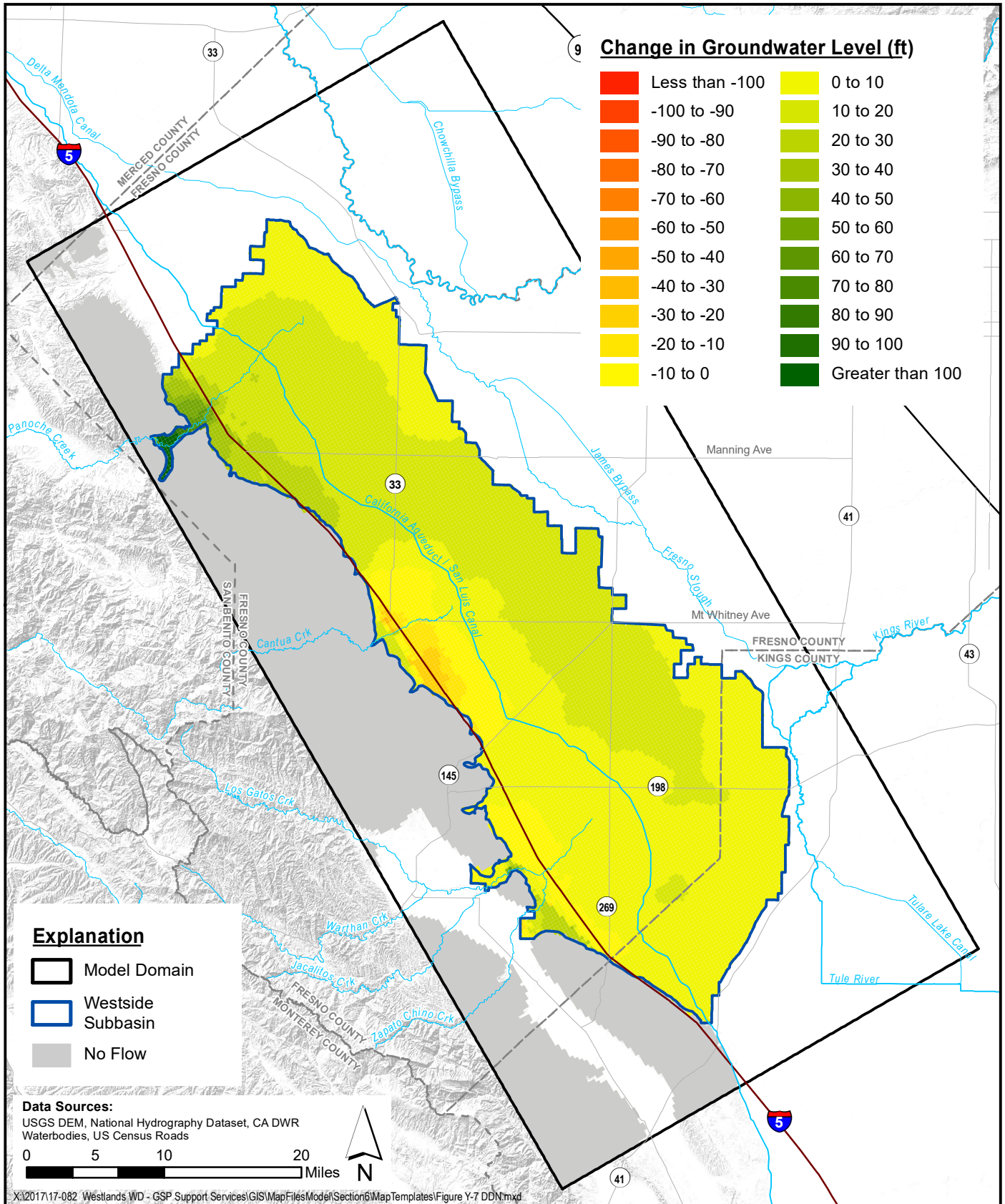
**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.2 (2020 - 2040)**

Figure F-23



SGMA Sustainability Analyses  
 Westside Subbasin





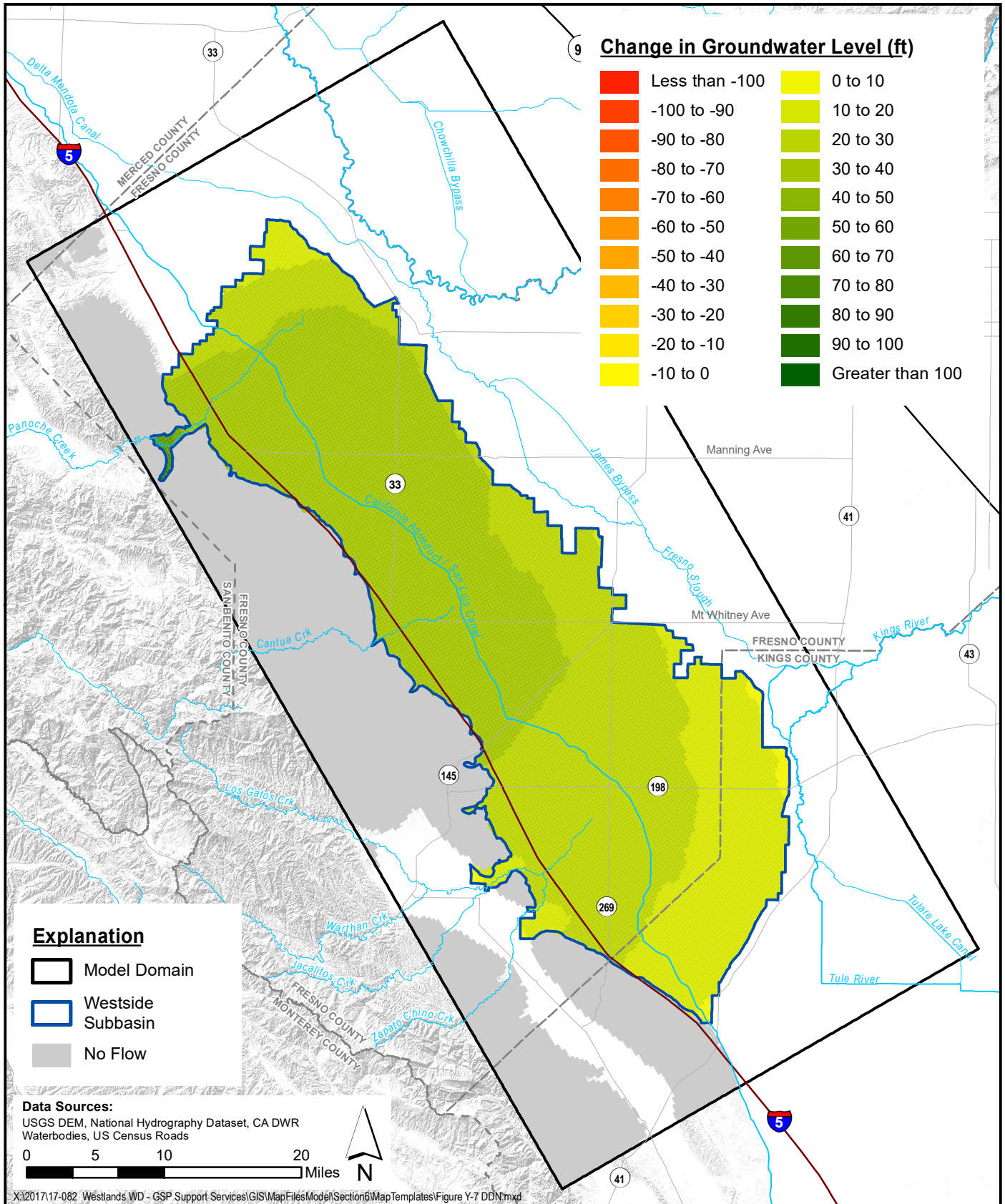
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.2 (2020 - 2040)**

Figure F-24



SGMA Sustainability Analyses  
 Westside Subbasin





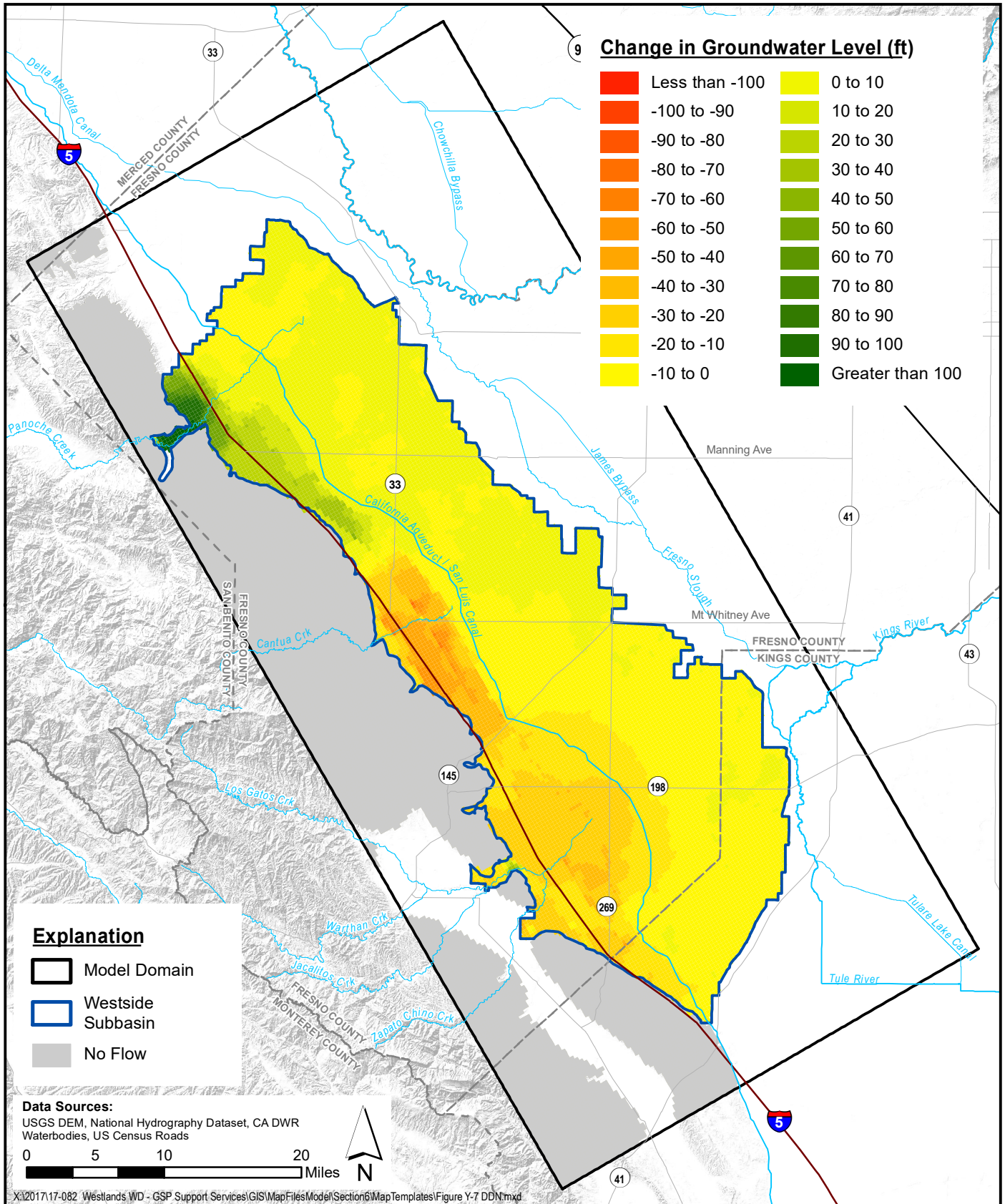
**Simulated Change in Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.2 (2020 - 2040)**

Figure F-25



SGMA Sustainability Analyses  
 Westside Subbasin



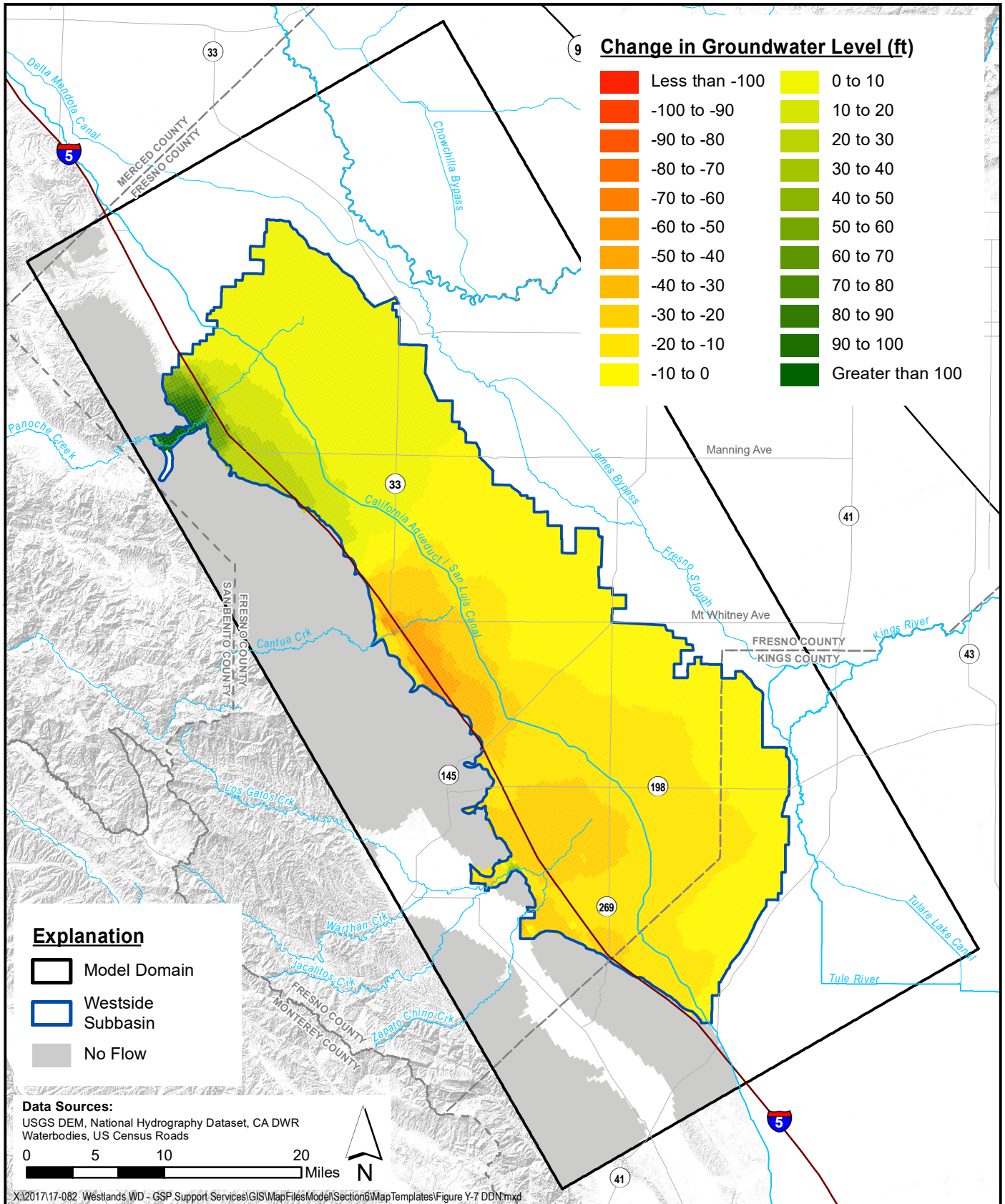


**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.2 (2020 - 2070)**

Figure F-26



SGMA Sustainability Analyses  
 Westside Subbasin



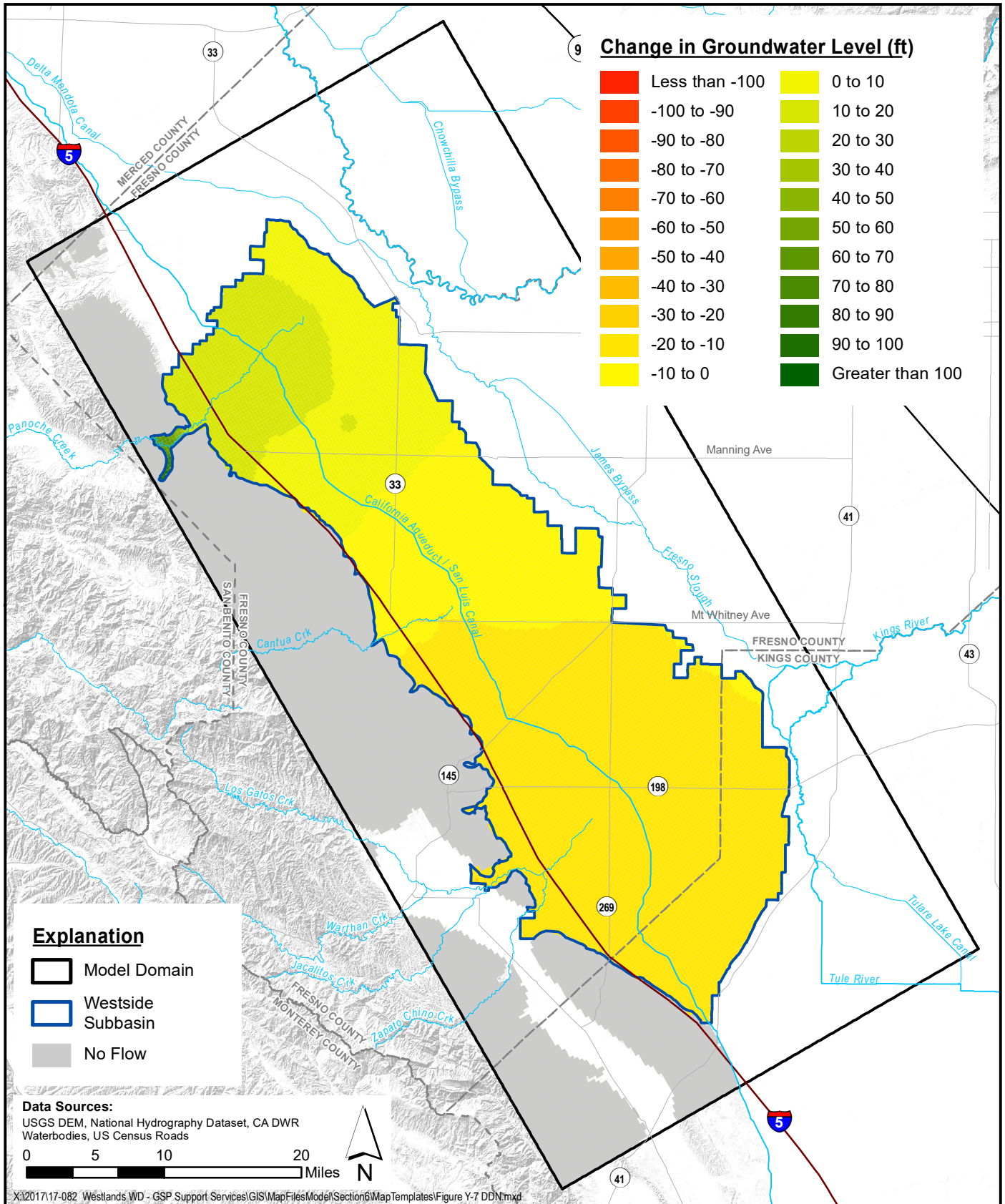
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.2 (2020 - 2070)**

Figure F-27



SGMA Sustainability Analyses  
 Westside Subbasin





**Change in Groundwater Level (ft)**

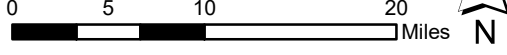
Less than -100	0 to 10
-100 to -90	10 to 20
-90 to -80	20 to 30
-80 to -70	30 to 40
-70 to -60	40 to 50
-60 to -50	50 to 60
-50 to -40	60 to 70
-40 to -30	70 to 80
-30 to -20	80 to 90
-20 to -10	90 to 100
-10 to 0	Greater than 100

**Explanation**

- Model Domain
- Westside Subbasin
- No Flow

**Data Sources:**

USGS DEM, National Hydrography Dataset, CA DWR Waterbodies, US Census Roads



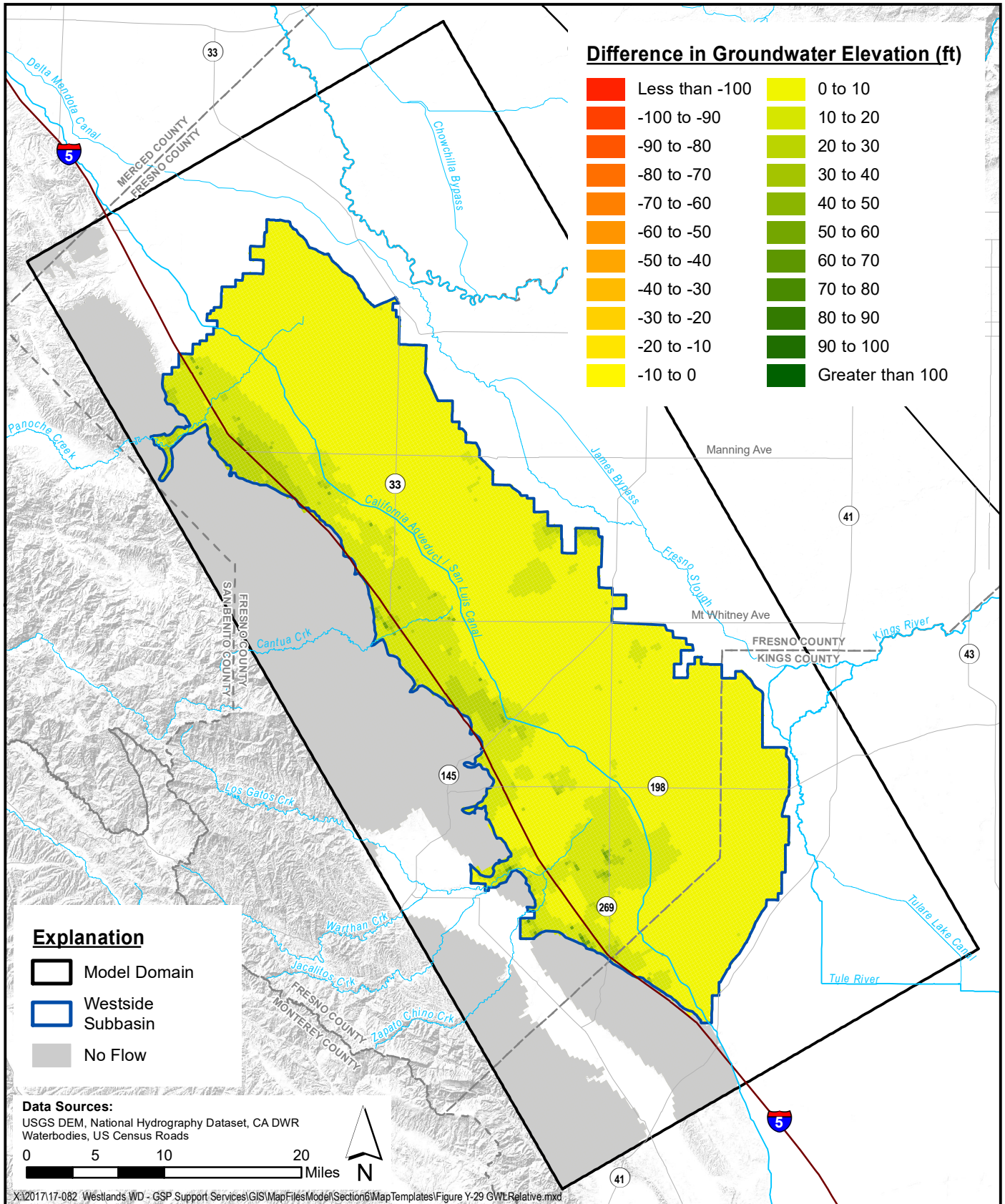
X:\2017\17-082 Westlands\_WD - GSP Support Services\GIS\MapFiles\Model\Section6\MapTemplates\Figure Y-7 DDN.mxd

**Simulated Change in Groundwater Elevation - Lower Aquifer  
2030 Climate Change - PMA No.2 (2020 - 2070)**

Figure F-28



SGMA Sustainability Analyses  
Westside Subbasin



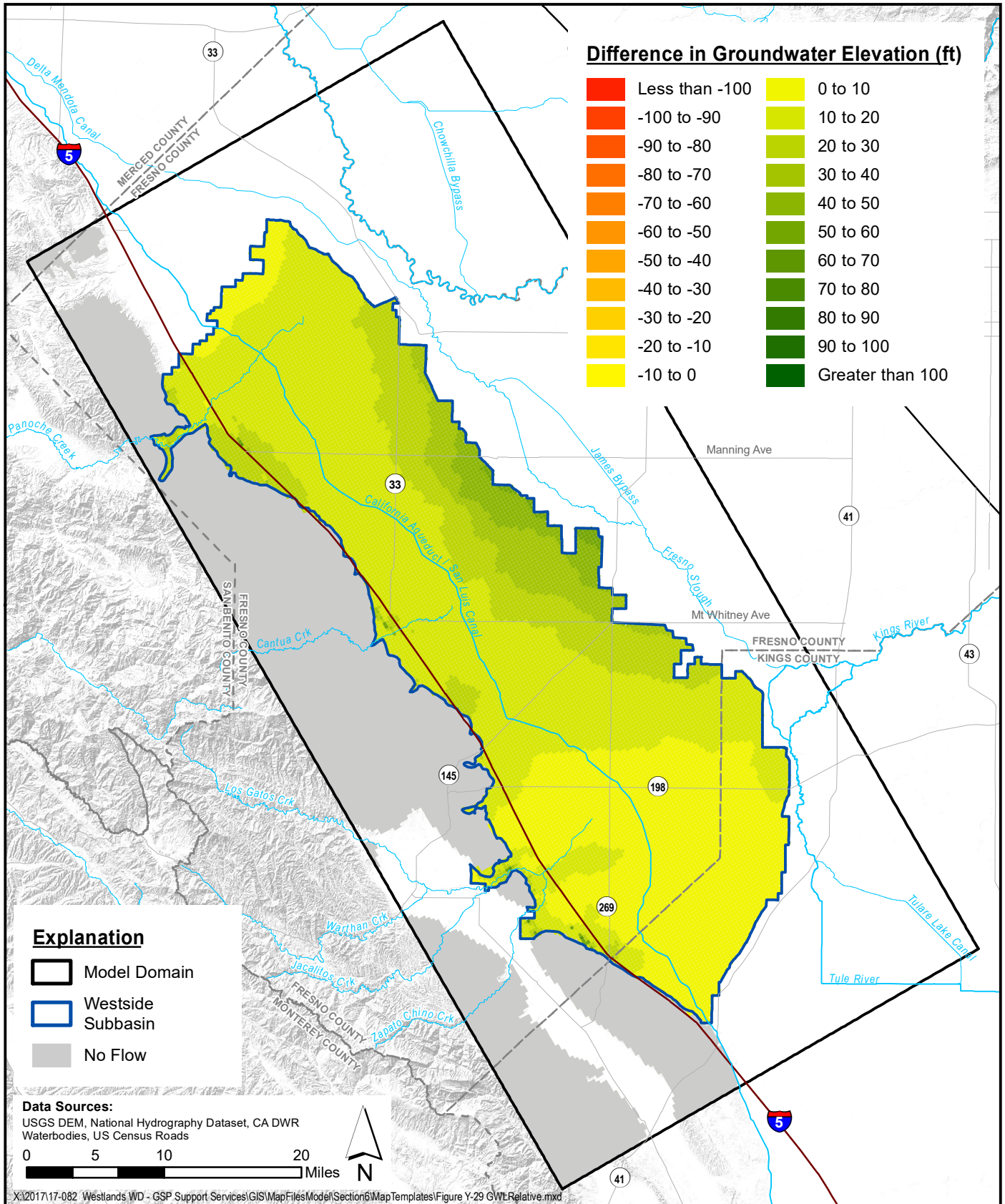
**Project Impacts on Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No. 2 (2020 - 2040)**

Figure F-29



SGMA Sustainability Analyses  
 Westside Subbasin





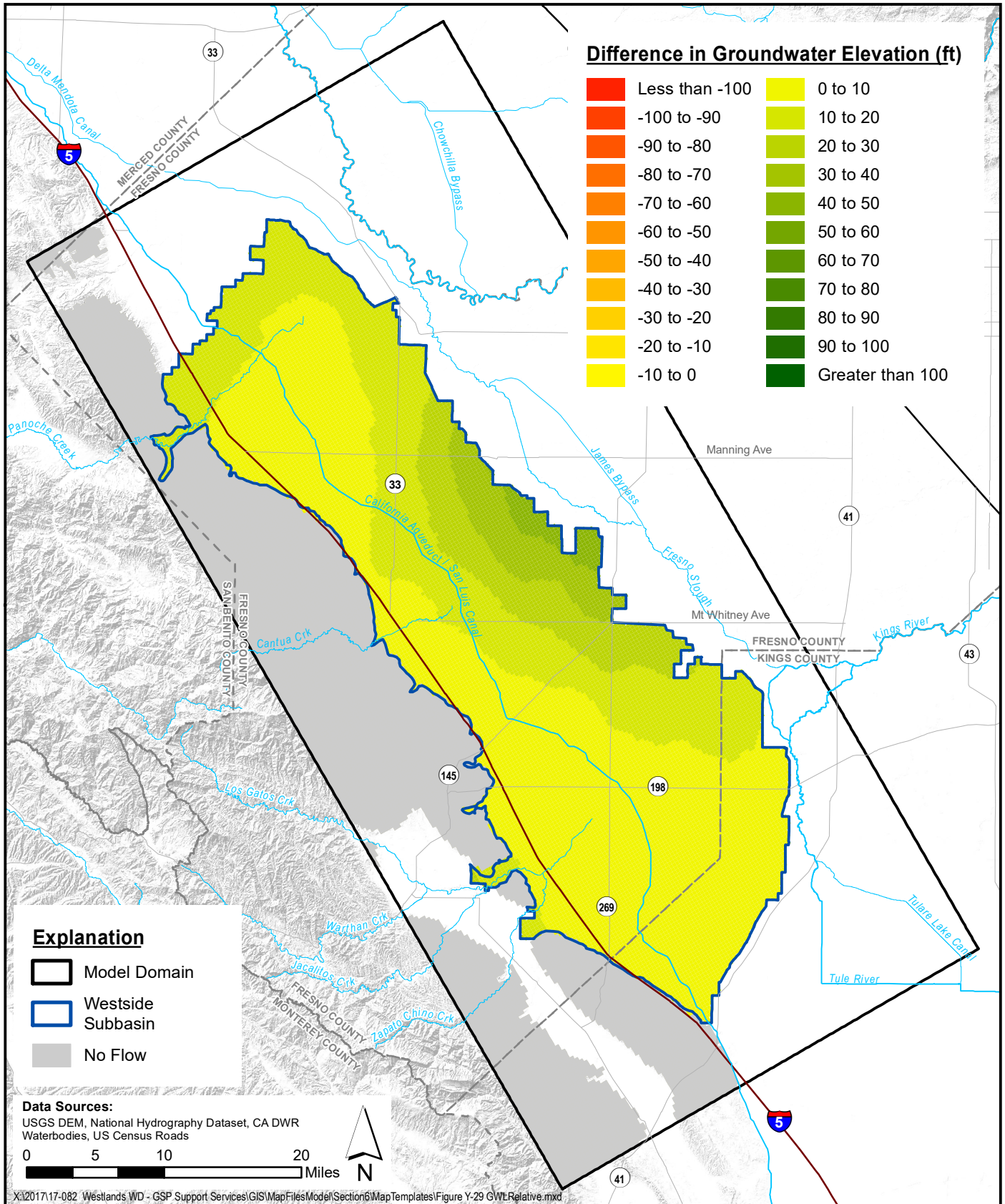
**Project Impacts on Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No. 2 (2020 - 2040)**

Figure F-30



SGMA Sustainability Analyses  
 Westside Subbasin





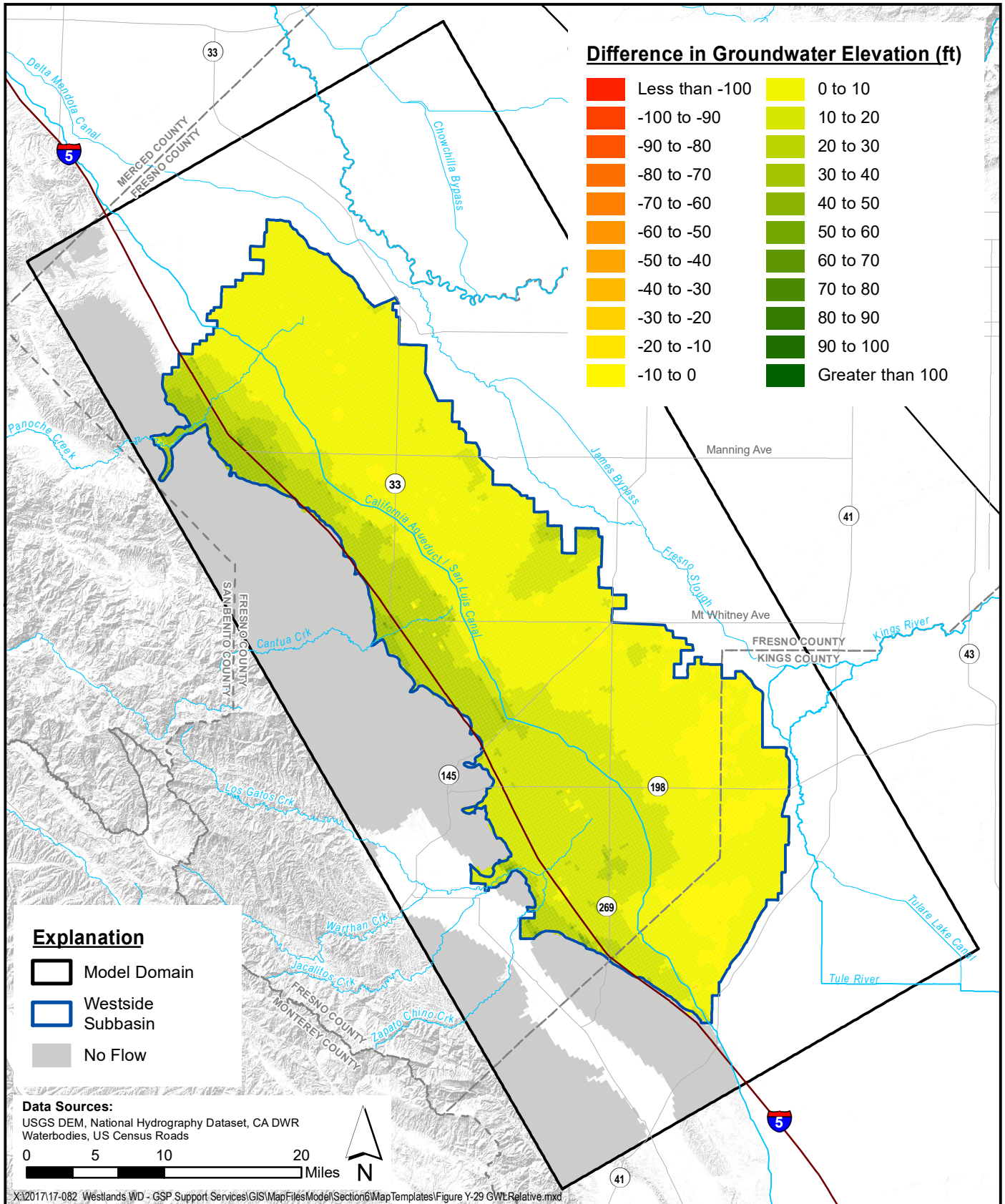
**Project Impacts on Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No. 2 (2020 - 2040)**

Figure F-31



SGMA Sustainability Analyses  
 Westside Subbasin





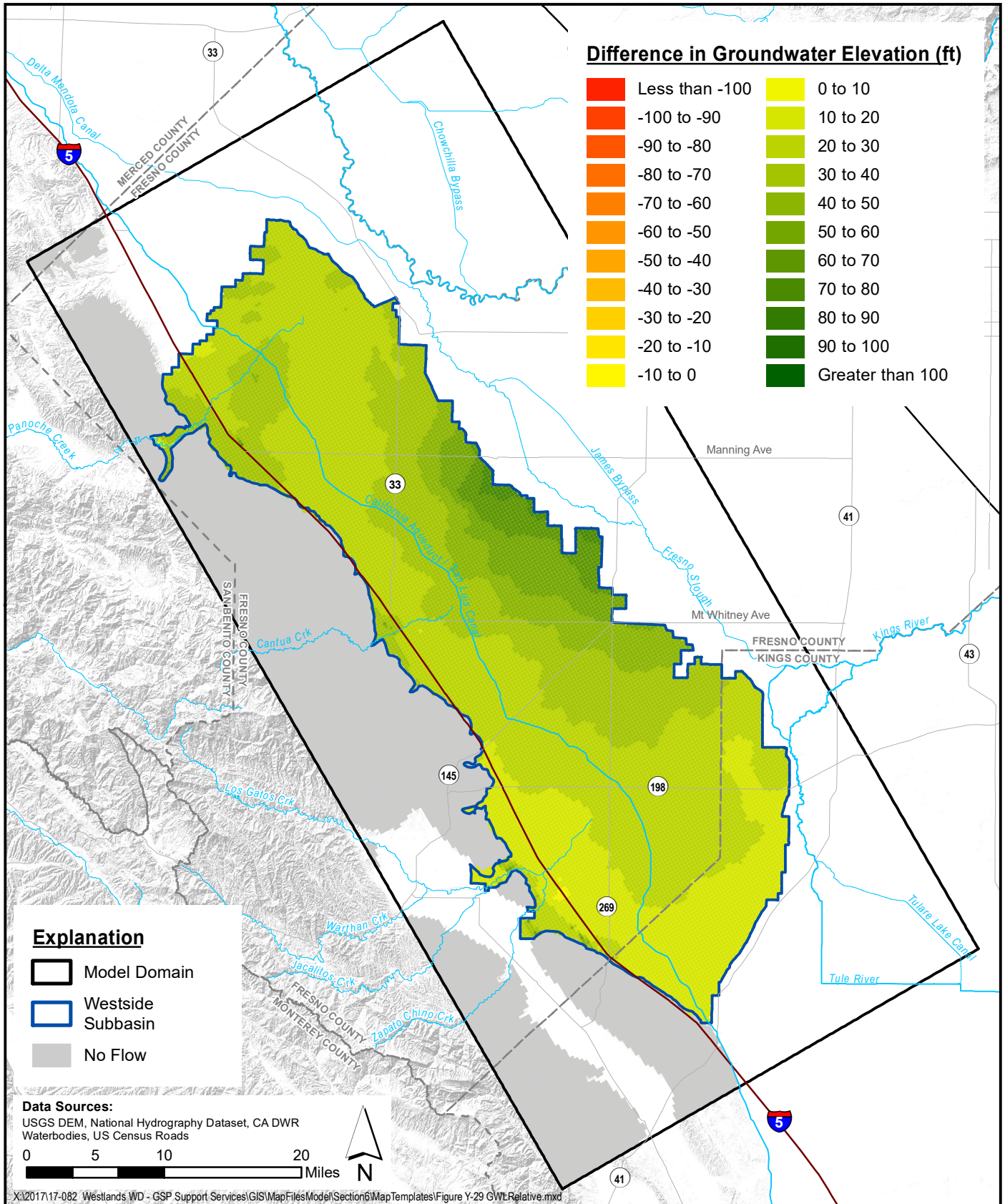
**Project Impacts on Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No. 2 (2020 - 2070)**

Figure F-32



SGMA Sustainability Analyses  
 Westside Subbasin





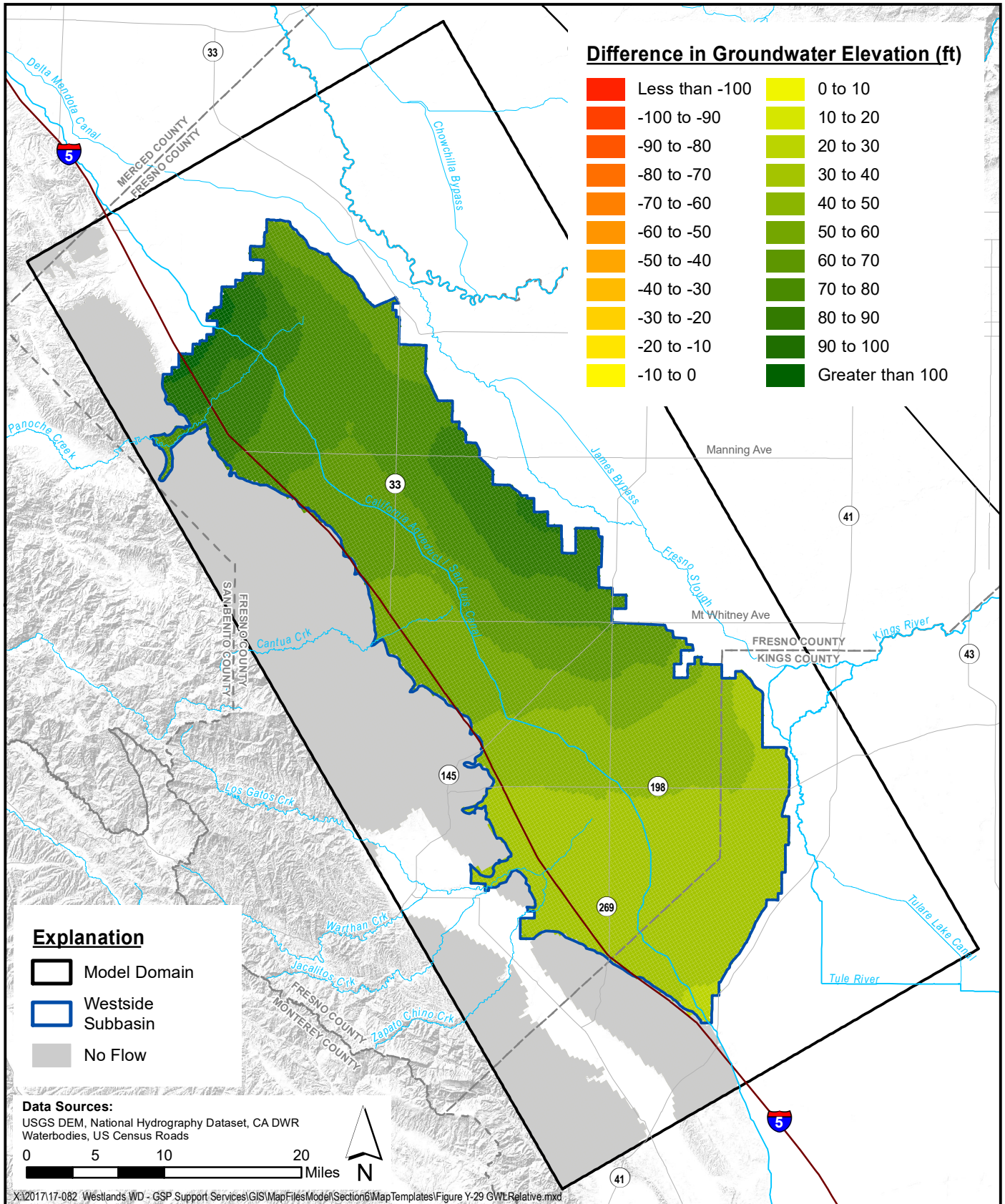
**Project Impacts on Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No. 2 (2020 - 2070)**

Figure F-33



SGMA Sustainability Analyses  
 Westside Subbasin





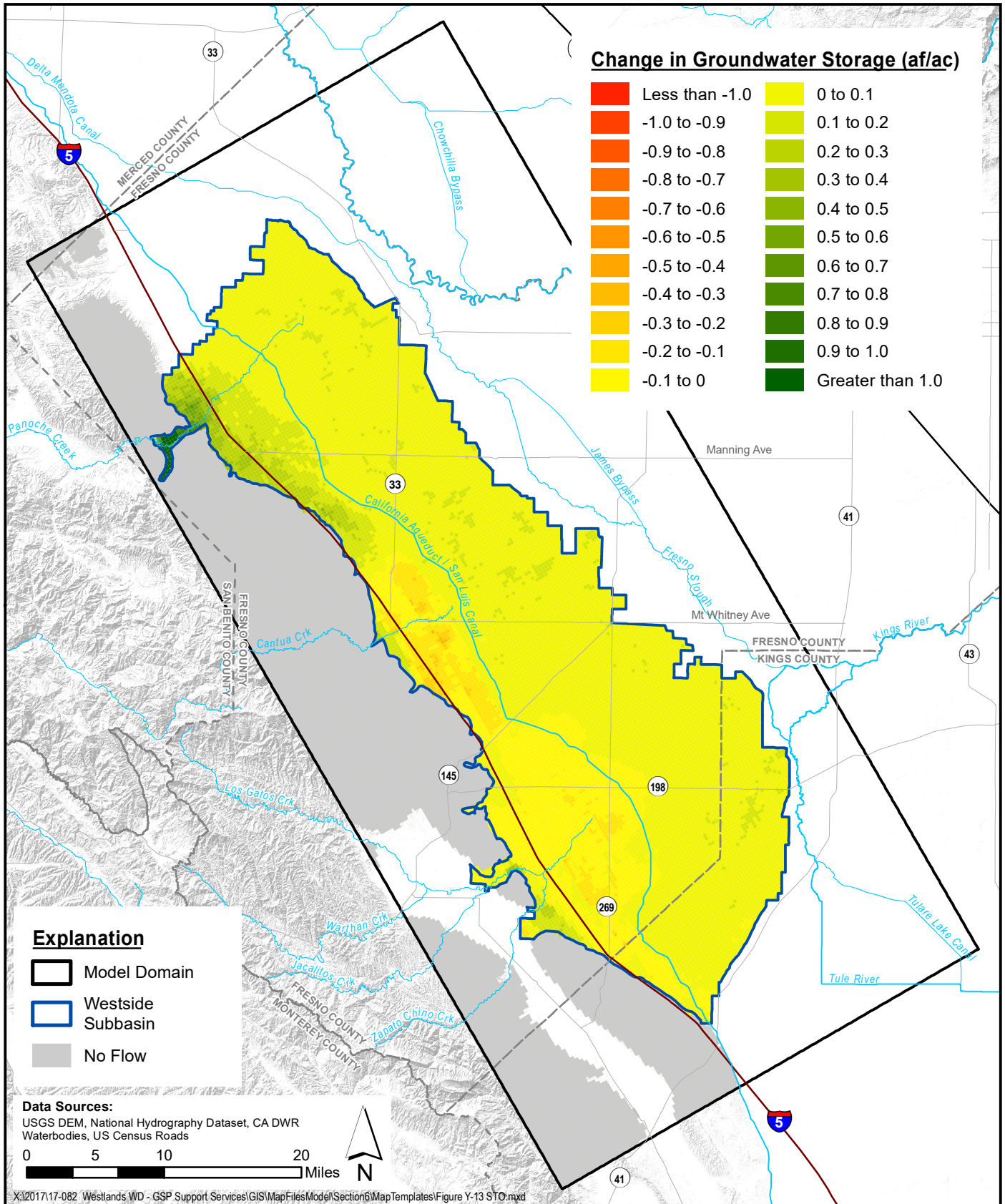
**Project Impacts on Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No. 2 (2020 - 2070)**

Figure F-34



SGMA Sustainability Analyses  
 Westside Subbasin





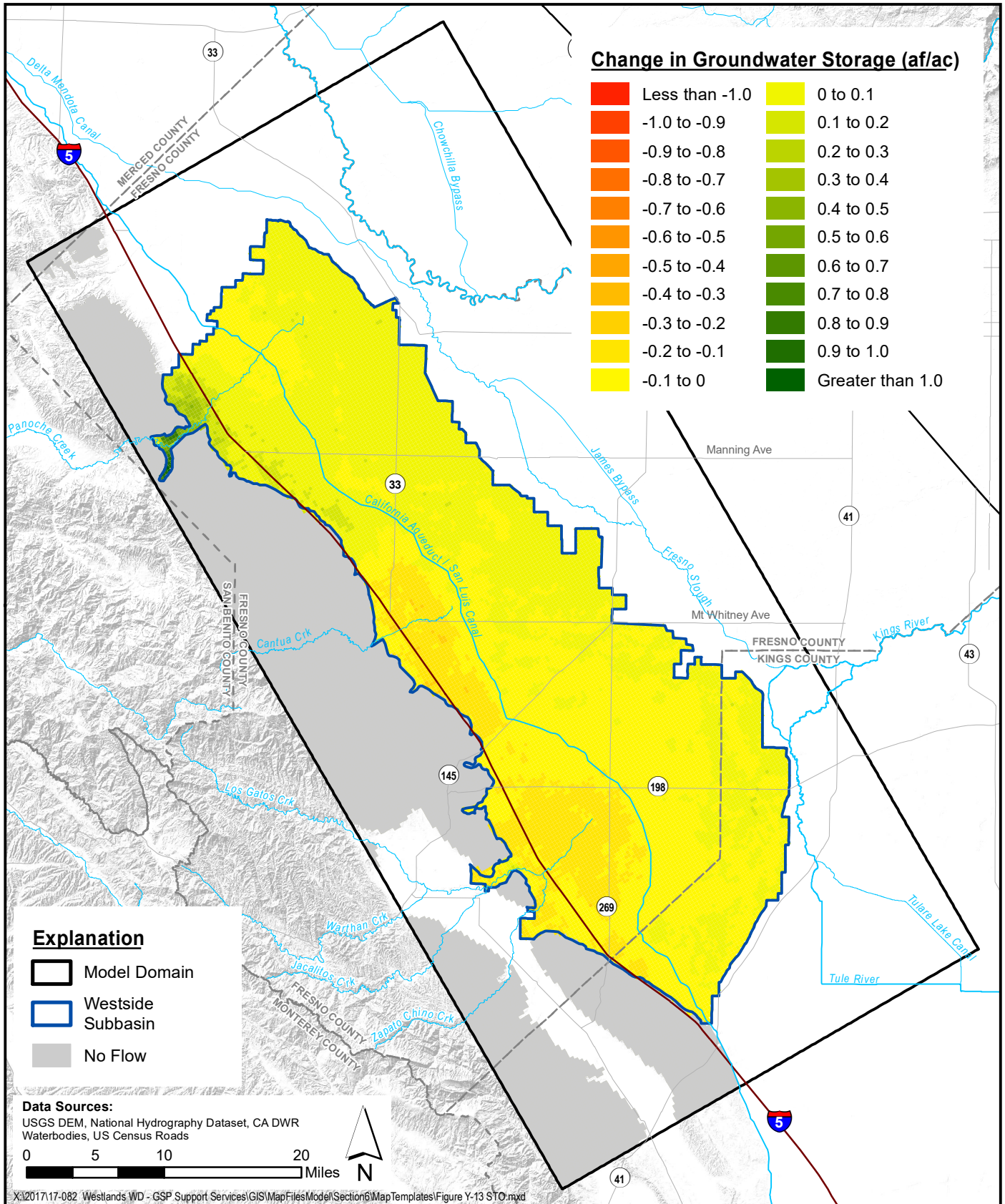
**Simulated Change in Groundwater Storage  
 2030 Climate Change - PMA No. 2 (2020 - 2040)**

Figure F-35



SGMA Sustainability Analyses  
 Westside Subbasin



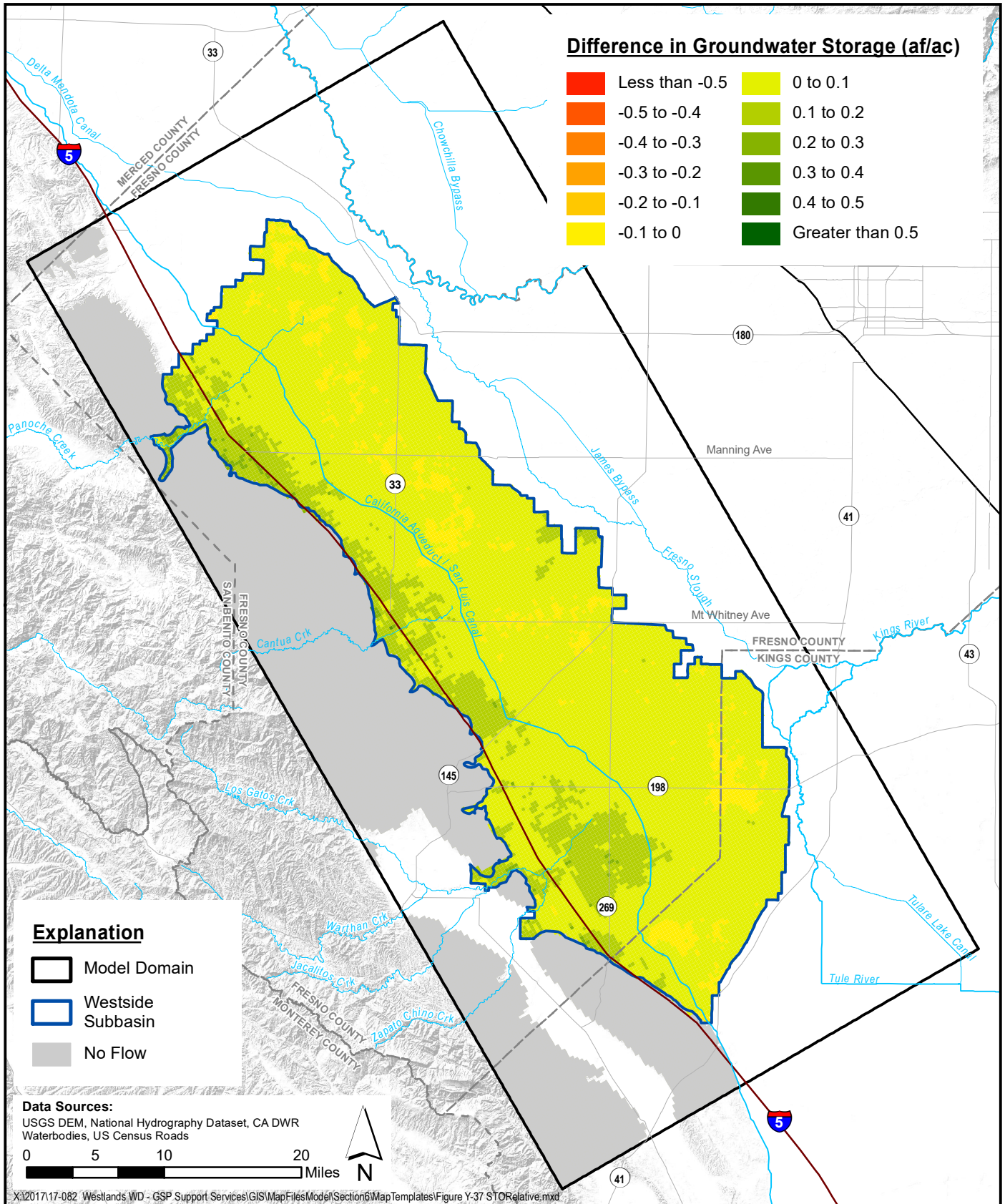


**Simulated Change in Groundwater Storage  
 2030 Climate Change - PMA No. 2 (2020 - 2070)**

Figure F-36



SGMA Sustainability Analyses  
 Westside Subbasin



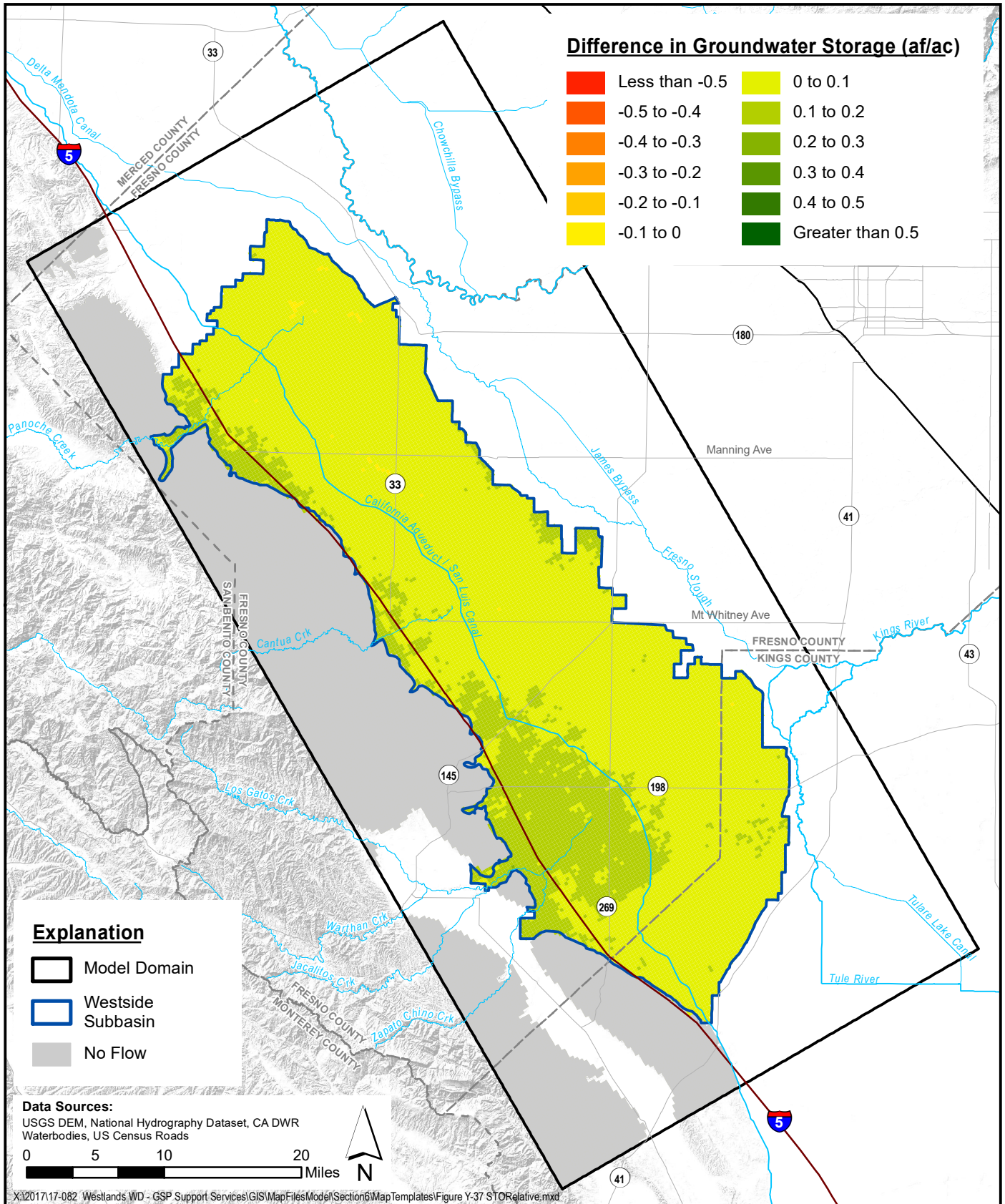
**Project Impacts on Groundwater Storage  
 2030 Climate Change - PMA No. 2 (2020 - 2040)**

Figure F-37



SGMA Sustainability Analyses  
 Westside Subbasin





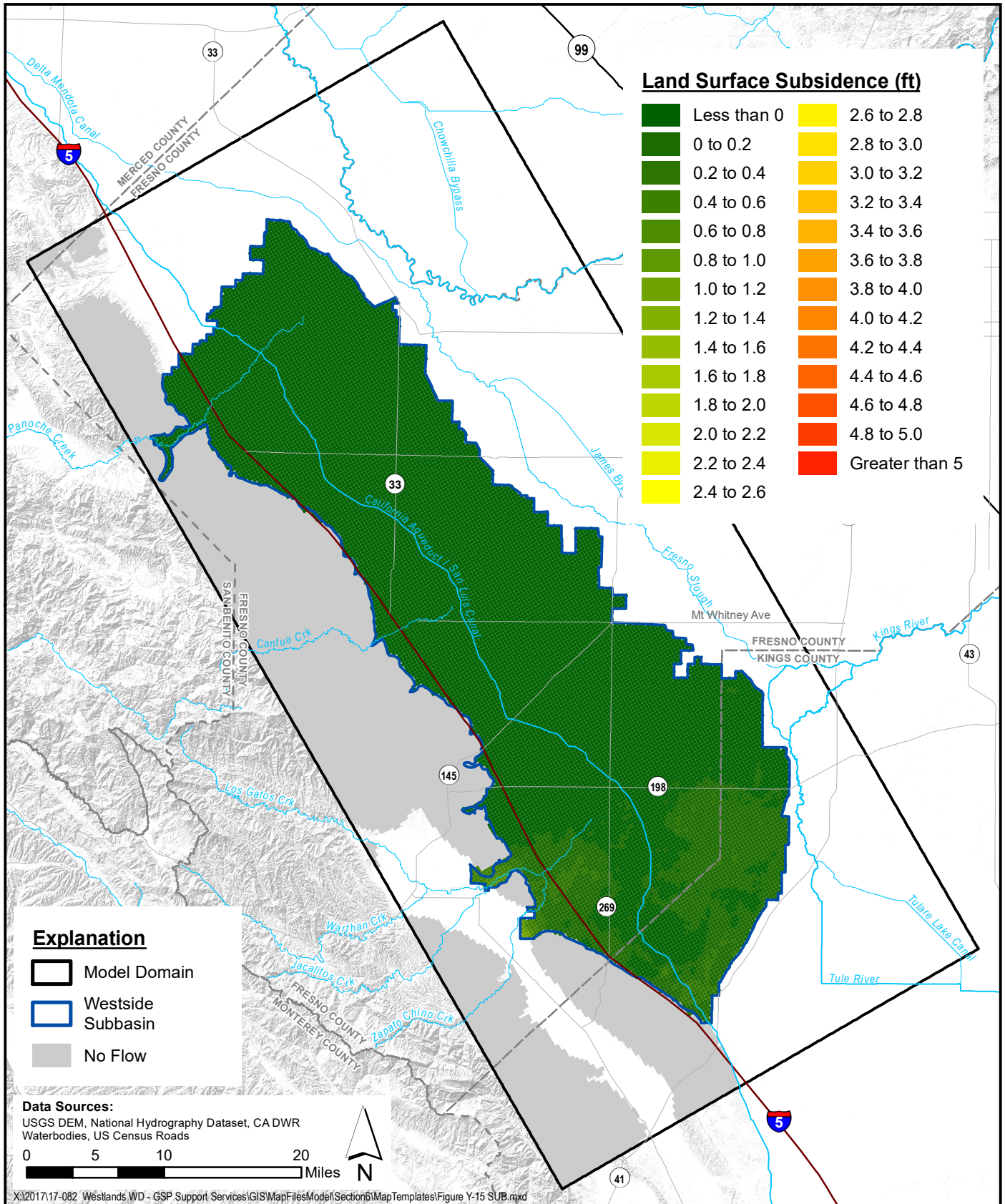
**Project Impacts on Groundwater Storage  
 2030 Climate Change - PMA No. 2 (2020 - 2070)**

**Figure F-38**



SGMA Sustainability Analyses  
 Westside Subbasin





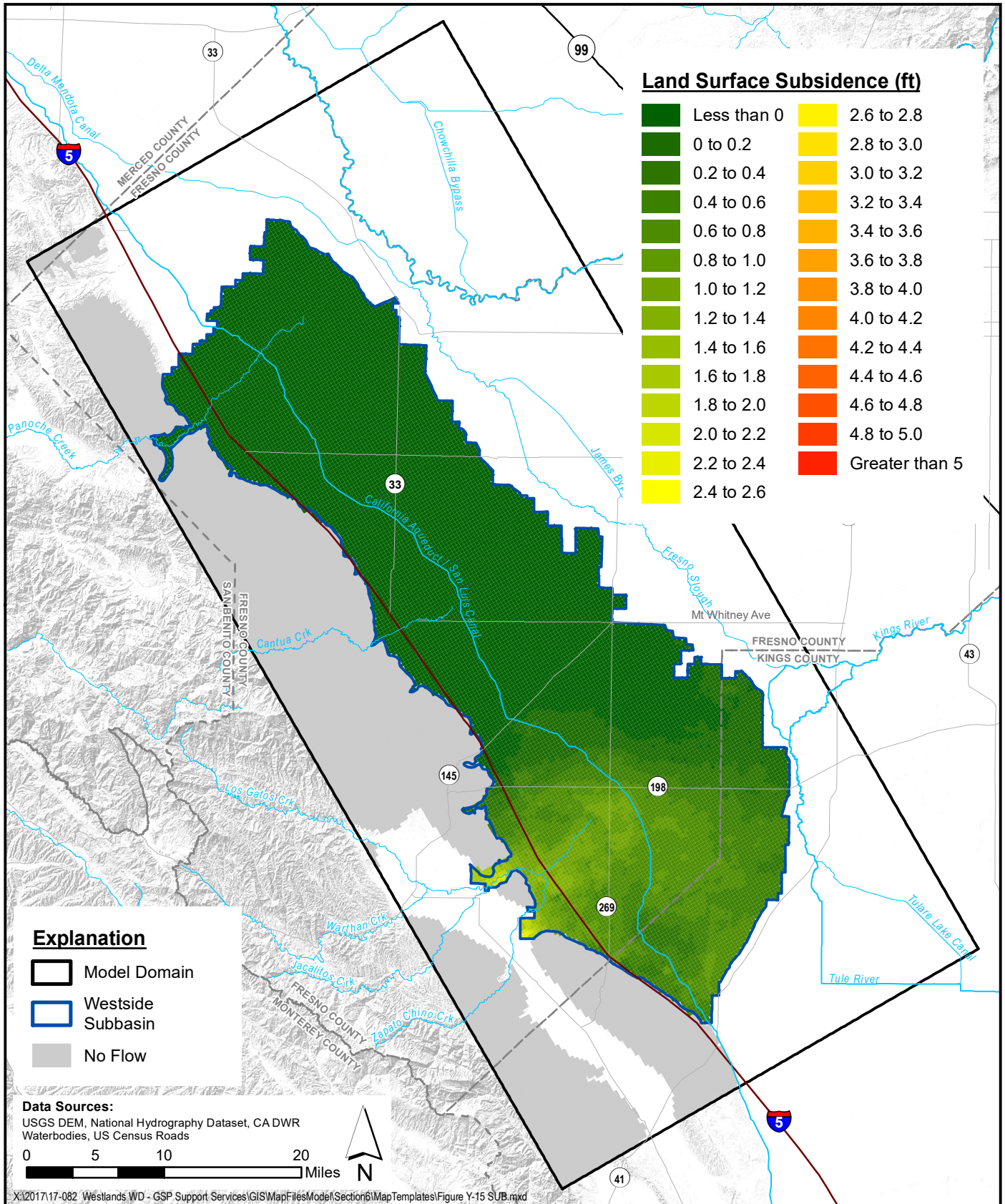
**Simulated Land Surface Subsidence  
 2030 Climate Change - PMA No.2 (2020 - 2040)**

Figure F-39



SGMA Sustainability Analyses  
 Westside Subbasin





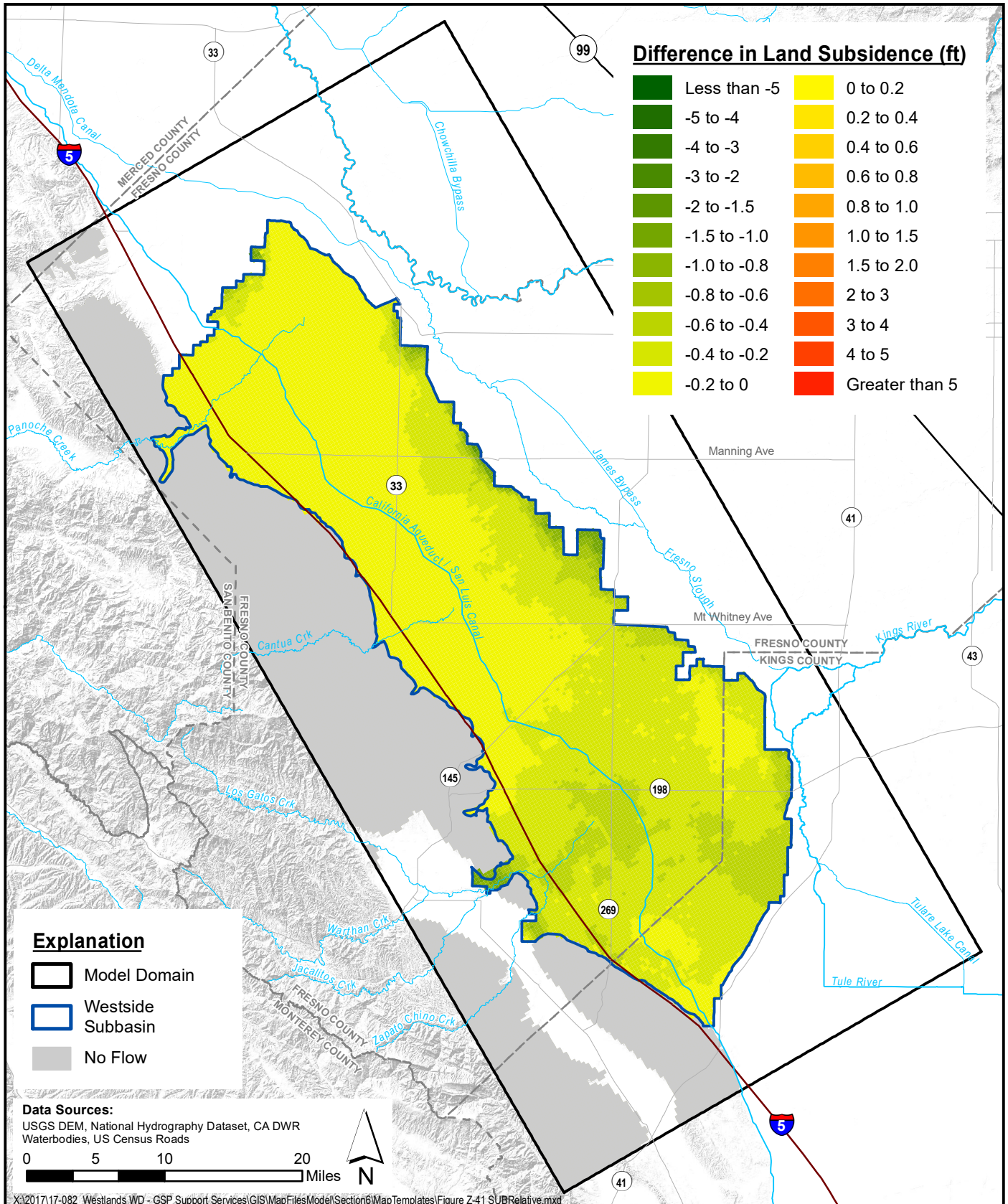
**Simulated Land Surface Subsidence  
 2030 Climate Change - PMA No.2 (2020 - 2070)**

Figure F-40



SGMA Sustainability Analyses  
 Westside Subbasin





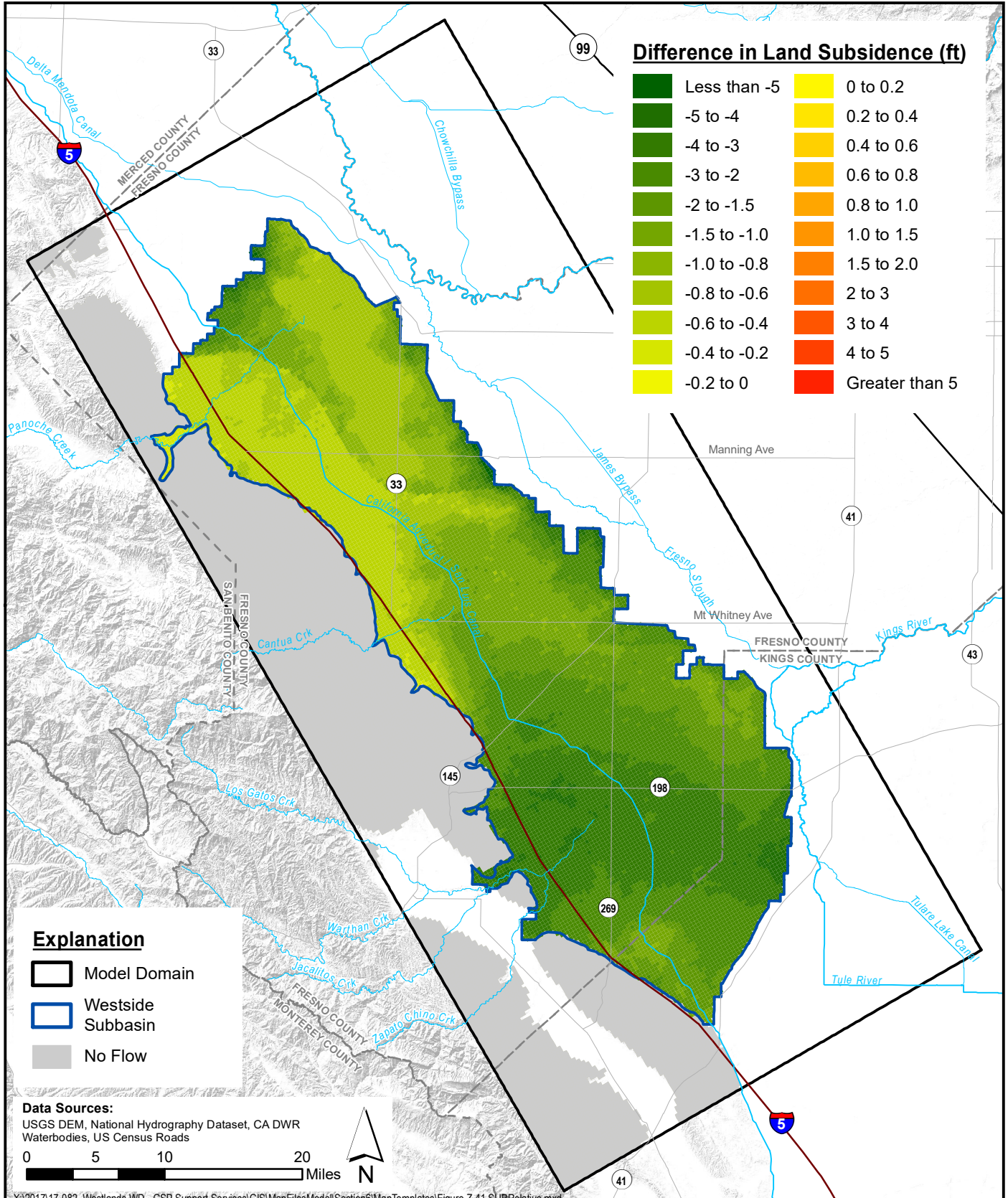
**Project Impact on Land Subsidence  
 2030 Climate Change - PMA No. 2 (2020 - 2040)**

Figure F-41



SGMA Sustainability Analyses  
 Westside Subbasin





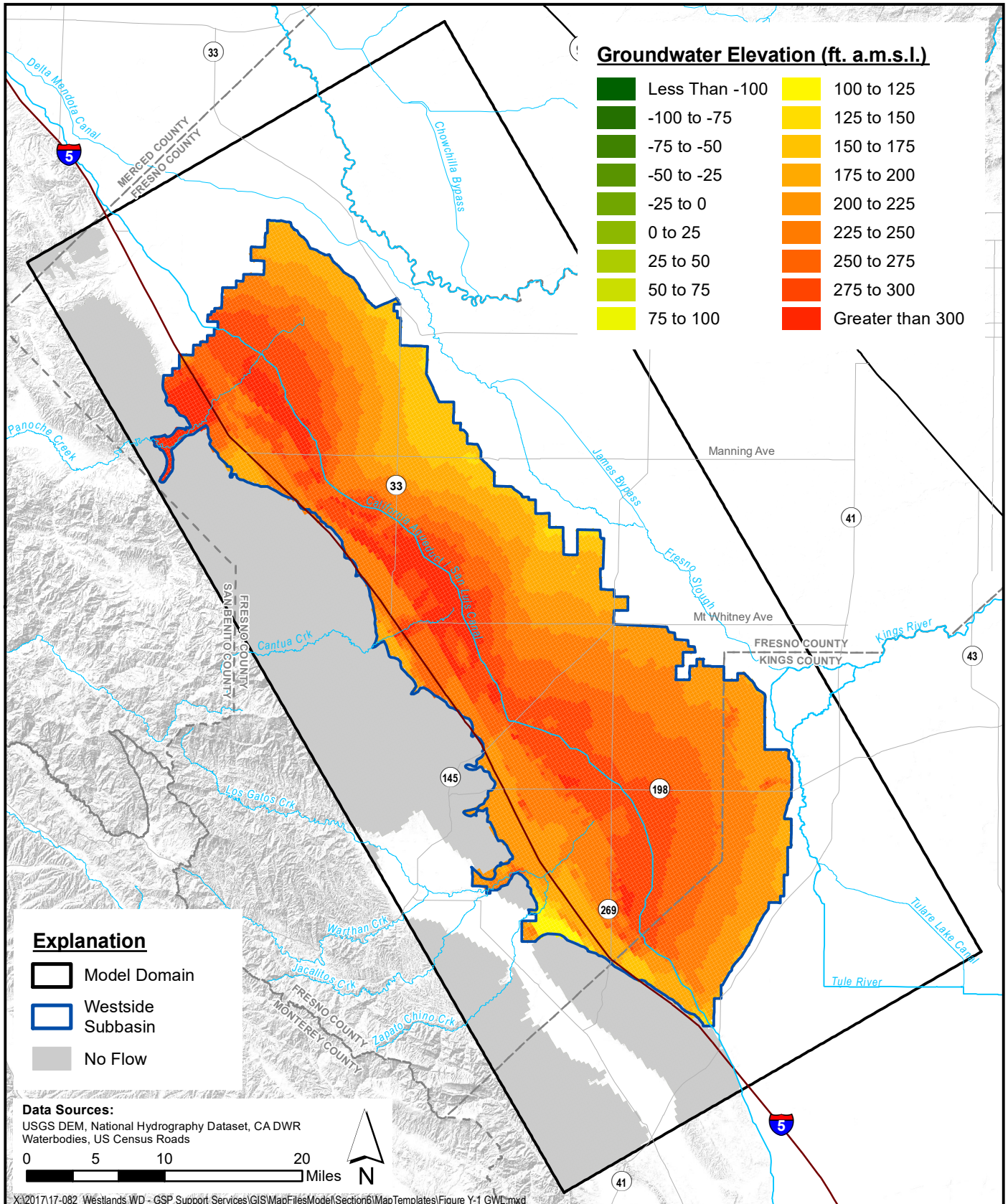
**Project Impact on Land Subsidence  
 2030 Climate Change - PMA No. 2 (2020 - 2070)**

Figure F-42



SGMA Sustainability Analyses  
 Westside Subbasin





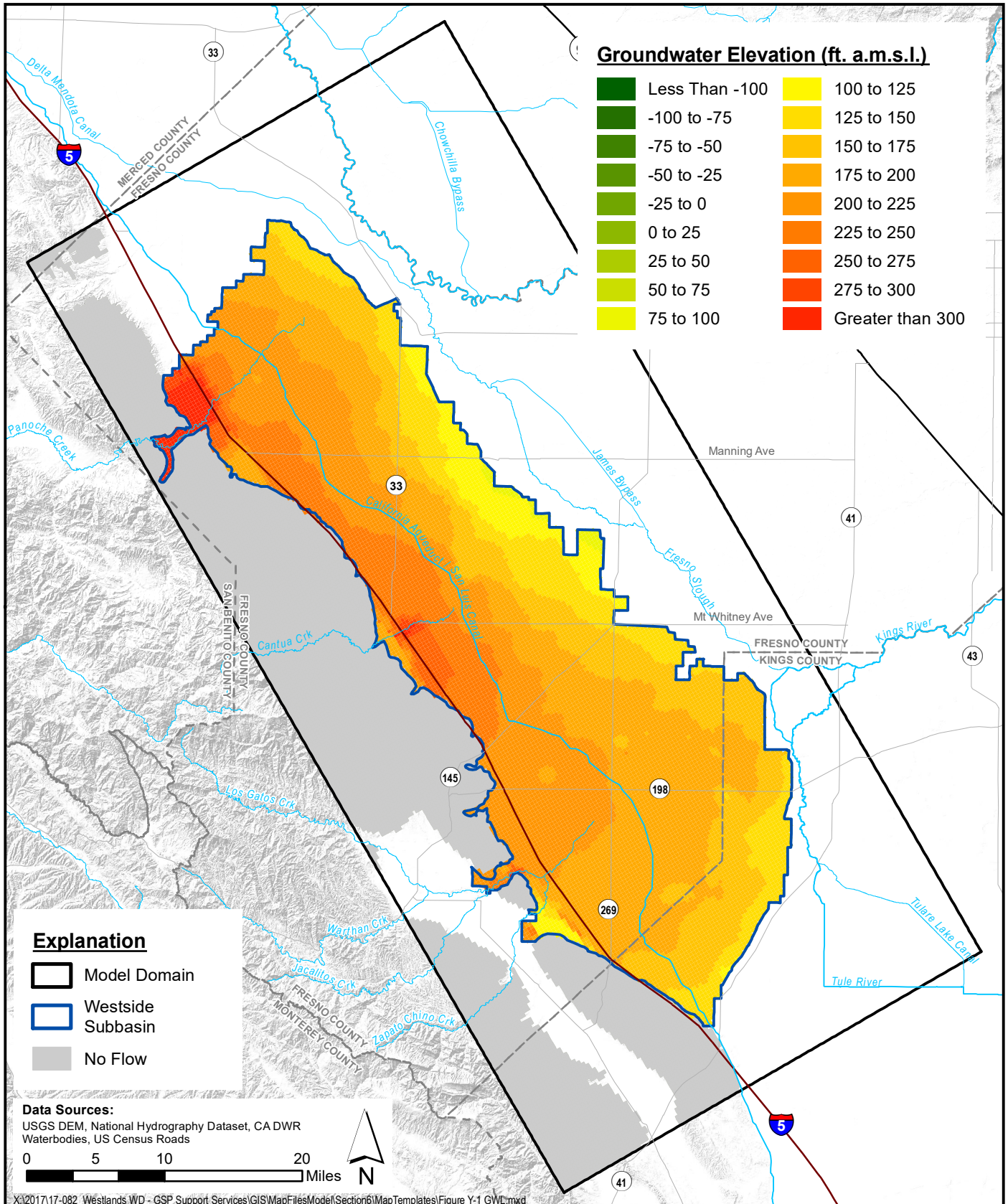
**Simulated Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.3 (January 2040)**

Figure F-43



SGMA Sustainability Analyses  
 Westside Subbasin



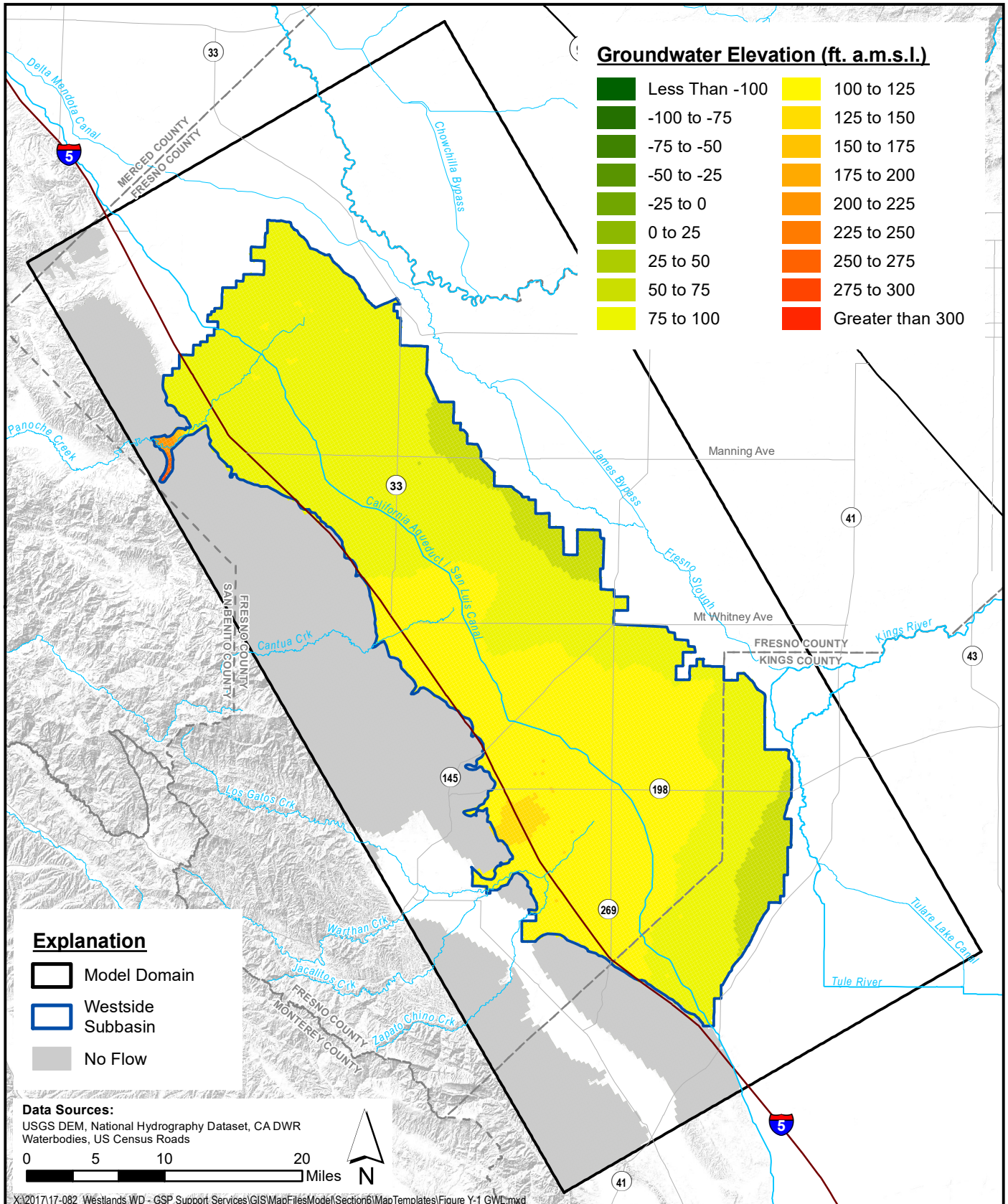


**Simulated Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.3 (January 2040)**

Figure F-44



SGMA Sustainability Analyses  
 Westside Subbasin



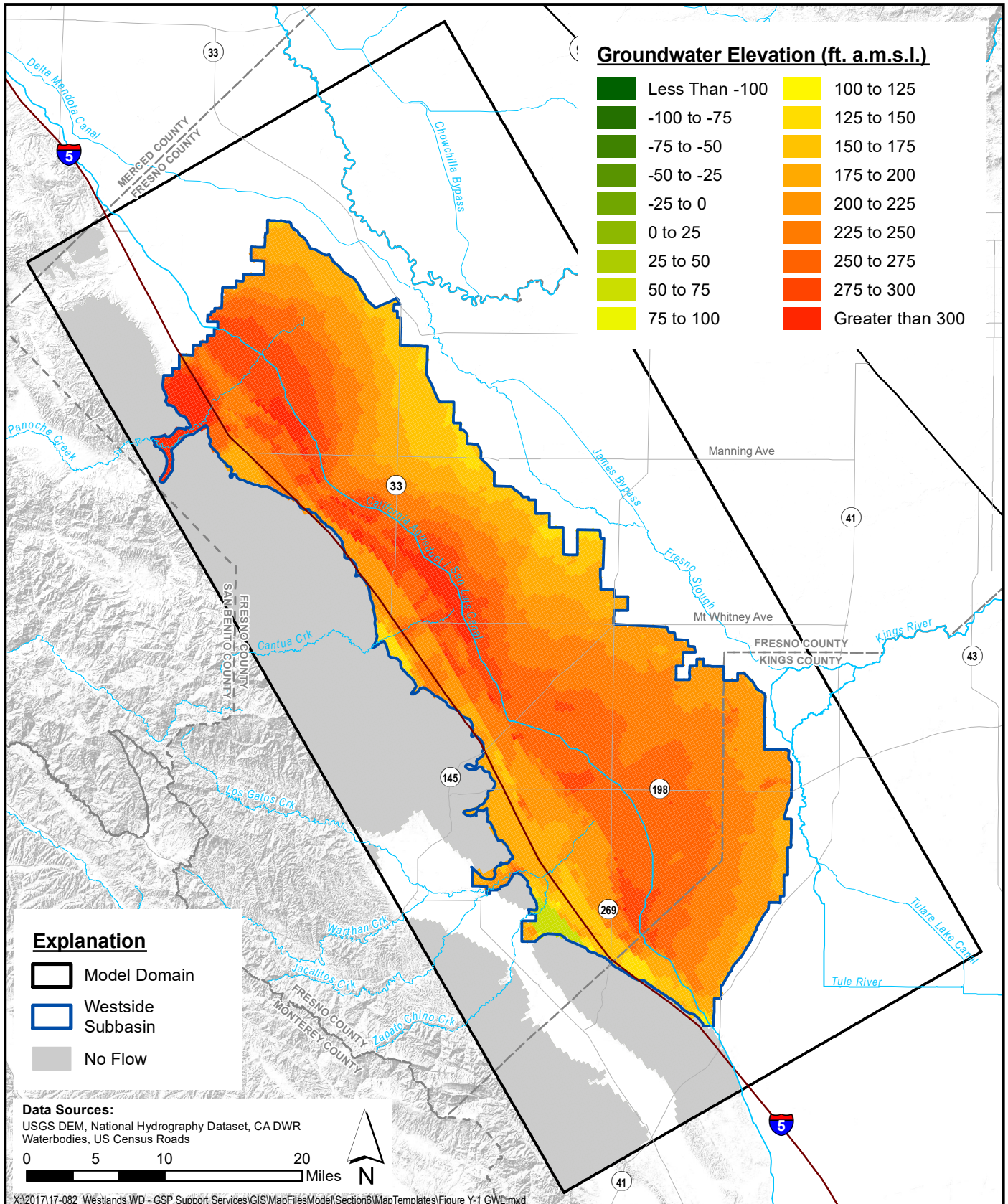
**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.3 (January 2040)**

Figure F-45



SGMA Sustainability Analyses  
 Westside Subbasin





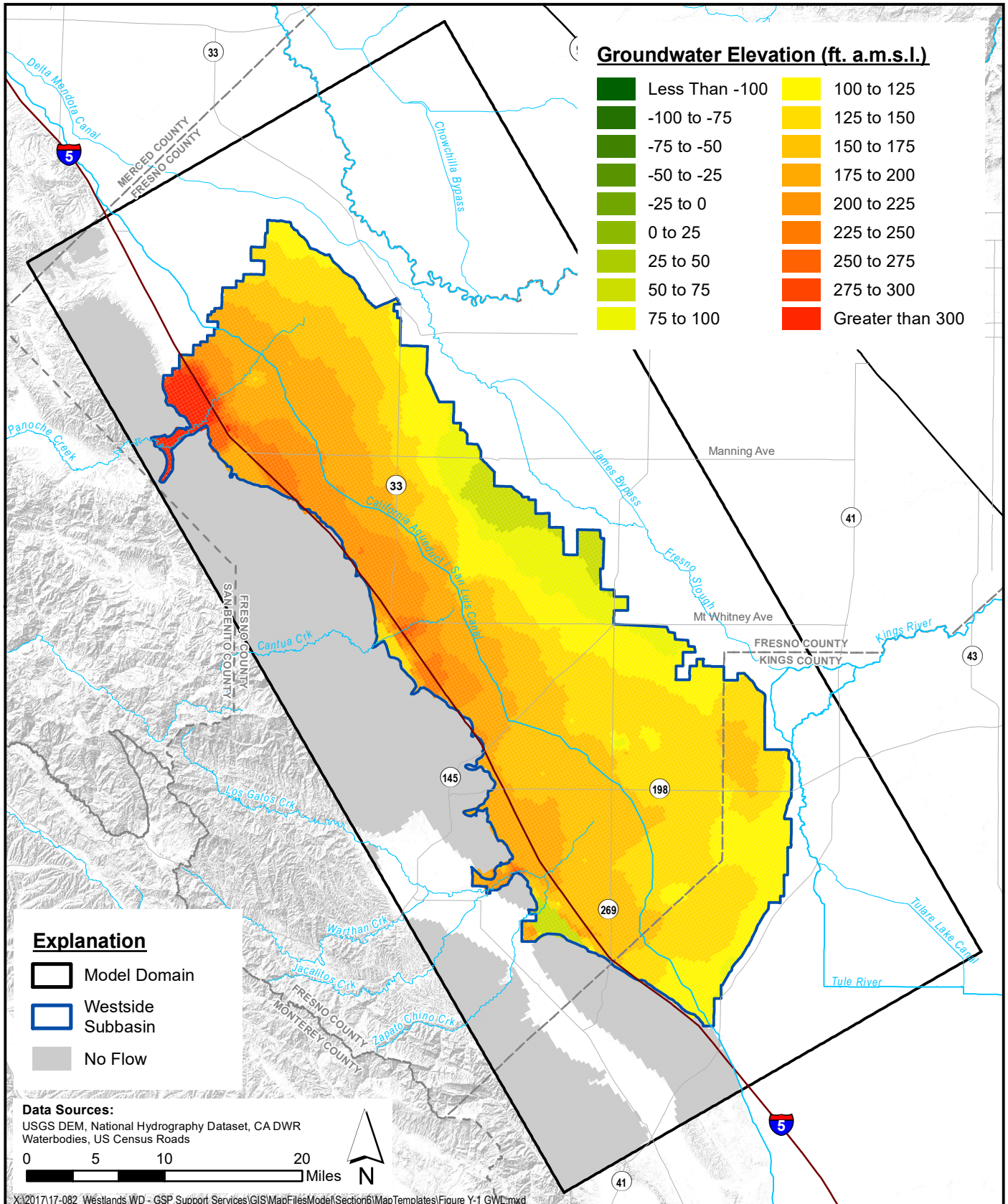
**Simulated Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.3 (January 2071)**

Figure F-46



SGMA Sustainability Analyses  
 Westside Subbasin





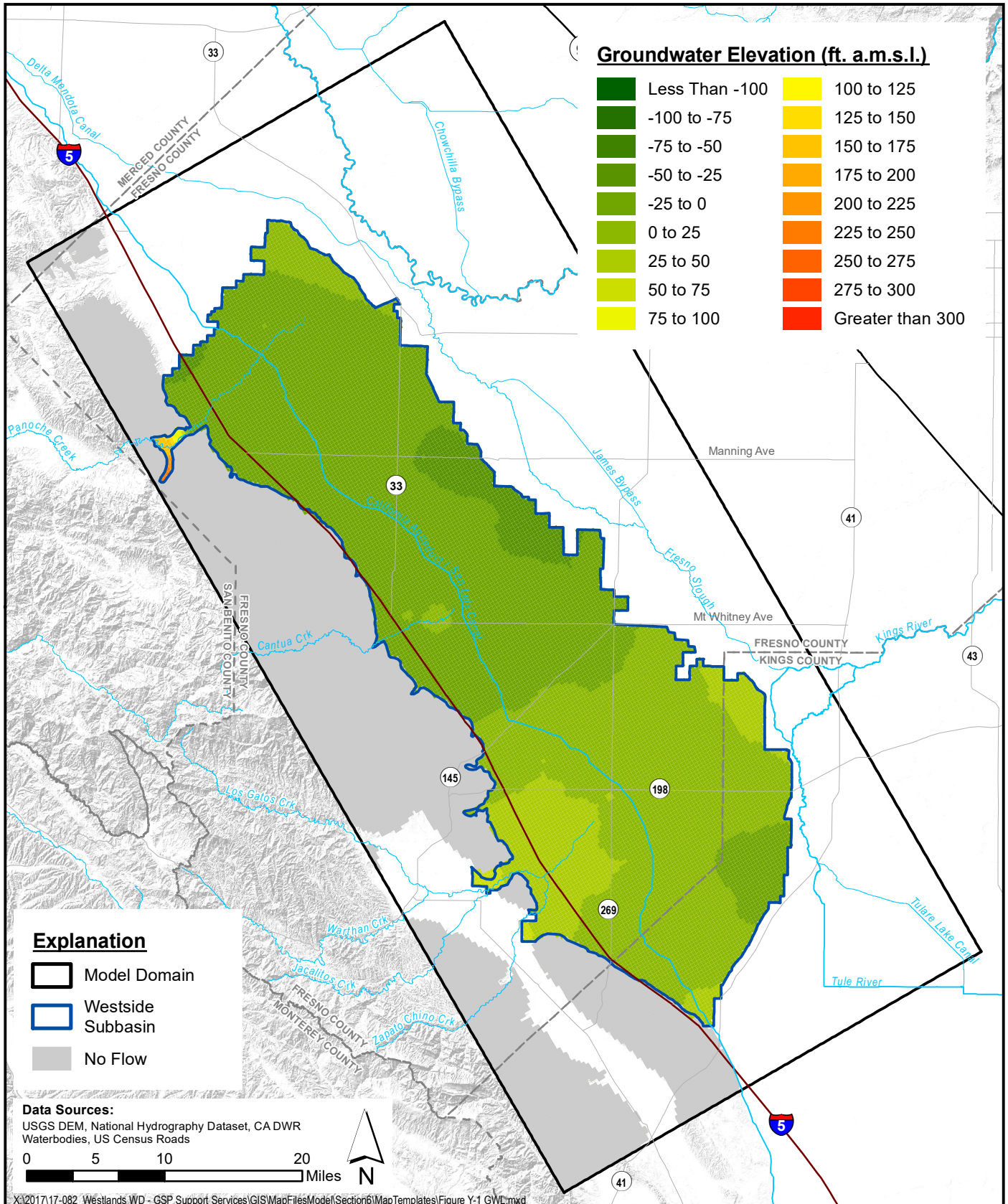
**Simulated Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.3 (January 2071)**

Figure F-47



SGMA Sustainability Analyses  
 Westside Subbasin



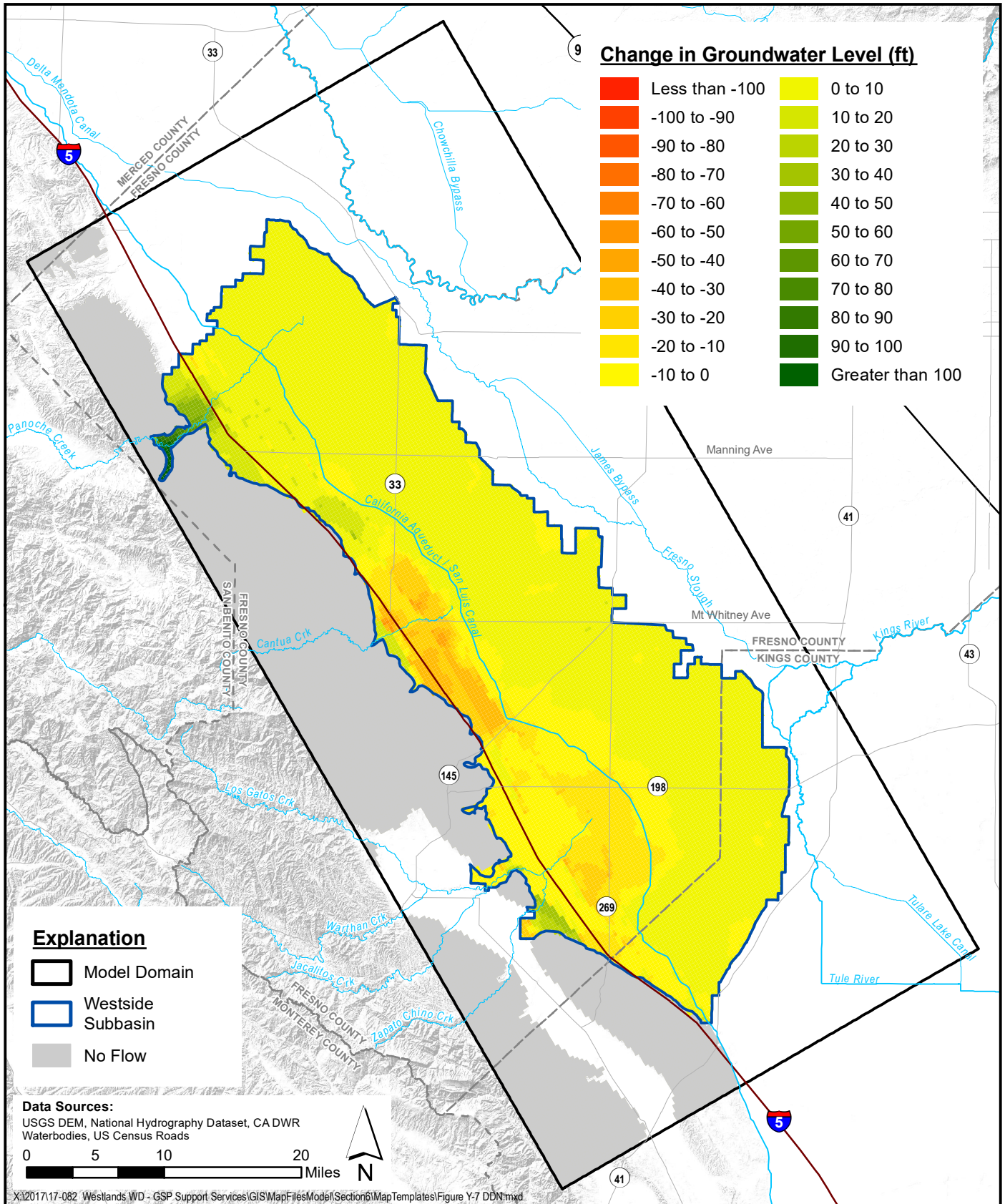


**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.3 (January 2071)**

Figure F-48



SGMA Sustainability Analyses  
 Westside Subbasin



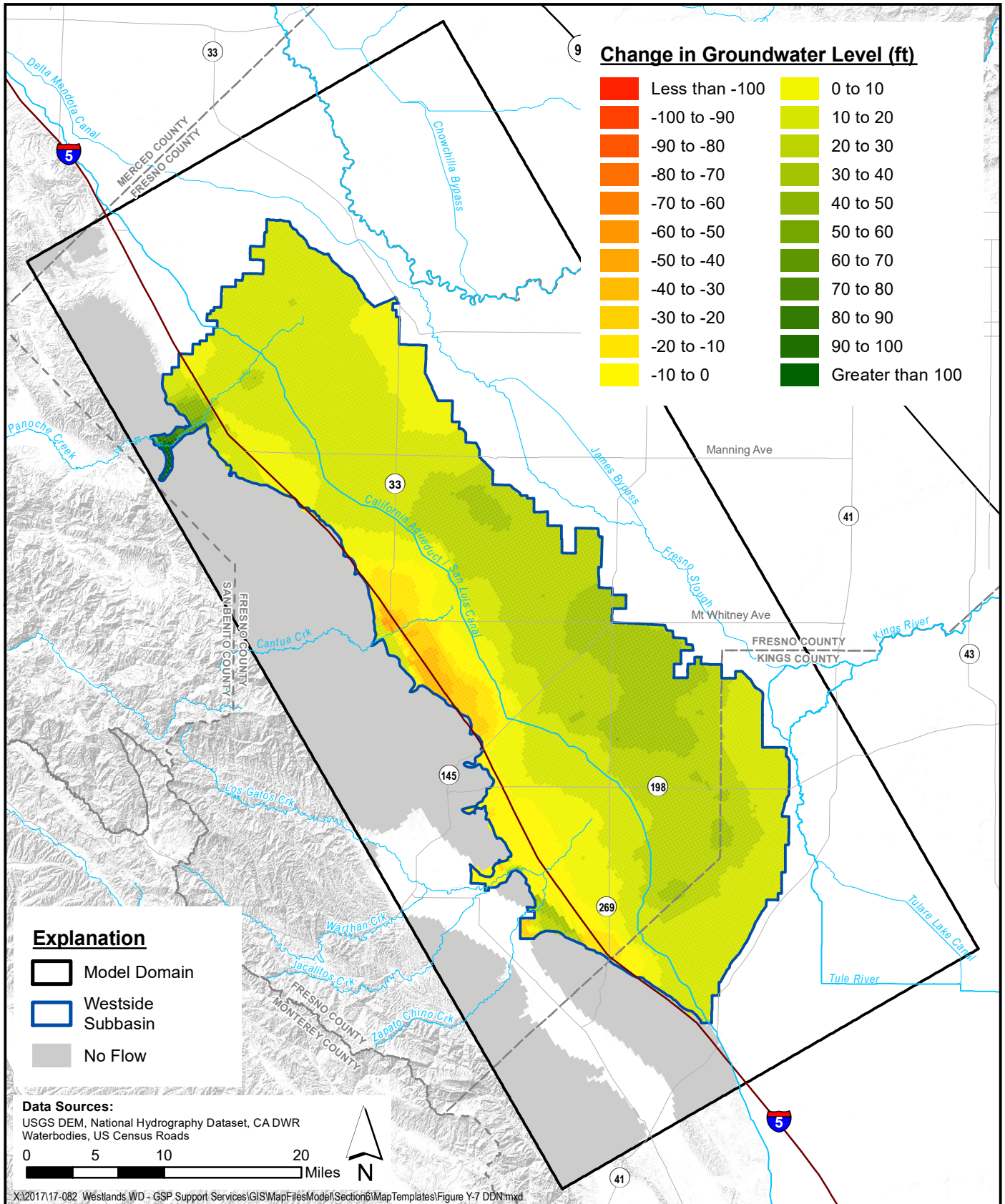
**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.3 (2020 - 2040)**

Figure F-49



SGMA Sustainability Analyses  
 Westside Subbasin

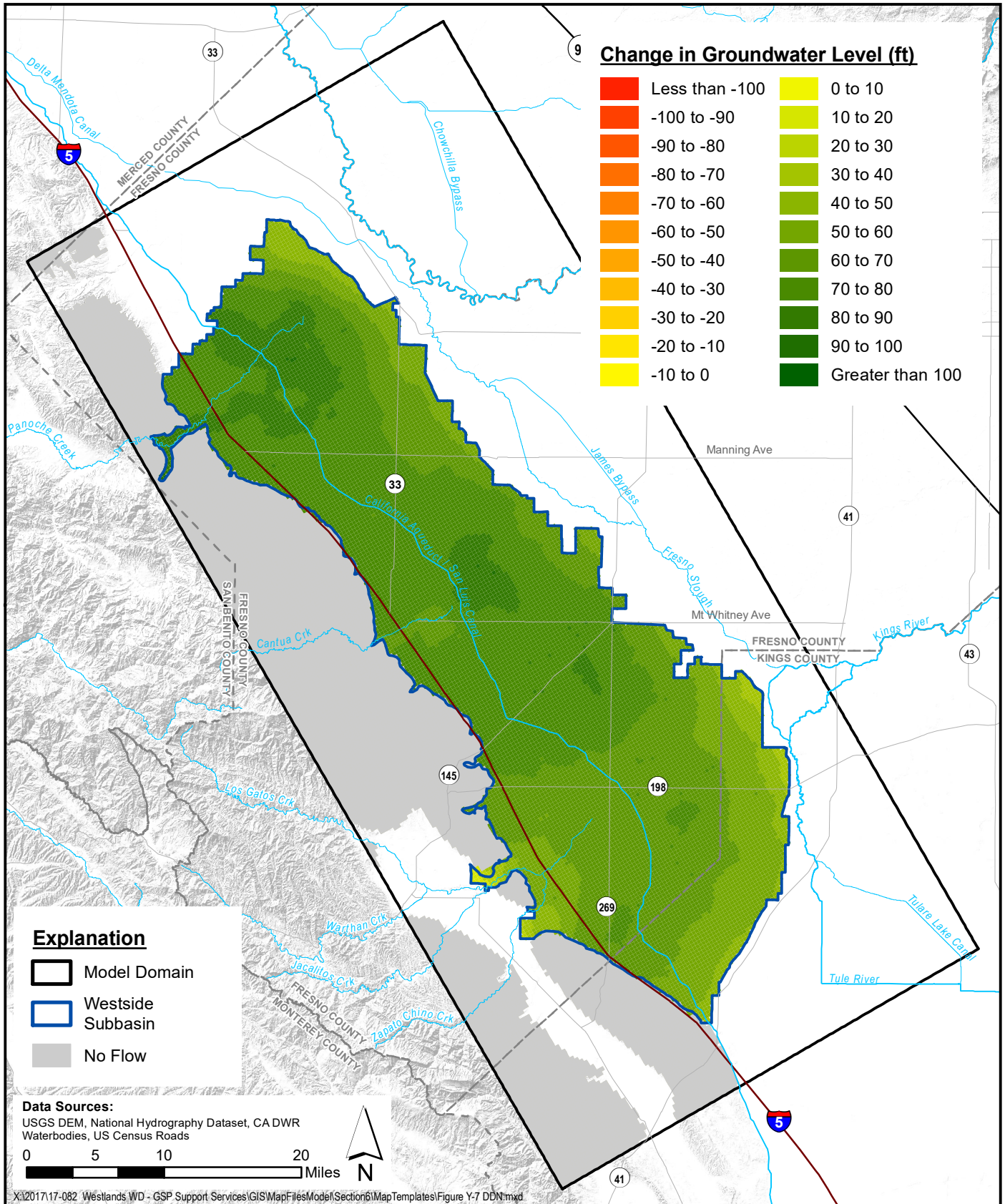




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Westside Subbasin





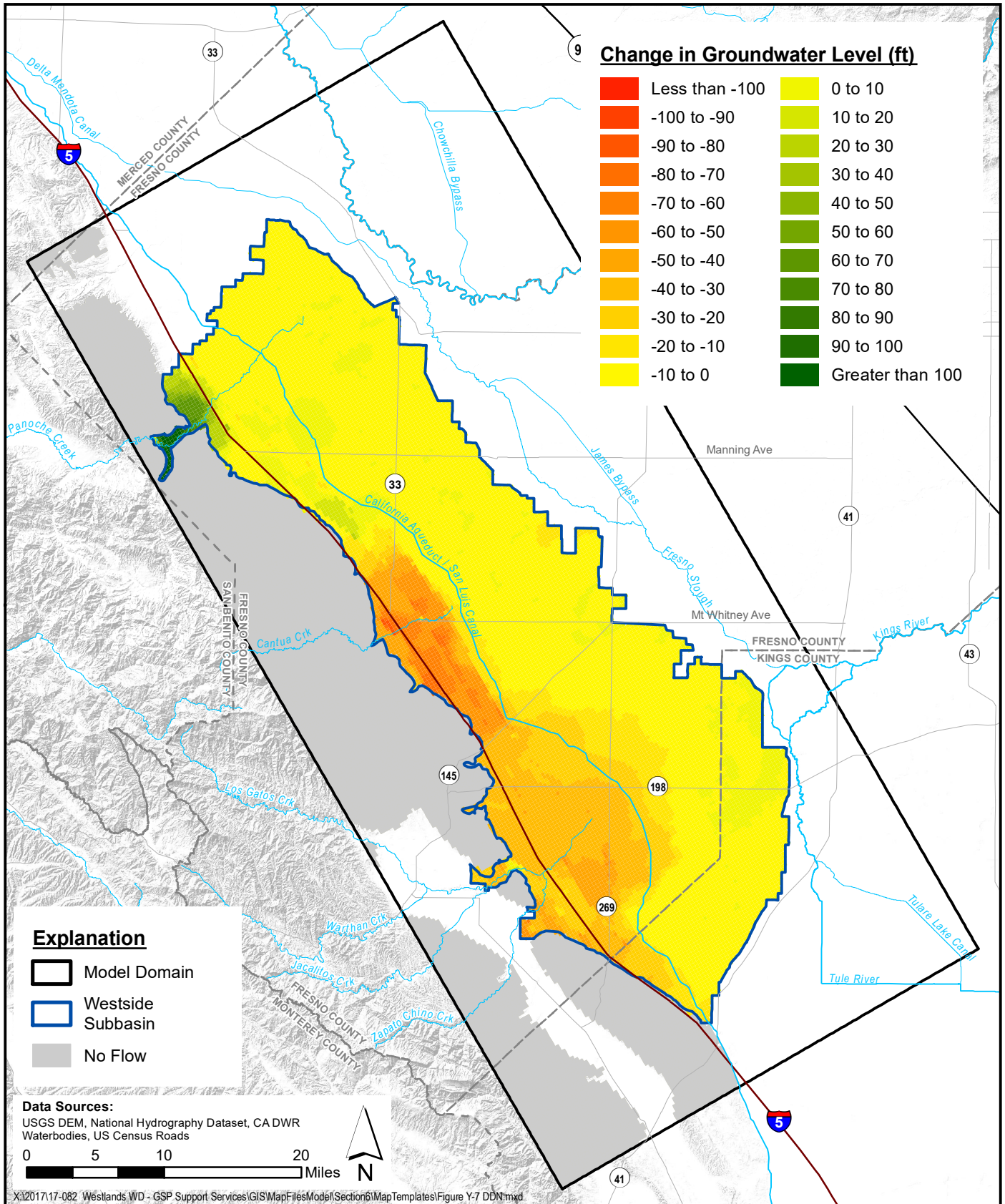
**Simulated Change in Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.3 (2020 - 2040)**

**Figure F-51**



SGMA Sustainability Analyses  
 Westside Subbasin



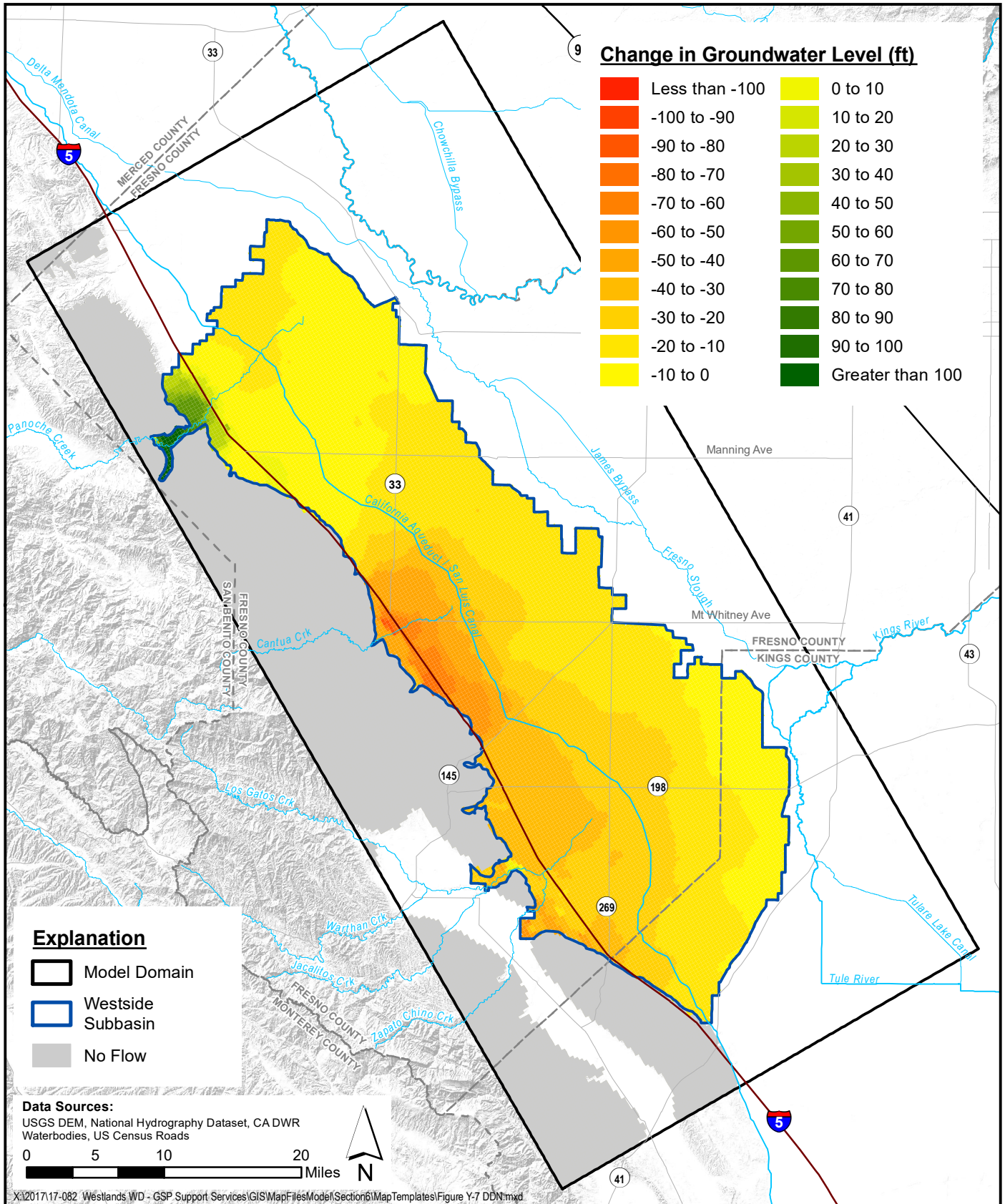


**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.3 (2020 - 2070)**

Figure F-52



SGMA Sustainability Analyses  
 Westside Subbasin



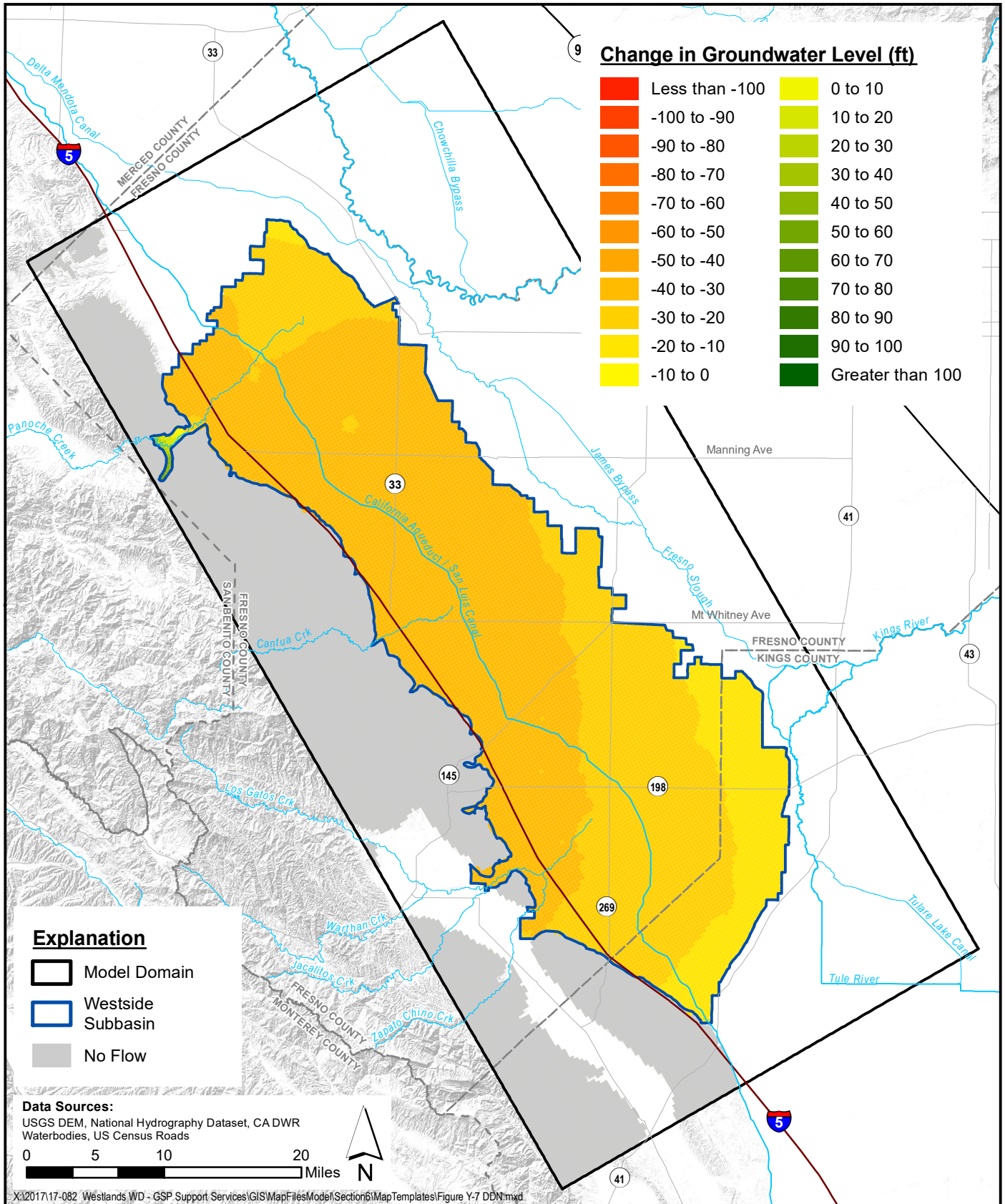
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.3 (2020 - 2070)**

Figure F-53



SGMA Sustainability Analyses  
 Westside Subbasin



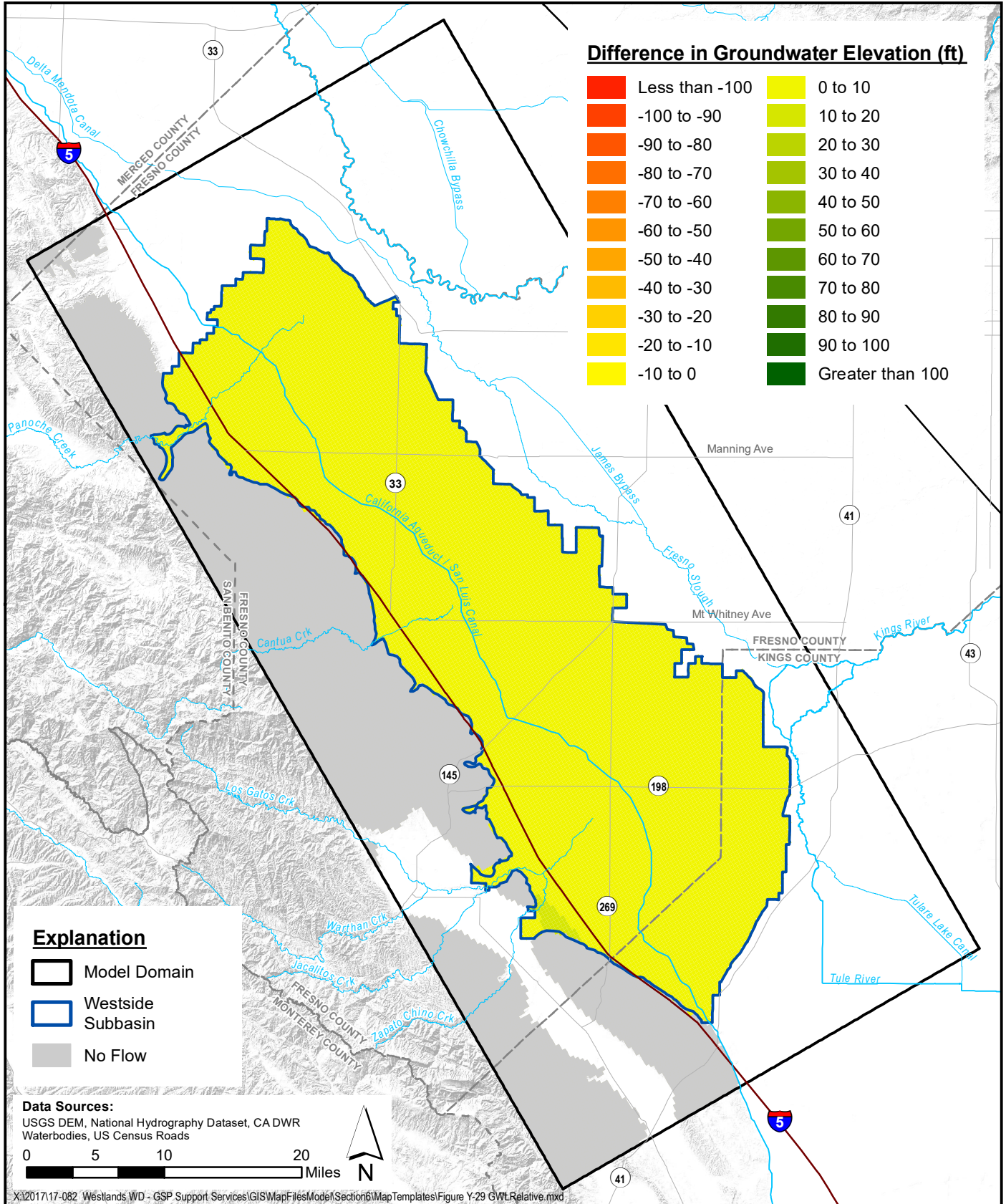


**Simulated Change in Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.3 (2020 - 2070)**

**Figure F-54**



SGMA Sustainability Analyses  
 Westside Subbasin



**Difference in Groundwater Elevation (ft)**

Less than -100	0 to 10
-100 to -90	10 to 20
-90 to -80	20 to 30
-80 to -70	30 to 40
-70 to -60	40 to 50
-60 to -50	50 to 60
-50 to -40	60 to 70
-40 to -30	70 to 80
-30 to -20	80 to 90
-20 to -10	90 to 100
-10 to 0	Greater than 100

**Explanation**

- Model Domain
- Westside Subbasin
- No Flow

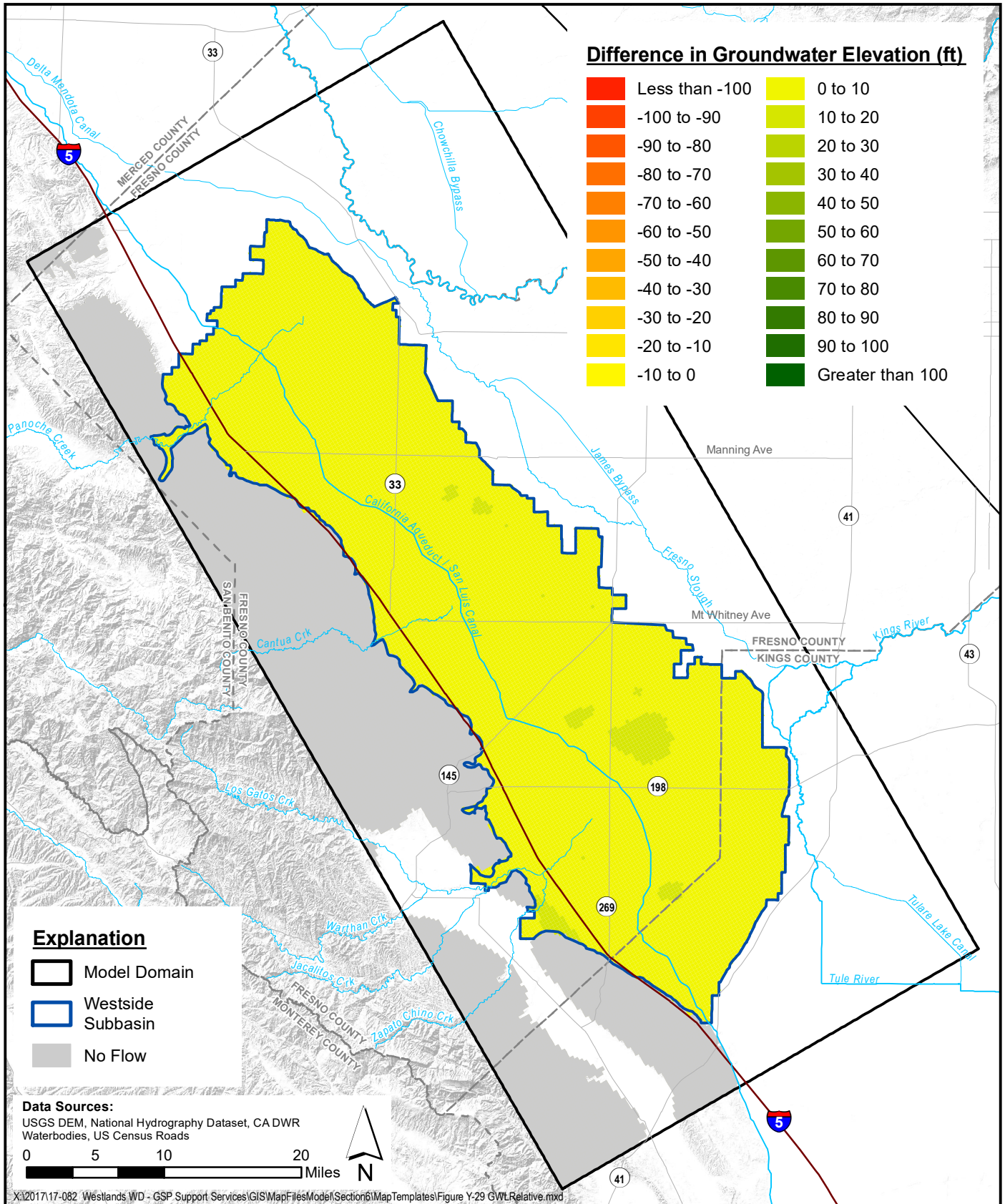
**Data Sources:**  
 USGS DEM, National Hydrography Dataset, CA DWR  
 Waterbodies, US Census Roads

0 5 10 20 Miles

X:\2017\17-082 Westlands WD - GSP Support Services\GIS\MapFiles\Model\Section6\MapTemplates\Figure Y-29 GWLRelative.mxd





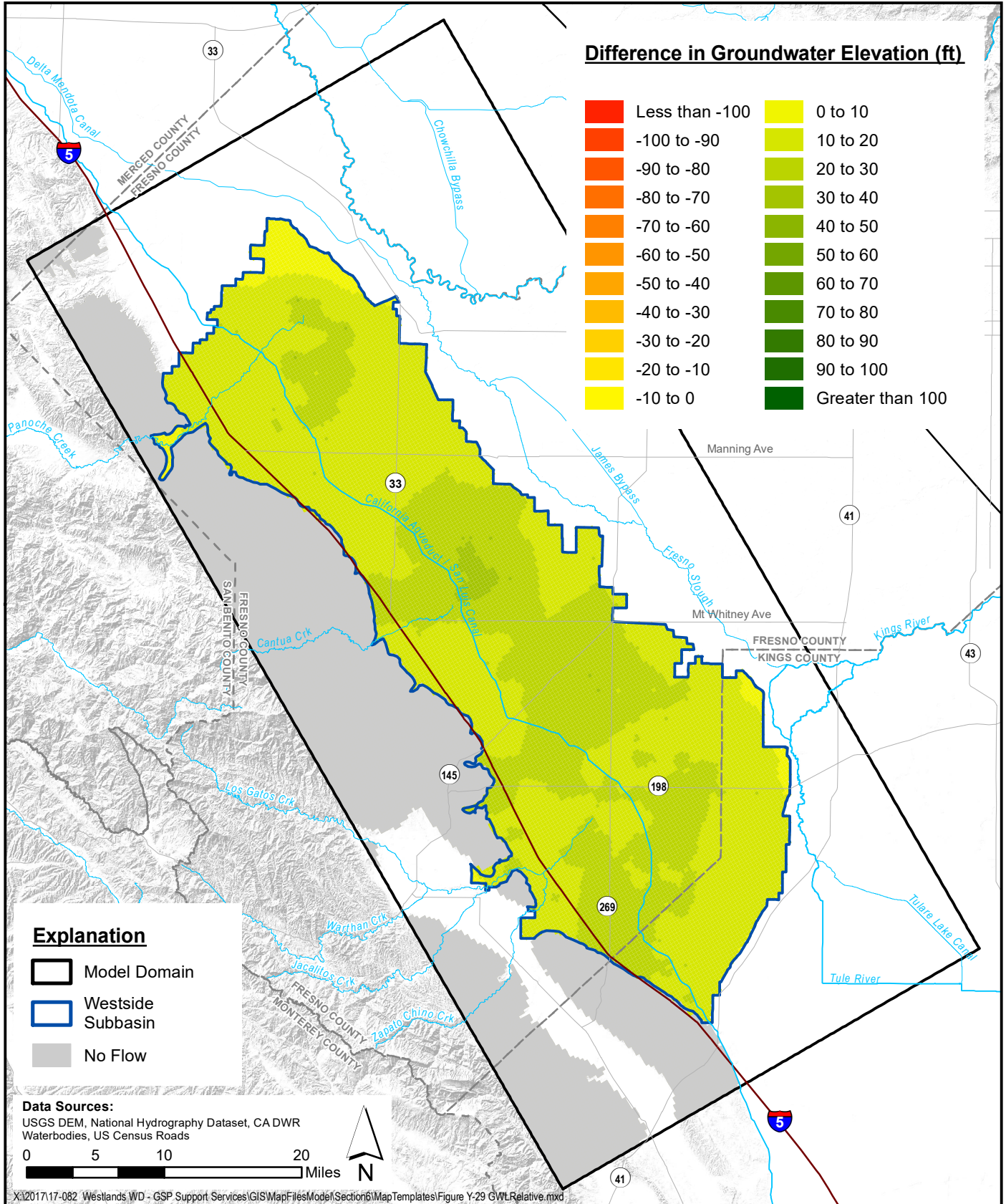


**Project Impacts on Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No. 3 (2020 - 2040)**

Figure F-56



SGMA Sustainability Analyses  
 Westside Subbasin



**Difference in Groundwater Elevation (ft)**

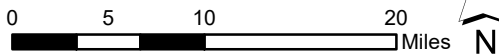
Less than -100	0 to 10
-100 to -90	10 to 20
-90 to -80	20 to 30
-80 to -70	30 to 40
-70 to -60	40 to 50
-60 to -50	50 to 60
-50 to -40	60 to 70
-40 to -30	70 to 80
-30 to -20	80 to 90
-20 to -10	90 to 100
-10 to 0	Greater than 100

**Explanation**

- Model Domain
- Westside Subbasin
- No Flow

**Data Sources:**

USGS DEM, National Hydrography Dataset, CA DWR Waterbodies, US Census Roads



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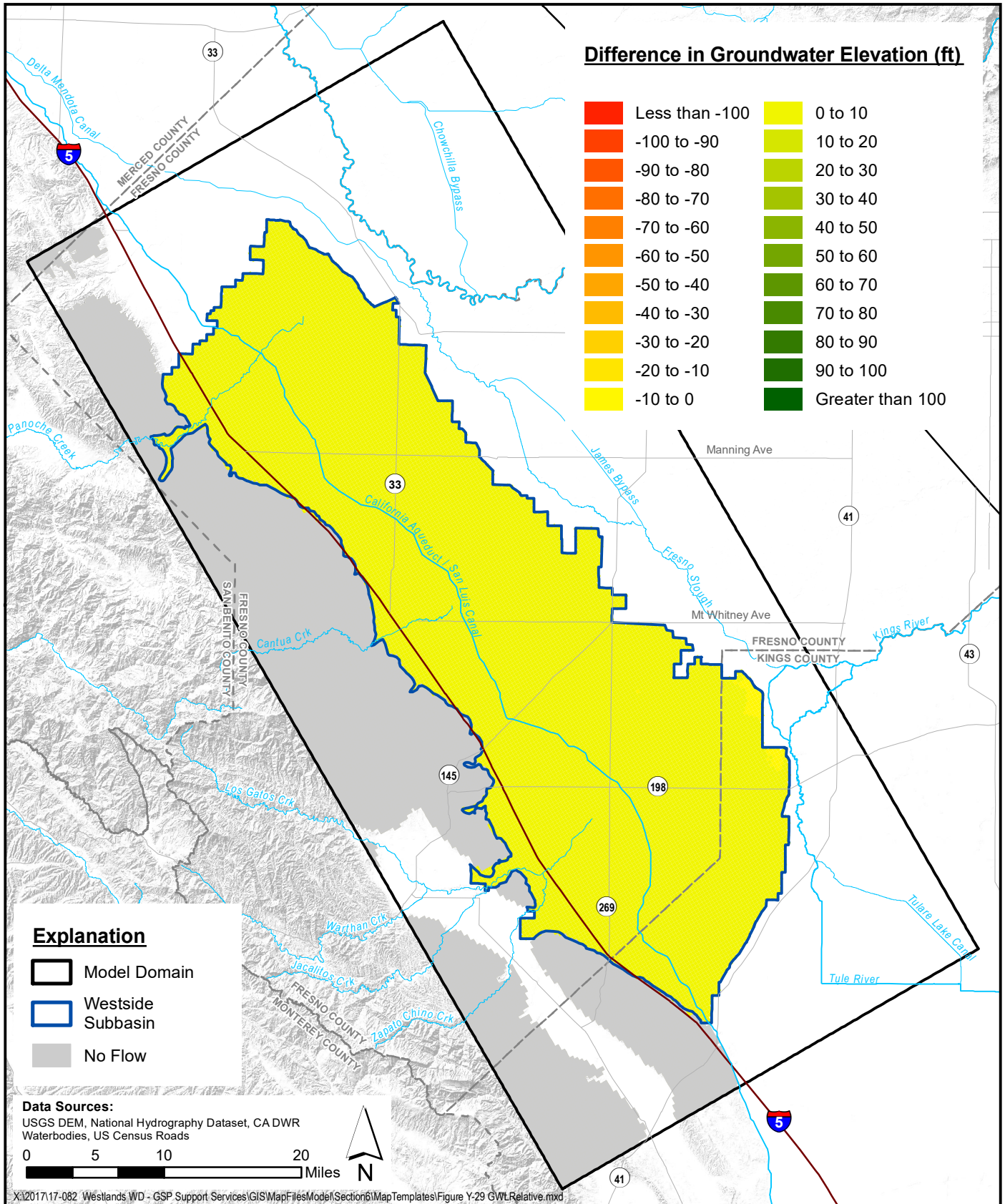
**Project Impacts on Groundwater Elevation - Lower Aquifer  
2030 Climate Change - PMA No. 3 (2020 - 2040)**

Figure F-57



SGMA Sustainability Analyses  
Westside Subbasin



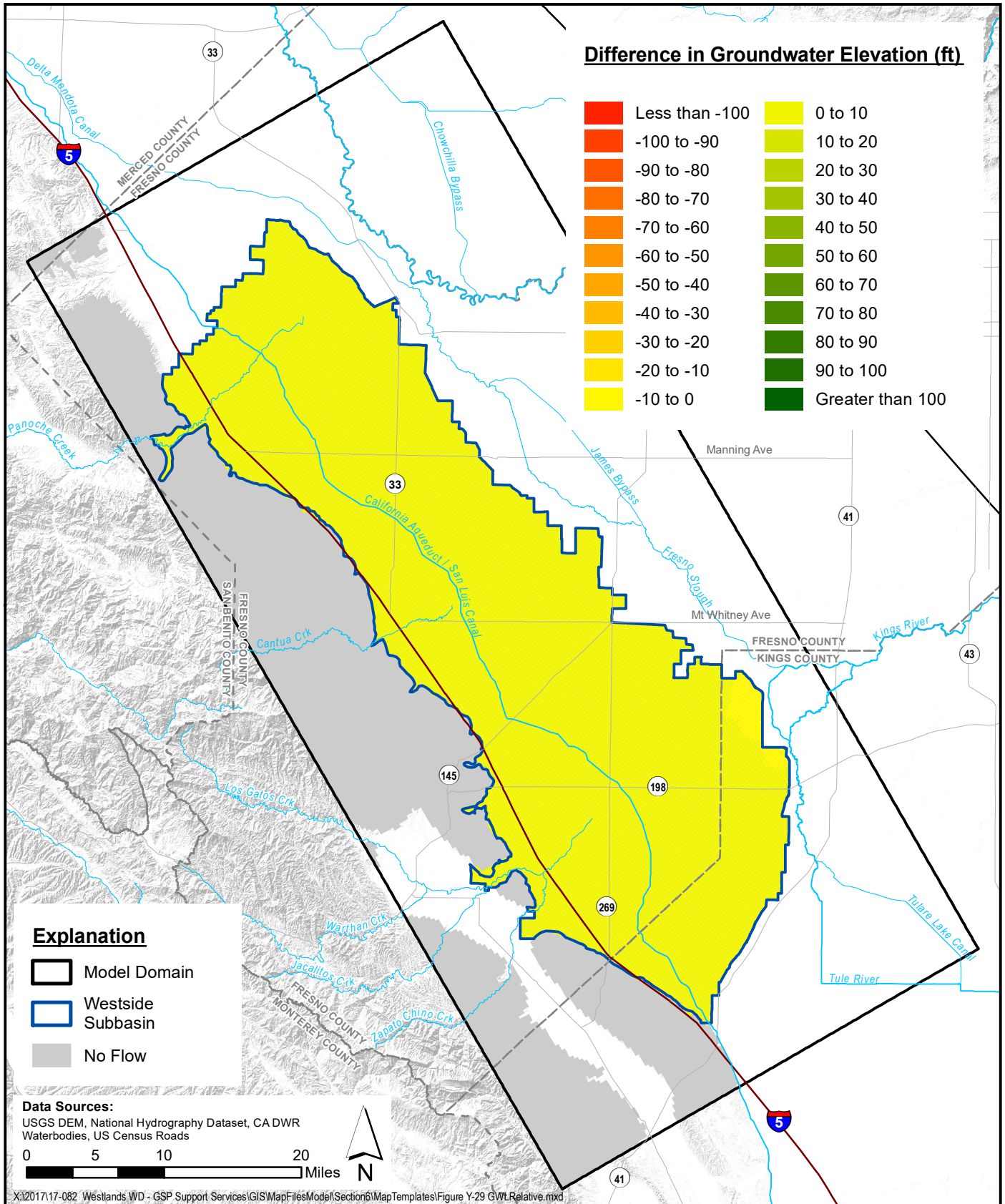


**Project Impacts on Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No. 3 (2020 - 2070)**

Figure F-58



SGMA Sustainability Analyses  
 Westside Subbasin



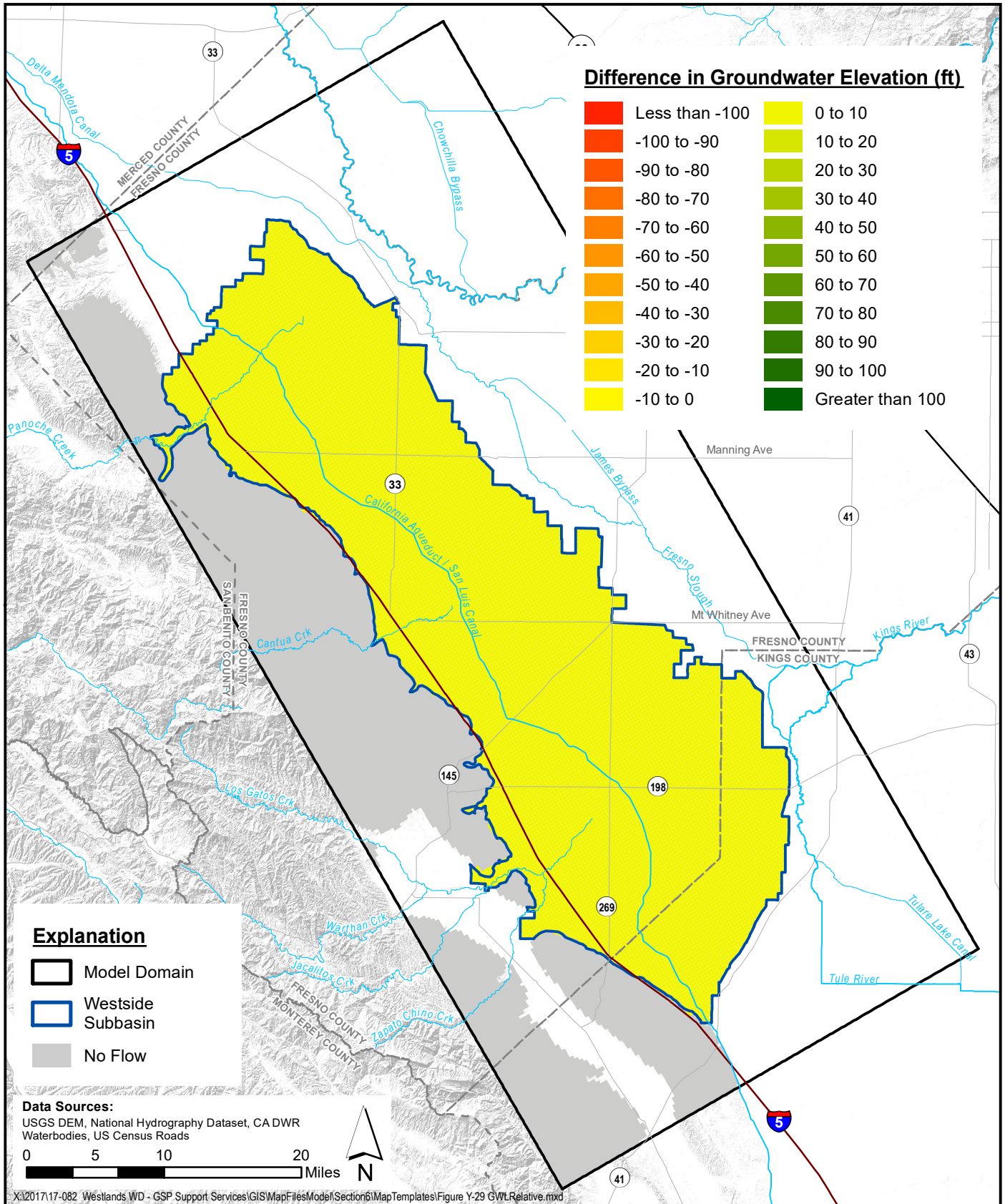
**Project Impacts on Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No. 3 (2020 - 2070)**

Figure F-59



SGMA Sustainability Analyses  
 Westside Subbasin



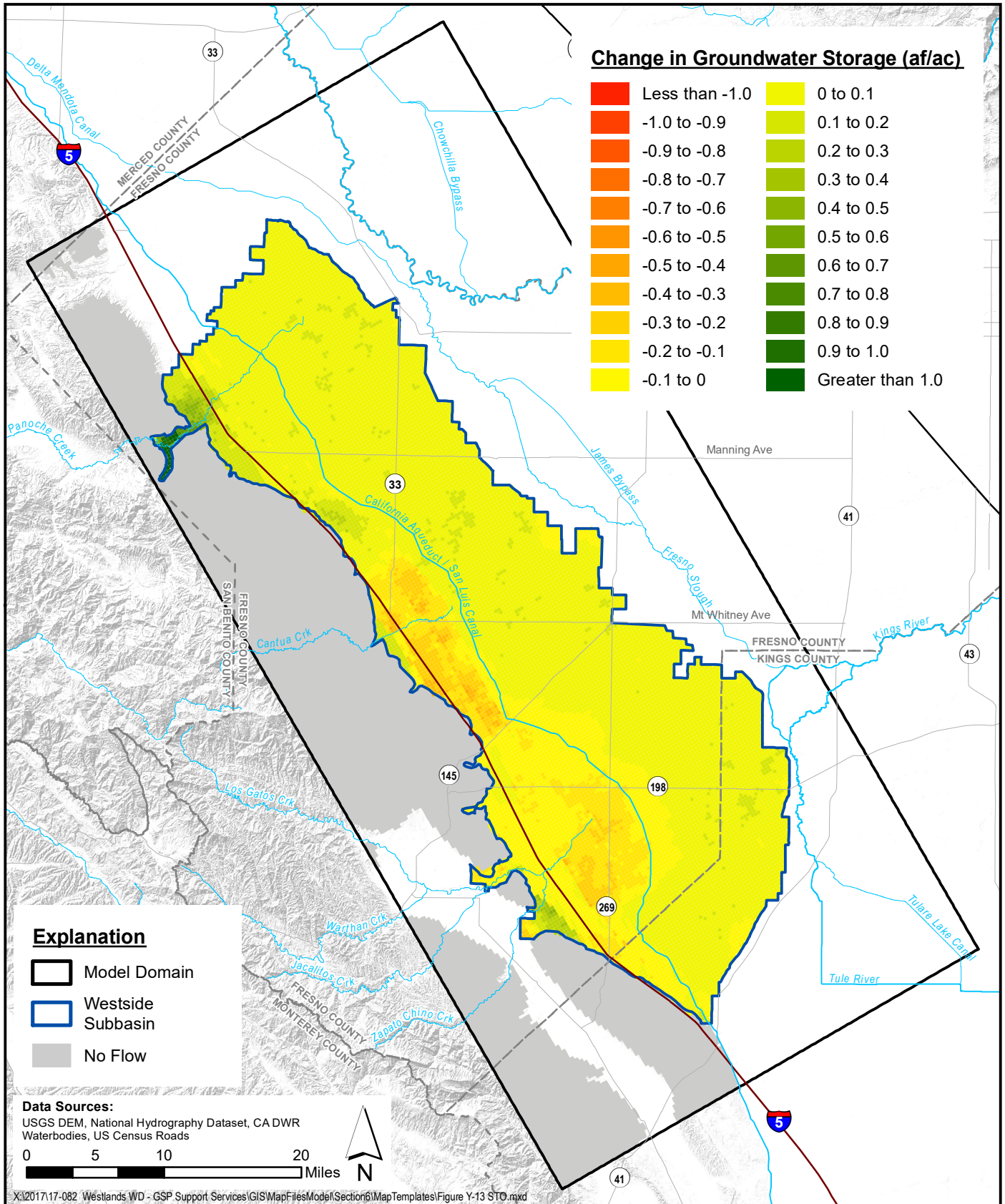


**Project Impacts on Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No. 3 (2020 - 2070)**

Figure F-60



SGMA Sustainability Analyses  
 Westside Subbasin



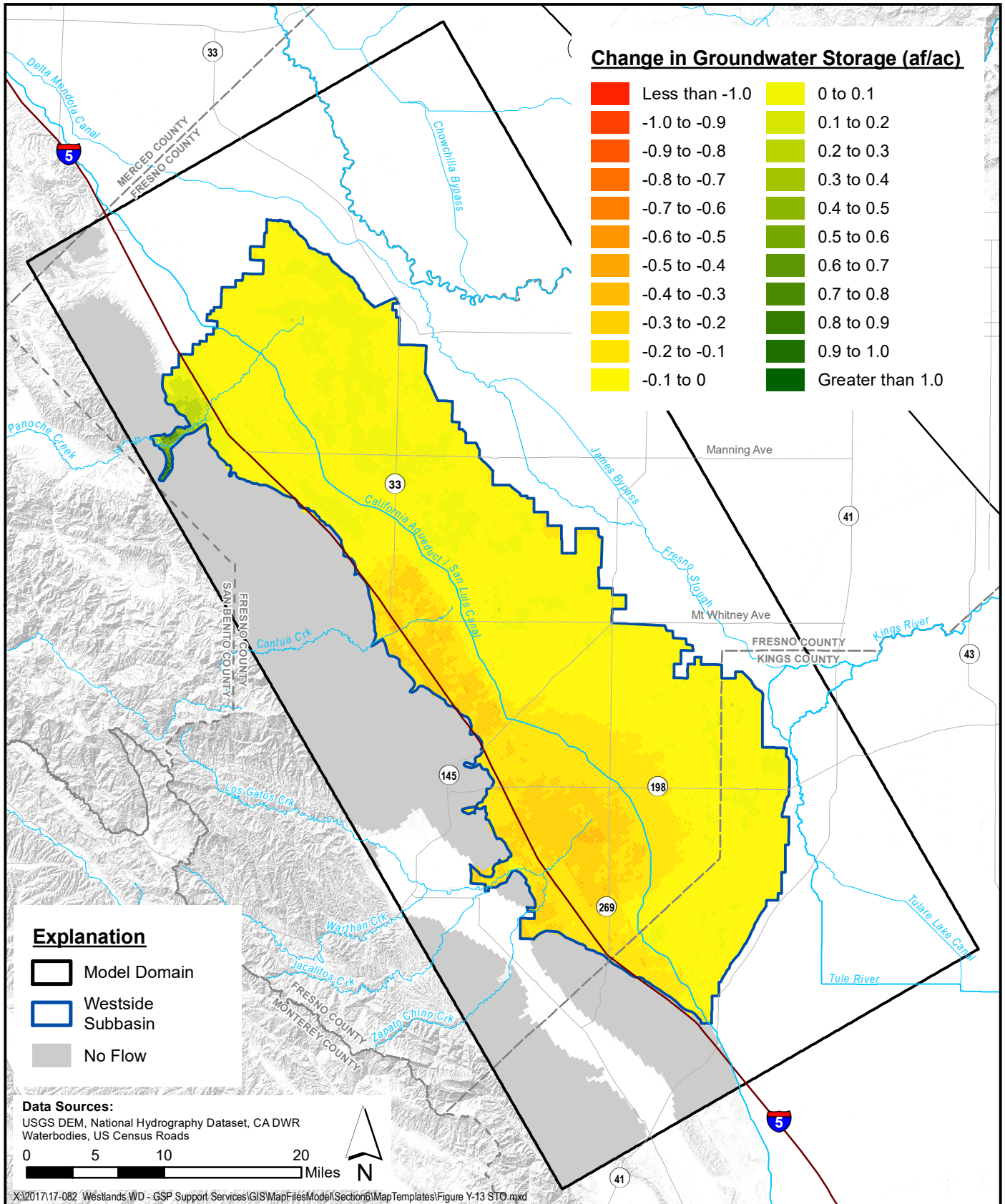
**Simulated Change in Groundwater Storage  
 2030 Climate Change - PMA No. 3 (2020 - 2040)**

Figure F-61



SGMA Sustainability Analyses  
 Westside Subbasin



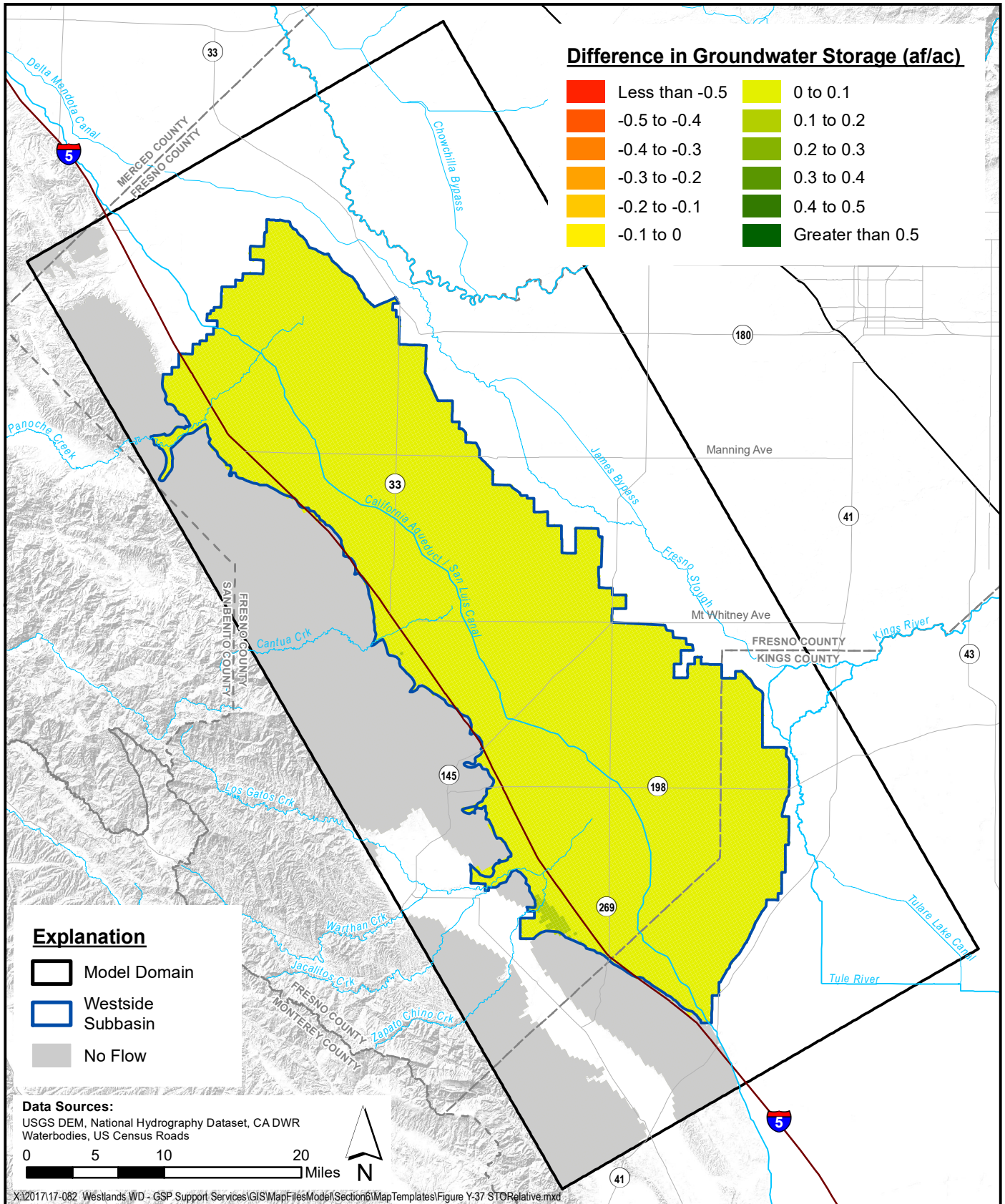


**Simulated Change in Groundwater Storage  
 2030 Climate Change - PMA No. 3 (2020 - 2070)**

Figure F-62



SGMA Sustainability Analyses  
 Westside Subbasin



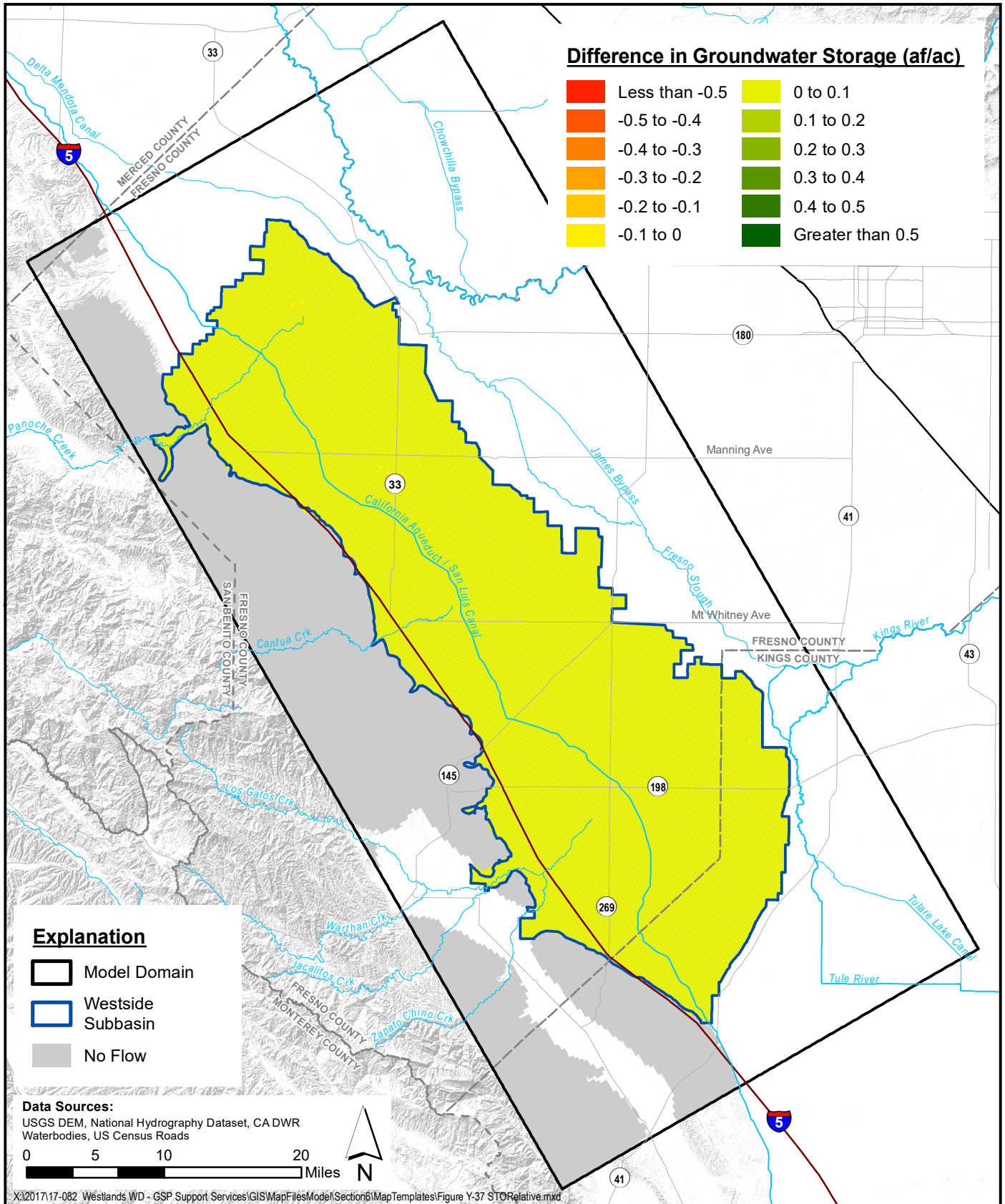
**Project Impacts on Groundwater Storage  
 2030 Climate Change - PMA No. 3 (2020 - 2040)**

Figure F-63



SGMA Sustainability Analyses  
 Westside Subbasin



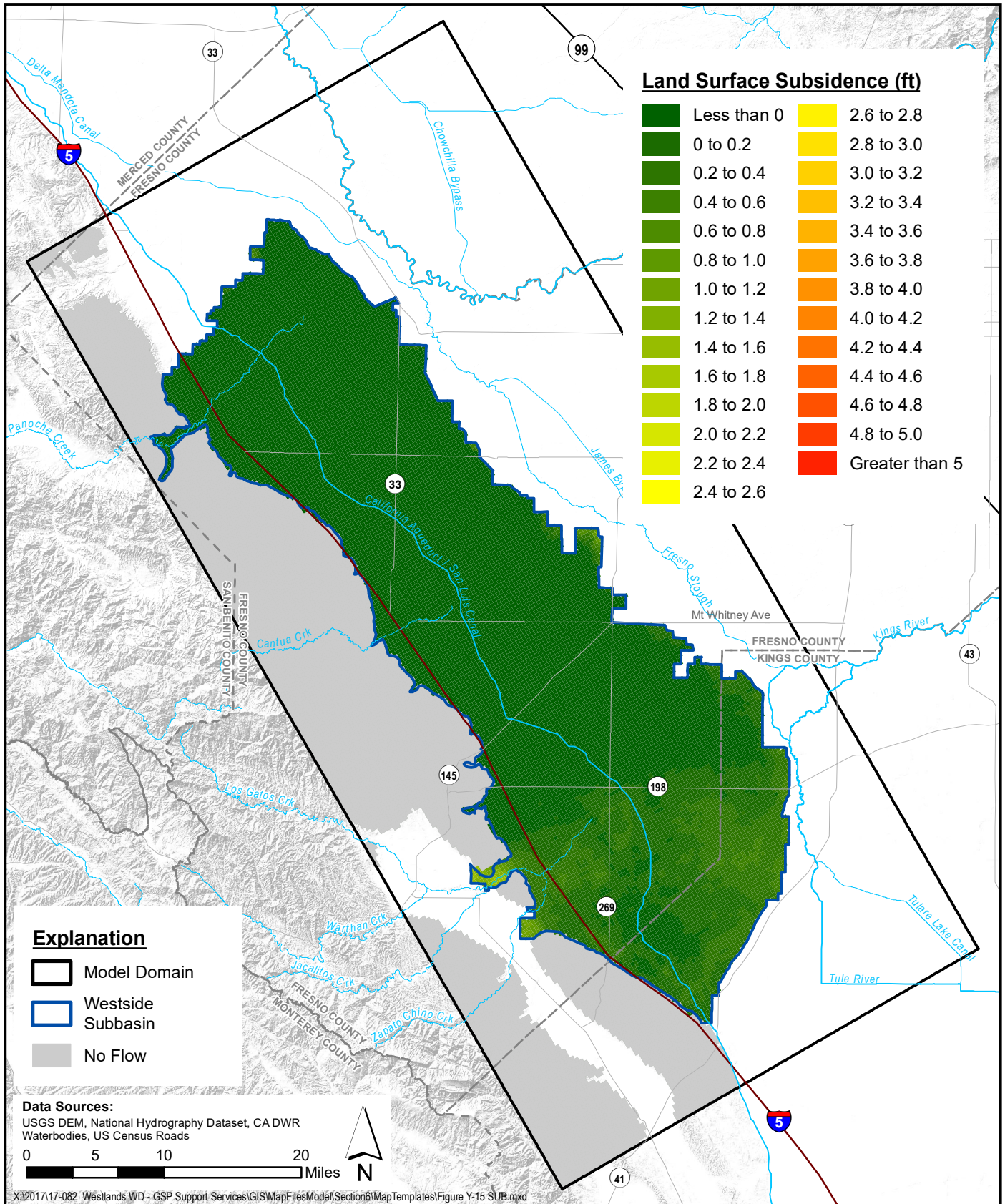


**Project Impacts on Groundwater Storage  
 2030 Climate Change - PMA No. 3 (2020 - 2070)**

**Figure F-64**



*SGMA Sustainability Analyses  
 Westside Subbasin*



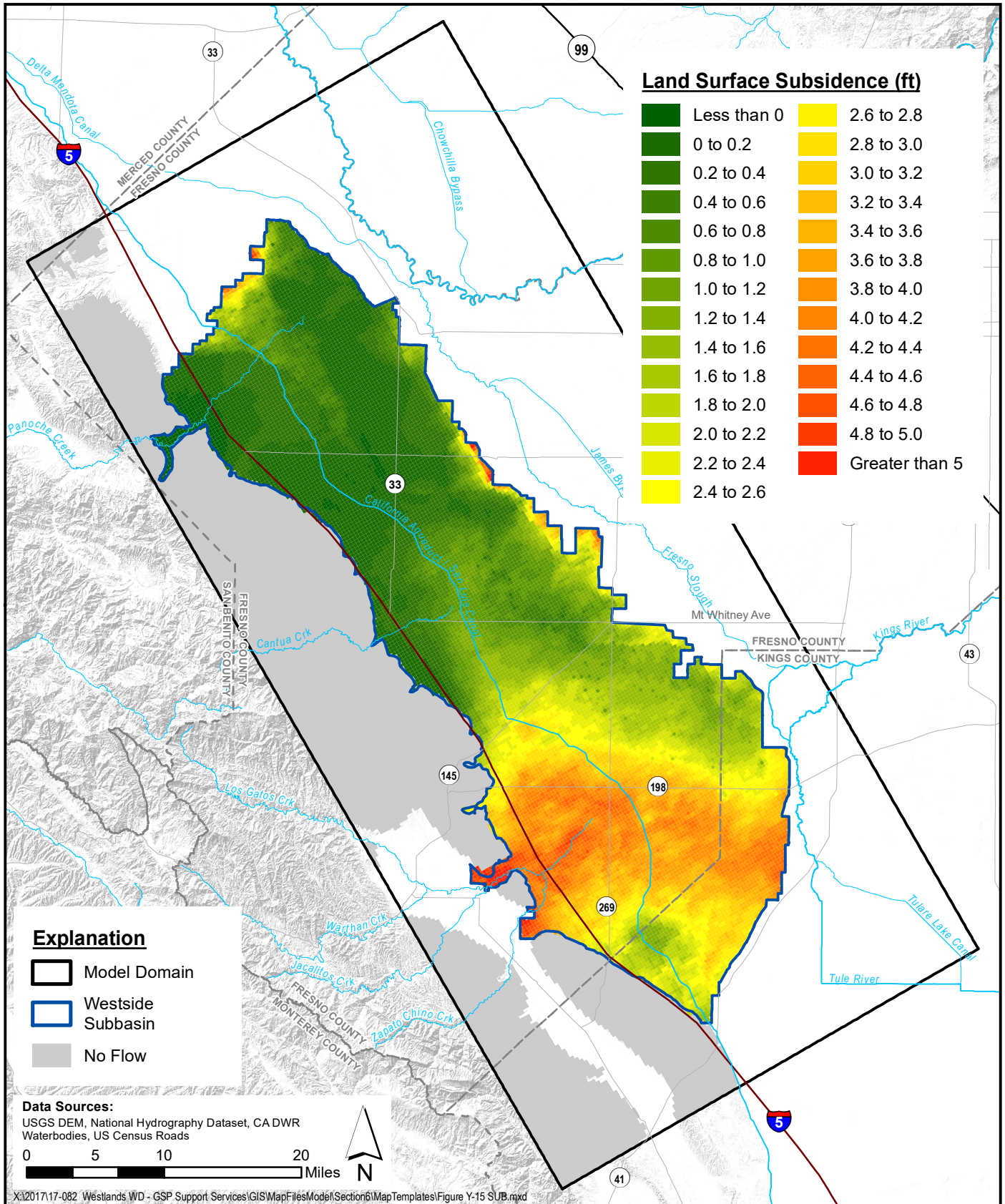
**Simulated Land Surface Subsidence  
 2030 Climate Change - PMA No.3 (2020 - 2040)**

Figure F-65



SGMA Sustainability Analyses  
 Westside Subbasin





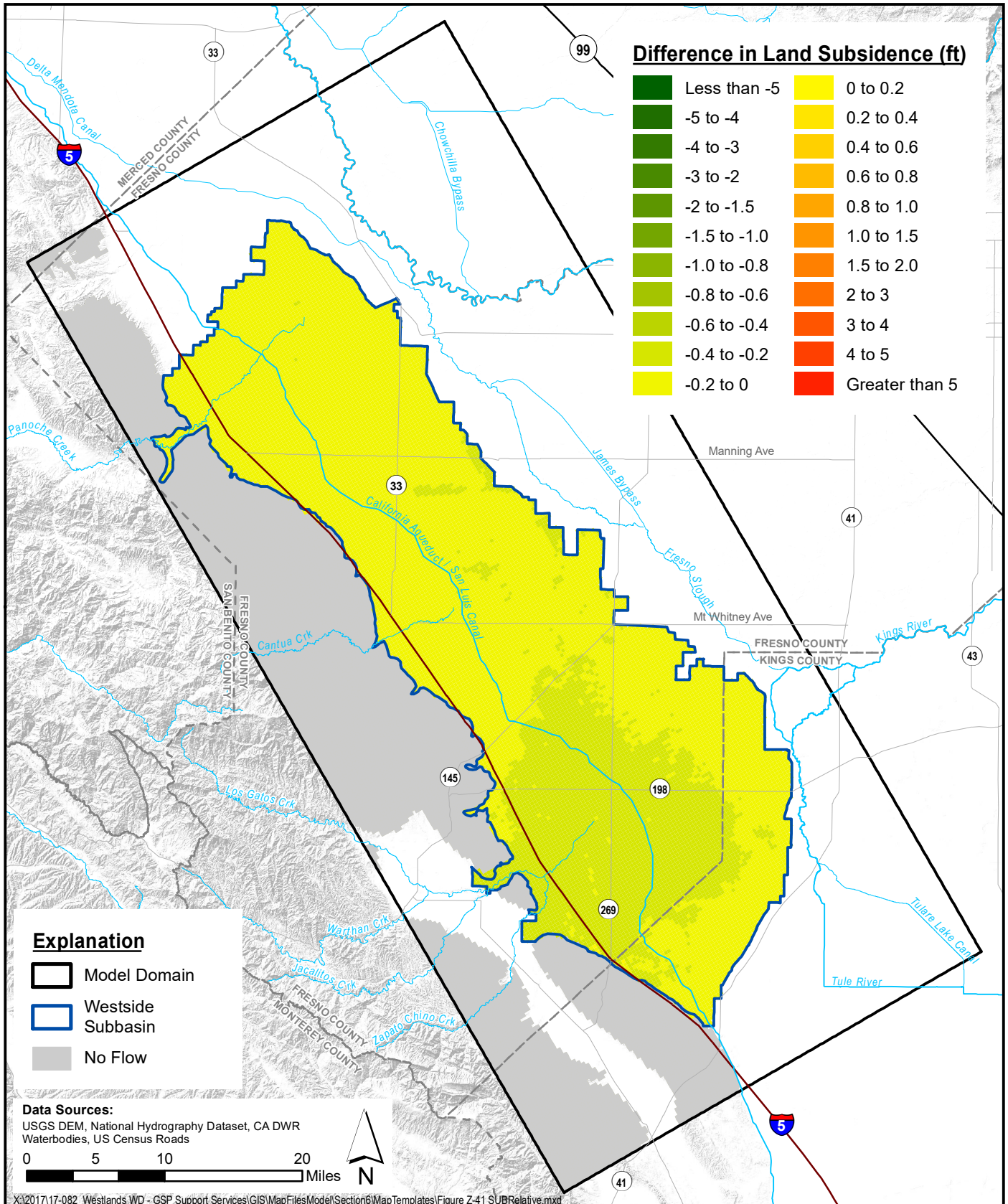
**Simulated Land Surface Subsidence  
 2030 Climate Change - PMA No.3 (2020 - 2070)**

Figure F-66



SGMA Sustainability Analyses  
 Westside Subbasin





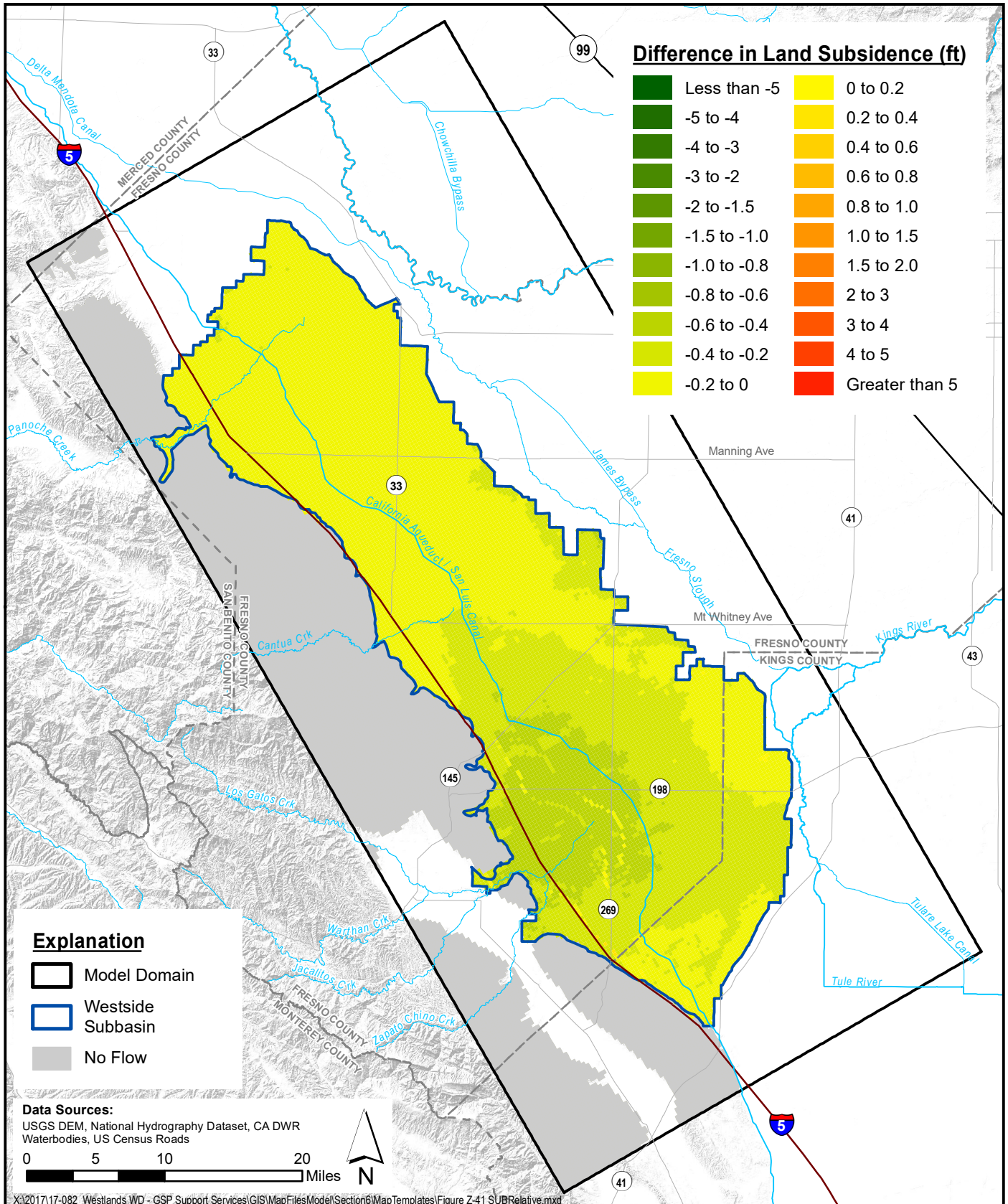
**Project Impact on Land Subsidence  
 2030 Climate Change - PMA No. 3 (2020 - 2040)**

Figure F-67



SGMA Sustainability Analyses  
 Westside Subbasin



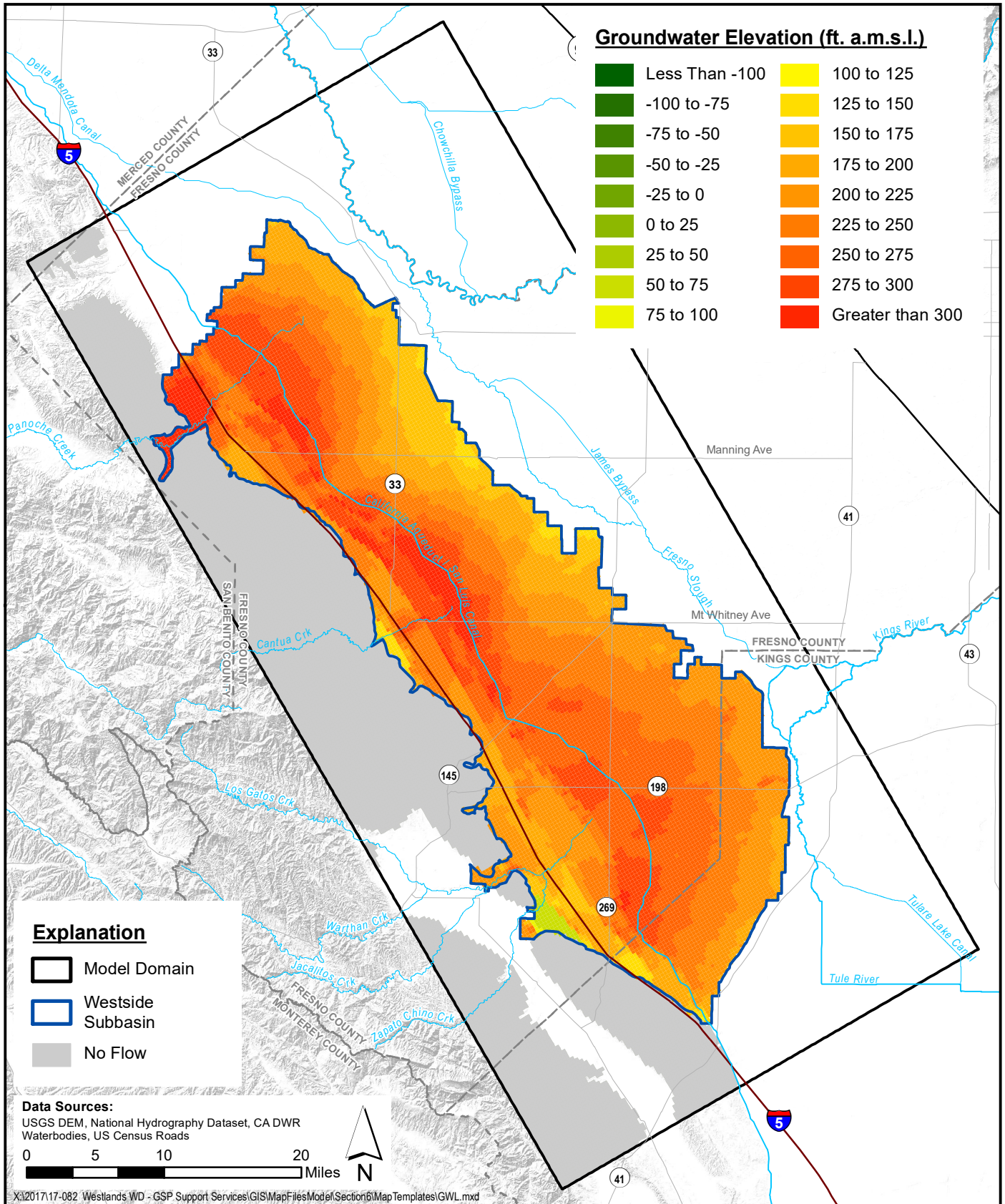


**Project Impact on Land Subsidence  
 2030 Climate Change - PMA No. 3 (2020 - 2070)**

Figure F-68

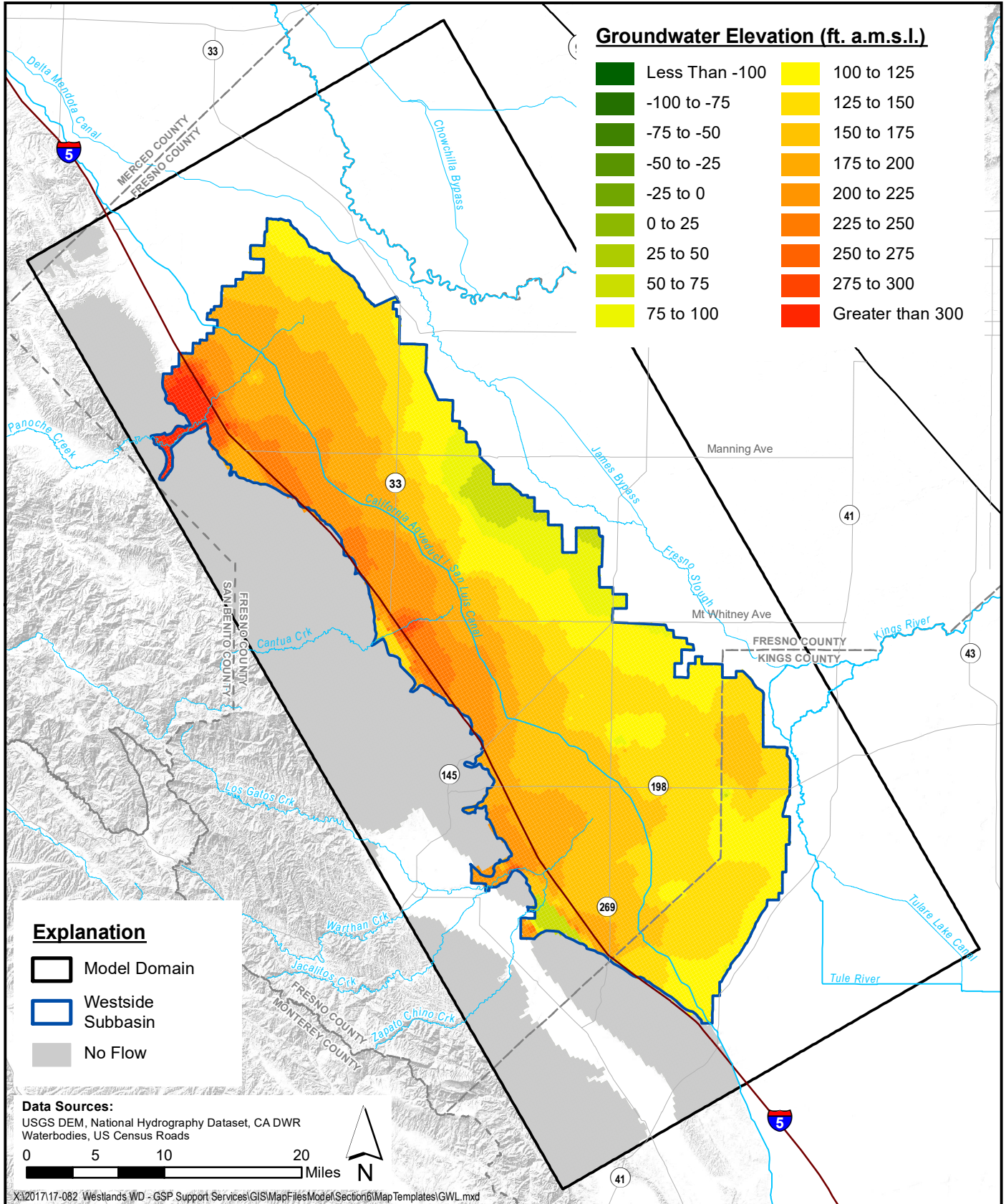


SGMA Sustainability Analyses  
 Westside Subbasin



Westside Subbasin





**Groundwater Elevation (ft. a.m.s.l.)**

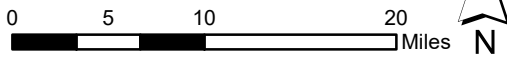
Less Than -100	100 to 125
-100 to -75	125 to 150
-75 to -50	150 to 175
-50 to -25	175 to 200
-25 to 0	200 to 225
0 to 25	225 to 250
25 to 50	250 to 275
50 to 75	275 to 300
75 to 100	Greater than 300

**Explanation**

- Model Domain
- Westside Subbasin
- No Flow

**Data Sources:**

USGS DEM, National Hydrography Dataset, CA DWR Waterbodies, US Census Roads



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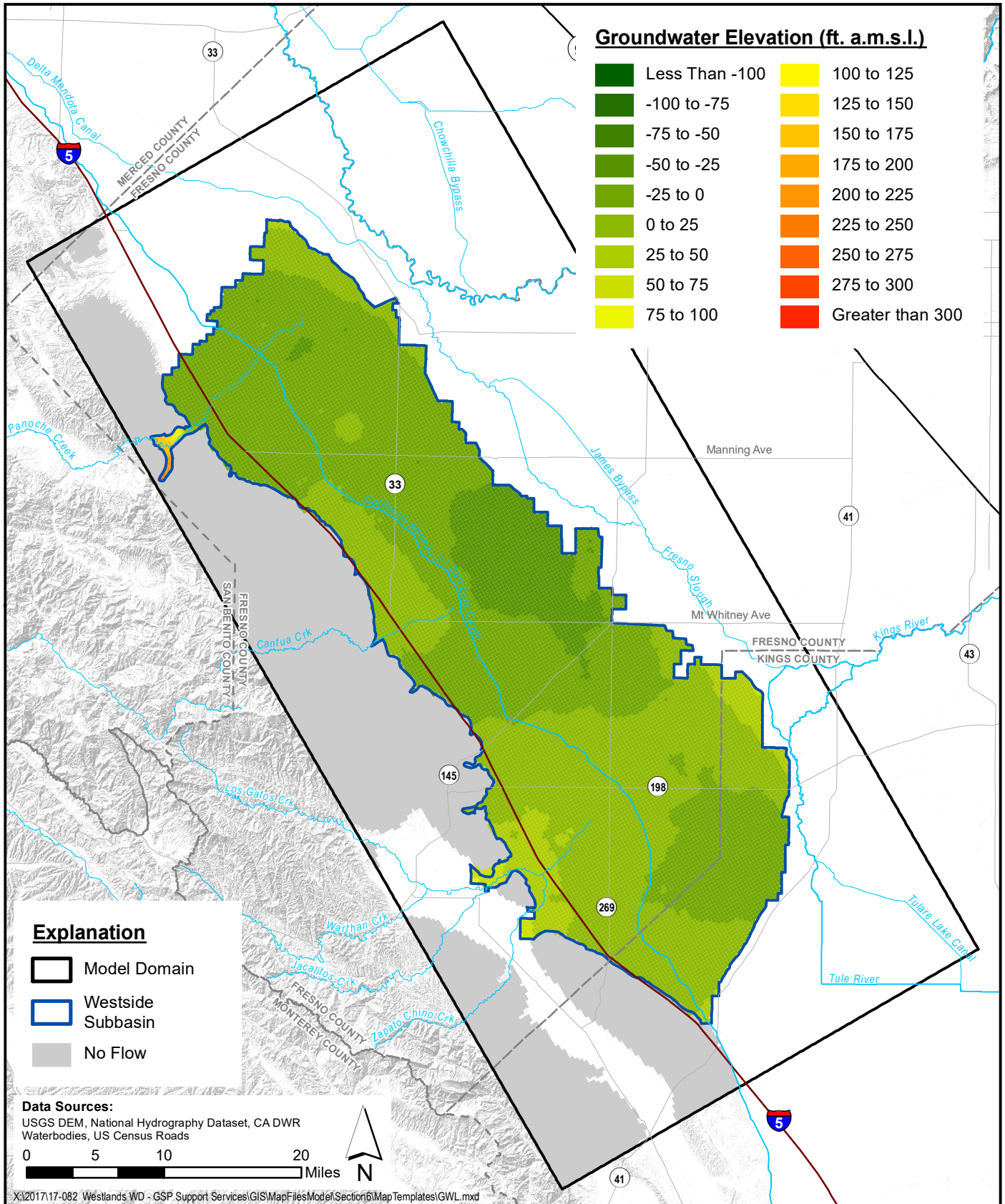
**Simulated Groundwater Elevation - Upper Aquifer  
2030 Climate Change - PMA No.4 (March 2047)**

Figure F-70



SGMA Sustainability Analyses  
Westside Subbasin





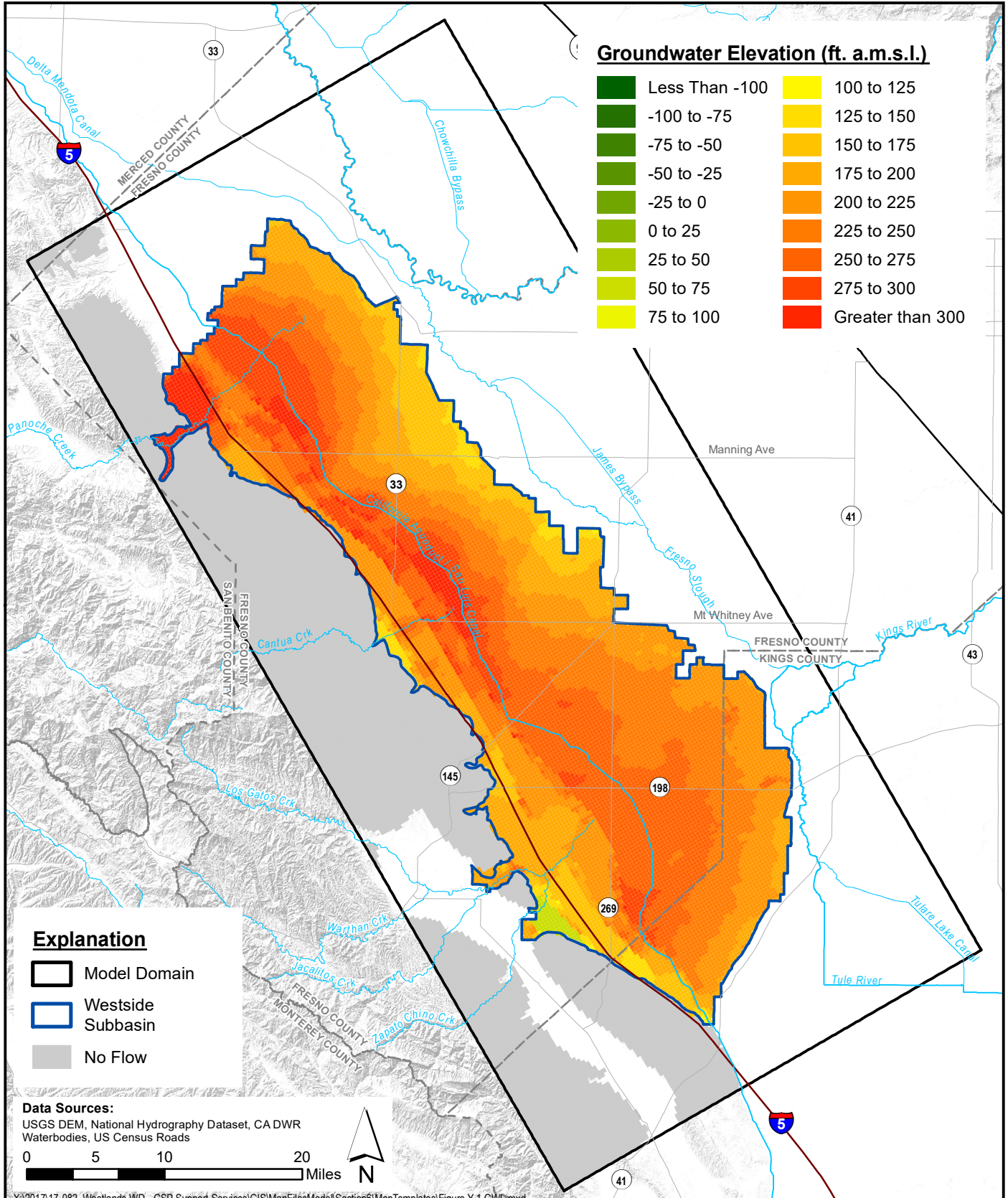
**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.4 (March 2047)**

Figure F-71



SGMA Sustainability Analyses  
 Westside Subbasin





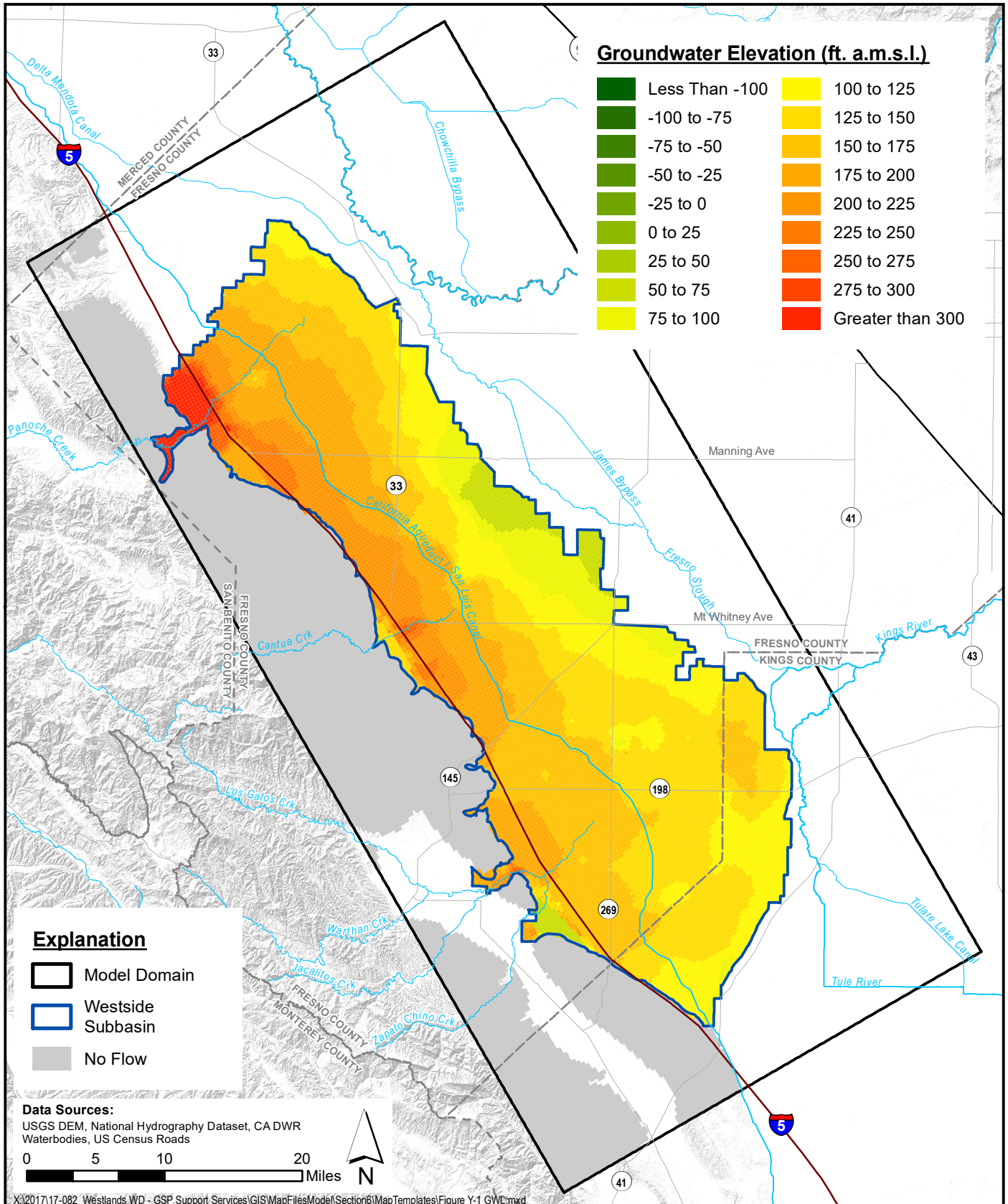
**Simulated Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.4 (January 2071)**

Figure F-72



SGMA Sustainability Analyses  
 Westside Subbasin





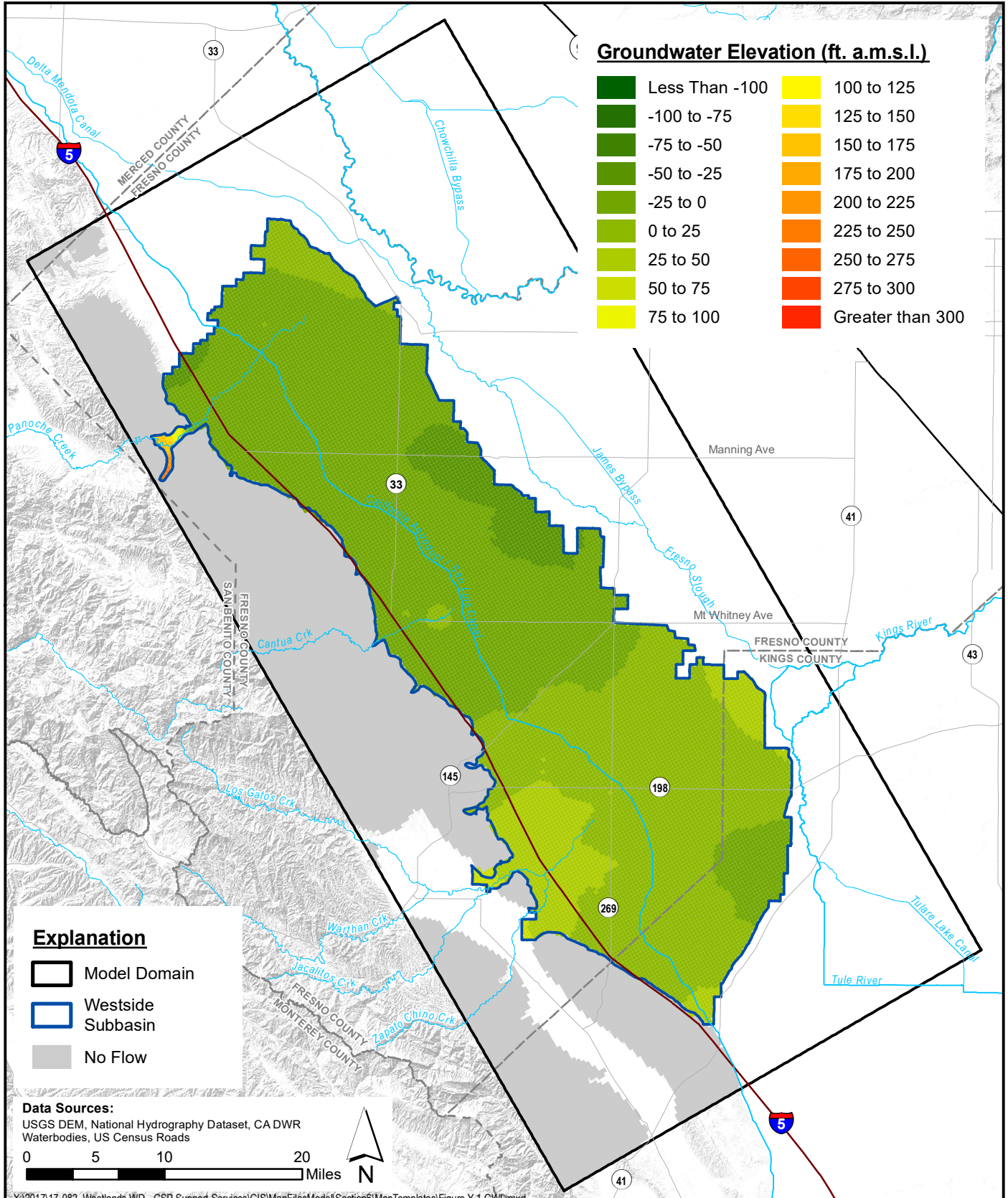
**Simulated Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.4 (January 2071)**

Figure F-73



SGMA Sustainability Analyses  
 Westside Subbasin



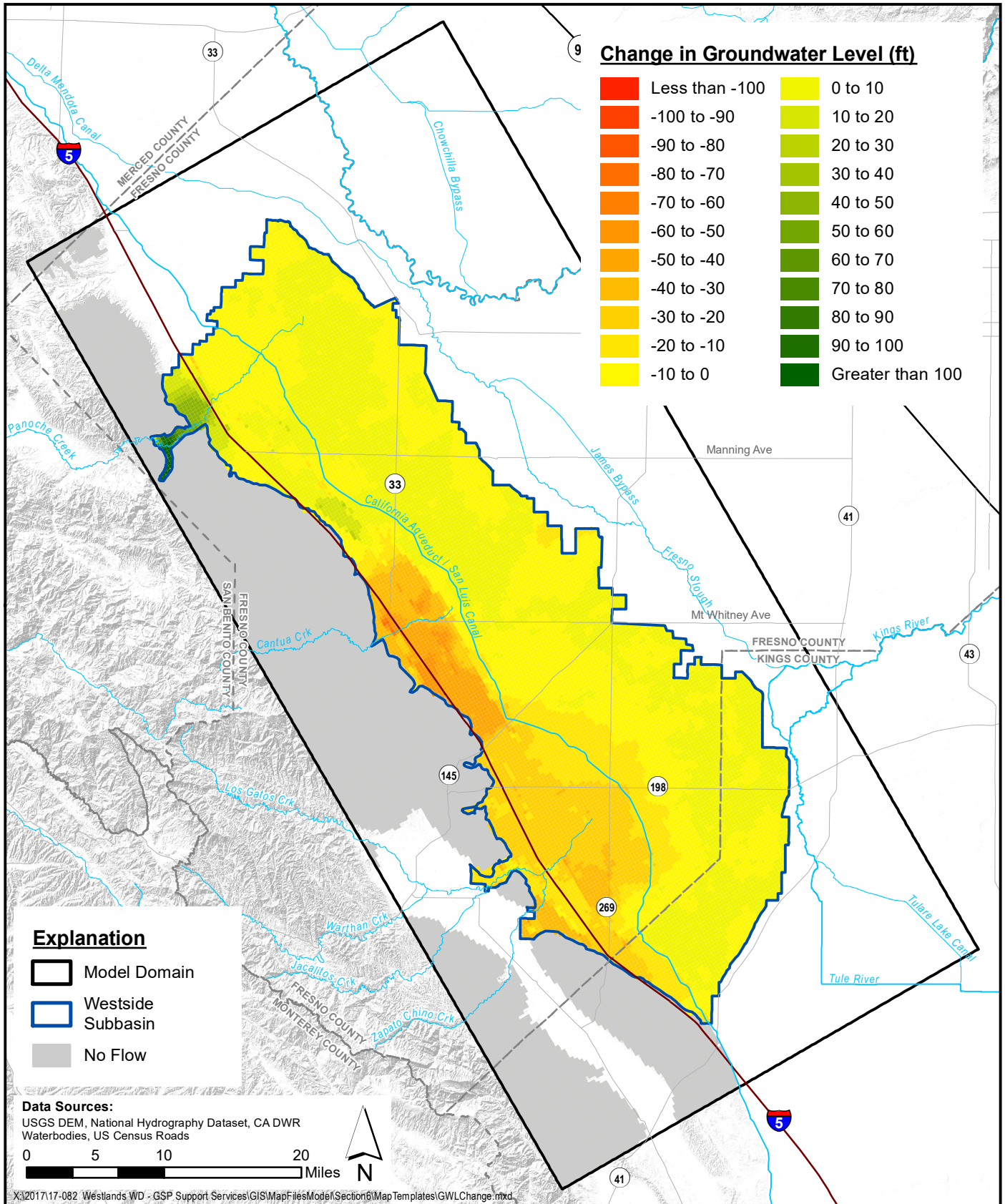


**Simulated Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.4 (January 2071)**

Figure F-74



SGMA Sustainability Analyses  
 Westside Subbasin



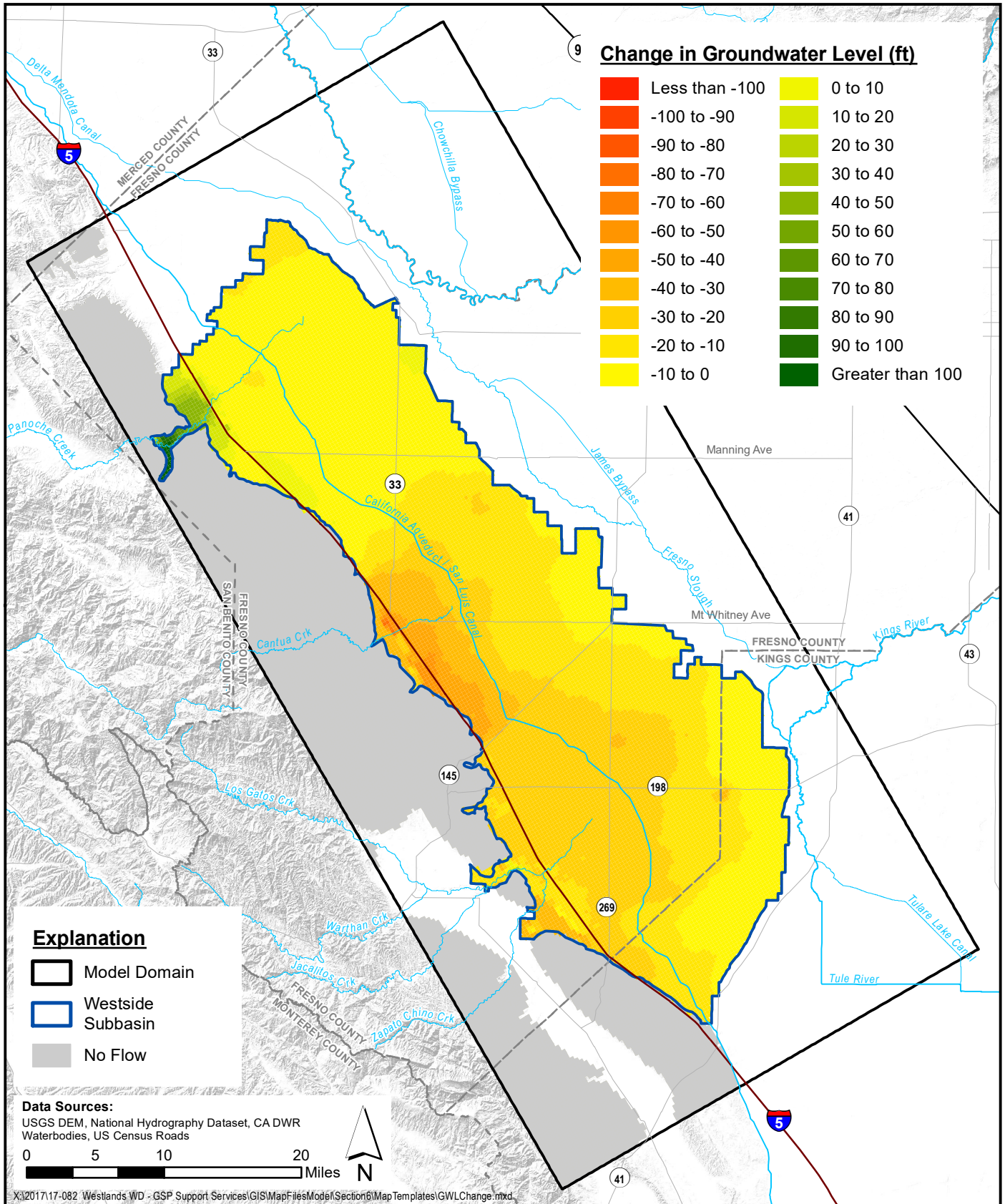
**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.4 (2020 - 2047)**

Figure F-75



SGMA Sustainability Analyses  
 Westside Subbasin



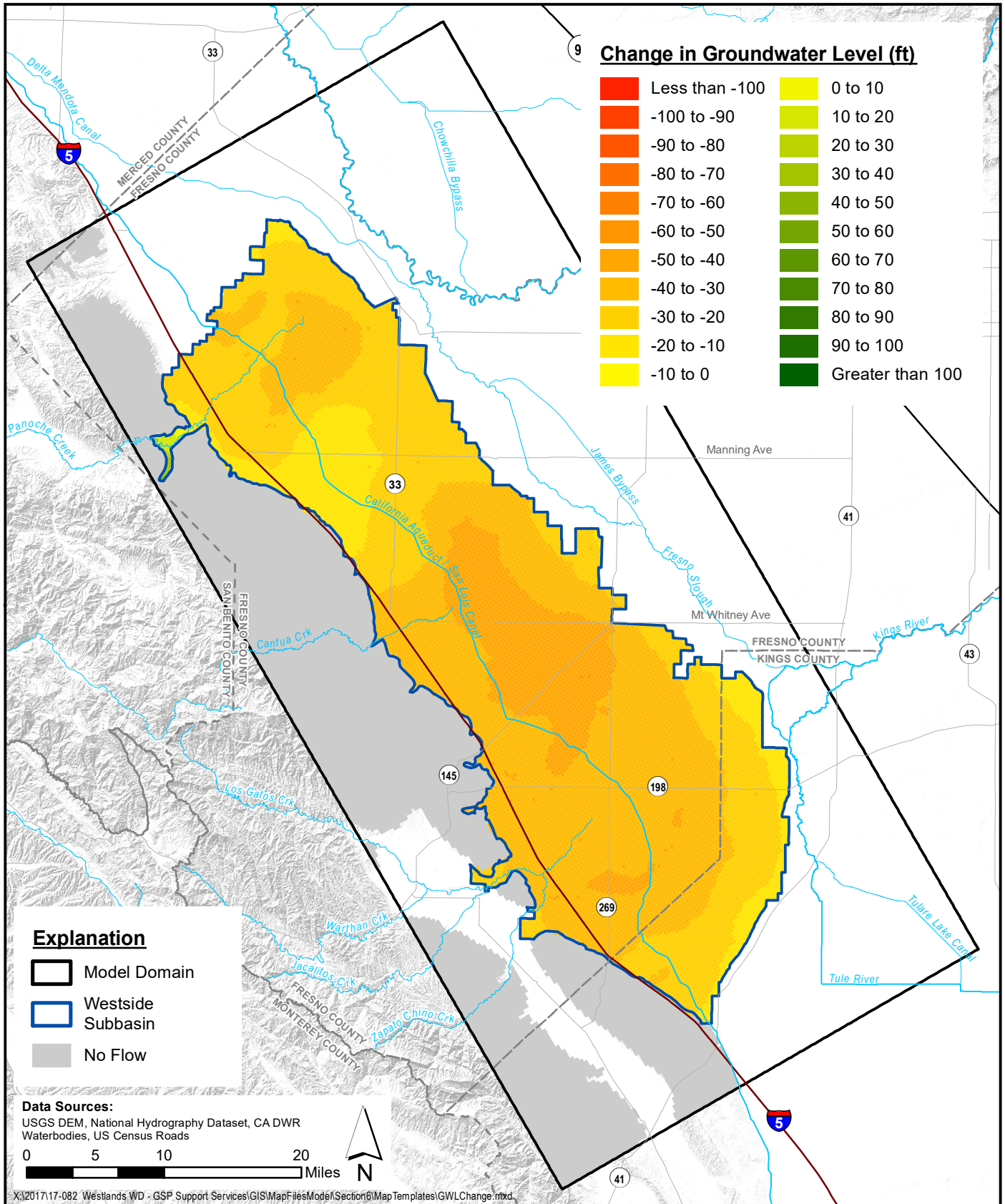


**Simulated Change in Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.4 (2020 - 2047)**

Figure F-76



SGMA Sustainability Analyses  
 Westside Subbasin



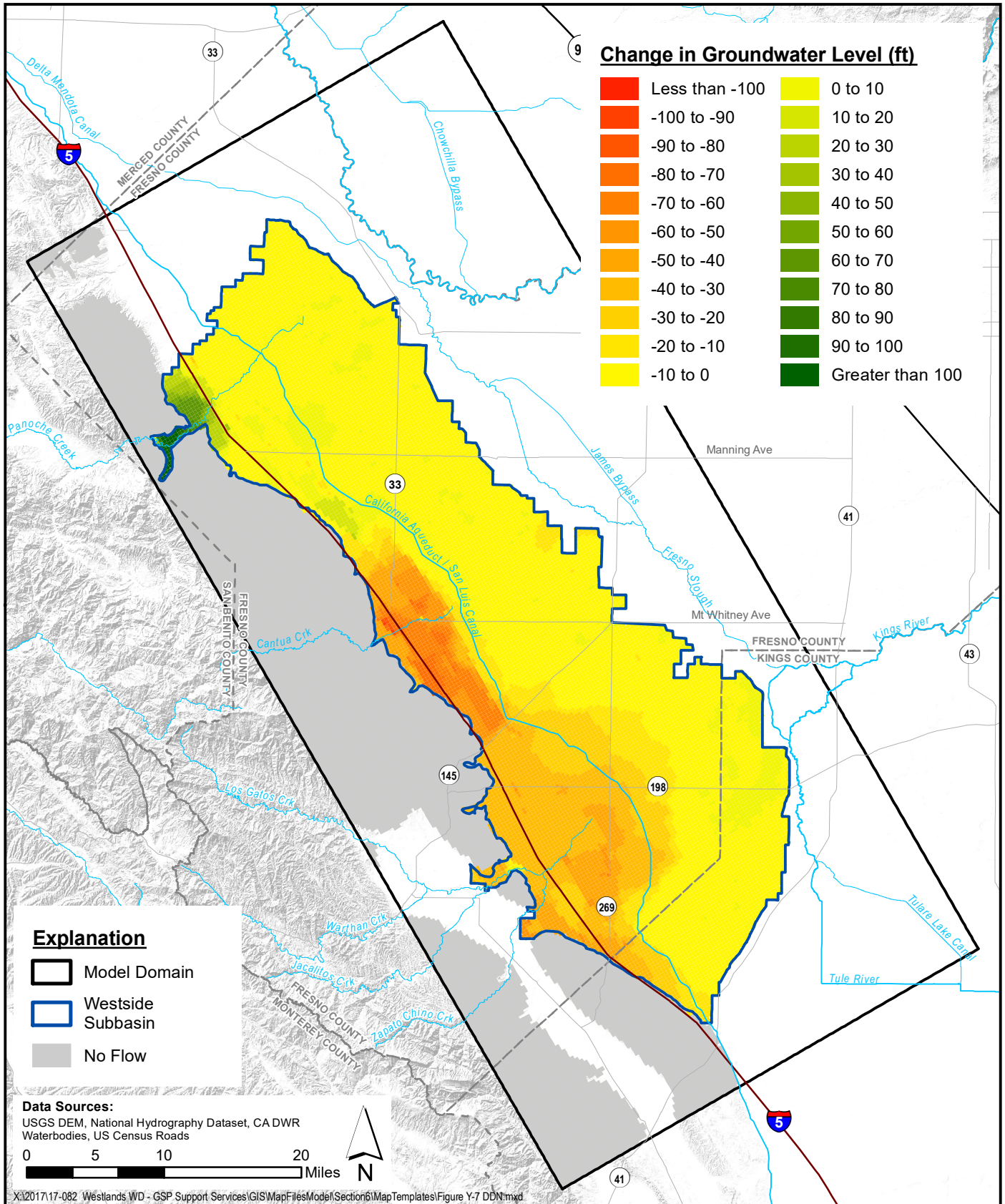
**Simulated Change in Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.4 (2020 - 2047)**

Figure F-77



SGMA Sustainability Analyses  
 Westside Subbasin



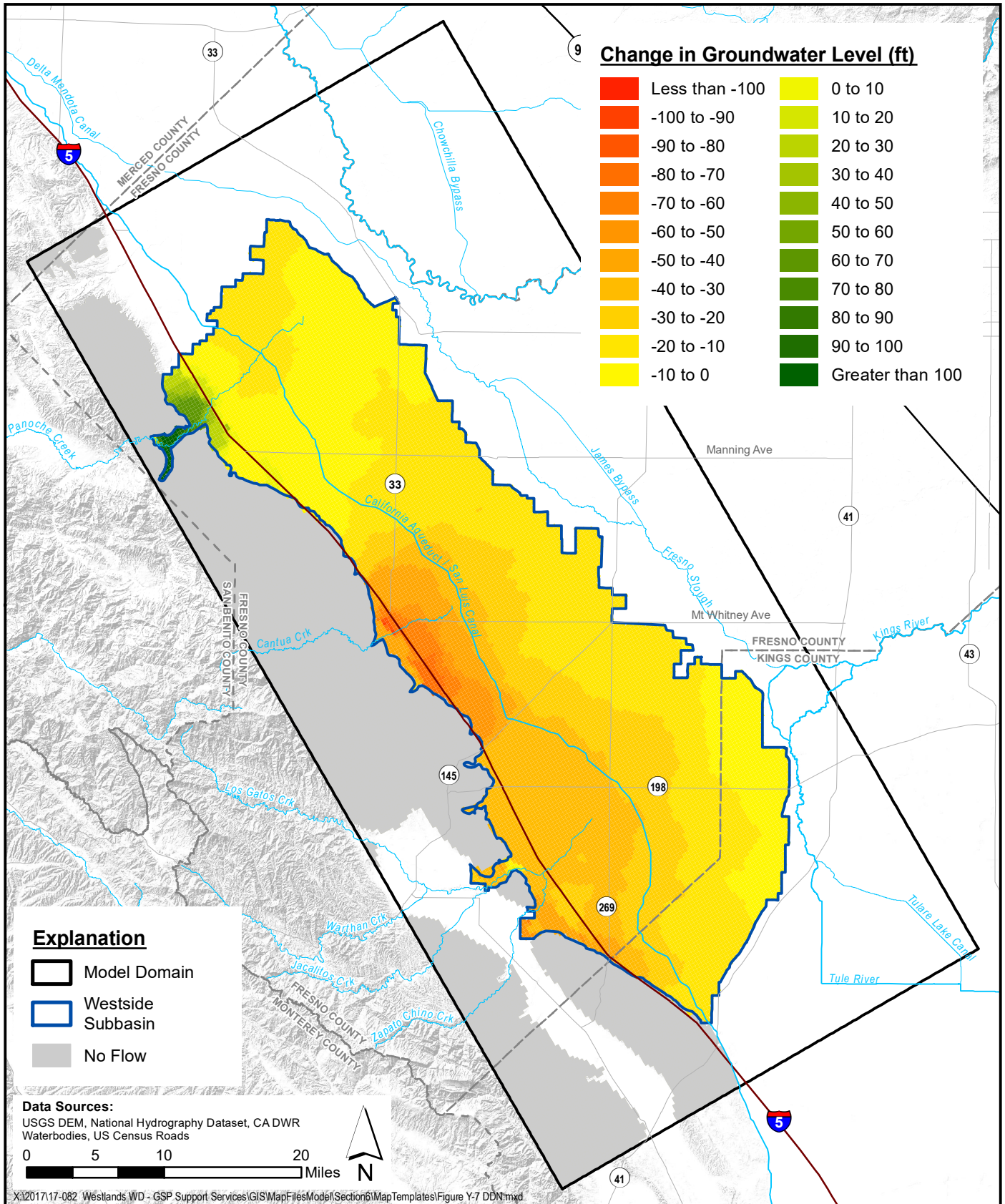


**Simulated Change in Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.4 (2020 - 2070)**

Figure F-78



SGMA Sustainability Analyses  
 Westside Subbasin



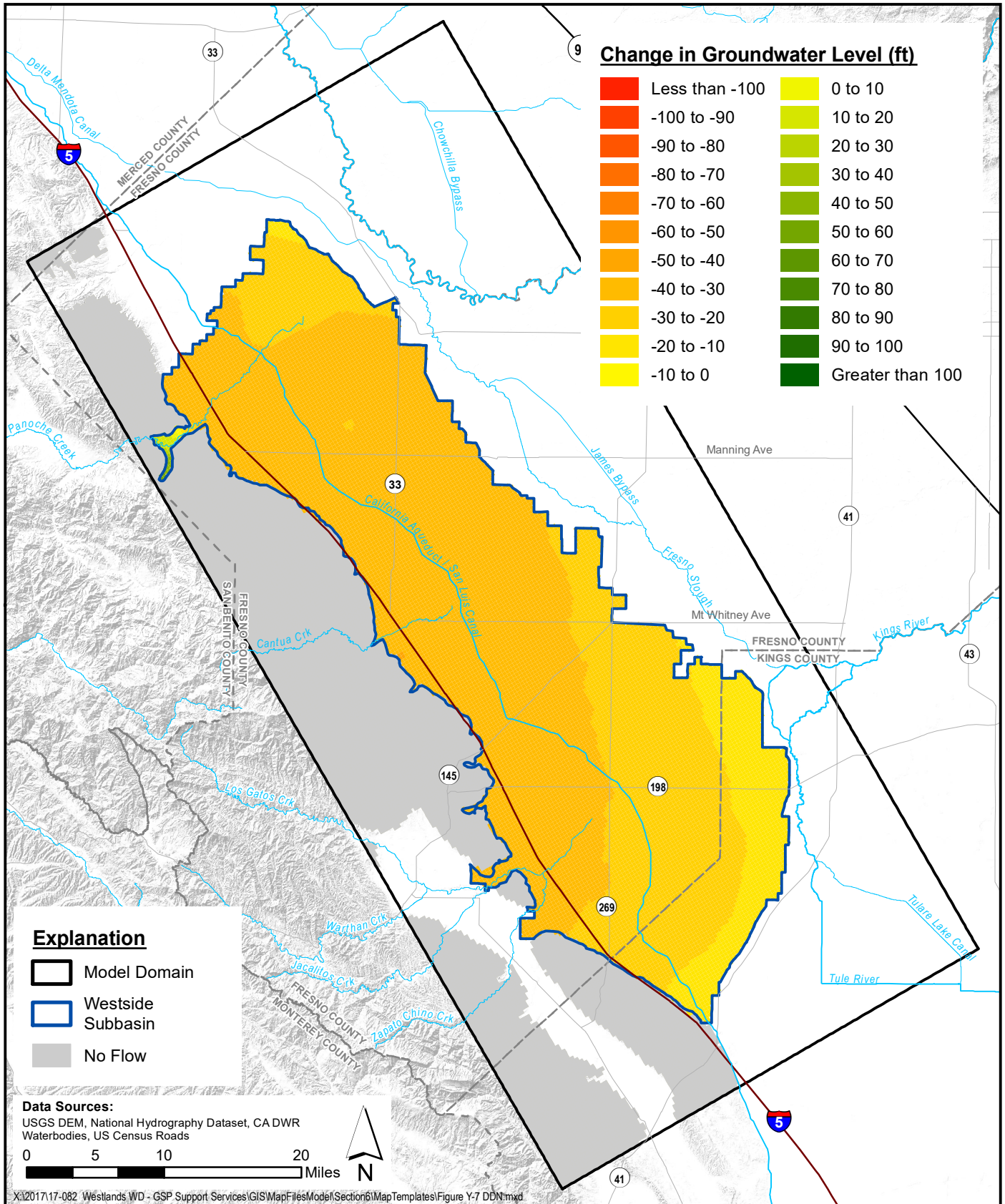
**Simulated Change in Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.4 (2020 - 2070)**

Figure F-79



SGMA Sustainability Analyses  
 Westside Subbasin



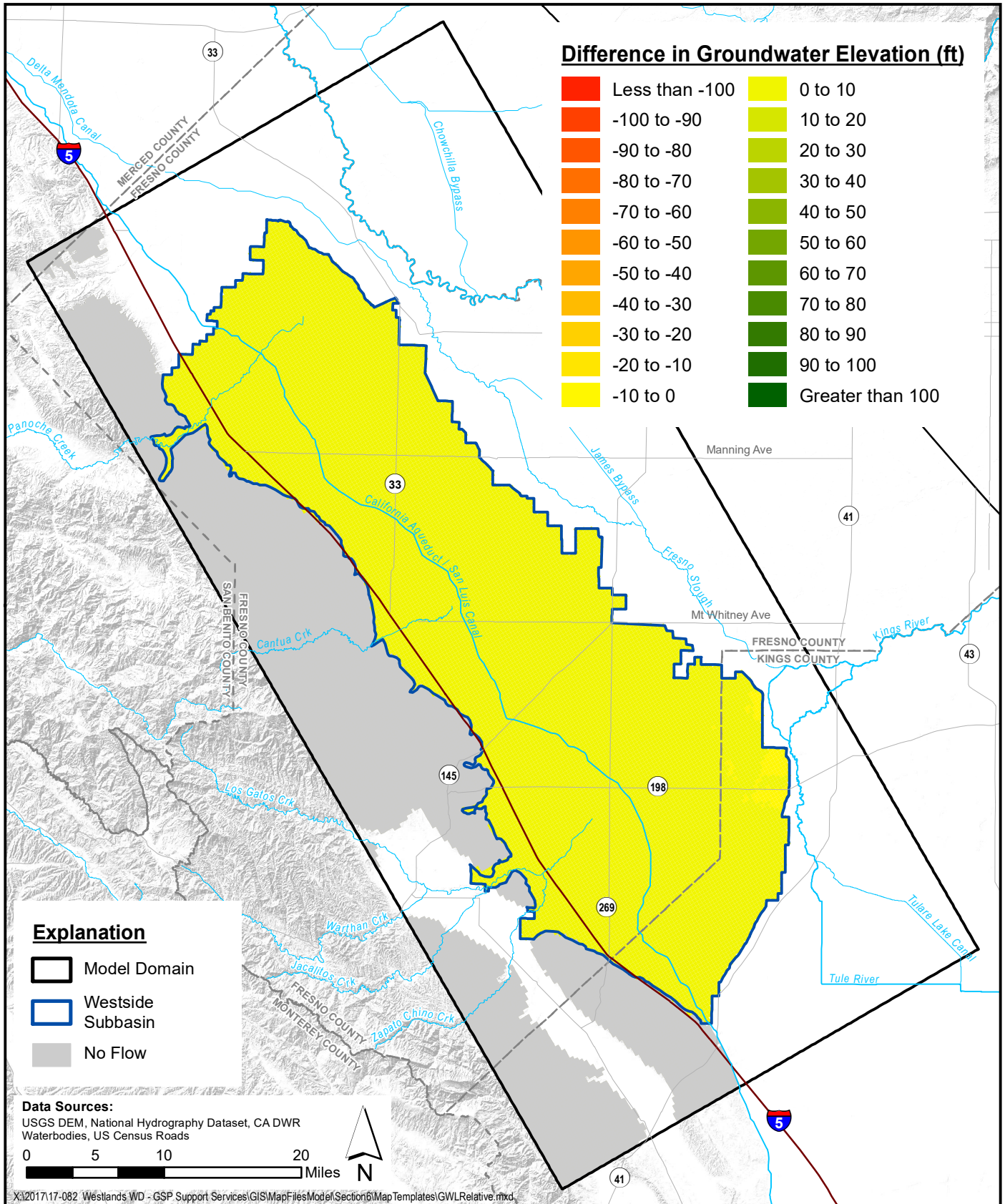


**Simulated Change in Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.4 (2020 - 2070)**

Figure F-80



SGMA Sustainability Analyses  
 Westside Subbasin



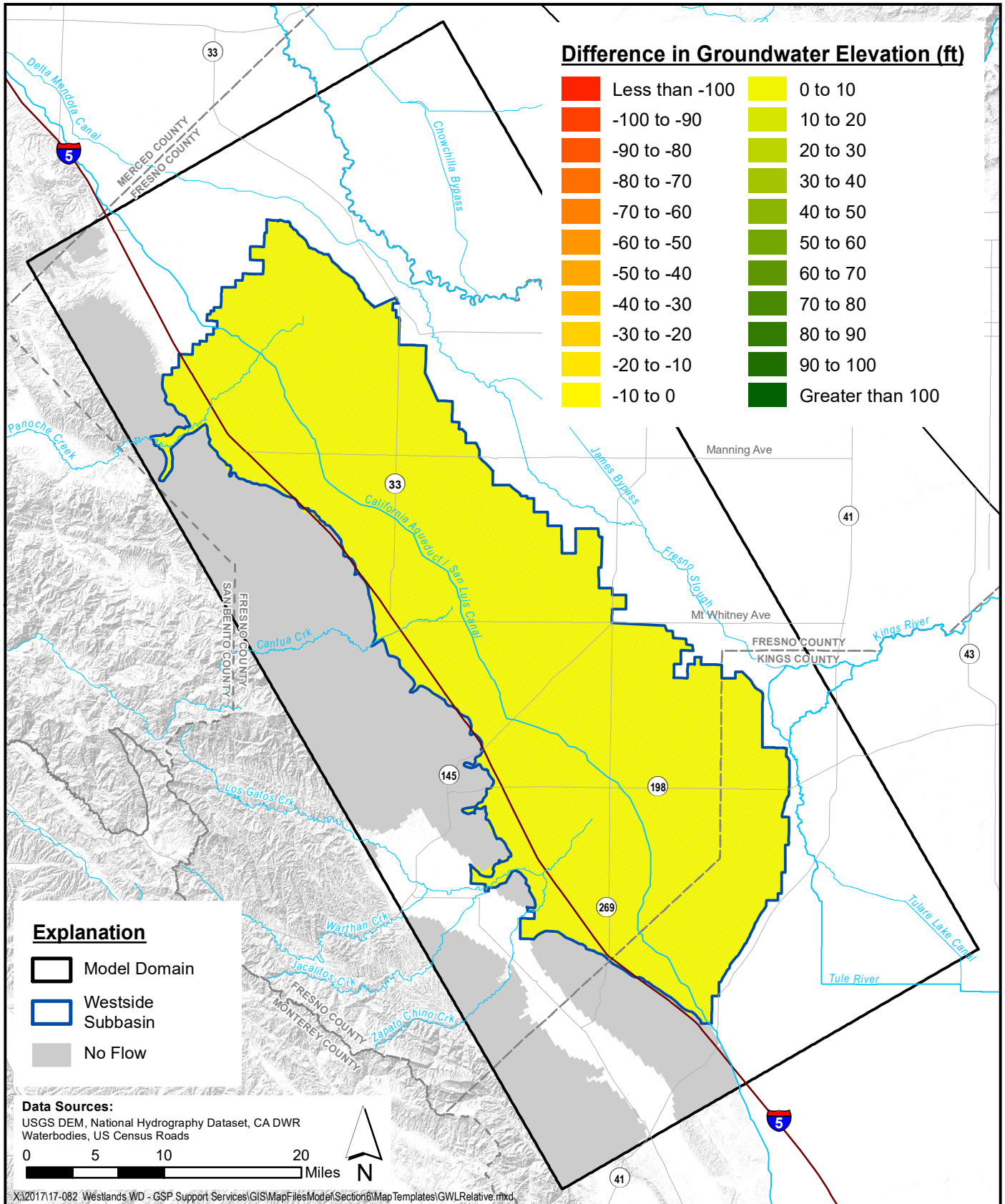
**Project Impacts on Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No.4 (2020 - 2047)**

Figure F-81



SGMA Sustainability Analyses  
 Westside Subbasin



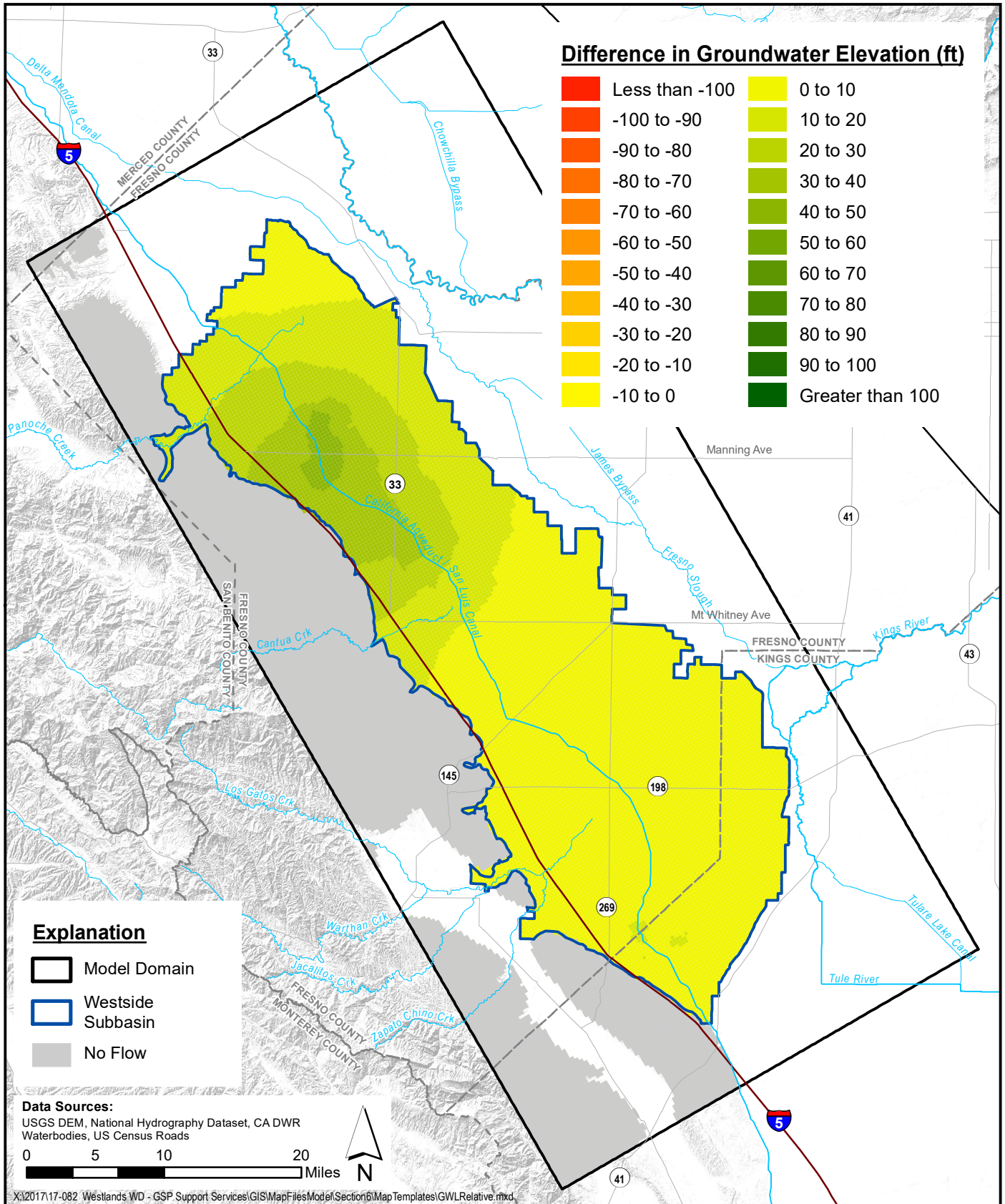


**Project Impacts on Groundwater Elevation - Upper Aquifer  
 2030 Climate Change - PMA No.4 (2020 - 2047)**

Figure F-82



SGMA Sustainability Analyses  
 Westside Subbasin



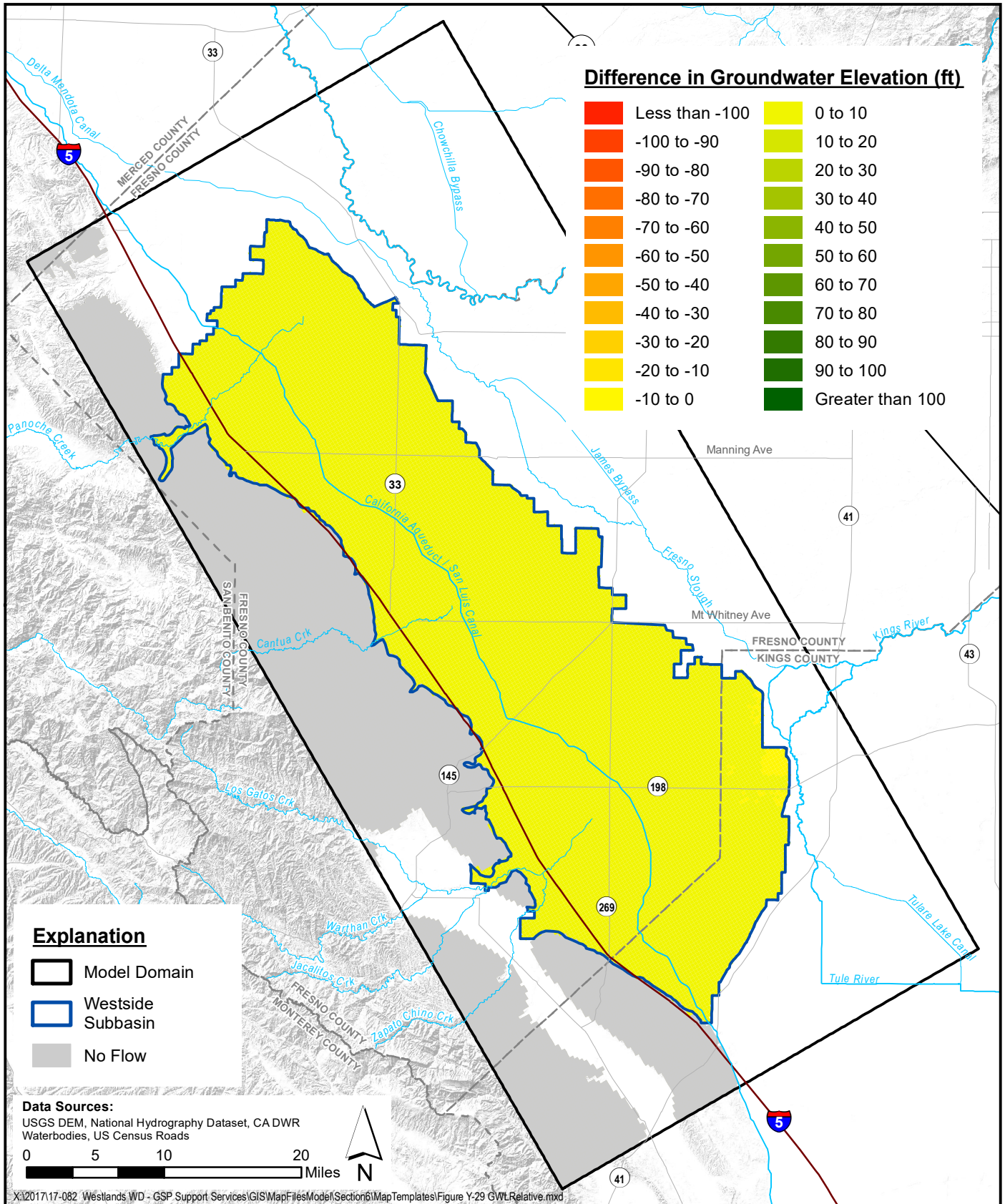
**Project Impacts on Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No.4 (2020 - 2047)**

Figure F-83



SGMA Sustainability Analyses  
 Westside Subbasin



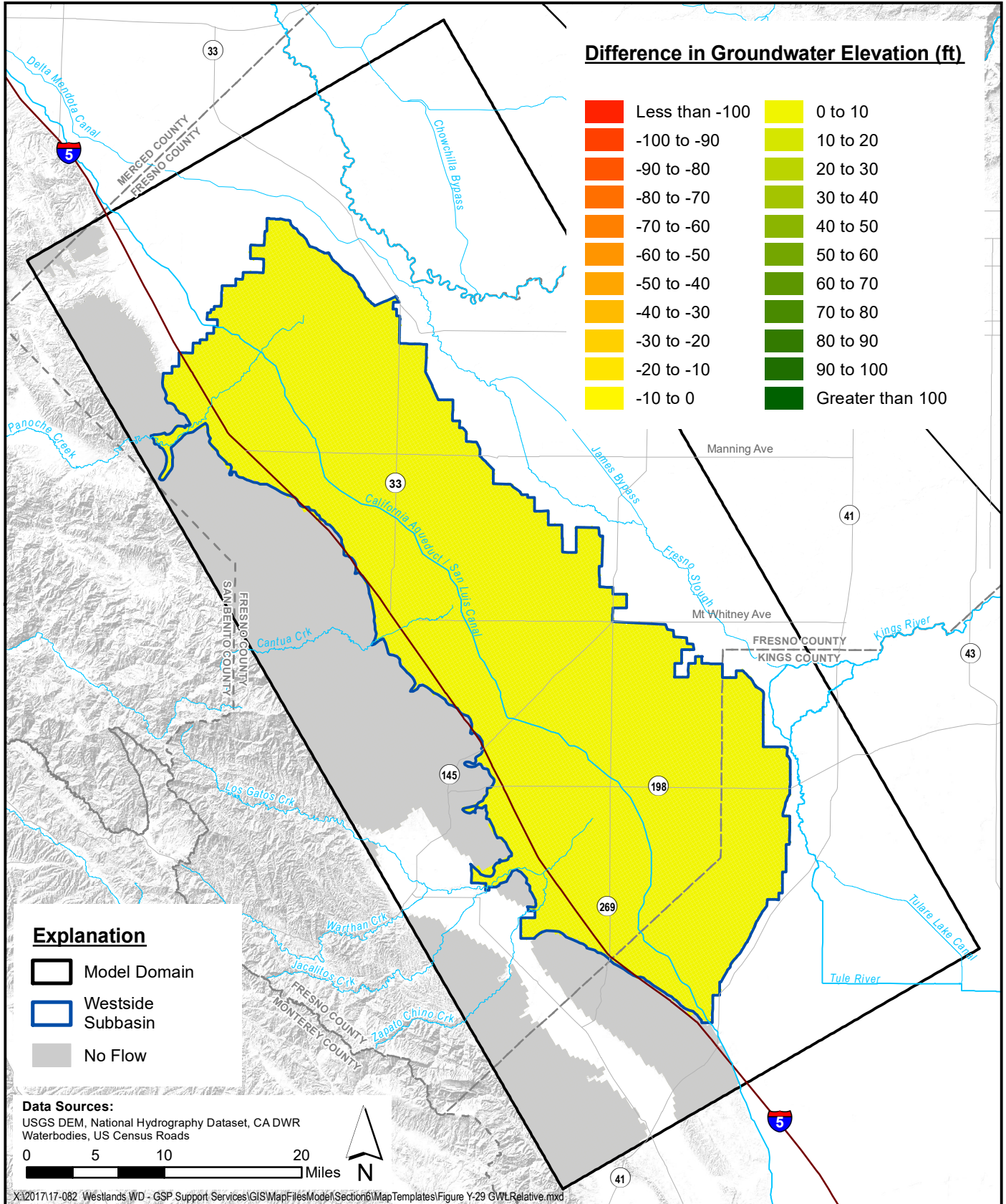


**Project Impacts on Groundwater Elevation - Shallow Zone  
 2030 Climate Change - PMA No. 4 (2020 - 2070)**

Figure F-84



SGMA Sustainability Analyses  
 Westside Subbasin



**Difference in Groundwater Elevation (ft)**

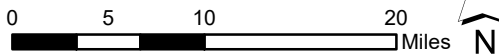
Less than -100	0 to 10
-100 to -90	10 to 20
-90 to -80	20 to 30
-80 to -70	30 to 40
-70 to -60	40 to 50
-60 to -50	50 to 60
-50 to -40	60 to 70
-40 to -30	70 to 80
-30 to -20	80 to 90
-20 to -10	90 to 100
-10 to 0	Greater than 100

**Explanation**

- Model Domain
- Westside Subbasin
- No Flow

**Data Sources:**

USGS DEM, National Hydrography Dataset, CA DWR Waterbodies, US Census Roads



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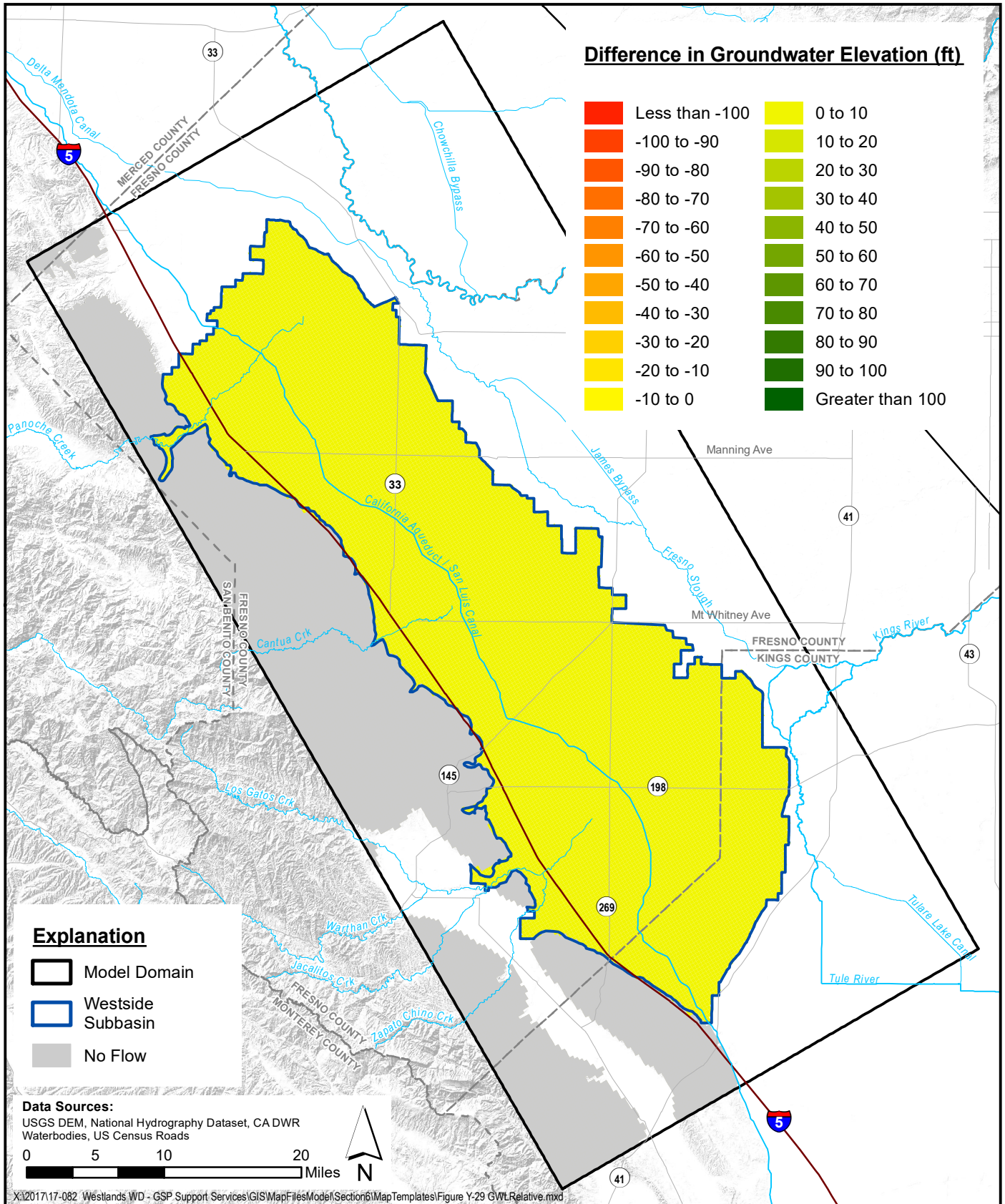
**Project Impacts on Groundwater Elevation - Upper Aquifer  
2030 Climate Change - PMA No. 4 (2020 - 2070)**

Figure F-85



SGMA Sustainability Analyses  
Westside Subbasin





**Project Impacts on Groundwater Elevation - Lower Aquifer  
 2030 Climate Change - PMA No. 4 (2020 - 2070)**

Figure F-86



SGMA Sustainability Analyses  
 Westside Subbasin