MISSION CREEK SUBBASIN SGMA

RINCON CONSULTANTS wsp



2027 Mission Creek Subbasin Alternative Plan Update

In Compliance with the Sustainable Groundwater Management Act

Volume 3 - October 2026

Prepared For:

Coachella Valley Water District

Desert Water Agency

Mission Springs Water District

Public Review Draft

APPENDIX 10
MEAN RESISTIVITY MAPS

Appendix 10 contains a series of mean resistivity maps, showing horizontal resistivity slices over specific elevation intervals and depth intervals along the flight lines.

The resistivity elevation map series starts out with the elevation interval of 980 to 1000m (3214 to 3280 ft), decreasing at 20-meter intervals until an elevation of -620 to -600m (-2034 to -1969 ft). A total of 82 maps are included in this series.

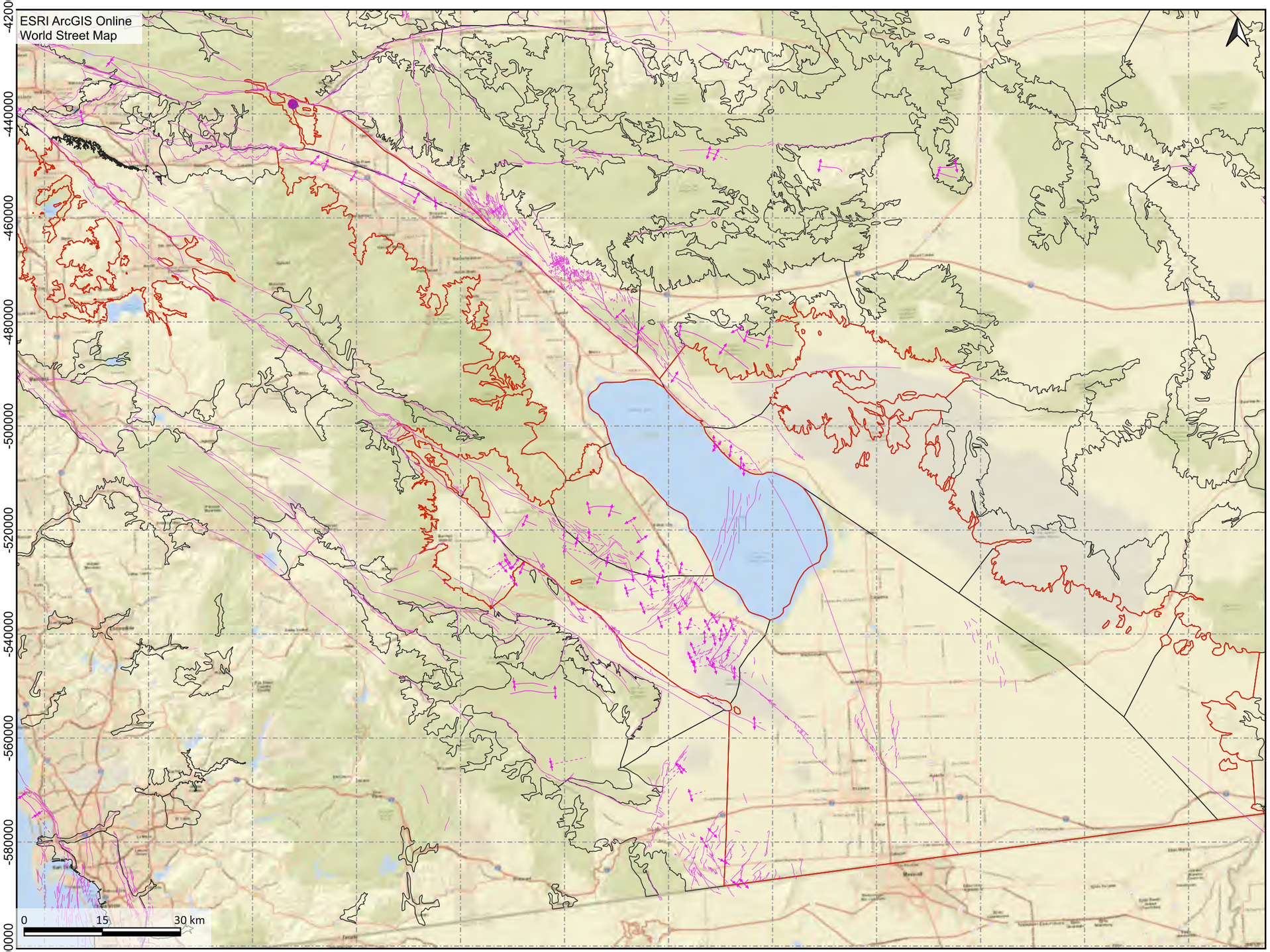
The resistivity depth interval map series starts out with the depth interval of 0 to 5 m (0 to 16 ft) bgs, thereafter intervals of 5 to 15 m (16 to 49 ft), 15 to 30 m (49 to 98 ft) bgs, and finally 30 to 60 m (98 to 197 ft) bgs.

For all maps, the resistivity is shown with the standard color scale, where blue colors represent resistivity under 10 Ohm-m, green colors from 10-20 Ohm-m, yellow colors from 20 – 30 Ohm-m, orange colors from 30 – 50 Ohm-m red colors from 50 – 90 Ohm-m and purple colors over 90 Ohm-m. The basin boundary is shown in brown, major roads are shown and labeled, and the faults, anticlines and synclines are shown on the map.

WO13, Elevation Interval 980 to 1000m (3215 to 3281 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

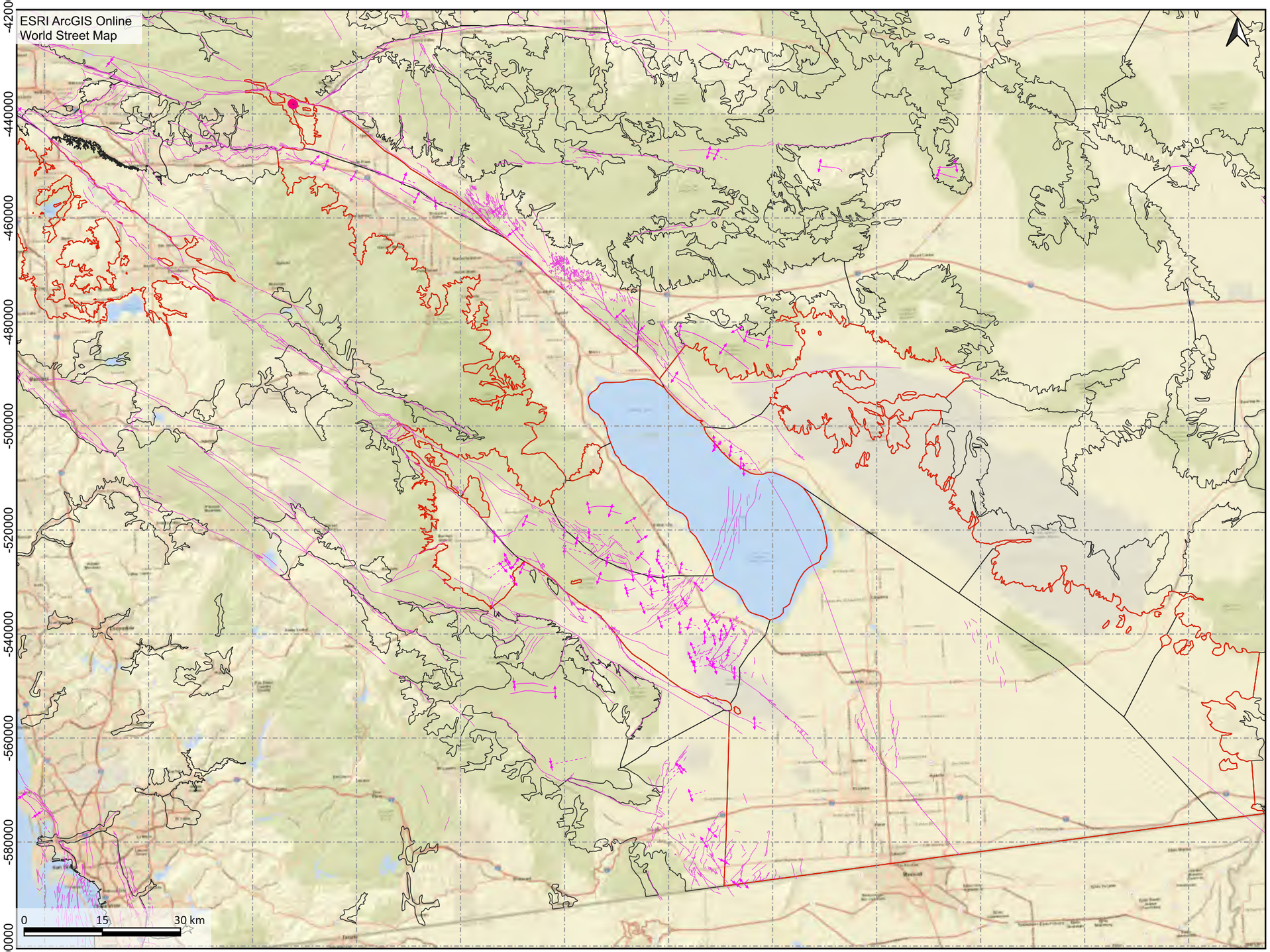
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 960 to 980m (3150 to 3215 ft)

AEM Mean Resistivity

RAMBOLL





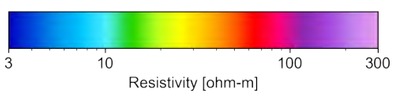
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Synclines and Anticlines (CGS, 2010)

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- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



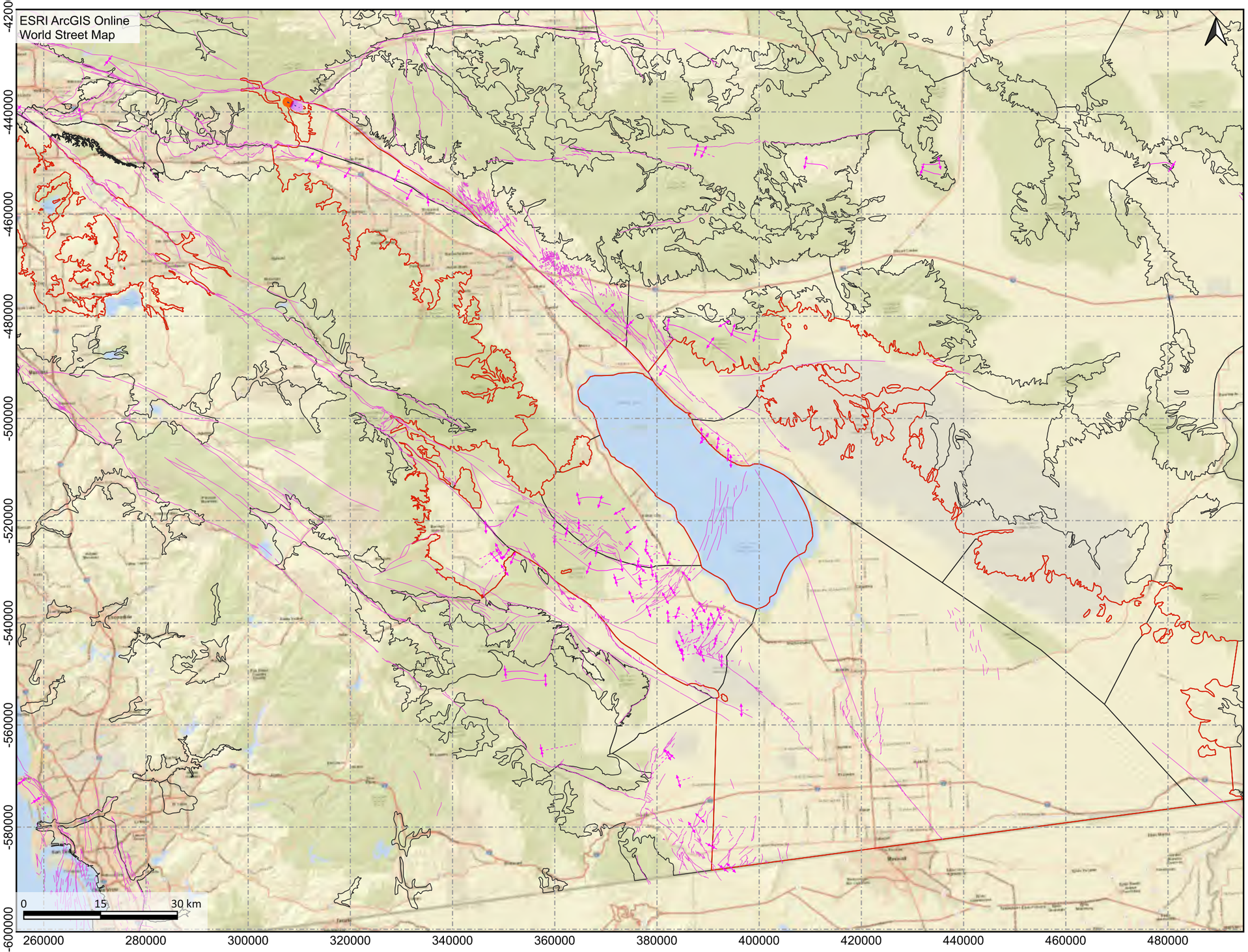
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 940 to 960m (3084 to 3150 ft)

AEM Mean Resistivity

RAMBOLL





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Synclines and Anticlines (CGS, 2010)

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Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

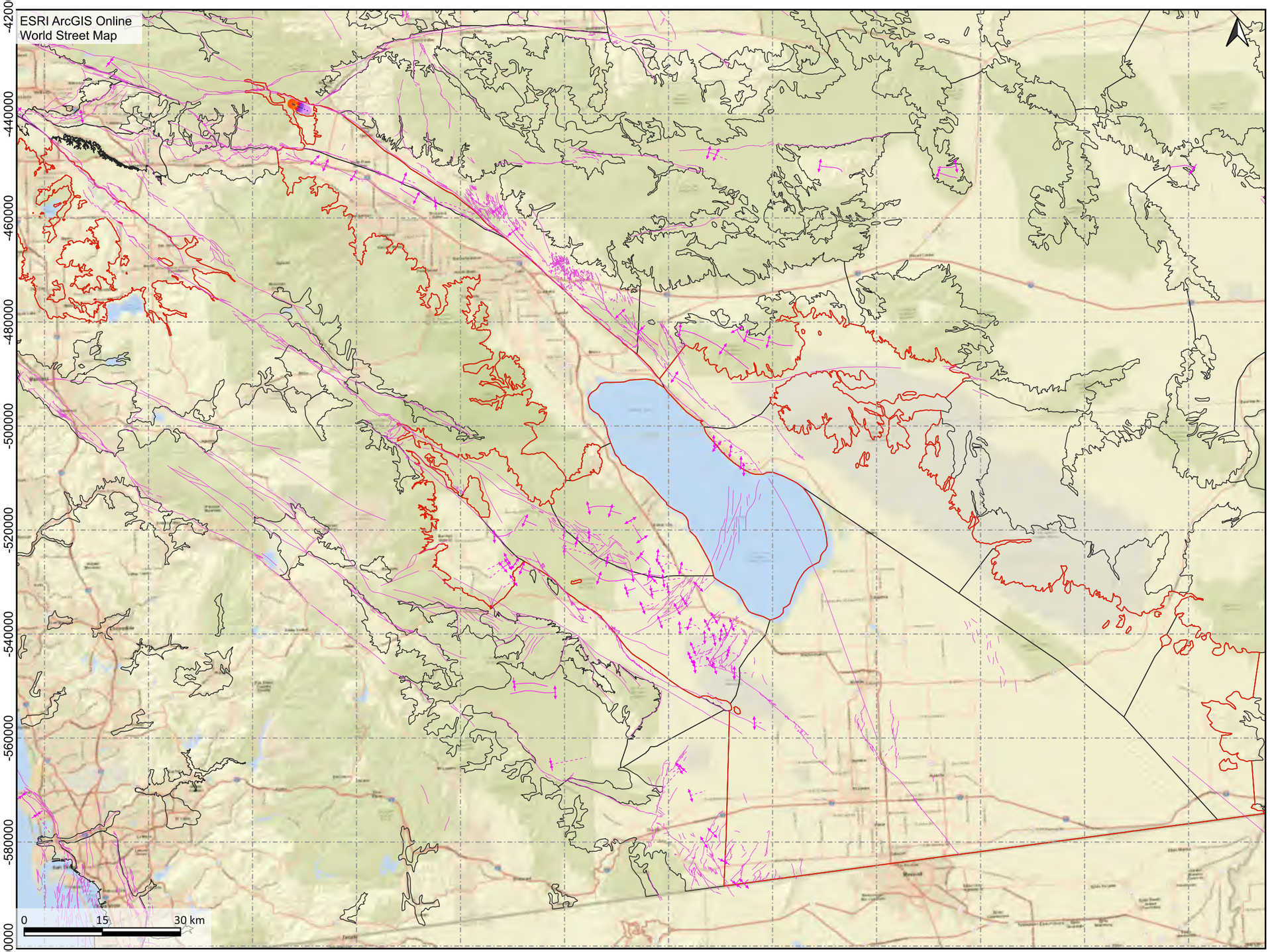
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 920 to 940m (3018 to 3084 ft)

AEM Mean Resistivity

RAMBOLL





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Synclines and Anticlines (CGS, 2010)

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Resistivity [ohm-m]

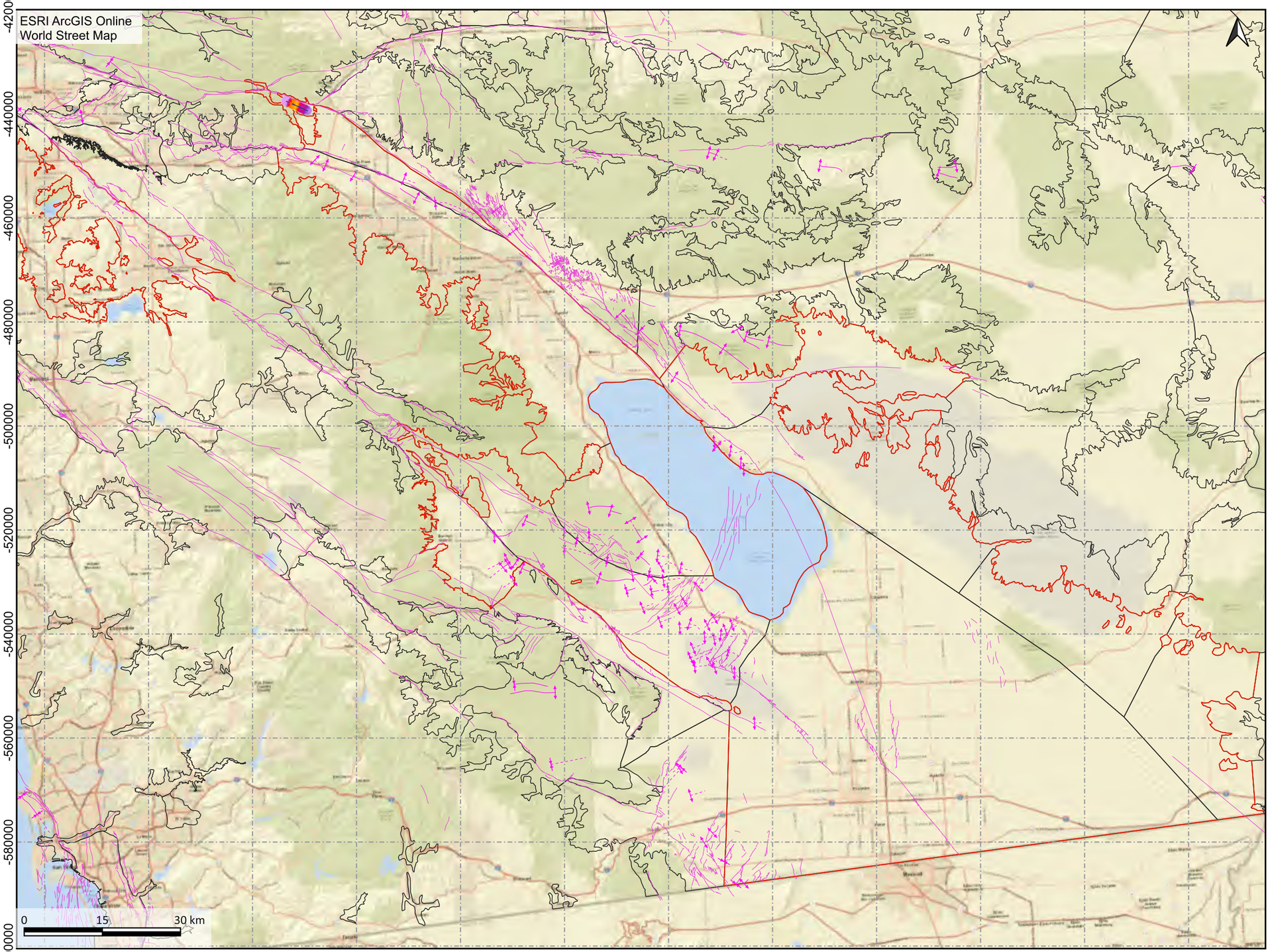
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Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 900 to 920m (2953 to 3018 ft)

AEM Mean Resistivity

RAMBOLL





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Resistivity [ohm-m]

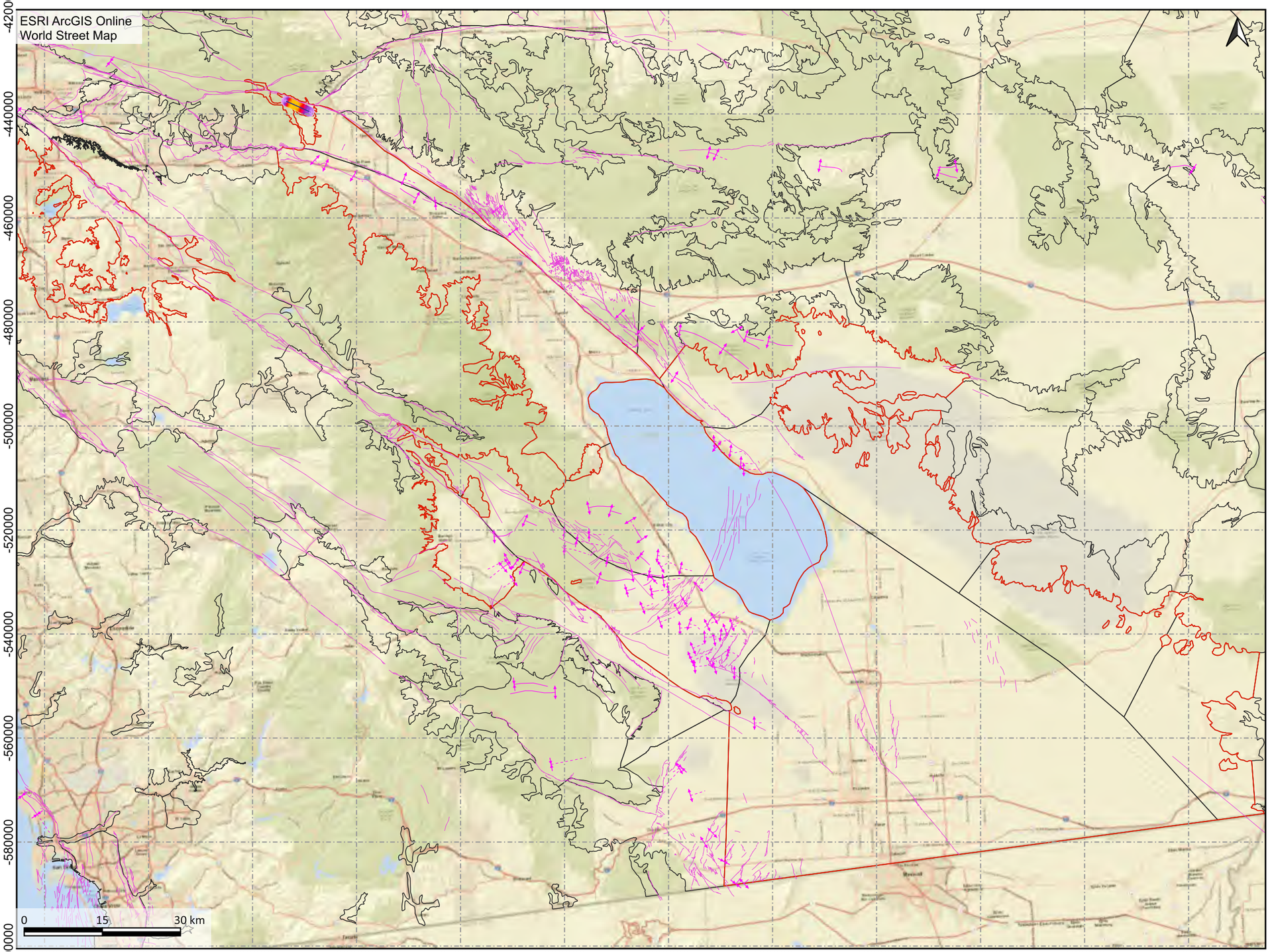
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 880 to 900m (2887 to 2953 ft)

AEM Mean Resistivity

RAMBOLL





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Resistivity [ohm-m]

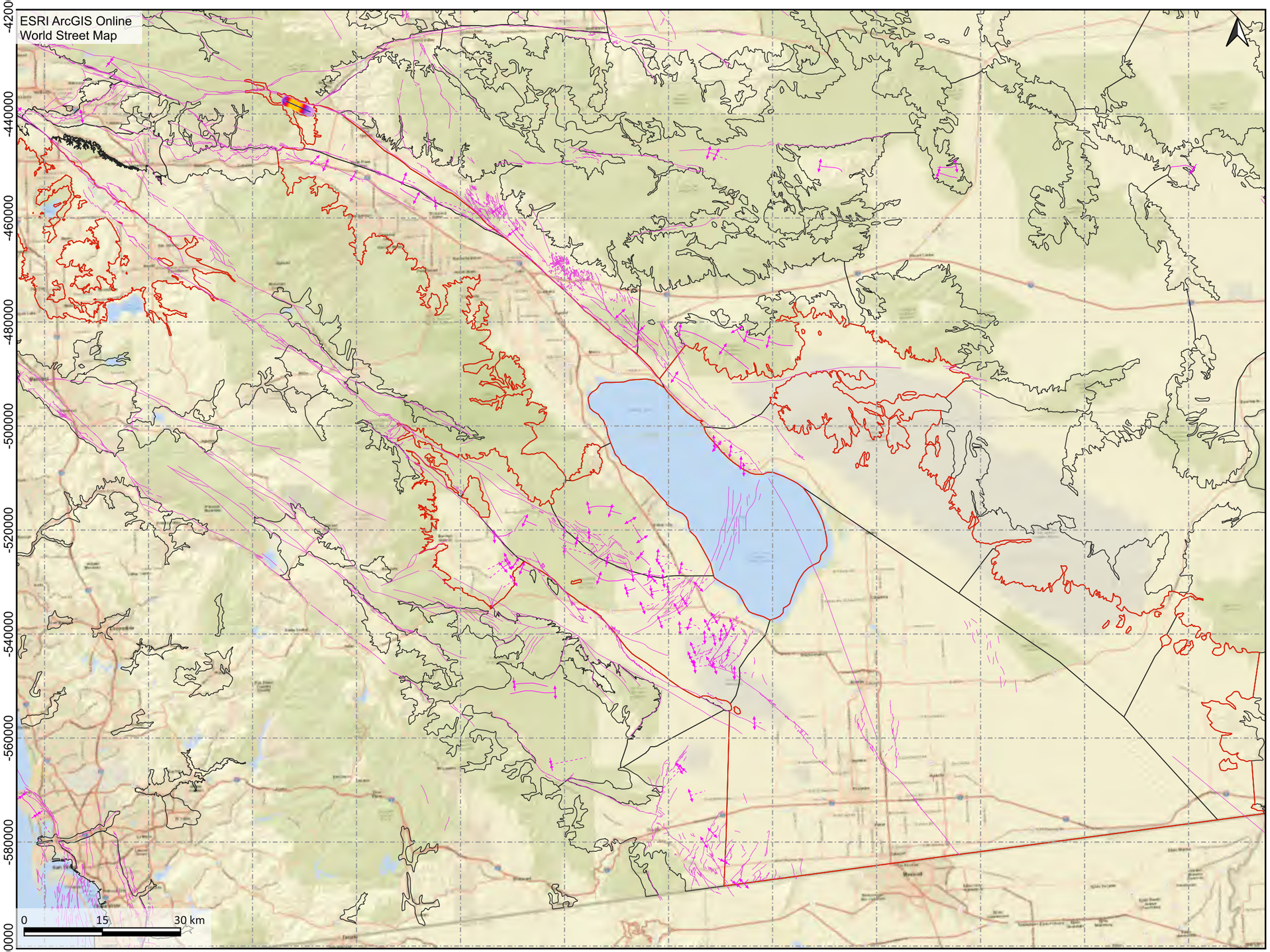
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Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 860 to 880m (2822 to 2887 ft)

AEM Mean Resistivity

RAMBOLL





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Synclines and Anticlines (CGS, 2010)

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Elevation-averaged resistivity values (from smooth resistivity model)

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Resistivity [ohm-m]

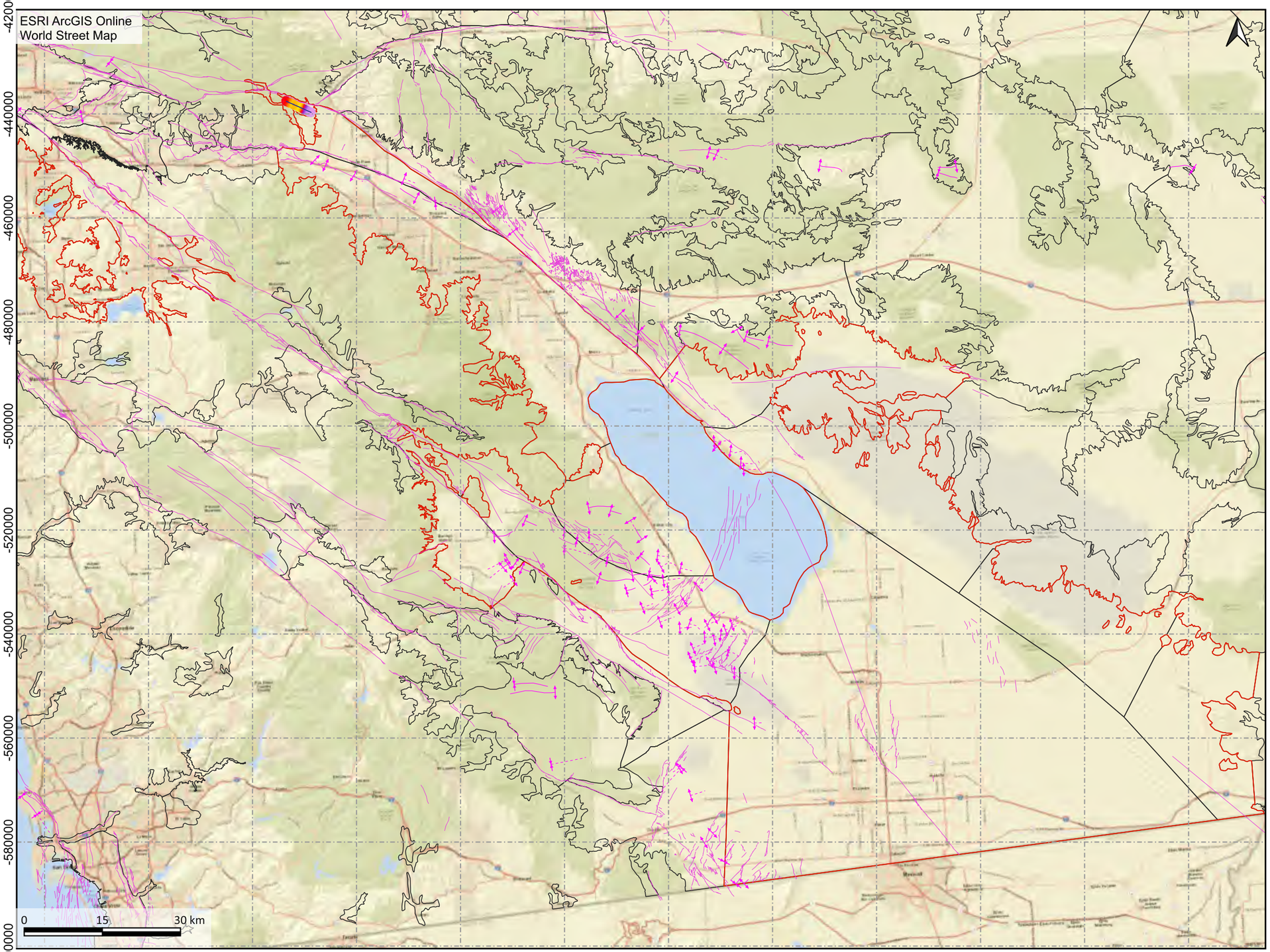
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 840 to 860m (2756 to 2822 ft)

AEM Mean Resistivity

RAMBOLL





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Synclines and Anticlines (CGS, 2010)

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Elevation-averaged resistivity values (from smooth resistivity model)

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Resistivity [ohm-m]

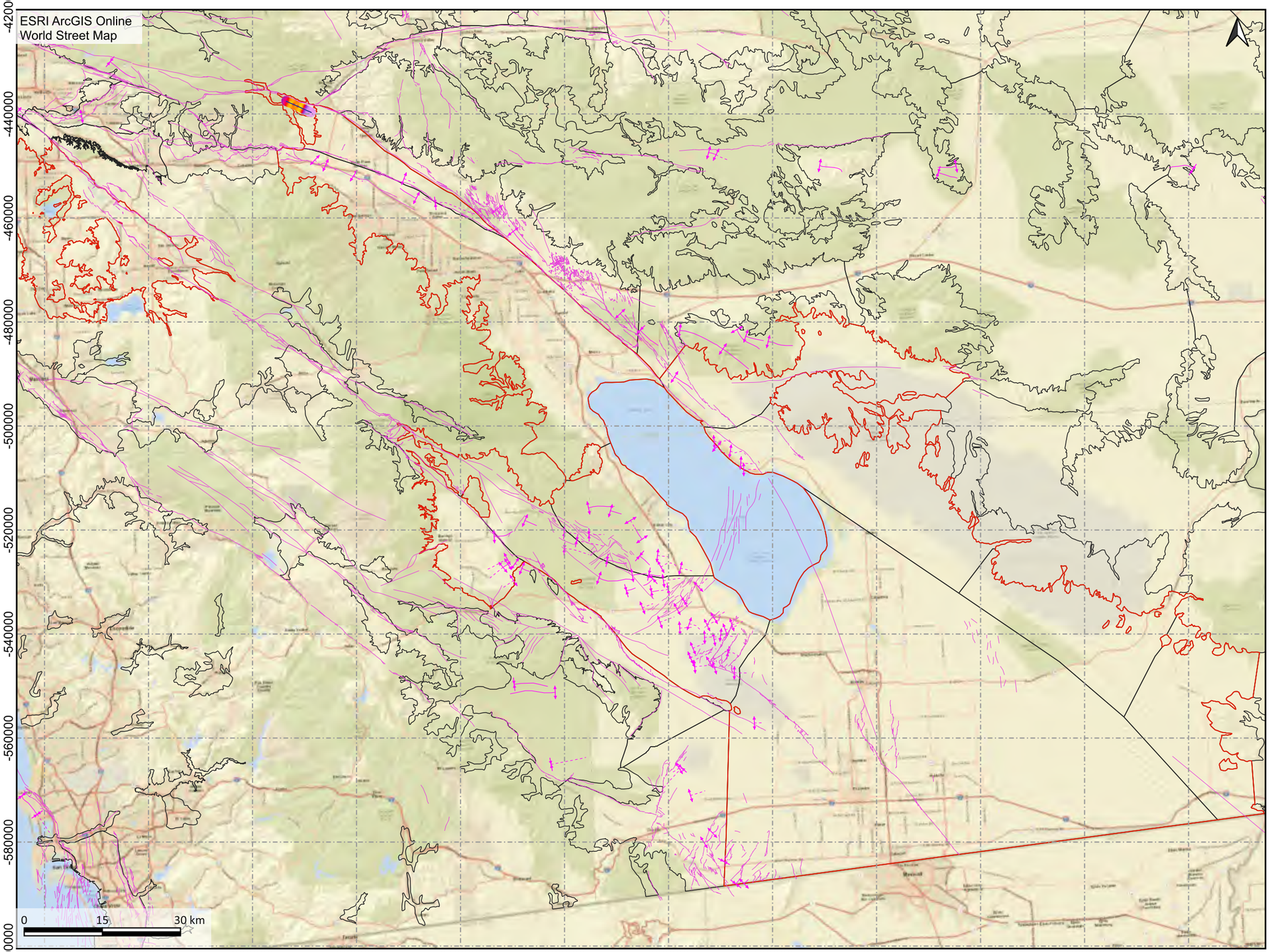
Coordinate system: NAD83 / California Albers, EPSG: 3310

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WO13, Elevation Interval 820 to 840m (2690 to 2756 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

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- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

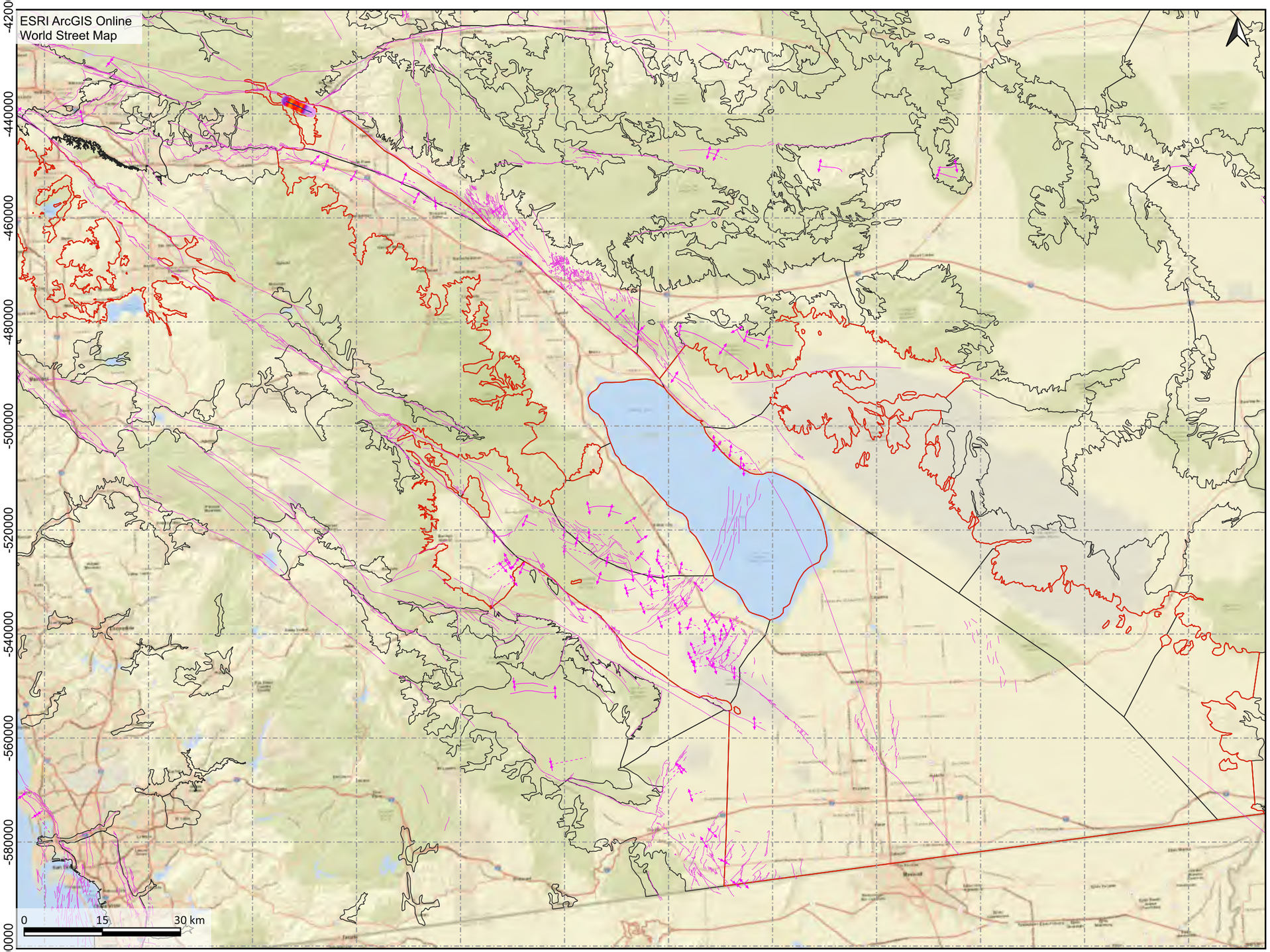
Coordinate system: NAD83 / California Albers, EPSG: 3310

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WO13, Elevation Interval 800 to 820m (2625 to 2690 ft)

AEM Mean Resistivity

RAMBOLL





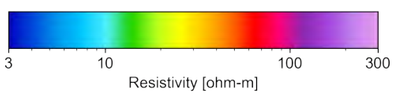
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Synclines and Anticlines (CGS, 2010)

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- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



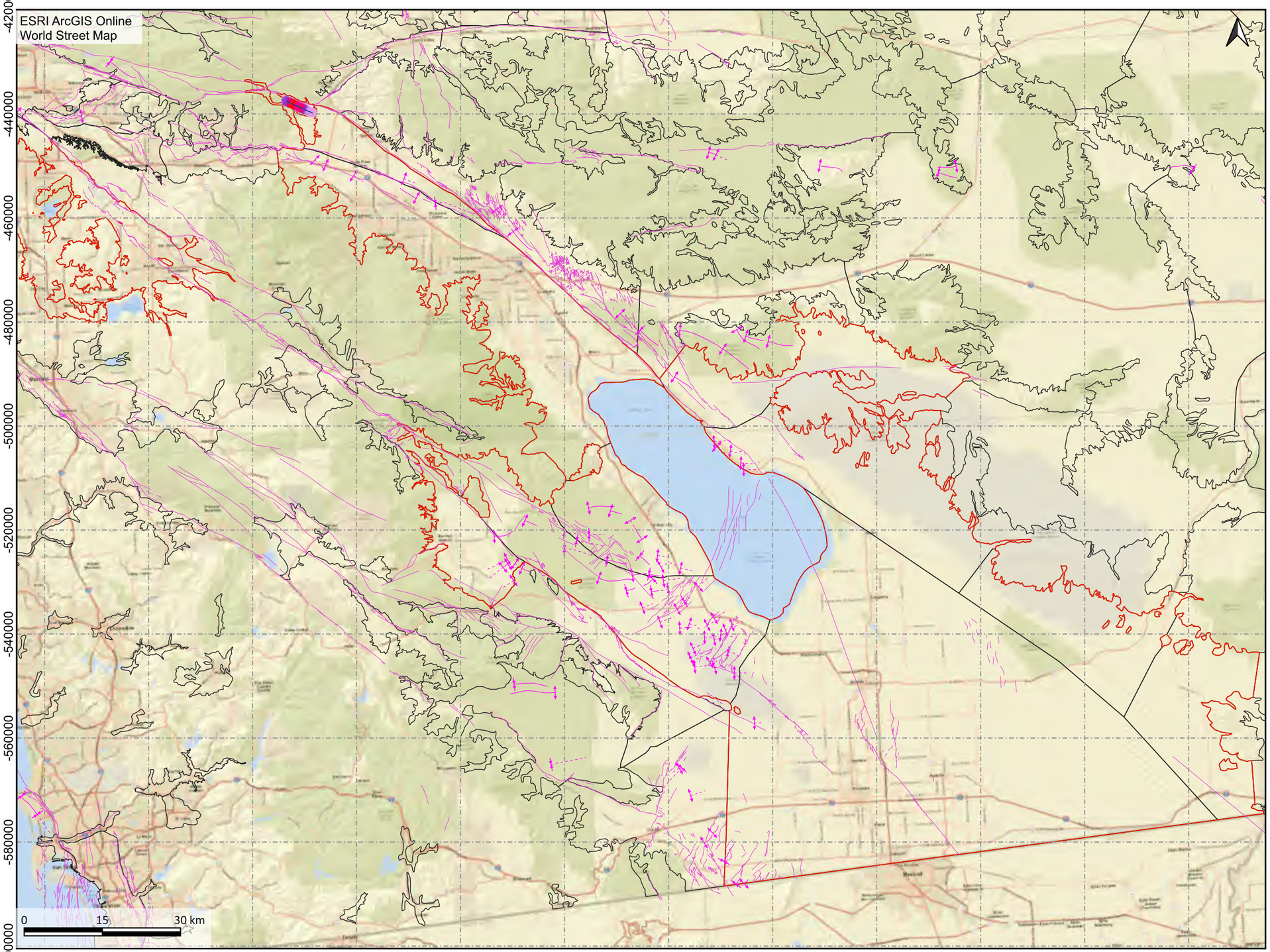
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WO13, Elevation Interval 780 to 800m (2559 to 2625 ft)

AEM Mean Resistivity

RAMBOLL





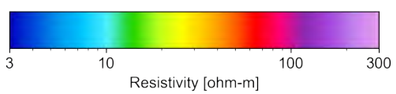
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Elevation-averaged resistivity values (from smooth resistivity model)



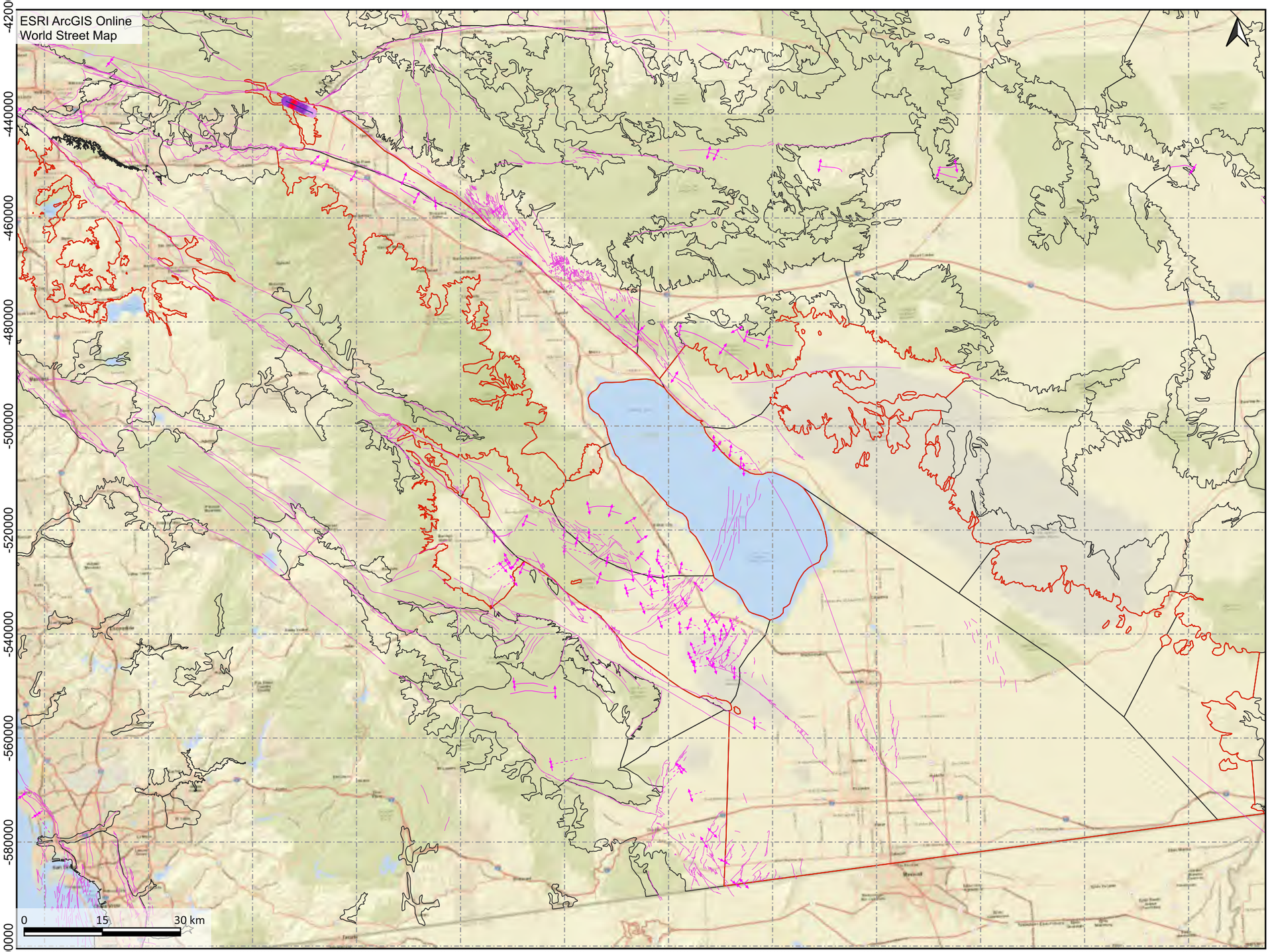
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WO13, Elevation Interval 760 to 780m (2493 to 2559 ft)

AEM Mean Resistivity

RAMBOLL





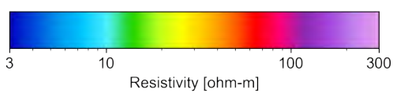
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Elevation-averaged resistivity values (from smooth resistivity model)



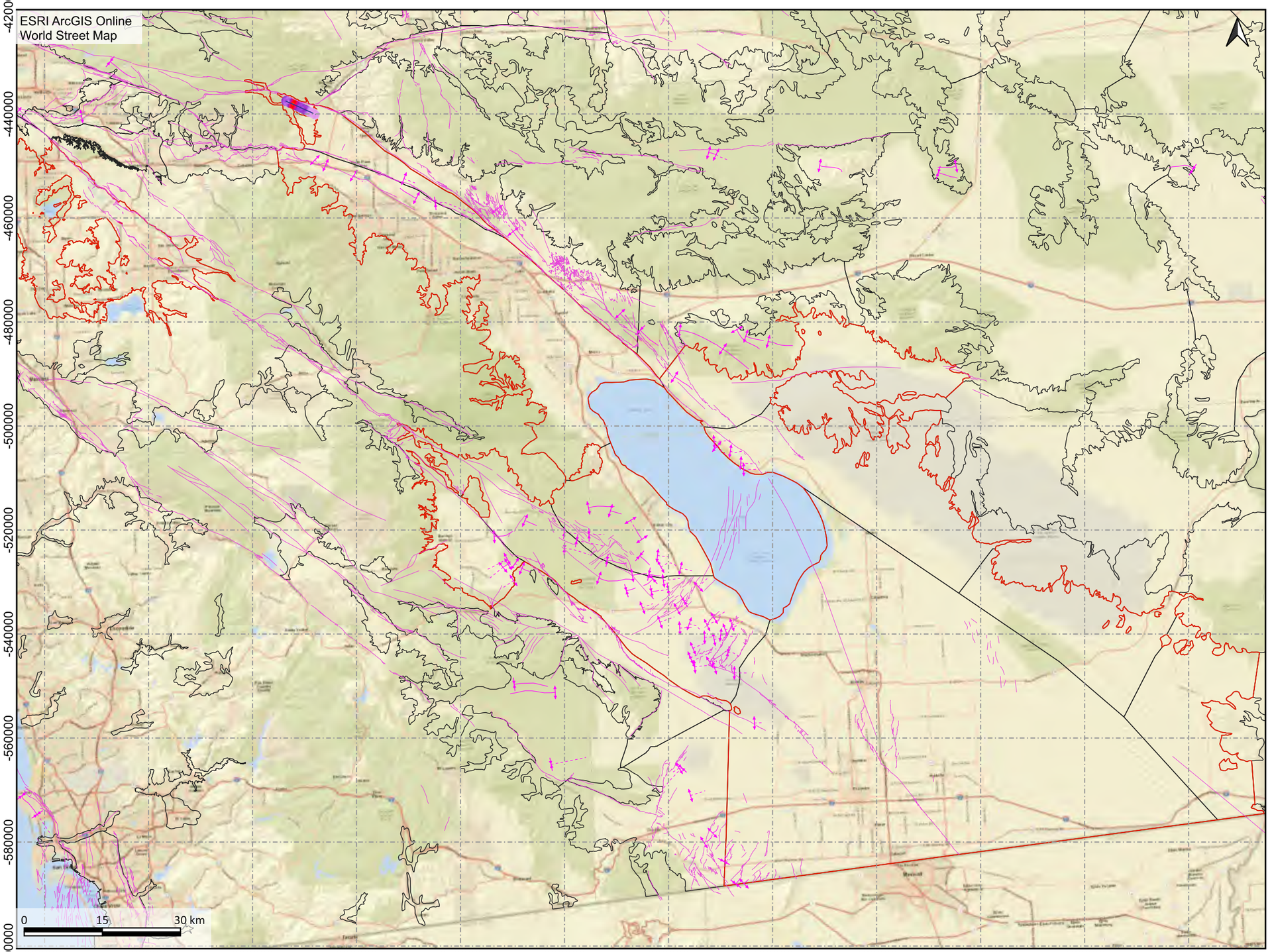
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Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 740 to 760m (2428 to 2493 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

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Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

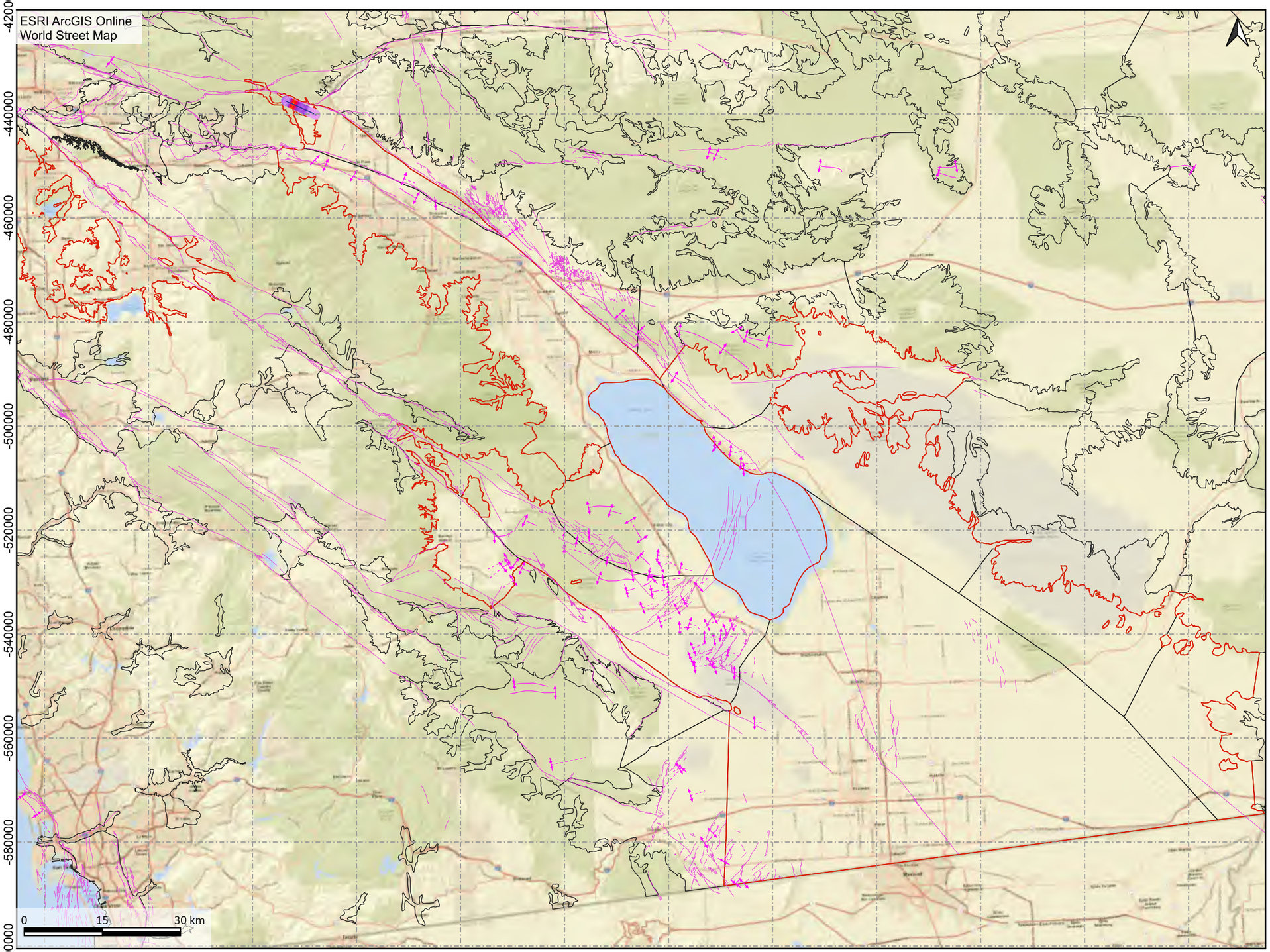
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WO13, Elevation Interval 720 to 740m (2362 to 2428 ft)

AEM Mean Resistivity

RAMBOLL





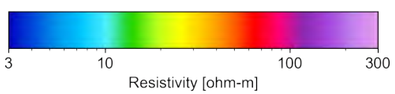
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Elevation-averaged resistivity values (from smooth resistivity model)



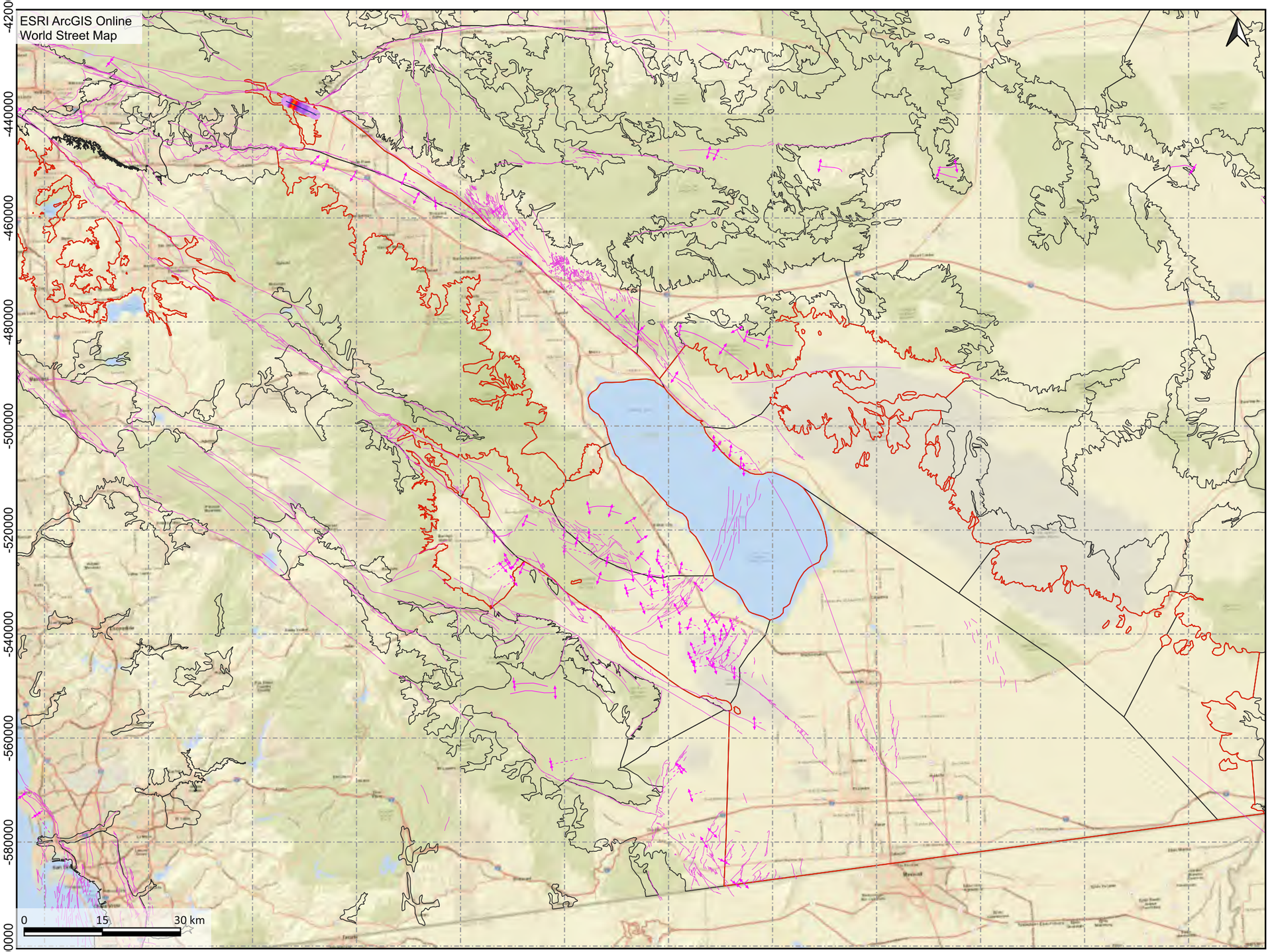
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 700 to 720m (2297 to 2362 ft)

AEM Mean Resistivity

RAMBOLL





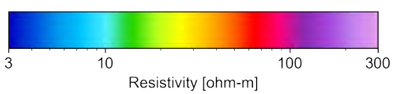
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Elevation-averaged resistivity values (from smooth resistivity model)



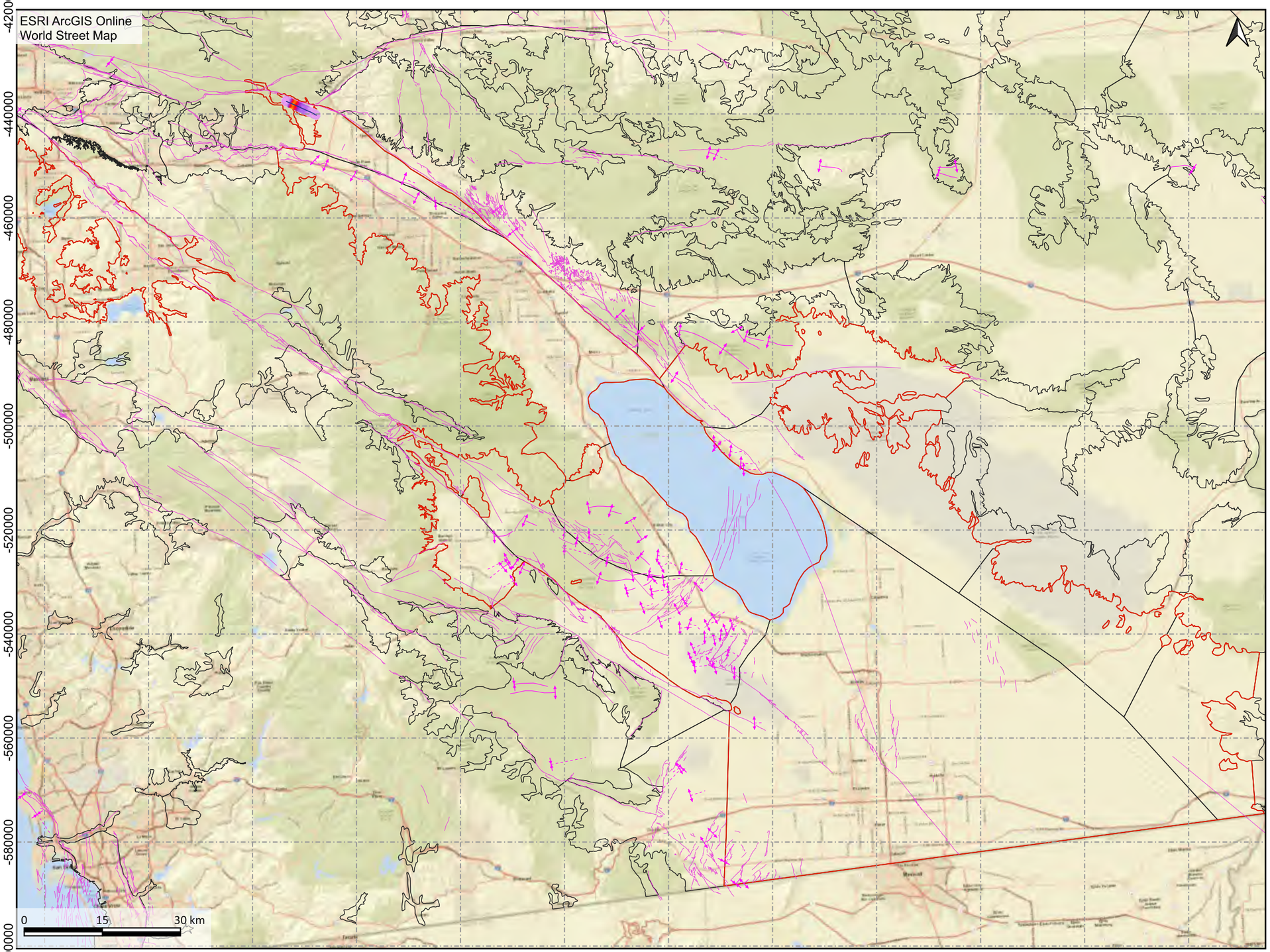
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 680 to 700m (2231 to 2297 ft)

AEM Mean Resistivity

RAMBOLL





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Resistivity [ohm-m]

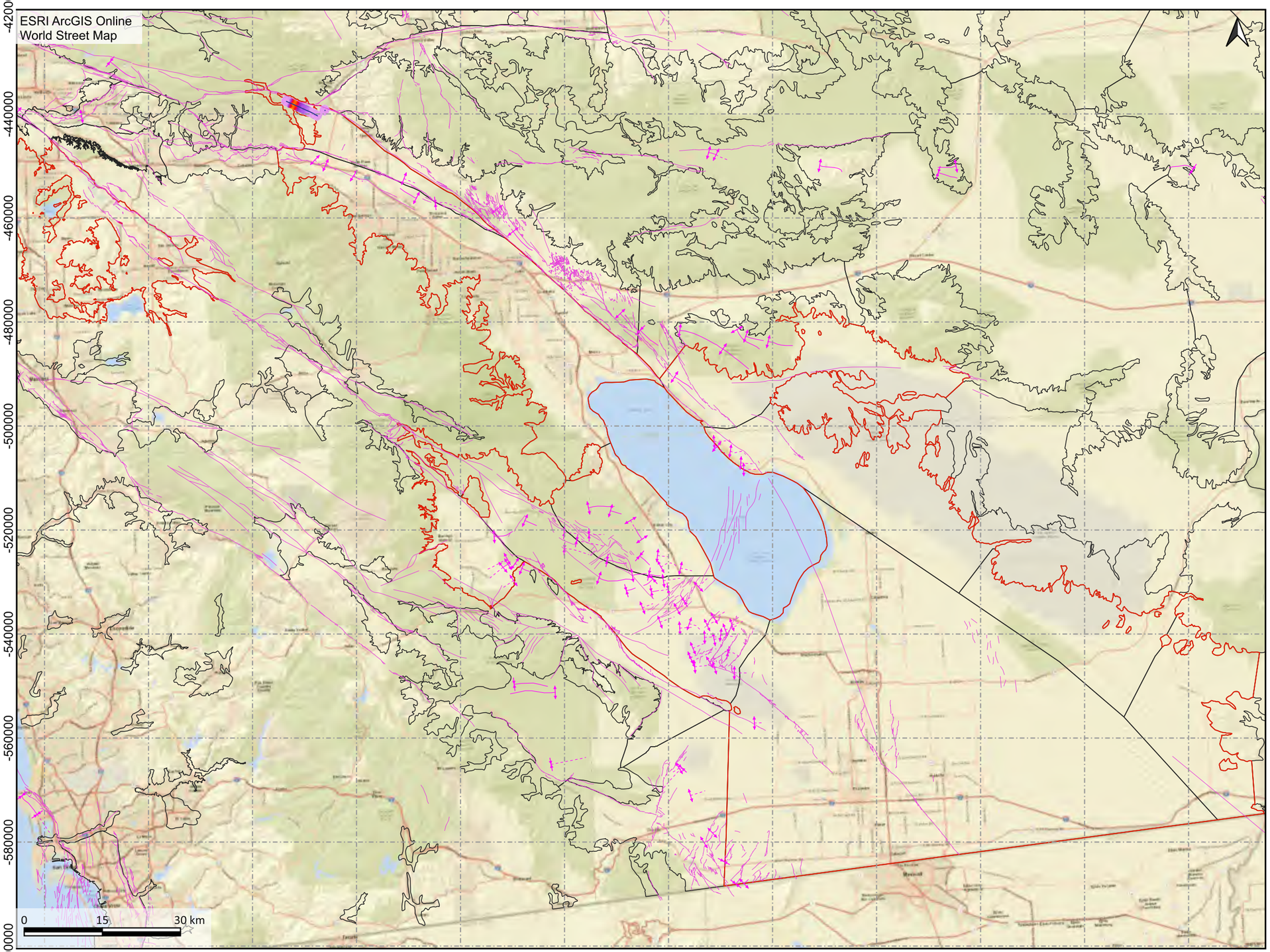
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 660 to 680m (2165 to 2231 ft)

AEM Mean Resistivity

RAMBOLL





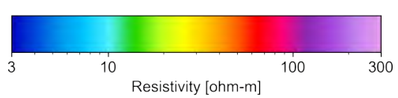
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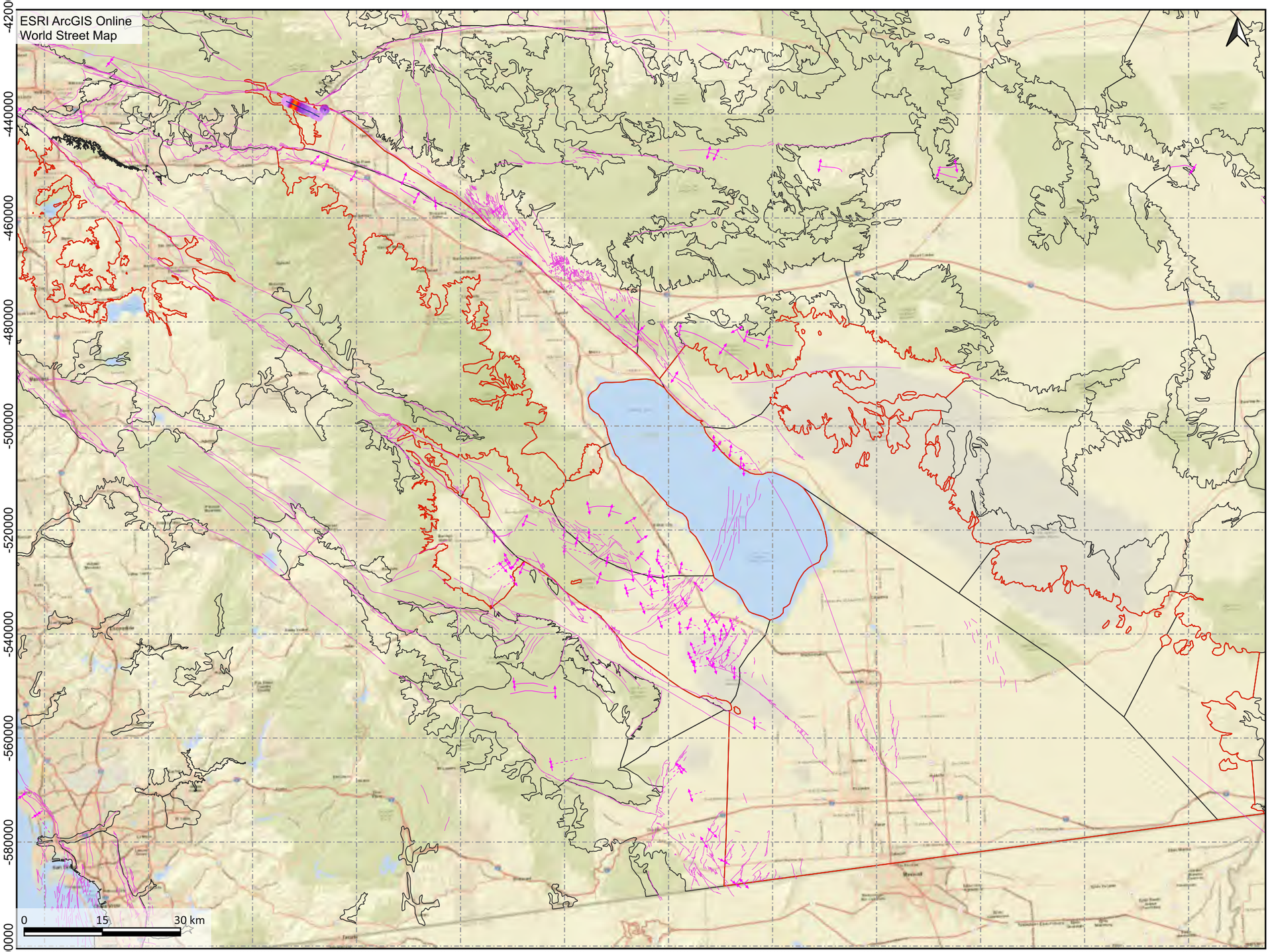
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 640 to 660m (2100 to 2165 ft)

AEM Mean Resistivity

RAMBOLL





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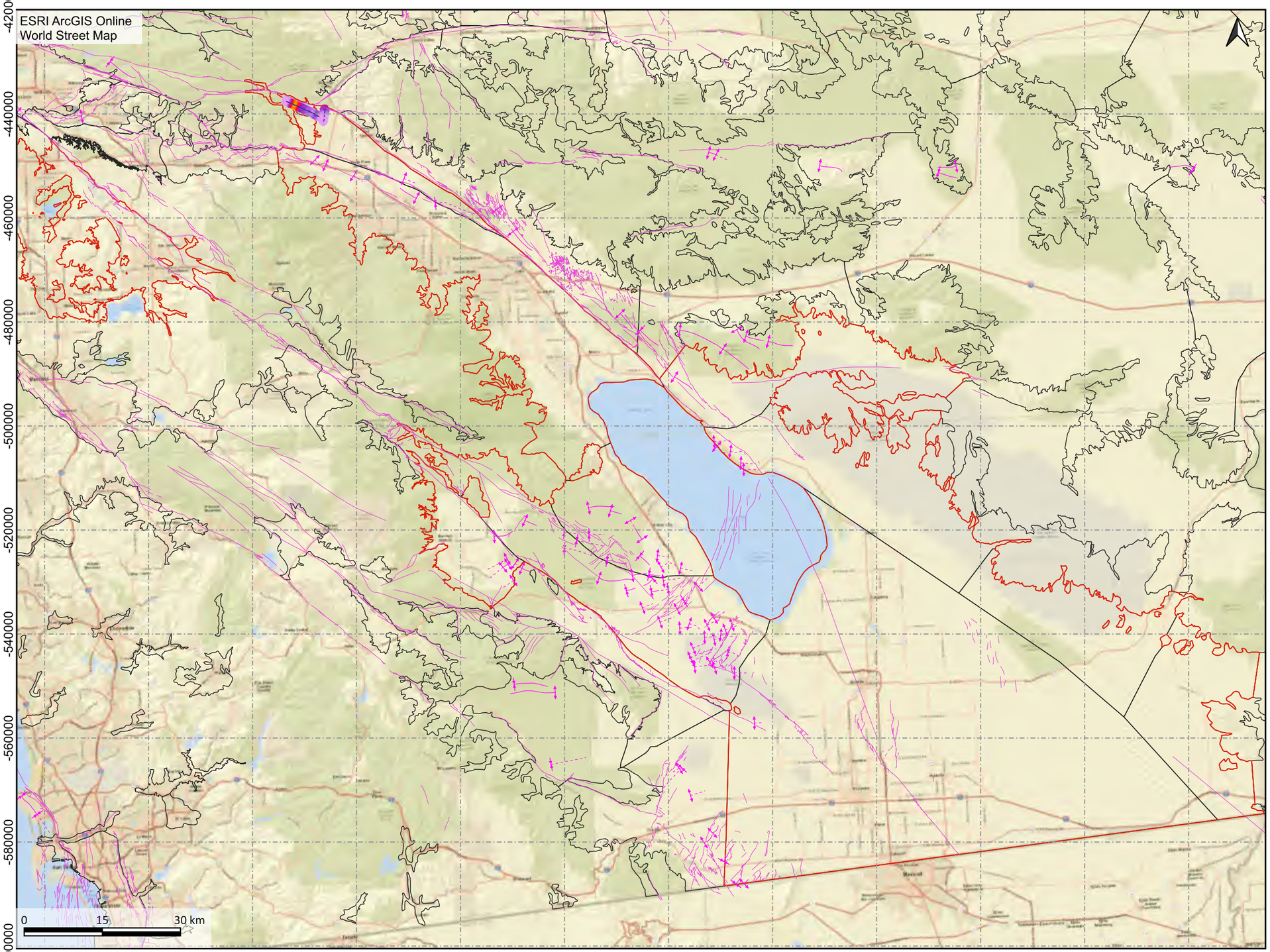
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Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 620 to 640m (2034 to 2100 ft)

AEM Mean Resistivity

RAMBOLL





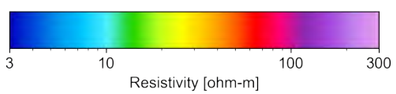
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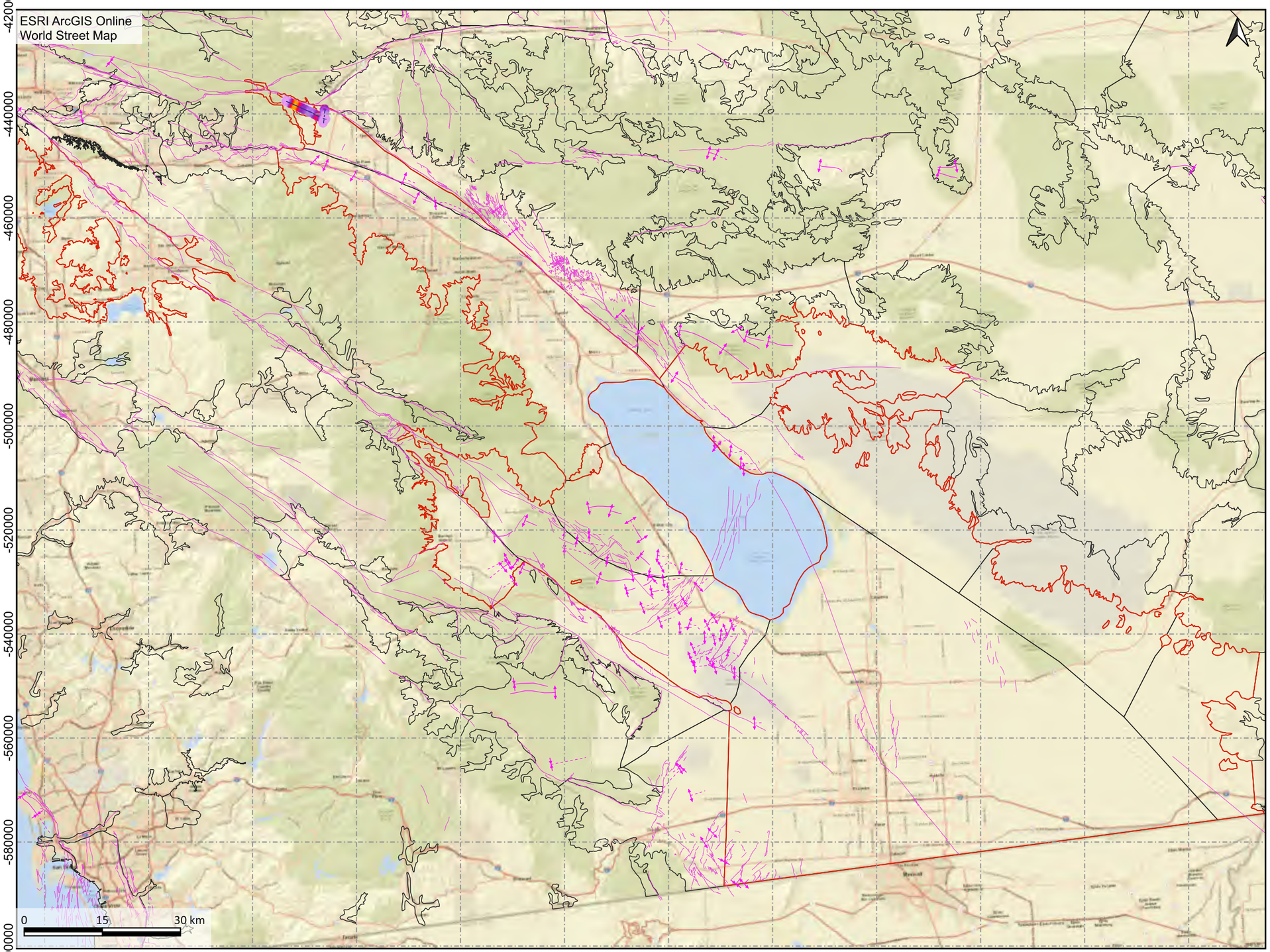
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WO13, Elevation Interval 600 to 620m (1969 to 2034 ft)

AEM Mean Resistivity

RAMBOLL





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3 10 100 300

Resistivity [ohm-m]

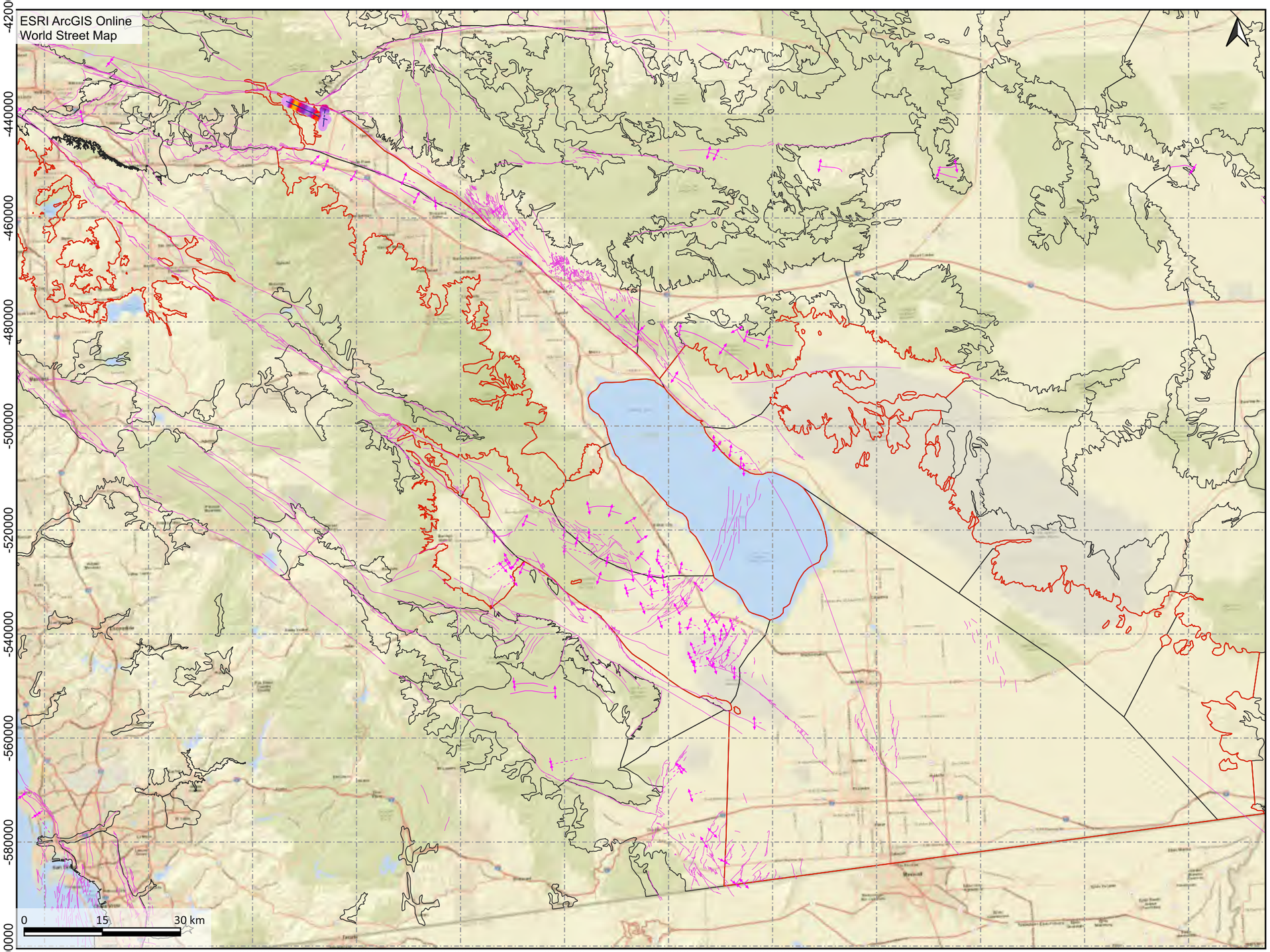
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 580 to 600m (1903 to 1969 ft)

AEM Mean Resistivity

RAMBOLL





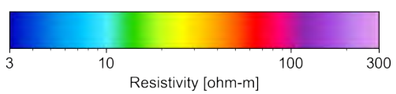
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



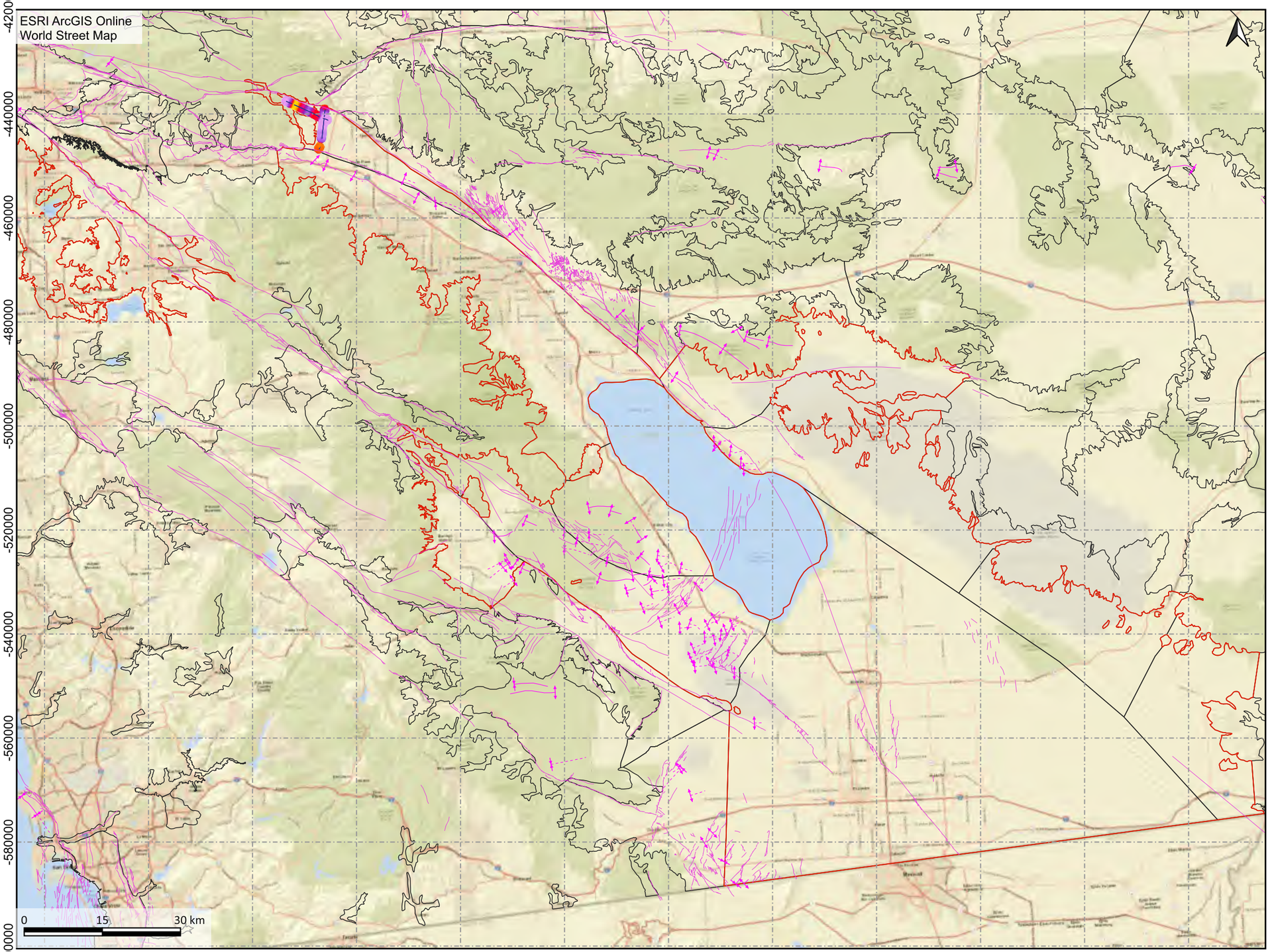
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 560 to 580m (1837 to 1903 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

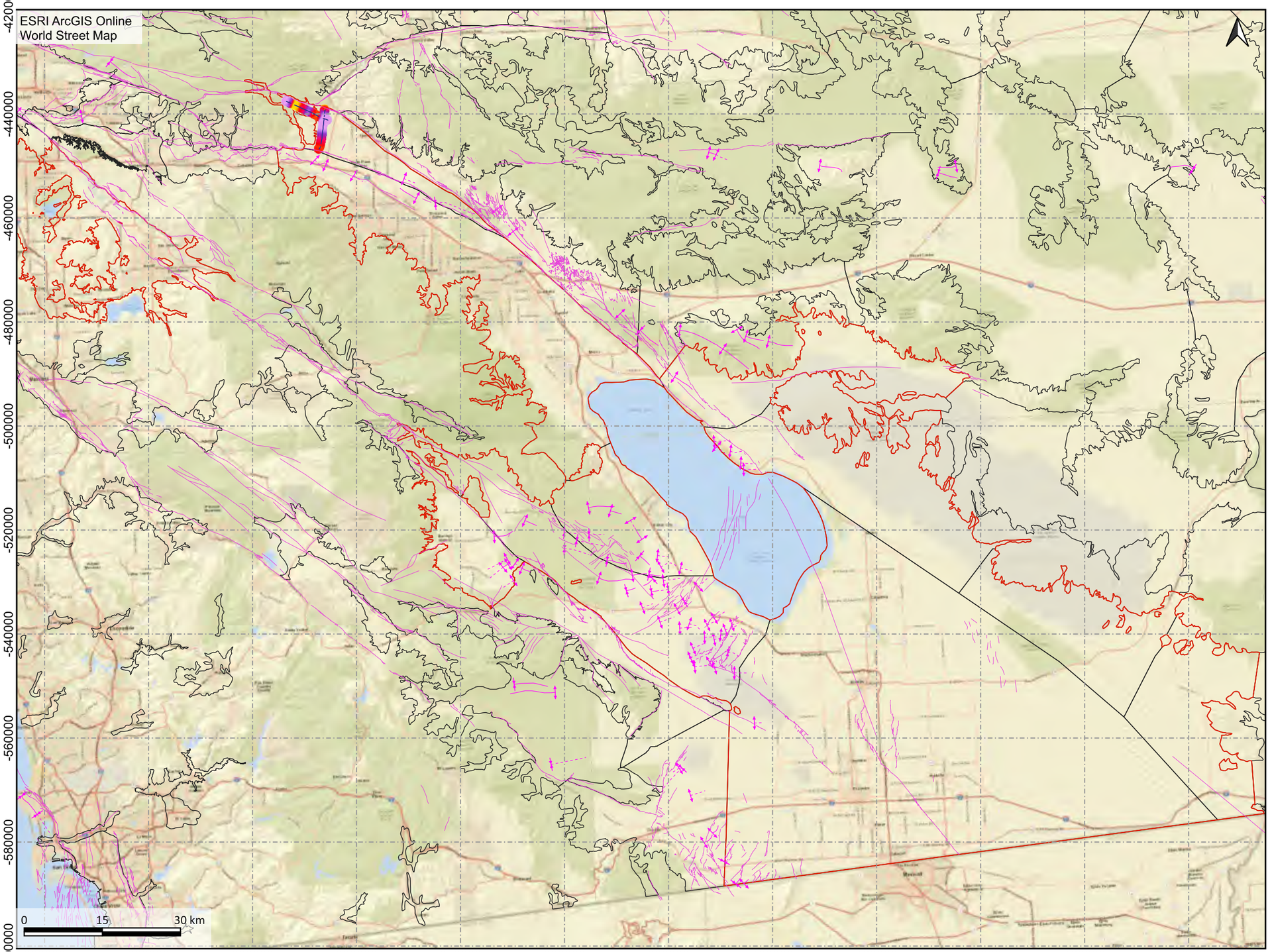
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 540 to 560m (1772 to 1837 ft)

AEM Mean Resistivity

RAMBOLL





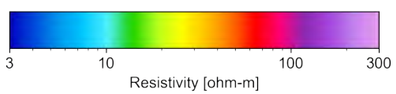
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



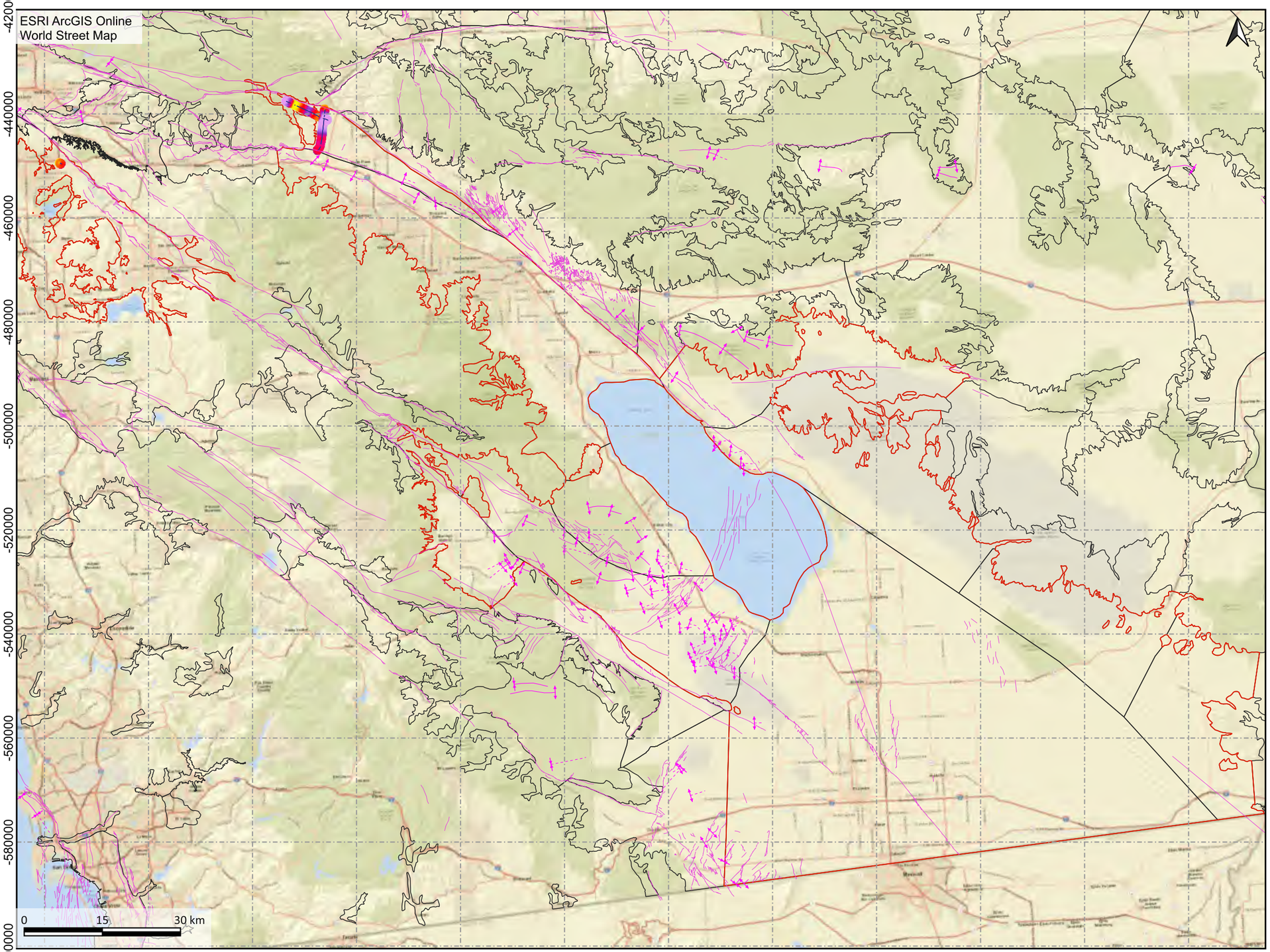
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Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 520 to 540m (1706 to 1772 ft)

AEM Mean Resistivity

RAMBOLL





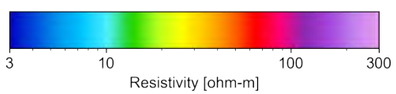
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



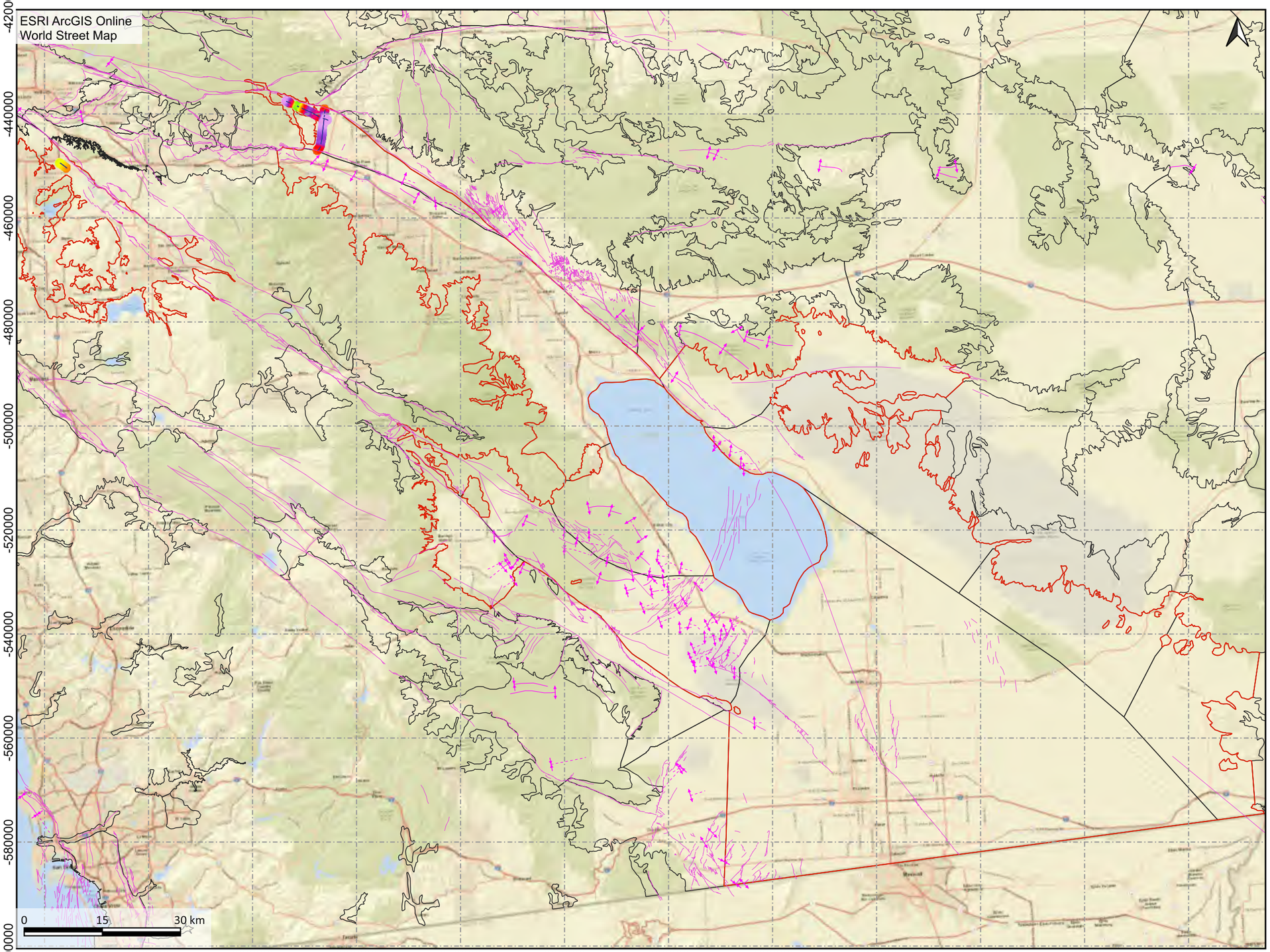
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Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 500 to 520m (1640 to 1706 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

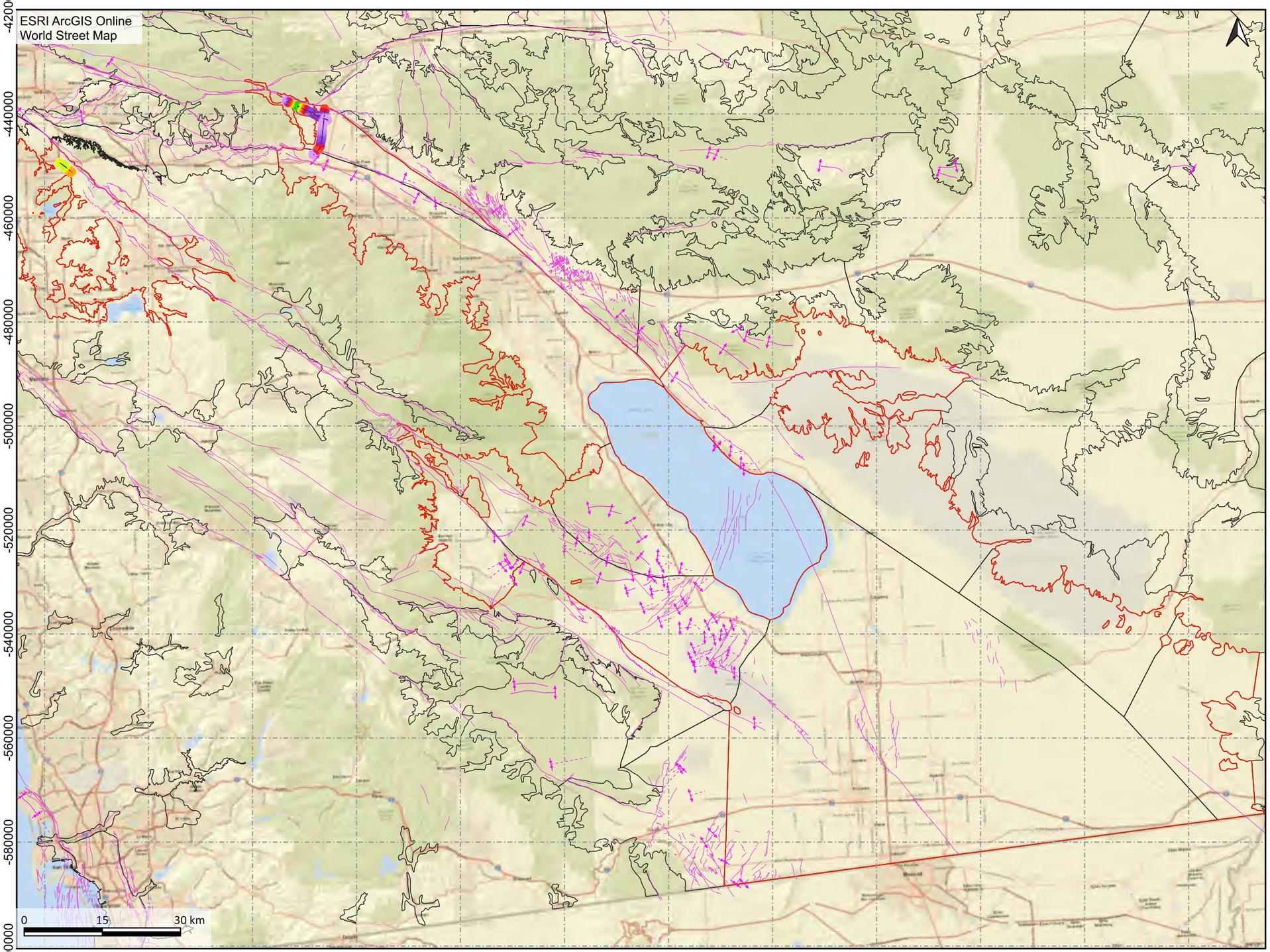
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 480 to 500m (1575 to 1640 ft)

AEM Mean Resistivity

RAMBOLL





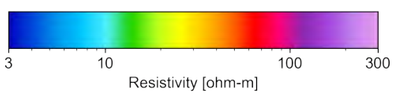
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



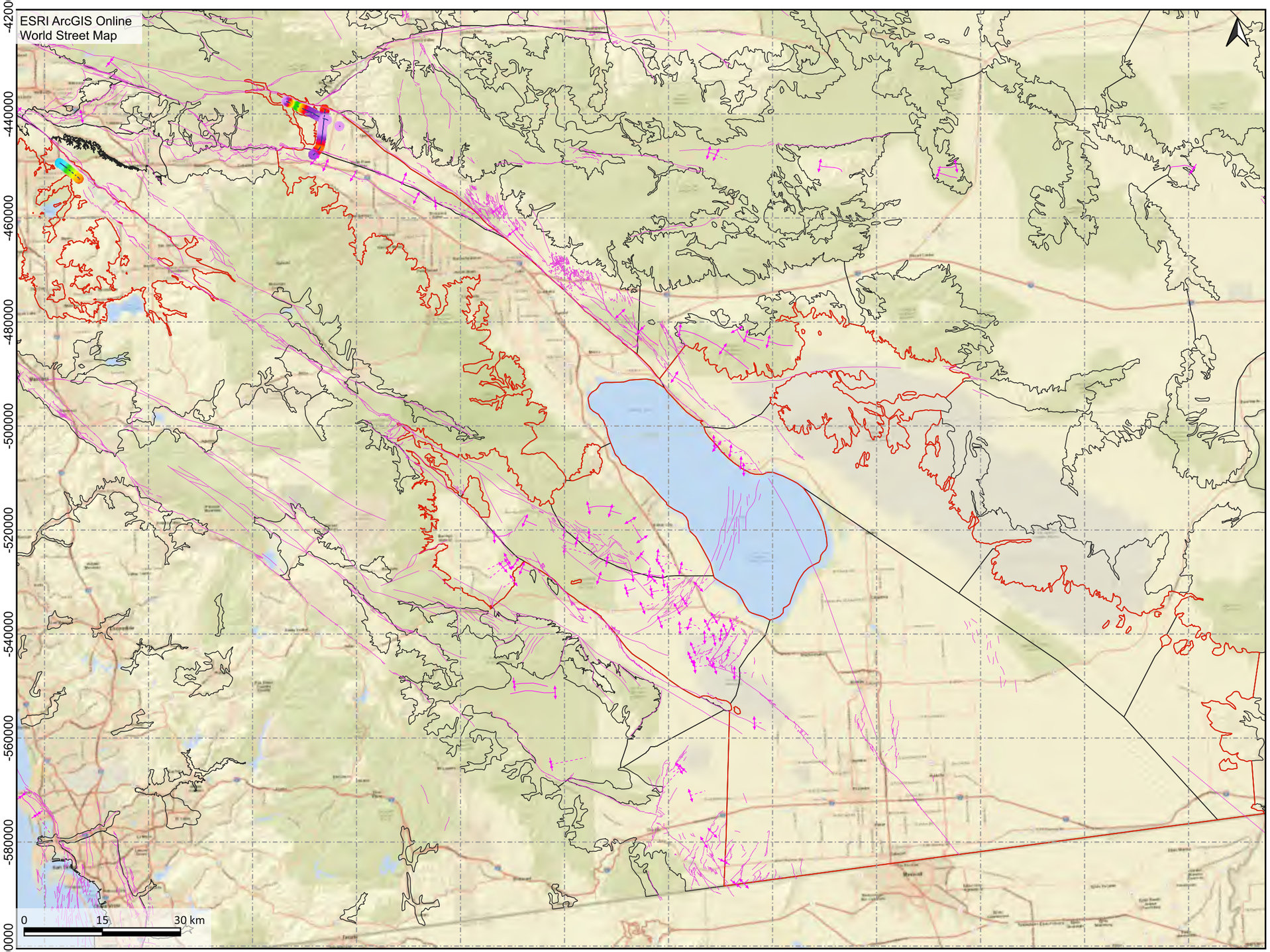
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 460 to 480m (1509 to 1575 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

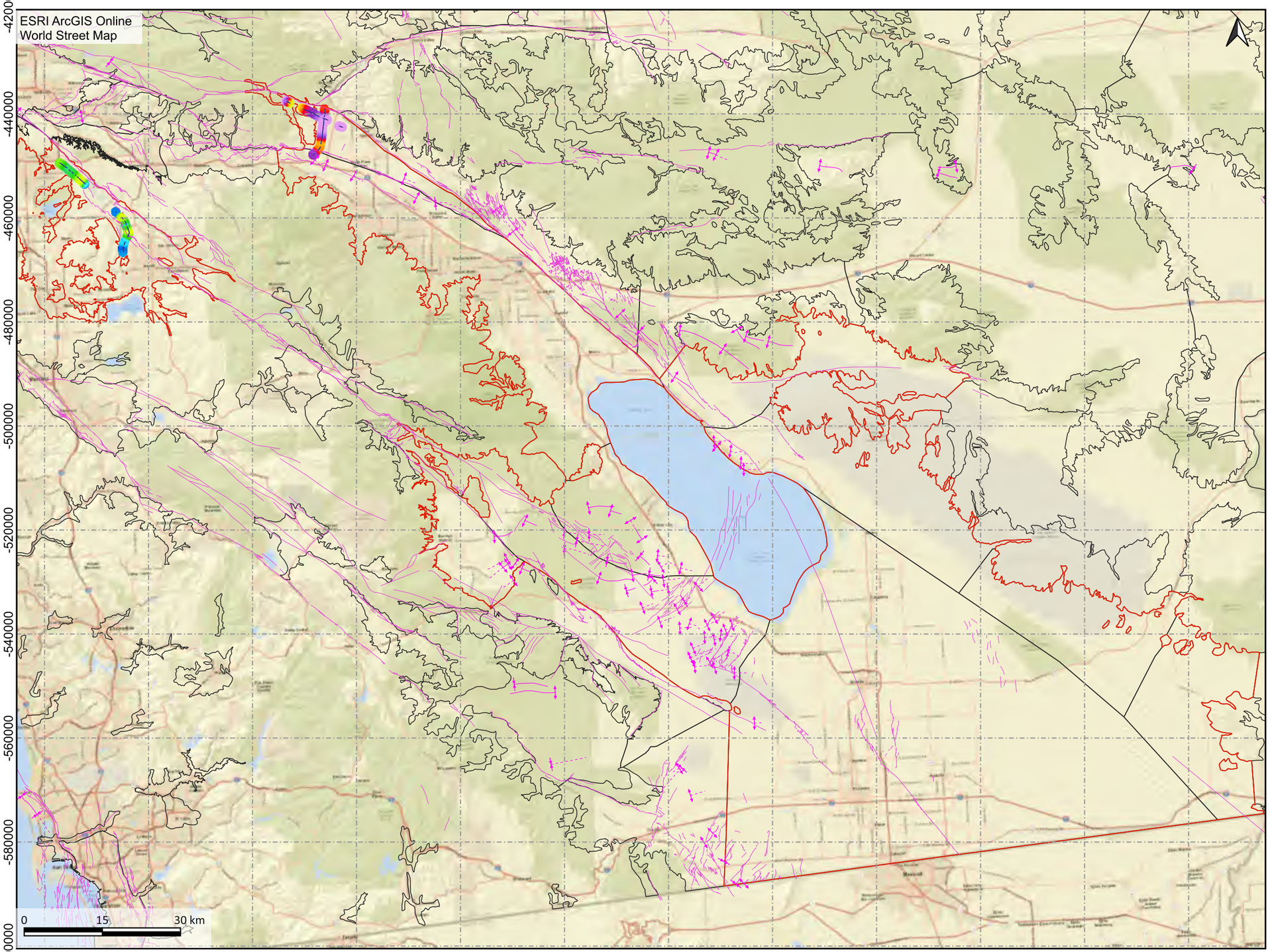
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 440 to 460m (1444 to 1509 ft)

AEM Mean Resistivity

RAMBOLL





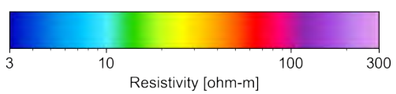
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



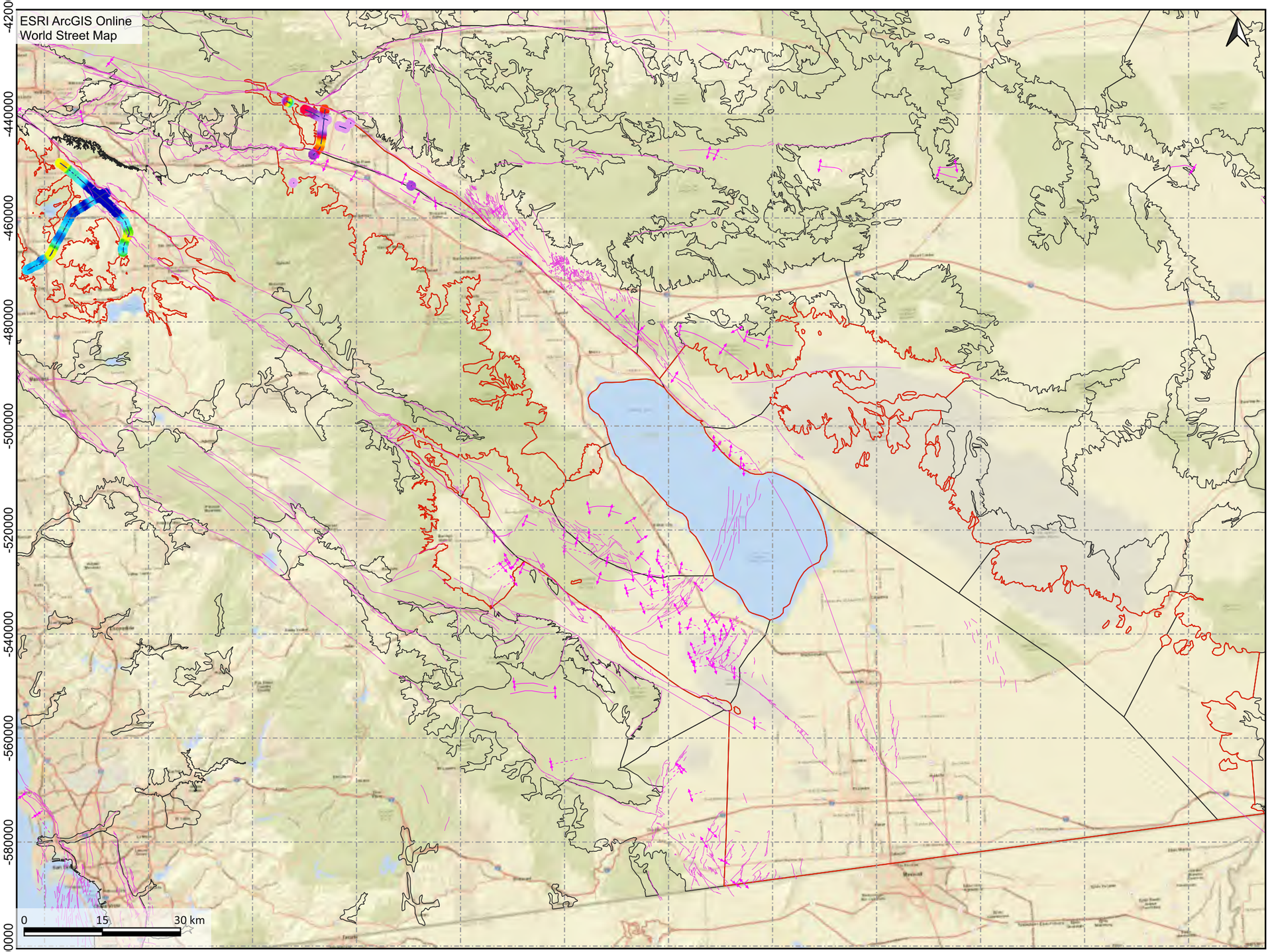
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 420 to 440m (1378 to 1444 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

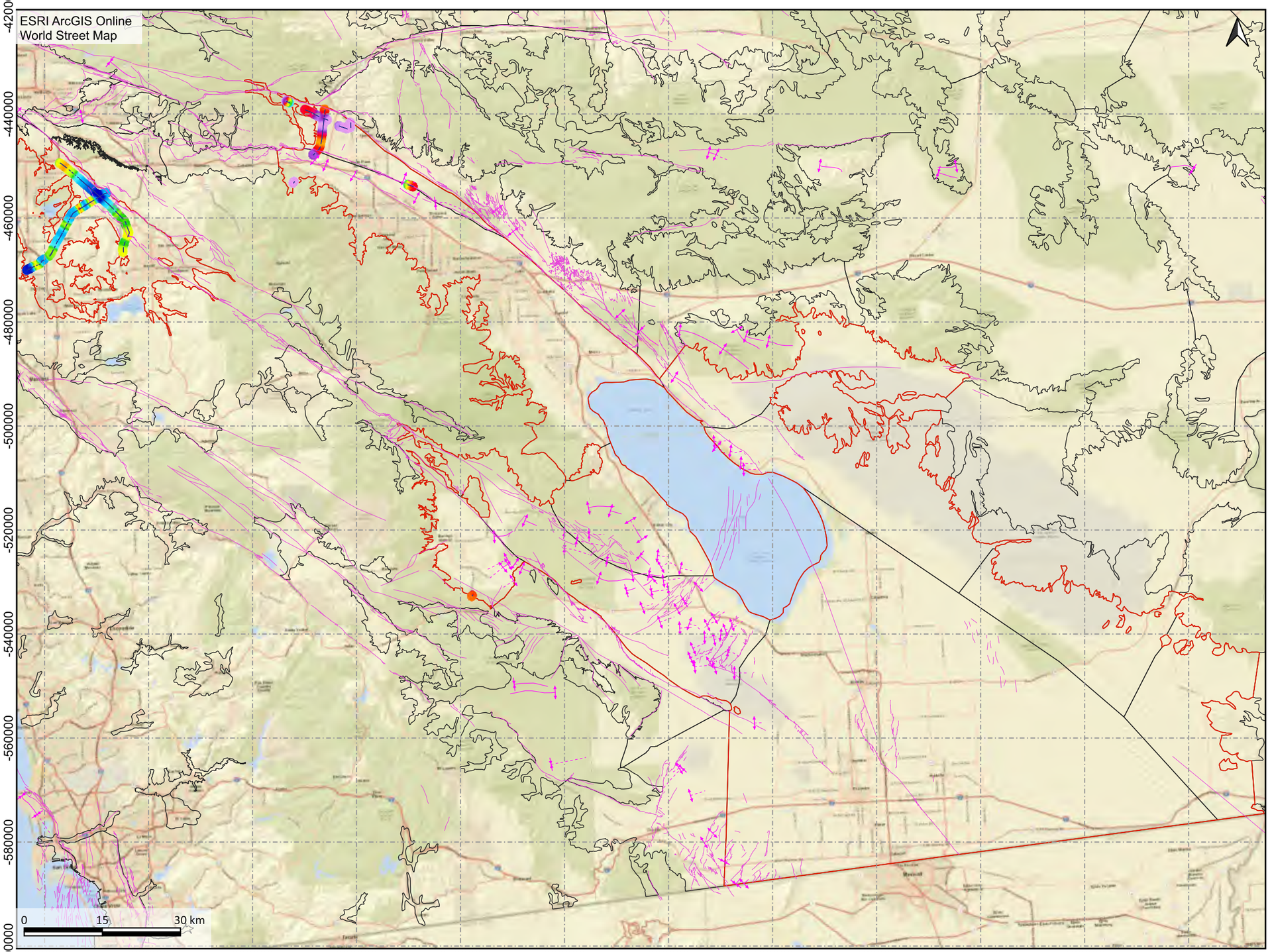
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 400 to 420m (1312 to 1378 ft)

AEM Mean Resistivity

RAMBOLL





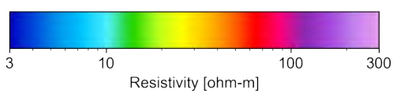
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



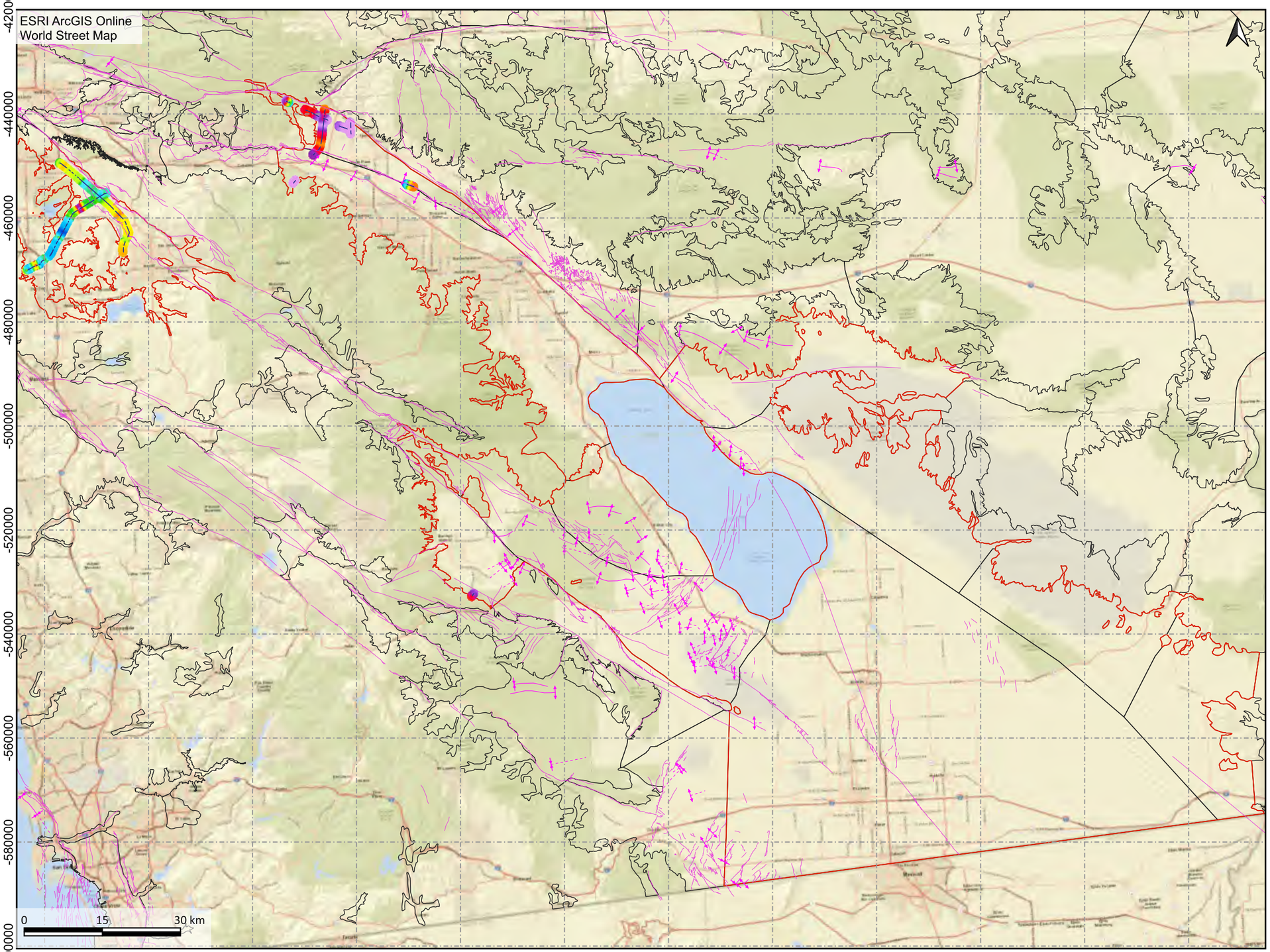
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 380 to 400m (1247 to 1312 ft)

AEM Mean Resistivity

RAMBOLL





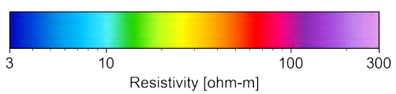
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



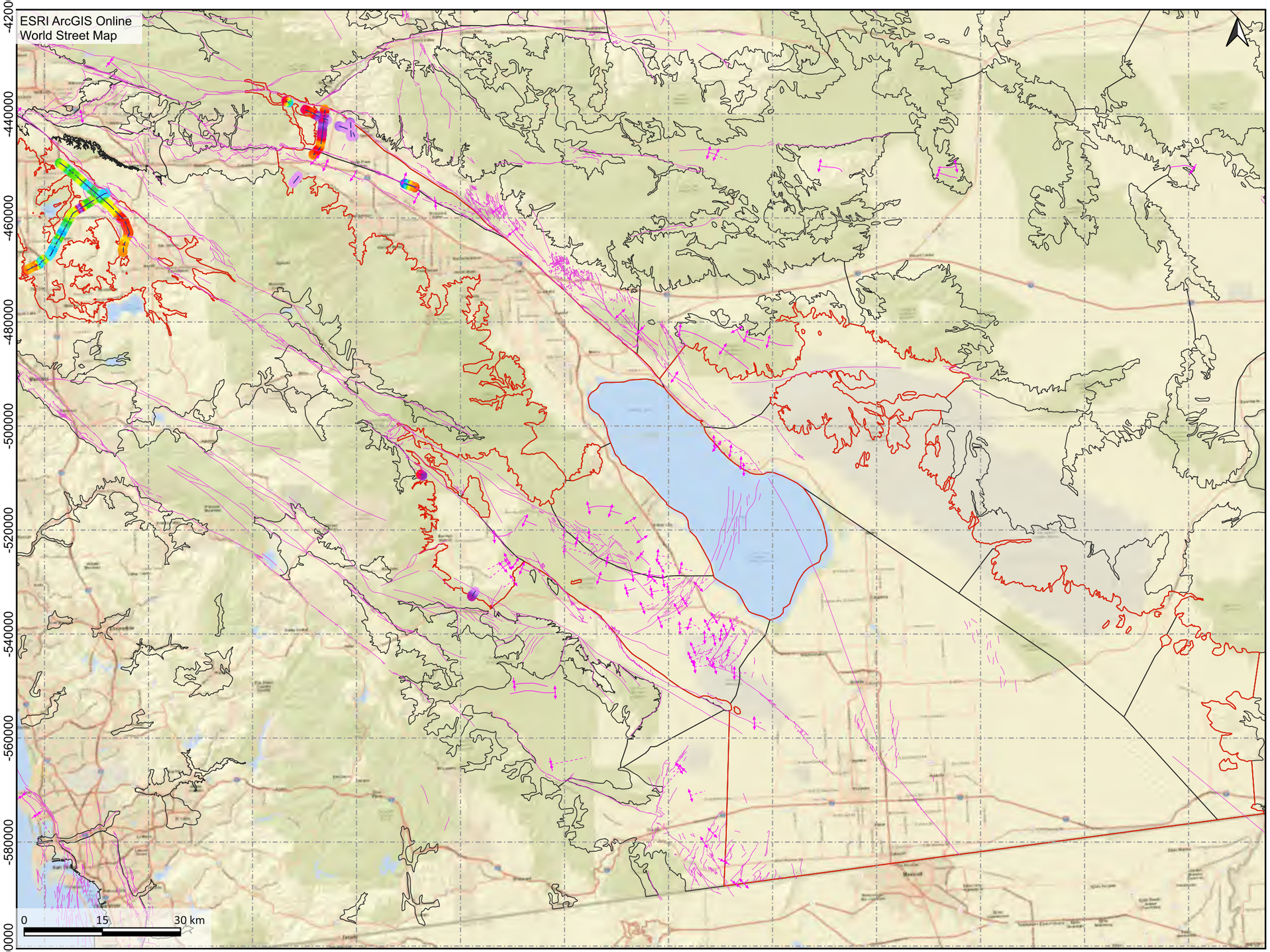
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 360 to 380m (1181 to 1247 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

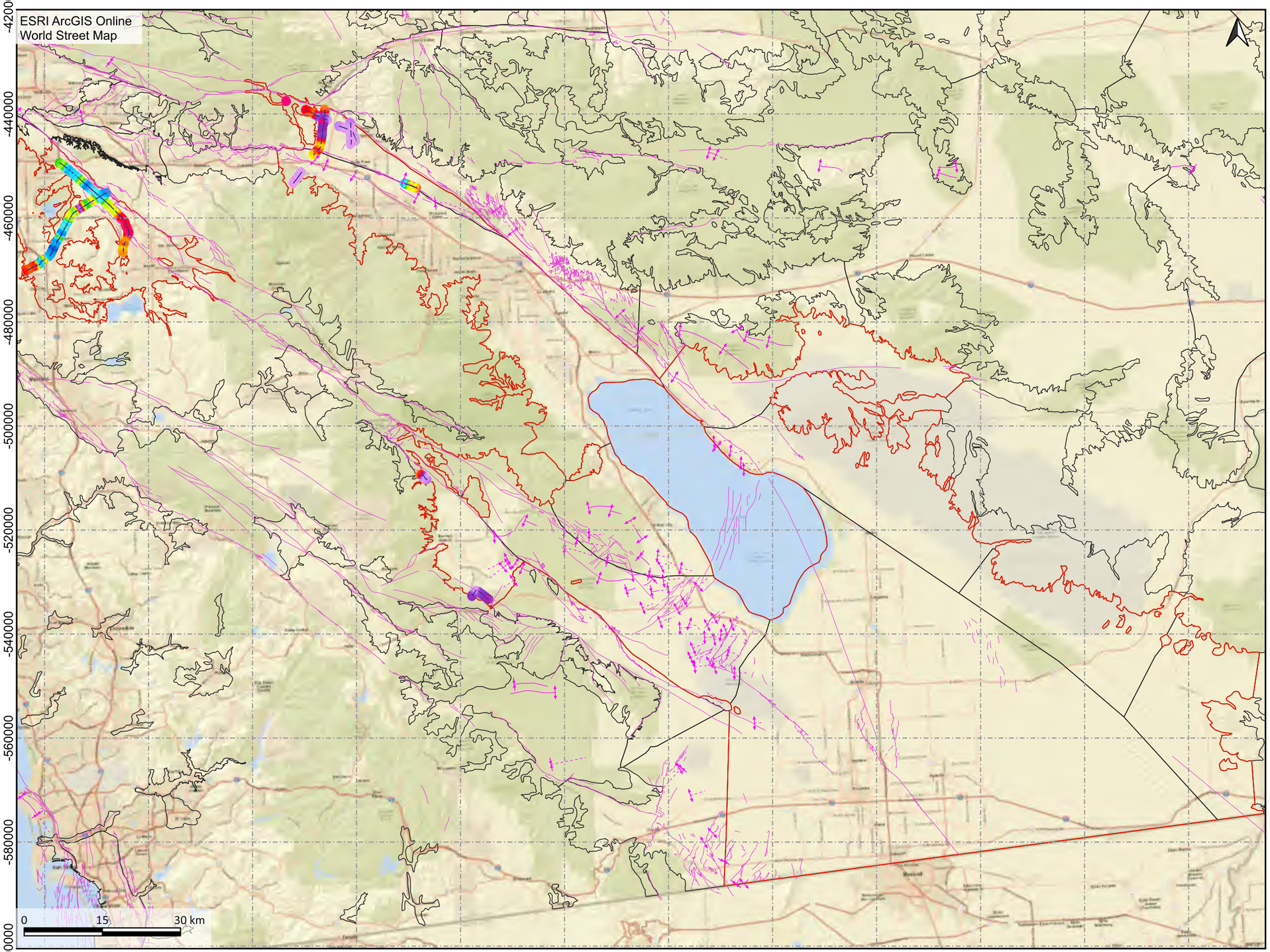
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 340 to 360m (1115 to 1181 ft)

AEM Mean Resistivity

RAMBOLL





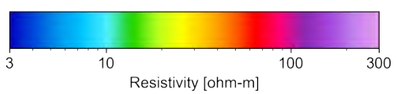
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



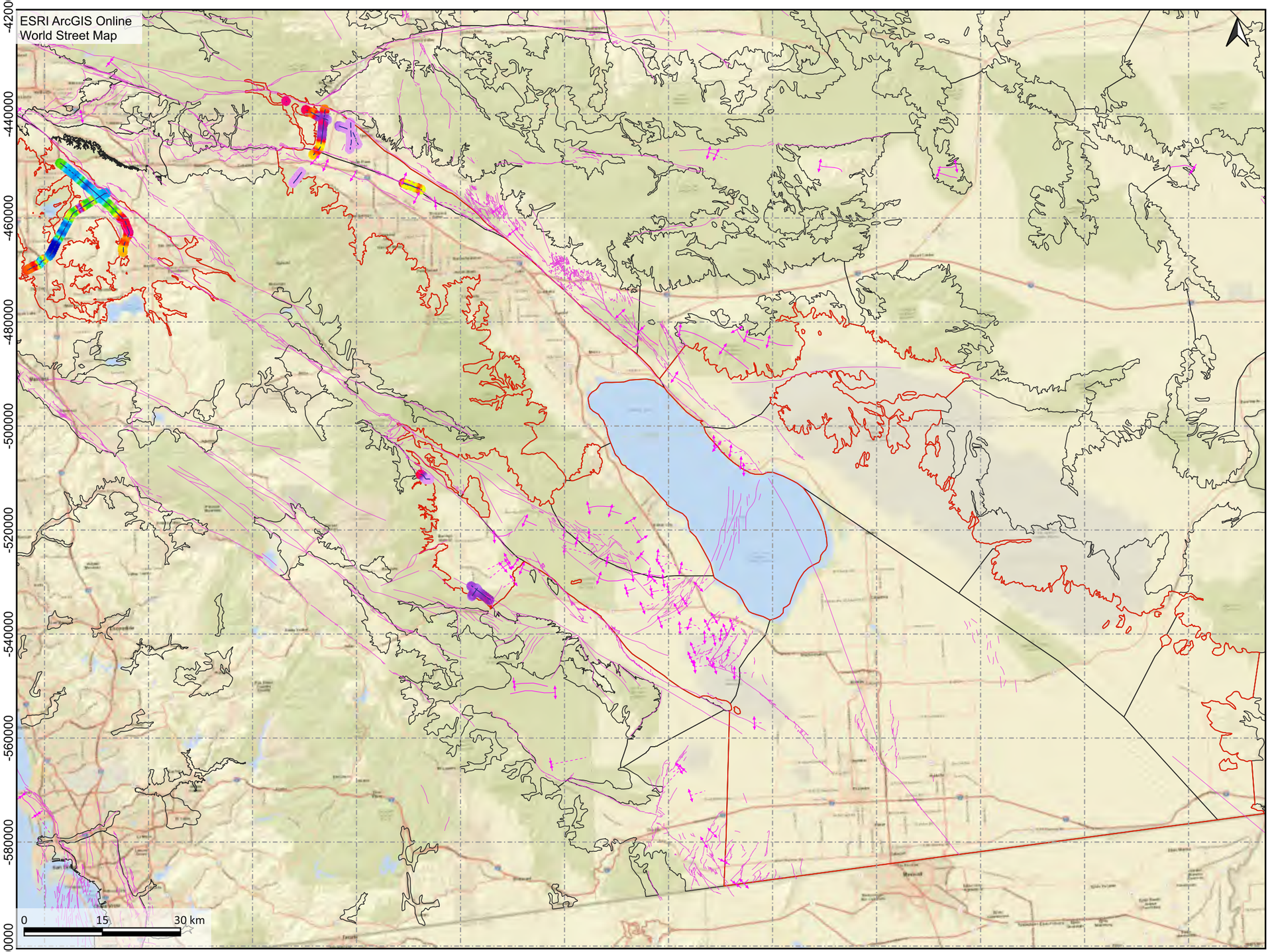
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 320 to 340m (1050 to 1115 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

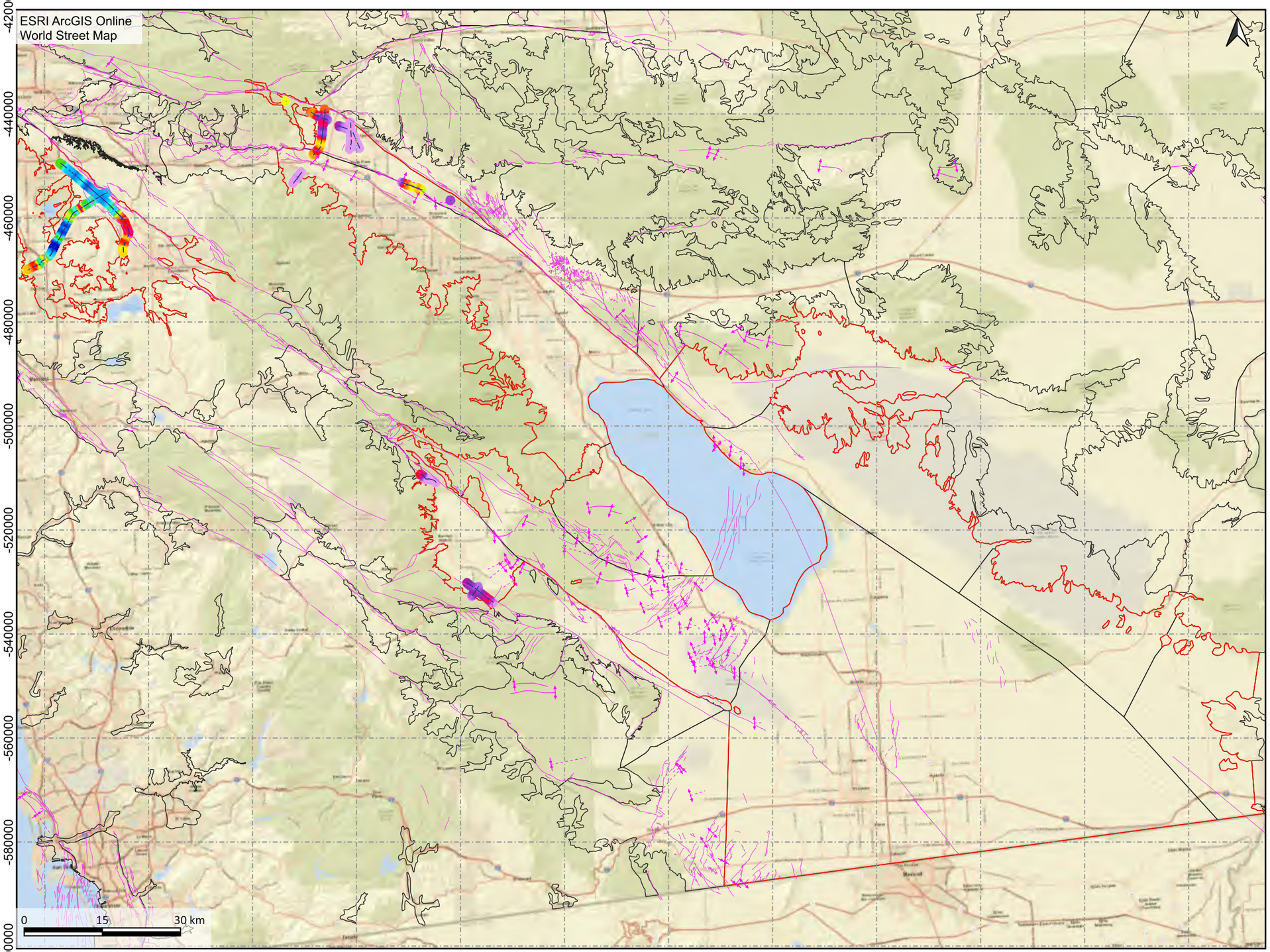
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 300 to 320m (984 to 1050 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

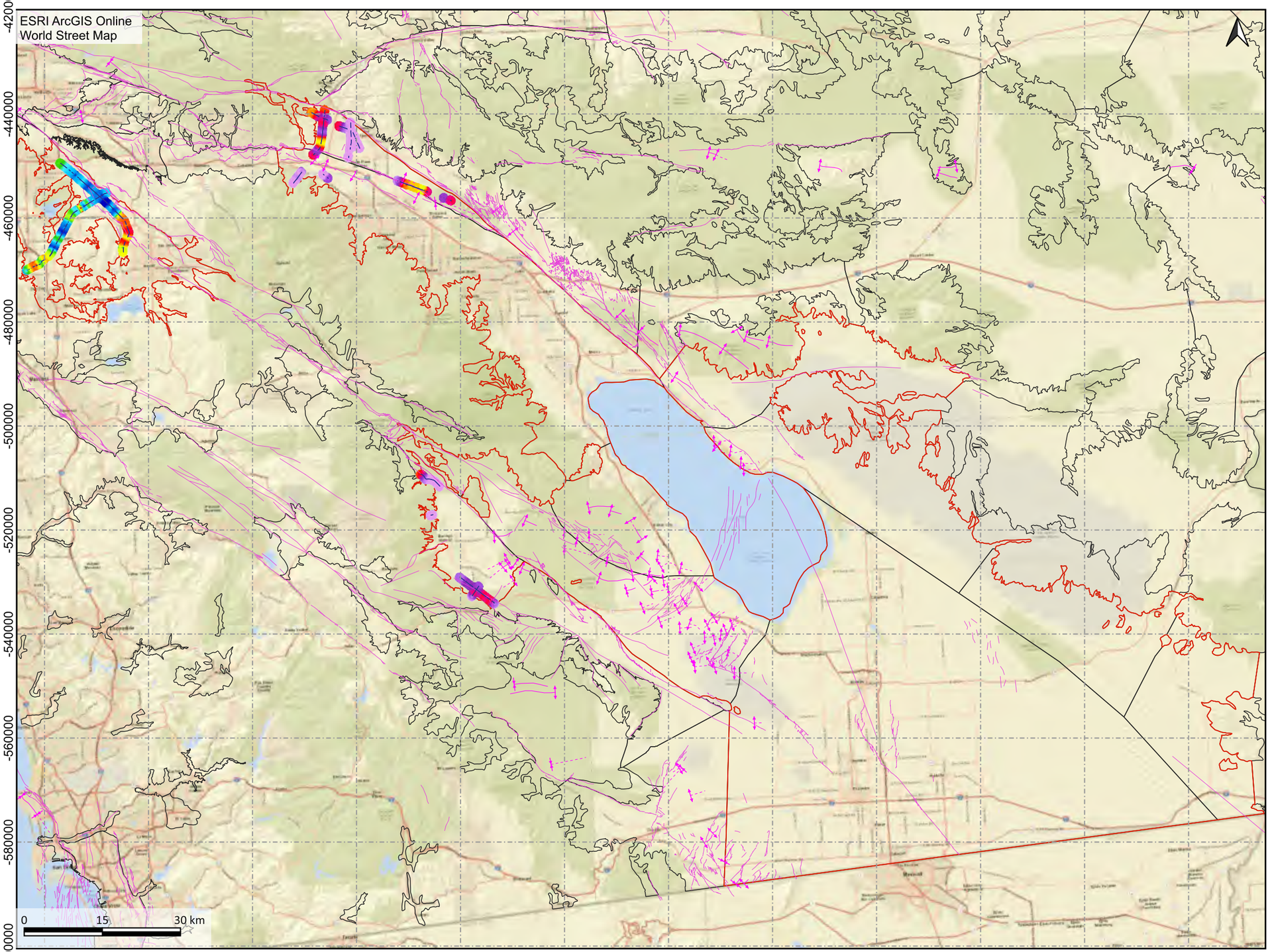
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 280 to 300m (919 to 984 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

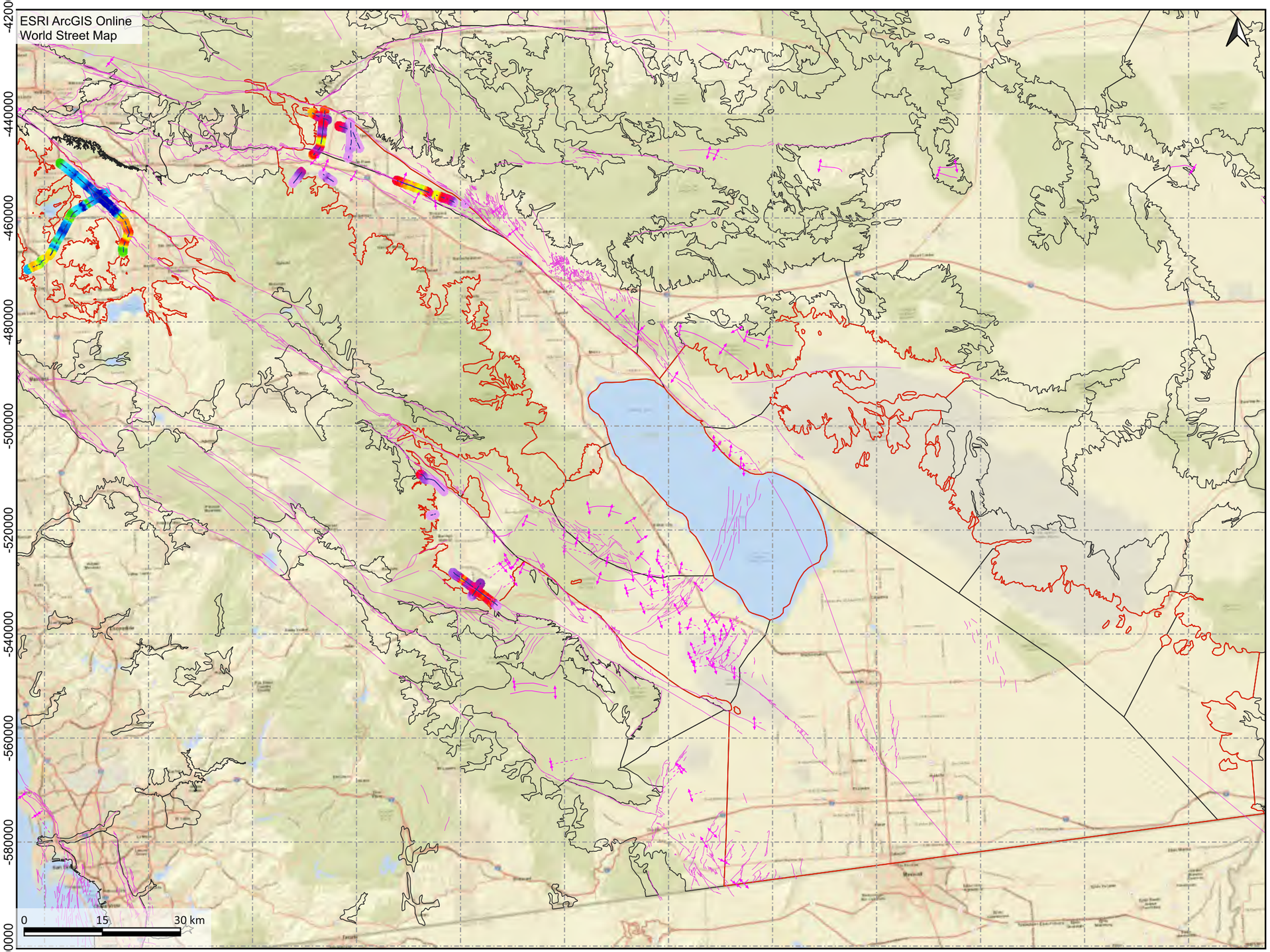
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 260 to 280m (853 to 919 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

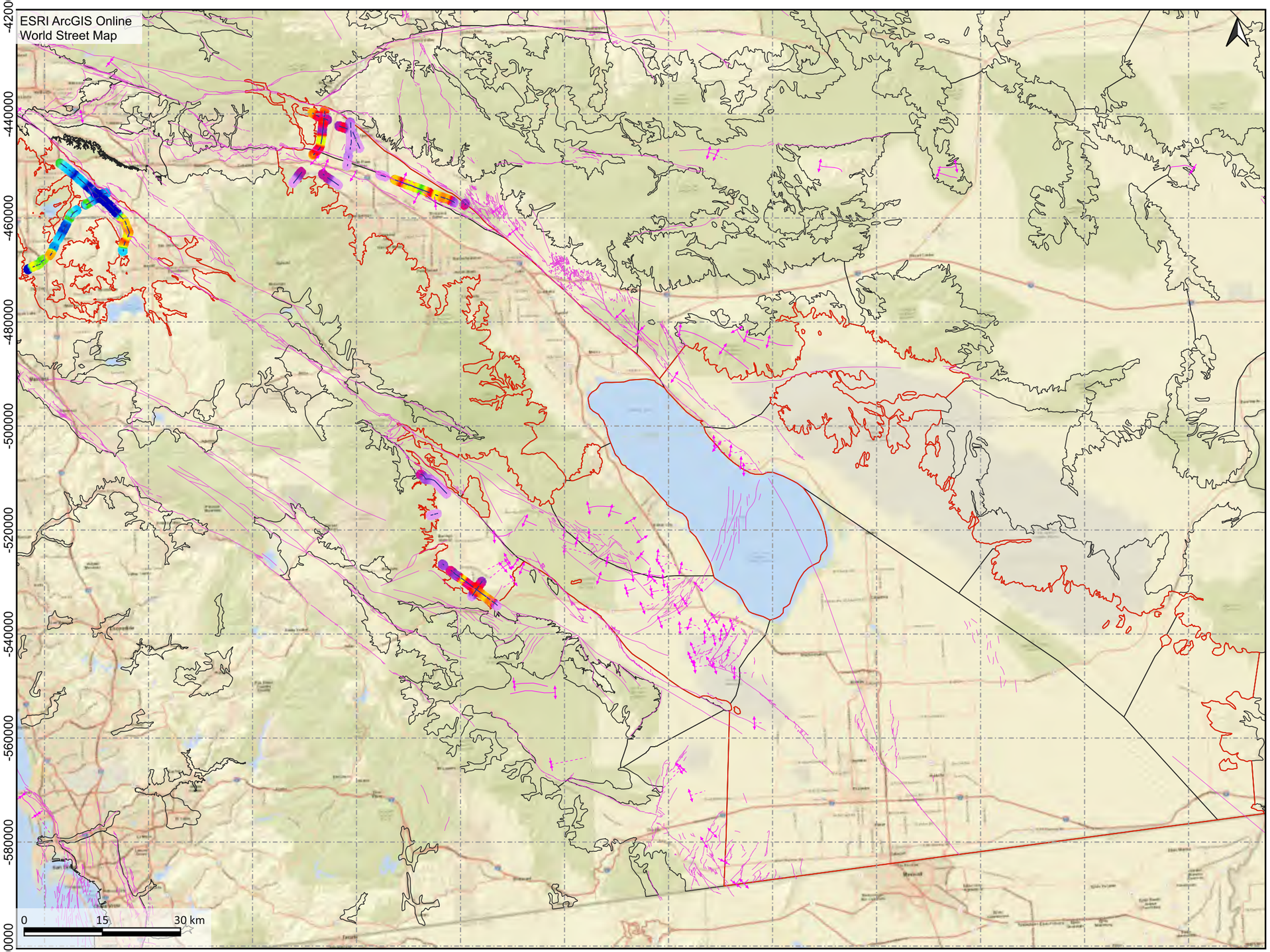
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 240 to 260m (787 to 853 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

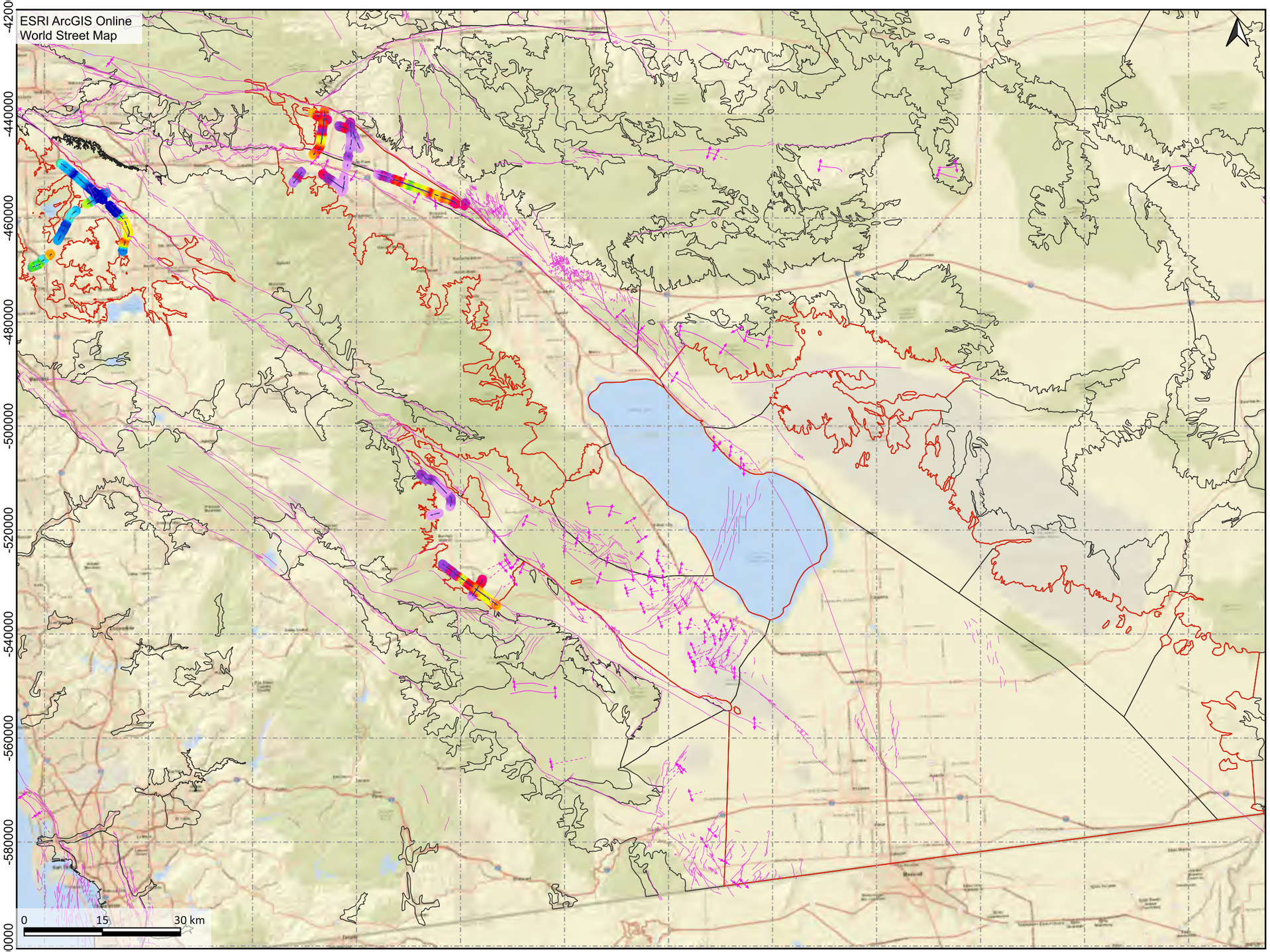
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 220 to 240m (722 to 787 ft)

AEM Mean Resistivity

RAMBOLL





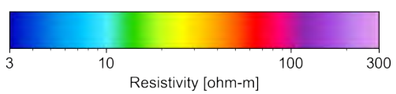
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



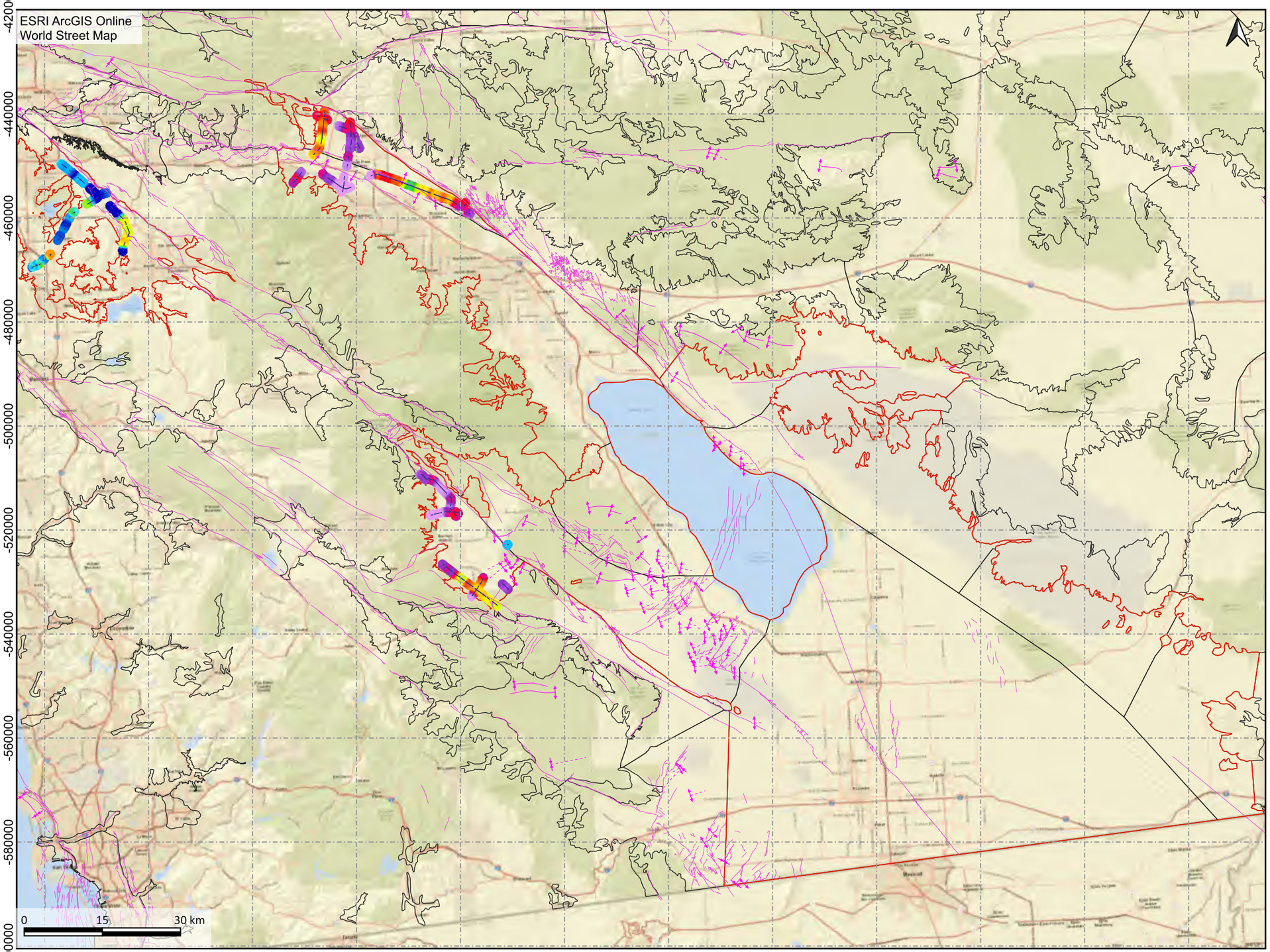
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 200 to 220m (656 to 722 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

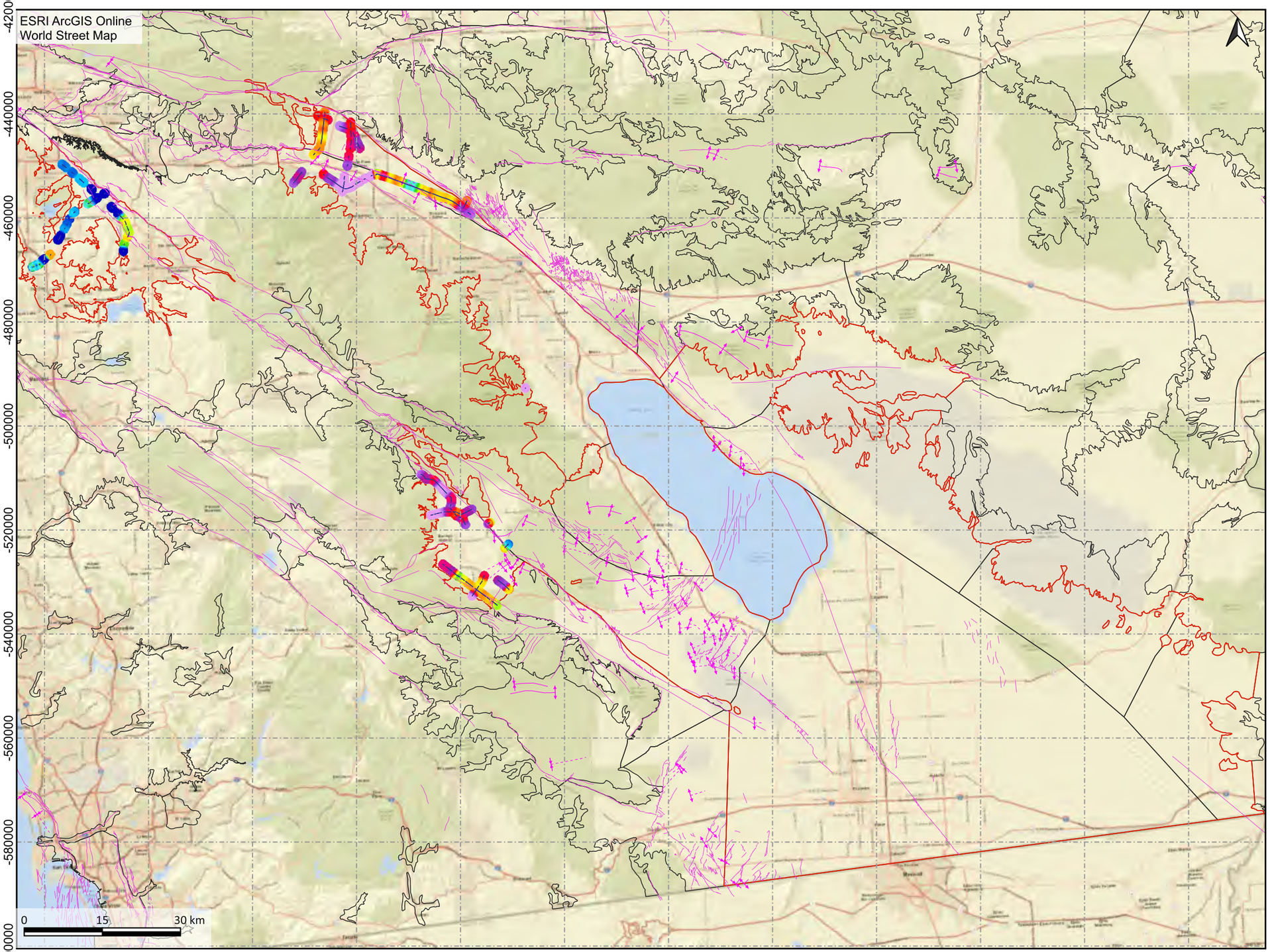
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 180 to 200m (591 to 656 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

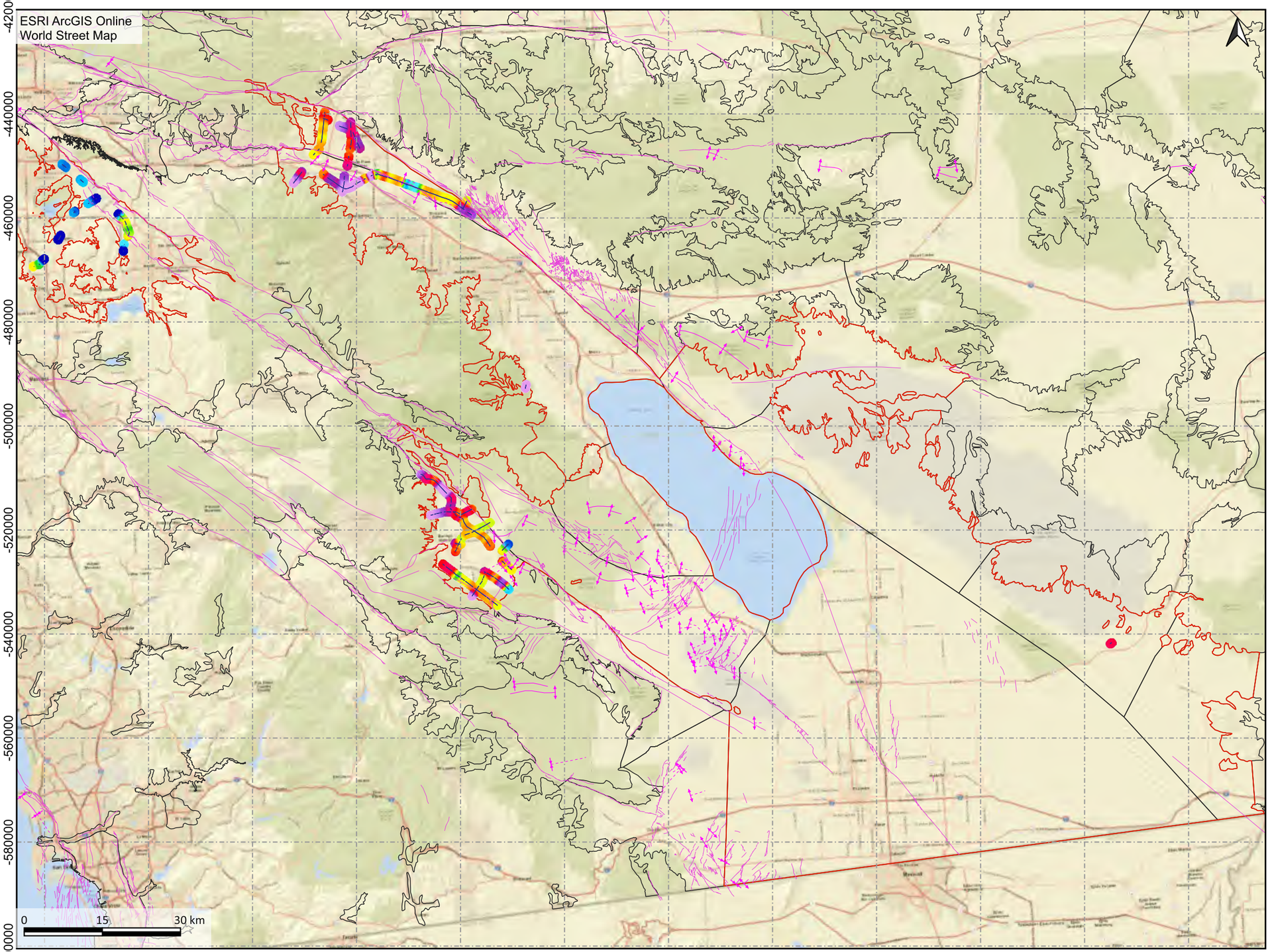
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 160 to 180m (525 to 591 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

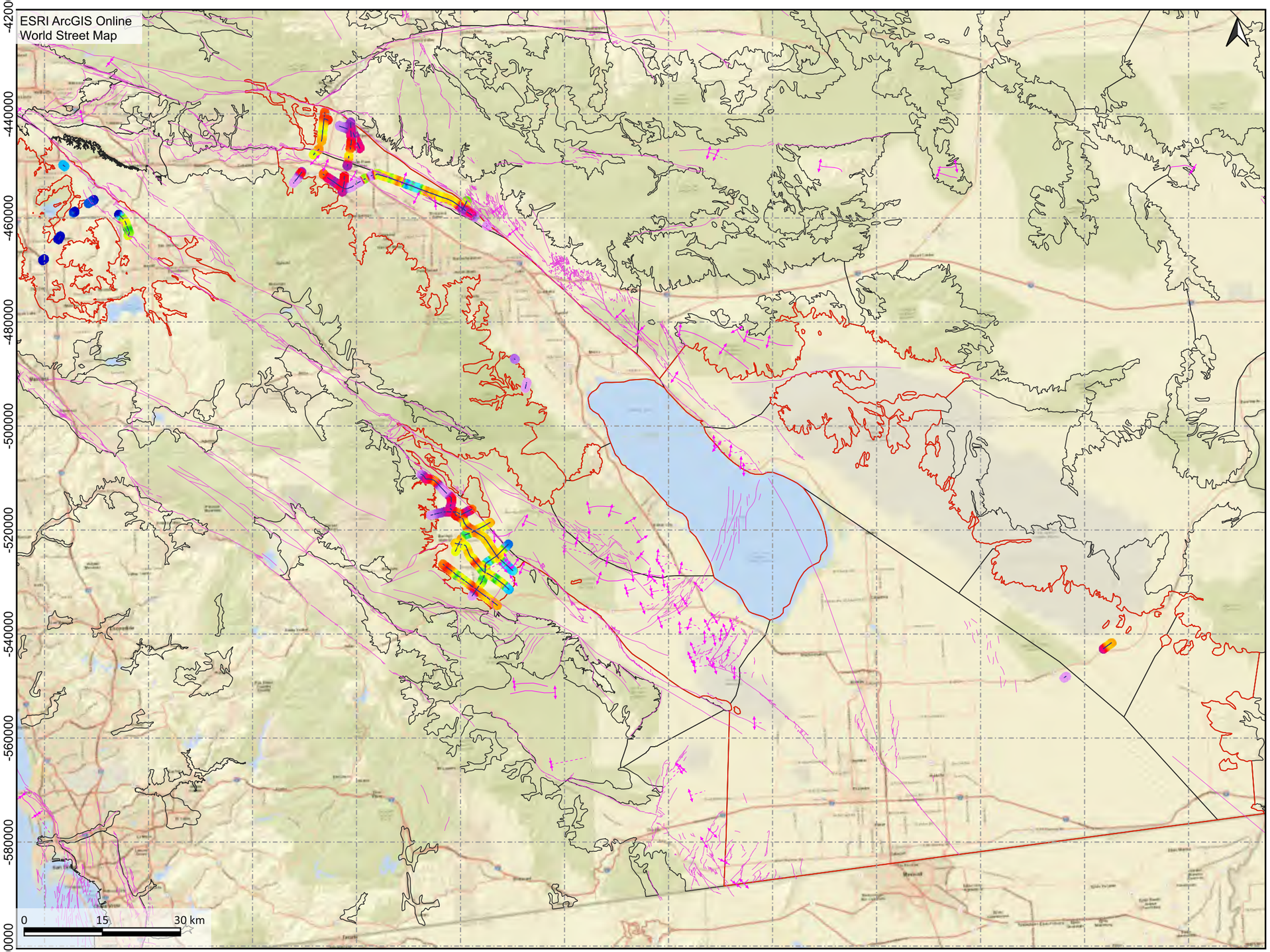
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 140 to 160m (459 to 525 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

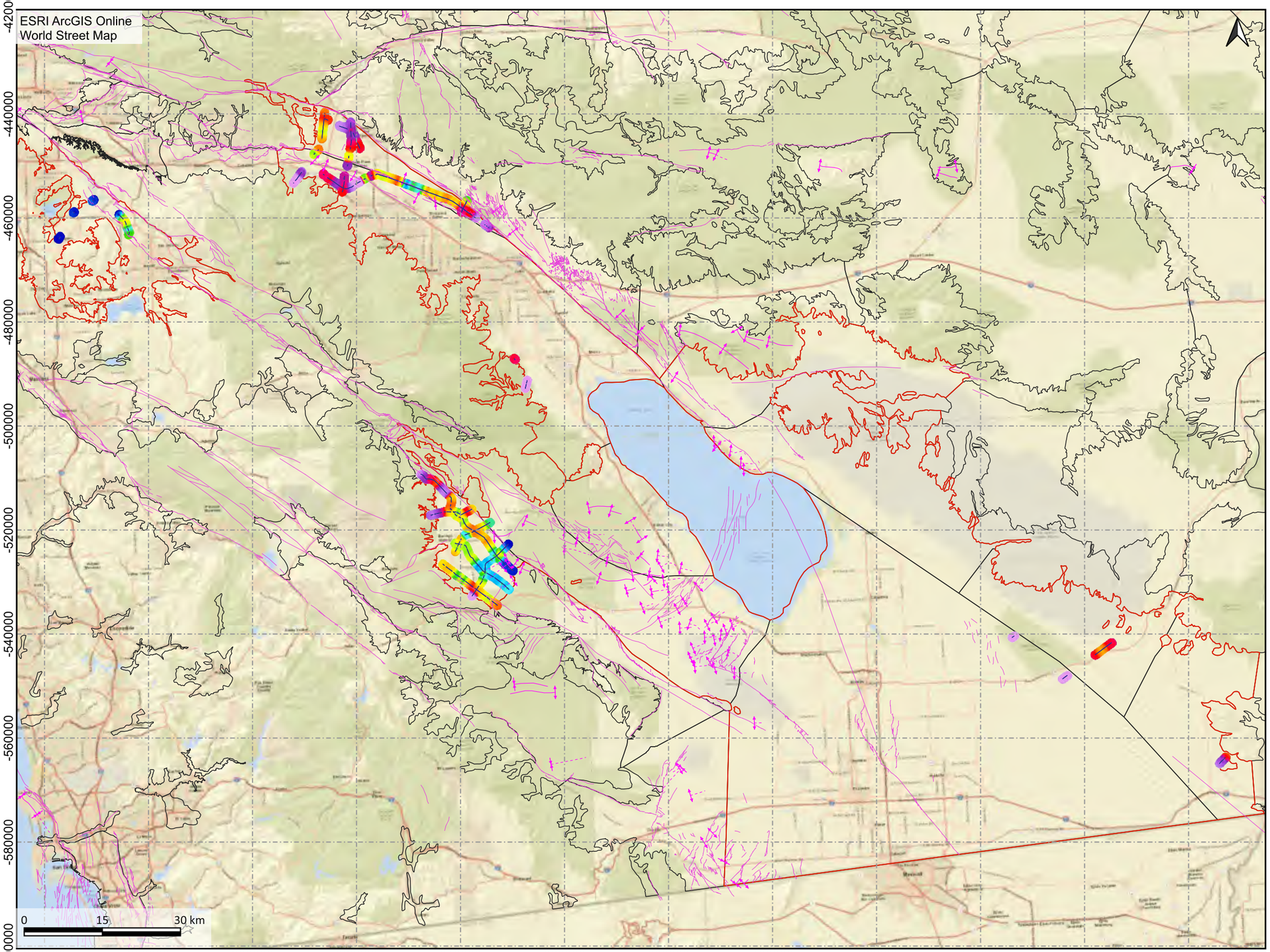
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 120 to 140m (394 to 459 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

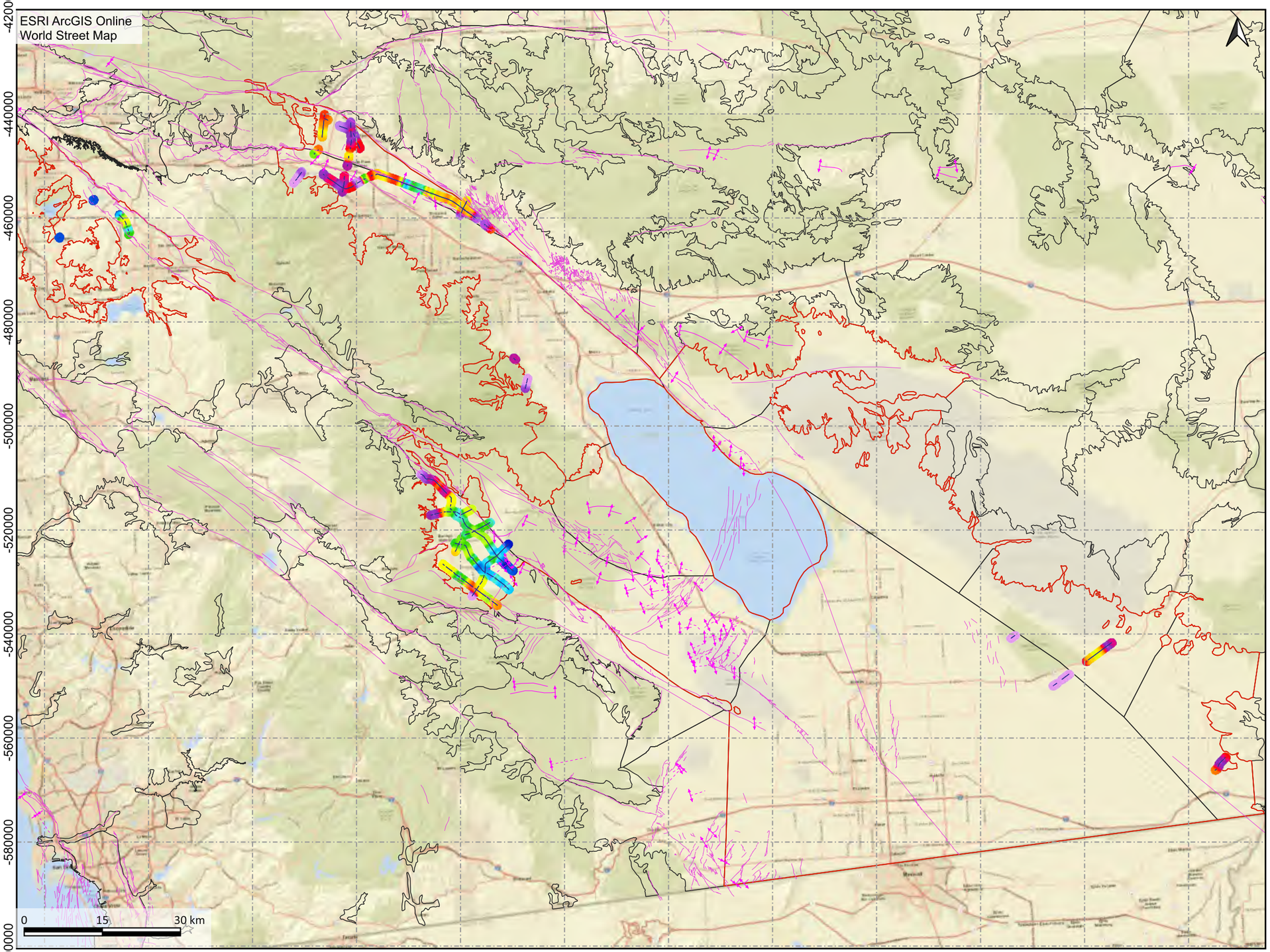
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 100 to 120m (328 to 394 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

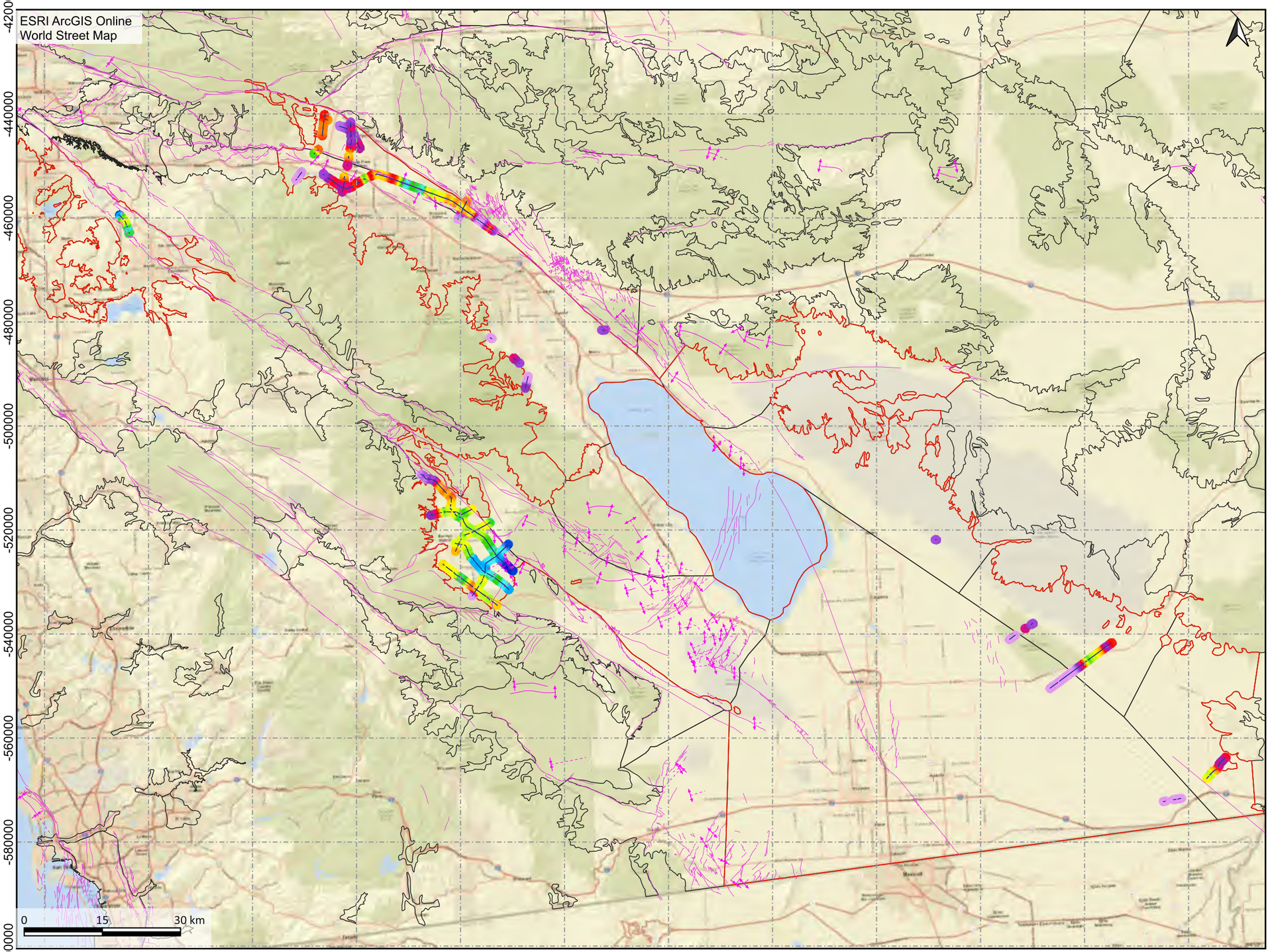
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 80 to 100m (262 to 328 ft)

AEM Mean Resistivity

RAMBOLL





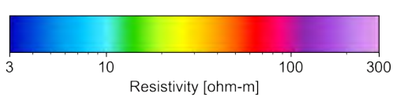
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



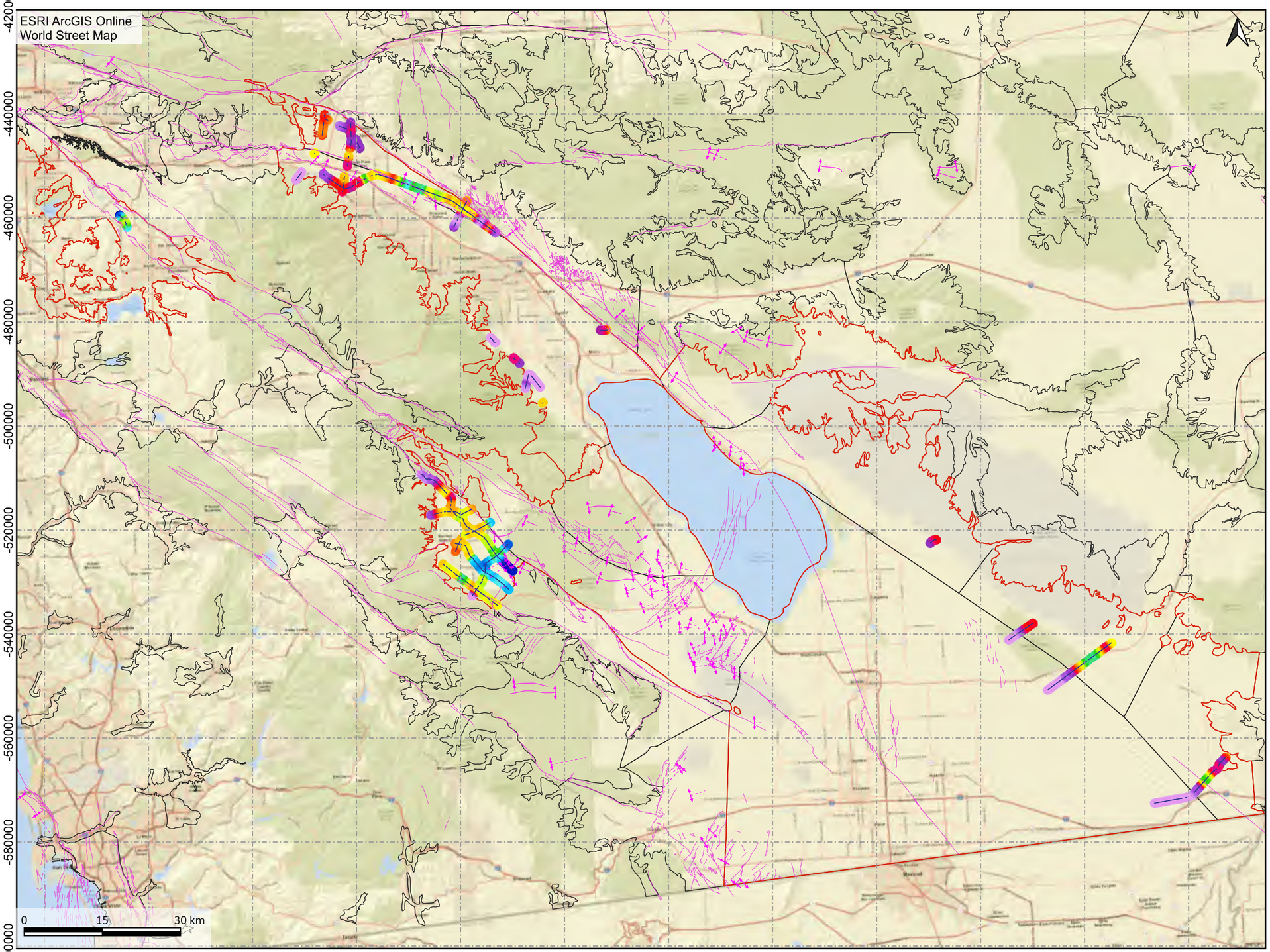
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 60 to 80m (197 to 262 ft)

AEM Mean Resistivity

RAMBOLL





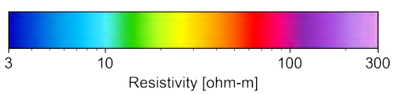
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



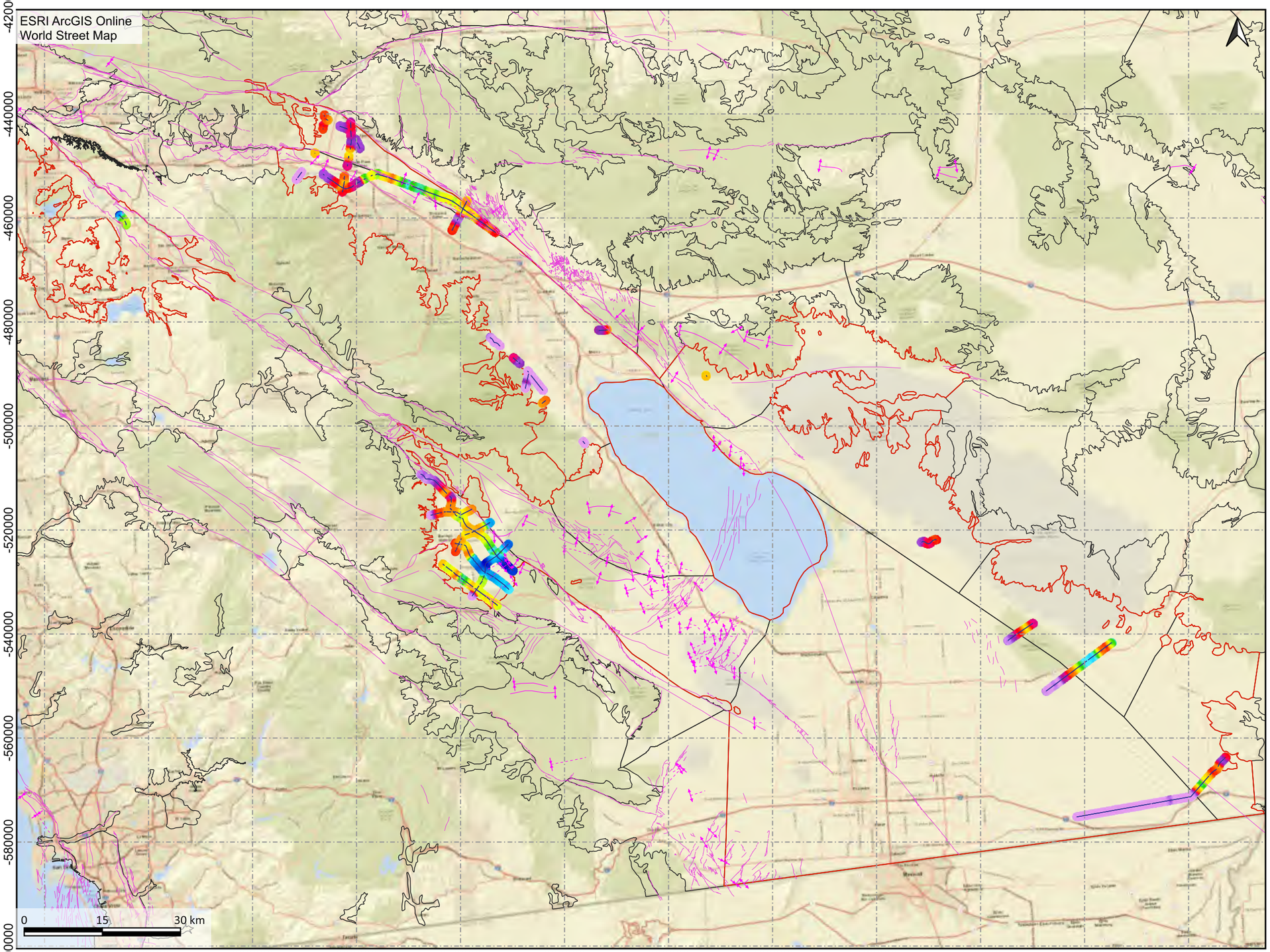
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 40 to 60m (131 to 197 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

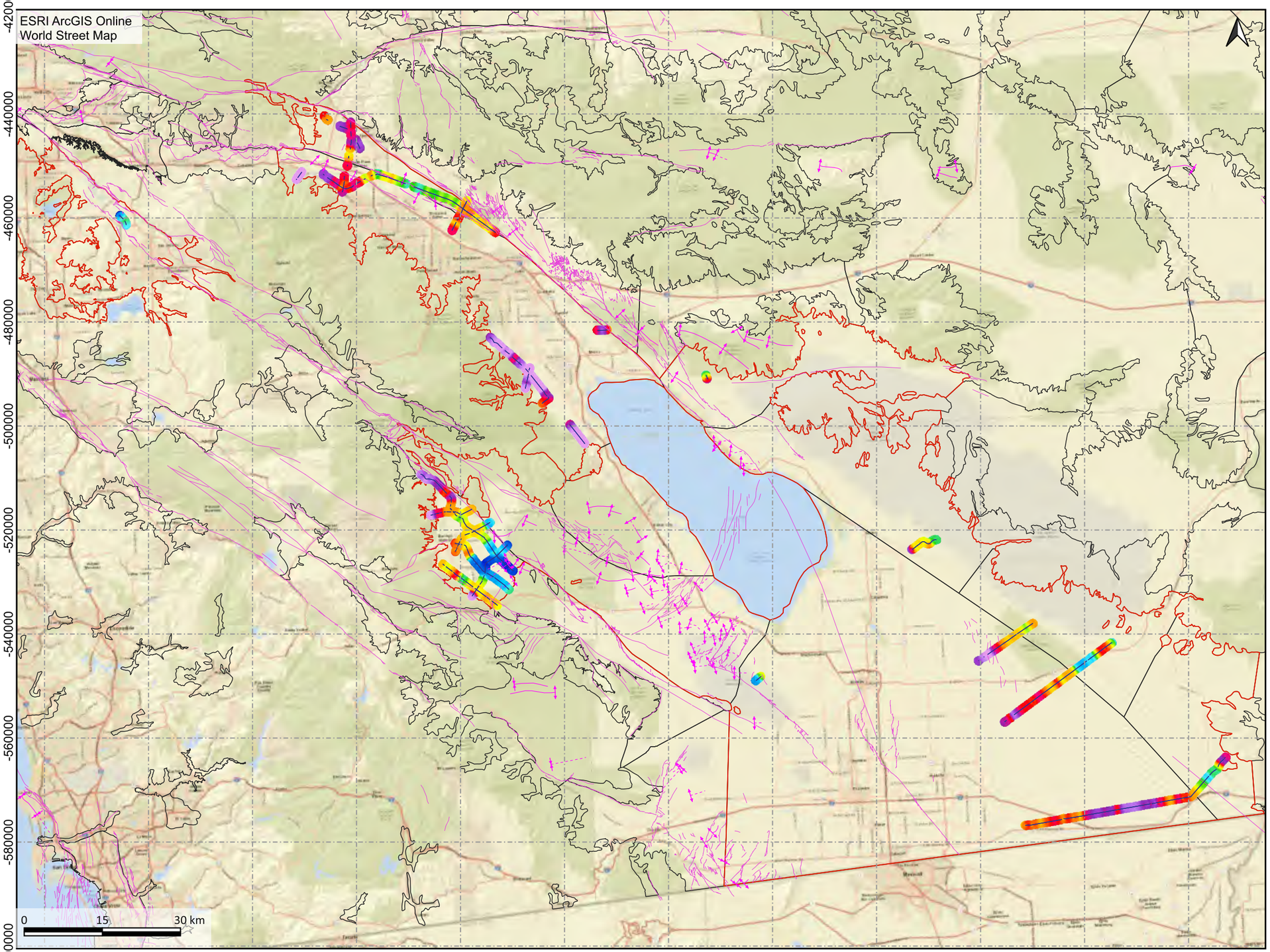
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 20 to 40m (66 to 131 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

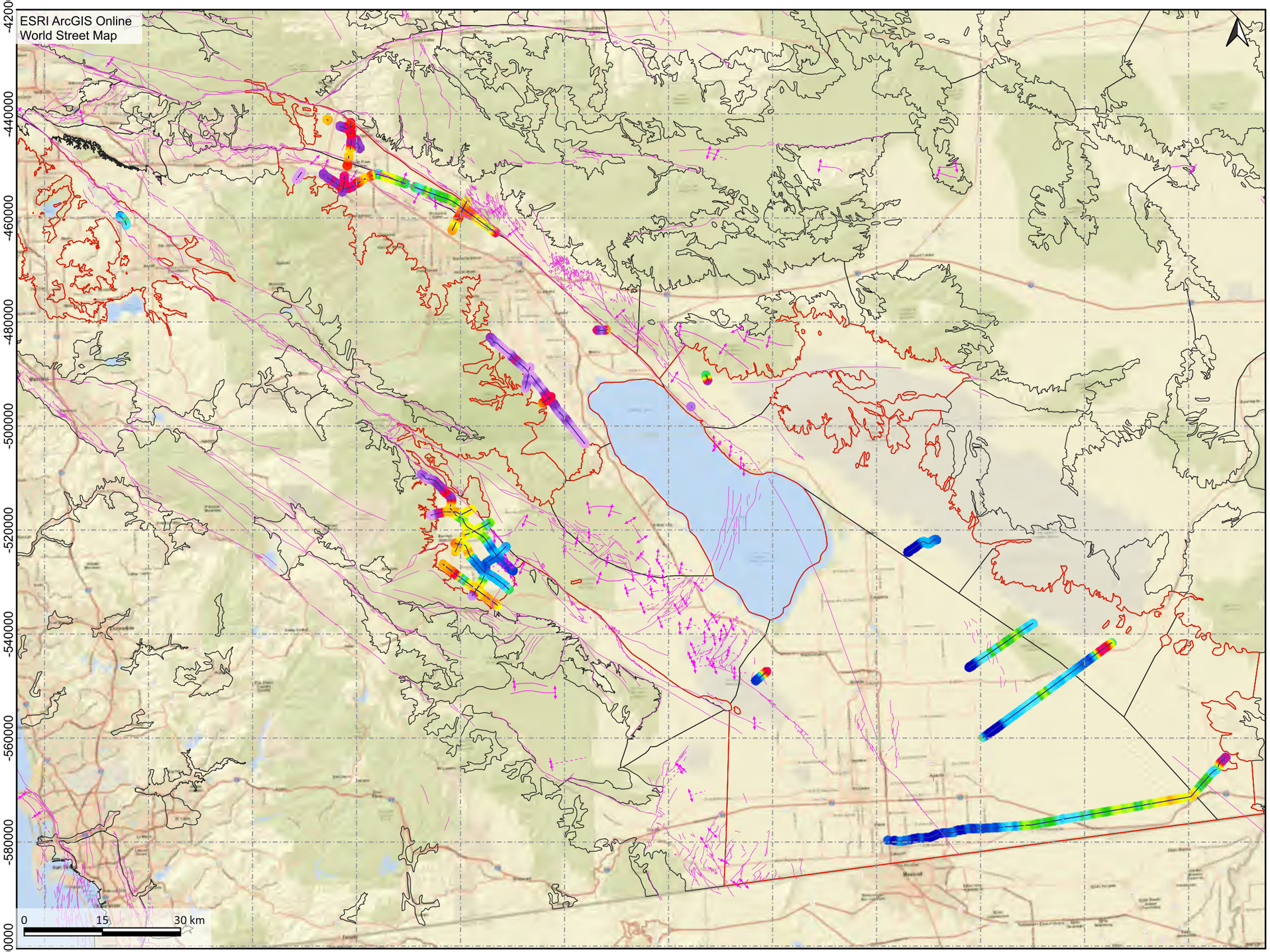
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval 0 to 20m (0 to 66 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 — 10 — 100 — 300

Resistivity [ohm-m]

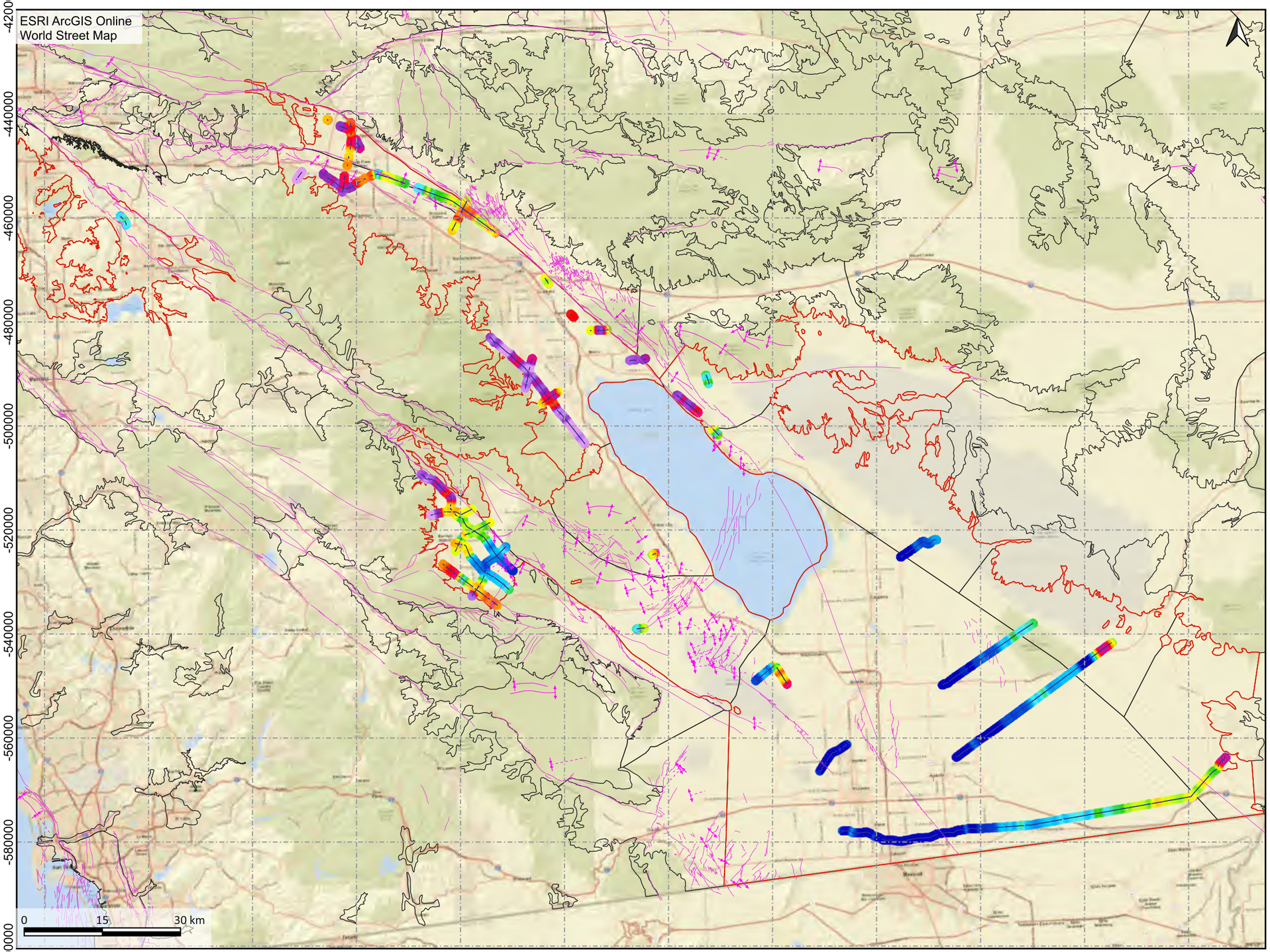
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -20 to 0m (-66 to 0 ft)

AEM Mean Resistivity

RAMBOLL





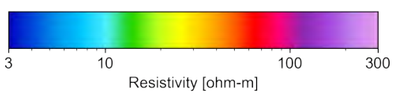
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



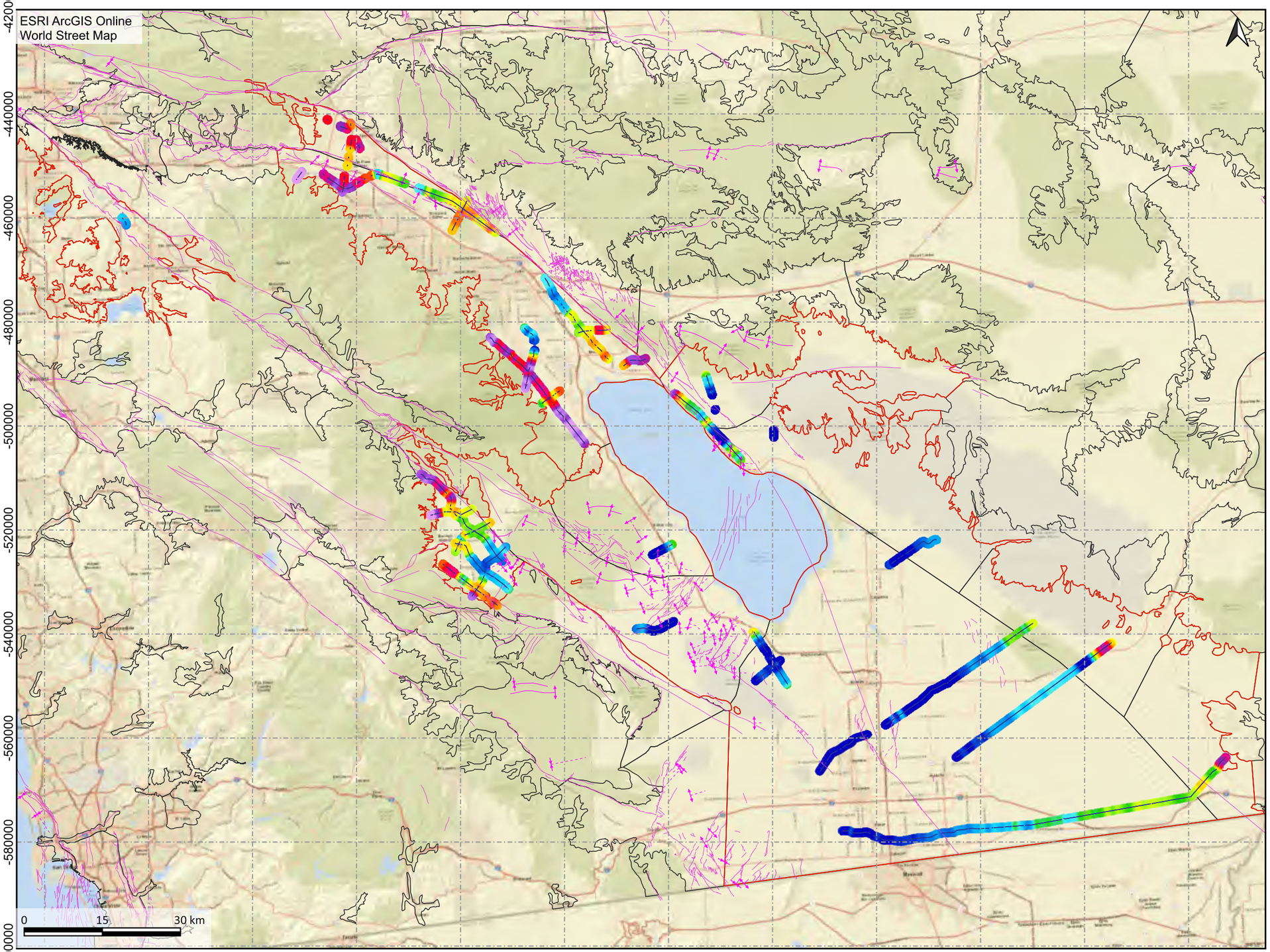
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -40 to -20m (-131 to -66 ft)

AEM Mean Resistivity

RAMBOLL





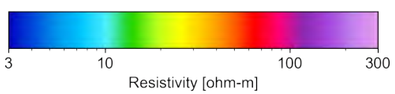
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



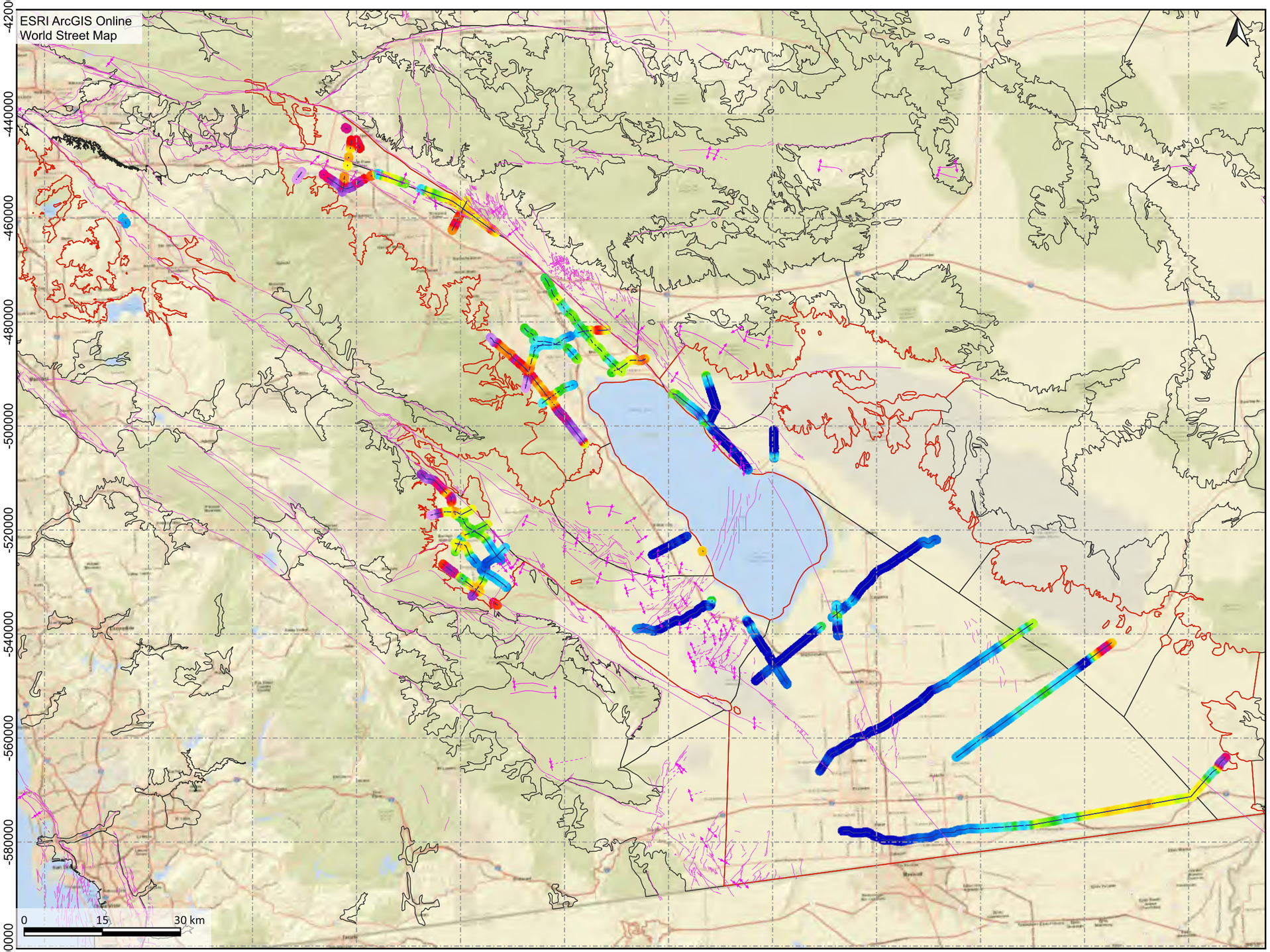
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -60 to -40m (-197 to -131 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

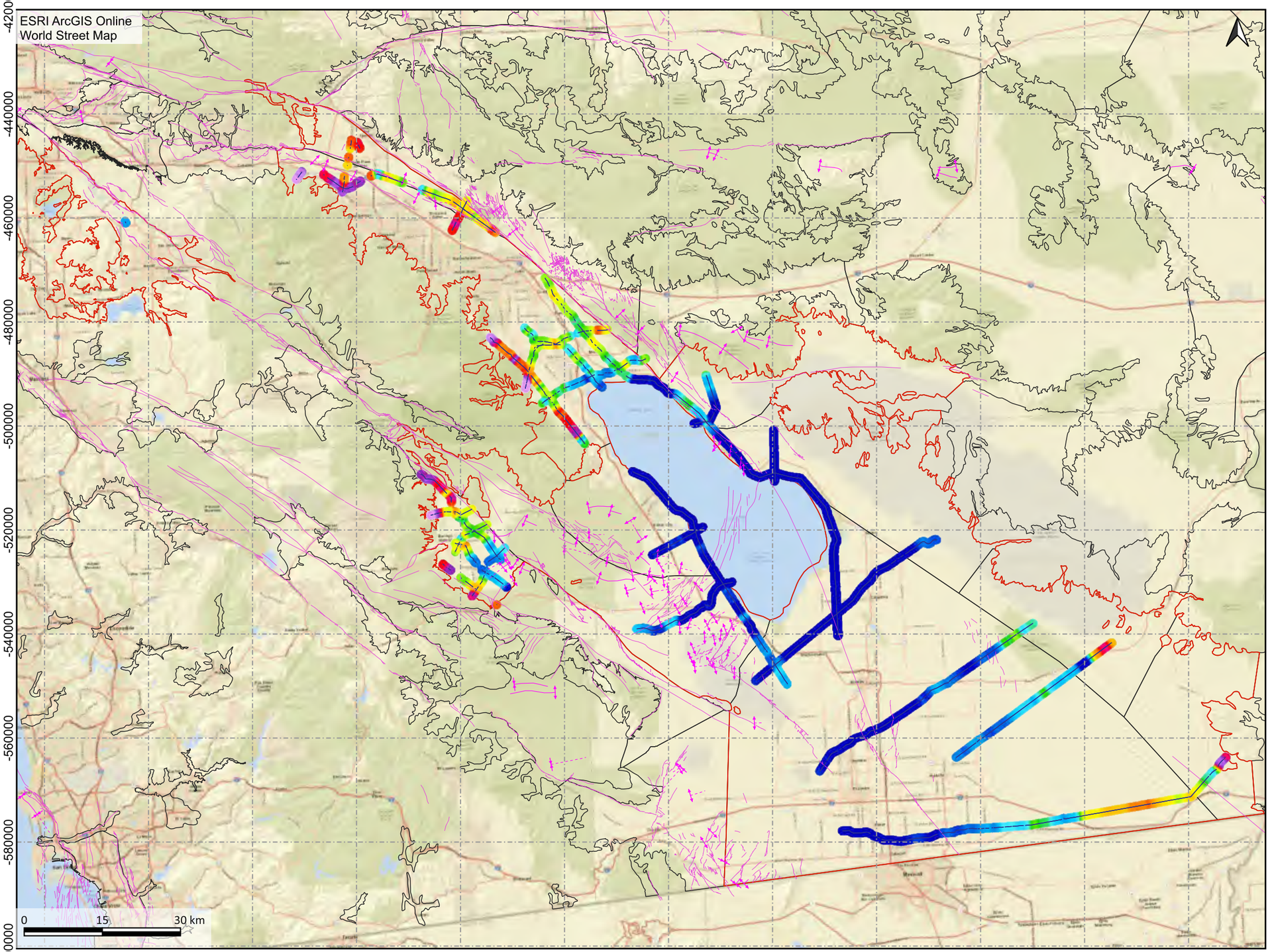
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -80 to -60m (-262 to -197 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

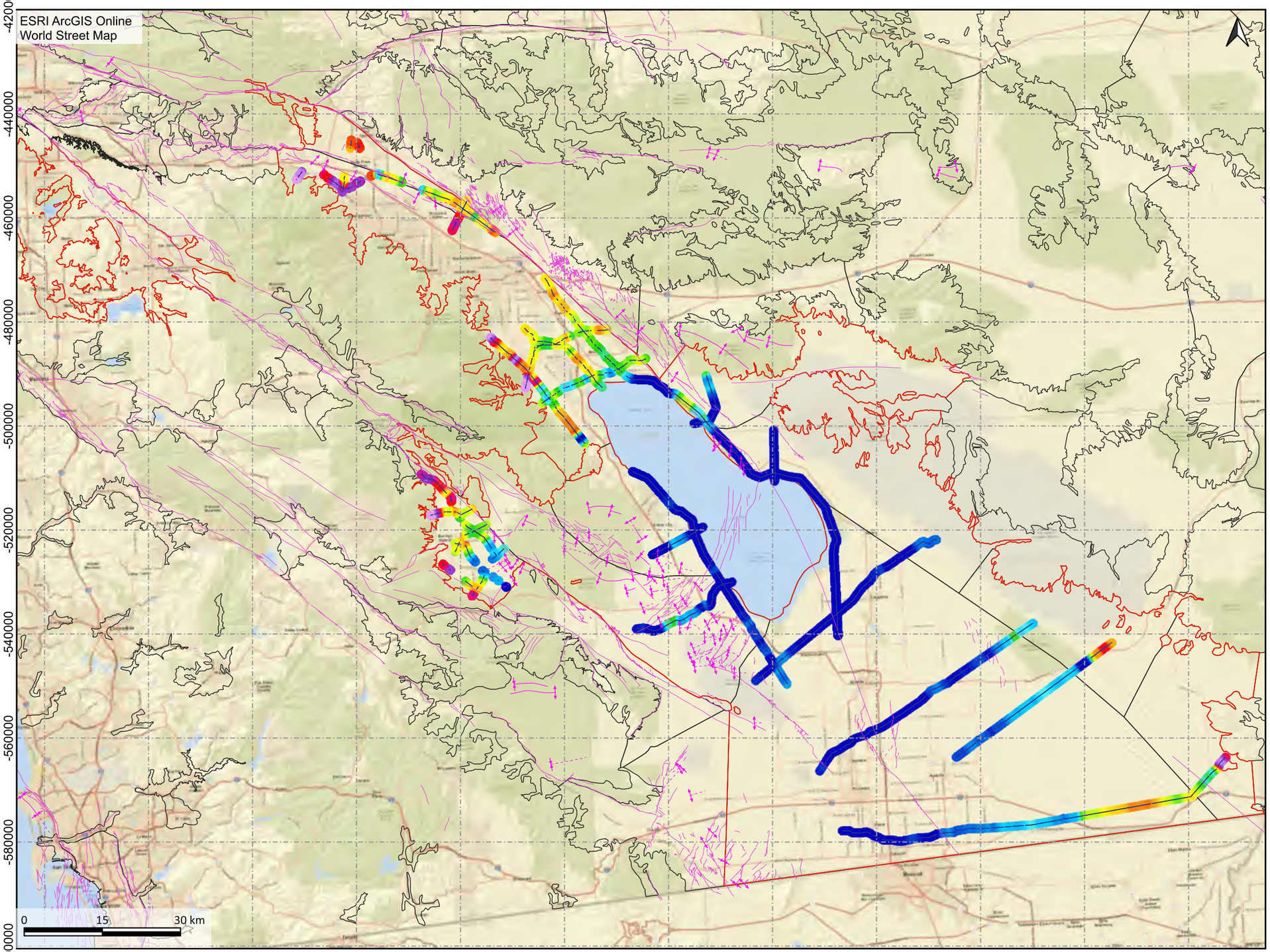
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -100 to -80m (-328 to -262 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

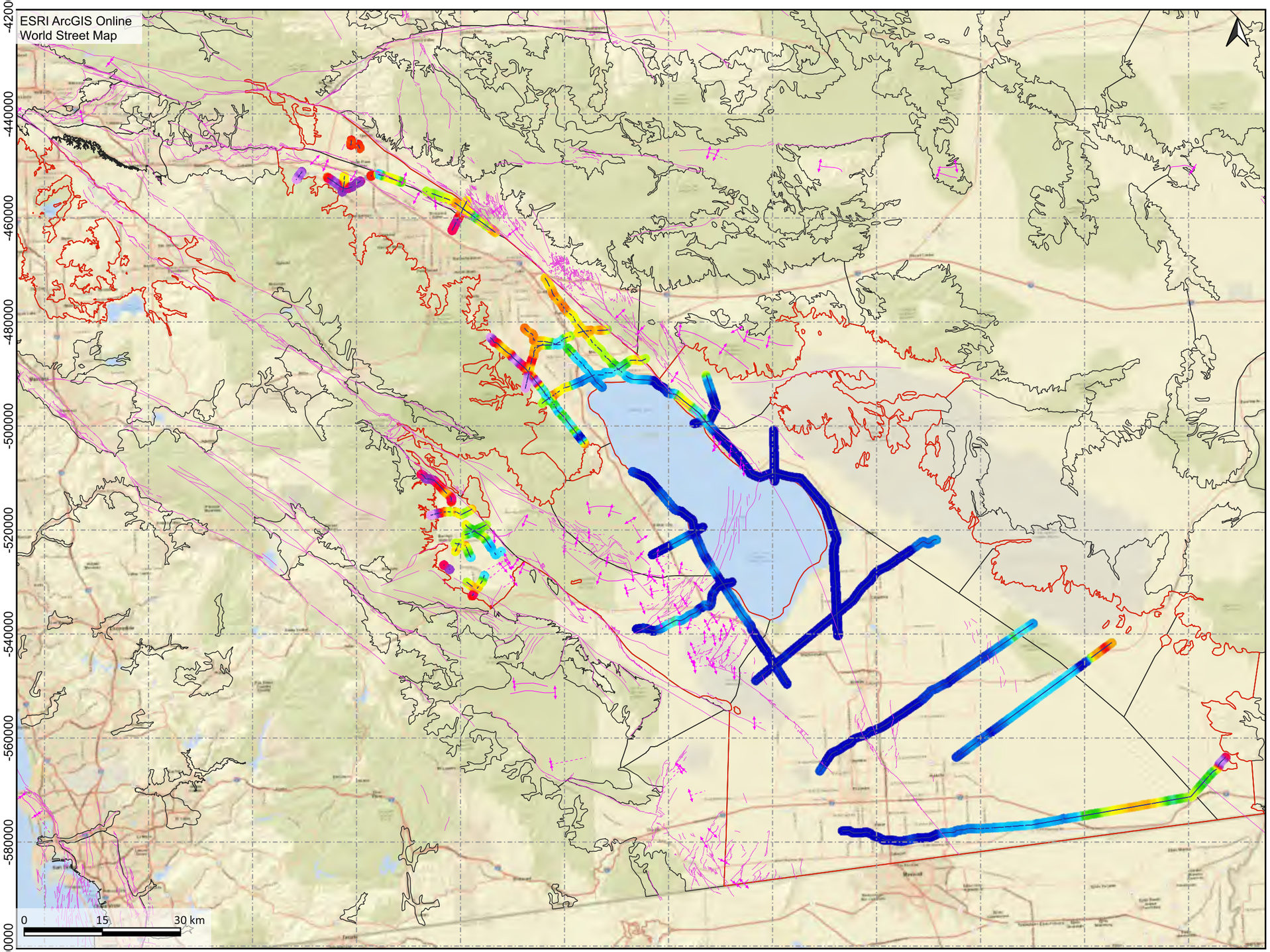
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -120 to -100m (-394 to -328 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

Groundwater Basin Boundary (DWR - B118)

Target Area

AEM data used for inversion

Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

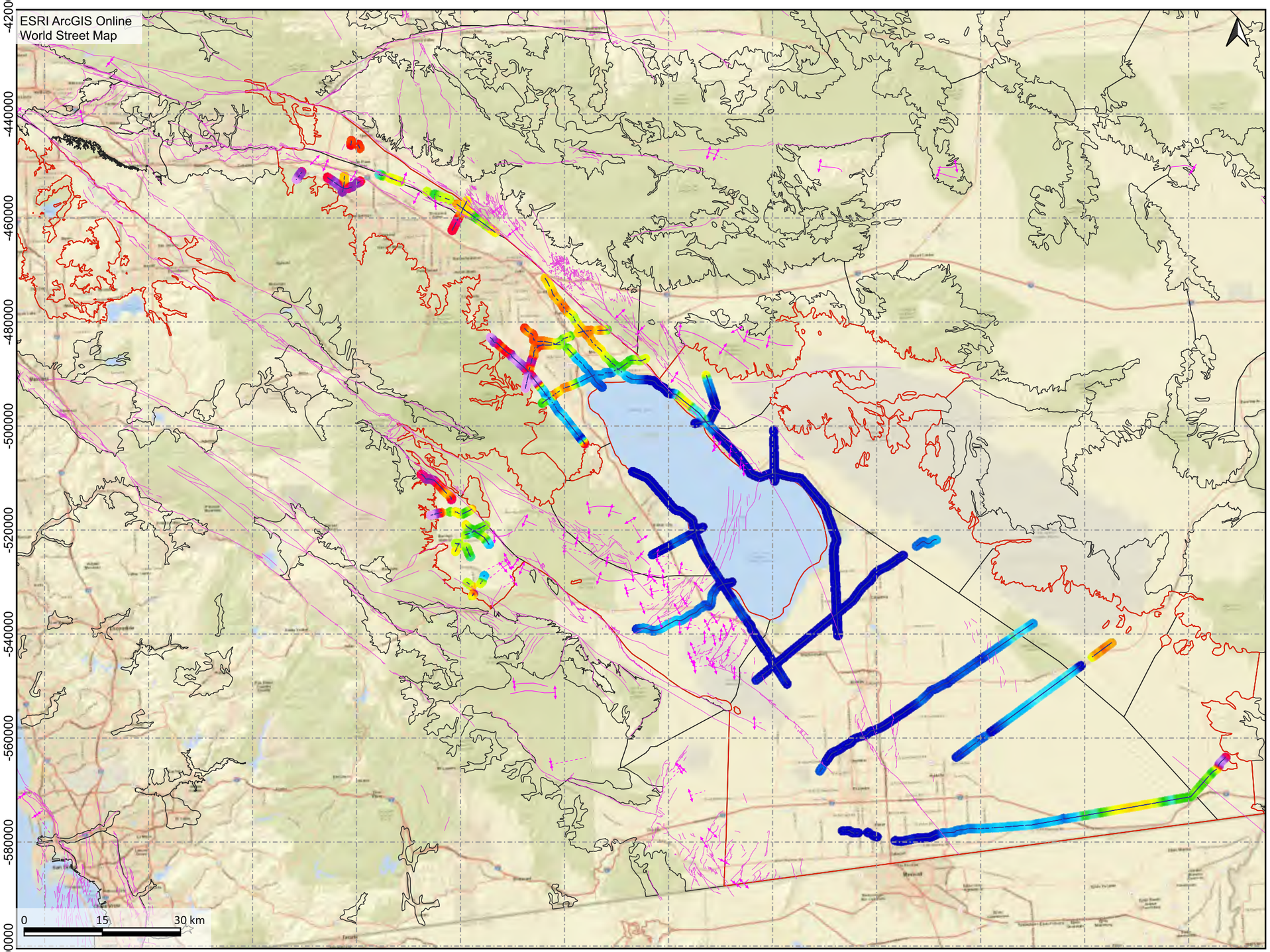
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -140 to -120m (-459 to -394 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 — 10 — 100 — 300

Resistivity [ohm-m]

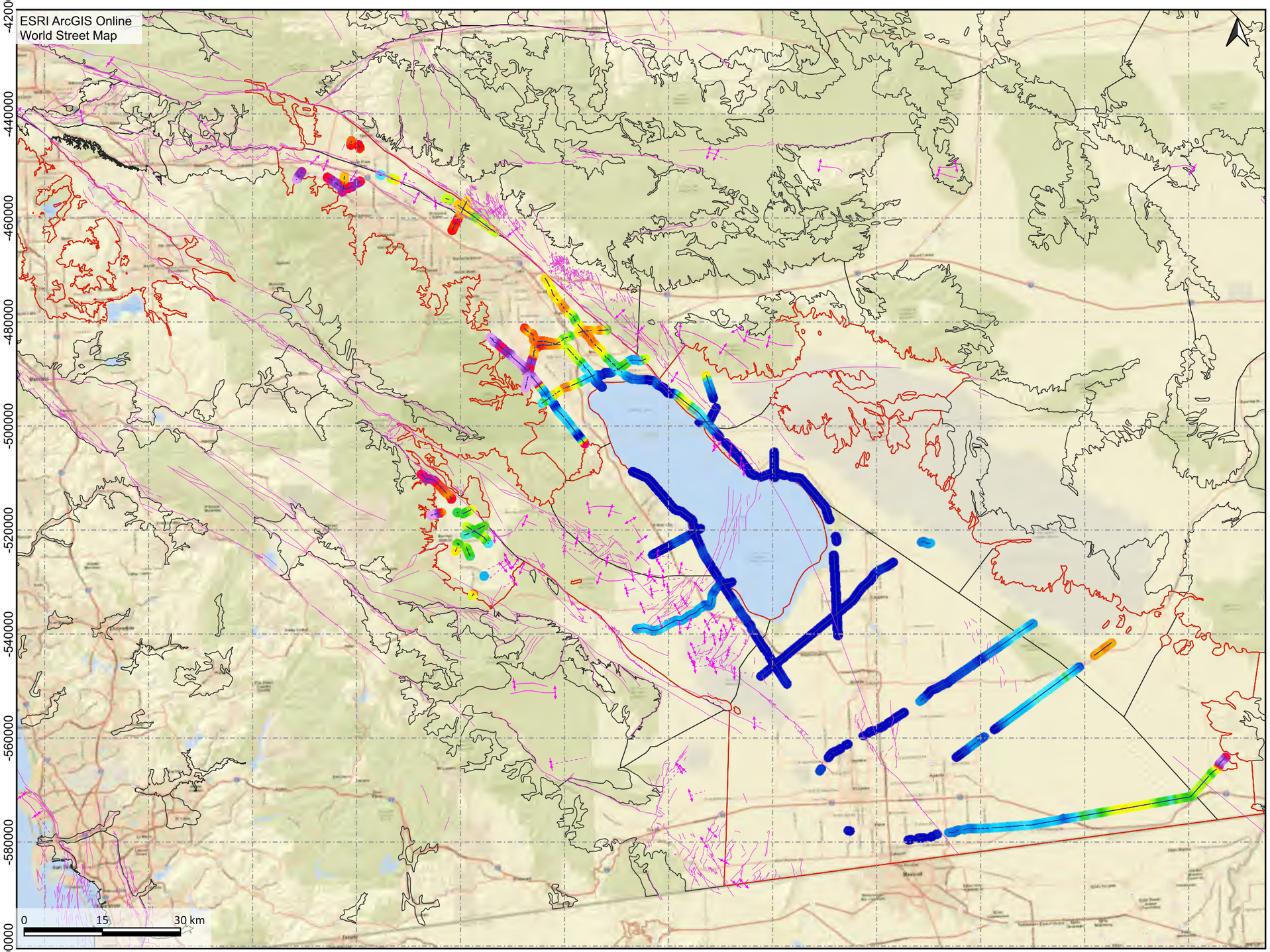
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -160 to -140m (-525 to -459 ft)

AEM Mean Resistivity

RAMBOLL





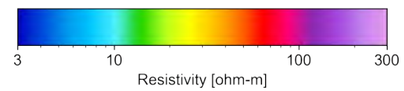
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



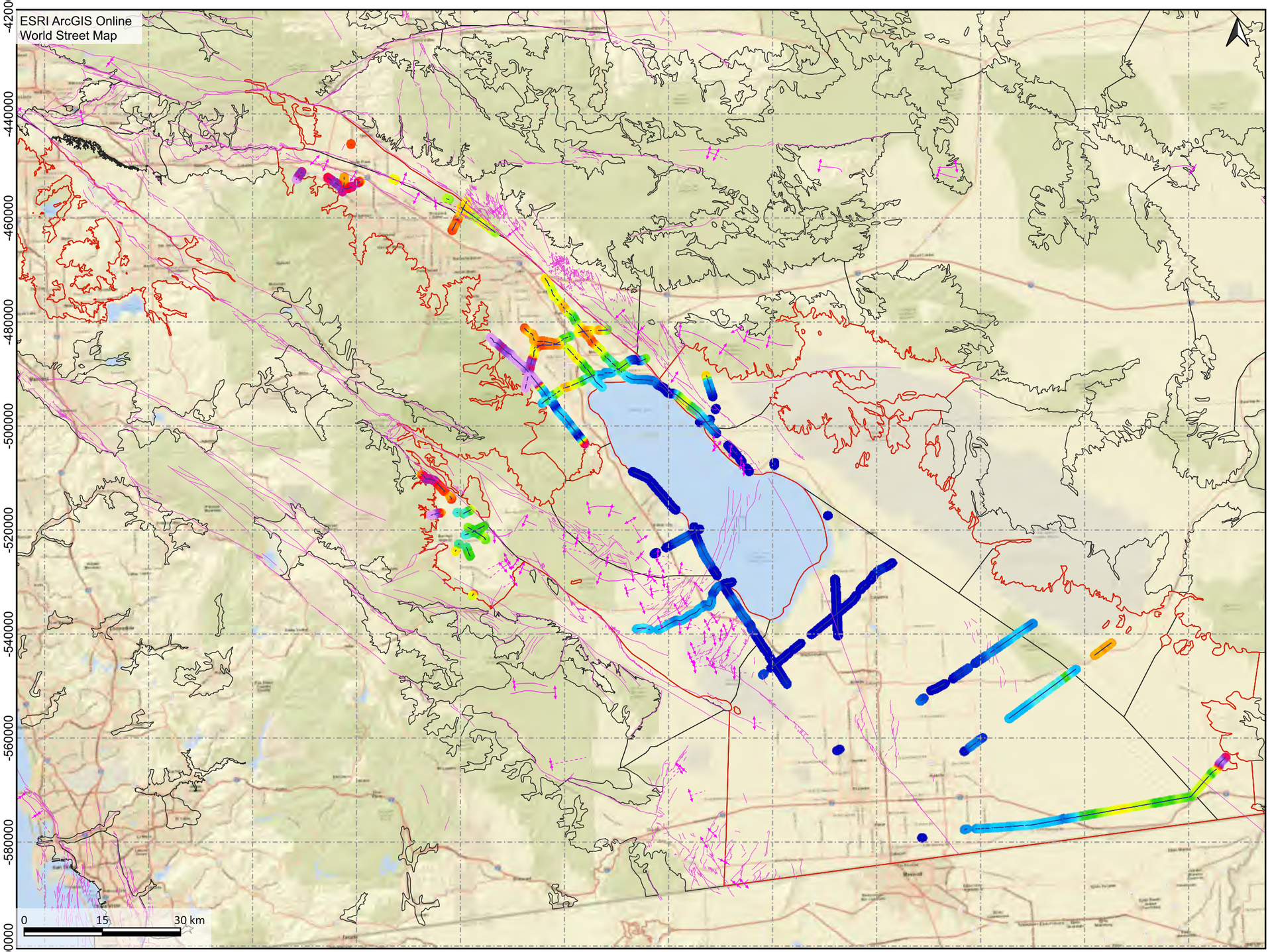
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDI, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -180 to -160m (-591 to -525 ft)

AEM Mean Resistivity

RAMBOLL





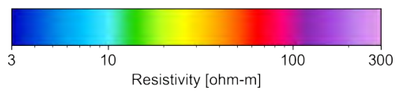
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



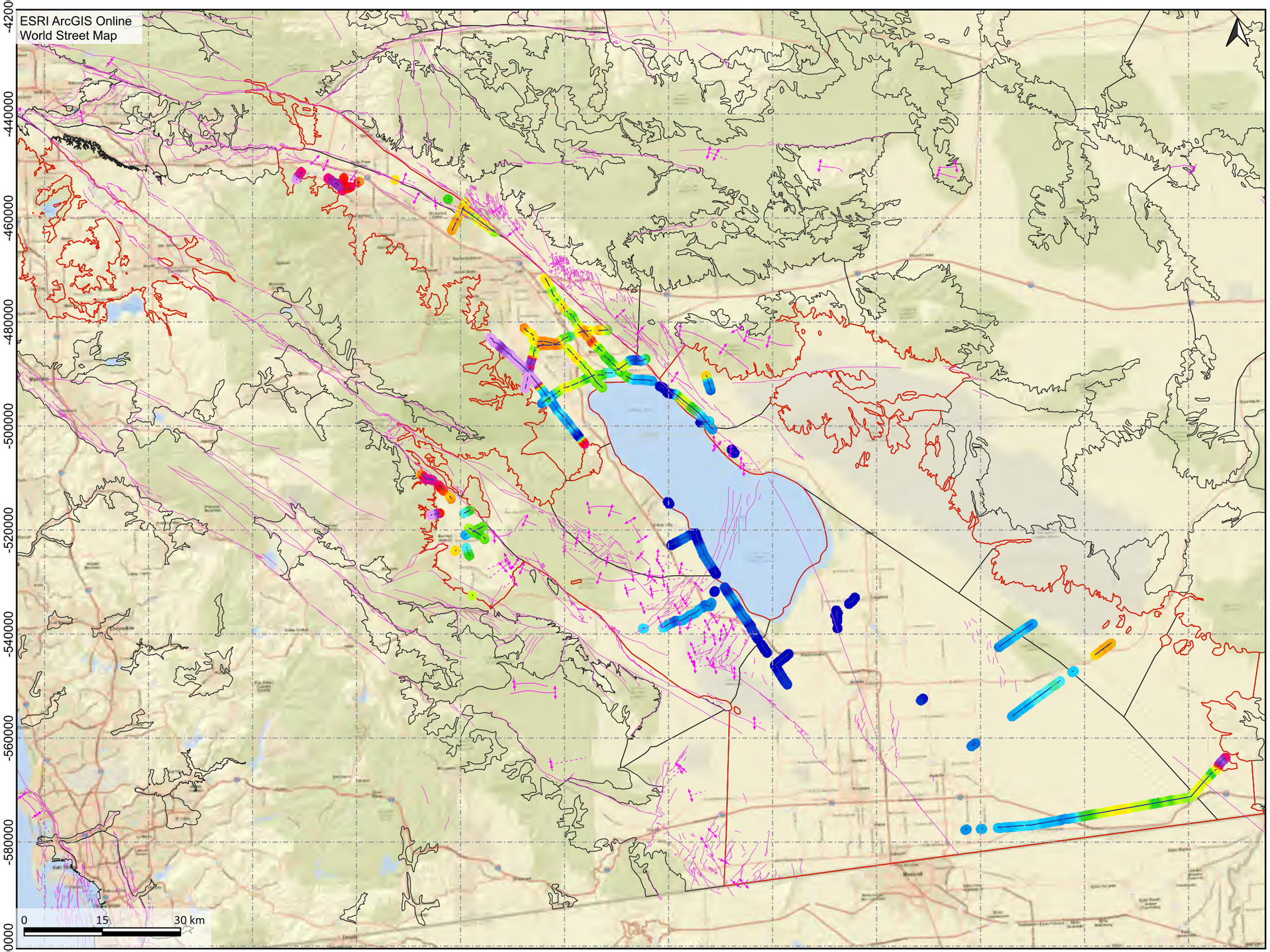
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDI, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -200 to -180m (-656 to -591 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

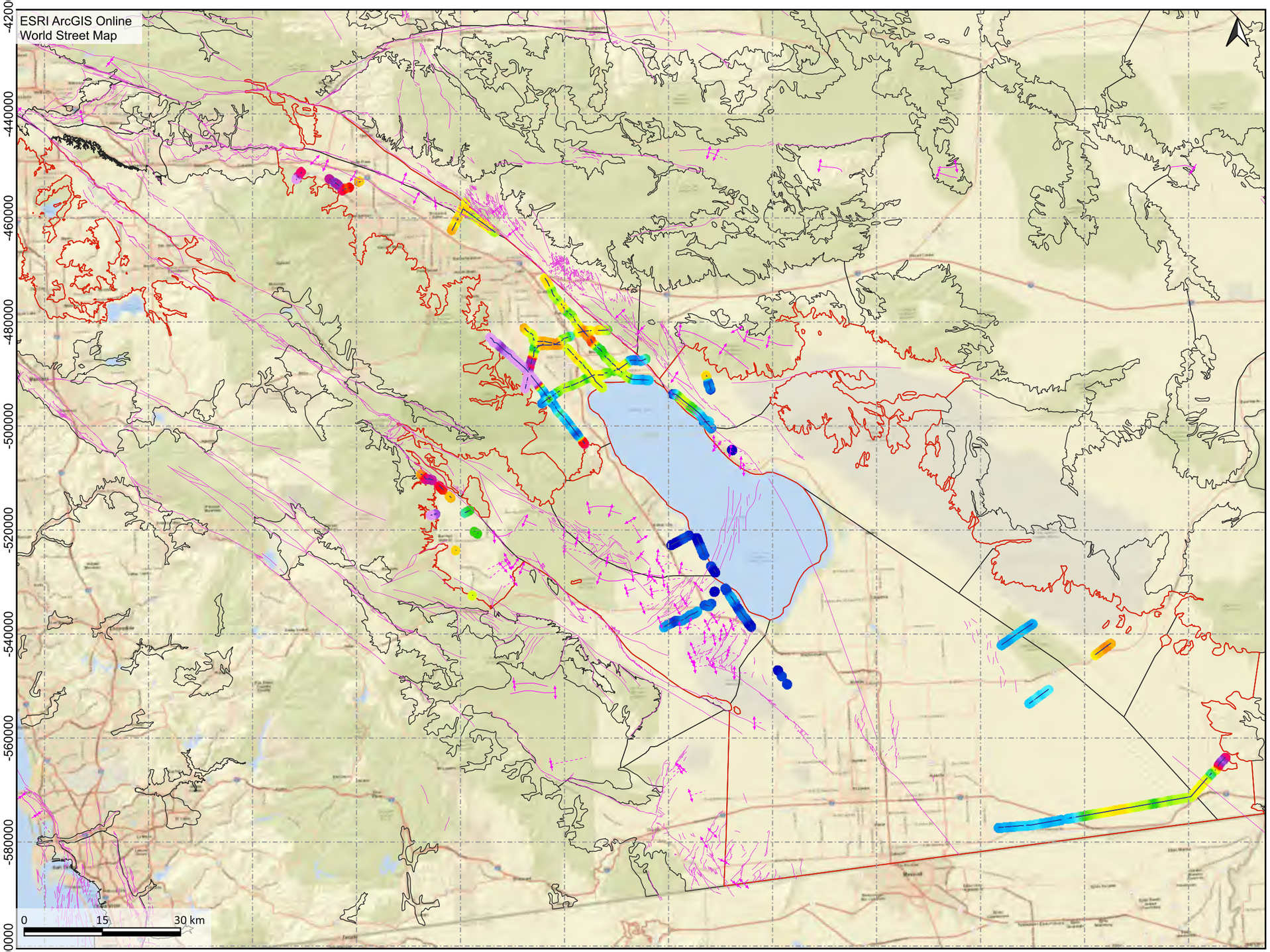
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -220 to -200m (-722 to -656 ft)

AEM Mean Resistivity

RAMBOLL





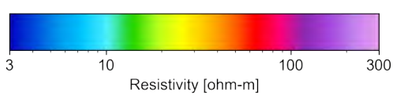
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



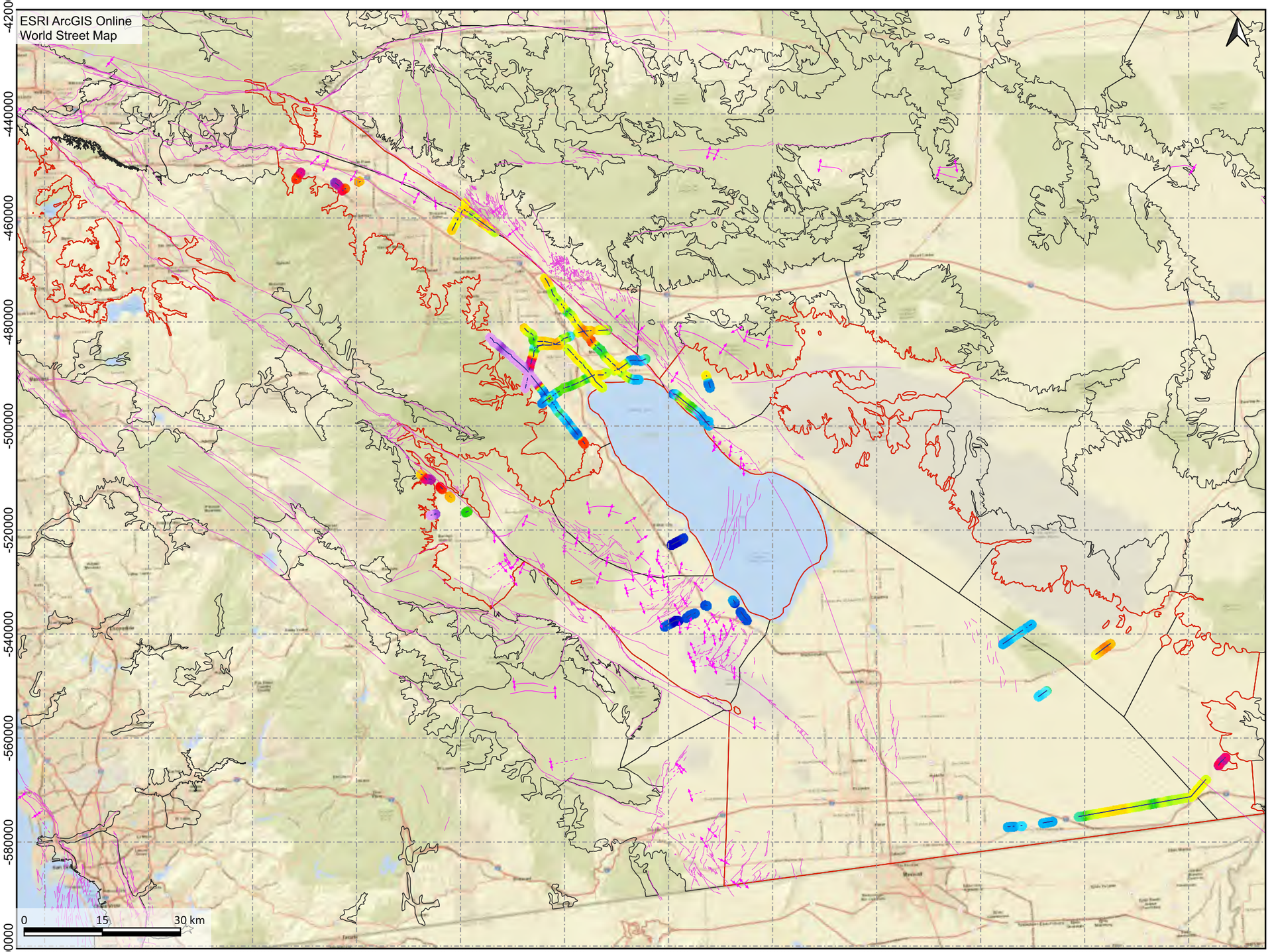
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -240 to -220m (-787 to -722 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 — 10 — 100 — 300

Resistivity [ohm-m]

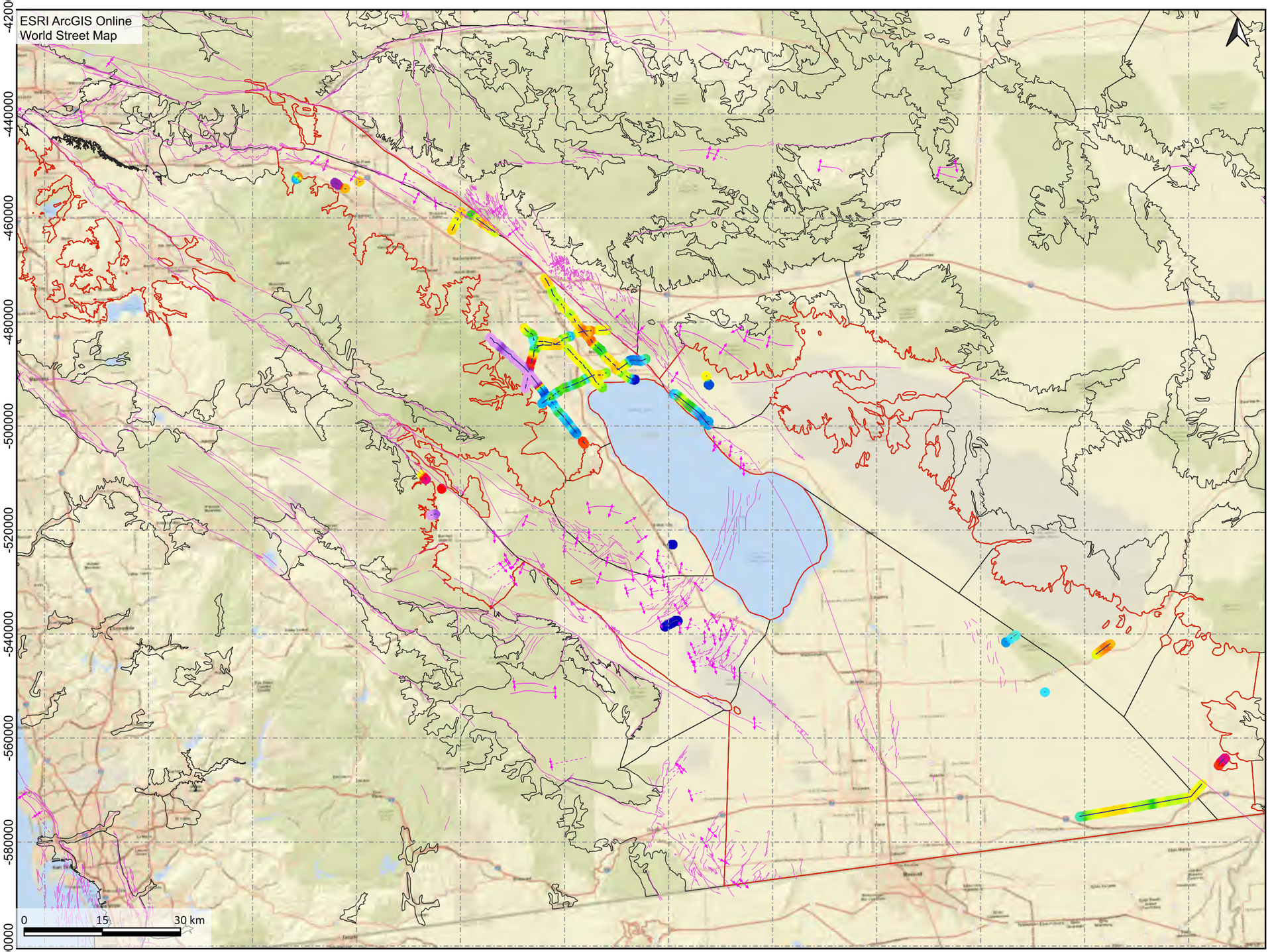
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -260 to -240m (-853 to -787 ft)

AEM Mean Resistivity

RAMBOLL





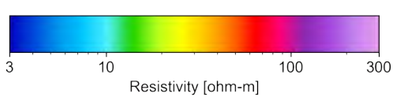
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



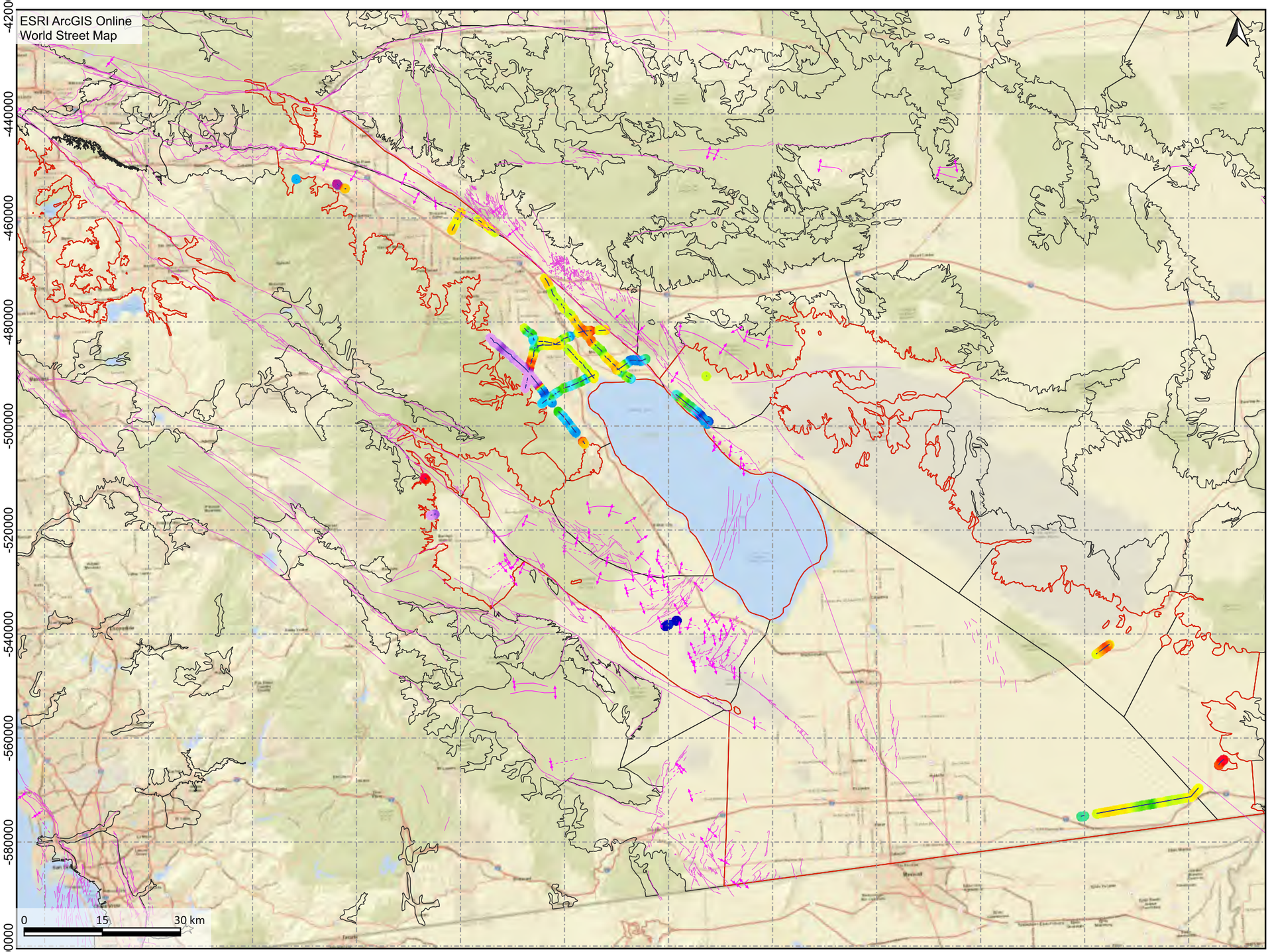
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -280 to -260m (-919 to -853 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

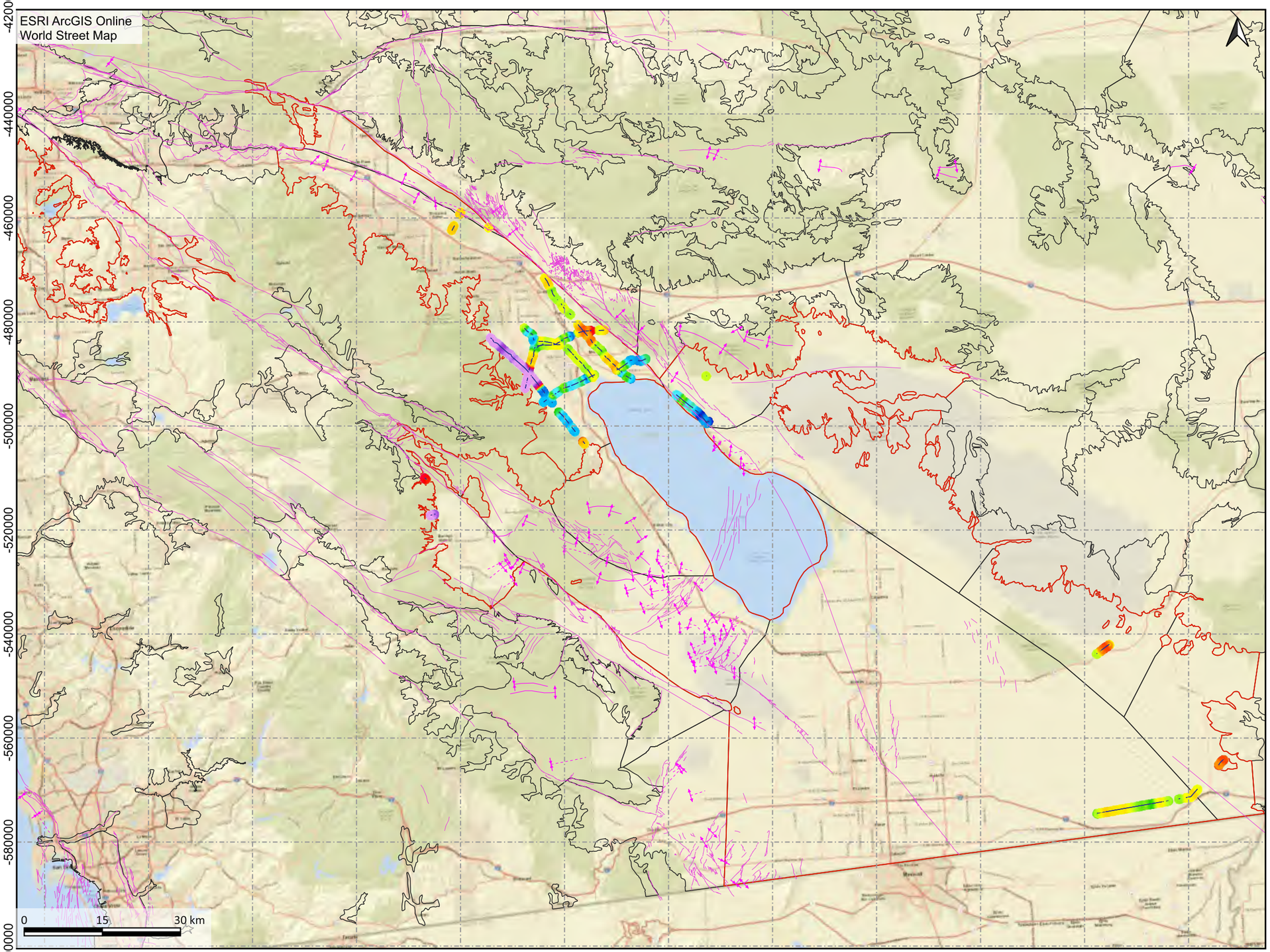
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -300 to -280m (-984 to -919 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

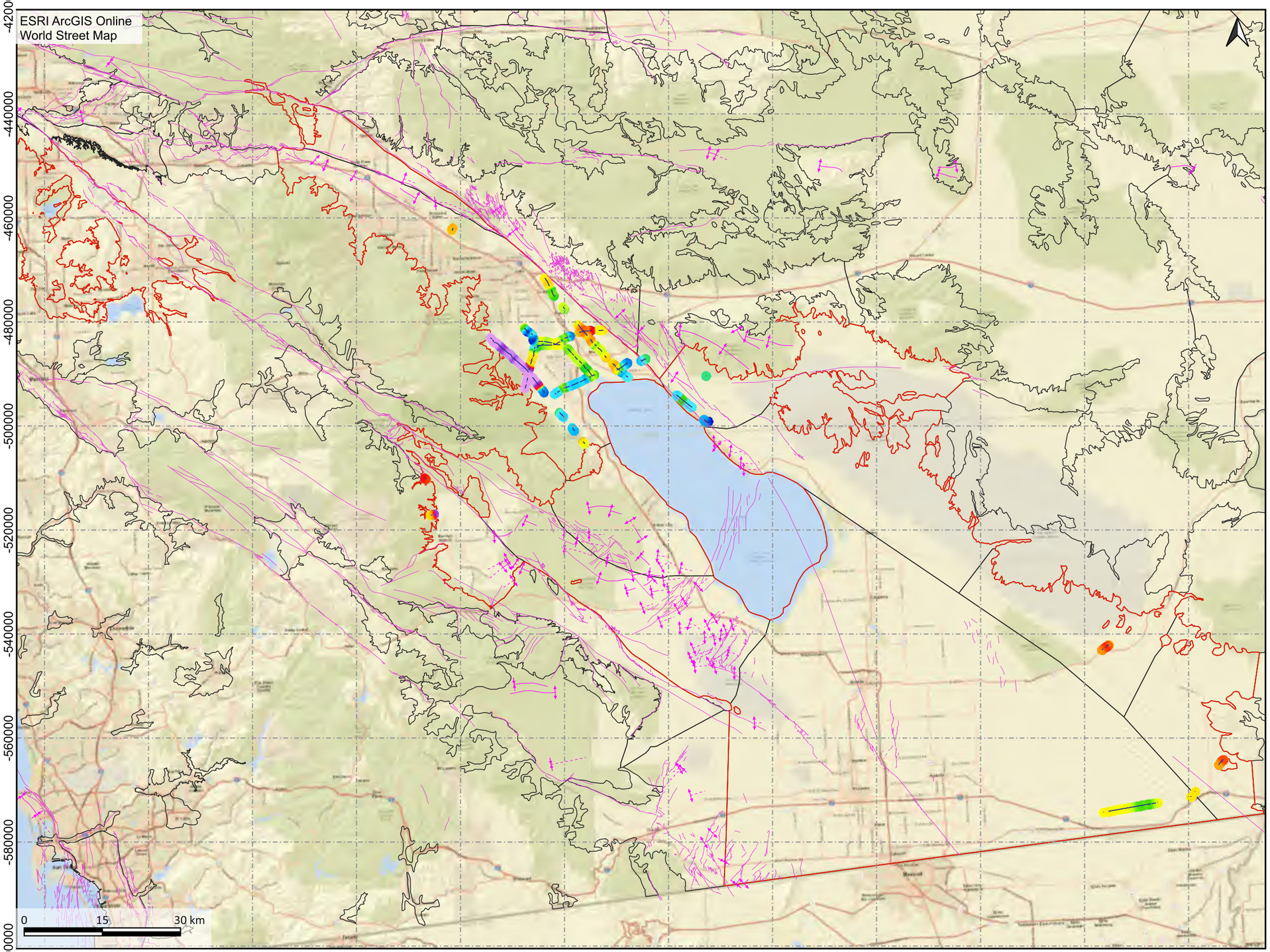
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -320 to -300m (-1050 to -984 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

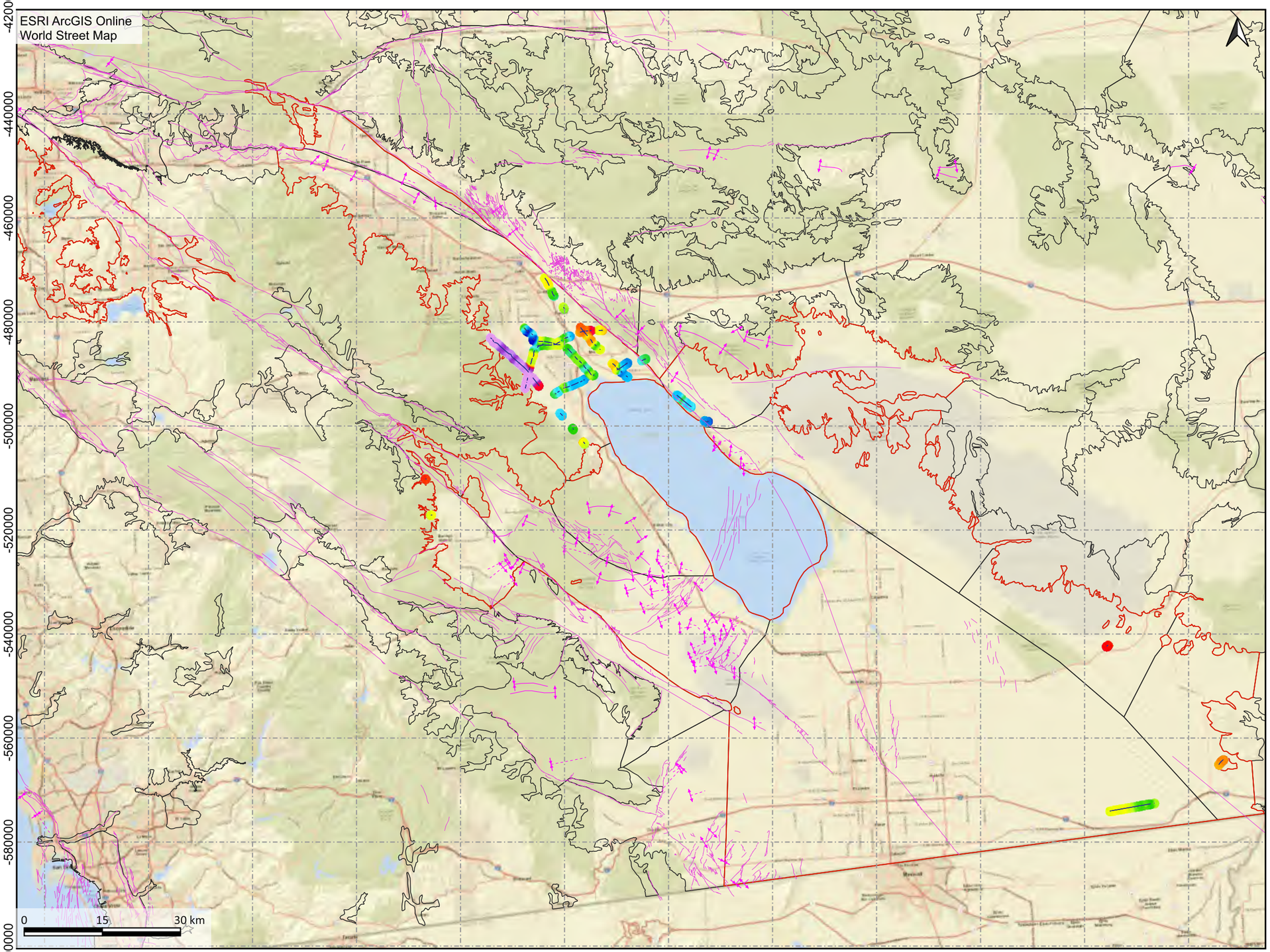
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -340 to -320m (-1115 to -1050 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

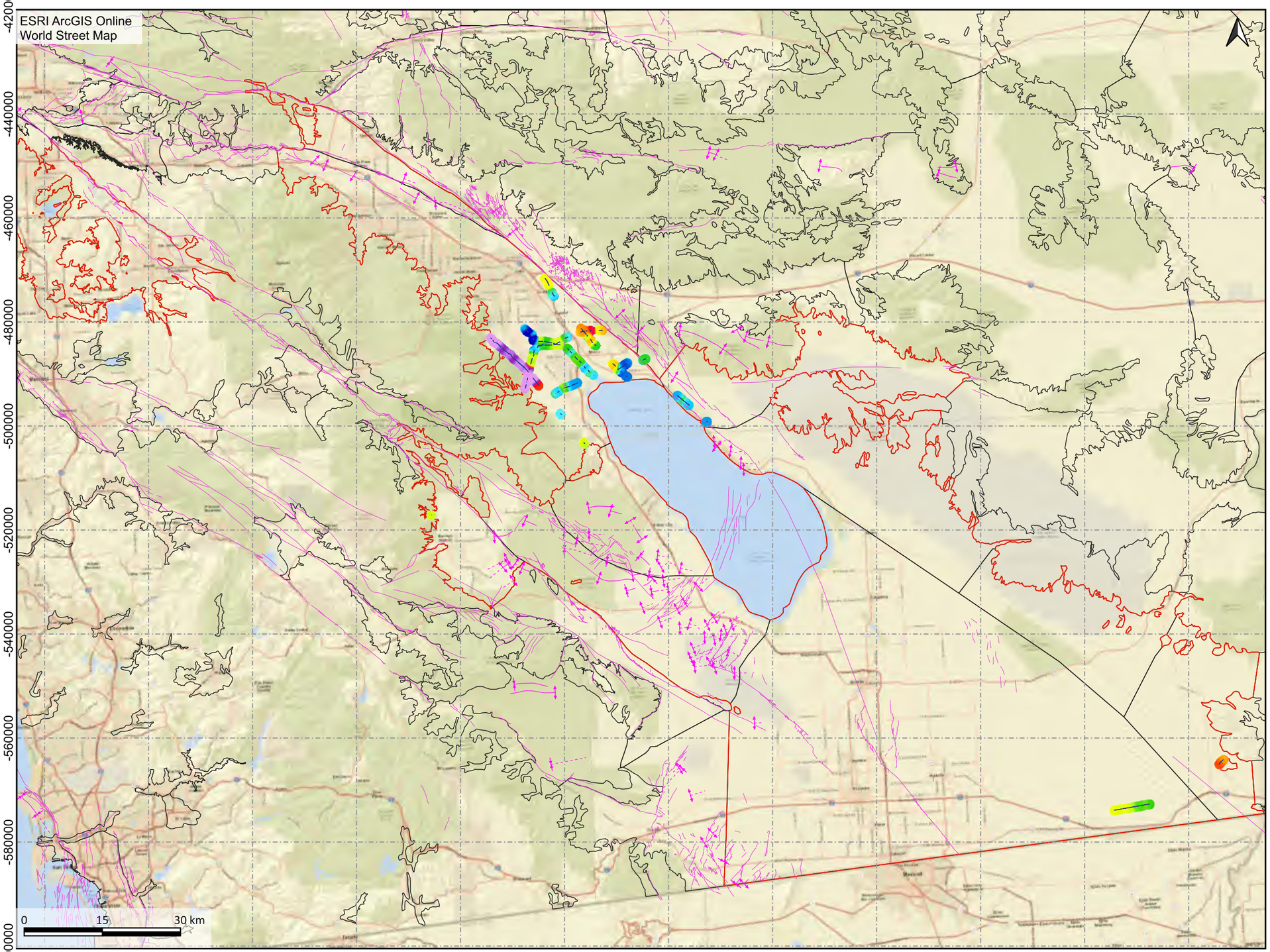
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -360 to -340m (-1181 to -1115 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

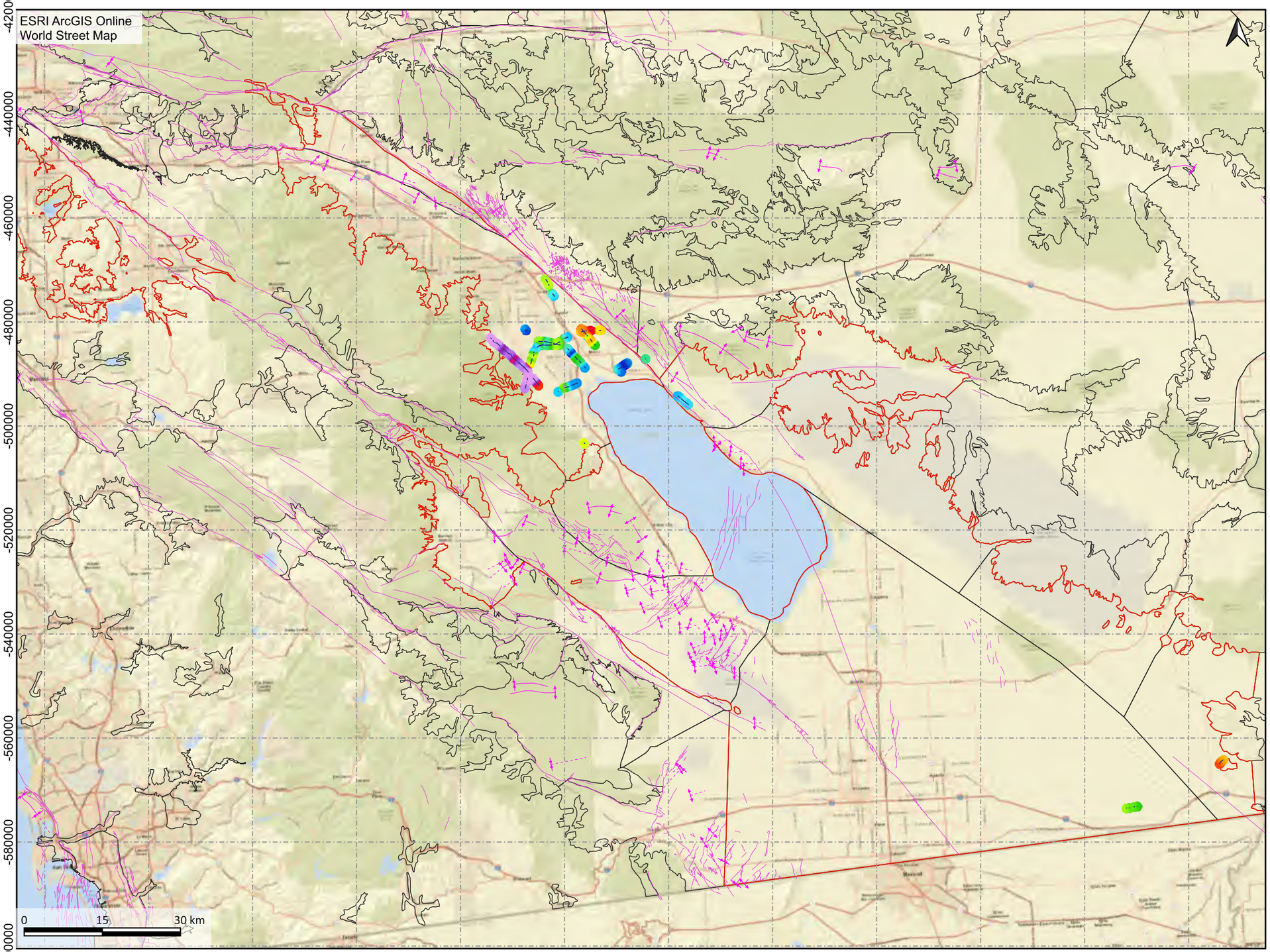
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -380 to -360m (-1247 to -1181 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

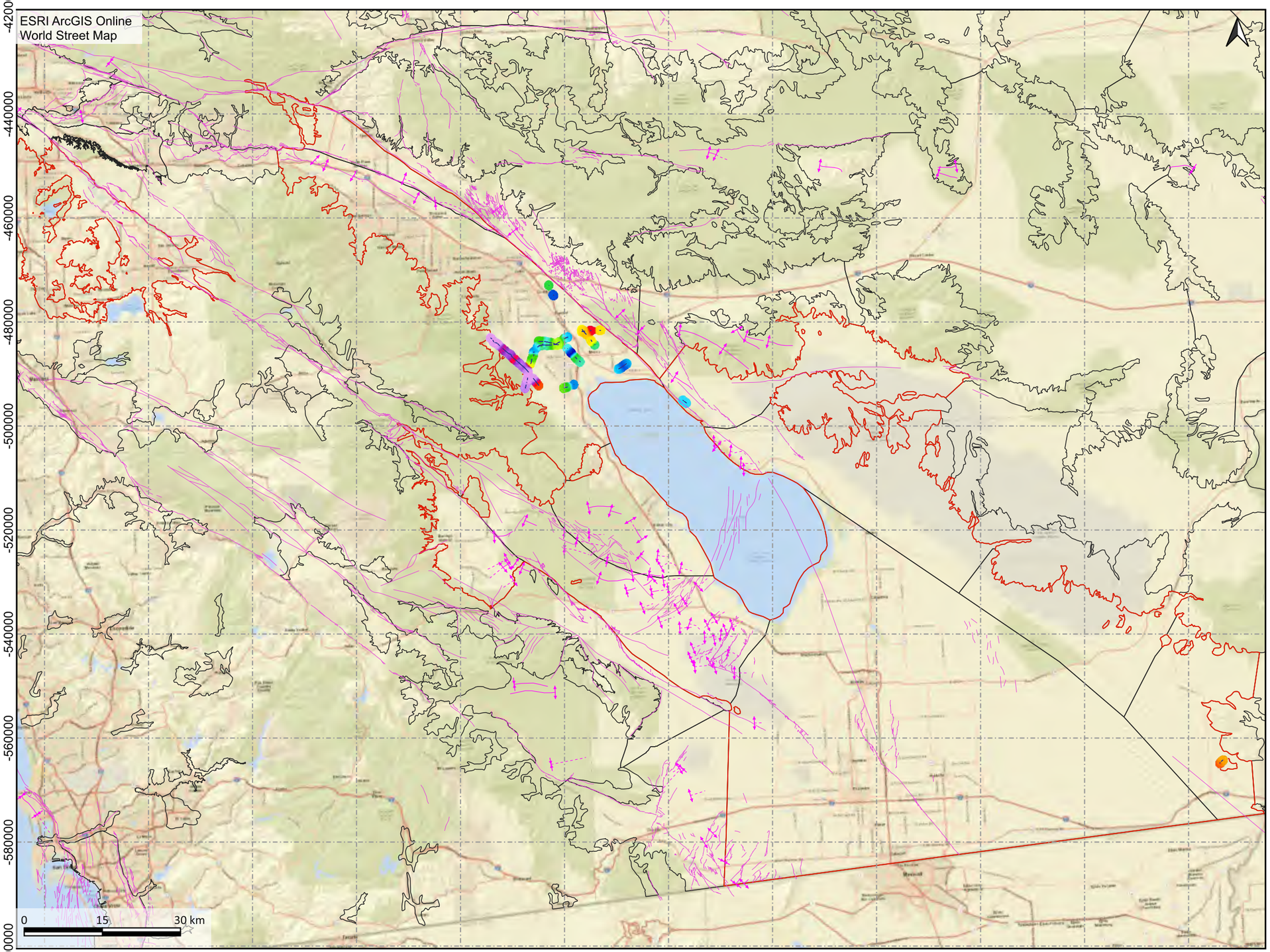
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -400 to -380m (-1312 to -1247 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

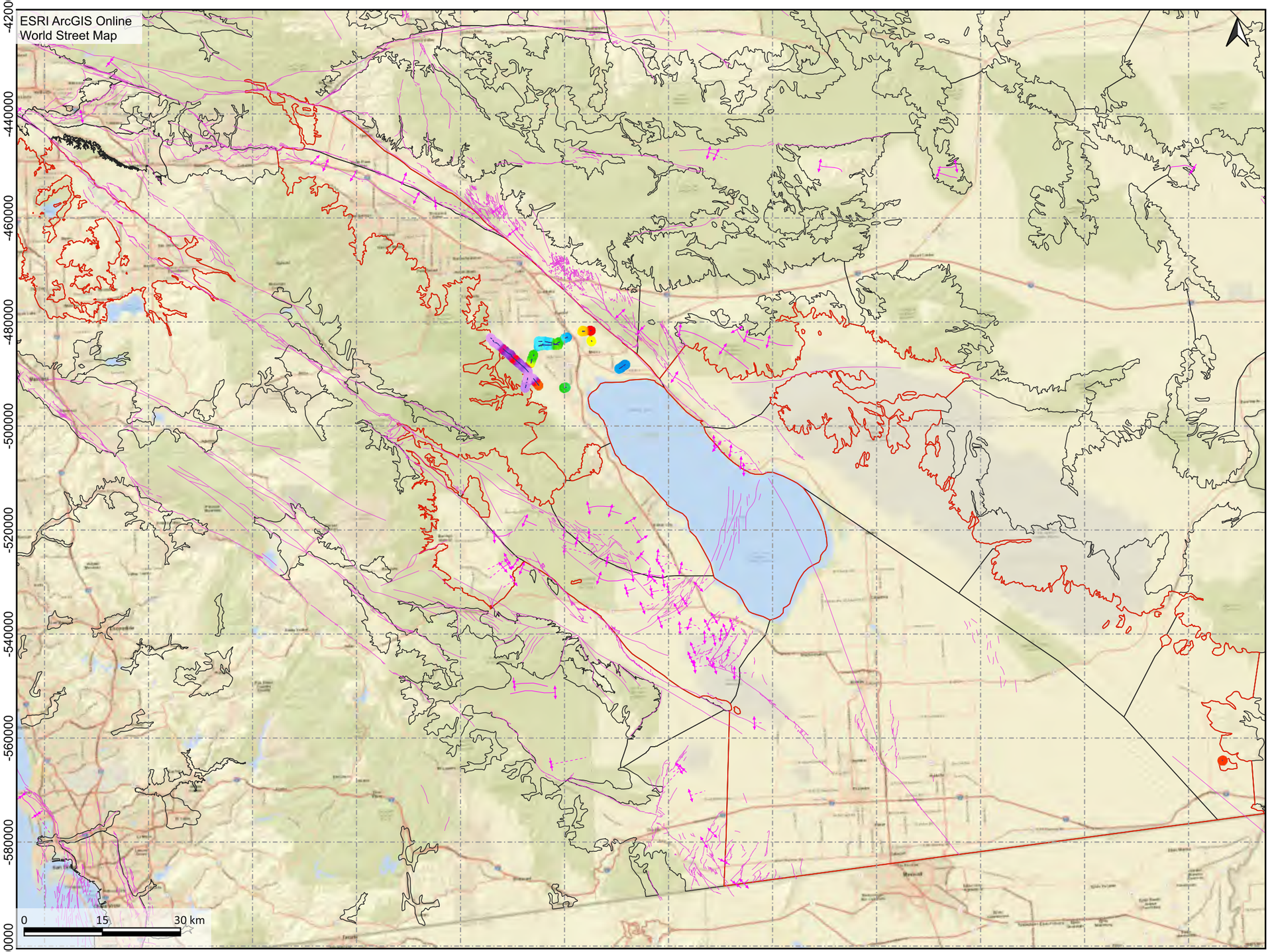
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -420 to -400m (-1378 to -1312 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

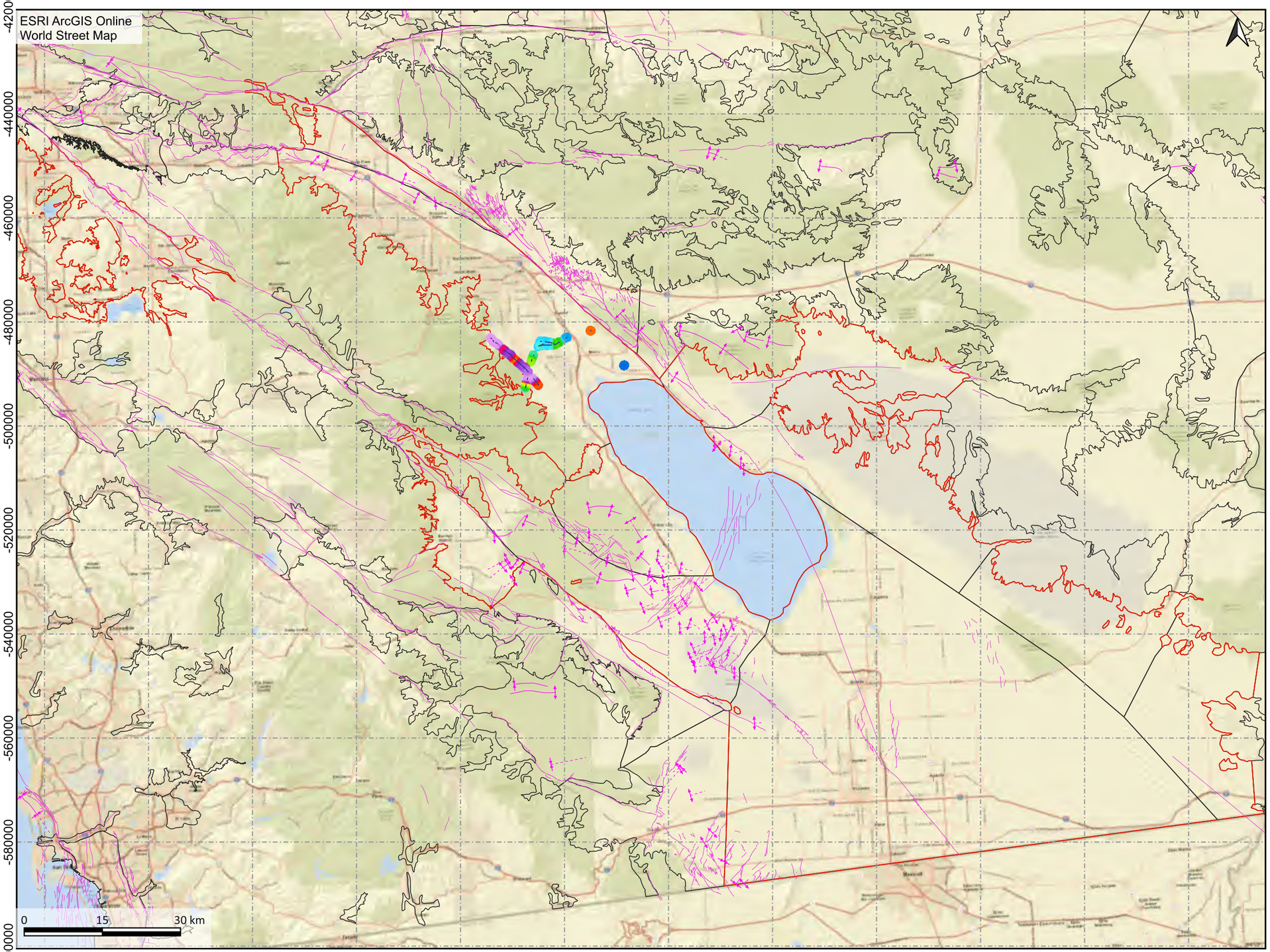
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -440 to -420m (-1444 to -1378 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

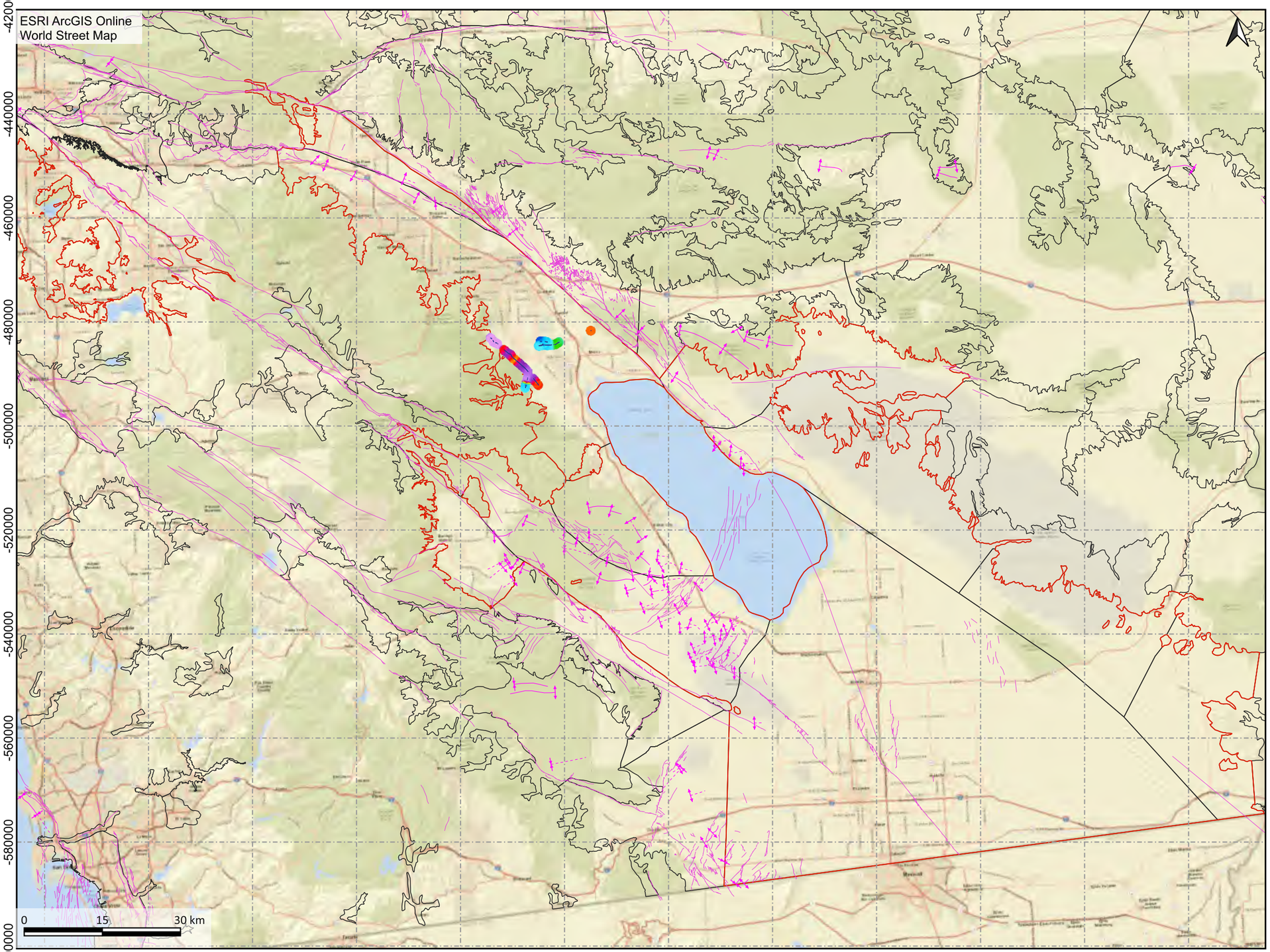
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -460 to -440m (-1509 to -1444 ft)

AEM Mean Resistivity

RAMBOLL





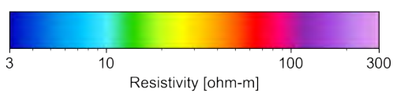
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



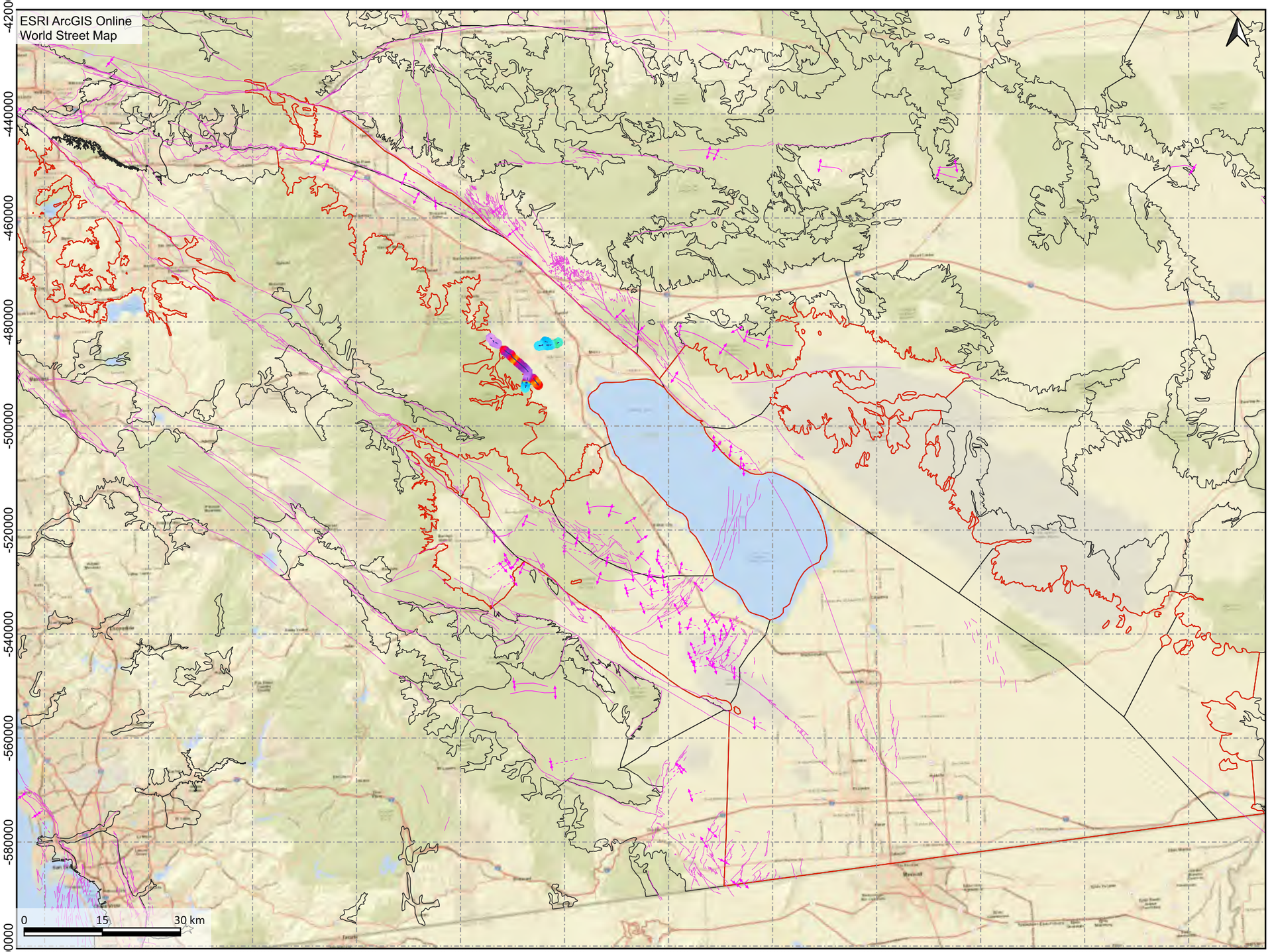
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -480 to -460m (-1575 to -1509 ft)

AEM Mean Resistivity

RAMBOLL





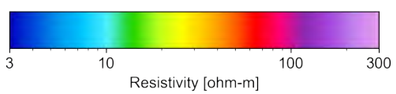
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



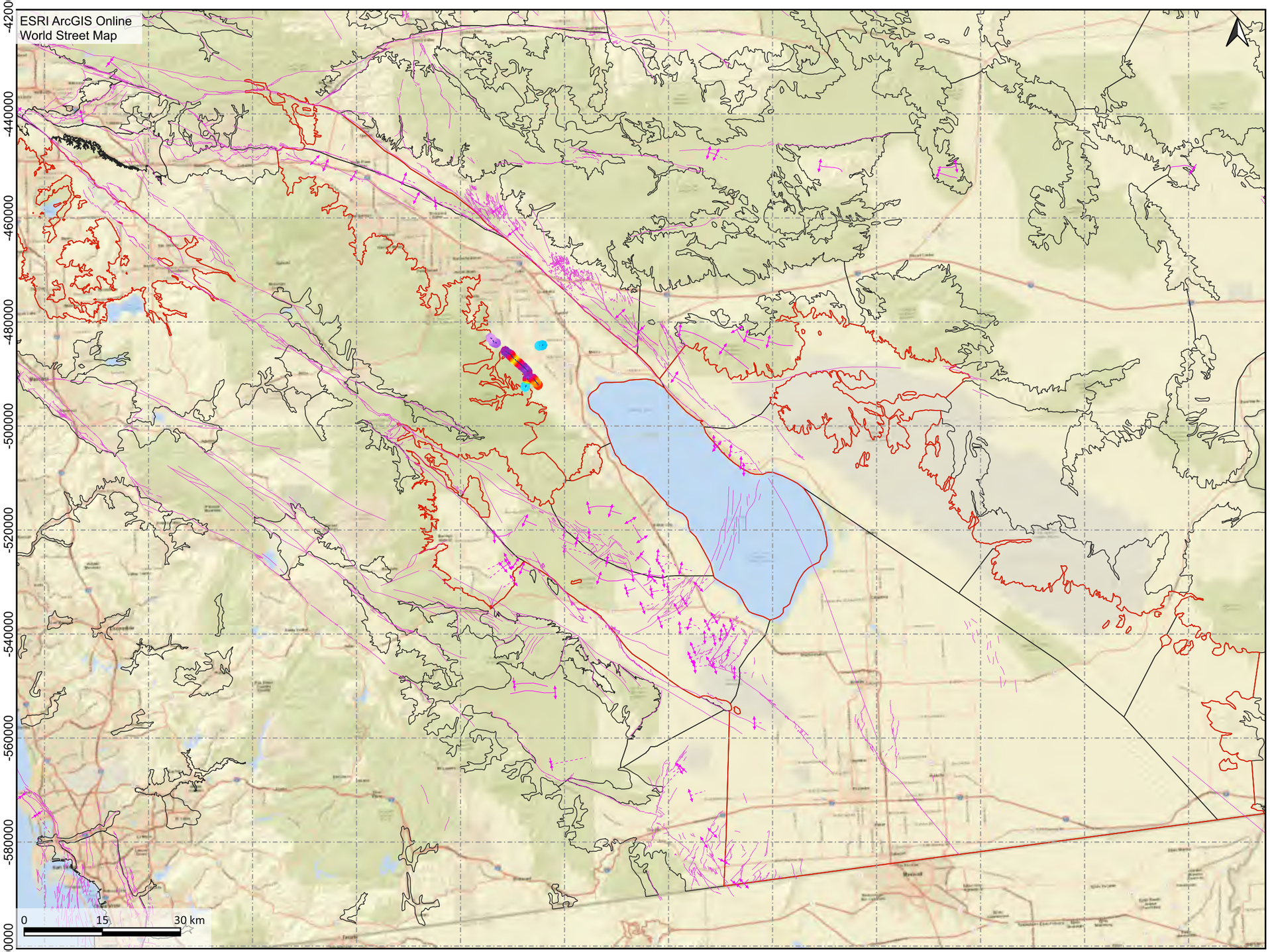
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -500 to -480m (-1640 to -1575 ft)

AEM Mean Resistivity

RAMBOLL





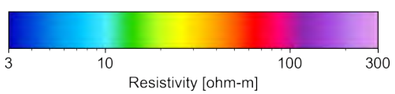
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



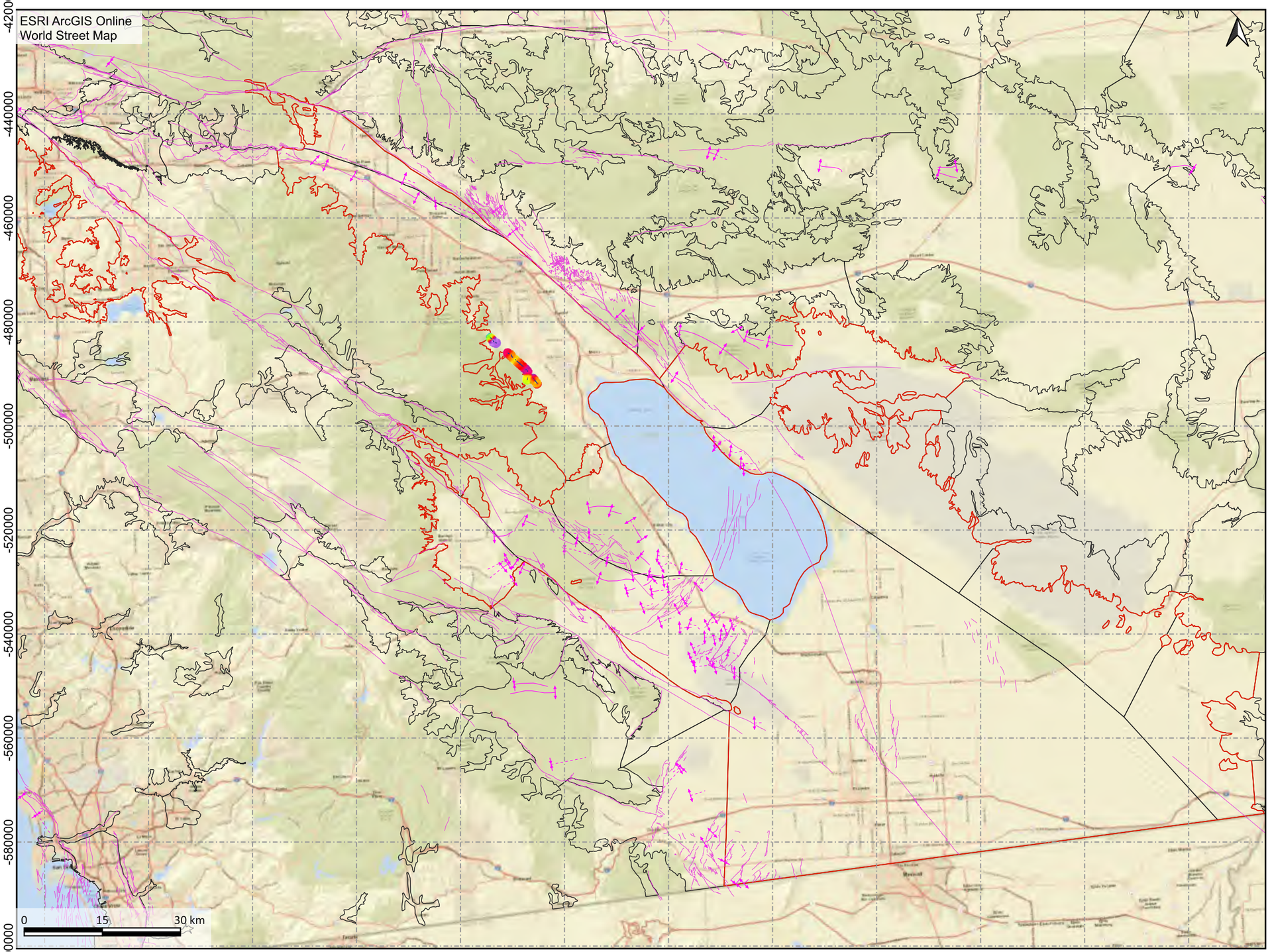
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -520 to -500m (-1706 to -1640 ft)

AEM Mean Resistivity

RAMBOLL





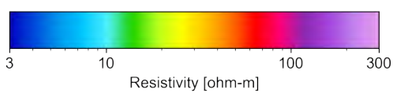
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



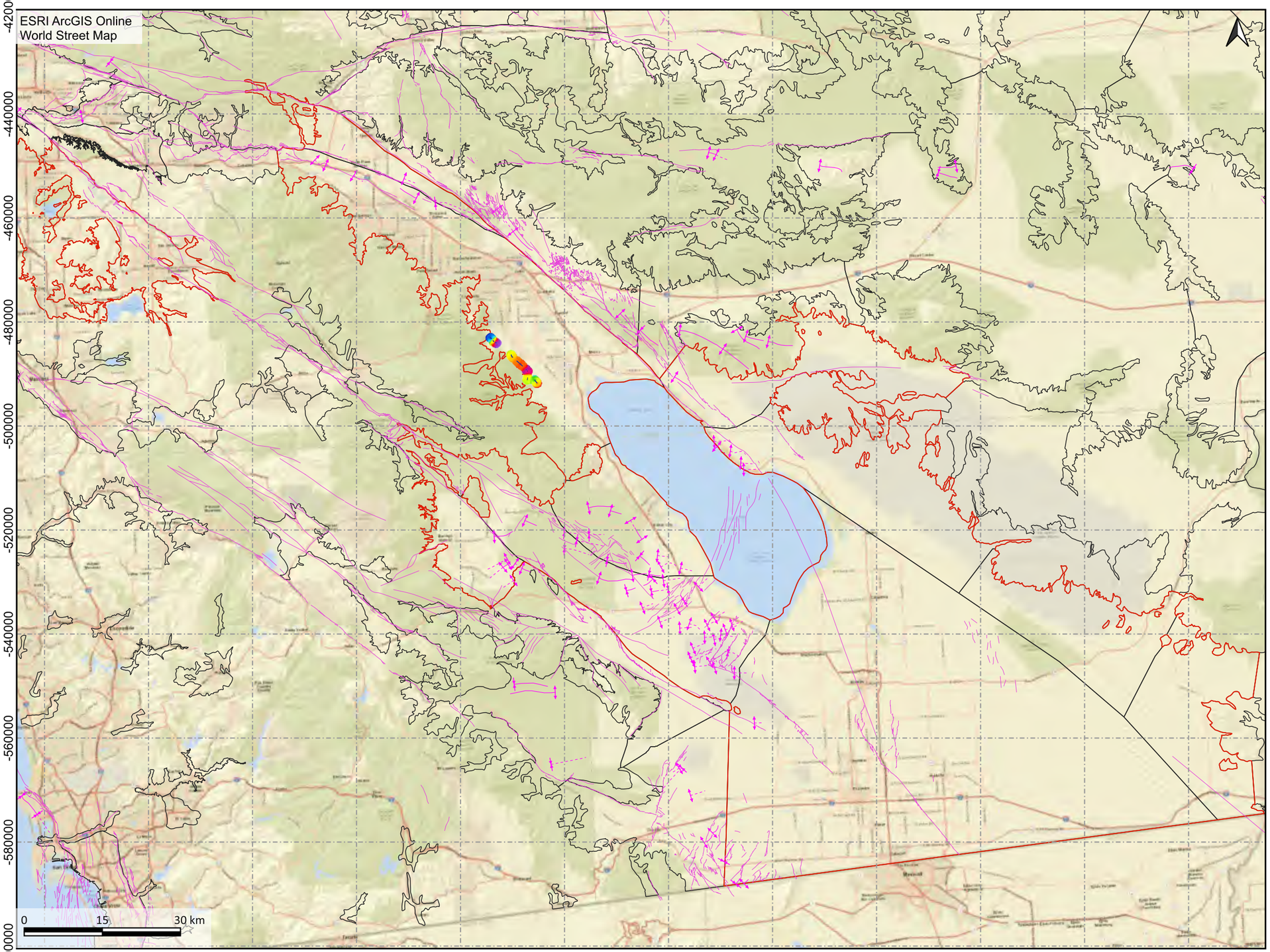
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -540 to -520m (-1772 to -1706 ft)

AEM Mean Resistivity

RAMBOLL





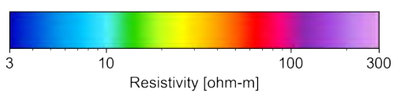
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



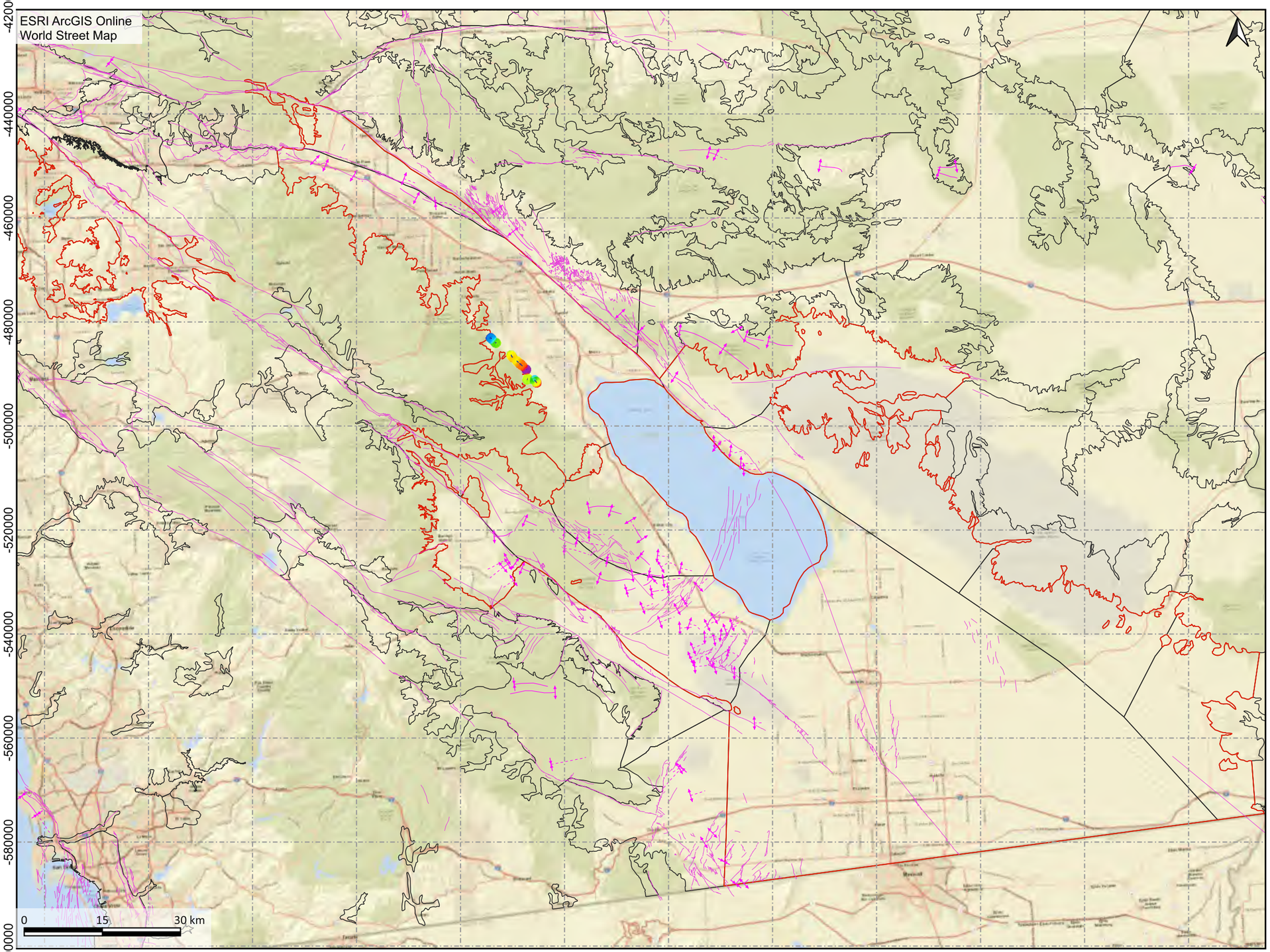
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -560 to -540m (-1837 to -1772 ft)

AEM Mean Resistivity

RAMBOLL





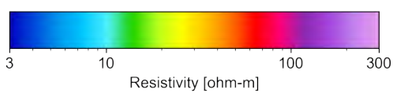
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



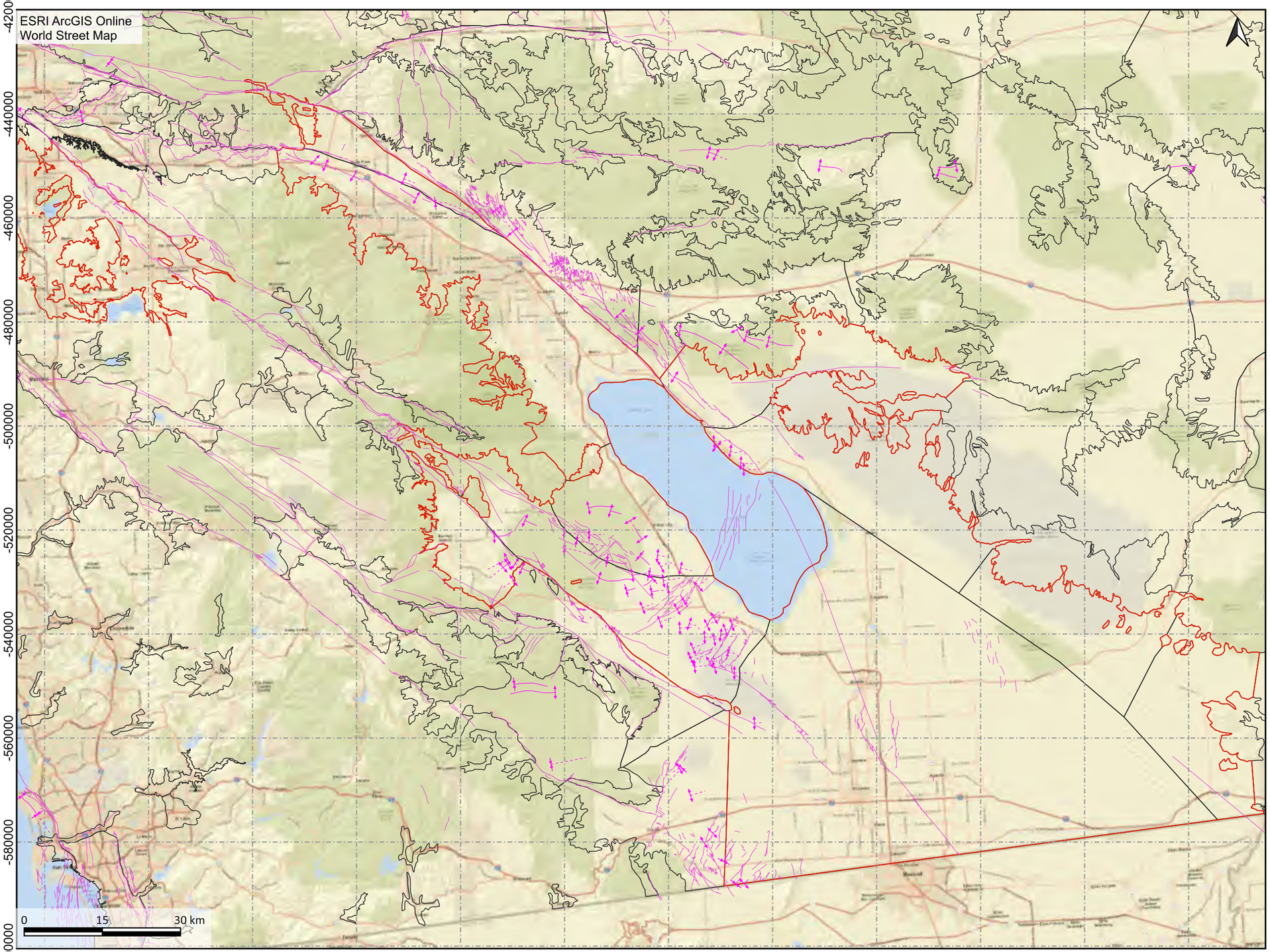
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -580 to -560m (-1903 to -1837 ft)

AEM Mean Resistivity

RAMBOLL





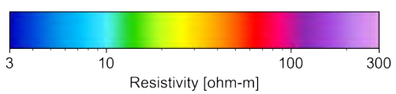
EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)



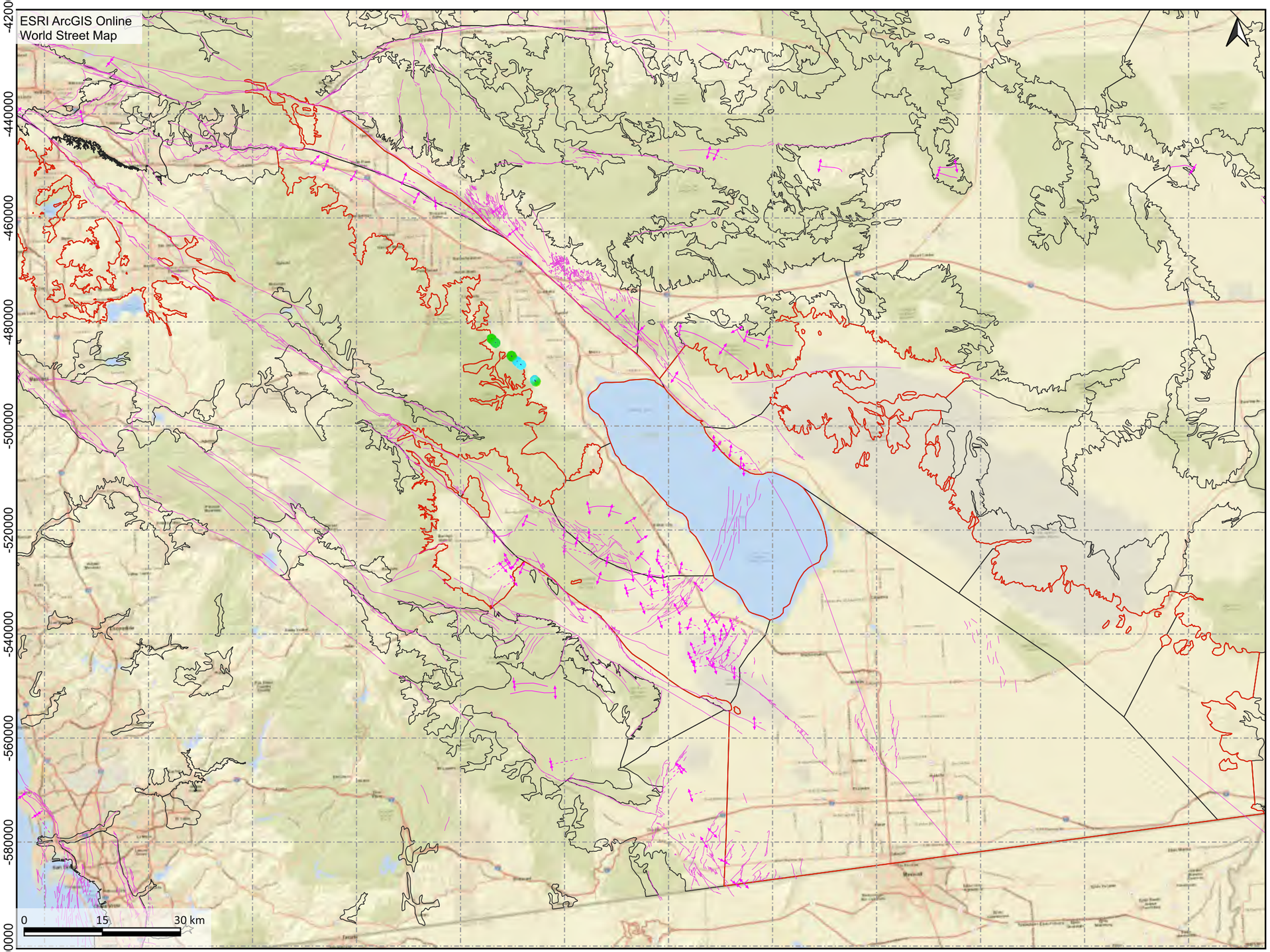
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -600 to -580m (-1969 to -1903 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

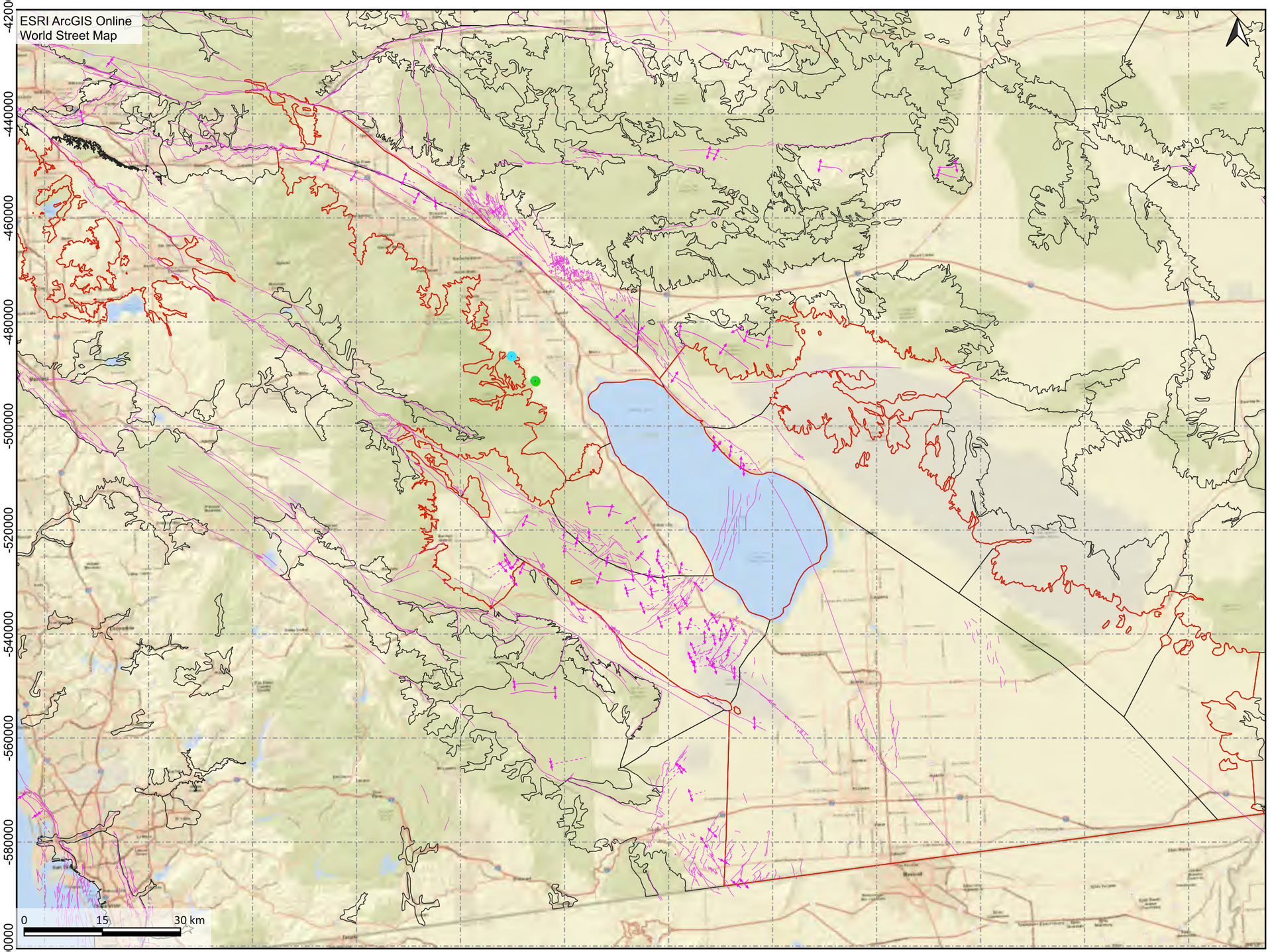
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Elevation Interval -620 to -600m (-2034 to -1969 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Elevation-averaged resistivity values (from smooth resistivity model)

3 10 100 300

Resistivity [ohm-m]

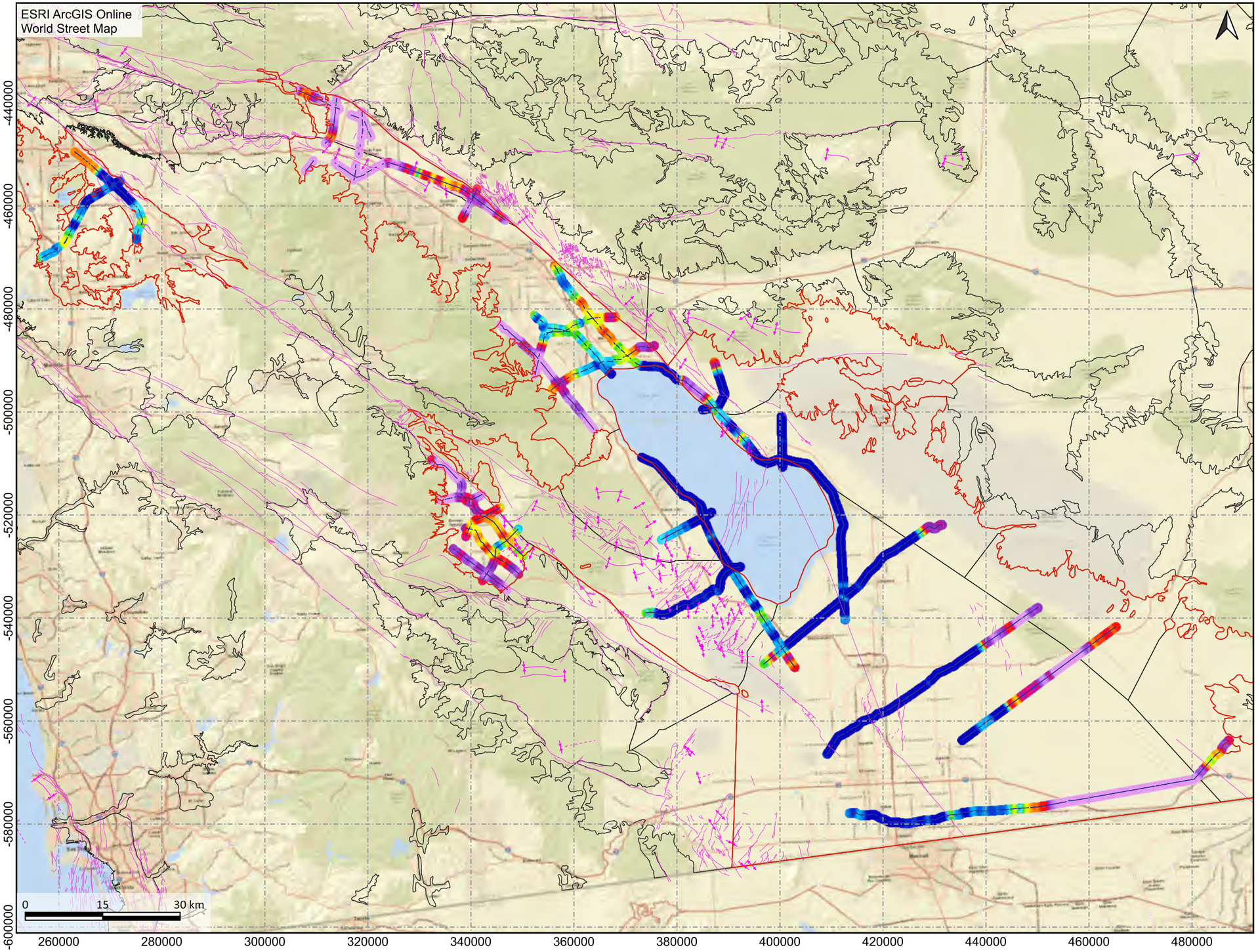
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Depth Interval 0 to 5m (0 to 16 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Depth-averaged resistivity values (from smooth resistivity model)

3 — 10 — 100 — 300

Resistivity [ohm-m]

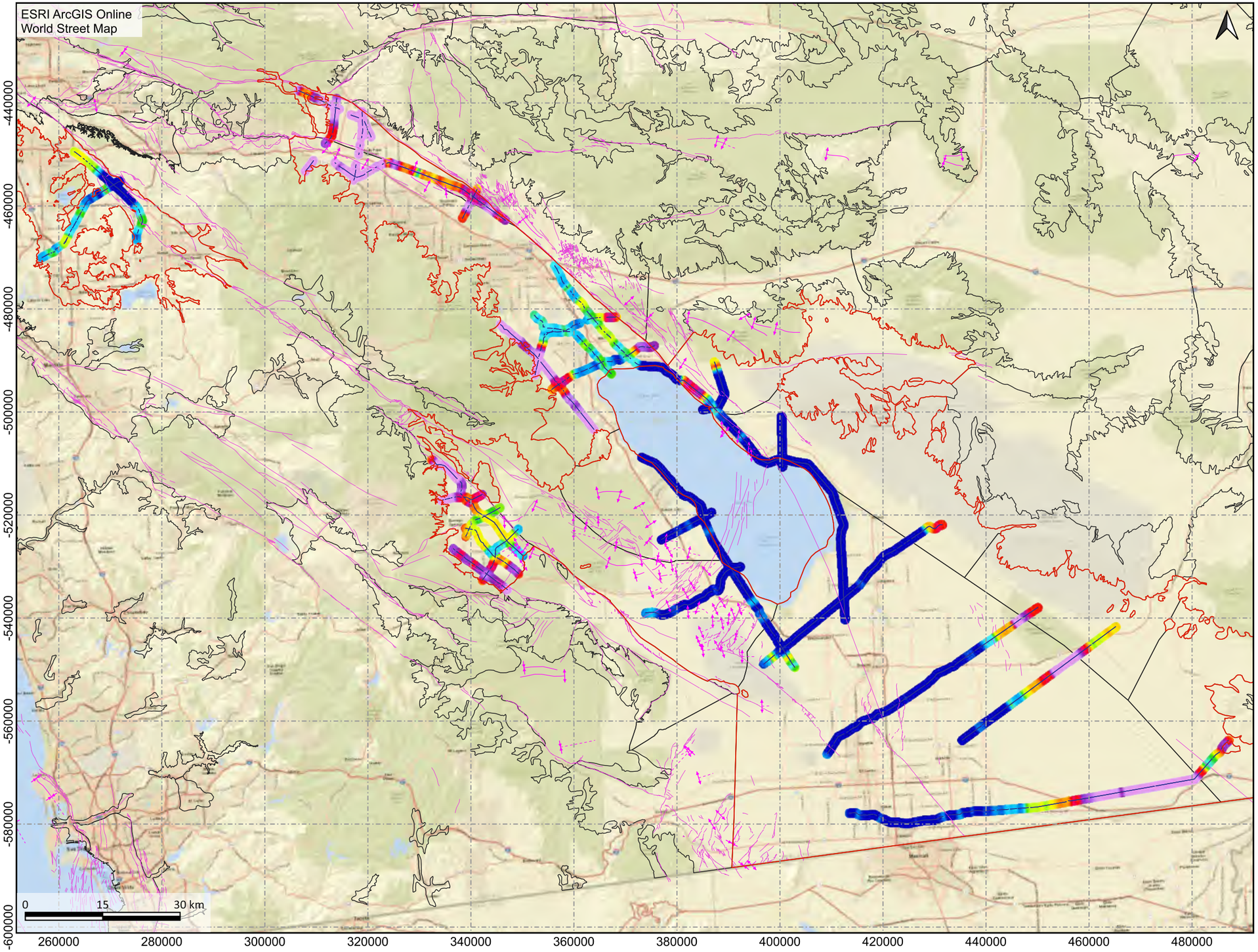
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Depth Interval 5 to 15m (16 to 49 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Depth-averaged resistivity values (from smooth resistivity model)

3 — 10 — 100 — 300

Resistivity [ohm-m]

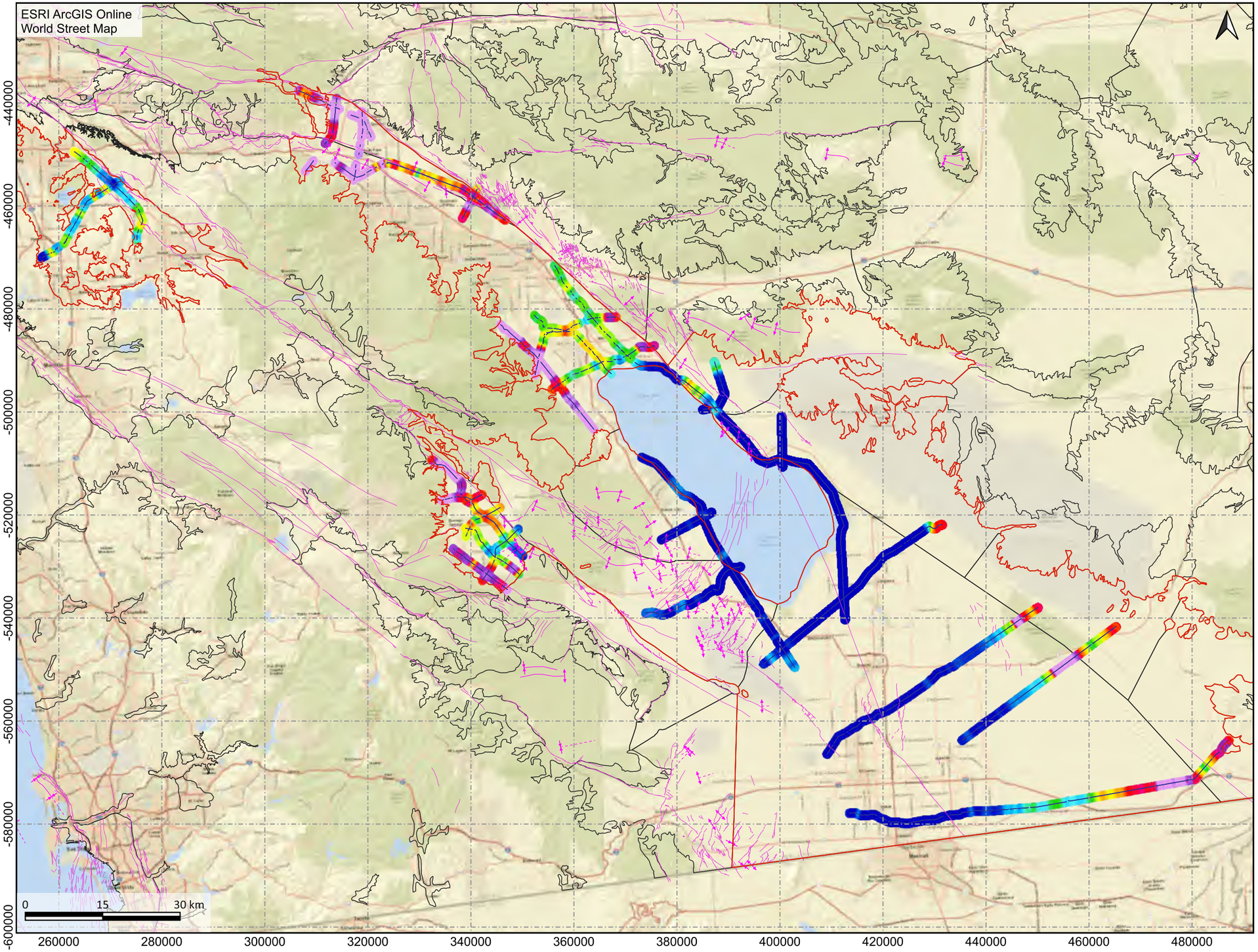
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Depth Interval 15 to 30m (49 to 98 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Depth-averaged resistivity values (from smooth resistivity model)

3 — 10 — 100 — 300

Resistivity [ohm-m]

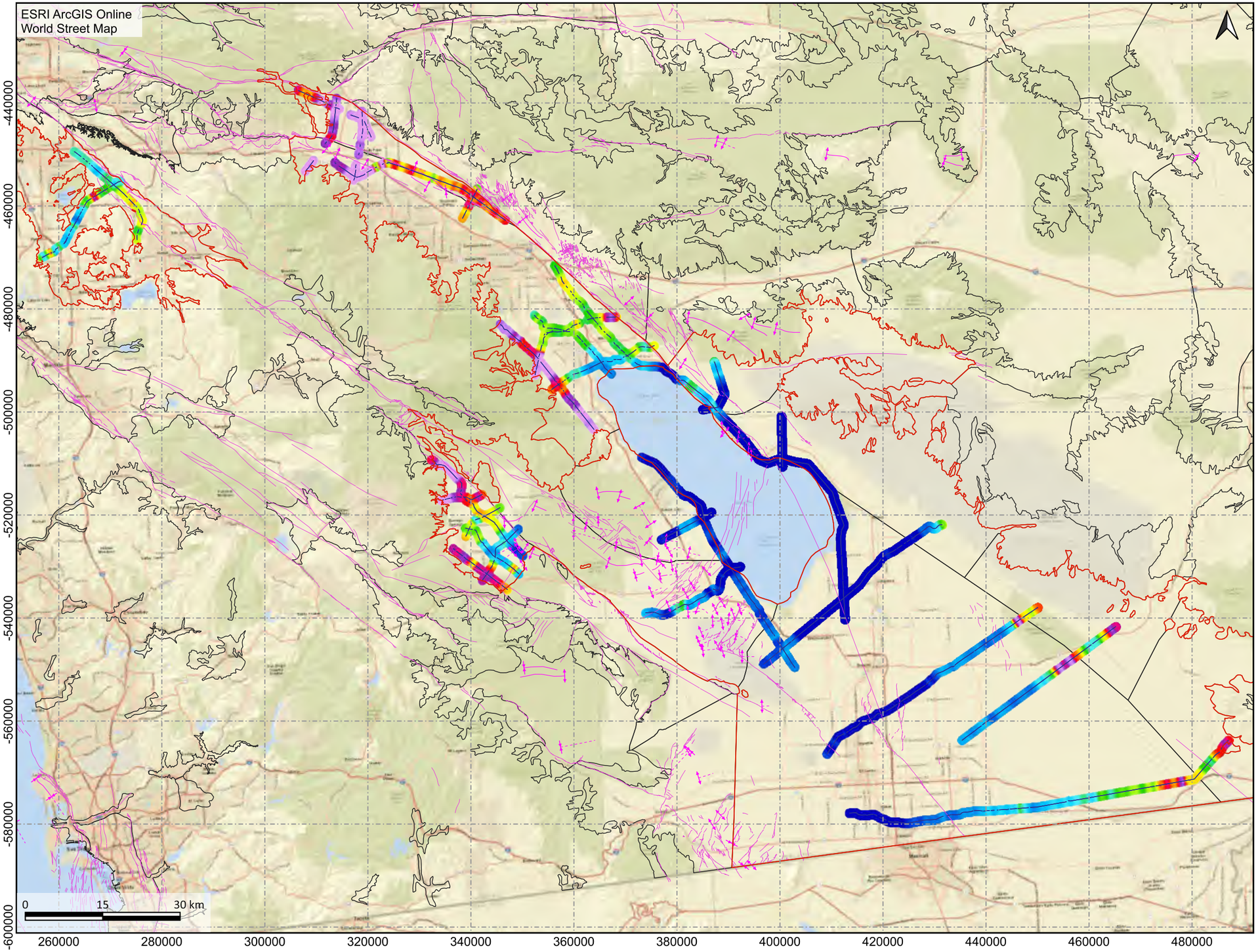
Coordinate system: NAD83 / California Albers, EPSG: 3310

Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

WO13, Depth Interval 30 to 60m (98 to 197 ft)

AEM Mean Resistivity

RAMBOLL





EPSG 3310 - NAD83 / California Albers

- Groundwater Basin Boundary (DWR - B118)
- Target Area
- AEM data used for inversion
- Quaternary faults (USGS 2018)

Synclines and Anticlines (CGS, 2010)

- anticline, certain
- anticline, concealed
- syncline, certain
- syncline, concealed

Depth-averaged resistivity values (from smooth resistivity model)

3 — 10 — 100 — 300

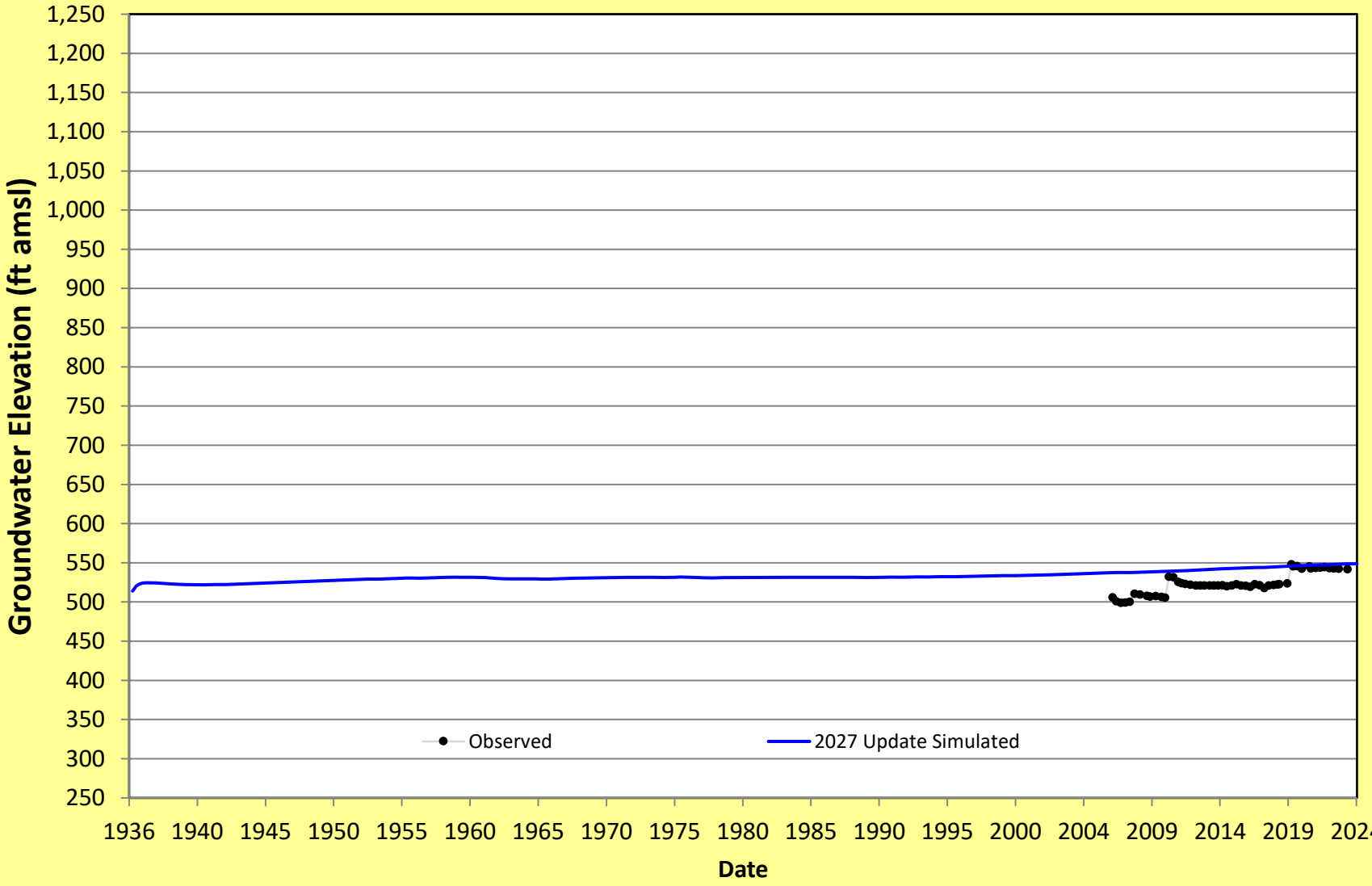
Resistivity [ohm-m]

Coordinate system: NAD83 / California Albers, EPSG: 3310

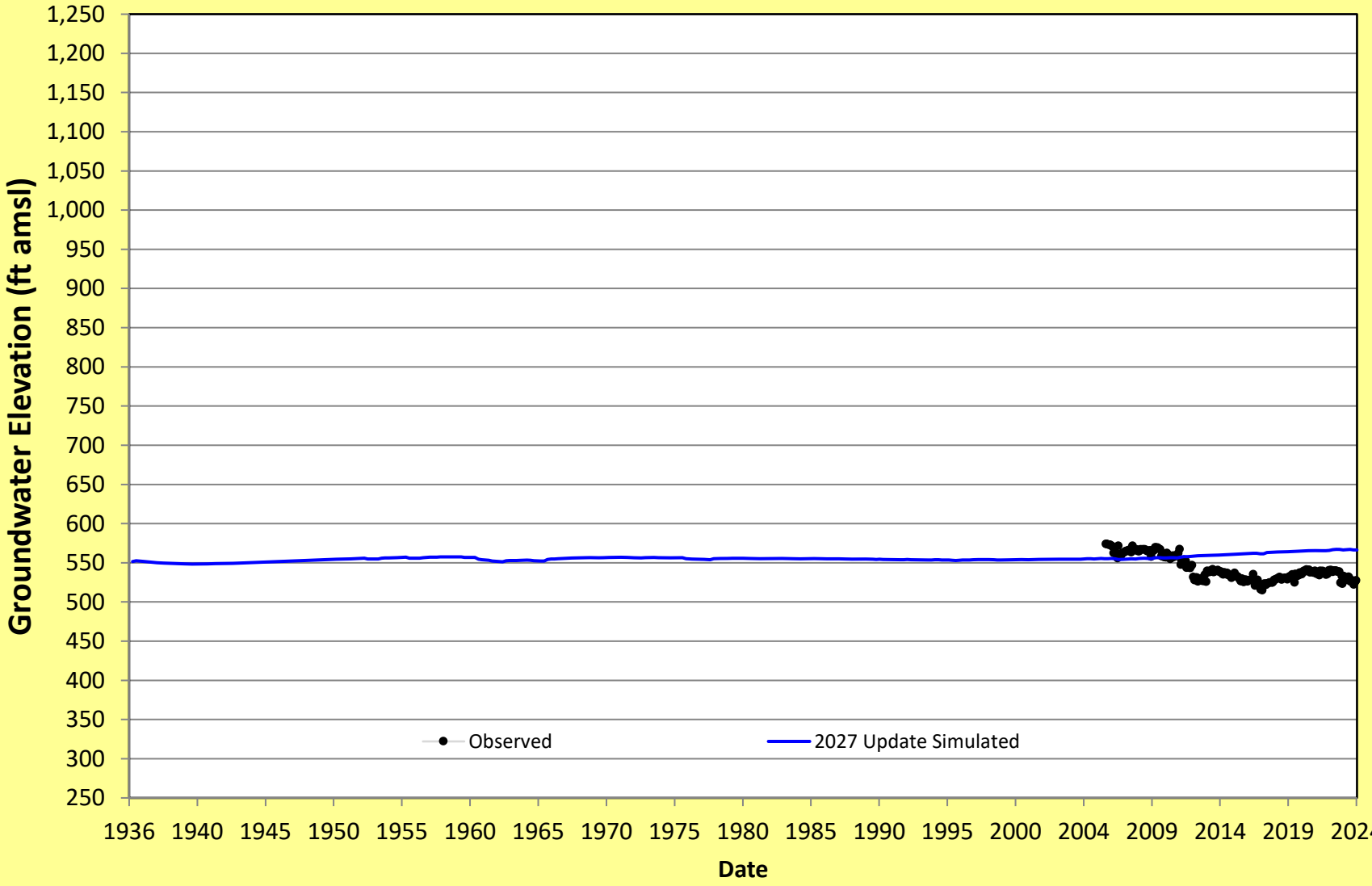
Date: 2024-07-17, Created by: MTDL, Checked by: JEPP, Approved by: PATH

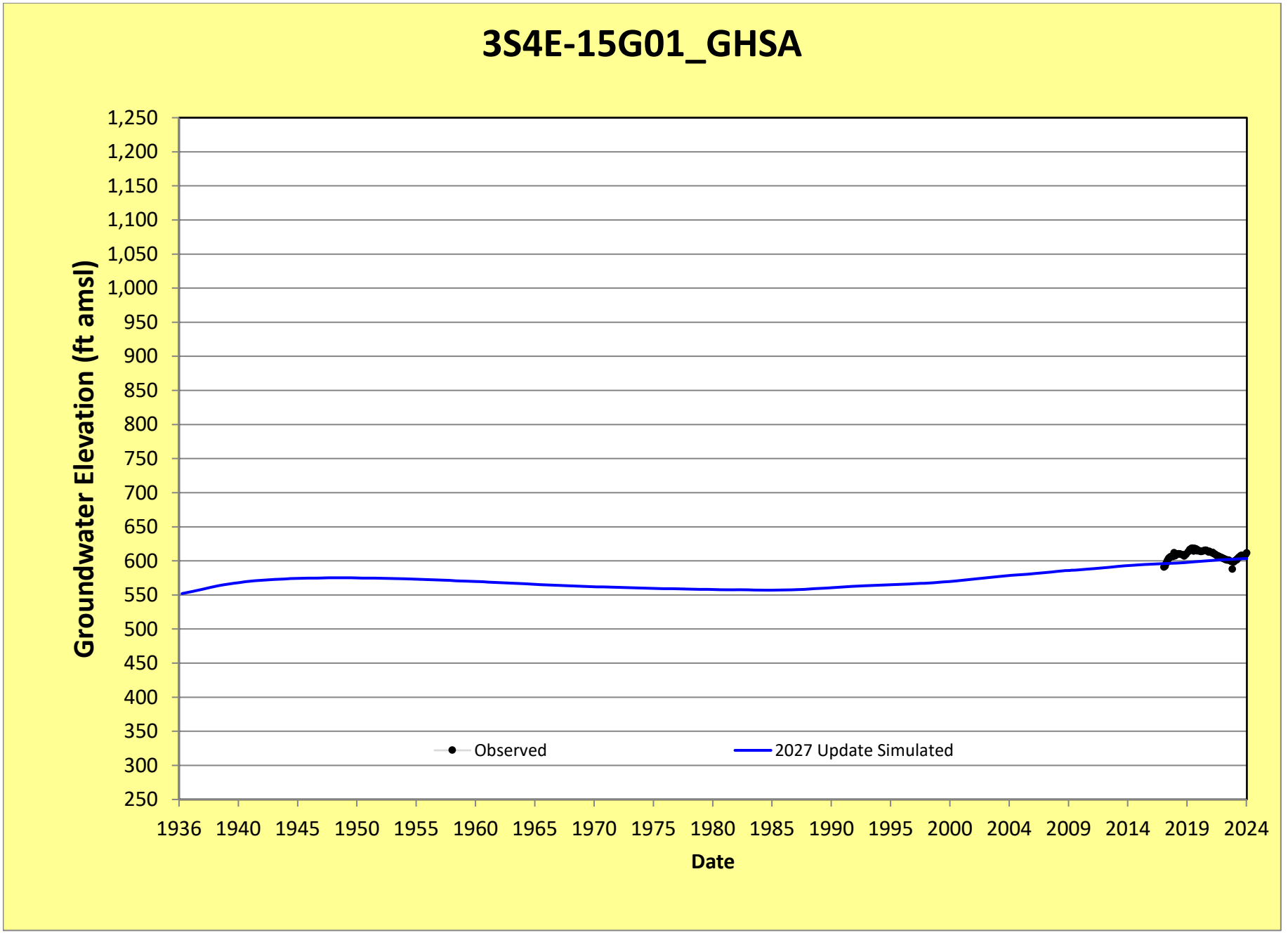
Attachment A2: Observed and Simulated Hydrographs

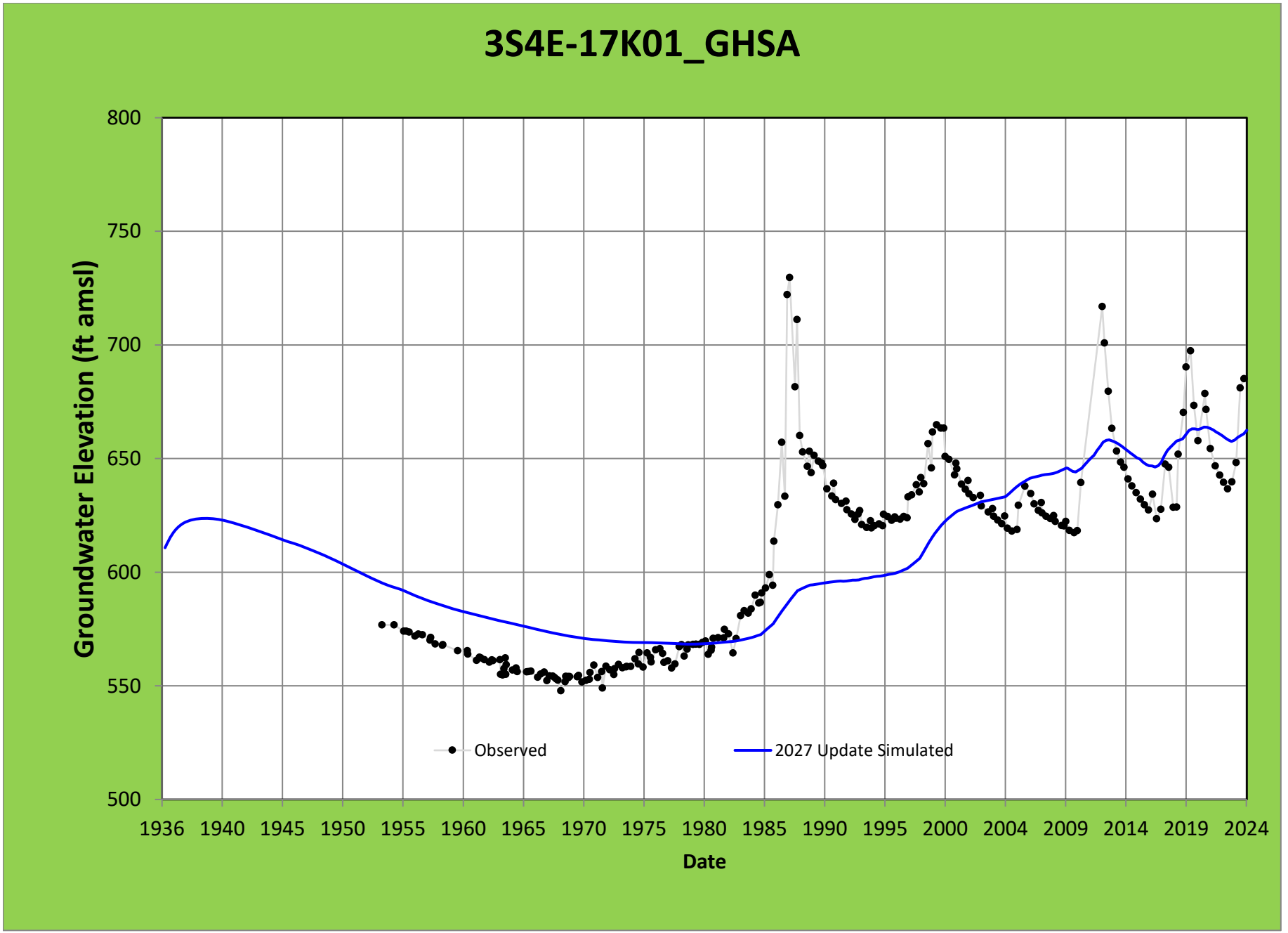
3S4E-13N02_GHSA



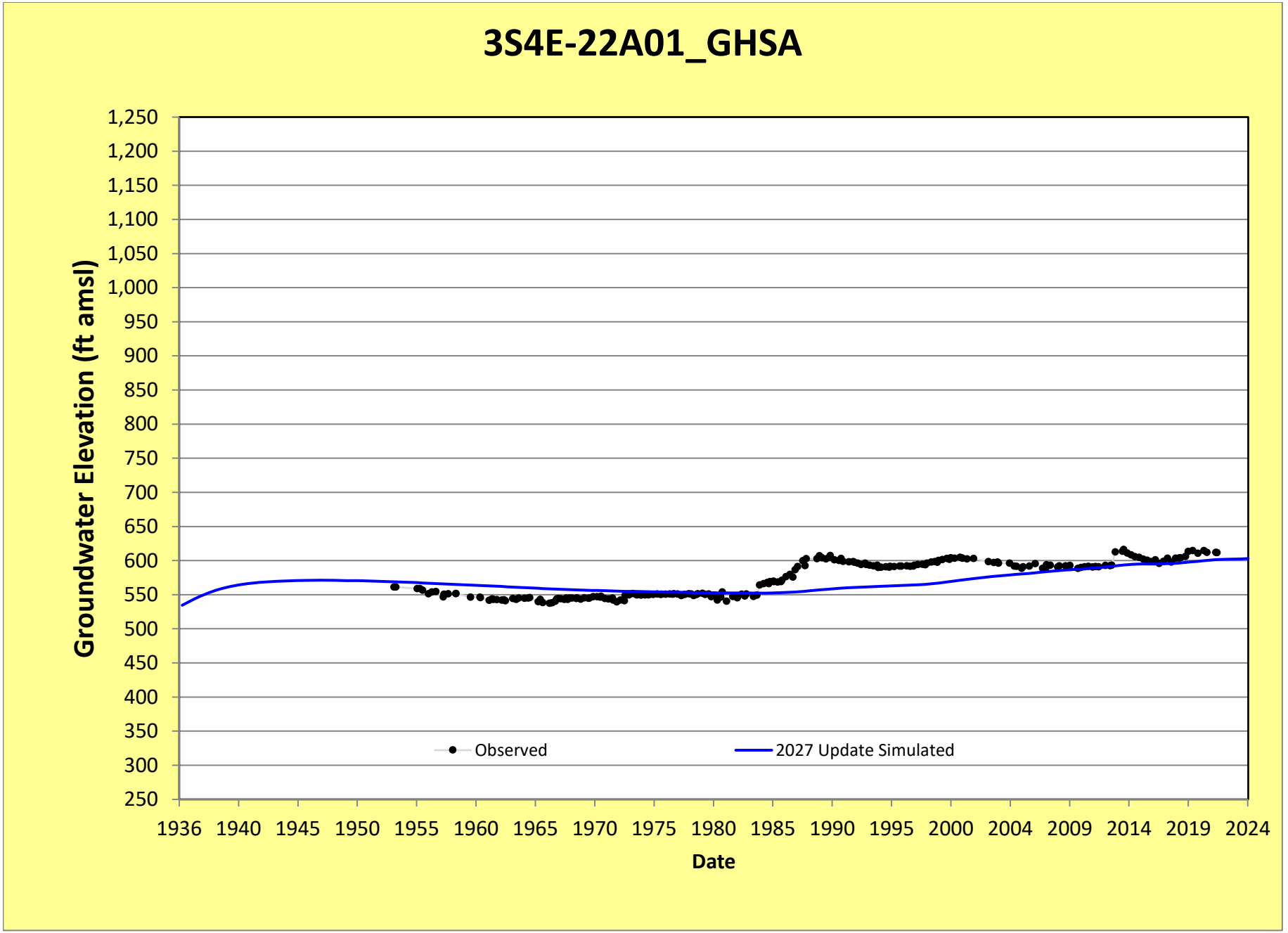
3S4E-14J01_GHSA



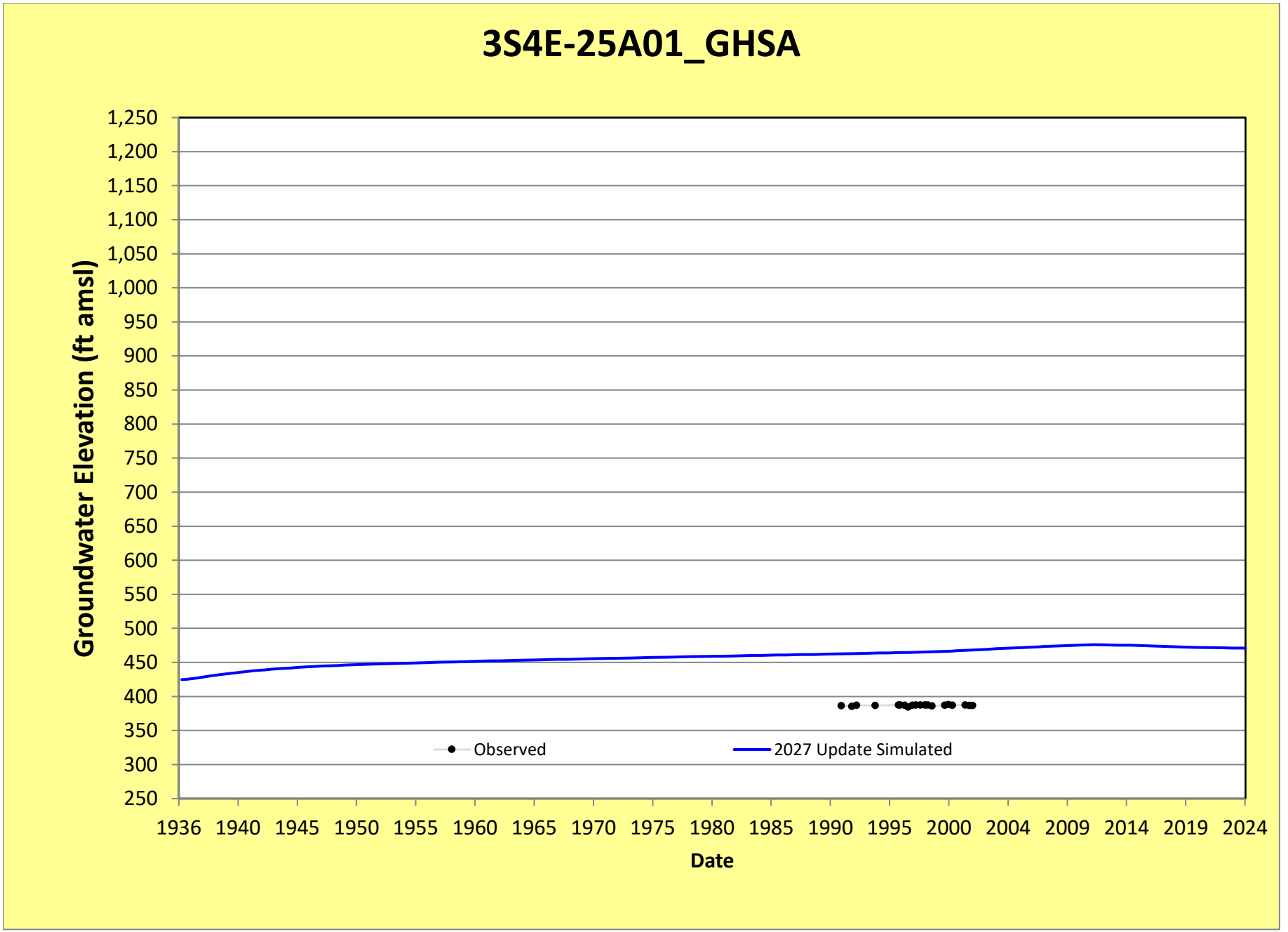

3S4E-15G01_GHSA
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

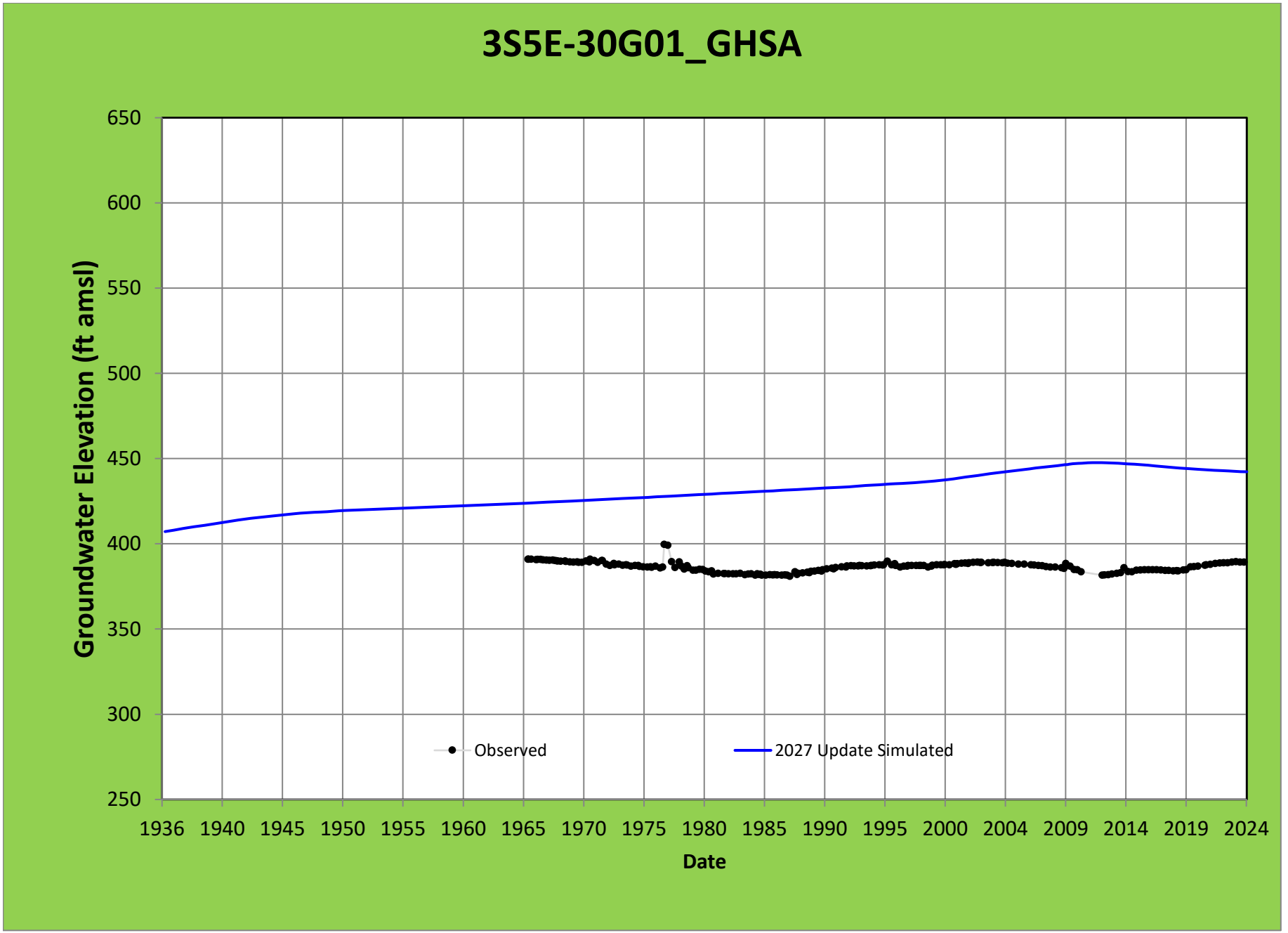

3S4E-17K01_GHSA
Groundwater Elevation (ft amsl)
800
750
700
650
600
550
500
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

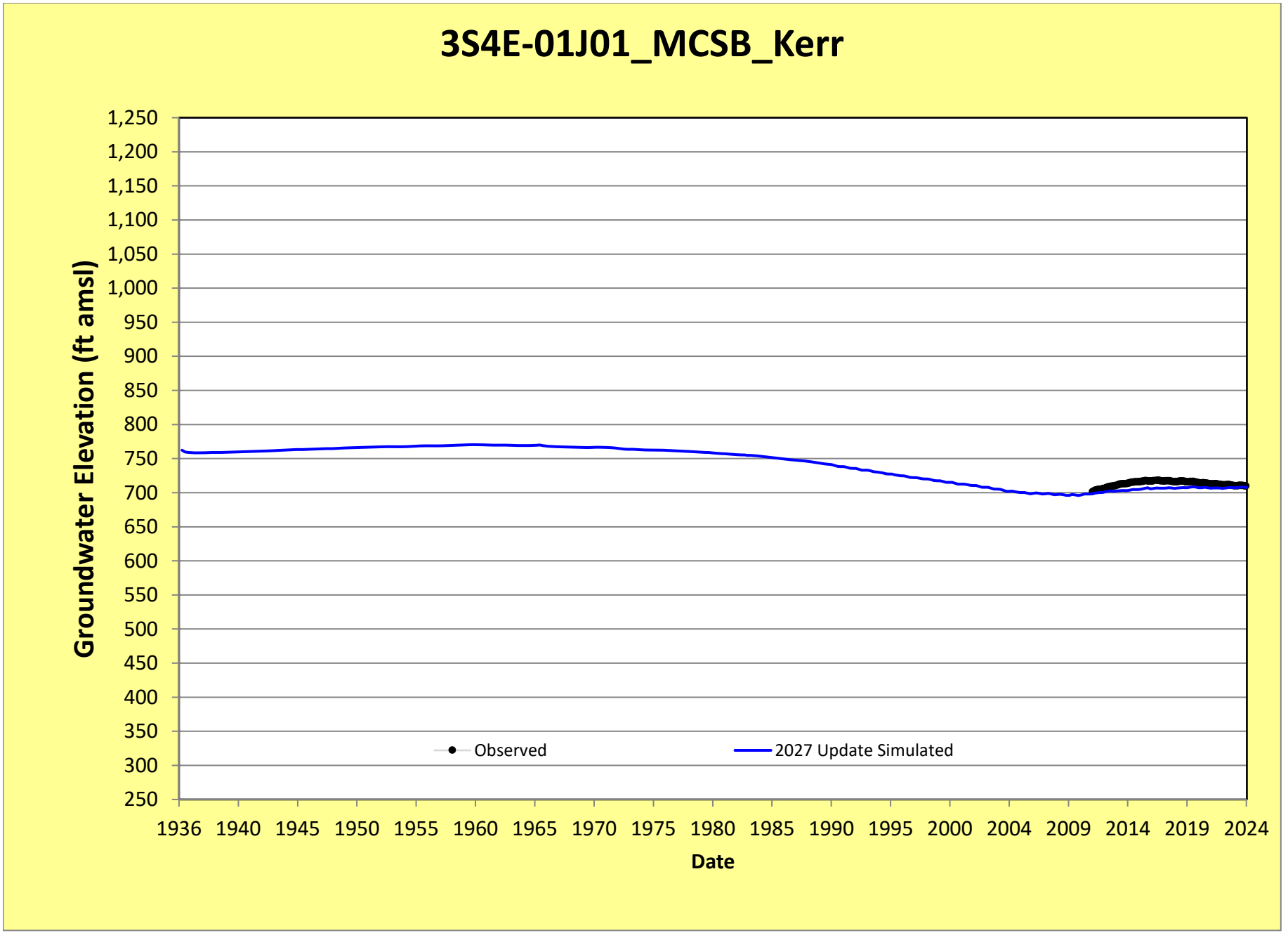
3S4E-22A01_GHSA

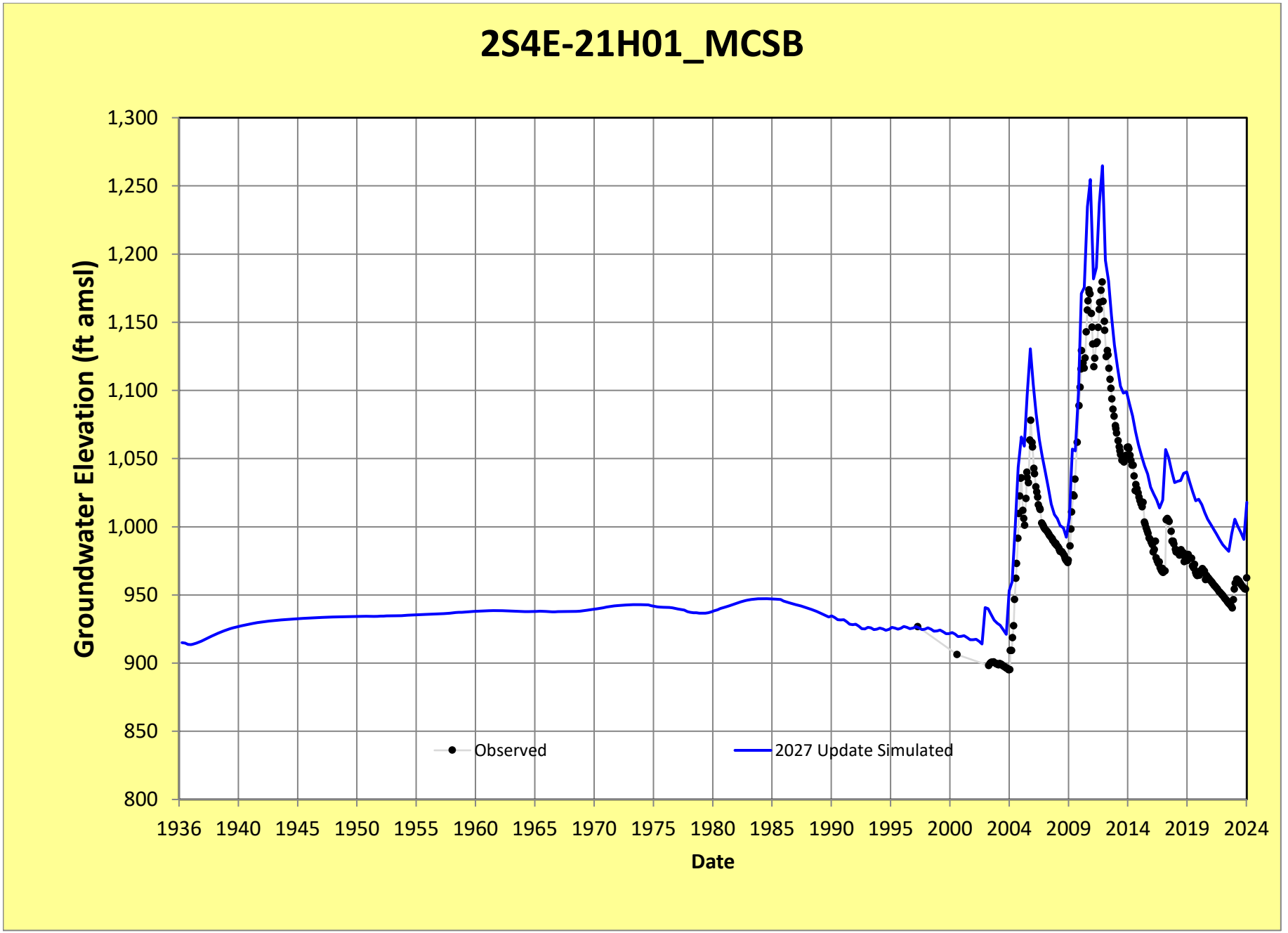


3S4E-25A01_GHSA

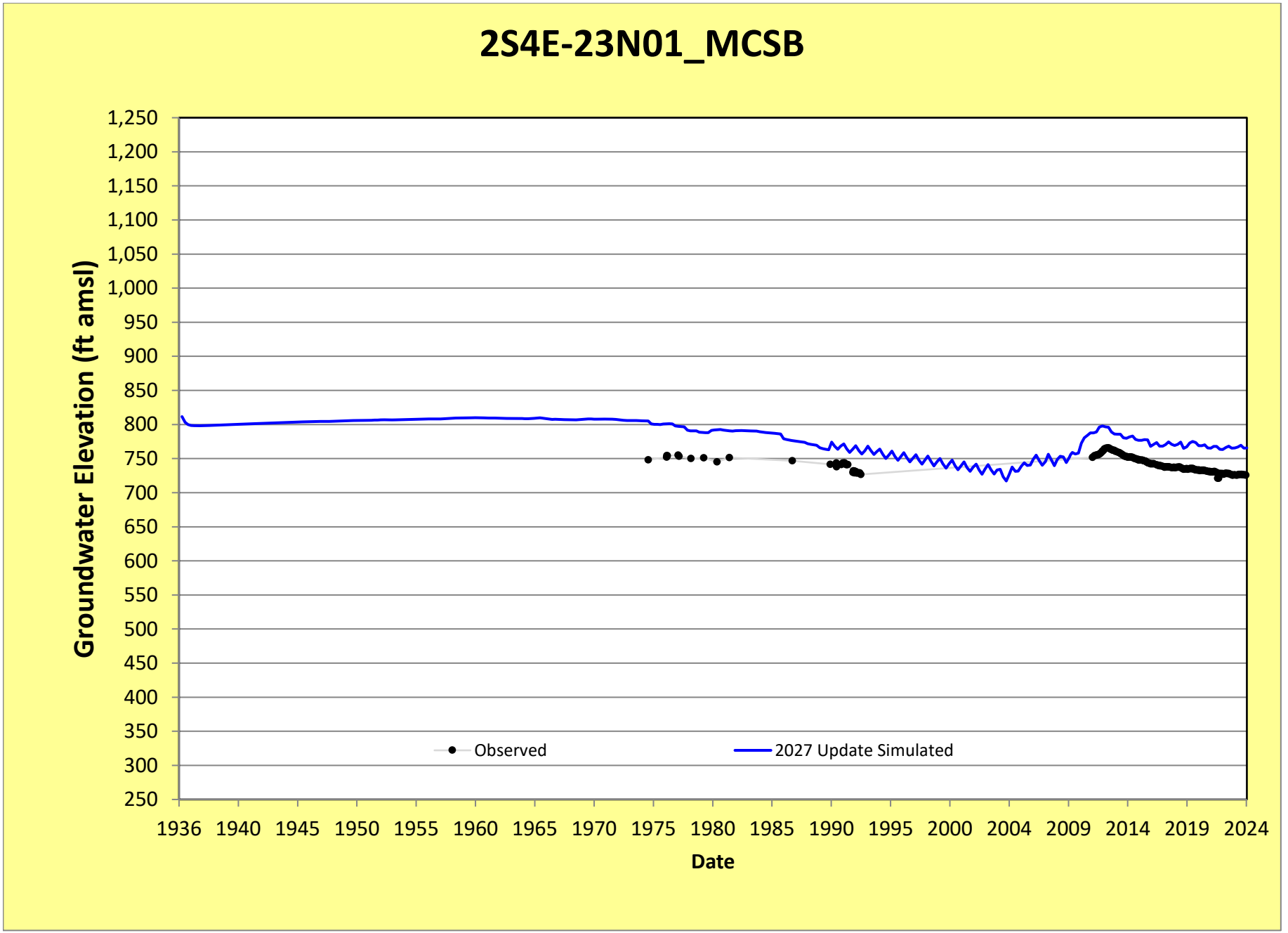


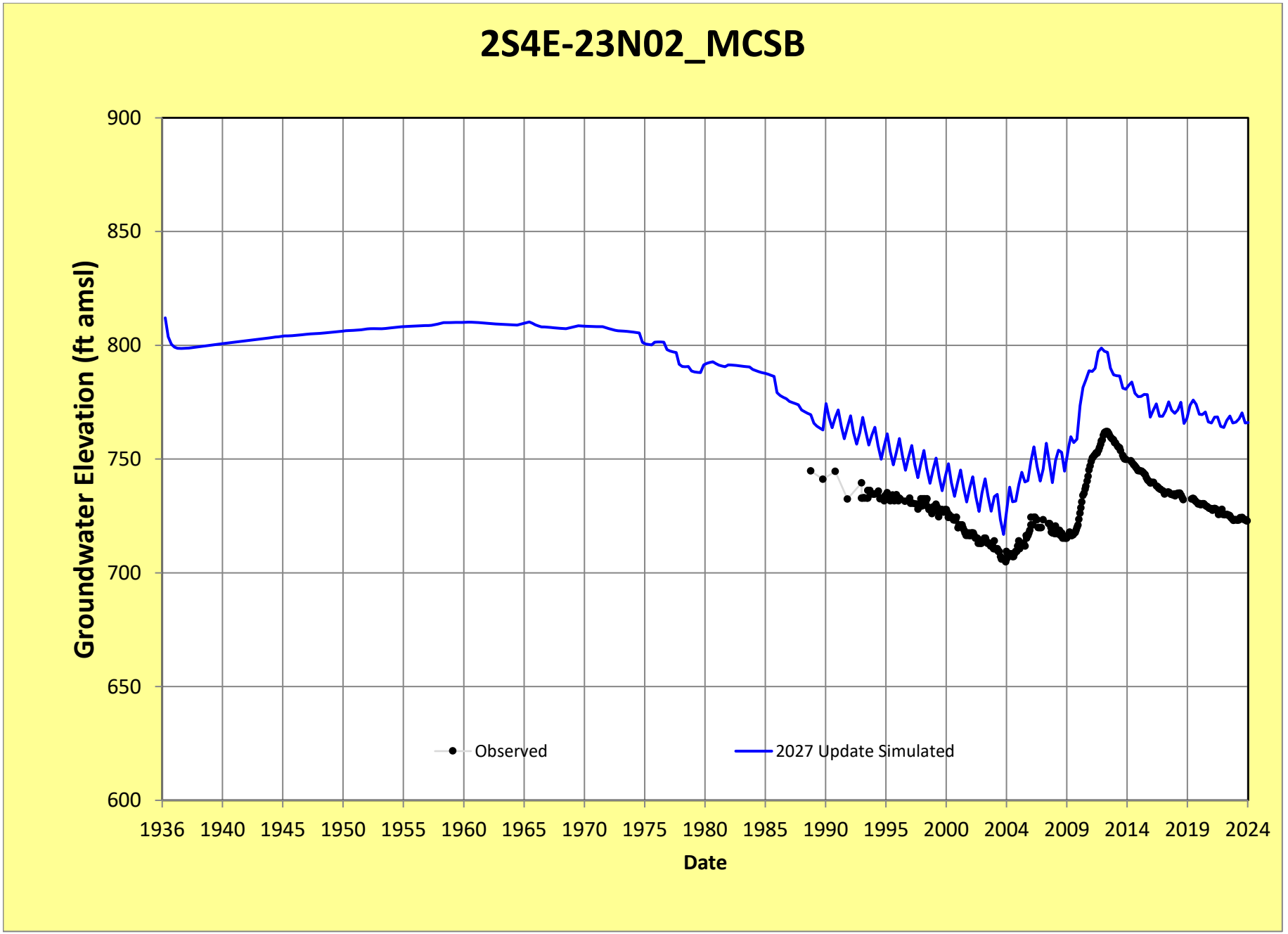

3S5E-30G01_GHSA
Groundwater Elevation (ft amsl)
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

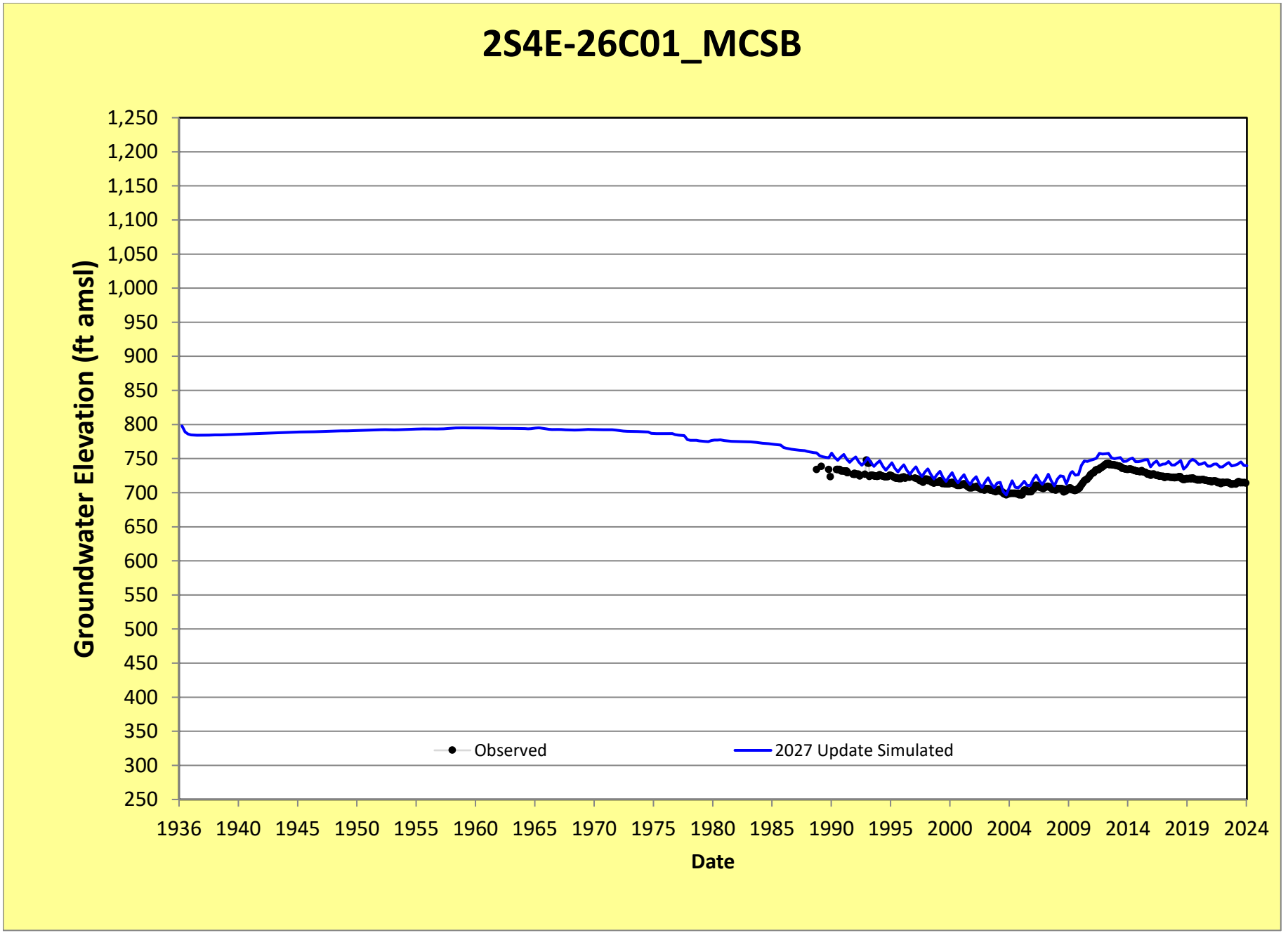

3S4E-01J01_MCSB_Kerr
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
1955
1960
1965
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1975
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2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

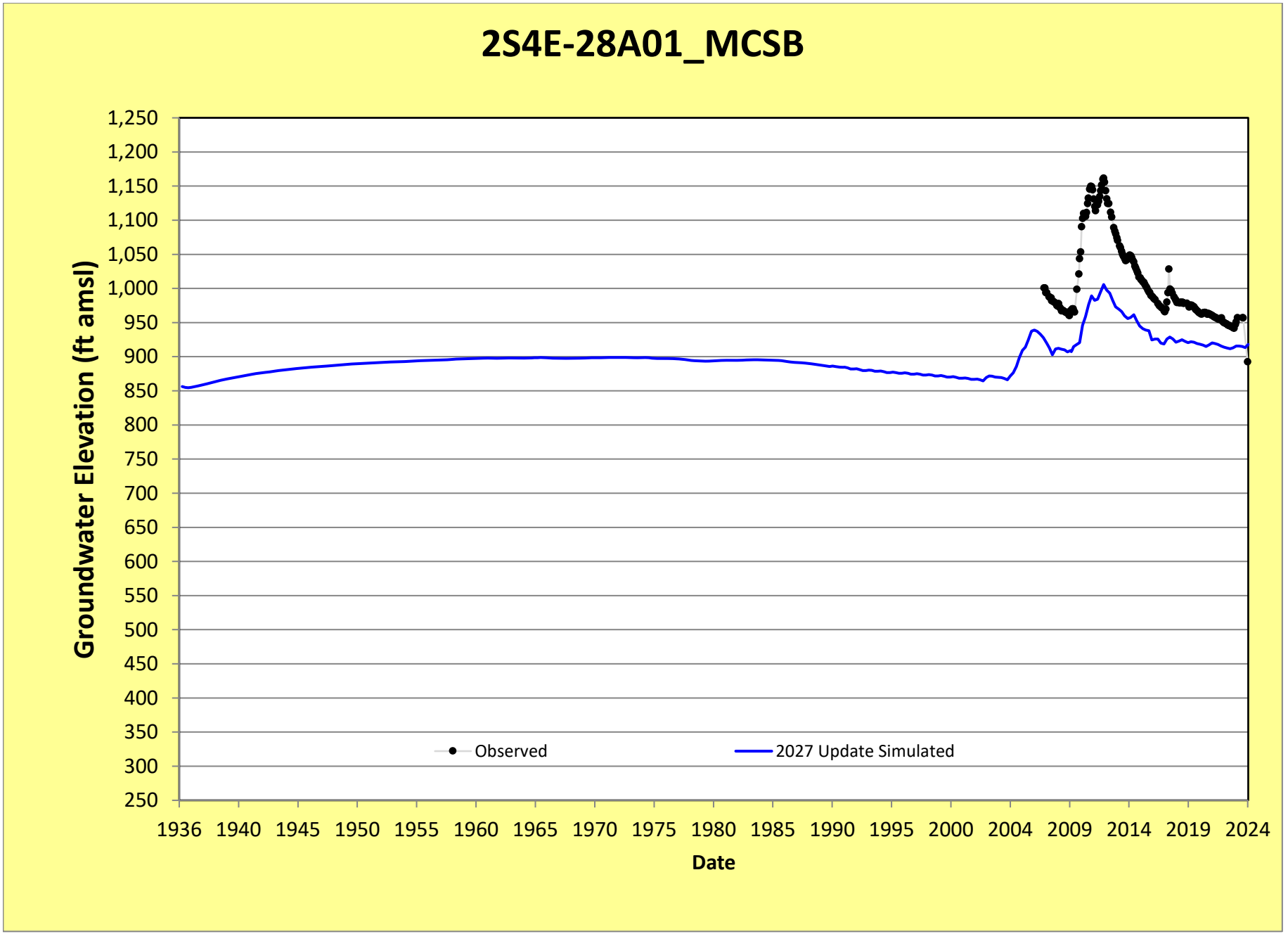

2S4E-21H01_MCSB
Groundwater Elevation (ft amsl)
1,300
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
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1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

2S4E-23N01_MCSB

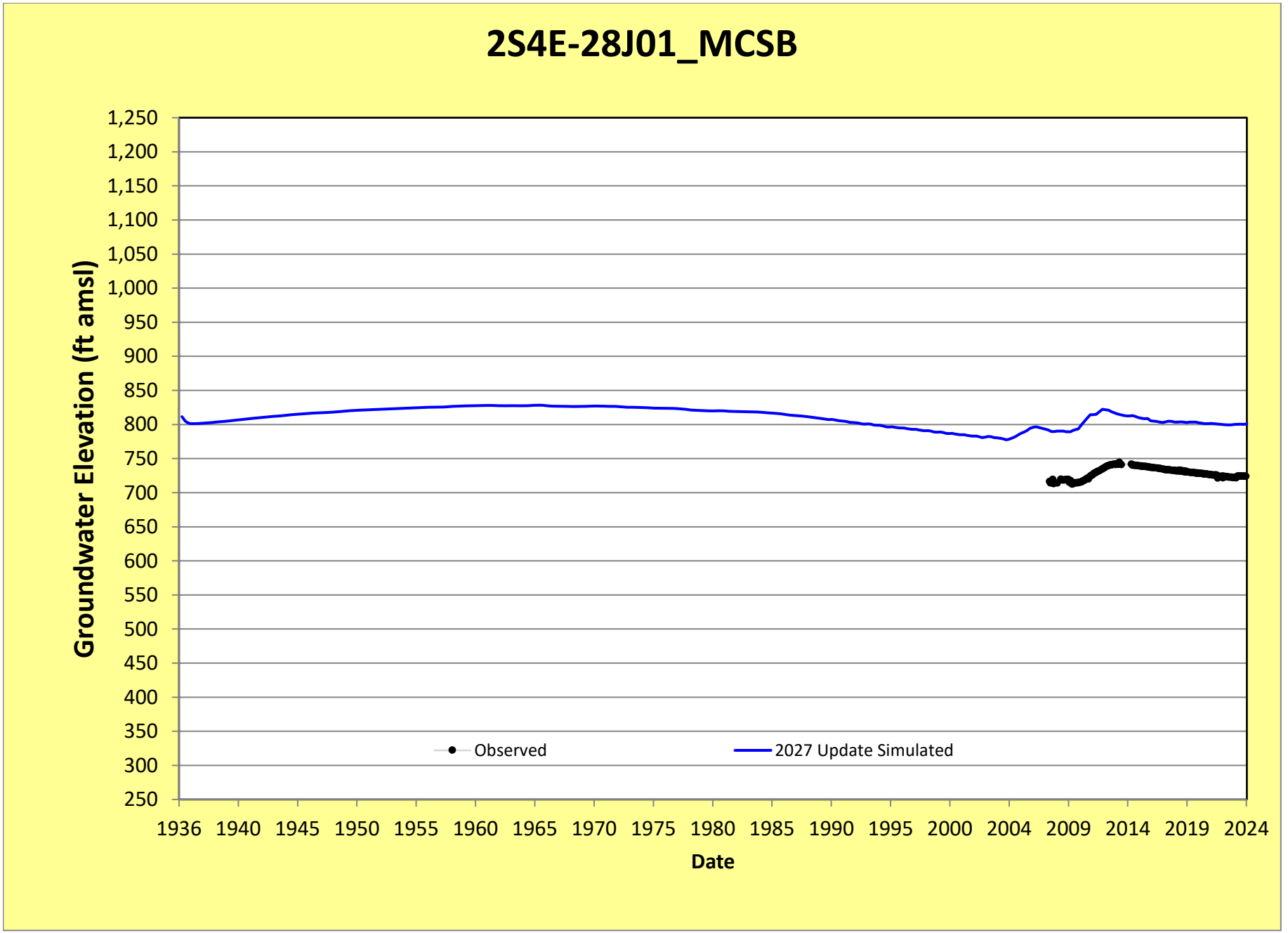



2S4E-23N02_MCSB
Groundwater Elevation (ft amsl)
900
850
800
750
700
650
600
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

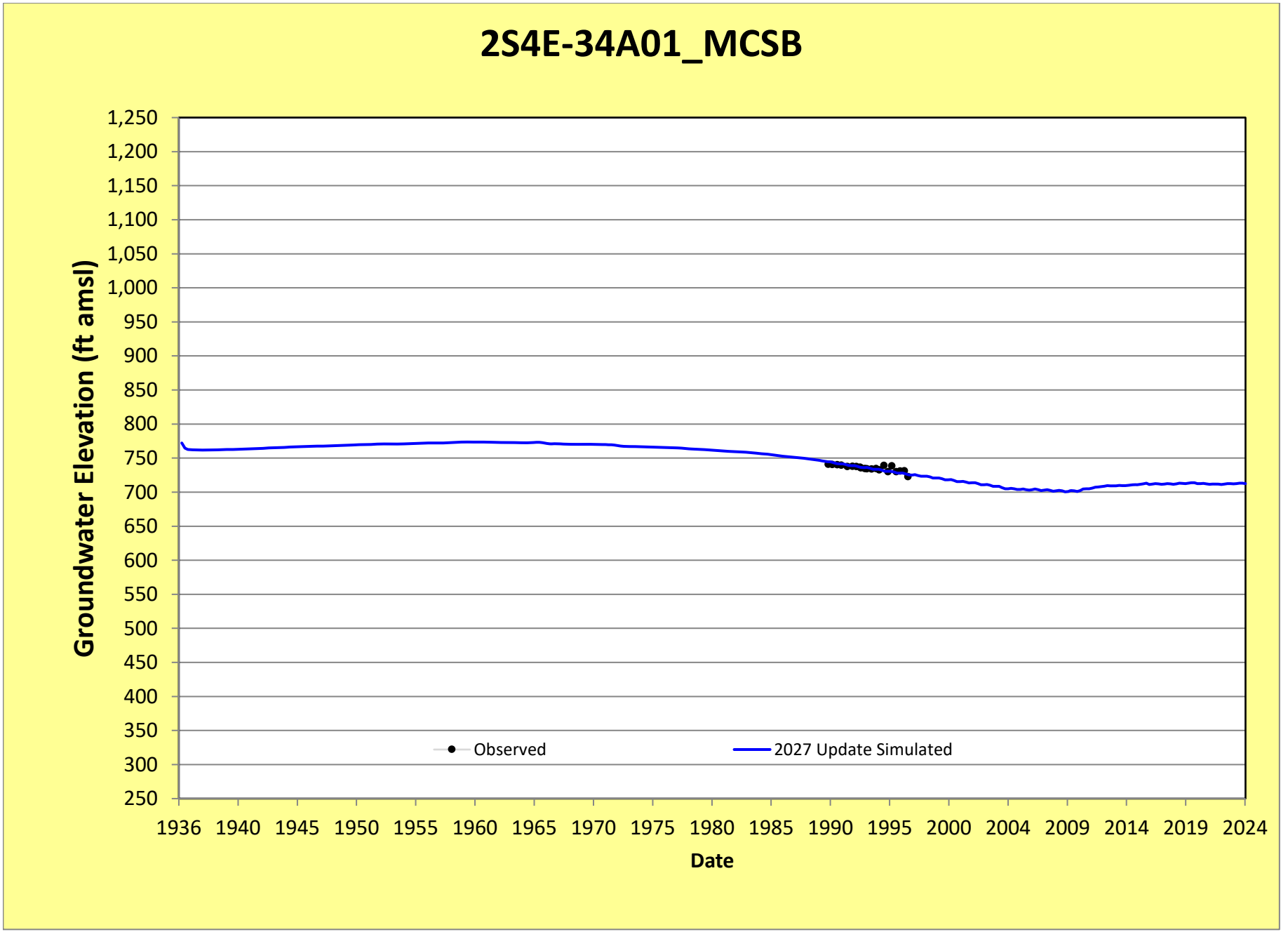

2S4E-26C01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
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1955
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2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

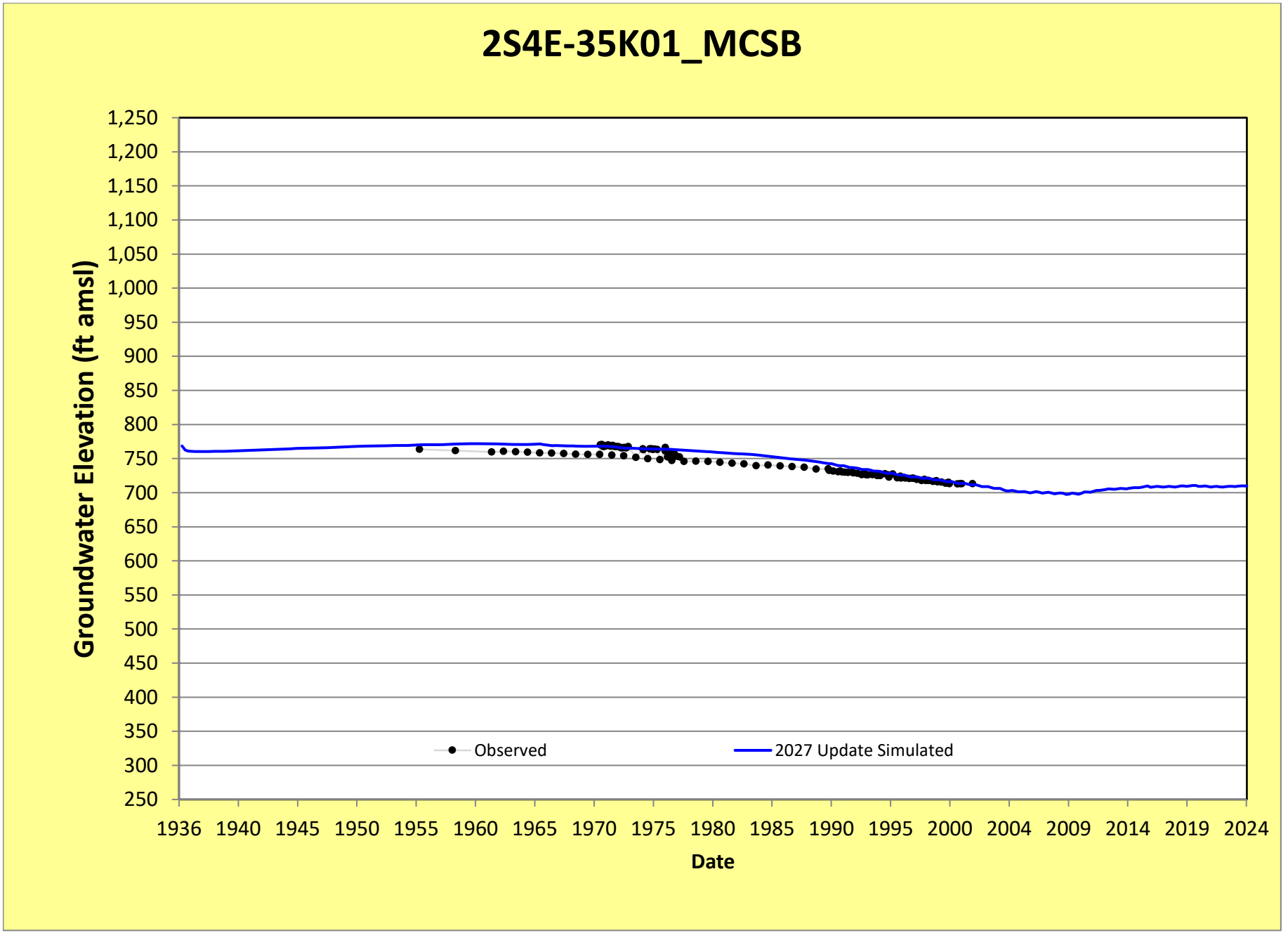

2S4E-28A01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
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2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

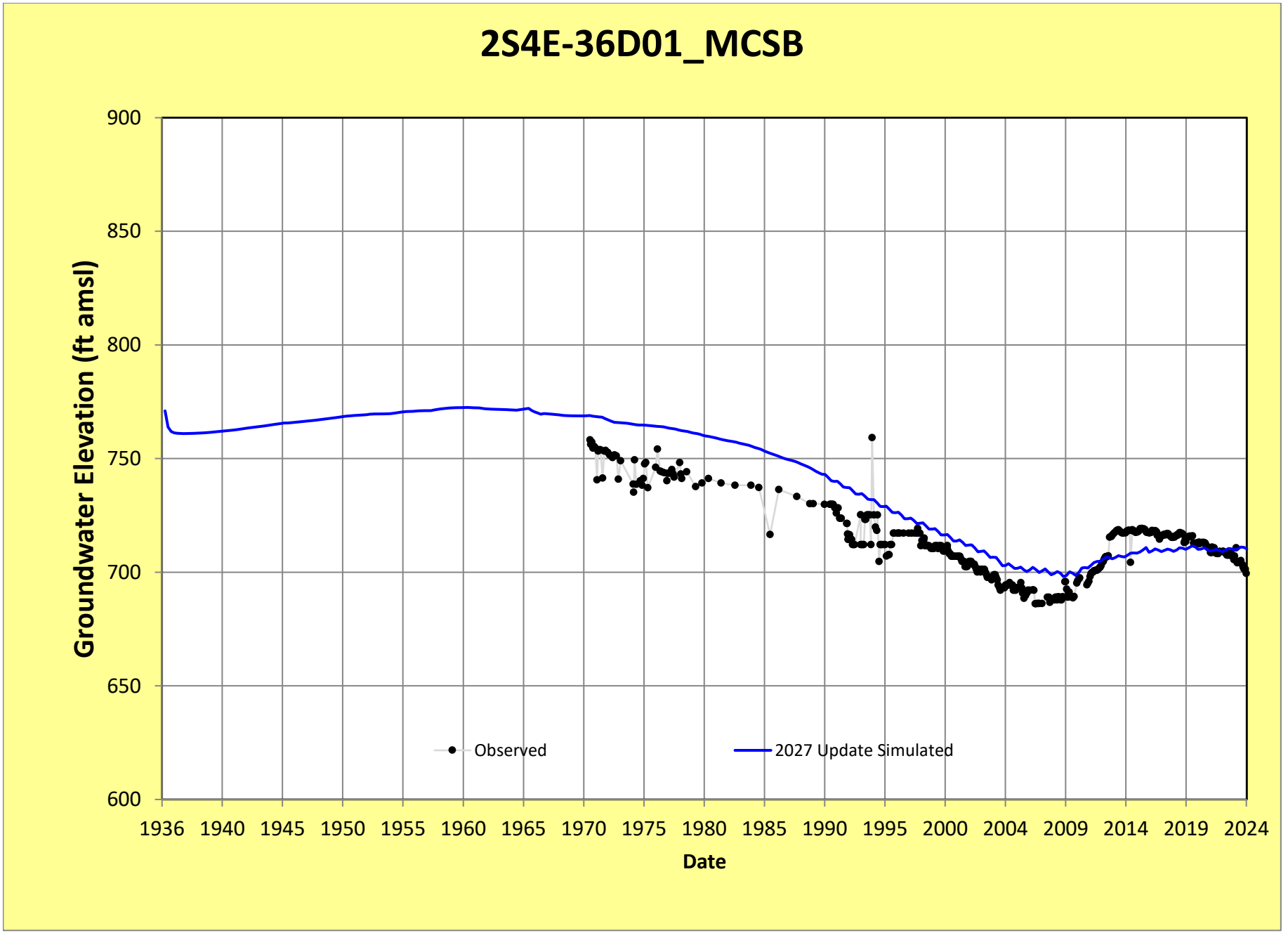
2S4E-28J01_MCSB



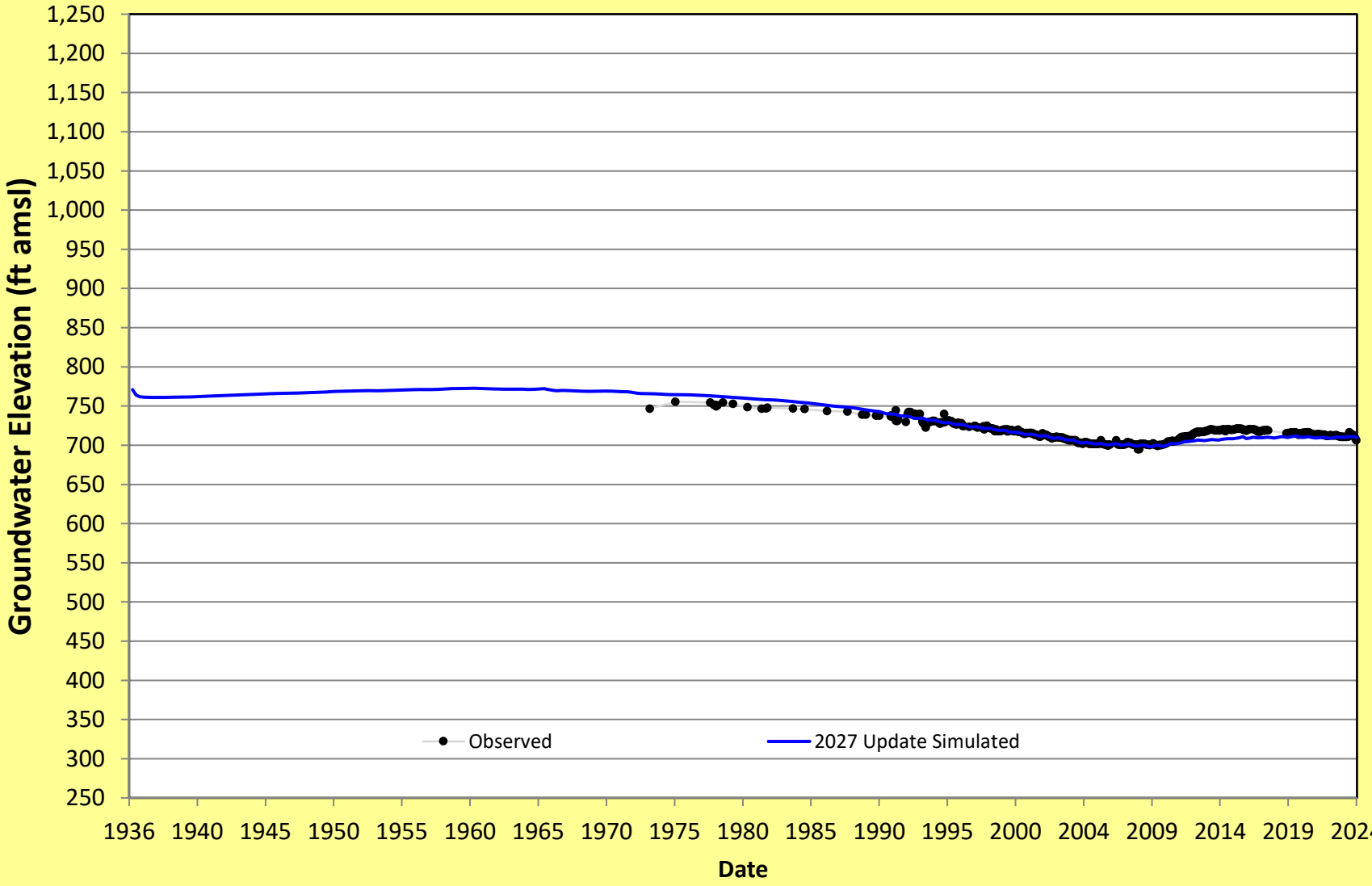
2S4E-34A01_MCSB

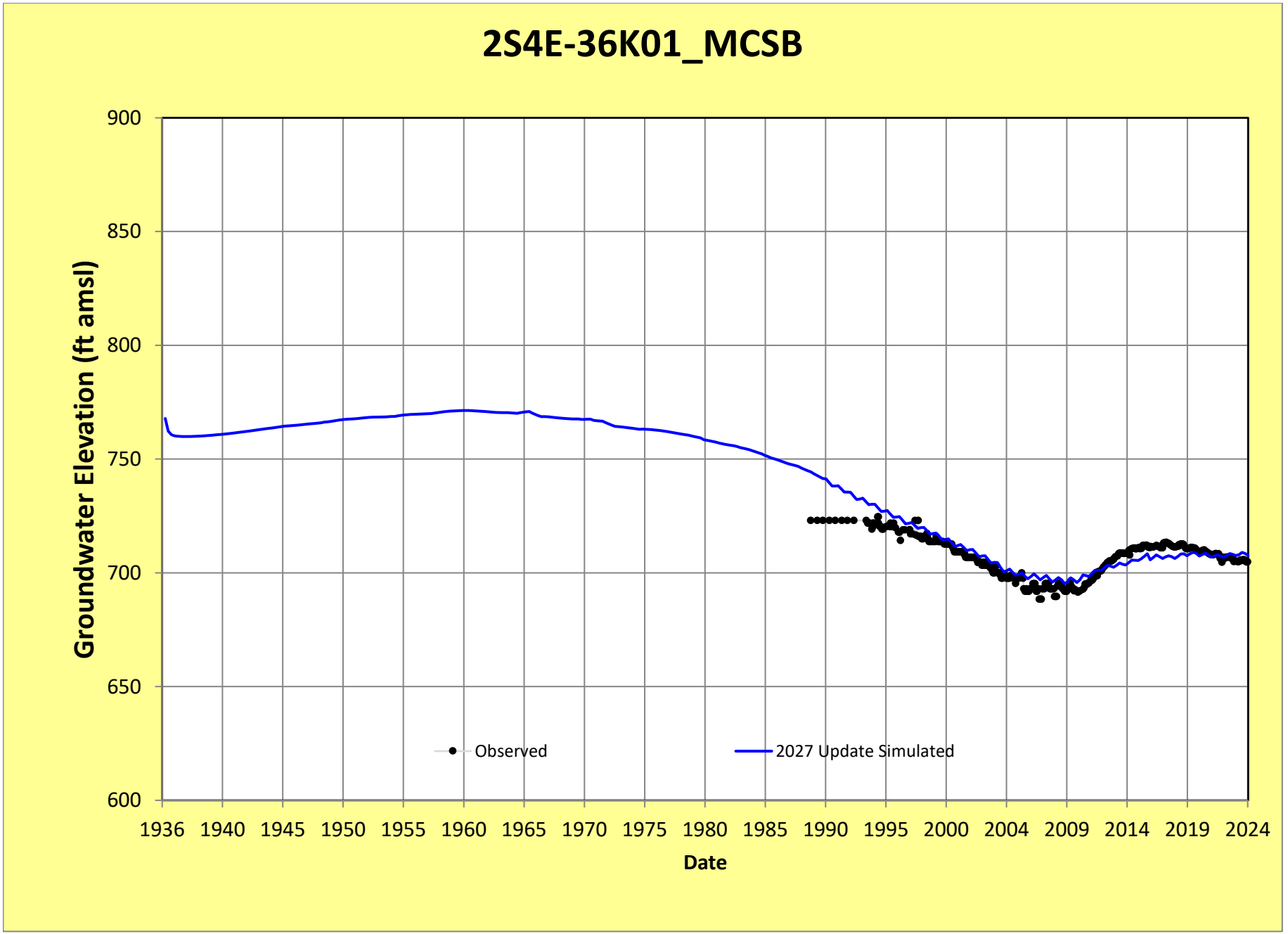



2S4E-35K01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
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2014
2019
2024
Date
Observed
2027 Update Simulated

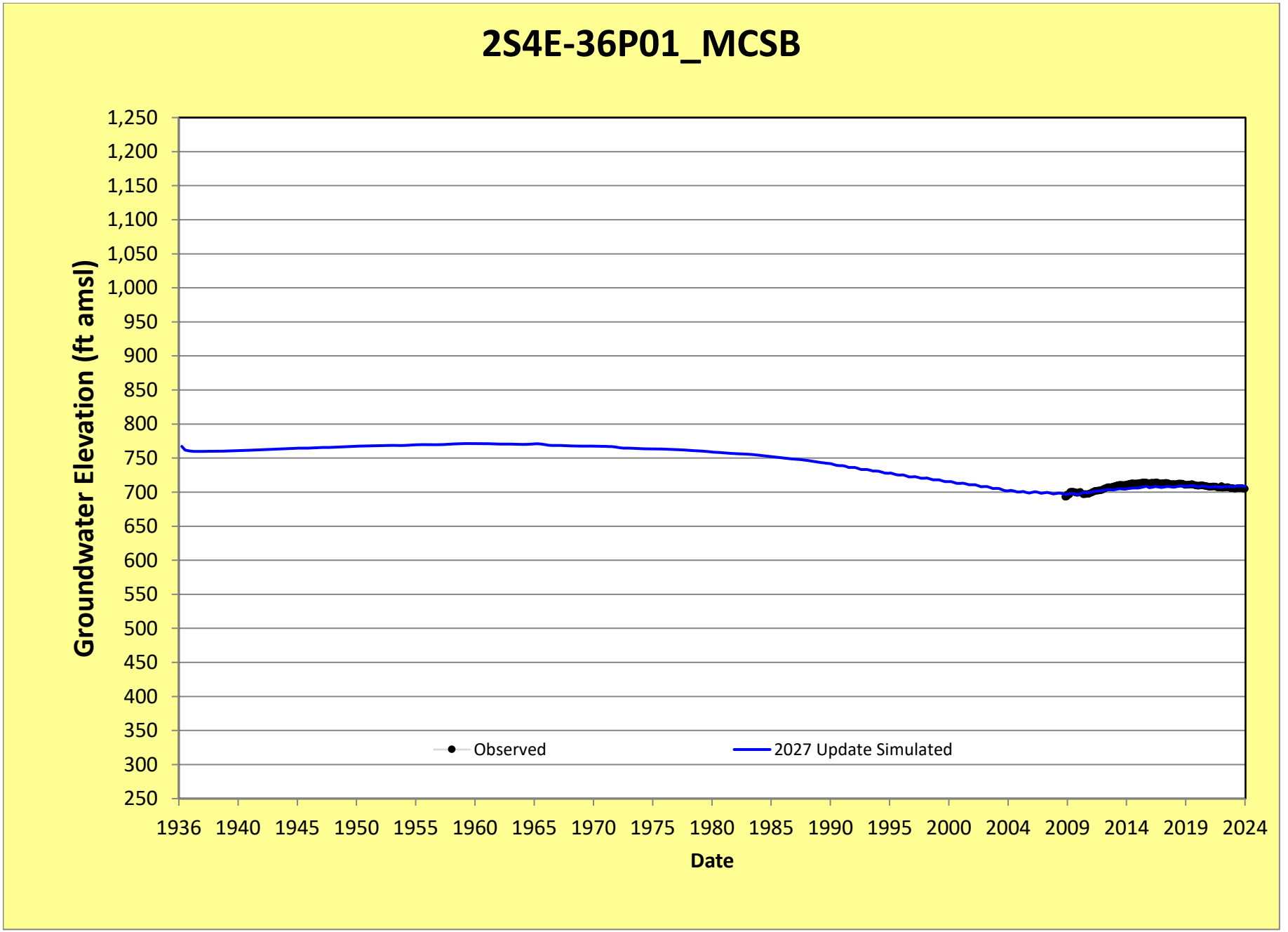

2S4E-36D01_MCSB
Groundwater Elevation (ft amsl)
900
850
800
750
700
650
600
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
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1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

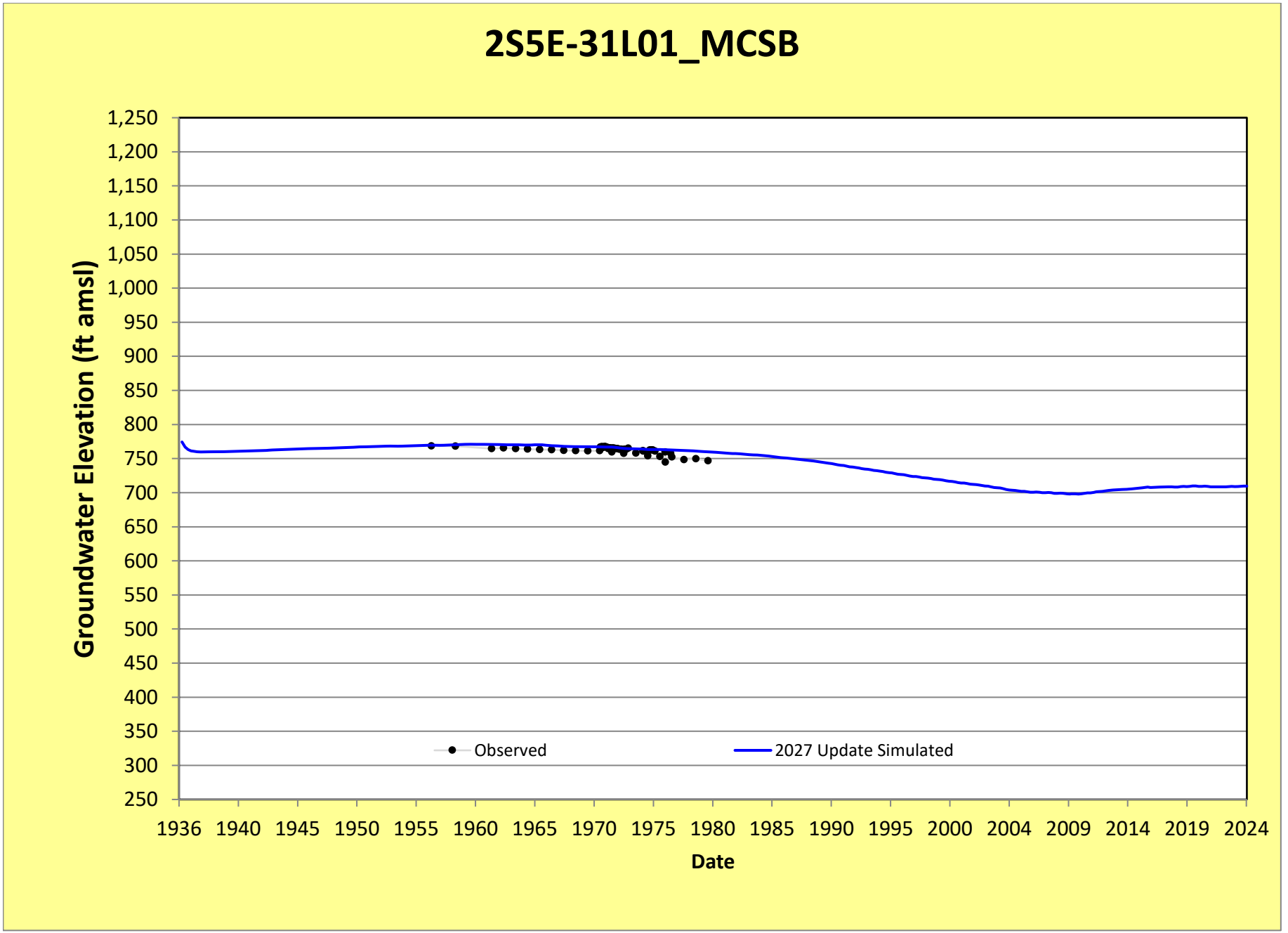
2S4E-36D02_MCSB



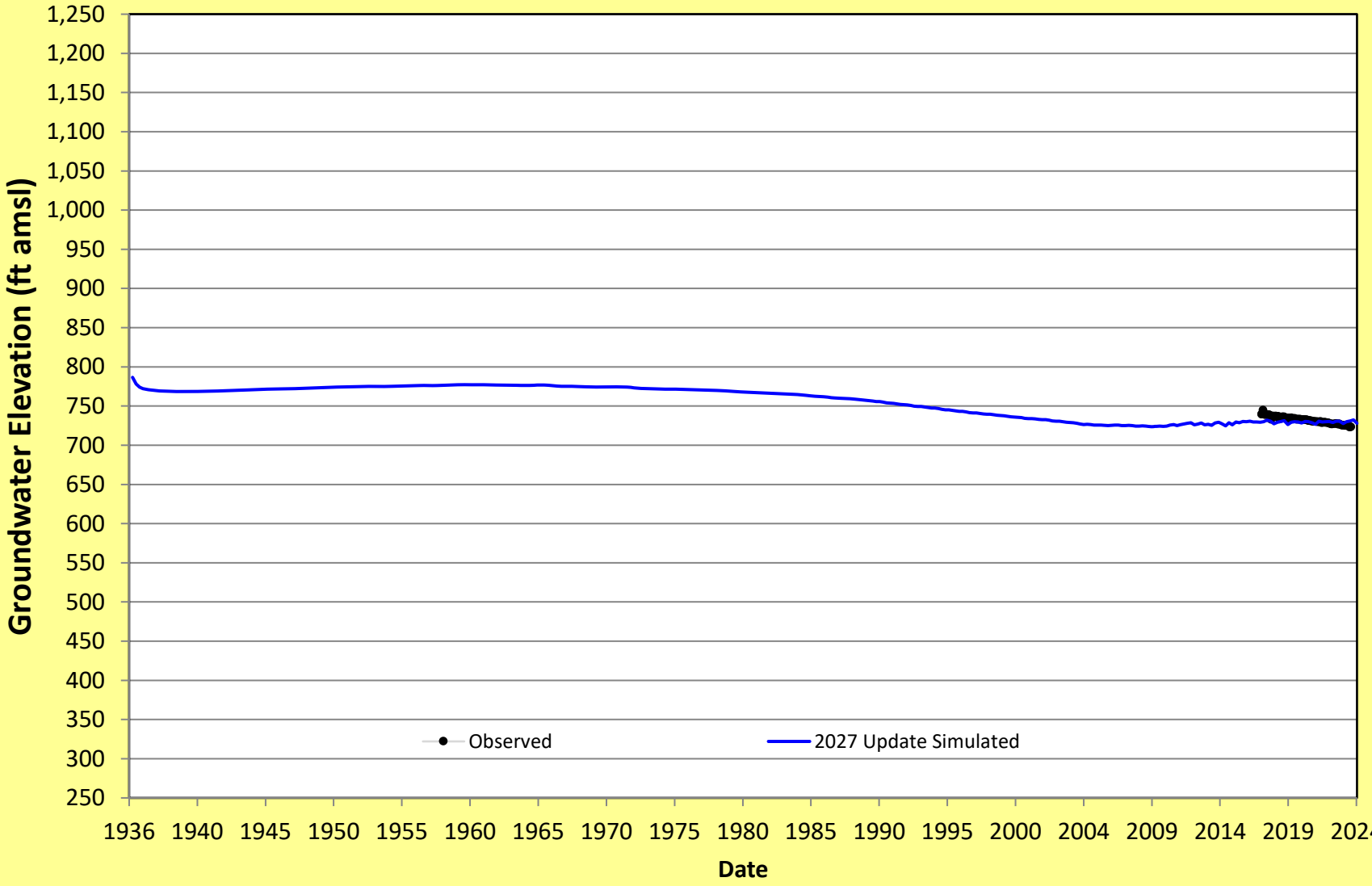

2S4E-36K01_MCSB
Groundwater Elevation (ft amsl)
900
850
800
750
700
650
600
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
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2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

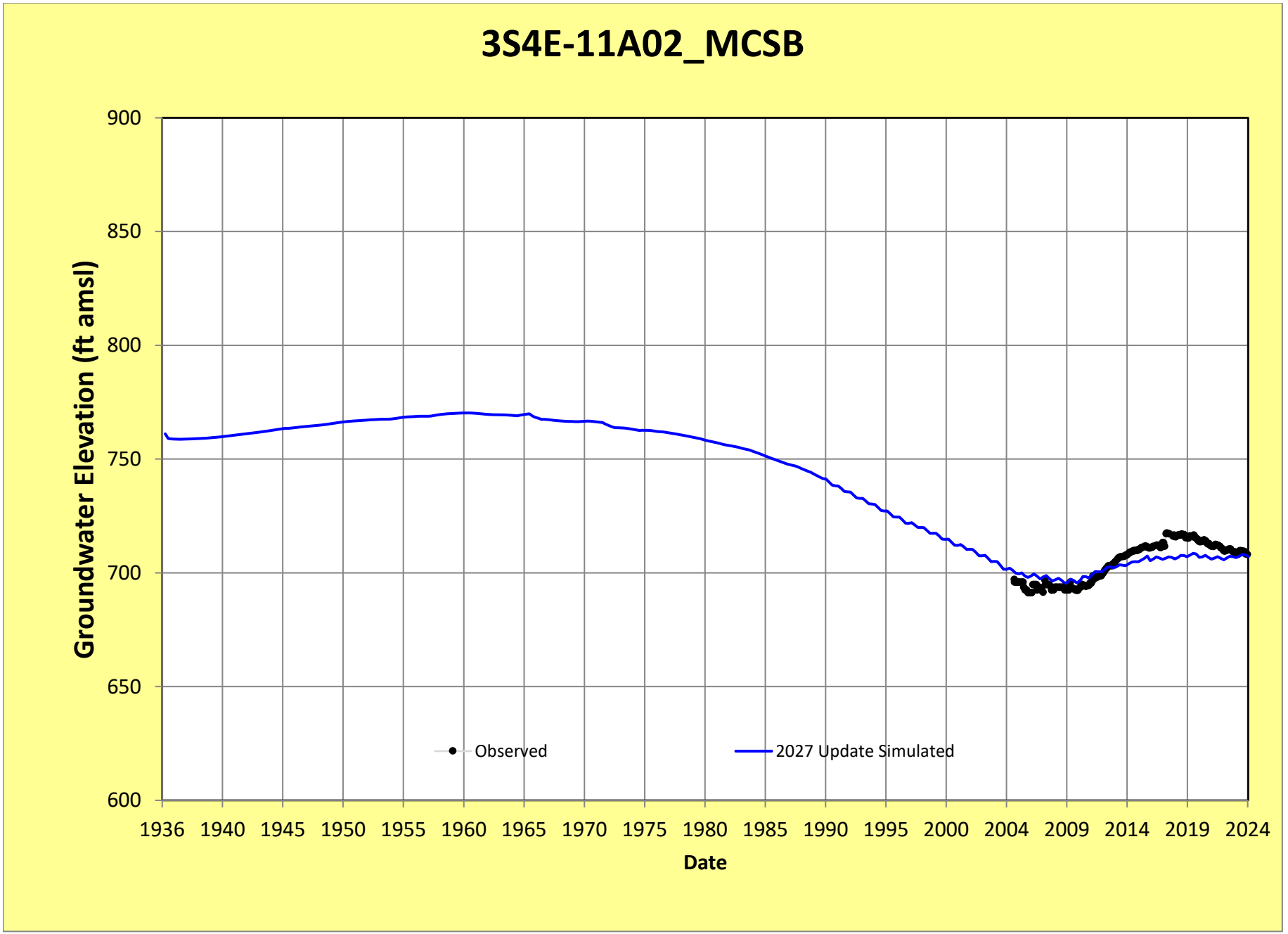
2S4E-36P01_MCSB

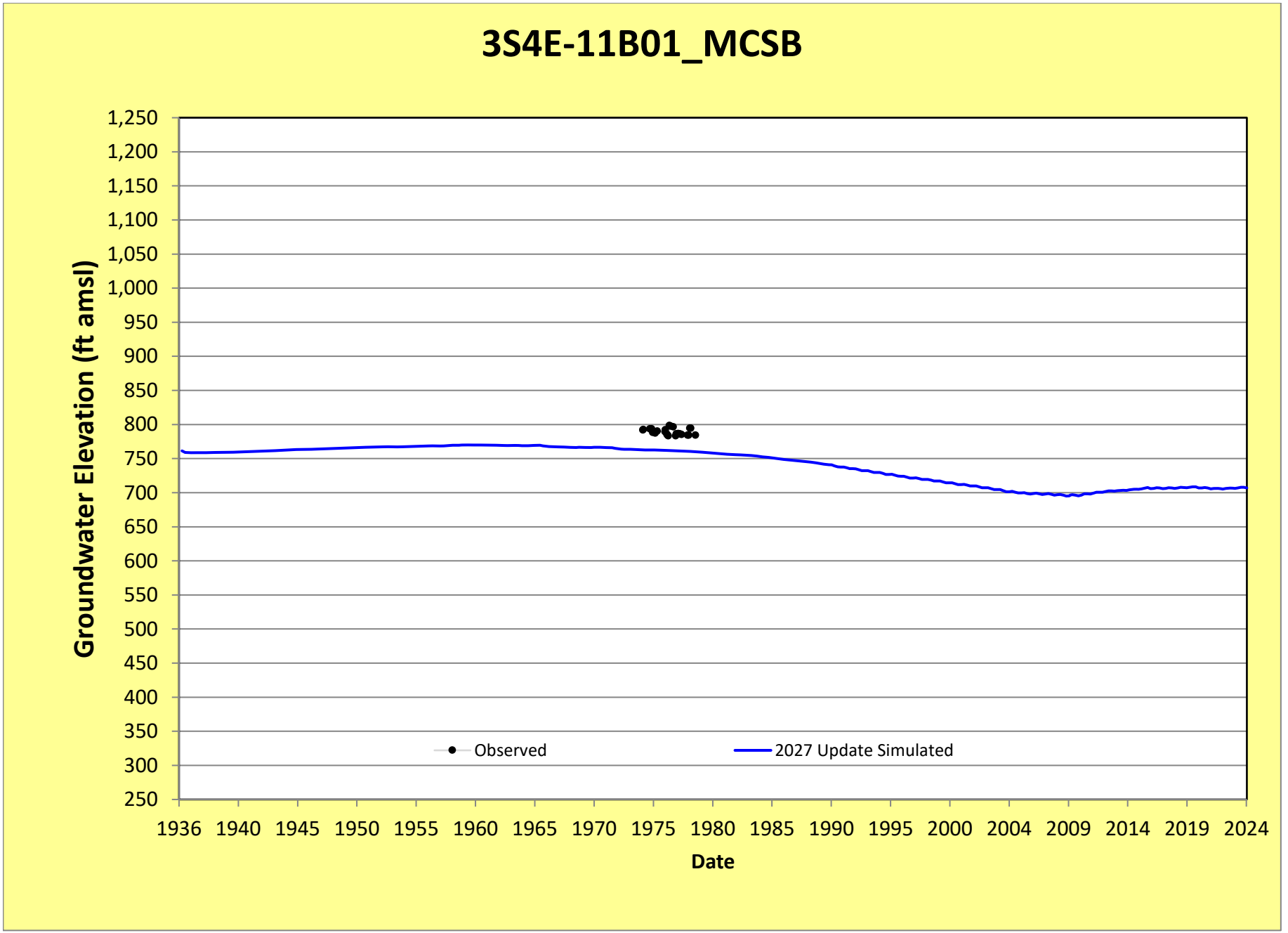


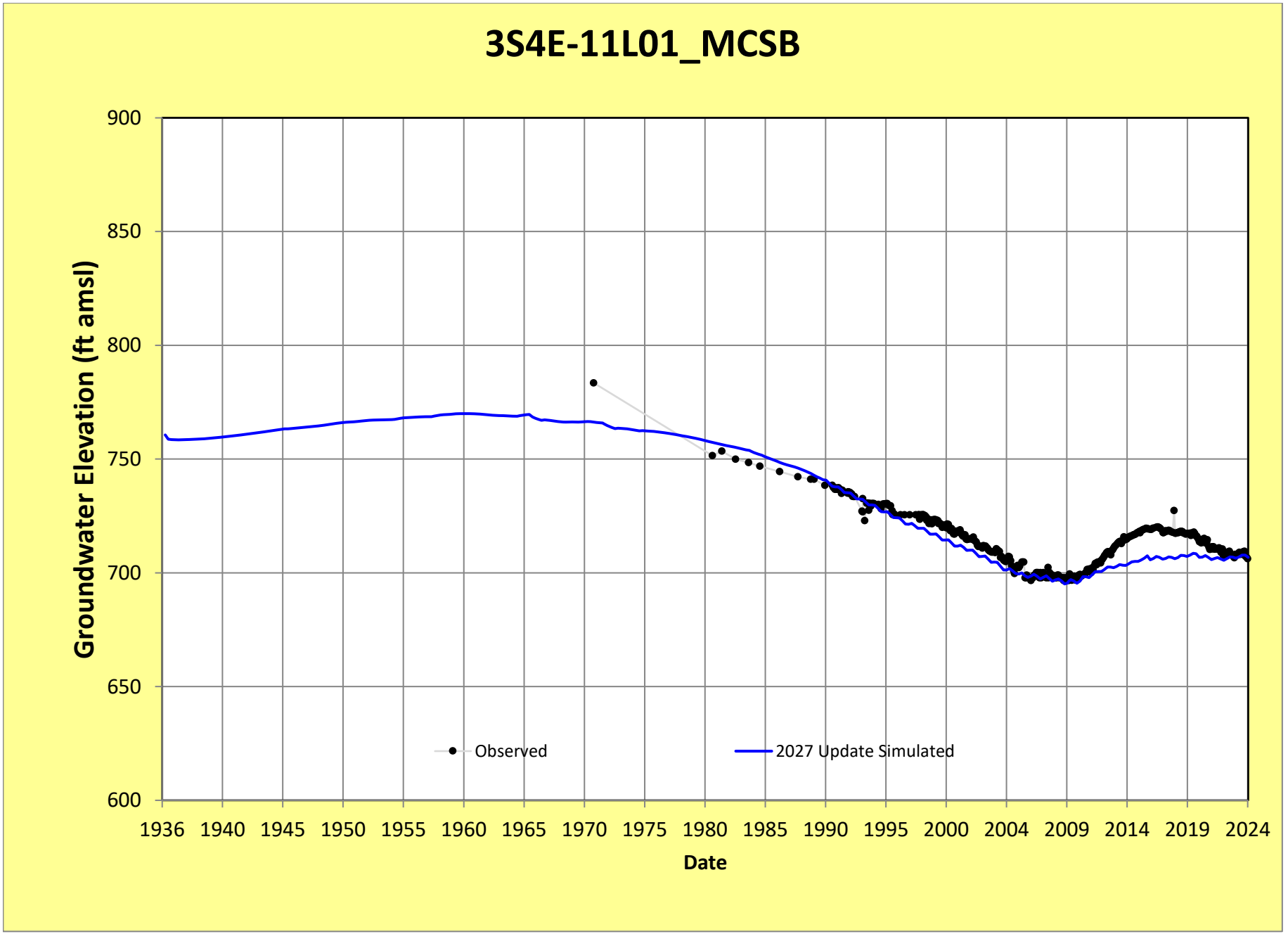

2S5E-31L01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
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2014
2019
2024
Date
Observed
2027 Update Simulated

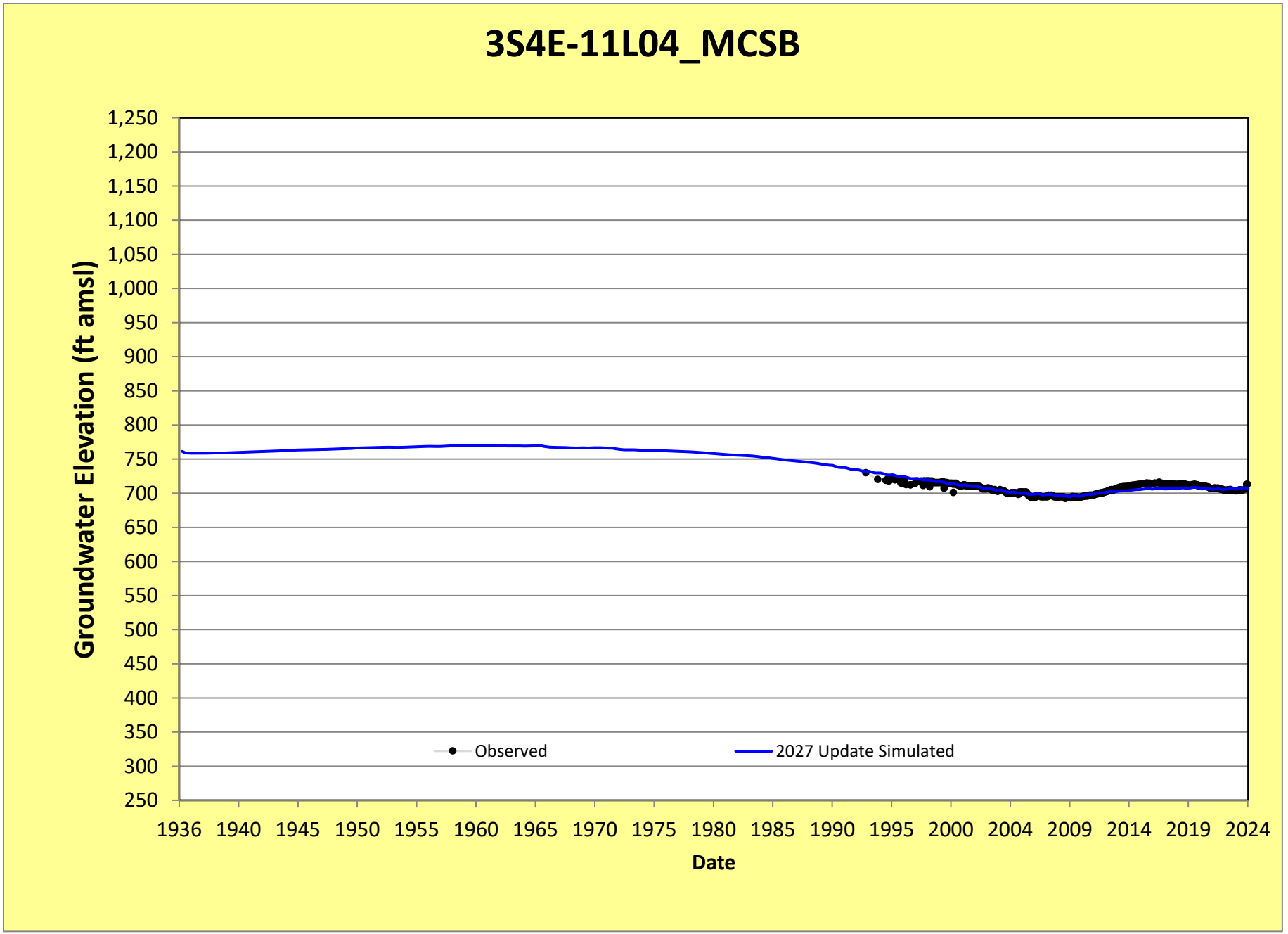
3S4E-04P01_MCSB

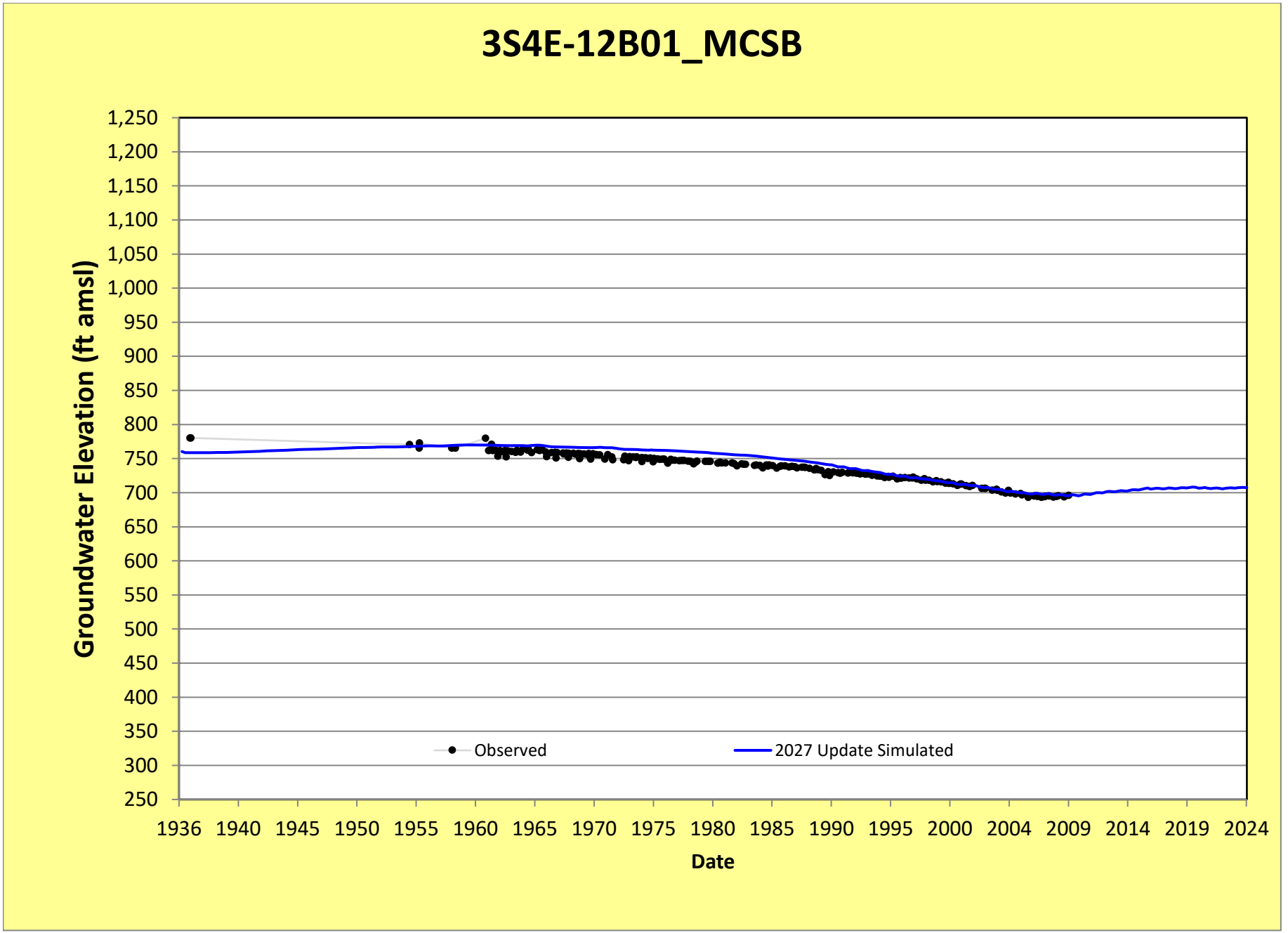



3S4E-11A02_MCSB
Groundwater Elevation (ft amsl)
900
850
800
750
700
650
600
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
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2014
2019
2024
Date
Observed
2027 Update Simulated

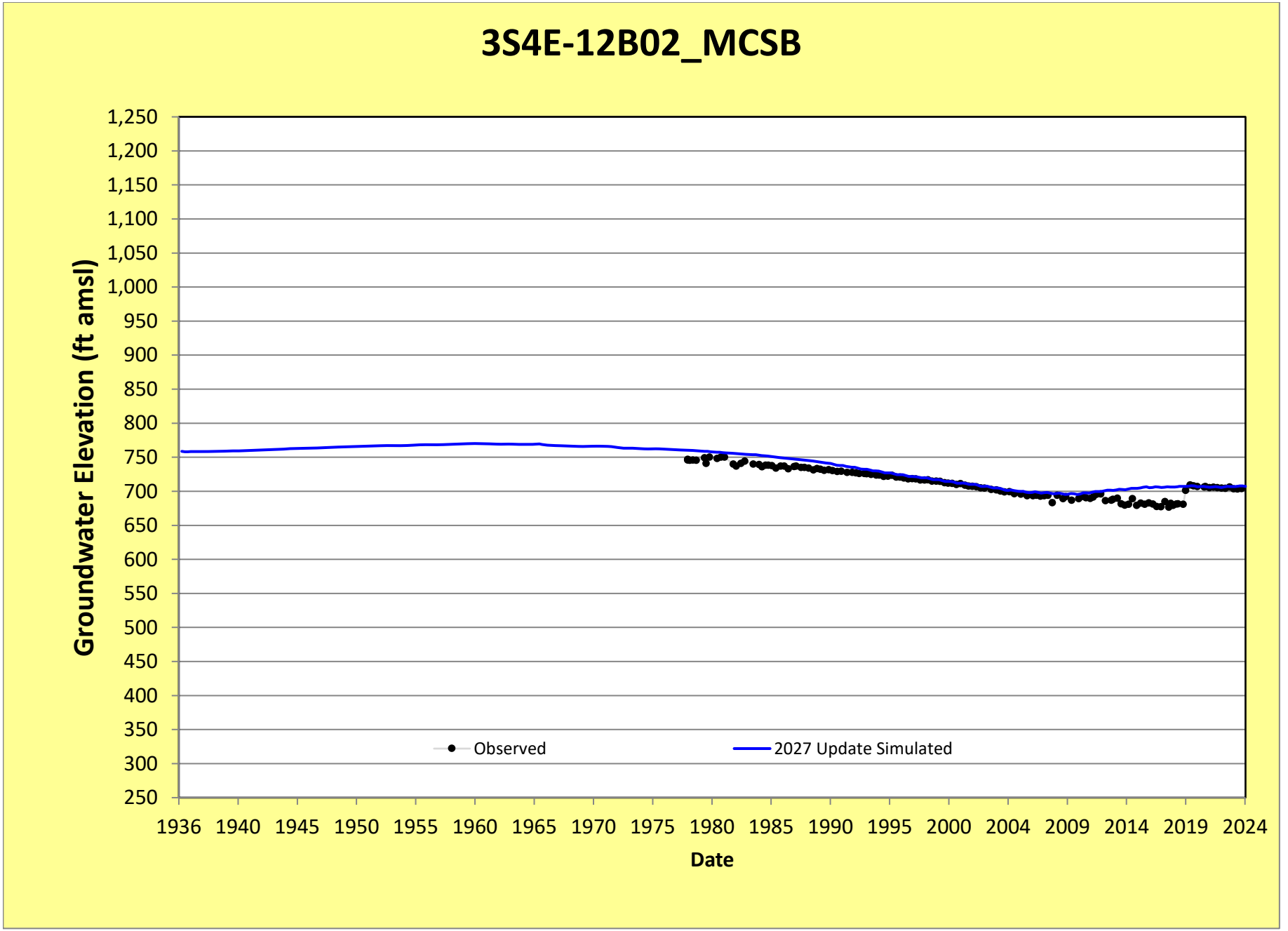

3S4E-11B01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
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2024
Date
Observed
2027 Update Simulated

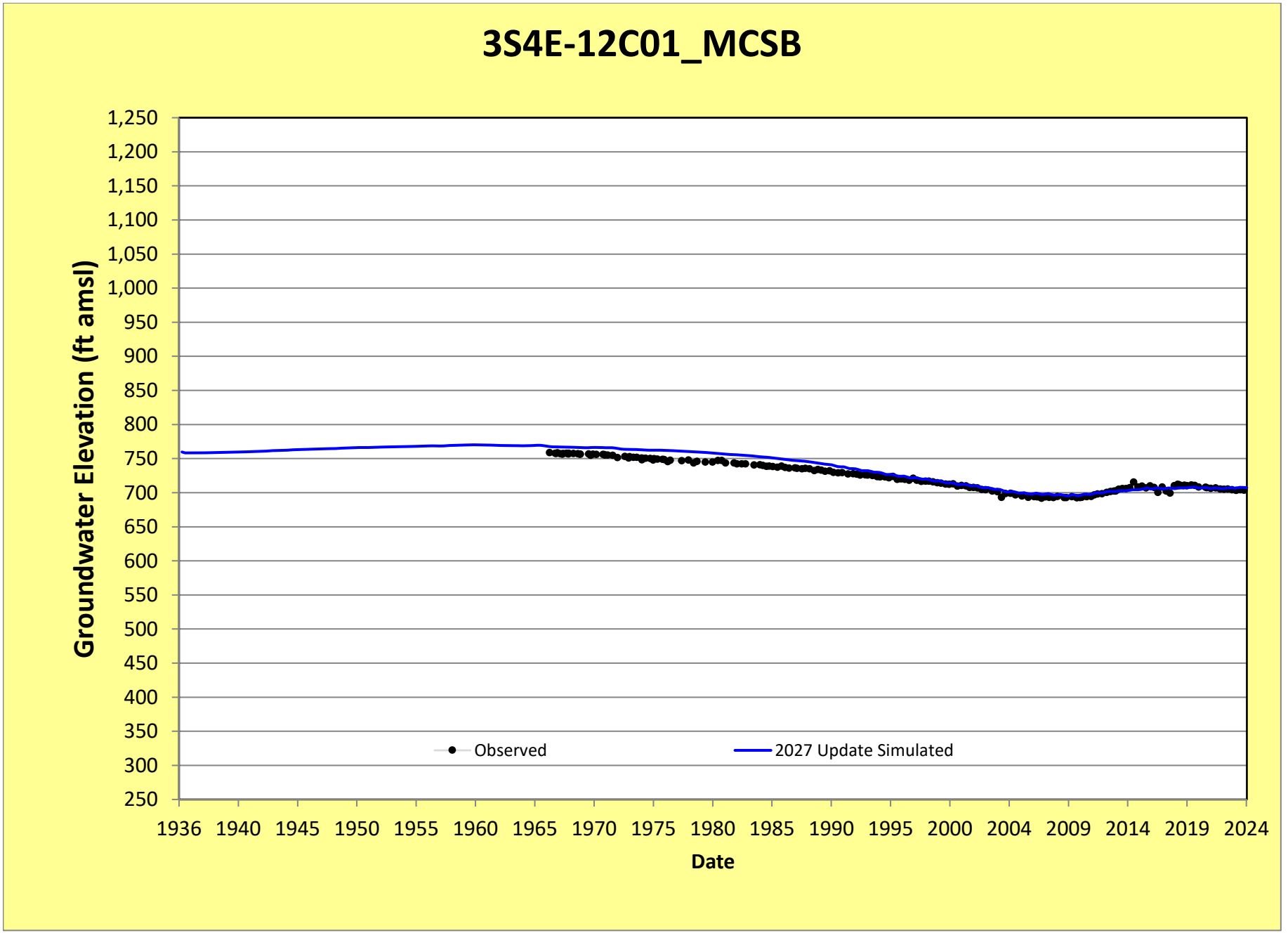

3S4E-11L01_MCSB
Groundwater Elevation (ft amsl)
900
850
800
750
700
650
600
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

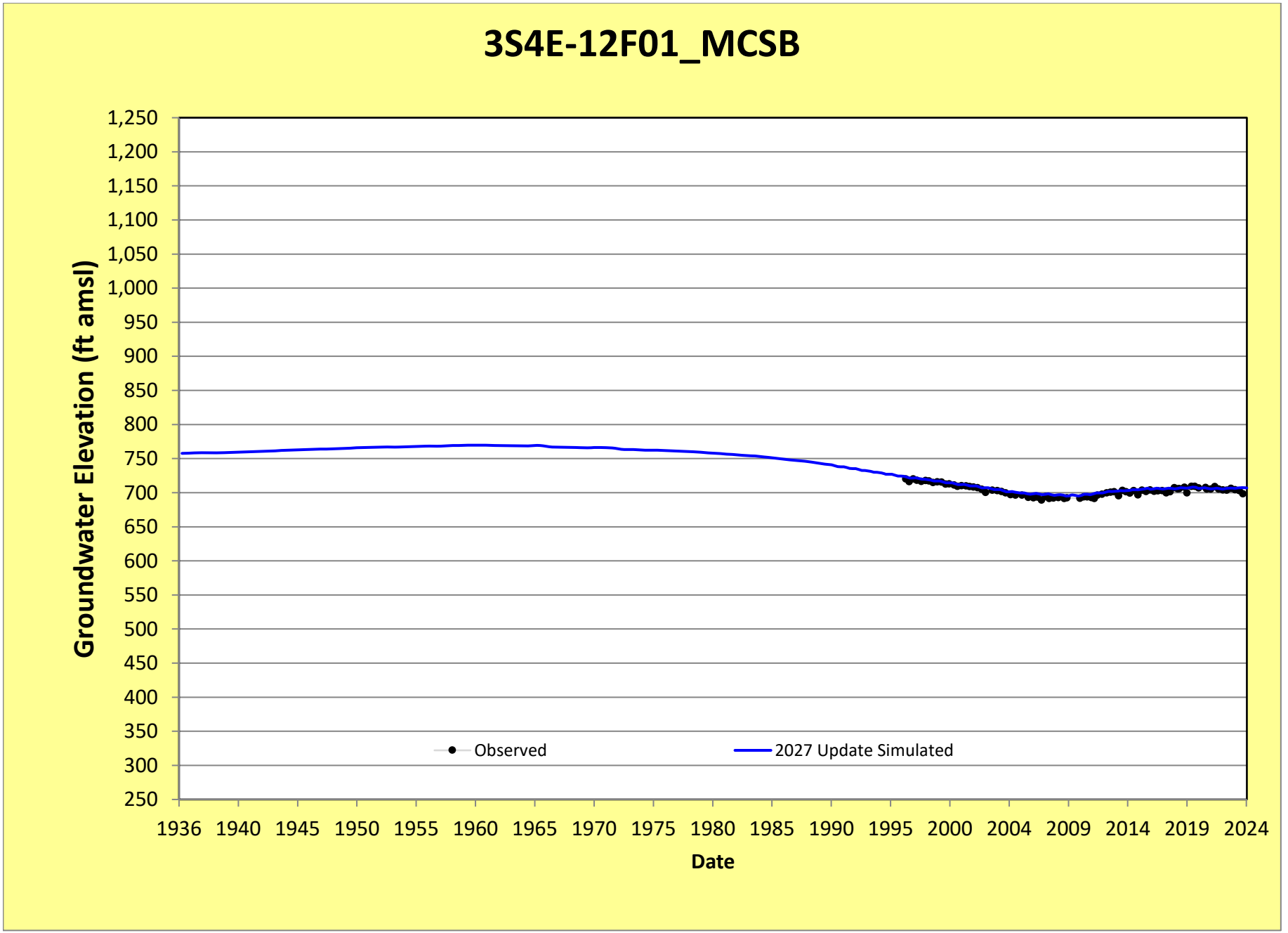

3S4E-11L04_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated


3S4E-12B01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
1955
1960
1965
1970
1975
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1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

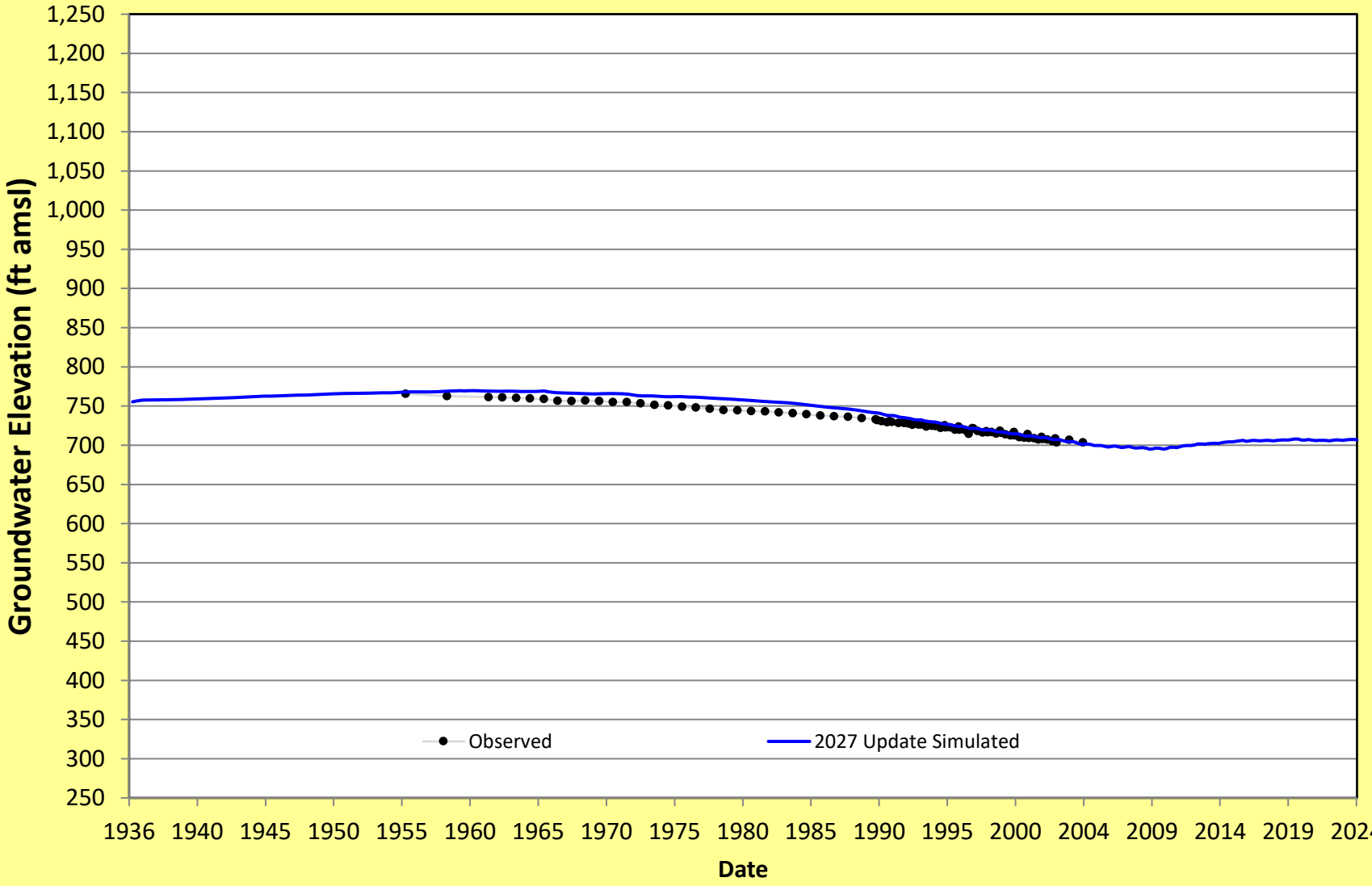
3S4E-12B02_MCSB



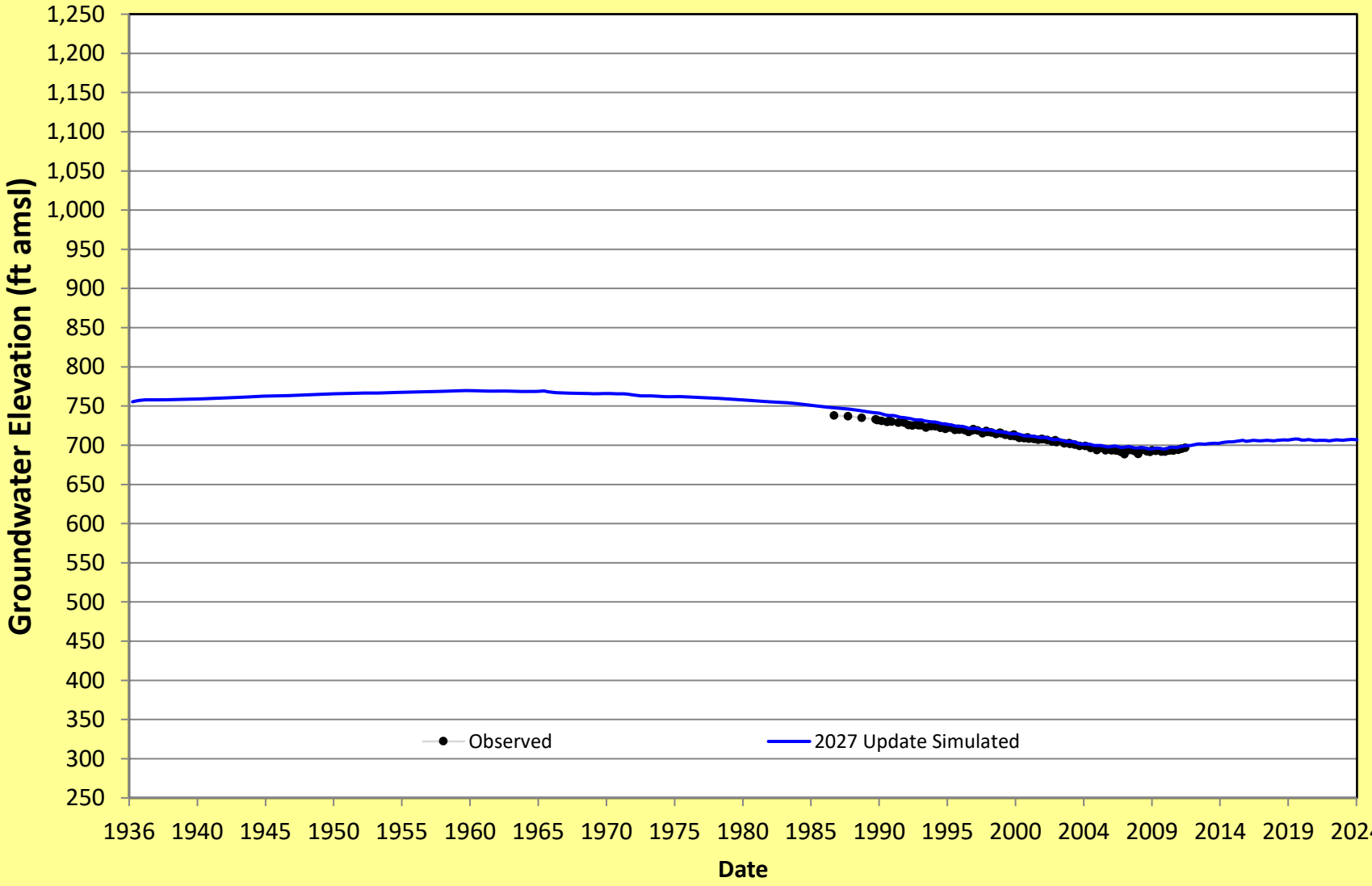

3S4E-12C01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
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2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

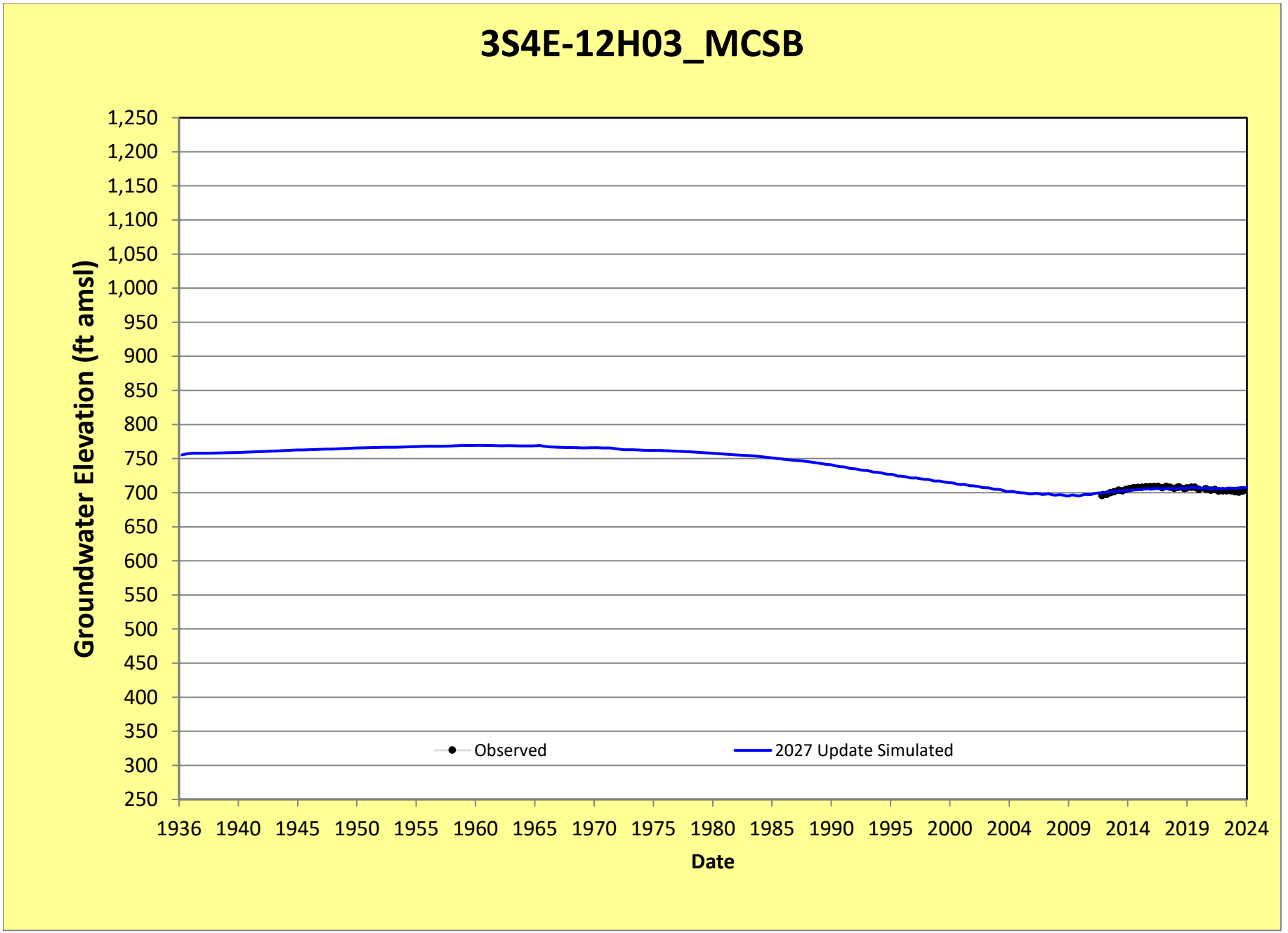

3S4E-12F01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

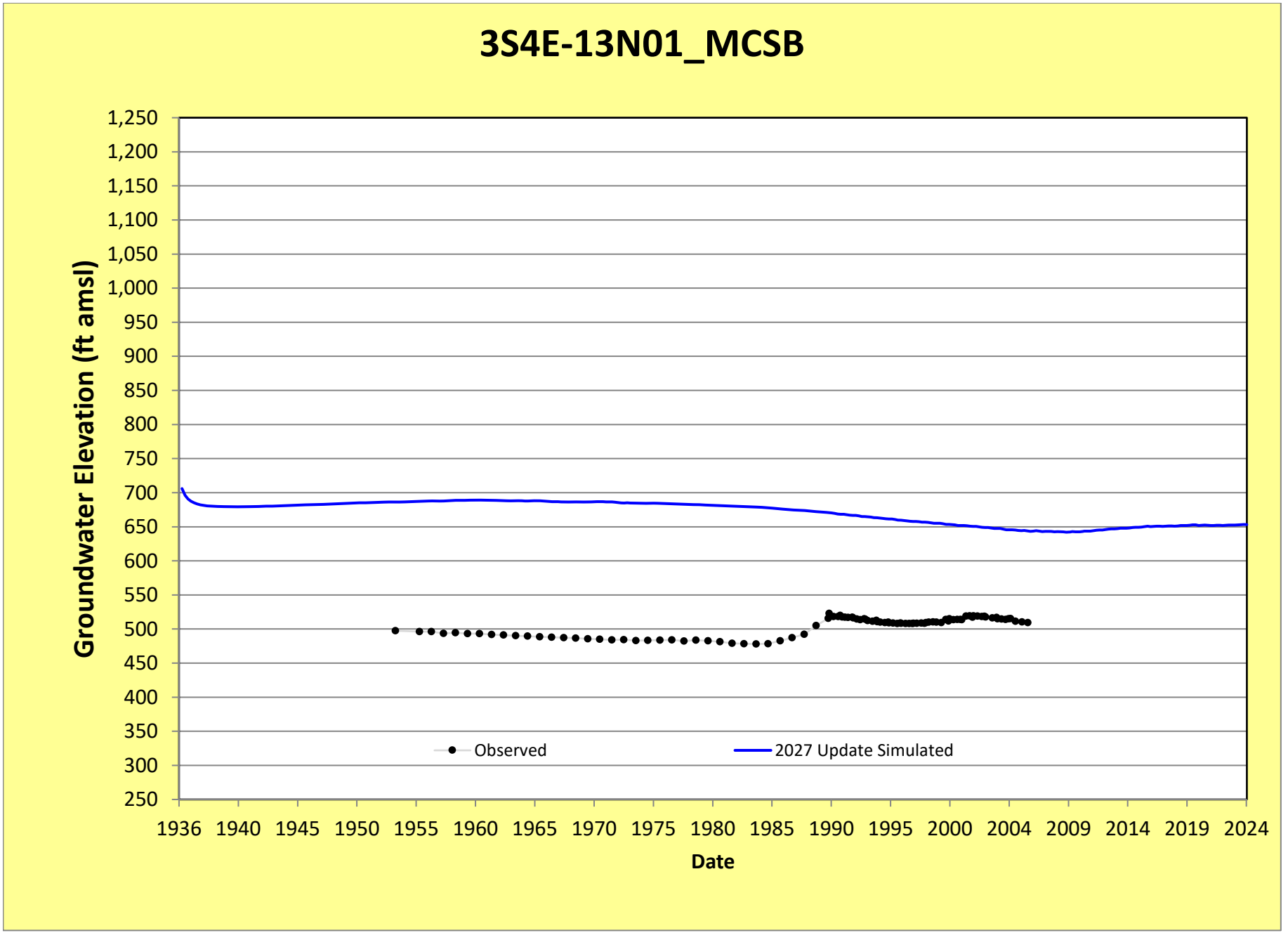
3S4E-12H01_MCSB



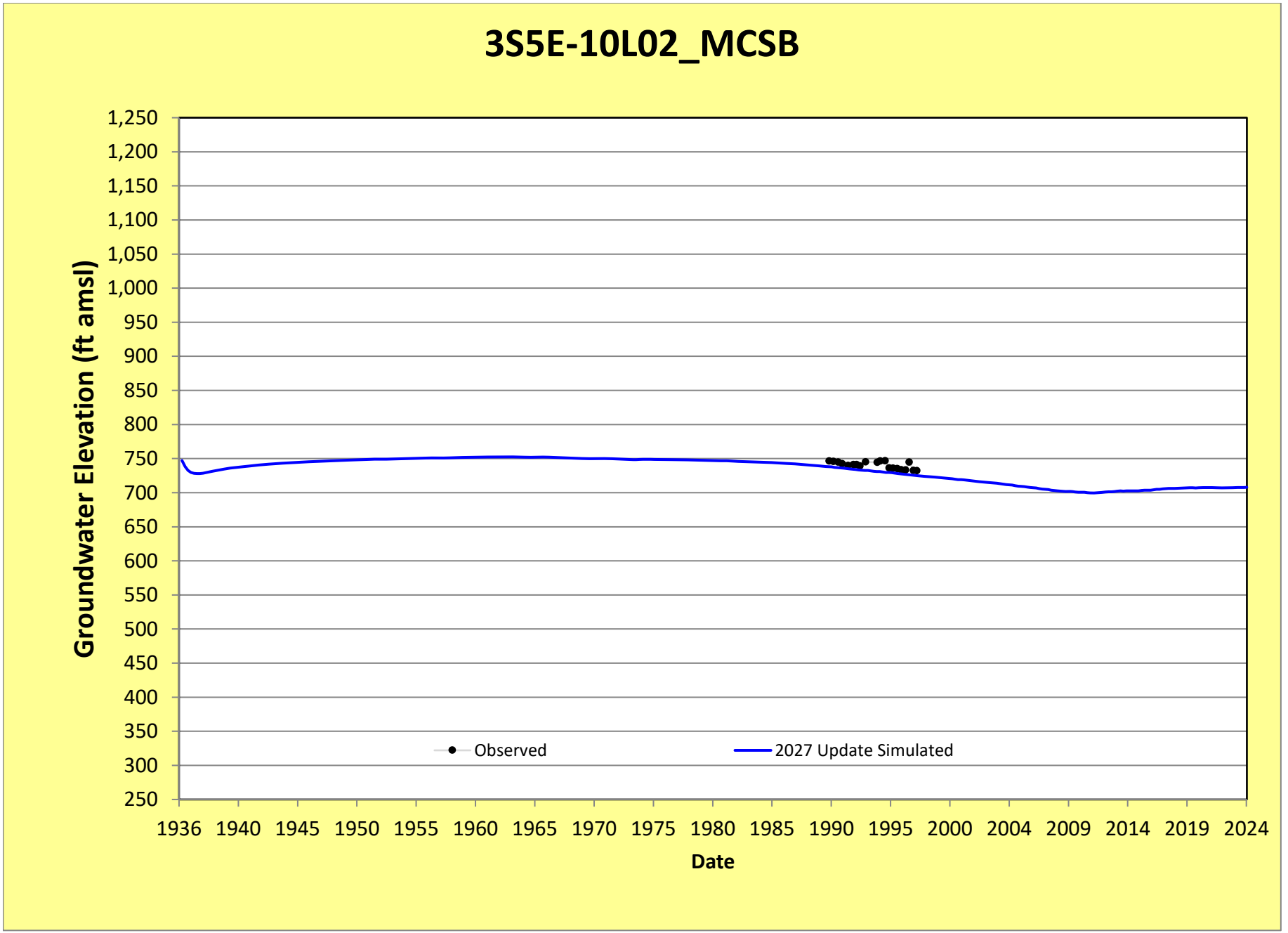
3S4E-12H02_MCSB

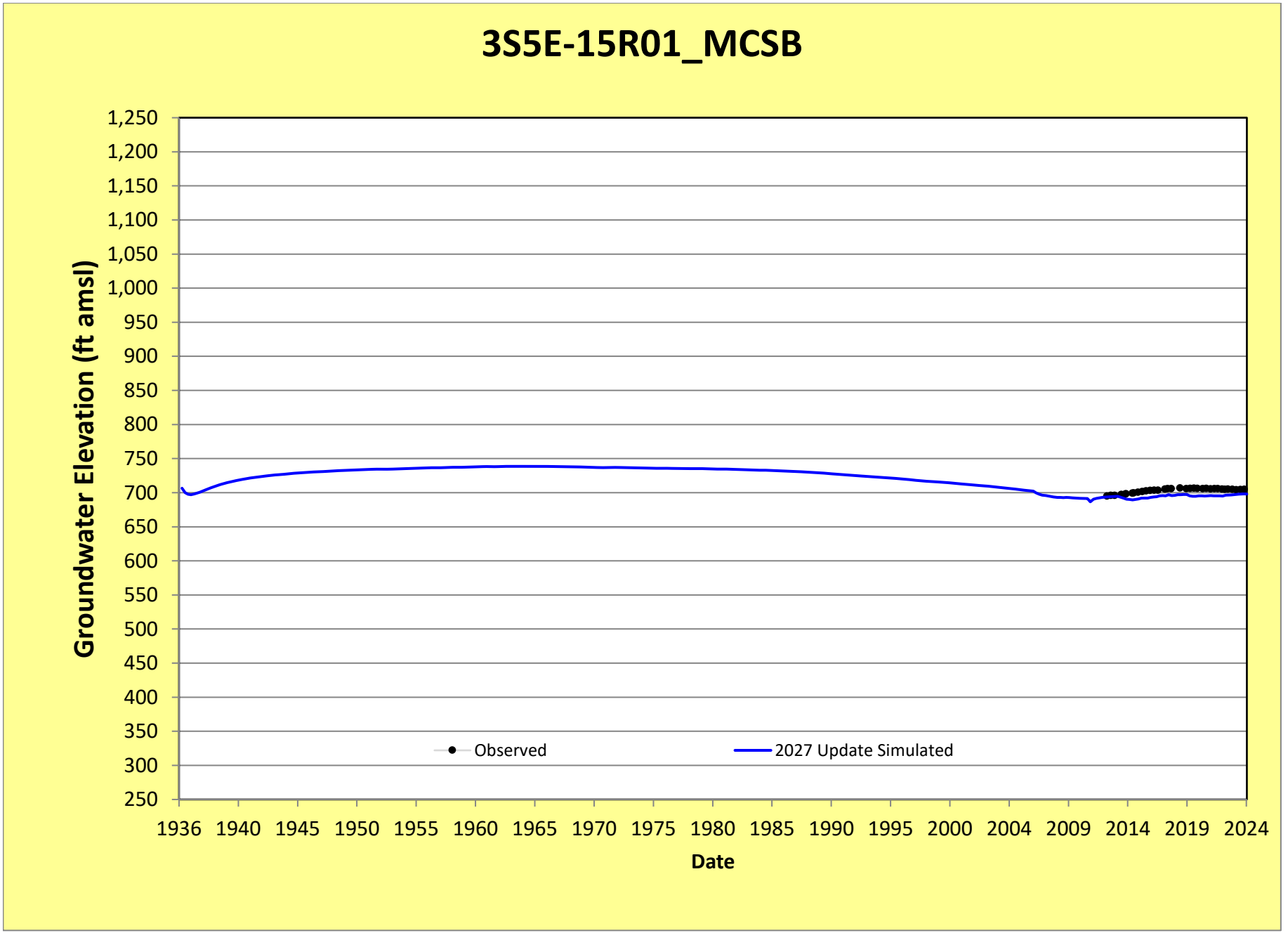


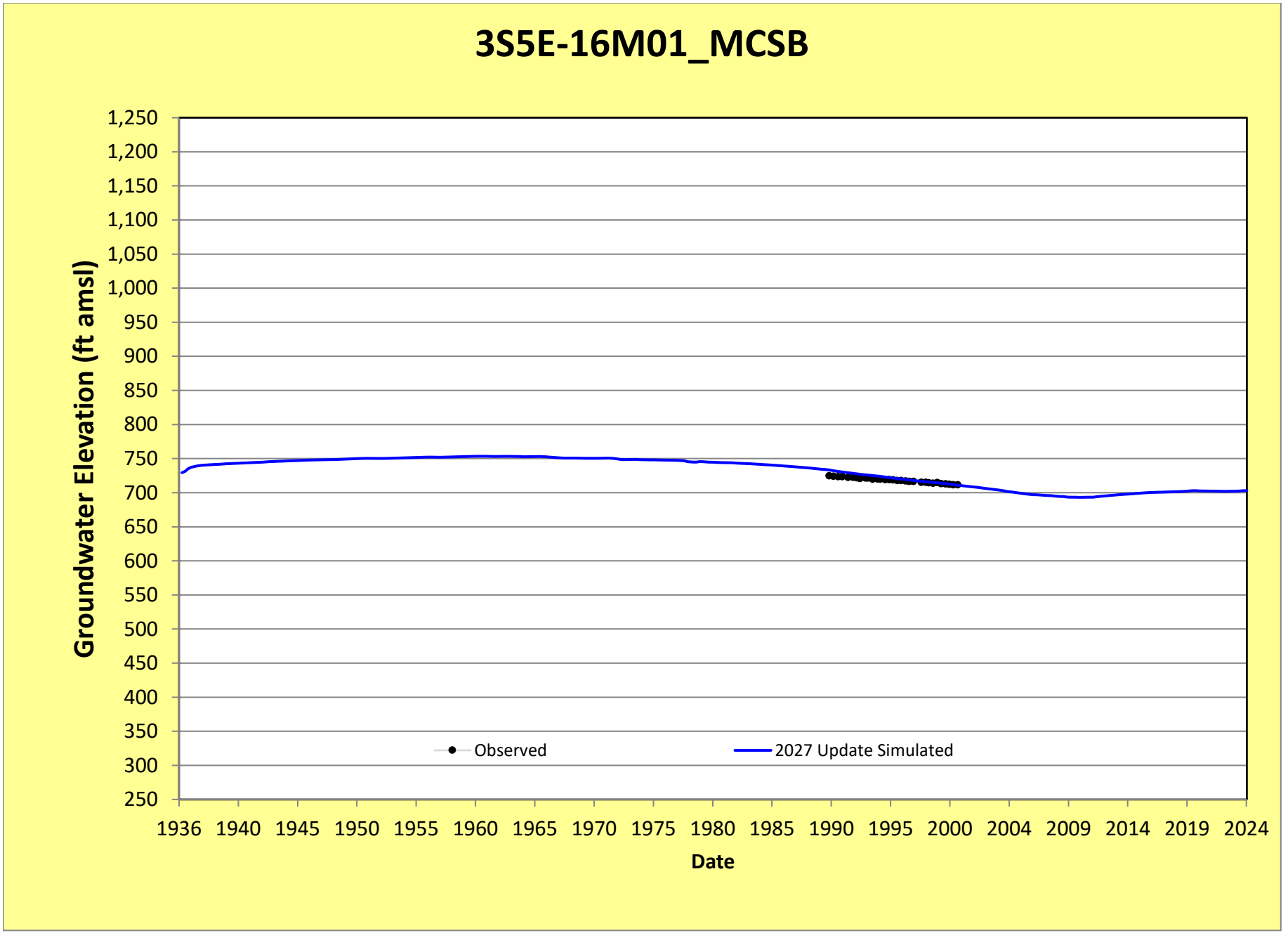

3S4E-12H03_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
1950
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1960
1965
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1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

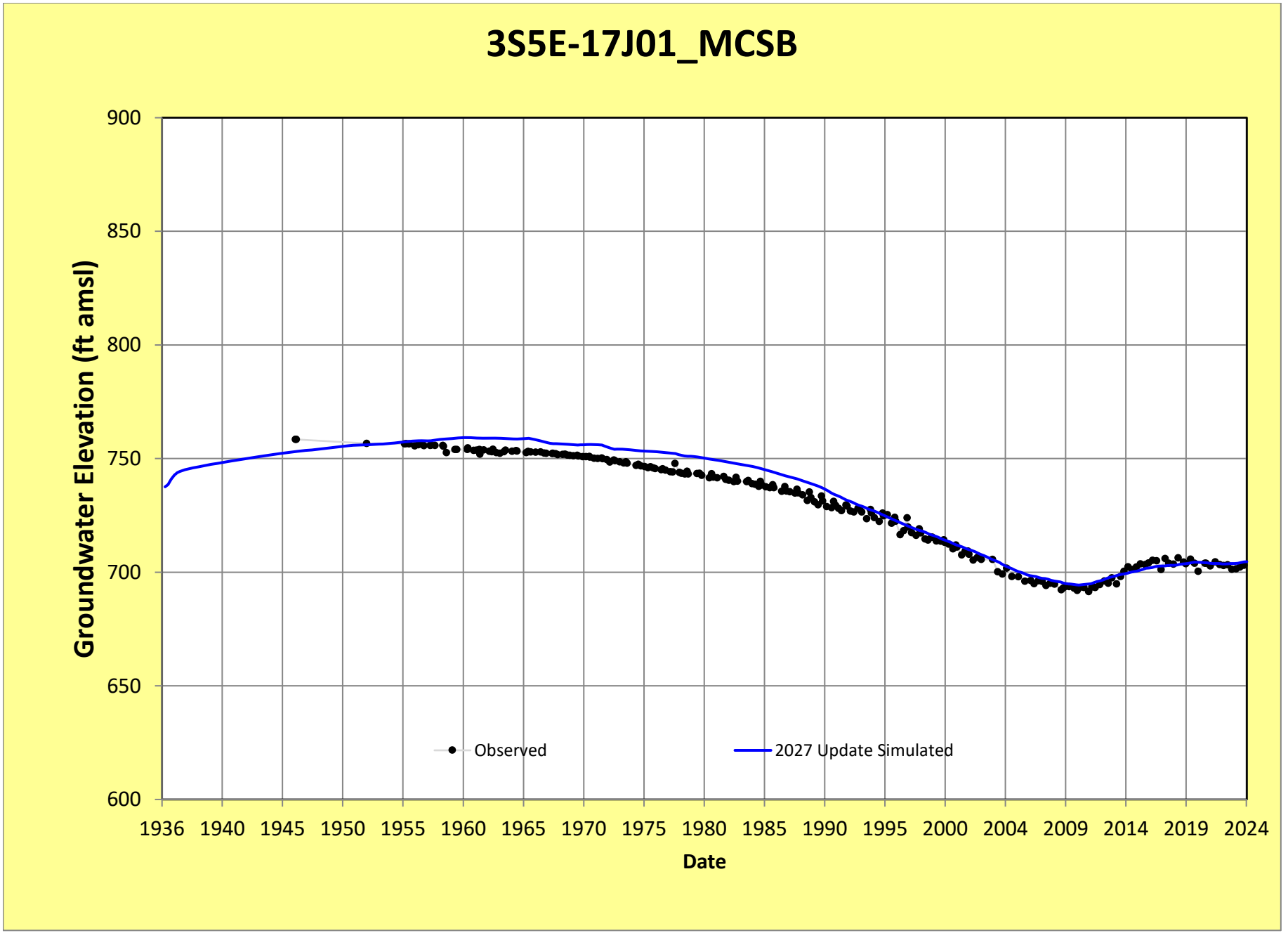

3S4E-13N01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
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2014
2019
2024
Date
Observed
2027 Update Simulated

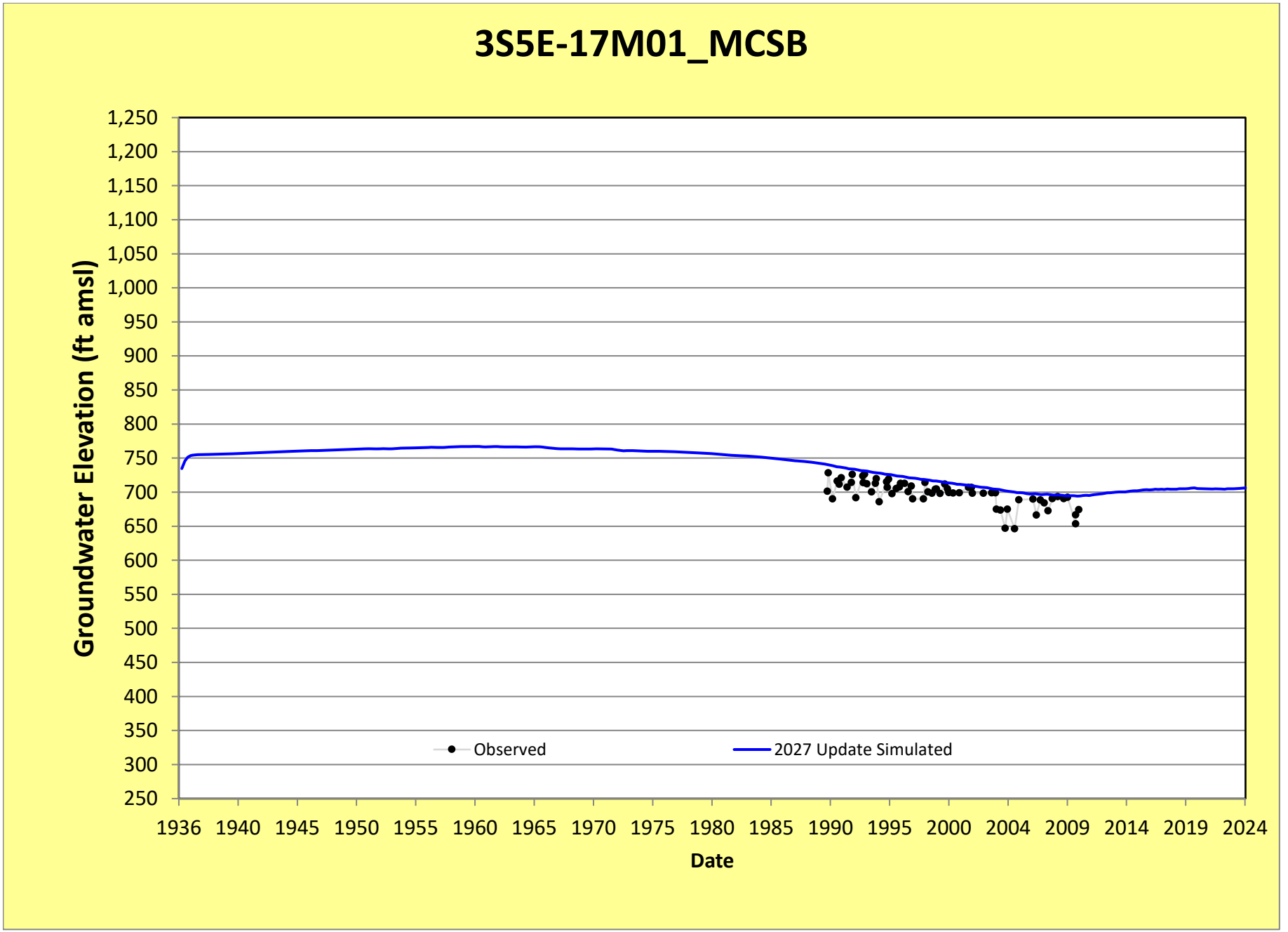
3S5E-10L02_MCSB

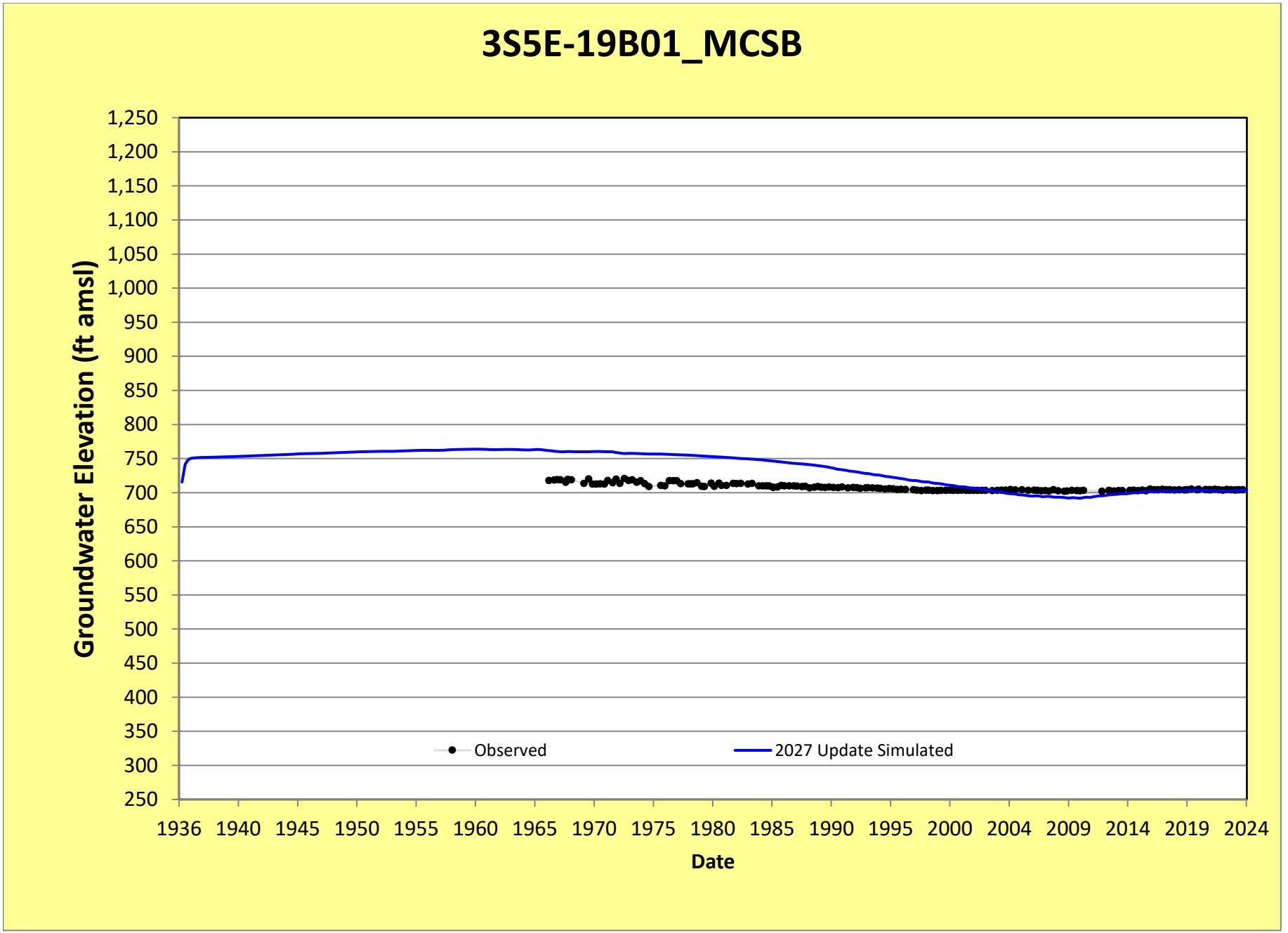


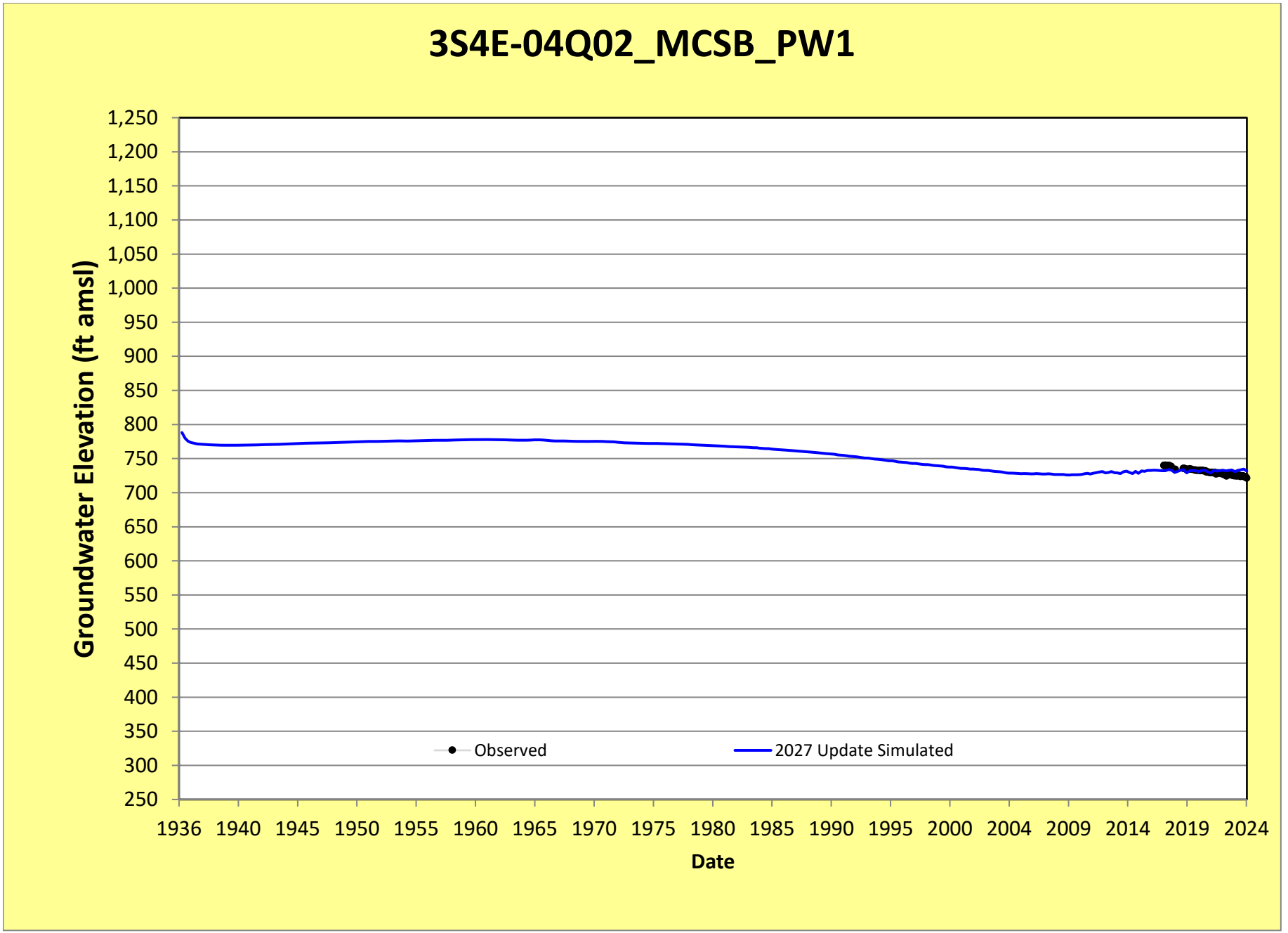

3S5E-15R01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
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2014
2019
2024
Date
Observed
2027 Update Simulated

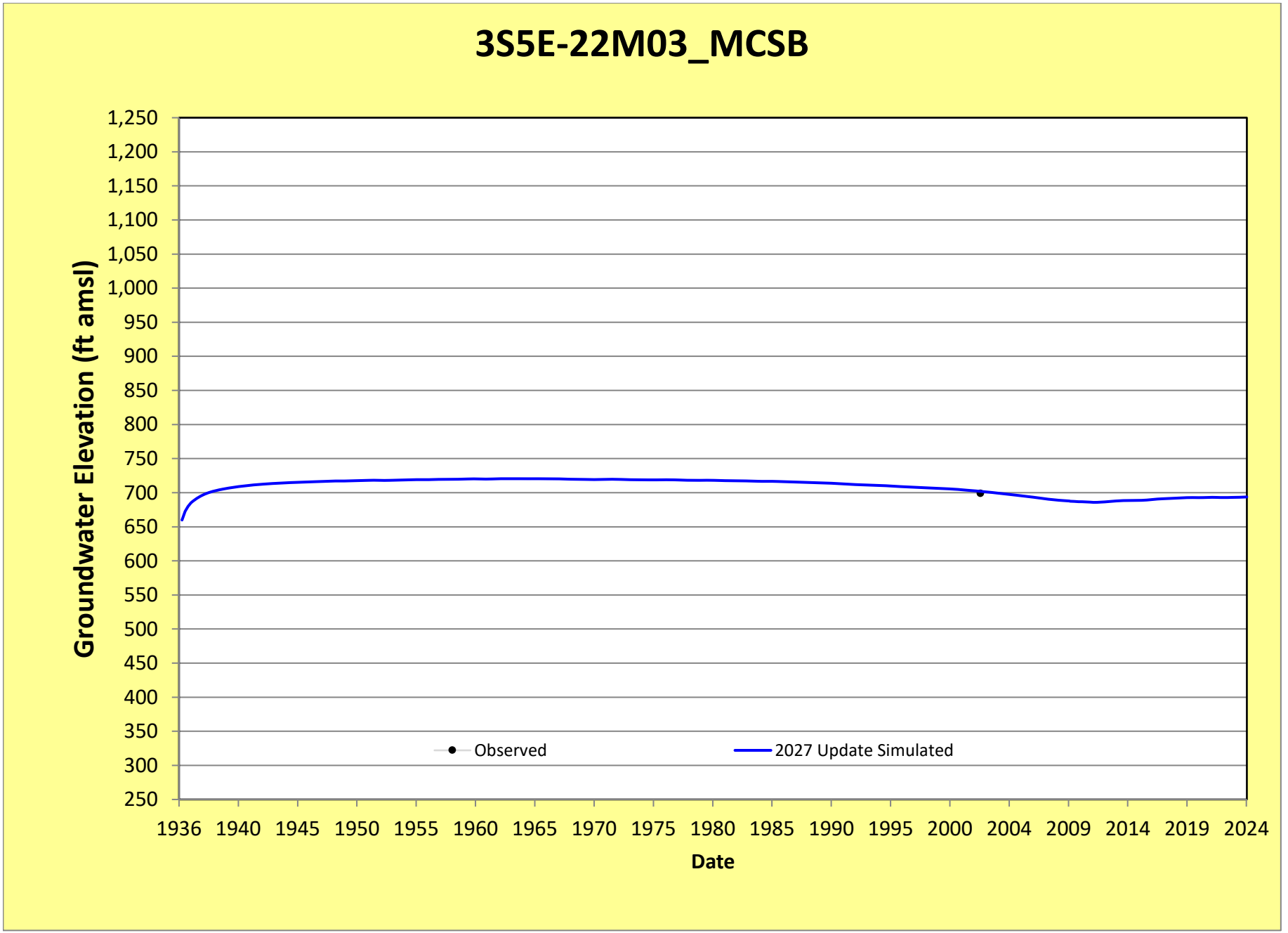

3S5E-16M01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
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2014
2019
2024
Date
Observed
2027 Update Simulated

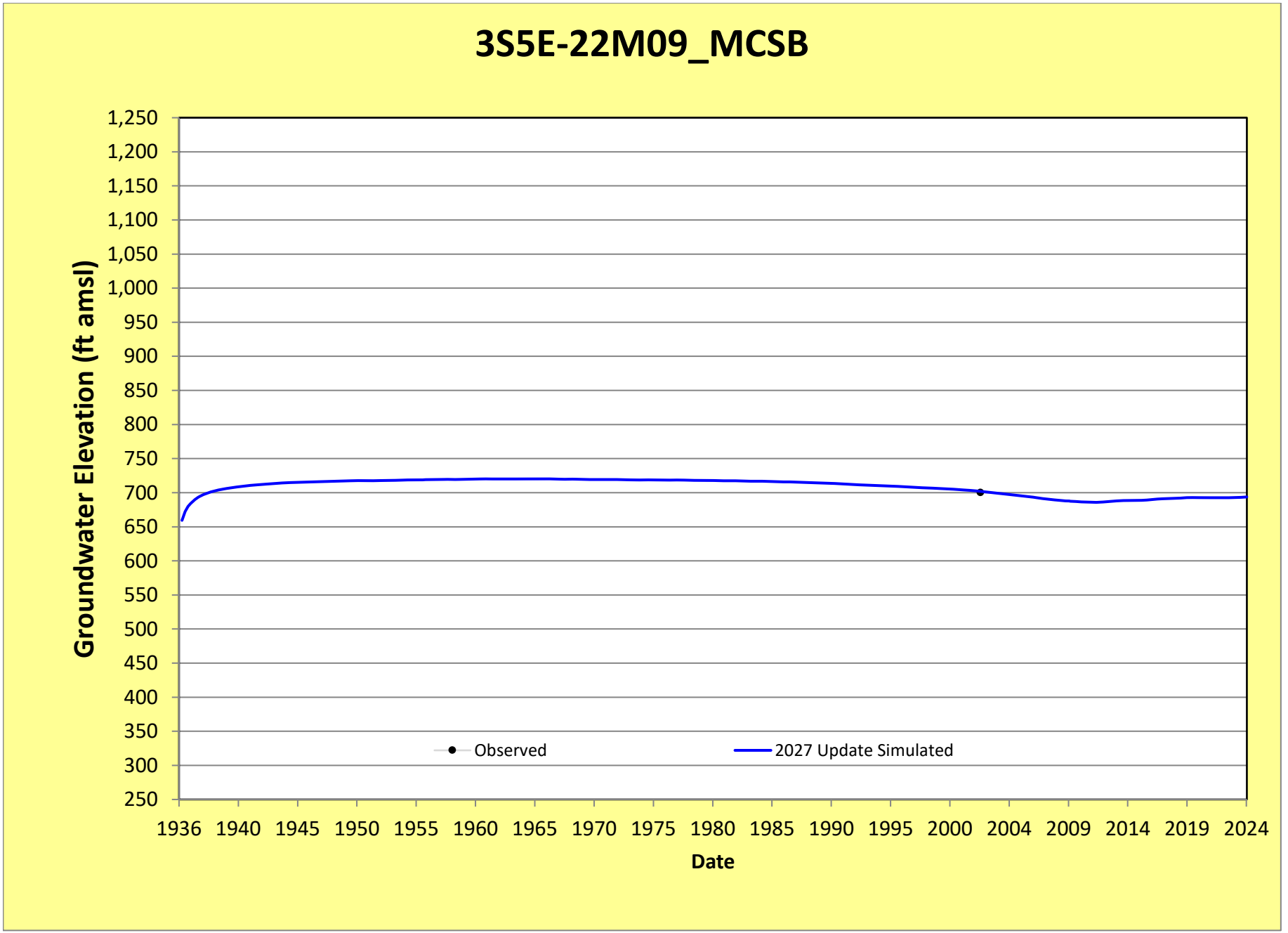

3S5E-17J01_MCSB
Groundwater Elevation (ft amsl)
900
850
800
750
700
650
600
1936
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

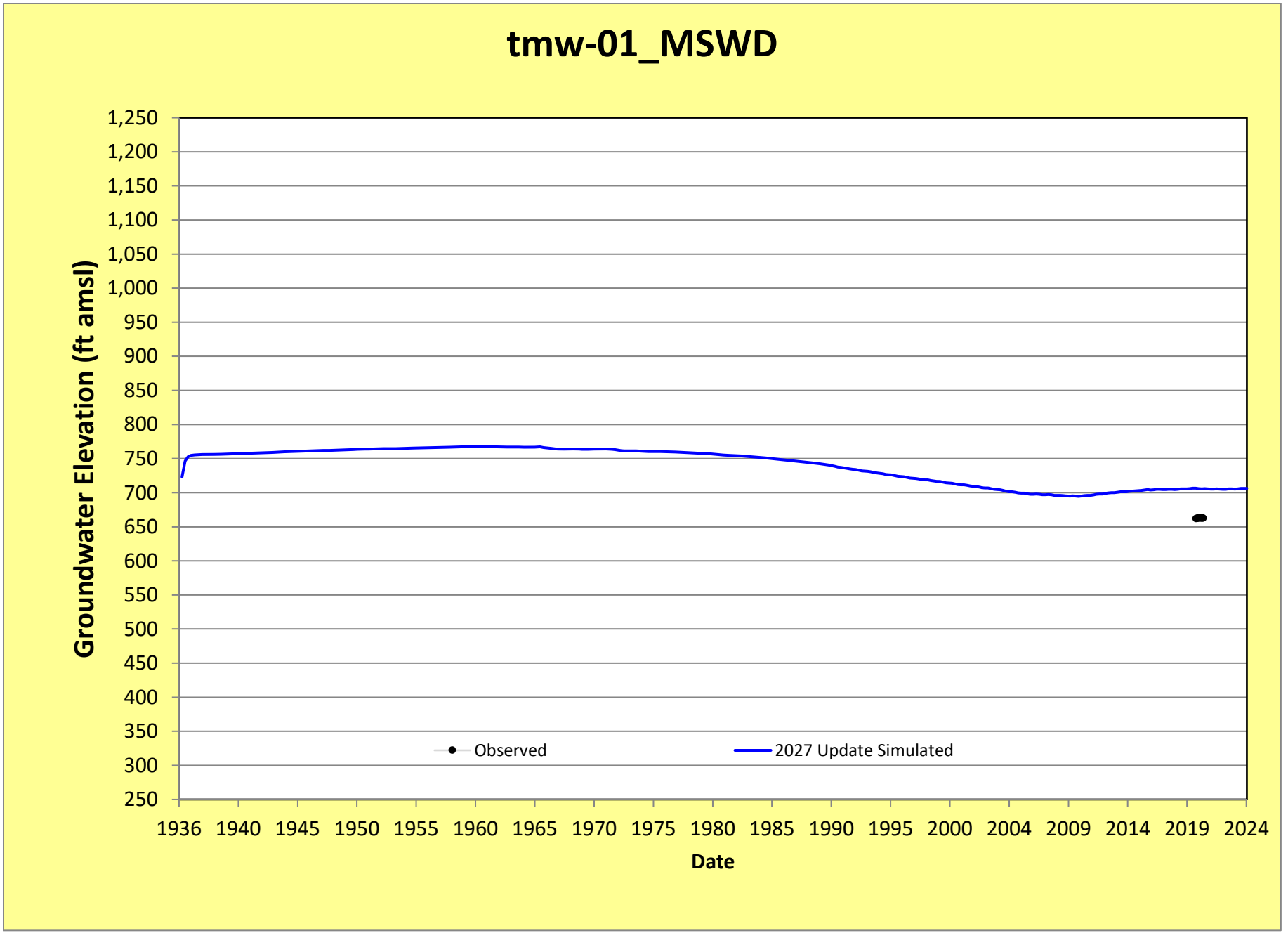

3S5E-17M01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
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2024
Date
Observed
2027 Update Simulated

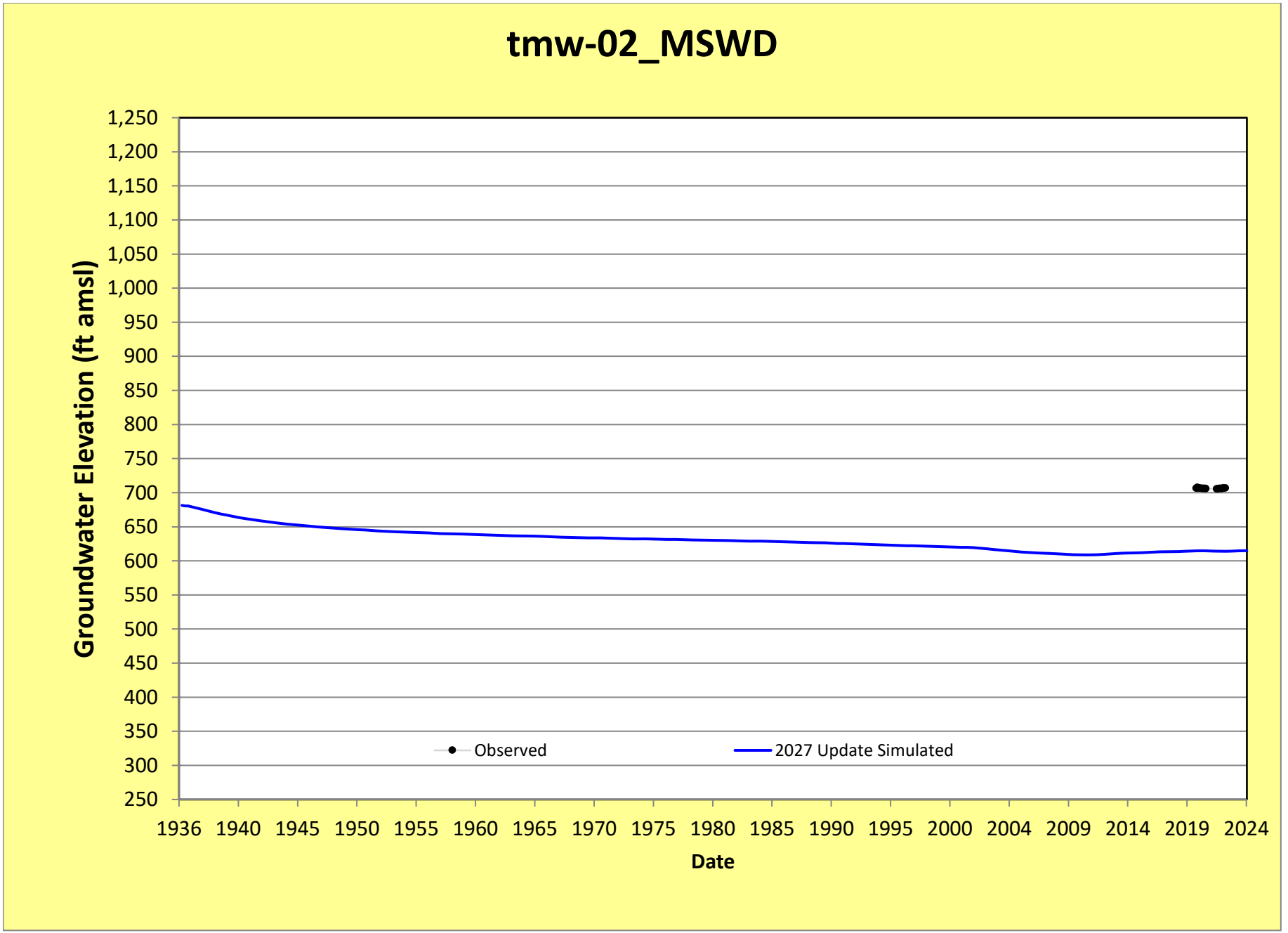

3S5E-19B01_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
1945
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2014
2019
2024
Date
Observed
2027 Update Simulated

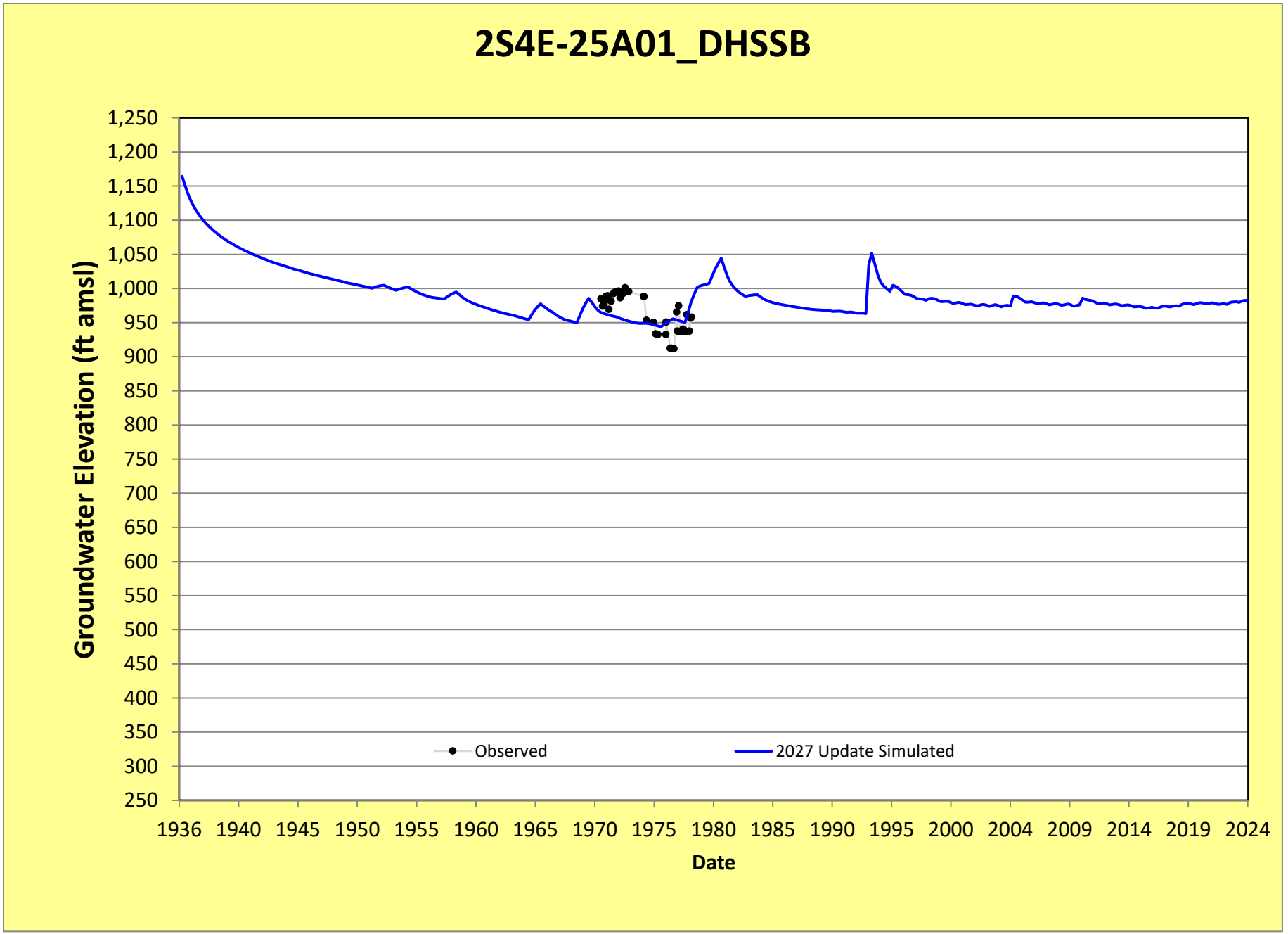

3S4E-04Q02_MCSB_PW1
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
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2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated

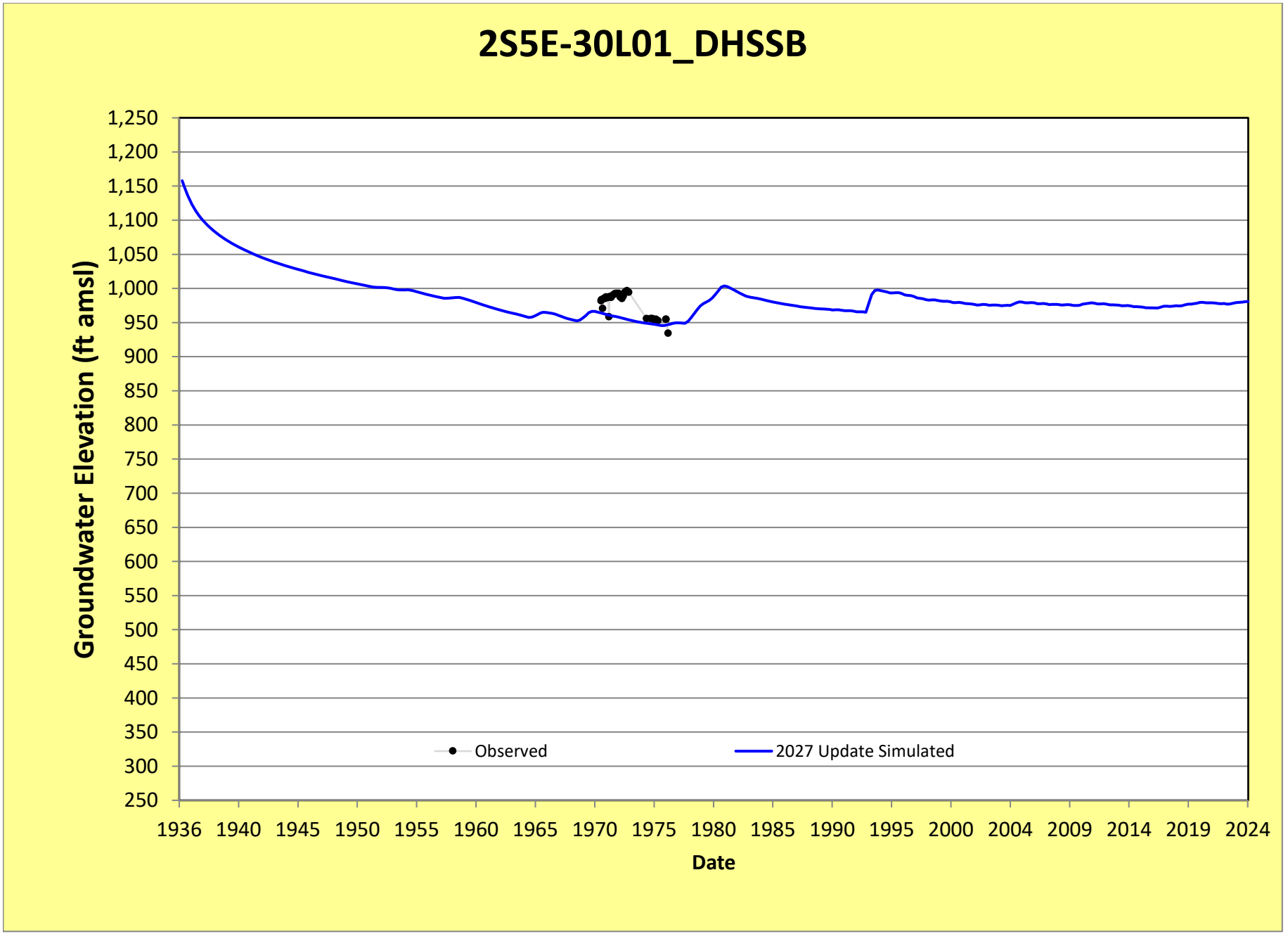

3S5E-22M03_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
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2019
2024
Date
Observed
2027 Update Simulated

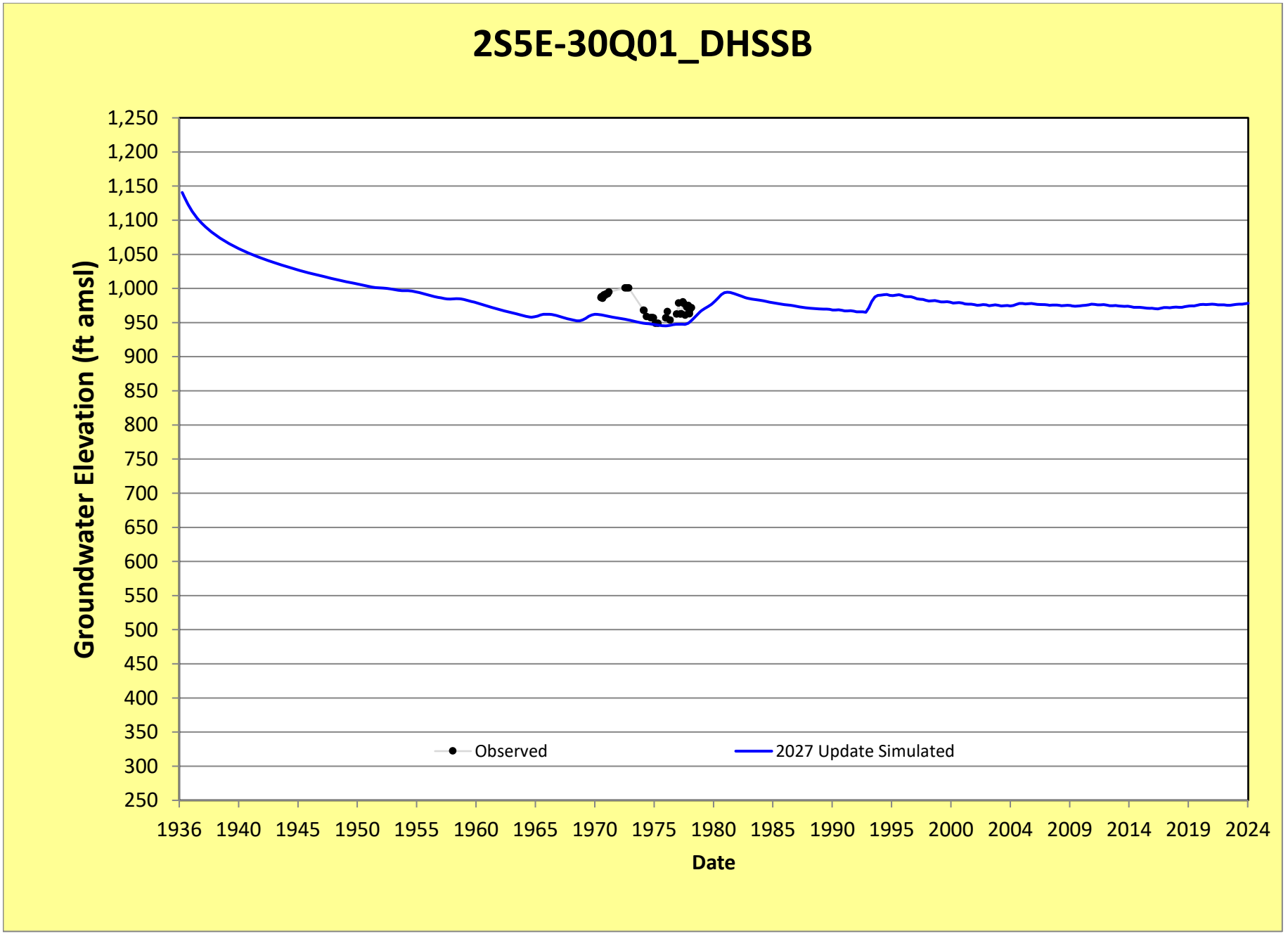

3S5E-22M09_MCSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
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1936
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2000
2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated


tmw-01_MSWD
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
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2009
2014
2019
2024
Date
Observed
2027 Update Simulated

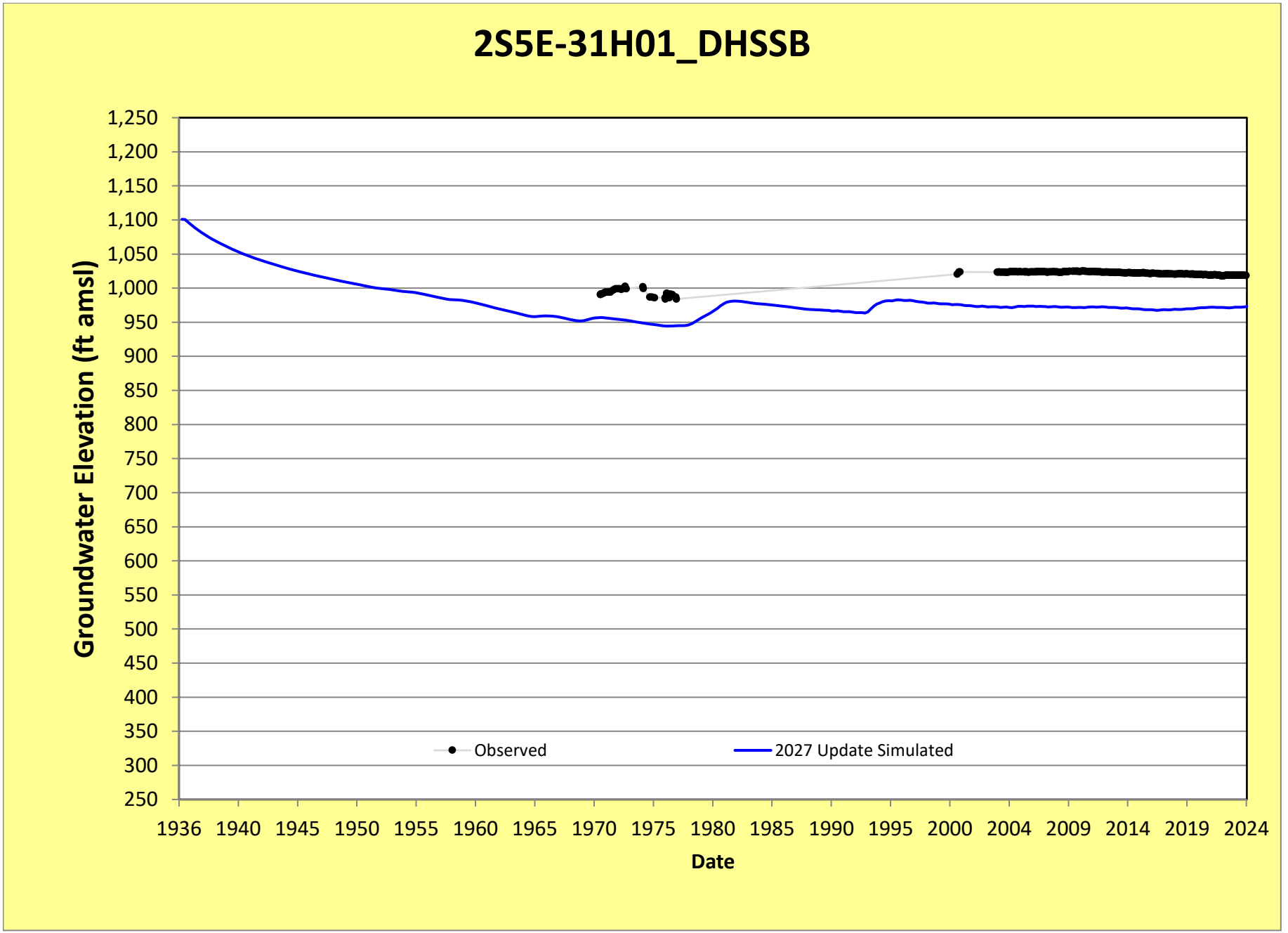

tmw-02_MSWD
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
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1936
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2014
2019
2024
Date
Observed
2027 Update Simulated


2S4E-25A01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
1936
1940
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1960
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2014
2019
2024
Date
Observed
2027 Update Simulated

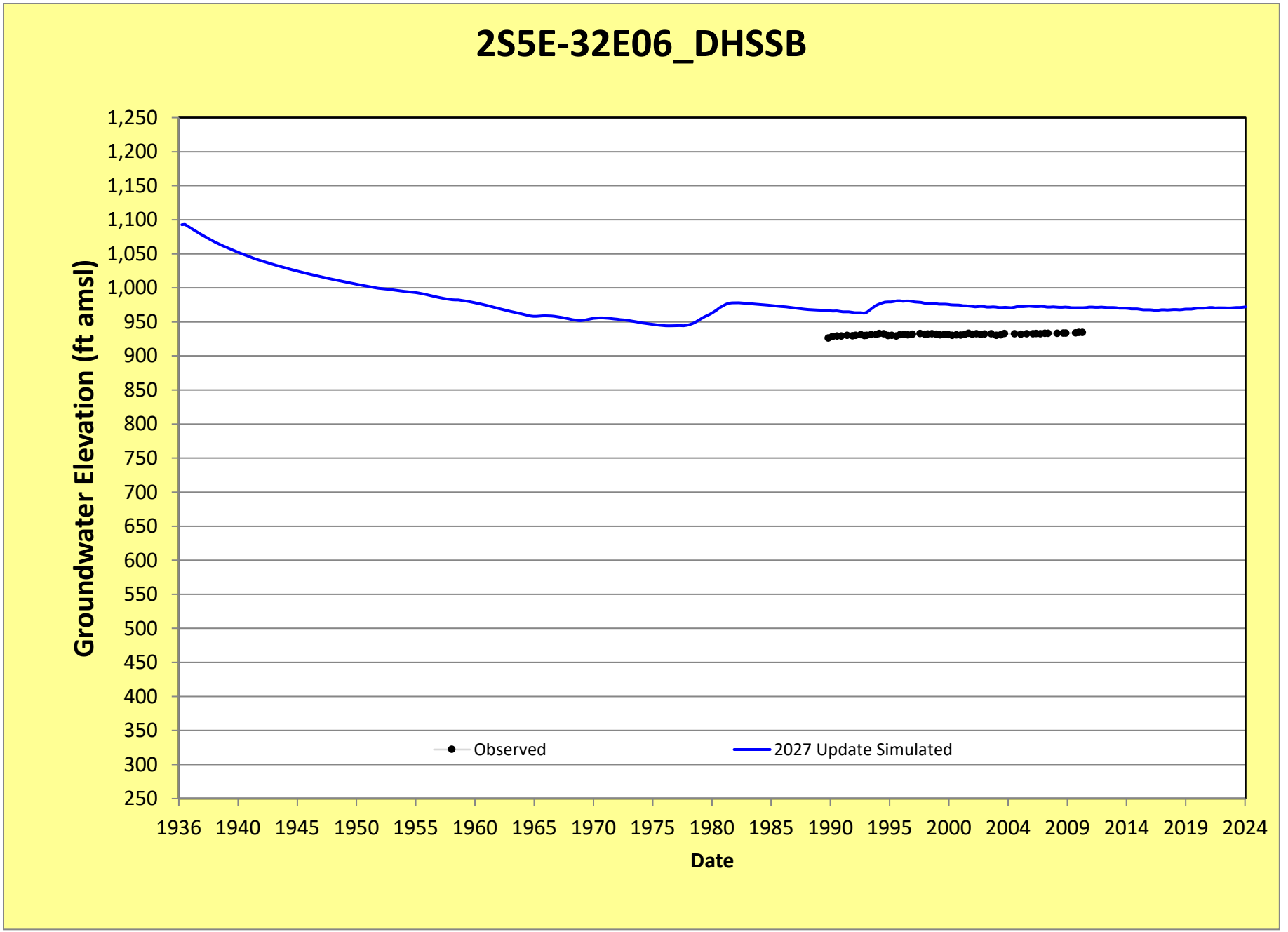

2S5E-30L01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
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1936
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2019
2024
Date
Observed
2027 Update Simulated

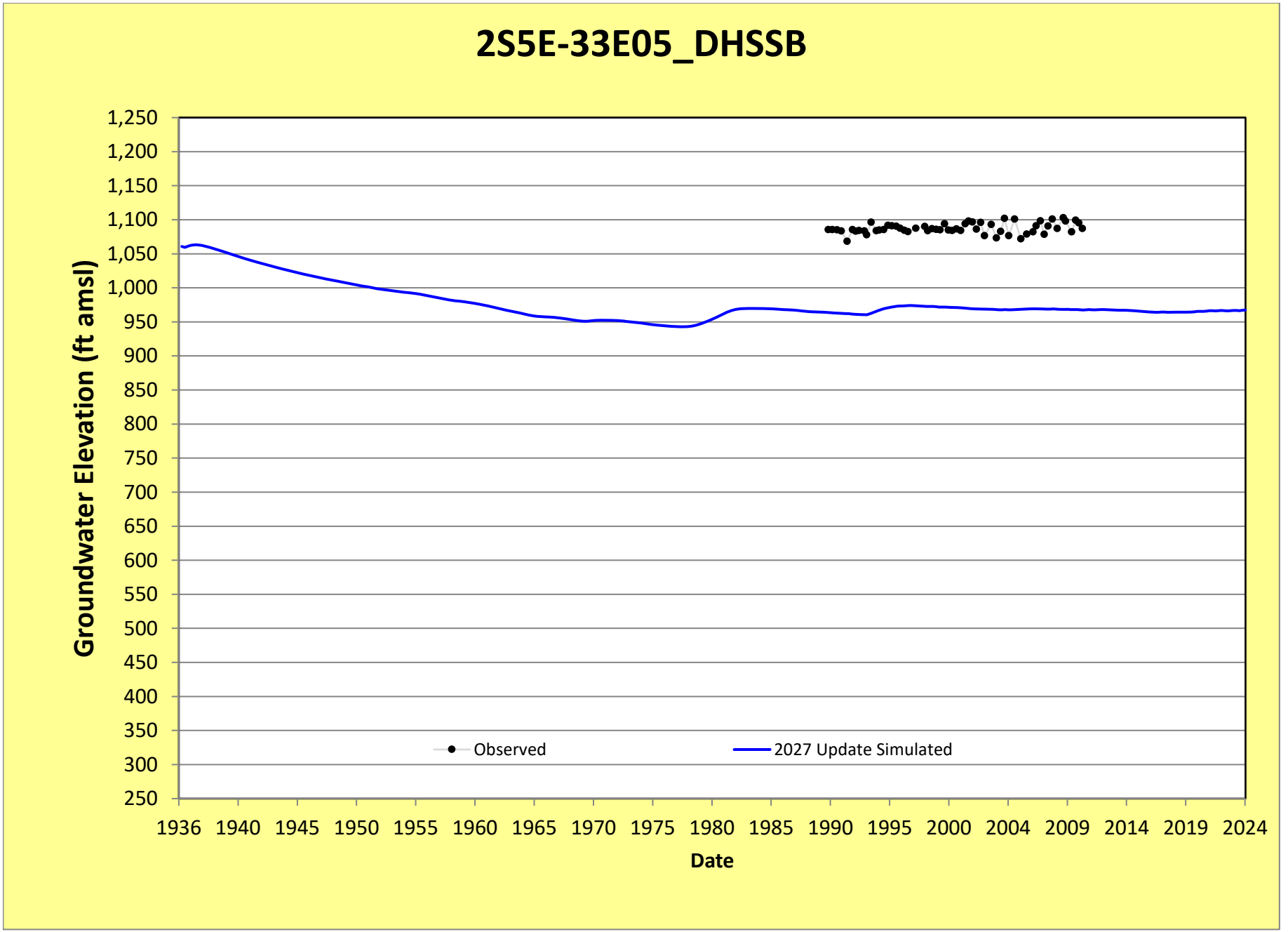

2S5E-30Q01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
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1936
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2019
2024
Date
Observed
2027 Update Simulated

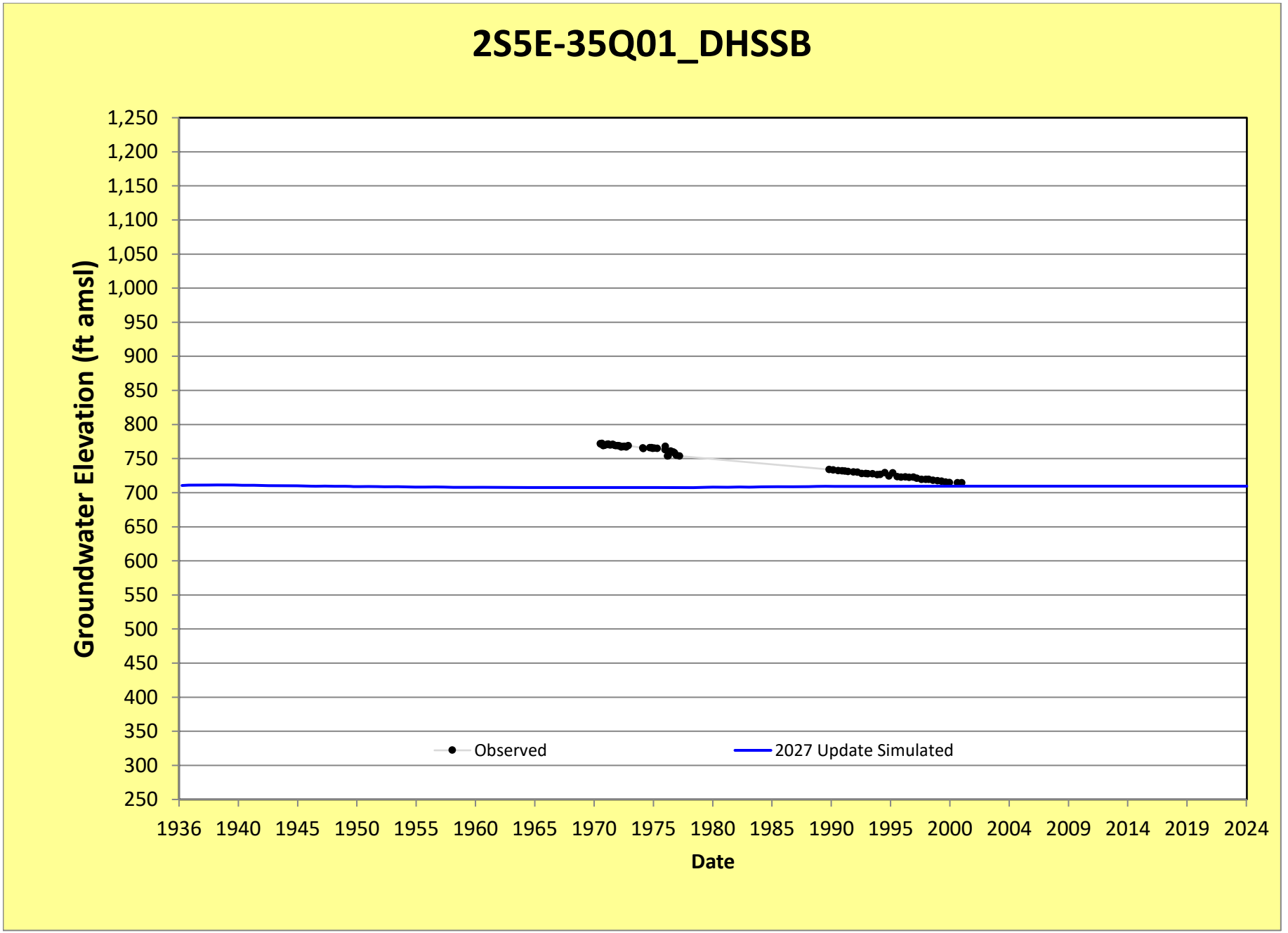
2S5E-31H01_DHSSB

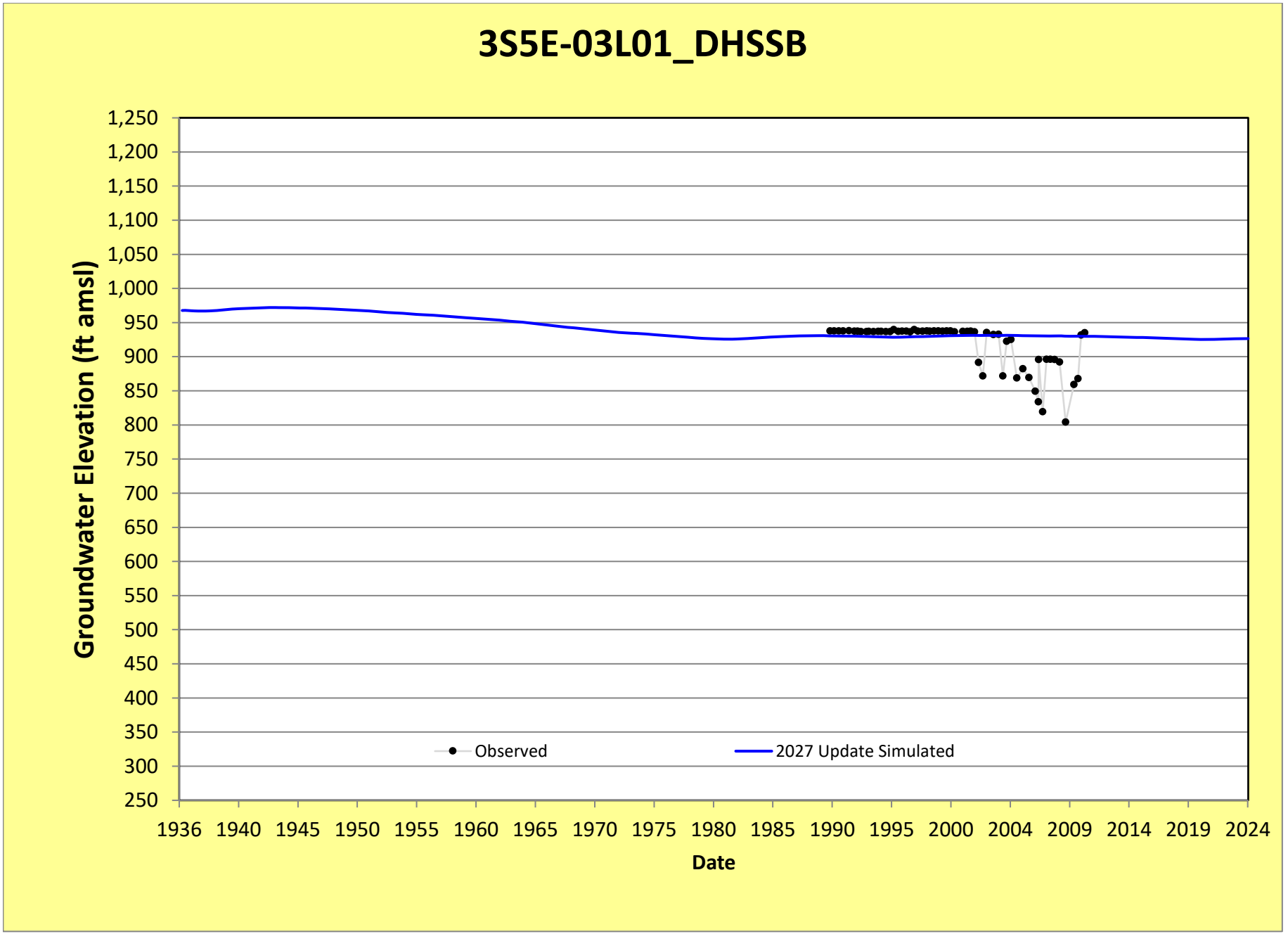


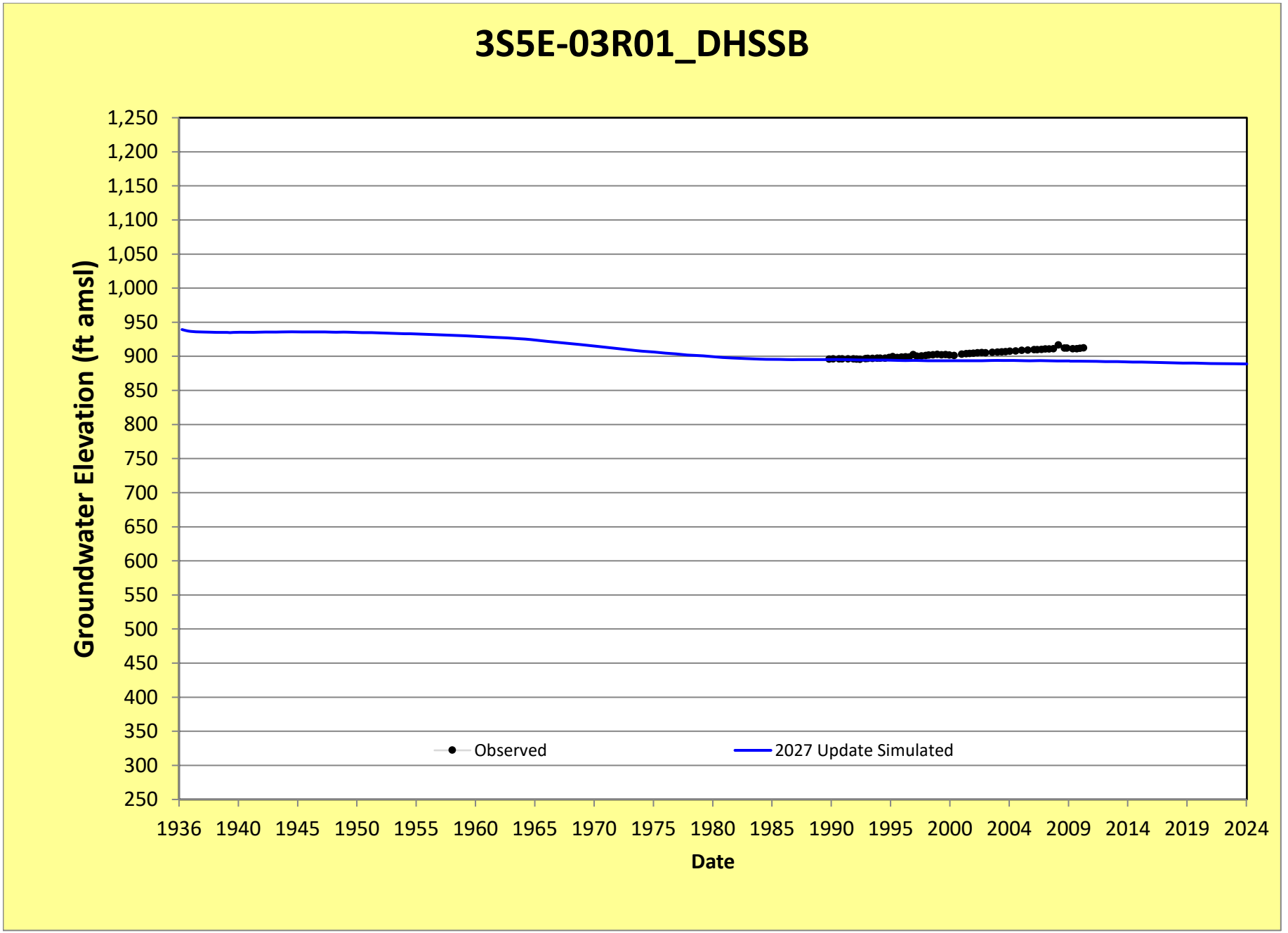
2S5E-32E06_DHSSB

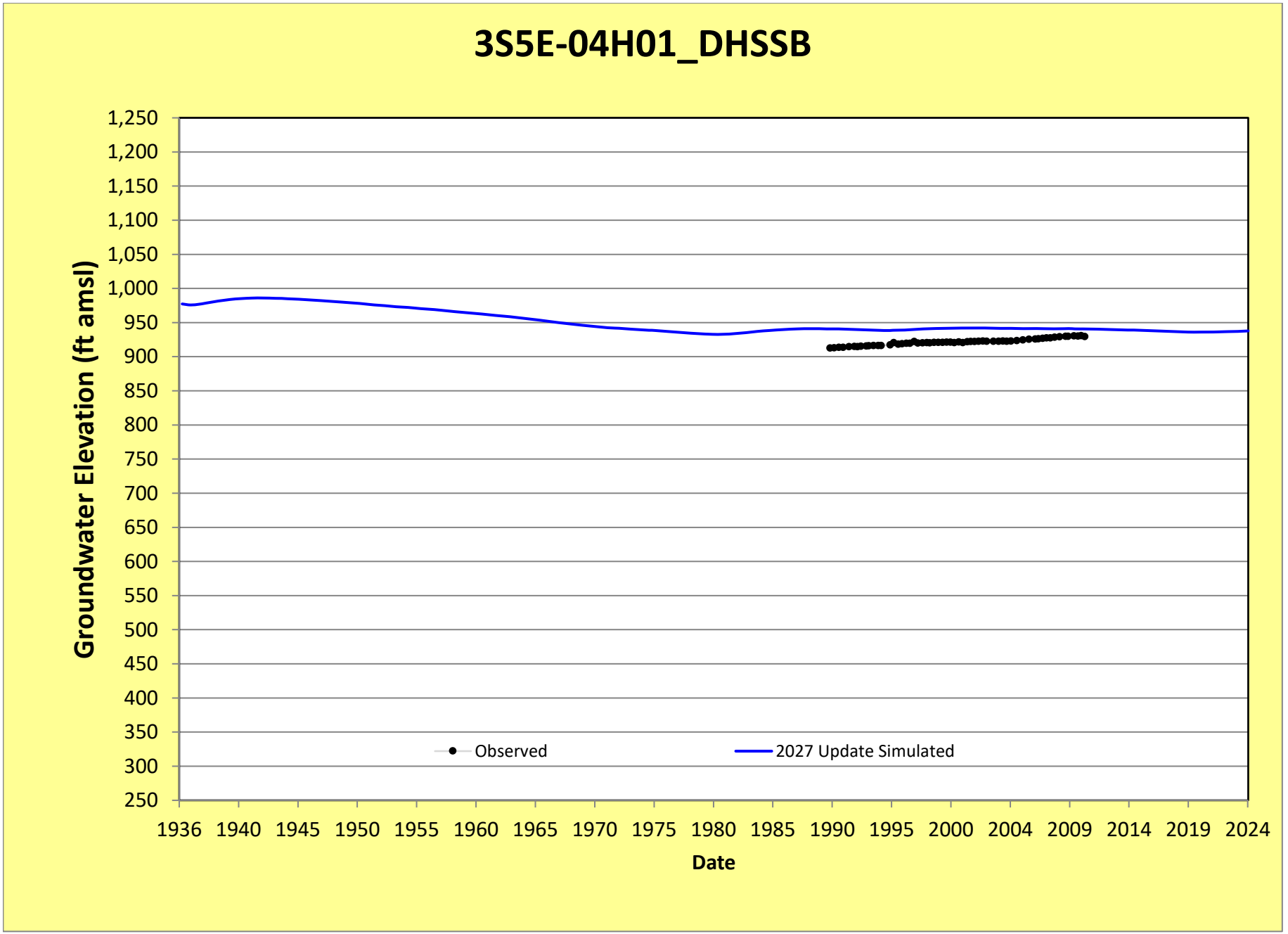



2S5E-33E05_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
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1936
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2024
Date
Observed
2027 Update Simulated

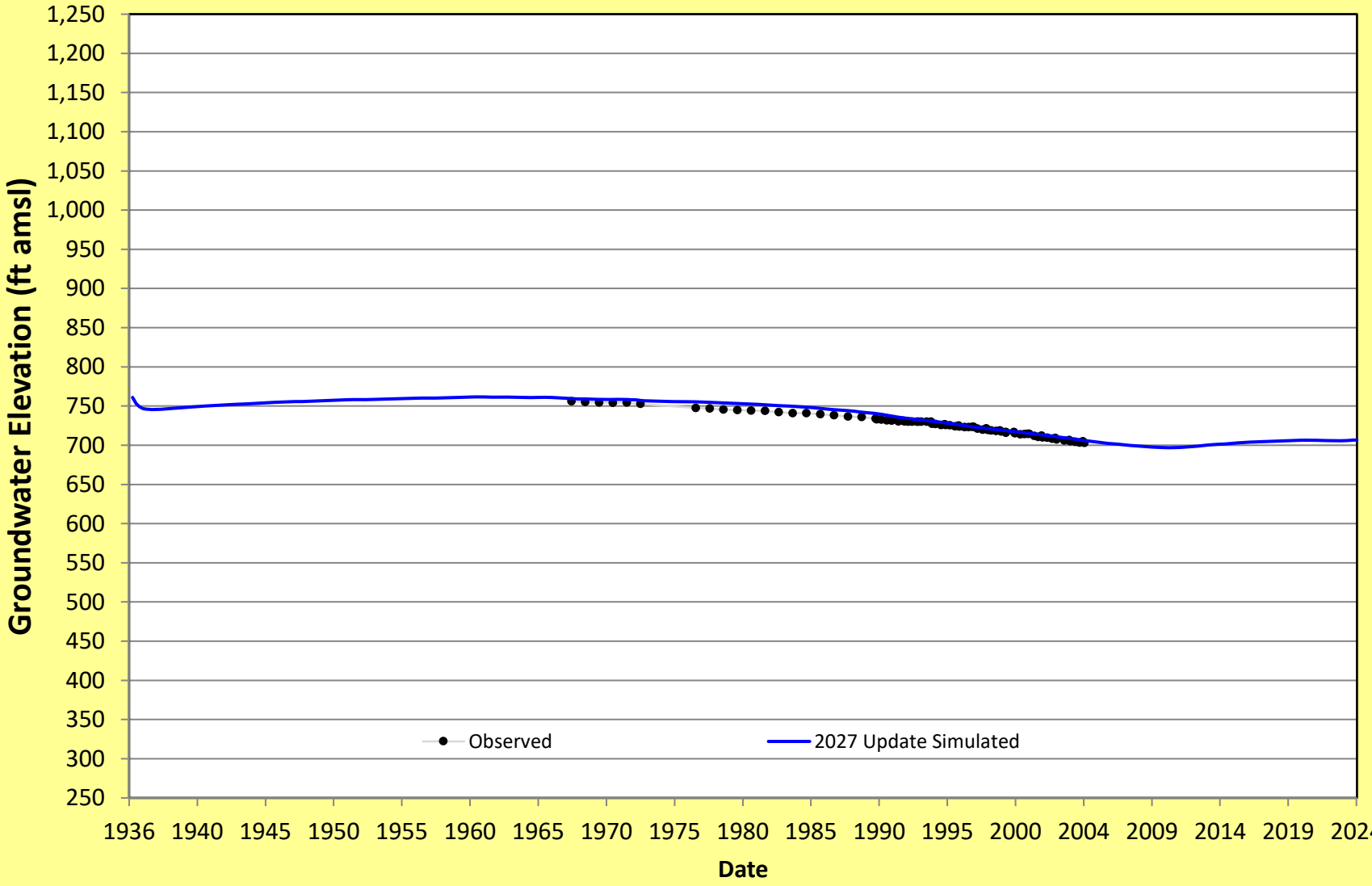

2S5E-35Q01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
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1936
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2024
Date
Observed
2027 Update Simulated


3S5E-03L01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
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2024
Date
Observed
2027 Update Simulated

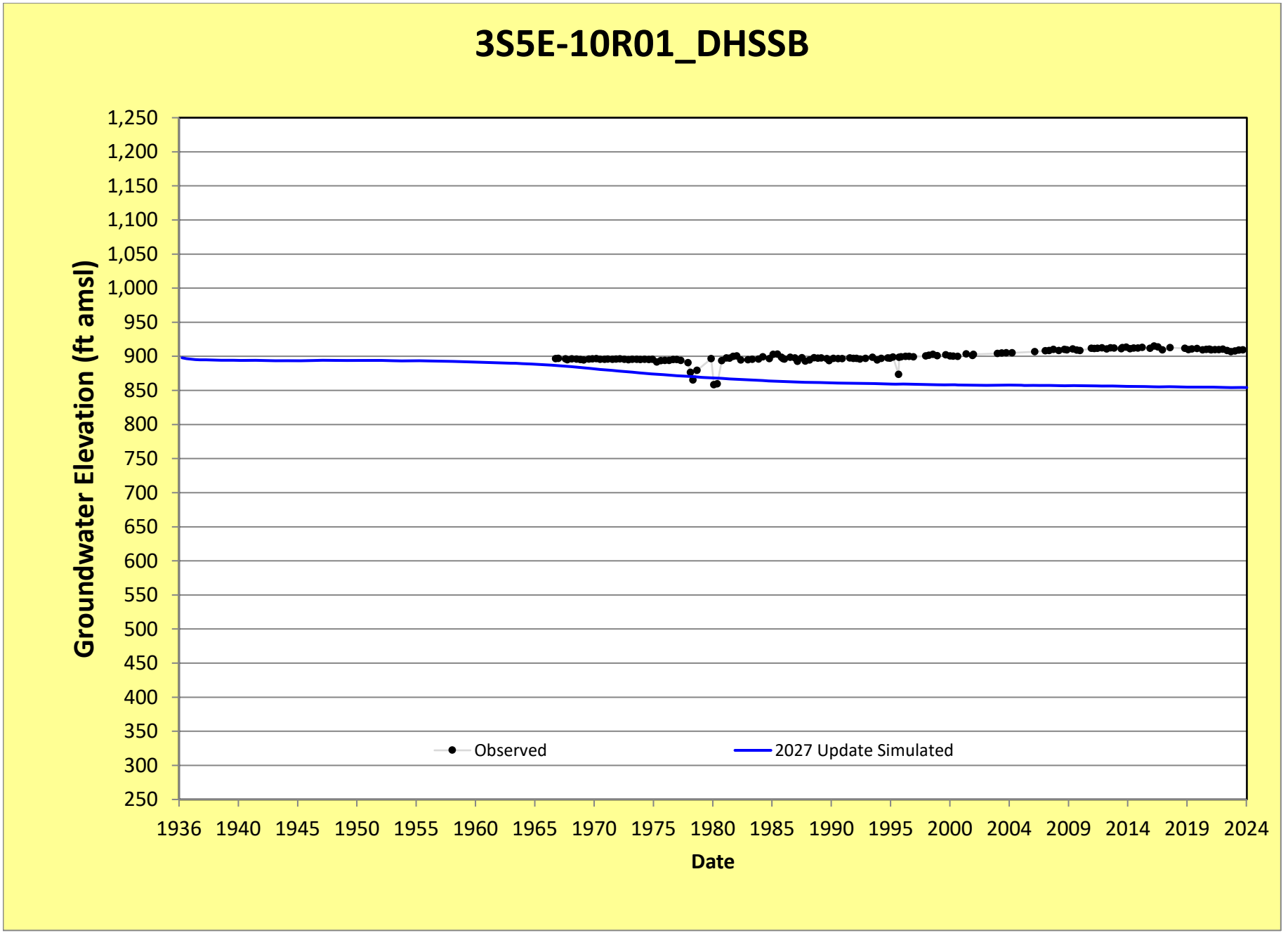

3S5E-03R01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
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1936
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2014
2019
2024
Date
Observed
2027 Update Simulated


3S5E-04H01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
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1936
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2024
Date
Observed
2027 Update Simulated

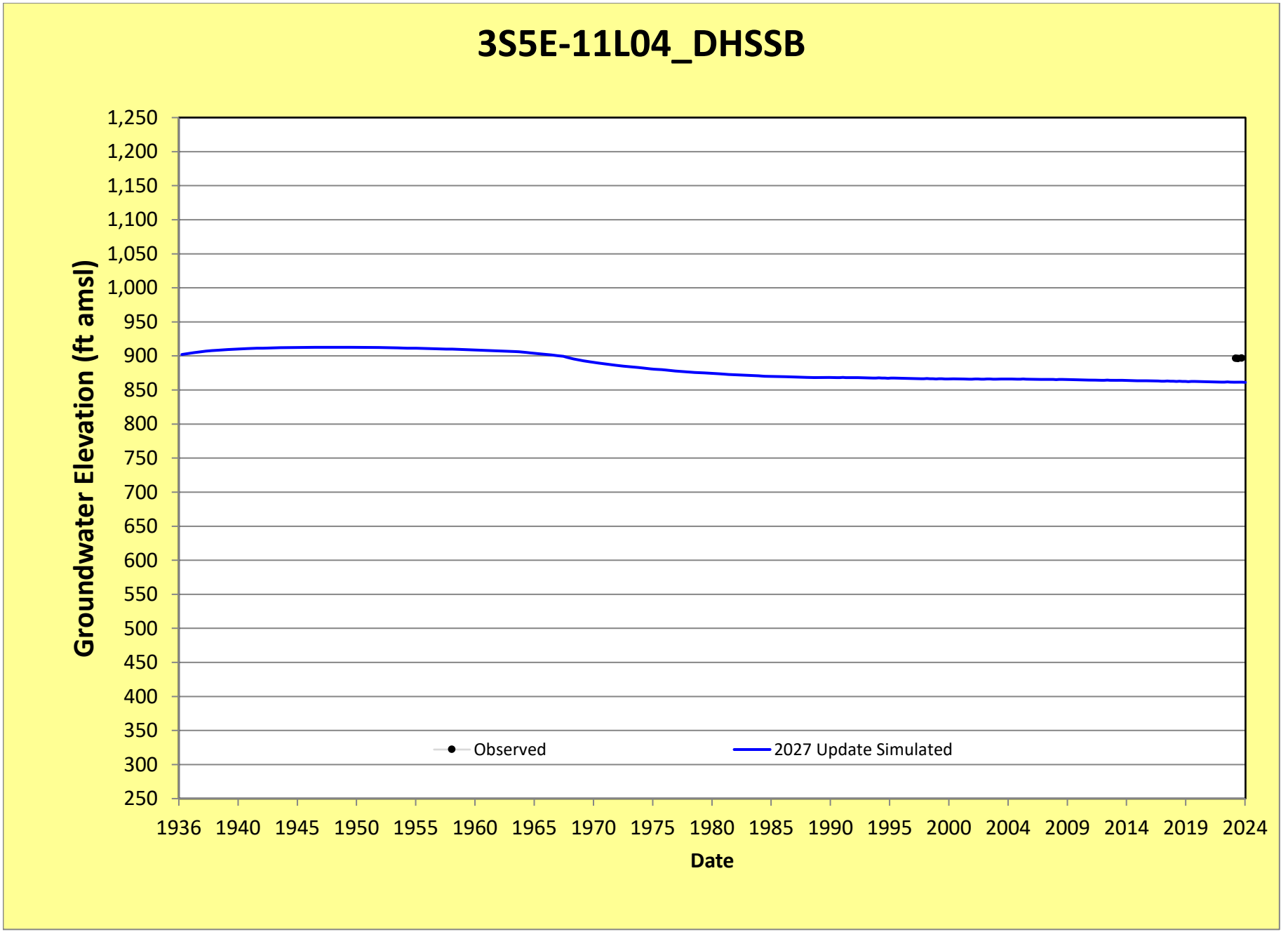
3S5E-09C01_DHSSB

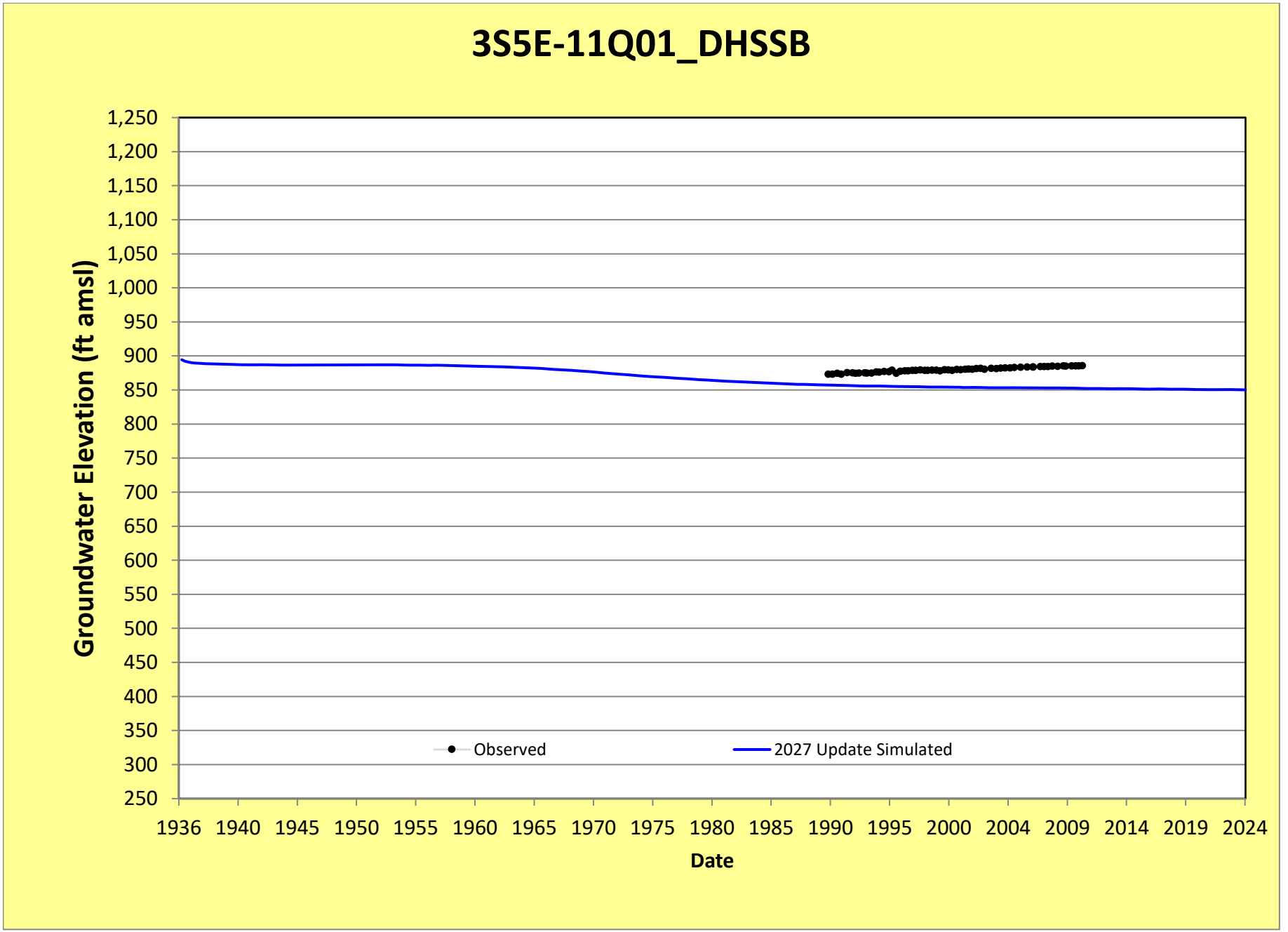


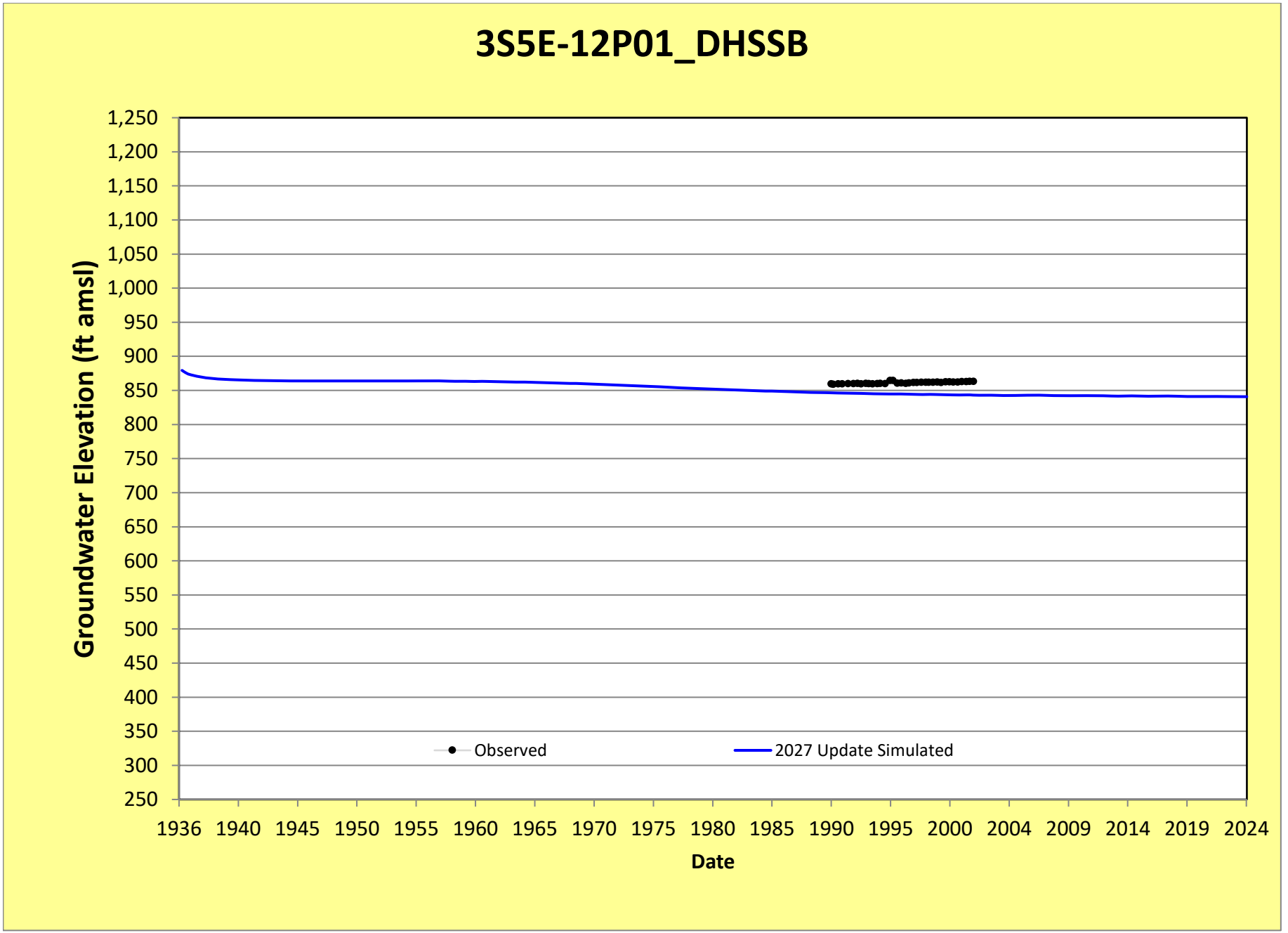
3S5E-10R01_DHSSB



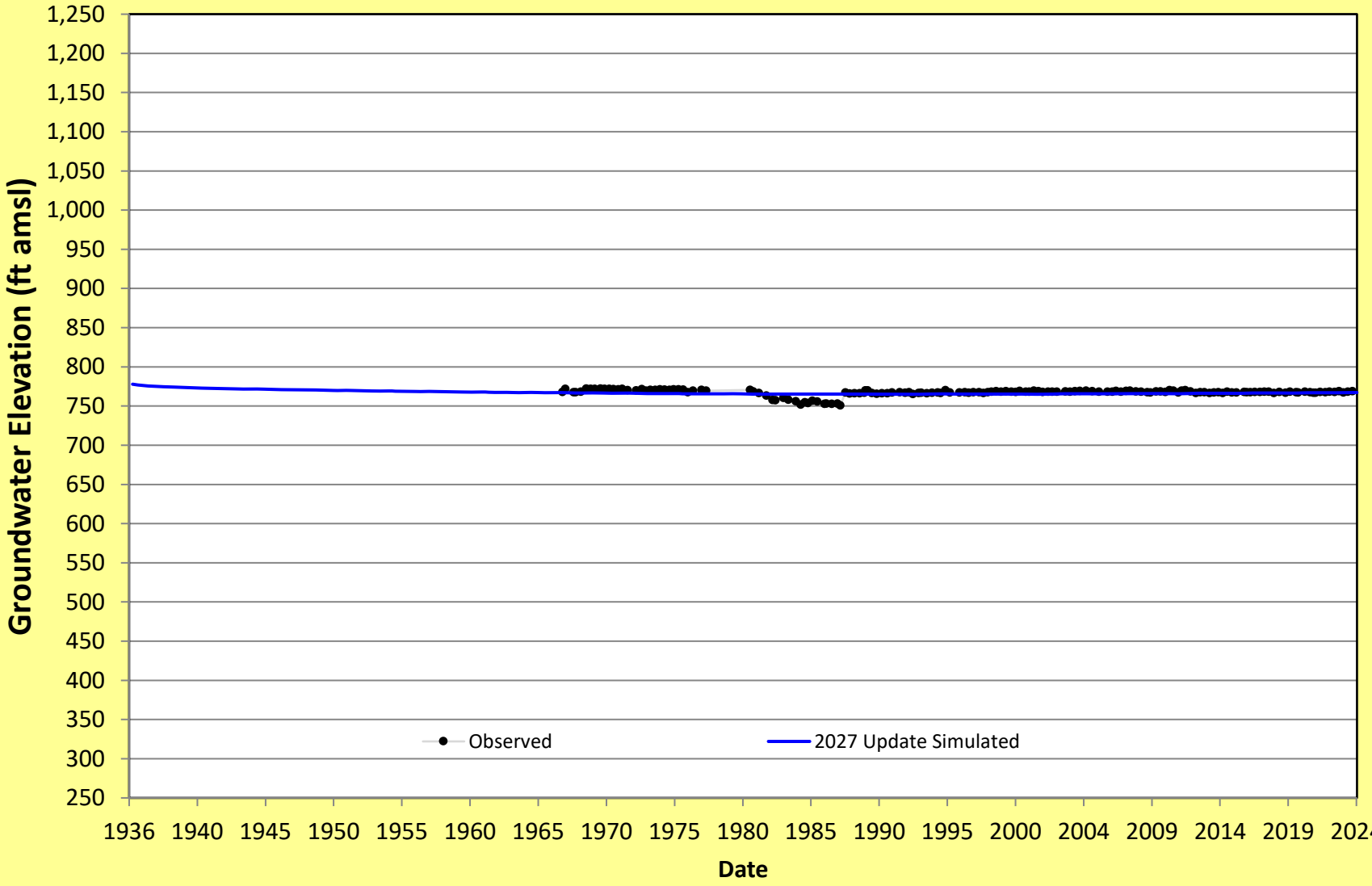
3S5E-11L04_DHSSB

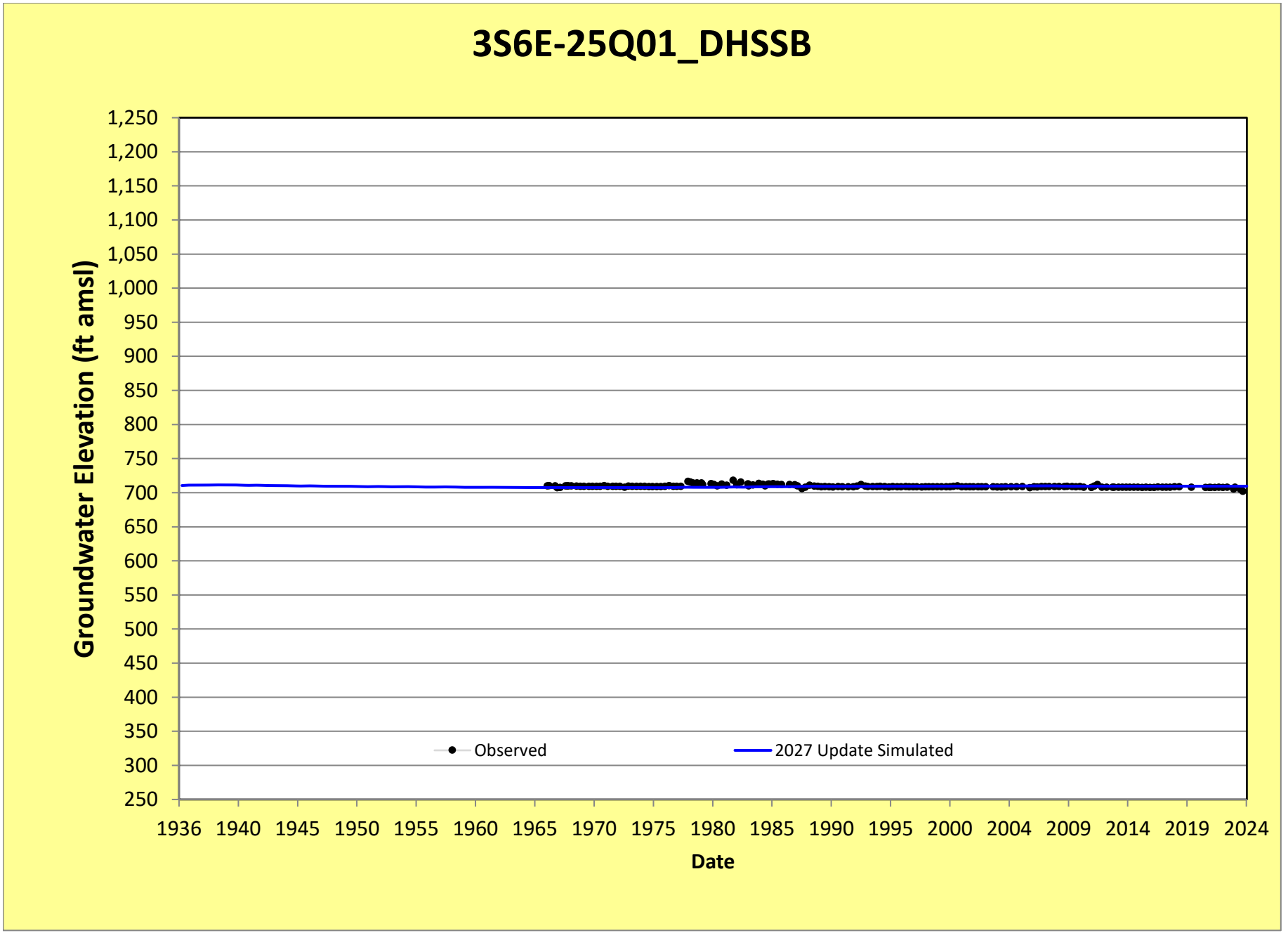


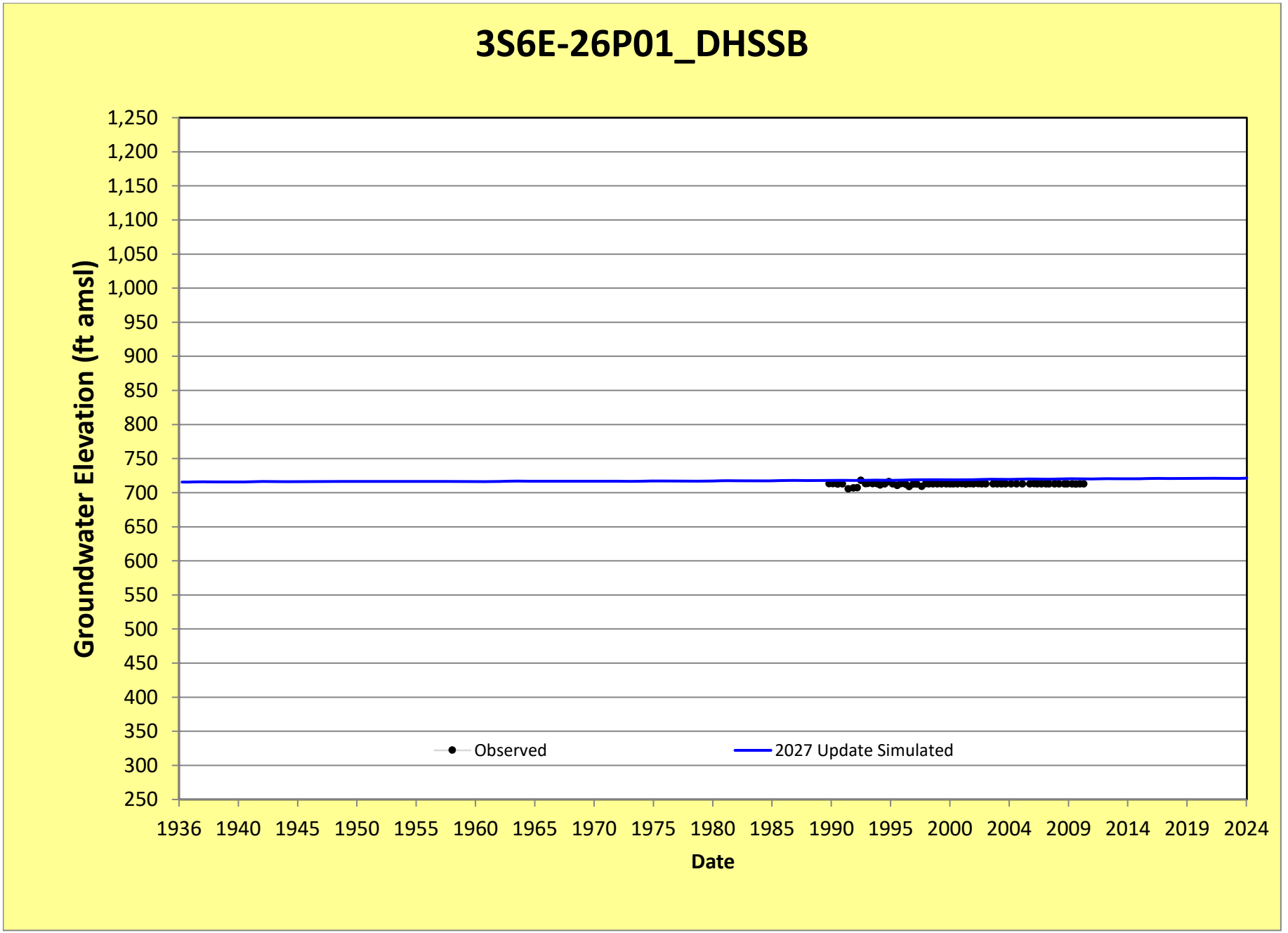

3S5E-11Q01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
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2014
2019
2024
Date
Observed
2027 Update Simulated


3S5E-12P01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
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2024
Date
Observed
2027 Update Simulated

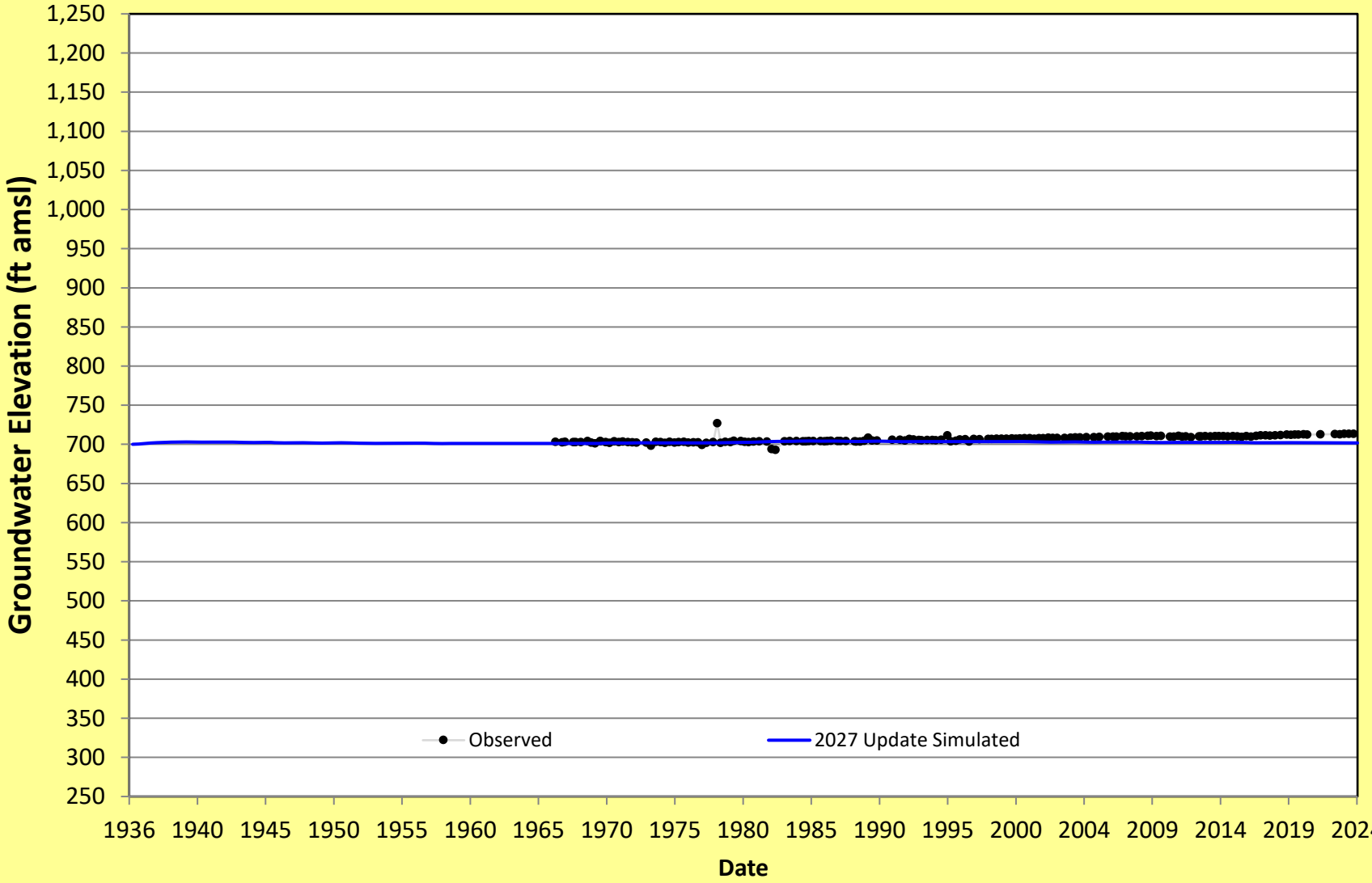
3S6E-21F02_DHSSB




3S6E-25Q01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
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1936
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2004
2009
2014
2019
2024
Date
Observed
2027 Update Simulated


3S6E-26P01_DHSSB
Groundwater Elevation (ft amsl)
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
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Observed
2027 Update Simulated

4S7E-14E01_DHSSB



Appendix B: Water Management Forecasting Supplementary Tables and Figures

Table B1a

Annual Mountain Front Recharge with CM5 RCP 4.5 Climate Change by Watershed

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[1]	Zone 2[2]	MCSB Total[3] (AFY)	Reach 51	Reach 52	Reach 53	Reach 54	DHSSB Total[4] (AFY)	Reach 55	Reach 56	Reach 57	Reach 58	Reach 59	Reach 60	Reach 61	Reach 62	Total[5] (AFY)	Cumulative[5] (AF)
	SF Whitewater (AFY)		Mission Creek Gage (AFY)	Chino Canyon (AFY)	Garnet Wash (AFY)	Big Morongo Creek (AFY)		Little Morongo Creek (AFY)	Morongo Wash (AFY)	Long Canyon (AFY)	East Wide Canyon (AFY)	1k Palm Canyon (AFY)	Fan Canyon (AFY)	Pushawalla Canyon (AFY)	Berdoo Canyon (AFY)		
2024-2025	18,084.37	10,655.69	8,773.95	109.67	205.94	1,566.14	5,552.87	1,726.55	213.80	1,167.94	1,306.55	465.03	666.48	3.27	3.27	16,209	16,209
2025-2026	14,070.63	1,382.73	1,372.92	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,409	17,617
2026-2027	18,740.03	10,432.55	9,452.09	34.72	3.27	942.47	1,355.00	1,332.12	3.27	3.27	3.27	3.27	3.27	3.27	3.27	11,788	29,405
2027-2028	9,499.77	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	29,444
2028-2029	1,998.63	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	29,483
2029-2030	3,136.81	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	29,523
2030-2031	6,854.09	1,352.58	1,342.78	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,379	30,901
2031-2032	16,259.81	11,346.39	10,251.52	3.27	3.27	1,088.33	1,635.94	1,613.06	3.27	3.27	3.27	3.27	3.27	3.27	3.27	12,982	43,884
2032-2033	13,050.06	1,249.62	1,239.81	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,276	45,159
2033-2034	9,948.64	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	45,199
2034-2035	18,381.70	14,012.21	11,670.60	54.03	102.37	2,185.21	2,526.46	1,307.84	3.27	3.27	658.12	3.27	544.15	3.27	3.27	16,539	61,737
2035-2036	20,969.76	9,133.26	8,151.42	3.27	3.27	975.30	1,496.43	1,473.55	3.27	3.27	3.27	3.27	3.27	3.27	3.27	10,630	72,367
2036-2037	28,852.58	19,017.53	16,759.86	78.26	129.05	2,050.36	4,513.54	3,349.80	3.27	559.39	588.00	3.27	3.27	3.27	3.27	23,531	95,898
2037-2038	13,205.33	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	95,937
2038-2039	15,333.00	1,478.38	1,468.57	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,505	97,442
2039-2040	3,945.94	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	97,481
2040-2041	8,592.57	2,532.87	2,523.07	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	2,559	100,040
2041-2042	1,730.56	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	100,079
2042-2043	6,961.88	1,122.75	1,112.94	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,149	101,228
2043-2044	28,564.27	23,301.37	18,269.85	88.08	154.14	4,789.30	12,232.89	5,504.50	253.35	1,352.44	1,563.00	740.22	1,315.25	836.54	667.59	35,534	136,763
2044-2045	44,048.85	23,833.52	20,162.90	185.94	332.75	3,151.93	17,442.25	6,926.32	515.88	2,101.12	2,330.72	1,228.50	1,993.09	1,333.40	1,013.22	41,276	178,038
2045-2046	27,207.30	2,873.49	2,863.68	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	2,900	180,938
2046-2047	23,641.48	9,967.67	7,071.78	87.32	3.27	2,805.30	4,164.01	4,141.13	3.27	3.27	3.27	3.27	3.27	3.27	3.27	14,132	195,070
2047-2048	6,575.30	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	195,109
2048-2049	17,162.64	14,494.04	12,149.33	3.27	3.27	2,338.17	3,626.97	3,604.09	3.27	3.27	3.27	3.27	3.27	3.27	3.27	18,121	213,230
2049-2050	19,303.49	7,985.34	6,433.64	56.06	102.96	1,392.68	3,550.40	1,593.03	3.27	663.45	733.97	3.27	546.88	3.27	3.27	11,536	224,766
2050-2051	22,599.81	5,551.01	4,782.28	3.27	3.27	762.19	1,412.26	1,389.38	3.27	3.27	3.27	3.27	3.27	3.27	3.27	6,963	231,729
2051-2052	3,588.66	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	231,768
2052-2053	6,498.78	1,145.21	1,135.41	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,171	232,939
2053-2054	21,306.11	13,572.65	11,542.86	58.04	120.52	1,851.23	6,152.81	2,365.30	277.59	1,275.90	1,206.27	452.24	568.96	3.27	3.27	19,725	252,665
2054-2055	25,485.08	11,600.23	9,696.49	70.74	122.06	1,710.94	3,600.72	1,980.74	3.27	757.12	846.53	3.27	3.27	3.27	3.27	15,201	267,866
2055-2056	20,638.89	6,895.30	6,166.74	3.27	3.27	722.03	1,184.37	1,161.49	3.27	3.27	3.27	3.27	3.27	3.27	3.27	8,080	275,946
2056-2057	5,631.19	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	275,985
2057-2058	1,084.97	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	276,024
2058-2059	14,455.40	7,608.11	5,950.88	57.03	93.20	1,507.01	2,236.56	1,717.23	3.27	499.72	3.27	3.27	3.27	3.27	3.27	9,845	285,869
2059-2060	38,403.48	32,381.79	26,188.81	146.34	255.84	5,790.80	9,212.47	7,128.87	3.27	929.09	1,138.16	3.27	3.27	3.27	3.27	41,594	327,463
2060-2061	18,905.06	1,898.59	1,888.78	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,925	329,388
2061-2062	6,107.54	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	329,427
2062-2063	11,387.79	3,120.75	3,110.95	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3,147	332,574
2063-2064	13,891.34	4,151.09	3,332.15	3.27	3.27	812.41	1,535.45	1,512.57	3.27	3.27	3.27	3.27	3.27	3.27	3.27	5,687	338,260

Table B1a

Annual Mountain Front Recharge with CM5 RCP 4.5 Climate Change by Watershed

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[1]	Zone 2[2] SF Whitewater (AFY)	MCSB Total[3] (AFY)	Reach 51 Mission Creek Gage (AFY)	Reach 52 Chino Canyon (AFY)	Reach 53 Garnet Wash (AFY)	Reach 54 Big Morongo Creek (AFY)	DHSSB Total[4] (AFY)	Reach 55 Little Morongo Creek (AFY)	Reach 56 Morongo Wash (AFY)	Reach 57 Long Canyon (AFY)	Reach 58 East Wide Canyon (AFY)	Reach 59 1k Palm Canyon (AFY)	Reach 60 Fan Canyon (AFY)	Reach 61 Pushawalla Canyon (AFY)	Reach 62 Berdoo Canyon (AFY)	Total[5] (AFY)	Cumulative[5] (AF)
2064-2065	3,008.48	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	338,300
2065-2066	993.13	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	338,339
2066-2067	15,507.67	10,541.97	8,733.86	45.17	3.27	1,759.68	6,092.58	2,125.81	3.27	663.83	842.75	407.78	864.89	653.73	530.53	16,635	354,973
2067-2068	2,820.78	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	355,013
2068-2069	5,989.34	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	355,052
2069-2070	6,848.58	1,116.94	1,107.13	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,143	356,195
2070-2071	3,400.51	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	356,234
2071-2072	2,624.30	589.14	579.33	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	615	356,849
2072-2073	41,644.12	34,225.03	27,917.11	250.34	428.20	5,629.38	29,766.90	11,492.59	992.93	3,557.58	4,041.46	2,124.62	3,627.33	2,194.91	1,735.48	63,992	420,841
2073-2074	42,512.36	31,396.61	26,297.16	152.95	291.84	4,654.65	14,869.03	6,067.24	304.33	2,216.40	2,583.50	785.08	1,558.33	794.99	559.16	46,266	467,107
Average[4] 2025-2074	14,629	6,644	5,591	32	49	972	2,698	1,392	54	317	359	127	236	119	93	9,342	
Min[4] 2025-2074	993	13	3	3	3	3	26	3	3	3	3	3	3	3	3	39	
Max[4] 2025-2074	44,049	34,225	27,917	250	428	5,791	29,767	11,493	993	3,558	4,041	2,125	3,627	2,195	1,735	63,992	

Notes

1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. Whitewater River specified recharge, Zone 2, in GHSA and provided by Todd Groundwater.
3. MCSB Total = Sum of Reaches 51 through 54 in Mission Creek Subbasin.
4. DHSSB Total = Sum of Reached 55 through 62 in Desert Hot Springs Subbasin.
5. Total and cumulative values are rounded to the nearest whole unit.
6. Average, minimum (min), maximum (max), total, and cumulative values rounded to the nearest whole unit.
7. MRF under CM5 RCP 4.5 climate conditions.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
BCM = Basin Characterization Model
DHSSB = Desert Hot Springs Subbasin
MCSB = Mission Creek Subbasin
SF = San Fernando

Table B1b

Annual Mountain Front Recharge with MIROC5 RCP 8.5 Climate Change by Watershed

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[1]	Zone 2[2]	MCSB Total[3]	Reach 51	Reach 52	Reach 53	Reach 54	DHSSB Total[4]	Reach 55	Reach 56	Reach 57	Reach 58	Reach 59	Reach 60	Reach 61	Reach 62	Total[5]	Cumulative[5]
	SF Whitewater (AFY)	(AFY)	Mission Creek Gage (AFY)	Chino Canyon (AFY)	Garnet Wash (AFY)	Big Morongo Creek (AFY)	(AFY)	Little Morongo Creek (AFY)	Morongo Wash (AFY)	Long Canyon (AFY)	East Wide Canyon (AFY)	1k Palm Canyon (AFY)	Fan Canyon (AFY)	Pushawalla Canyon (AFY)	Berdoo Canyon (AFY)	(AFY)	(AF)
2024-2025	11,912.04	1,218.55	1,208.74	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,245	1,245
2025-2026	5,855.71	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	1,284
2026-2027	3,648.39	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	1,323
2027-2028	2,974.01	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	1,362
2028-2029	24,286.50	21,805.88	17,201.58	115.96	115.96	4,372.39	13,911.69	7,874.22	251.56	1,258.92	1,392.56	661.23	1,217.89	734.99	520.34	35,718	37,080
2029-2030	13,897.55	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	37,119
2030-2031	1,728.75	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	37,158
2031-2032	1,827.52	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	37,198
2032-2033	8,570.25	5,119.68	4,467.40	3.27	3.27	645.74	1,072.69	1,049.81	3.27	3.27	3.27	3.27	3.27	3.27	3.27	6,192	43,390
2033-2034	15,196.49	5,645.42	4,843.93	3.27	3.27	794.95	1,462.85	1,439.97	3.27	3.27	3.27	3.27	3.27	3.27	3.27	7,108	50,498
2034-2035	4,923.97	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	50,537
2035-2036	402.61	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	50,577
2036-2037	3,143.52	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	50,616
2037-2038	175.73	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	50,655
2038-2039	5,873.13	2,496.78	2,486.97	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	2,523	53,178
2039-2040	3,040.99	586.00	576.19	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	612	53,790
2040-2041	8,574.36	1,092.39	1,082.58	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,119	54,909
2041-2042	3,190.58	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	54,948
2042-2043	5,190.47	539.03	529.23	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	565	55,513
2043-2044	2.43	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	55,552
2044-2045	1,419.86	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	55,592
2045-2046	2.43	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	55,631
2046-2047	14,521.61	10,199.36	8,939.96	55.44	3.27	1,200.69	2,623.34	1,508.09	3.27	556.33	542.57	3.27	3.27	3.27	3.27	12,823	68,454
2047-2048	13,242.42	4,096.36	4,086.56	3.27	3.27	3.27	1,173.50	1,150.62	3.27	3.27	3.27	3.27	3.27	3.27	3.27	5,270	73,723
2048-2049	9,218.17	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	73,763
2049-2050	1,257.49	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	73,802
2050-2051	583.67	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	73,841
2051-2052	3,669.04	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	73,880
2052-2053	993.19	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	73,920
2053-2054	2,058.01	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	73,959
2054-2055	8,056.98	2,747.55	2,048.46	3.27	3.27	692.56	1,075.51	1,052.63	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3,823	77,782
2055-2056	1,115.17	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	77,821
2056-2057	397.23	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	77,860
2057-2058	2,499.30	792.12	782.31	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	818	78,679
2058-2059	17,362.34	13,652.67	11,446.67	51.84	3.27	2,150.90	2,917.09	2,894.21	3.27	3.27	3.27	3.27	3.27	3.27	3.27	16,570	95,248
2059-2060	34,470.12	26,227.05	21,489.76	121.07	3.27	4,612.96	9,013.41	7,322.84	3.27	831.23	842.99	3.27	3.27	3.27	3.27	35,240	130,489
2060-2061	4,330.68	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	130,528
2061-2062	2.43	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	130,567
2062-2063	2.43	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	130,606
2063-2064	4,047.24	1,976.21	1,966.41	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	2,002	132,609

Table B1b

Annual Mountain Front Recharge with MIROC5 RCP 8.5 Climate Change by Watershed

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[1]	Zone 2[2] SF Whitewater (AFY)	MCSB Total[3] (AFY)	Reach 51 Mission Creek Gage (AFY)	Reach 52 Chino Canyon (AFY)	Reach 53 Garnet Wash (AFY)	Reach 54 Big Morongo Creek (AFY)	DHSSB Total[4] (AFY)	Reach 55 Little Morongo Creek (AFY)	Reach 56 Morongo Wash (AFY)	Reach 57 Long Canyon (AFY)	Reach 58 East Wide Canyon (AFY)	Reach 59 1k Palm Canyon (AFY)	Reach 60 Fan Canyon (AFY)	Reach 61 Pushawalla Canyon (AFY)	Reach 62 Berdoo Canyon (AFY)	Total[5] (AFY)	Cumulative[5] (AF)
2064-2065	4,510.17	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	132,648
2065-2066	9,585.13	4,590.27	4,580.47	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	4,616	137,264
2066-2067	5,959.77	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	137,304
2067-2068	1,290.80	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	137,343
2068-2069	158.39	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	137,382
2069-2070	1,413.34	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	137,421
2070-2071	23,148.68	12,494.78	9,174.64	57.97	3.27	3,258.90	6,066.54	4,520.33	3.27	750.99	778.87	3.27	3.27	3.27	3.27	18,561	155,983
2071-2072	14,460.47	1,411.44	1,401.64	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	1,438	157,420
2072-2073	1,411.64	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	157,459
2073-2074	362.44	13.07	3.27	3.27	3.27	3.27	26.15	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	39	157,499
Average[4] 2025-2074	6,119	2,342	1,968	11	6	357	808	579	8	71	74	16	28	18	14	3,150	
Min[4] 2025-2074	2	13	3	3	3	3	26	3	3	3	3	3	3	3	3	39	
Max[4] 2025-2074	34,470	26,227	21,490	121	116	4,613	13,912	7,874	252	1,259	1,393	661	1,218	735	520	35,718	

Notes

1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. Whitewater River specified recharge, Zone 2, in GHSA and provided by Todd Groundwater.
3. MCSB Total = Sum of Reaches 51 through 54 in Mission Creek Subbasin.
4. DHSSB Total = Sum of Reached 55 through 62 in Desert Hot Springs Subbasin.
5. Total and cumulative values are rounded to the nearest whole unit.
6. Average, minimum (min), maximum (max), total, and cumulative values rounded to the nearest whole unit.
7. MRF under MIROC5 RCP 8.5 climate conditions.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
BCM = Basin Characterization Model
DHSSB = Desert Hot Springs Subbasin
MCSB = Mission Creek Subbasin
SF = San Fernando

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek
Agency	DWA	DWA	DWA	MSWD	MSWD	MSWD	MSWD	MSWD	MSWD	MSWD	MSWD
Owner	Mission Lakes GC	Mission Lakes GC	Mission Lakes GC	MSWD	MSWD	MSWD	MSWD	MSWD	MSWD	MSWD	MSWD
Use	Golf Course	Golf Course	Golf Course	Muni	Muni	Muni	Muni	Muni	Muni	Muni	Muni
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	MCSB_2S4E-23L01_P32	MCSB_2S4E-23L02_P29	MCSB_2S4E-23L03_P28	MCSB_2S4E-23N01_23	MCSB_2S4E-23N02_30	MCSB_2S4E-26C01_28	MCSB_2S4E-28A01_34	MCSB_2S4E-36D01_22	MCSB_2S4E-36D02_24	MCSB_2S4E-36K01_29	MCSB_2S4E-36P01_37
2024-2025	355.00	0.00	621.05	0.00	0.00	587.91	419.93	1,091.83	1,091.83	1,175.82	1,175.82
2025-2026	355.00	0.00	621.05	0.00	0.00	584.21	417.29	1,084.97	1,084.97	1,168.43	1,168.43
2026-2027	355.00	0.00	621.05	0.00	0.00	593.09	423.64	1,101.46	1,101.46	1,186.18	1,186.18
2027-2028	355.76	0.00	622.38	0.00	0.00	601.97	429.98	1,117.95	1,117.95	1,203.94	1,203.94
2028-2029	355.00	0.00	621.05	0.00	0.00	610.85	436.32	1,134.44	1,134.44	1,221.70	1,221.70
2029-2030	355.00	0.00	621.05	0.00	0.00	619.73	442.67	1,150.93	1,150.93	1,239.46	1,239.46
2030-2031	355.00	0.00	621.05	0.00	0.00	630.10	450.07	1,170.19	1,170.19	1,260.20	1,260.20
2031-2032	355.76	0.00	622.38	0.00	0.00	640.93	457.81	1,190.30	1,190.30	1,281.87	1,281.87
2032-2033	355.00	0.00	621.05	0.00	0.00	651.77	465.55	1,210.42	1,210.42	1,303.53	1,303.53
2033-2034	355.00	0.00	621.05	0.00	0.00	662.60	473.29	1,230.54	1,230.54	1,325.20	1,325.20
2034-2035	355.00	0.00	621.05	0.00	0.00	673.43	481.02	1,250.66	1,250.66	1,346.87	1,346.87
2035-2036	355.76	0.00	622.38	0.00	0.00	681.69	486.92	1,265.99	1,265.99	1,363.38	1,363.38
2036-2037	355.00	0.00	621.05	0.00	0.00	689.14	492.24	1,279.83	1,279.83	1,378.28	1,378.28
2037-2038	355.00	0.00	621.05	0.00	0.00	696.59	497.57	1,293.67	1,293.67	1,393.18	1,393.18
2038-2039	355.00	0.00	621.05	0.00	0.00	704.04	502.89	1,307.51	1,307.51	1,408.09	1,408.09
2039-2040	355.76	0.00	622.38	0.00	0.00	711.49	508.21	1,321.35	1,321.35	1,422.99	1,422.99
2040-2041	355.00	0.00	621.05	0.00	0.00	719.24	513.74	1,335.74	1,335.74	1,438.48	1,438.48
2041-2042	355.00	0.00	621.05	0.00	0.00	727.08	519.34	1,350.30	1,350.30	1,454.17	1,454.17
2042-2043	355.00	0.00	621.05	0.00	0.00	734.92	524.95	1,364.86	1,364.86	1,469.85	1,469.85
2043-2044	355.76	0.00	622.38	0.00	0.00	742.76	530.55	1,379.42	1,379.42	1,485.53	1,485.53
2044-2045	355.00	0.00	621.05	0.00	0.00	750.60	536.15	1,393.98	1,393.98	1,501.21	1,501.21
2045-2046	355.00	0.00	621.05	0.00	0.00	758.45	541.75	1,408.54	1,408.54	1,516.89	1,516.89
2046-2047	355.00	0.00	621.05	0.00	0.00	766.29	547.35	1,423.11	1,423.11	1,532.58	1,532.58
2047-2048	355.76	0.00	622.38	0.00	0.00	774.13	552.95	1,437.67	1,437.67	1,548.26	1,548.26
2048-2049	355.00	0.00	621.05	0.00	0.00	781.97	558.55	1,452.24	1,452.24	1,563.95	1,563.95
2049-2050	355.00	0.00	621.05	0.00	0.00	789.82	564.15	1,466.80	1,466.80	1,579.63	1,579.63
2050-2051	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2051-2052	355.76	0.00	622.38	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2052-2053	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2053-2054	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2054-2055	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2055-2056	355.76	0.00	622.38	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2056-2057	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2057-2058	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2058-2059	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2059-2060	355.76	0.00	622.38	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2060-2061	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2061-2062	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2062-2063	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2063-2064	355.76	0.00	622.38	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2064-2065	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2065-2066	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2066-2067	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2067-2068	355.76	0.00	622.38	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2068-2069	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2069-2070	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2070-2071	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2071-2072	355.76	0.00	622.38	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2072-2073	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36
2073-2074	355.00	0.00	621.05	0.00	0.00	791.68	565.49	1,470.26	1,470.26	1,583.36	1,583.36

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Desert Hot Springs	Desert Hot Springs	Garnet Hill	Garnet Hill	Garnet Hill	Garnet Hill	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek
Agency	Private	MSWD	MSWD	MSWD	MSWD	MSWD	DWA	DWA	MSWD	MSWD	MSWD
Owner	--	MSWD	MSWD	MSWD	MSWD	MSWD	DWA	DWA	MSWD	MSWD	MSWD
Use									Muni	Muni	Muni
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	DHSSB_2S5E-30Q01_10	DHSSB_2S5E-31H01_5	GHSA_3S3E-07D01_25A	GHSA_3S3E-07M01_25	GHSA_3S3E-08A01_26A	GHSA_3S3E-08M01_26	MCSB_3S4E-04P01_PW2	MCSB_3S4E-04Q02_PW1	MCSB_3S4E-11A02_32	MCSB_3S4E-11L01_27	MCSB_3S4E-11L04_31
2024-2025	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,007.84	755.88	1,091.83
2025-2026	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,001.51	751.13	1,084.97
2026-2027	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,016.73	762.55	1,101.46
2027-2028	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,031.95	773.96	1,117.95
2028-2029	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,047.17	785.38	1,134.44
2029-2030	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,062.40	796.80	1,150.93
2030-2031	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,080.17	810.13	1,170.19
2031-2032	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,098.74	824.06	1,190.30
2032-2033	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,117.31	837.99	1,210.42
2033-2034	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,135.89	851.91	1,230.54
2034-2035	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,154.46	865.84	1,250.66
2035-2036	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,168.61	876.46	1,265.99
2036-2037	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,181.38	886.04	1,279.83
2037-2038	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,194.16	895.62	1,293.67
2038-2039	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,206.93	905.20	1,307.51
2039-2040	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,219.70	914.78	1,321.35
2040-2041	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,232.99	924.74	1,335.74
2041-2042	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,246.43	934.82	1,350.30
2042-2043	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,259.87	944.90	1,364.86
2043-2044	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,273.31	954.98	1,379.42
2044-2045	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,286.75	965.06	1,393.98
2045-2046	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,300.19	975.14	1,408.54
2046-2047	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,313.64	985.23	1,423.11
2047-2048	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,327.08	995.31	1,437.67
2048-2049	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,340.53	1,005.39	1,452.24
2049-2050	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,353.97	1,015.48	1,466.80
2050-2051	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2051-2052	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,357.17	1,017.88	1,470.26
2052-2053	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2053-2054	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2054-2055	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2055-2056	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,357.17	1,017.88	1,470.26
2056-2057	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2057-2058	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2058-2059	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2059-2060	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,357.17	1,017.88	1,470.26
2060-2061	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2061-2062	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2062-2063	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2063-2064	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,357.17	1,017.88	1,470.26
2064-2065	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2065-2066	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2066-2067	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2067-2068	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,357.17	1,017.88	1,470.26
2068-2069	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2069-2070	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2070-2071	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2071-2072	0.00	0.00	0.00	0.00	0.00	0.00	72.52	52.96	1,357.17	1,017.88	1,470.26
2072-2073	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26
2073-2074	0.00	0.00	0.00	0.00	0.00	0.00	72.37	52.85	1,357.17	1,017.88	1,470.26

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Garnet Hill	Mission Creek	Mission Creek
Agency	CVWD	CVWD	CVWD	CVWD	CVWD	CVWD	CVWD	CVWD	DWA	DWA
Owner	CVWD	CVWD	CVWD	CVWD	CVWD	CVWD	CVWD	CVWD	Hidden Springs GC	Sands RV
Use	Muni	Muni	Muni	Muni	Muni	Muni	Muni		Golf Course	
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	**MCSB_3S4E-12B02_3408**	**MCSB_3S4E-12C01_3405**	**MCSB_3S4E-12C2S**	**MCSB_3S4E-12F01_3410**	**MCSB_3S4E-12H01_3407-1**	**MCSB_3S4E-12H02_3409-1**	**MCSB_3S4E-12H03_3409-2**	**GHSA_3S4E-14J01_33**	**MCSB_3S5E-05Q01_P27**	**MCSB_3S5E-08B01_P26**
2024-2025	650.25	0.00	546.21	806.31	0.00	0.00	598.23	445.00	449.76	365.24
2025-2026	607.92	0.00	510.65	753.82	0.00	0.00	559.28	445.00	449.76	365.24
2026-2027	620.10	0.00	520.88	768.93	0.00	0.00	570.49	445.00	449.76	365.24
2027-2028	632.29	0.00	531.12	784.03	0.00	0.00	581.70	445.95	450.72	366.02
2028-2029	644.47	0.00	541.35	799.14	0.00	0.00	592.91	445.00	449.76	365.24
2029-2030	655.11	0.00	550.29	812.34	0.00	0.00	602.70	445.00	449.76	365.24
2030-2031	668.36	0.00	561.42	828.76	0.00	0.00	614.89	445.00	449.76	365.24
2031-2032	681.02	0.00	572.06	844.47	0.00	0.00	626.54	445.95	0.00	147.45
2032-2033	693.21	0.00	582.29	859.57	0.00	0.00	637.75	445.00	0.00	144.75
2033-2034	705.39	0.00	592.53	874.68	0.00	0.00	648.96	445.00	0.00	0.00
2034-2035	717.57	0.00	602.76	889.79	0.00	0.00	660.17	445.00	0.00	0.00
2035-2036	720.58	0.00	605.28	893.51	0.00	0.00	662.93	445.95	0.00	0.00
2036-2037	720.71	0.00	605.40	893.68	0.00	0.00	663.06	445.00	0.00	0.00
2037-2038	720.85	0.00	605.51	893.85	0.00	0.00	663.18	445.00	0.00	0.00
2038-2039	720.99	0.00	605.63	894.02	0.00	0.00	663.31	445.00	0.00	0.00
2039-2040	720.41	0.00	605.15	893.31	0.00	0.00	662.78	445.95	0.00	0.00
2040-2041	721.04	0.00	605.67	894.09	0.00	0.00	663.36	445.00	0.00	0.00
2041-2042	721.40	0.00	605.98	894.53	0.00	0.00	663.69	445.00	0.00	0.00
2042-2043	721.54	0.00	606.09	894.71	0.00	0.00	663.81	445.00	0.00	0.00
2043-2044	721.67	0.00	606.21	894.88	0.00	0.00	663.94	445.95	0.00	0.00
2044-2045	721.45	0.00	606.02	894.60	0.00	0.00	663.73	445.00	0.00	0.00
2045-2046	721.84	0.00	606.34	895.08	0.00	0.00	664.09	445.00	0.00	0.00
2046-2047	722.09	0.00	606.55	895.39	0.00	0.00	664.32	445.00	0.00	0.00
2047-2048	722.22	0.00	606.67	895.56	0.00	0.00	664.44	445.95	0.00	0.00
2048-2049	722.36	0.00	606.78	895.73	0.00	0.00	664.57	445.00	0.00	0.00
2049-2050	722.50	0.00	606.90	895.90	0.00	0.00	664.70	445.00	0.00	0.00
2050-2051	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2051-2052	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.95	0.00	0.00
2052-2053	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2053-2054	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2054-2055	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2055-2056	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.95	0.00	0.00
2056-2057	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2057-2058	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2058-2059	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2059-2060	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.95	0.00	0.00
2060-2061	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2061-2062	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2062-2063	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2063-2064	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.95	0.00	0.00
2064-2065	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2065-2066	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2066-2067	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2067-2068	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.95	0.00	0.00
2068-2069	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2069-2070	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2070-2071	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2071-2072	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.95	0.00	0.00
2072-2073	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00
2073-2074	722.53	0.00	606.93	895.94	0.00	0.00	664.73	445.00	0.00	0.00

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek
Agency	CVWD	CVWD	Private	Private	CVWD	CVWD	CVWD	CVWD	CVWD	CVWD
Owner	Blue Beyond	Blue Beyond	Blue Beyond	Too Many Palms, LLC.	DS Aquaculture	DS Aquaculture	Desert Dunes GC	Desert Dunes GC	Desert Dunes GC	Donald Franklin
Use	Ag	Ag	Ag	Ag	Ag	Ag	Golf Course	Golf Course	Golf Course	Domestic
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	**MCSB_3S5E-08P01**	**MCSB_3S5E-08P02**	**MCSB_3S5E-15L01**	**MCSB_3S5E-15N03**	**MCSB_3S5E-15R01**	**MCSB_3S5E-15R02**	**MCSB_3S5E-17M01**	**MCSB_3S5E-17N01**	**MCSB_3S5E-18J01**	**MCSB_3S5E-20H02**
2024-2025	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2025-2026	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2026-2027	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2027-2028	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2028-2029	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2029-2030	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2030-2031	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2031-2032	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2032-2033	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2033-2034	0.30	420.31	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2034-2035	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2035-2036	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2036-2037	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2037-2038	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2038-2039	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2039-2040	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2040-2041	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2041-2042	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2042-2043	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2043-2044	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2044-2045	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2045-2046	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2046-2047	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2047-2048	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2048-2049	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2049-2050	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2050-2051	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2051-2052	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2052-2053	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2053-2054	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2054-2055	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2055-2056	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2056-2057	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2057-2058	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2058-2059	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2059-2060	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2060-2061	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2061-2062	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2062-2063	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2063-2064	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2064-2065	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2065-2066	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2066-2067	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2067-2068	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2068-2069	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2069-2070	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2070-2071	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2071-2072	0.30	492.53	0.00	0.00	141.86	0.30	0.00	0.00	0.00	19.71
2072-2073	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67
2073-2074	0.30	491.48	0.00	0.00	141.56	0.30	0.00	0.00	0.00	19.67

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Desert Hot Springs	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs
Agency	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private
Owner	--	--	--	--	--	--	--	--	--	--	--
Use											
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	**2S4E-24Q01_DHSSB**	**2S4E-25P_MCSB**	**2S4E-26D1_MCSB**	**2S4E-35B1_MCSB**	**2S4E-35J_MCSB**	**2S5E-30F03_DHSSB**	**2S5E-30J02_DHSSB**	**2S5E-30K03_DHSSB**	**2S5E-30L01_DHSSB**	**2S5E-32B03_DHSSB**	**2S5E-32E01_DHSSB**
2024-2025	1.00	0.00	308.29	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2025-2026	1.00	0.00	309.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2026-2027	1.00	0.00	309.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2027-2028	1.00	0.00	309.85	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2028-2029	1.00	0.00	305.49	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2029-2030	1.00	0.00	308.71	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2030-2031	1.00	0.00	308.71	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2031-2032	1.00	0.00	309.69	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2032-2033	1.00	0.00	307.87	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2033-2034	1.00	0.00	293.80	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2034-2035	1.00	0.00	308.98	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2035-2036	1.00	0.00	309.84	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2036-2037	1.00	0.00	308.98	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2037-2038	1.00	0.00	308.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2038-2039	1.00	0.00	319.50	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2039-2040	1.00	0.00	309.99	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2040-2041	1.00	0.00	309.15	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2041-2042	1.00	0.00	309.15	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2042-2043	1.00	0.00	308.32	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2043-2044	1.00	0.00	309.00	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2044-2045	1.00	0.00	309.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2045-2046	1.00	0.00	309.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2046-2047	1.00	0.00	309.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2047-2048	1.00	0.00	306.19	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2048-2049	1.00	0.00	308.71	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2049-2050	1.00	0.00	308.71	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2050-2051	1.00	0.00	308.71	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2051-2052	1.00	0.00	308.85	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2052-2053	1.00	0.00	293.80	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2053-2054	1.00	0.00	308.98	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2054-2055	1.00	0.00	308.98	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2055-2056	1.00	0.00	309.84	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2056-2057	1.00	0.00	308.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2057-2058	1.00	0.00	319.50	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2058-2059	1.00	0.00	309.15	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2059-2060	1.00	0.00	309.99	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2060-2061	1.00	0.00	309.15	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2061-2062	1.00	0.00	308.32	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2062-2063	1.00	0.00	308.29	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2063-2064	1.00	0.00	309.85	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2064-2065	1.00	0.00	309.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2065-2066	1.00	0.00	309.14	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2066-2067	1.00	0.00	305.49	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2067-2068	1.00	0.00	309.69	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2068-2069	1.00	0.00	308.71	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2069-2070	1.00	0.00	308.71	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2070-2071	1.00	0.00	307.87	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2071-2072	1.00	0.00	294.78	0.00	0.00	0.00	1.00	85.22	7.02	6.02	90.23
2072-2073	1.00	0.00	308.98	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04
2073-2074	1.00	0.00	308.98	0.00	0.00	0.00	1.00	85.04	7.00	6.00	90.04

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Mission Creek	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Garnet Hill	Garnet Hill
Agency	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private
Owner	--	--	--	--	--	--	--	--	--	--	--
Use											
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	**2S5E-32H02_DHSSB**	**2S5E-32K02_DHSSB**	**2S5E-32L01_DHSSB**	**2S5E-32N01_DHSSB**	**2S5E-32P02_DHSSB**	**2S5E-32R02_DHSSB**	**2S5E-33E01_DHSSB**	**2S5E-33M01_DHSSB**	**2S5E-33N01_DHSSB**	**3S3E-02B_GHSA**	**3S3E-02C_GHSA**
2024-2025	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2025-2026	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2026-2027	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2027-2028	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2028-2029	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2029-2030	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2030-2031	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2031-2032	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2032-2033	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2033-2034	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2034-2035	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2035-2036	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2036-2037	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2037-2038	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2038-2039	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2039-2040	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2040-2041	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2041-2042	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2042-2043	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2043-2044	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2044-2045	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2045-2046	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2046-2047	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2047-2048	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2048-2049	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2049-2050	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2050-2051	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2051-2052	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2052-2053	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2053-2054	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2054-2055	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2055-2056	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2056-2057	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2057-2058	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2058-2059	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2059-2060	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2060-2061	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2061-2062	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2062-2063	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2063-2064	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2064-2065	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2065-2066	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2066-2067	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2067-2068	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2068-2069	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2069-2070	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2070-2071	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2071-2072	28.07	24.06	115.30	0.00	14.04	10.03	38.10	45.12	34.09	0.00	0.00
2072-2073	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00
2073-2074	28.01	24.01	115.05	0.00	14.01	10.00	38.02	45.02	34.02	0.00	0.00

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Garnet Hill	Garnet Hill	Garnet Hill	Garnet Hill	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Garnet Hill
Agency	Private	Private	Private	Private	Private	Private	Private	Private	Private	CVWD	Private
Owner	--	--	--	--	--	--	--	--	--	CVWD	--
Use											
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	3S3E-02P1&2_GHSA	3S3E-11K1_GHSA	3S3E-24J1_GHSA	3S4E-07M1_GHSA	3S4E-11B2_MCSB	3S4E-11L2_MCSB	3S4E-11L3_MCSB	3S4E-11M1_MCSB	3S4E-11P1_MCSB	3S4E-13N1_MCSB	3S4E-13Q1_GHSA
2024-2025	0.00	0.00	0.00	0.00	0.00	0.00	102.59	0.00	0.00	0.00	0.00
2025-2026	0.00	0.00	0.00	0.00	0.00	0.00	102.87	0.00	0.00	0.00	0.00
2026-2027	0.00	0.00	0.00	0.00	0.00	0.00	102.87	0.00	0.00	0.00	0.00
2027-2028	0.00	0.00	0.00	0.00	0.00	0.00	103.11	0.00	0.00	0.00	0.00
2028-2029	0.00	0.00	0.00	0.00	0.00	0.00	101.66	0.00	0.00	0.00	0.00
2029-2030	0.00	0.00	0.00	0.00	0.00	0.00	102.73	0.00	0.00	0.00	0.00
2030-2031	0.00	0.00	0.00	0.00	0.00	0.00	102.73	0.00	0.00	0.00	0.00
2031-2032	0.00	0.00	0.00	0.00	0.00	0.00	103.06	0.00	0.00	0.00	0.00
2032-2033	0.00	0.00	0.00	0.00	0.00	0.00	102.45	0.00	0.00	0.00	0.00
2033-2034	0.00	0.00	0.00	0.00	0.00	0.00	97.77	0.00	0.00	0.00	0.00
2034-2035	0.00	0.00	0.00	0.00	0.00	0.00	102.82	0.00	0.00	0.00	0.00
2035-2036	0.00	0.00	0.00	0.00	0.00	0.00	103.10	0.00	0.00	0.00	0.00
2036-2037	0.00	0.00	0.00	0.00	0.00	0.00	102.82	0.00	0.00	0.00	0.00
2037-2038	0.00	0.00	0.00	0.00	0.00	0.00	102.54	0.00	0.00	0.00	0.00
2038-2039	0.00	0.00	0.00	0.00	0.00	0.00	106.32	0.00	0.00	0.00	0.00
2039-2040	0.00	0.00	0.00	0.00	0.00	0.00	103.16	0.00	0.00	0.00	0.00
2040-2041	0.00	0.00	0.00	0.00	0.00	0.00	102.88	0.00	0.00	0.00	0.00
2041-2042	0.00	0.00	0.00	0.00	0.00	0.00	102.88	0.00	0.00	0.00	0.00
2042-2043	0.00	0.00	0.00	0.00	0.00	0.00	102.60	0.00	0.00	0.00	0.00
2043-2044	0.00	0.00	0.00	0.00	0.00	0.00	102.83	0.00	0.00	0.00	0.00
2044-2045	0.00	0.00	0.00	0.00	0.00	0.00	102.87	0.00	0.00	0.00	0.00
2045-2046	0.00	0.00	0.00	0.00	0.00	0.00	102.87	0.00	0.00	0.00	0.00
2046-2047	0.00	0.00	0.00	0.00	0.00	0.00	102.87	0.00	0.00	0.00	0.00
2047-2048	0.00	0.00	0.00	0.00	0.00	0.00	101.89	0.00	0.00	0.00	0.00
2048-2049	0.00	0.00	0.00	0.00	0.00	0.00	102.73	0.00	0.00	0.00	0.00
2049-2050	0.00	0.00	0.00	0.00	0.00	0.00	102.73	0.00	0.00	0.00	0.00
2050-2051	0.00	0.00	0.00	0.00	0.00	0.00	102.73	0.00	0.00	0.00	0.00
2051-2052	0.00	0.00	0.00	0.00	0.00	0.00	102.78	0.00	0.00	0.00	0.00
2052-2053	0.00	0.00	0.00	0.00	0.00	0.00	97.77	0.00	0.00	0.00	0.00
2053-2054	0.00	0.00	0.00	0.00	0.00	0.00	102.82	0.00	0.00	0.00	0.00
2054-2055	0.00	0.00	0.00	0.00	0.00	0.00	102.82	0.00	0.00	0.00	0.00
2055-2056	0.00	0.00	0.00	0.00	0.00	0.00	103.10	0.00	0.00	0.00	0.00
2056-2057	0.00	0.00	0.00	0.00	0.00	0.00	102.54	0.00	0.00	0.00	0.00
2057-2058	0.00	0.00	0.00	0.00	0.00	0.00	106.32	0.00	0.00	0.00	0.00
2058-2059	0.00	0.00	0.00	0.00	0.00	0.00	102.88	0.00	0.00	0.00	0.00
2059-2060	0.00	0.00	0.00	0.00	0.00	0.00	103.16	0.00	0.00	0.00	0.00
2060-2061	0.00	0.00	0.00	0.00	0.00	0.00	102.88	0.00	0.00	0.00	0.00
2061-2062	0.00	0.00	0.00	0.00	0.00	0.00	102.60	0.00	0.00	0.00	0.00
2062-2063	0.00	0.00	0.00	0.00	0.00	0.00	102.59	0.00	0.00	0.00	0.00
2063-2064	0.00	0.00	0.00	0.00	0.00	0.00	103.11	0.00	0.00	0.00	0.00
2064-2065	0.00	0.00	0.00	0.00	0.00	0.00	102.87	0.00	0.00	0.00	0.00
2065-2066	0.00	0.00	0.00	0.00	0.00	0.00	102.87	0.00	0.00	0.00	0.00
2066-2067	0.00	0.00	0.00	0.00	0.00	0.00	101.66	0.00	0.00	0.00	0.00
2067-2068	0.00	0.00	0.00	0.00	0.00	0.00	103.06	0.00	0.00	0.00	0.00
2068-2069	0.00	0.00	0.00	0.00	0.00	0.00	102.73	0.00	0.00	0.00	0.00
2069-2070	0.00	0.00	0.00	0.00	0.00	0.00	102.73	0.00	0.00	0.00	0.00
2070-2071	0.00	0.00	0.00	0.00	0.00	0.00	102.45	0.00	0.00	0.00	0.00
2071-2072	0.00	0.00	0.00	0.00	0.00	0.00	98.10	0.00	0.00	0.00	0.00
2072-2073	0.00	0.00	0.00	0.00	0.00	0.00	102.82	0.00	0.00	0.00	0.00
2073-2074	0.00	0.00	0.00	0.00	0.00	0.00	102.82	0.00	0.00	0.00	0.00

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Garnet Hill	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Mission Creek	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs
Agency	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private
Owner	--	--	--	--	--	--	Paul Norris	--	--	--	--
Use							Domestic				
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	**3S4E-17K2_GHSA**	**3S5E-05A01_DHSSB**	**3S5E-05B04_DHSSB**	**3S5E-10F01_DHSSB**	**3S5E-10G01_DHSSB**	**3S5E-10H05_DHSSB**	**3S5E-10L02_DHSSB**	**3S5E-10R03_DHSSB**	**3S5E-11K01_DHSSB**	**3S5E-11M04_DHSSB**	**3S5E-11R01_DHSSB**
2024-2025	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2025-2026	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2026-2027	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2027-2028	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2028-2029	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2029-2030	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2030-2031	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2031-2032	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2032-2033	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2033-2034	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2034-2035	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2035-2036	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2036-2037	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2037-2038	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2038-2039	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2039-2040	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2040-2041	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2041-2042	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2042-2043	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2043-2044	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2044-2045	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2045-2046	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2046-2047	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2047-2048	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2048-2049	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2049-2050	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2050-2051	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2051-2052	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2052-2053	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2053-2054	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2054-2055	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2055-2056	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2056-2057	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2057-2058	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2058-2059	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2059-2060	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2060-2061	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2061-2062	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2062-2063	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2063-2064	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2064-2065	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2065-2066	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2066-2067	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2067-2068	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2068-2069	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2069-2070	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2070-2071	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2071-2072	0.00	2.01	7.02	255.66	60.15	35.09	100.26	338.87	0.00	50.13	2.01
2072-2073	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00
2073-2074	0.00	2.00	7.00	255.11	60.03	35.02	100.04	338.15	0.00	50.02	2.00

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Demands by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Subbasin	Desert Hot Springs	Desert Hot Springs	Desert Hot Springs	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek	Mission Creek
Agency	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private	Private
Owner	--	--	--	Barney Helser	--	--	--	--	--	--	--
Use				Domestic							
Units	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY	AFY
Water Year[1]	**3S5E-13N01_DHSSB**	**3S5E-14C01_DHSSB**	**3S5E-14G03_DHSSB**	**3S5E-16M1_MCSB**	**3S5E-17K1_MCSB**	**3S5E-18L1_MCSB**	**3S5E-18N_MCSB**	**3S5E-18P_MCSB**	**3S5E-21K1_MCSB**	**Well144_DHSSB**	**Well159_MCSB**
2024-2025	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.77
2025-2026	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2026-2027	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2027-2028	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.21
2028-2029	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.97
2029-2030	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.89
2030-2031	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.89
2031-2032	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.16
2032-2033	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.64
2033-2034	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.64
2034-2035	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.96
2035-2036	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.21
2036-2037	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.96
2037-2038	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.72
2038-2039	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.96
2039-2040	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.25
2040-2041	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2041-2042	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2042-2043	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.77
2043-2044	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.97
2044-2045	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2045-2046	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2046-2047	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2047-2048	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.17
2048-2049	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.89
2049-2050	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.89
2050-2051	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.89
2051-2052	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.92
2052-2053	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.64
2053-2054	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.96
2054-2055	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.96
2055-2056	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.21
2056-2057	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.72
2057-2058	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.96
2058-2059	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2059-2060	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.25
2060-2061	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2061-2062	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.77
2062-2063	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.77
2063-2064	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.21
2064-2065	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2065-2066	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.01
2066-2067	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.97
2067-2068	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.16
2068-2069	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.89
2069-2070	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.89
2070-2071	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.64
2071-2072	10.03	240.62	100.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.92
2072-2073	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.96
2073-2074	10.00	240.11	100.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.96

Notes:
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.
2. AFY = acre-feet per year

Table B2

50-Year Forecast of Annual Pumping Dem
Mission Creek Subbasin Alternati
Coachella Valley, Californ

Subbasin	Mission Creek	Garnet Hill
Agency	Private	Power Plant
Owner	--	Power Plant
Use		
Units	AFY	AFY
Water Year[1]	**Well160-P27_DHSSB**	**3S4E-15G01_GHSA**
2024-2025	0.00	16.26
2025-2026	0.00	10.57
2026-2027	0.00	11.46
2027-2028	0.00	10.87
2028-2029	0.00	7.83
2029-2030	0.00	17.12
2030-2031	0.00	10.20
2031-2032	0.00	12.02
2032-2033	0.00	10.88
2033-2034	0.00	8.30
2034-2035	0.00	17.52
2035-2036	0.00	9.87
2036-2037	0.00	13.63
2037-2038	0.00	8.02
2038-2039	0.00	16.23
2039-2040	0.00	14.86
2040-2041	0.00	11.26
2041-2042	0.00	10.82
2042-2043	0.00	8.31
2043-2044	0.00	16.29
2044-2045	0.00	10.57
2045-2046	0.00	11.46
2046-2047	0.00	10.83
2047-2048	0.00	7.84
2048-2049	0.00	17.12
2049-2050	0.00	10.20
2050-2051	0.00	11.94
2051-2052	0.00	10.93
2052-2053	0.00	8.30
2053-2054	0.00	17.52
2054-2055	0.00	9.86
2055-2056	0.00	13.64
2056-2057	0.00	8.02
2057-2058	0.00	16.23
2058-2059	0.00	14.84
2059-2060	0.00	11.27
2060-2061	0.00	10.82
2061-2062	0.00	8.31
2062-2063	0.00	16.26
2063-2064	0.00	10.59
2064-2065	0.00	11.46
2065-2066	0.00	10.83
2066-2067	0.00	7.83
2067-2068	0.00	17.21
2068-2069	0.00	10.20
2069-2070	0.00	11.94
2070-2071	0.00	10.88
2071-2072	0.00	8.35
2072-2073	0.00	17.52
2073-2074	0.00	9.86

Notes:
1. Water year (WY) is defined by October 1st of the leading year through Sept
2. AFY = acre-feet per year

Table B3

50-Year Forecast of Annual Return Flows by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Zone #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Water Year[1]	No Flow Zone	Whitewater Headwater	Farm	Farm	Farm	Whitewater Riverbed	Equestrian Area	Farm	Farm	MCSB Septic	Unknown Septic	Mission Lakes Golf Course	Horton WWTP	Hidden Springs Golf Course	The Sands Golf Course	House & Landscape	House & Landscape	Desert Dunes Golf Course	Mission Creek GRF	Too Many Palms Nursery	Pipeline	Overhill Booster Station	House & Landscape
	(AFY)																						
2024-2025	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,196.70	277.91	241.71	2,274.49	112.77	74.27	21.03	0.00	0.00	11,092.96	0.00	0.00	0.00	0.00
2025-2026	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,148.52	278.67	256.33	2,308.17	115.77	109.39	21.09	0.00	0.00	10,032.50	0.00	0.00	0.00	0.00
2026-2027	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,156.36	277.91	241.49	2,341.86	96.51	87.26	21.03	0.00	0.00	8,859.93	0.00	0.00	0.00	0.00
2027-2028	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,129.96	277.91	243.13	2,382.05	101.99	99.29	21.03	0.00	0.00	6,698.00	0.00	0.00	0.00	0.00
2028-2029	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,137.57	277.91	188.09	2,409.22	112.43	67.87	21.03	0.00	0.00	1,302.81	0.00	0.00	0.00	0.00
2029-2030	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,145.18	277.91	241.71	2,442.91	112.77	74.27	21.03	0.00	0.00	11,146.25	0.00	0.00	0.00	0.00
2030-2031	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,152.67	278.67	256.33	2,454.13	115.77	109.39	21.09	0.00	0.00	5,175.33	0.00	0.00	0.00	0.00
2031-2032	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,161.92	277.91	241.49	2,472.11	96.51	87.26	21.03	0.00	0.00	9,689.42	0.00	0.00	0.00	0.00
2032-2033	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,171.05	277.91	243.13	2,476.59	101.99	99.29	21.03	0.00	0.00	7,632.04	0.00	0.00	0.00	0.00
2033-2034	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,180.18	277.91	188.09	2,487.82	112.43	67.87	21.03	0.00	0.00	7,428.15	0.00	0.00	0.00	0.00
2034-2035	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,189.31	277.91	241.71	2,499.04	112.77	74.27	21.03	0.00	0.00	10,165.42	0.00	0.00	0.00	0.00
2035-2036	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,198.44	278.67	256.33	2,505.89	115.77	109.39	21.09	0.00	0.00	17,562.80	0.00	0.00	0.00	0.00
2036-2037	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,204.24	277.91	241.49	2,499.04	96.51	87.26	21.03	0.00	0.00	17,649.72	0.00	0.00	0.00	0.00
2037-2038	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,210.04	277.91	243.13	2,499.04	101.99	99.29	21.03	0.00	0.00	14,302.97	0.00	0.00	0.00	0.00
2038-2039	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,215.84	277.91	188.09	2,499.04	112.43	67.87	21.03	0.00	0.00	13,129.43	0.00	0.00	0.00	0.00
2039-2040	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,221.65	277.91	241.71	2,505.89	112.77	74.27	21.03	0.00	0.00	3,409.53	0.00	0.00	0.00	0.00
2040-2041	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,227.40	278.67	256.33	2,499.04	115.77	109.39	21.09	0.00	0.00	2,807.94	0.00	0.00	0.00	0.00
2041-2042	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,233.56	277.91	241.49	2,499.04	96.51	87.26	21.03	0.00	0.00	443.16	0.00	0.00	0.00	0.00
2042-2043	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,239.66	277.91	243.13	2,499.04	101.99	99.29	21.03	0.00	0.00	9,395.05	0.00	0.00	0.00	0.00
2043-2044	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,245.77	277.91	188.09	2,505.89	112.43	67.87	21.03	0.00	0.00	6,108.62	0.00	0.00	0.00	0.00
2044-2045	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,251.87	277.91	241.71	2,499.04	112.77	74.27	21.03	0.00	0.00	13,326.49	0.00	0.00	0.00	0.00
2045-2046	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,257.95	278.67	256.33	2,499.04	115.77	109.39	21.09	0.00	0.00	14,253.12	0.00	0.00	0.00	0.00
2046-2047	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,264.09	277.91	241.49	2,499.04	96.51	87.26	21.03	0.00	0.00	18,519.10	0.00	0.00	0.00	0.00
2047-2048	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,270.19	277.91	243.13	2,505.89	101.99	99.29	21.03	0.00	0.00	14,345.43	0.00	0.00	0.00	0.00
2048-2049	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,276.30	277.91	188.09	2,499.04	112.43	67.87	21.03	0.00	0.00	11,484.31	0.00	0.00	0.00	0.00
2049-2050	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,282.41	277.91	241.71	2,499.04	112.77	74.27	21.03	0.00	0.00	11,324.10	0.00	0.00	0.00	0.00
2050-2051	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,288.52	278.67	256.33	2,499.04	115.77	109.39	21.09	0.00	0.00	8,440.65	0.00	0.00	0.00	0.00
2051-2052	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,288.52	277.91	241.49	2,505.89	96.51	87.26	21.03	0.00	0.00	5,761.69	0.00	0.00	0.00	0.00
2052-2053	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,288.52	277.91	243.13	2,499.04	101.99	99.29	21.03	0.00	0.00	1,990.96	0.00	0.00	0.00	0.00
2053-2054	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,288.52	277.91	188.09	2,499.04	112.43	67.87	21.03	0.00	0.00	6,970.84	0.00	0.00	0.00	0.00
2054-2055	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,288.52	277.91	241.71	2,499.04	112.77	74.27	21.03	0.00	0.00	8,001.65	0.00	0.00	0.00	0.00
2055-2056	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,288.52	278.67	256.33	2,505.89	115.77	109.39	21.09	0.00	0.00	15,833.31	0.00	0.00	0.00	0.00
2056-2057	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,288.52	277.91	241.49	2,499.04	96.51	87.26	21.03	0.00	0.00	7,282.69	0.00	0.00	0.00	0.00
2057-2058	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,288.52	277.91	243.13	2,499.04	101.99	99.29	21.03	0.00	0.00	4,496.23	0.00	0.00	0.00	0.00
2058-2059	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,288.52	277.91	188.09	2,499.04	112.43	67.87	21.03	0.00	0.00	14,337.91	0.00	0.00	0.00	0.00
2059-2060	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,288.52	277.91	241.71	2,505.89	112.77	74.27	21.03	0.00	0.00	18,775.52	0.00	0.00	0.00	0.00
2060-2061	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,288.52	278.67	256.33	2,499.04	115.77	109.39	21.09	0.00	0.00	11,368.54	0.00	0.00	0.00	0.00
2061-2062	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,288.52	277.91	241.49	2,499.04	96.51	87.26	21.03	0.00	0.00	3,736.80	0.00	0.00	0.00	0.00
2062-2063	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,288.52	277.91	243.13	2,499.04	101.99	99.29	21.03	0.00	0.00	6,648.78	0.00	0.00	0.00	0.00

Table B3

50-Year Forecast of Annual Return Flows by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Zone #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Water Year[1]	No Flow Zone	Whitewater Headwater	Farm	Farm	Farm	Whitewater Riverbed	Equestrian Area	Farm	Farm	MCSB Septic	Unknown Septic	Mission Lakes Golf Course	Horton WWTP	Hidden Springs Golf Course	The Sands Golf Course	House & Landscape	House & Landscape	Desert Dunes Golf Course	Mission Creek GRF	Too Many Palms Nursery	Pipeline	Overhill Booster Station	House & Landscape
	(AFY)																						
2063-2064	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,288.52	277.91	188.09	2,505.89	112.43	67.87	21.03	0.00	0.00	5,950.02	0.00	0.00	0.00	0.00
2064-2065	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,288.52	277.91	241.71	2,499.04	112.77	74.27	21.03	0.00	0.00	7,682.16	0.00	0.00	0.00	0.00
2065-2066	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,288.52	278.67	256.33	2,499.04	115.77	109.39	21.09	0.00	0.00	5,277.71	0.00	0.00	0.00	0.00
2066-2067	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,288.52	277.91	241.49	2,499.04	96.51	87.26	21.03	0.00	0.00	3,444.91	0.00	0.00	0.00	0.00
2067-2068	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,288.52	277.91	243.13	2,505.89	101.99	99.29	21.03	0.00	0.00	2,757.61	0.00	0.00	0.00	0.00
2068-2069	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,288.52	277.91	188.09	2,499.04	112.43	67.87	21.03	0.00	0.00	6,007.50	0.00	0.00	0.00	0.00
2069-2070	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	1,288.52	277.91	241.71	2,499.04	112.77	74.27	21.03	0.00	0.00	12,588.93	0.00	0.00	0.00	0.00
2070-2071	0.00	0.00	0.00	0.00	0.00	0.00	4.48	0.00	0.00	1,262.41	278.67	256.33	2,499.04	115.77	109.39	21.09	0.00	0.00	8,717.15	0.00	0.00	0.00	0.00
2071-2072	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	1,262.41	277.91	241.49	2,505.89	96.51	87.26	21.03	0.00	0.00	3,314.00	0.00	0.00	0.00	0.00
2072-2073	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1,262.41	277.91	243.13	2,499.04	101.99	99.29	21.03	0.00	0.00	12,872.47	0.00	0.00	0.00	0.00
2073-2074	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00	0.00	1,262.41	277.91	188.09	2,499.04	112.43	67.87	21.03	0.00	0.00	6,905.40	0.00	0.00	0.00	0.00

Notes
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AFY = acre-feet per year
GRF = Groundwater Replenishment Facility
MCSB = Mission Creek Subbasin
DHS = Desert Hot Springs
WWTP = Wastewater Treatment Plant
RWRF = Regional Water Replenishment Facility

Table B3

50-Year Forecast of Annual Return Flows by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Zone #	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Water Year[1]	House & Landscape	House & Landscape	Desert Springs Aquaculture	Ephemeral streambed	Nurseries	Water Tank	San Marcos Date Farm	KK&R Nursery	Irrigated grass	Small Nursery	Ranch Estate Glamping	Desert Crest WWTP	Blue Beyond (Fish farm)	MCSB Sewer Municipal Outdoor	DHS Septic Municipal Outdoor	DHS Septic Municipal Outdoor	Upper Sky Valley Septic	Lower Sky Valley Septic	Unknown Septic A	Unknown Septic B	Nancy Wright RWRF	Commercial area next to Nancy Wright RWRF
	(AFY)																					
2024-2025	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	47.47	240.38	712.33	294.83	330.07	558.92	77.10	25.66	941.67	0.00
2025-2026	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	50.00	46.91	244.16	717.42	301.58	330.45	561.46	77.28	25.72	1,064.81	0.00
2026-2027	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	51.43	263.07	593.06	327.41	330.85	564.02	77.18	25.68	1,187.95	0.00
2027-2028	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	47.42	267.08	597.72	334.57	331.26	566.60	77.24	25.70	1,314.68	0.00
2028-2029	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	52.52	271.09	539.63	358.32	331.68	569.20	77.29	25.72	1,434.23	0.00
2029-2030	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	47.47	275.04	543.69	365.38	331.72	571.13	77.10	25.66	1,557.37	0.00
2030-2031	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	50.00	46.91	279.92	432.18	384.41	333.19	575.53	77.28	25.72	1,680.52	0.00
2031-2032	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	51.43	284.73	436.67	392.85	334.26	579.24	77.18	25.68	1,808.60	0.00
2032-2033	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	47.42	289.54	441.15	401.28	335.32	582.94	77.24	25.70	1,926.80	0.00
2033-2034	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	50.00	52.52	294.36	445.64	409.72	336.38	586.63	77.29	25.72	2,049.94	0.00
2034-2035	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	299.17	415.65	433.24	337.43	590.32	77.10	25.66	2,173.08	0.00
2035-2036	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	302.23	417.95	438.04	334.72	587.67	77.28	25.72	2,287.99	0.00
2036-2037	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	305.29	420.23	442.81	332.09	585.14	77.18	25.68	2,390.39	0.00
2037-2038	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	308.35	422.50	447.56	329.54	582.70	77.24	25.70	2,499.04	0.00
2038-2039	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	311.41	424.76	452.28	327.06	580.35	77.29	25.72	2,607.70	0.00
2039-2040	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	314.44	426.90	456.75	324.49	577.82	77.10	25.66	2,723.79	0.00
2040-2041	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	317.69	429.31	461.80	322.41	576.14	77.28	25.72	2,825.01	0.00
2041-2042	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	320.91	431.61	466.61	320.24	574.25	77.18	25.68	2,933.66	0.00
2042-2043	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	324.13	433.90	471.39	318.12	572.44	77.24	25.70	3,042.31	0.00
2043-2044	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	327.35	436.17	476.15	316.06	570.70	77.29	25.72	3,159.60	0.00
2044-2045	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	330.55	438.39	480.78	313.97	568.90	77.10	25.66	3,259.62	0.00
2045-2046	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	333.79	439.99	484.12	316.15	572.85	77.28	25.72	3,259.62	0.00
2046-2047	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	337.01	441.53	487.34	318.26	576.67	77.18	25.68	3,259.62	0.00
2047-2048	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	340.23	443.07	490.57	320.37	580.49	77.24	25.70	3,268.55	0.00
2048-2049	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	343.45	444.61	493.79	322.47	584.30	77.29	25.72	3,259.62	0.00
2049-2050	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	346.67	446.15	497.02	324.58	588.12	77.10	25.66	3,259.62	0.00
2050-2051	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	346.67	446.15	497.02	324.58	588.12	77.28	25.72	3,259.62	0.00
2051-2052	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	346.67	446.15	497.02	324.58	588.12	77.18	25.68	3,268.55	0.00
2052-2053	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	346.67	446.15	497.02	324.58	588.12	77.24	25.70	3,259.62	0.00
2053-2054	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	346.67	446.15	497.02	324.58	588.12	77.29	25.72	3,259.62	0.00
2054-2055	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	346.67	446.15	497.02	324.58	588.12	77.10	25.66	3,259.62	0.00
2055-2056	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	346.67	446.15	497.02	324.58	588.12	77.28	25.72	3,268.55	0.00
2056-2057	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	346.67	446.15	497.02	324.58	588.12	77.18	25.68	3,259.62	0.00
2057-2058	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	346.67	446.15	497.02	324.58	588.12	77.24	25.70	3,259.62	0.00
2058-2059	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	346.67	446.15	497.02	324.58	588.12	77.29	25.72	3,259.62	0.00
2059-2060	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	346.67	446.15	497.02	324.58	588.12	77.10	25.66	3,268.55	0.00
2060-2061	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	346.67	446.15	497.02	324.58	588.12	77.28	25.72	3,259.62	0.00
2061-2062	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	346.67	446.15	497.02	324.58	588.12	77.18	25.68	3,259.62	0.00
2062-2063	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	346.67	446.15	497.02	324.58	588.12	77.24	25.70	3,259.62	0.00

Table B3

50-Year Forecast of Annual Return Flows by Water Year
Mission Creek Subbasin Alternative Update
Coachella Valley, California

Zone #	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Water Year[1]	House & Landscape	House & Landscape	Desert Springs Aquaculture	Ephemeral streambed	Nurseries	Water Tank	San Marcos Date Farm	KK&R Nursery	Irrigated grass	Small Nursery	Ranch Estate Glamping	Desert Crest WWTP	Blue Beyond (Fish farm)	MCSB Sewer Municipal Outdoor	DHS Septic Municipal Outdoor	DHS Septic Municipal Outdoor	Upper Sky Valley Septic	Lower Sky Valley Septic	Unknown Septic A	Unknown Septic B	Nancy Wright RWRF	Commercial area next to Nancy Wright RWRF
	(AFY)																					
2063-2064	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	346.67	446.15	497.02	324.58	588.12	77.29	25.72	3,268.55	0.00
2064-2065	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	346.67	446.15	497.02	324.58	588.12	77.10	25.66	3,259.62	0.00
2065-2066	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	346.67	446.15	497.02	324.58	588.12	77.28	25.72	3,259.62	0.00
2066-2067	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	346.67	446.15	497.02	324.58	588.12	77.18	25.68	3,259.62	0.00
2067-2068	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	346.67	446.15	497.02	324.58	588.12	77.24	25.70	3,268.55	0.00
2068-2069	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	346.67	446.15	497.02	324.58	588.12	77.29	25.72	3,259.62	0.00
2069-2070	0.00	0.00	20.85	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.47	357.48	429.93	505.66	324.58	588.12	77.10	25.66	3,259.62	0.00
2070-2071	0.00	0.00	15.33	0.00	0.00	0.00	0.00	0.00	0.00	32.10	0.00	0.00	46.91	357.48	429.93	505.66	324.58	588.12	77.28	25.72	3,259.62	0.00
2071-2072	0.00	0.00	10.67	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	51.43	357.48	429.93	505.66	324.58	588.12	77.18	25.68	3,268.55	0.00
2072-2073	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	47.42	357.48	429.93	505.66	324.58	588.12	77.24	25.70	3,259.62	45.00
2073-2074	0.00	0.00	13.91	0.00	0.00	0.00	0.00	0.00	0.00	32.01	0.00	0.00	52.52	357.48	429.93	505.66	324.58	588.12	77.29	25.72	3,259.62	18.00

Notes
1. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e. WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AFY = acre-feet per year
GRF = Groundwater Replenishment Facility
MCSB = Mission Creek Subbasin
DHS = Desert Hot Springs
WWTP = Wastewater Treatment Plant
RWRF = Regional Water Replenishment Facility

Table B4

Simulated MCSB Baseline with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)						Simulated Outflows (AFY)					Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Inter-subbasin Underflow with DHSSB	Groundwater Replenishment	Wastewater Return[1]	Return Flows[2]	Total Inflow	Pumping	Evapo-transpiration	Inter-subbasin Underflow with GHSA	Inter-subbasin Underflow with Indio Hills[3]	Total Outflow		
2008-2009	1,262	1,263	1,234	1,367	3,212	8,338	-15,628	-900	-1,965	-526	-19,019	-10,681	0
2009-2010	3,564	1,249	23,856	1,267	3,053	32,989	-14,894	-893	-1,974	-528	-18,289	14,700	14,700
2010-2011	8,679	1,241	37,504	1,318	3,044	51,785	-14,954	-894	-2,058	-525	-18,431	33,354	48,055
2011-2012	1,960	1,136	23,103	1,426	3,008	30,633	-14,686	-906	-2,128	-546	-18,266	12,367	60,422
2012-2013	850	1,097	2,332	1,535	2,987	8,800	-15,363	-917	-2,105	-567	-18,952	-10,152	50,270
2013-2014	572	1,102	3,819	1,643	2,942	10,078	-15,024	-928	-2,068	-569	-18,589	-8,511	41,760
2014-2015	522	1,104	586	1,789	2,805	6,806	-13,700	-937	-2,073	-565	-17,276	-10,469	31,290
2015-2016	536	1,114	0	1,819	2,896	6,364	-13,627	-951	-2,088	-585	-17,251	-10,887	20,404
2016-2017	5,759	1,128	1,909	1,896	2,716	13,408	-13,801	-955	-2,047	-598	-17,401	-3,993	16,411
2017-2018	1,413	1,135	7,737	1,971	2,635	14,890	-14,606	-958	-2,033	-601	-18,198	-3,308	13,102
2018-2019	5,422	1,162	6,686	2,066	2,425	17,761	-13,546	-963	-2,070	-601	-17,181	580	13,682
2019-2020	3,027	1,152	1,341	2,240	2,213	9,973	-13,531	-972	-2,054	-592	-17,148	-7,174	6,508
2020-2021	1,193	1,170	427	2,167	2,221	7,178	-14,457	-969	-1,983	-591	-18,000	-10,823	-4,315
2021-2022	791	1,181	0	2,257	2,225	6,454	-13,623	-968	-1,977	-587	-17,155	-10,702	-15,017
2022-2023	5,700	1,201	5,276	2,204	2,152	16,533	-12,101	-971	-2,000	-591	-15,663	870	-14,147
2023-2024	3,947	1,214	5,432	2,304	2,240	15,137	-11,981	-980	-2,028	-599	-15,588	-451	-14,598
2024-2025	9,233	1,353	9,731	2,056	2,276	24,649	-14,311	-980	-1,932	-582	-17,805	6,844	-7,754
2025-2026	3,331	1,244	12,519	2,056	2,265	21,414	-14,125	-982	-1,919	-585	-17,611	3,803	-3,951
2026-2027	8,630	1,278	11,422	2,056	2,225	25,611	-14,290	-984	-1,884	-586	-17,745	7,866	3,915
2027-2028	1,869	1,196	5,494	2,056	2,221	12,837	-14,464	-990	-1,843	-590	-17,886	-5,050	-1,135
2028-2029	921	1,157	1,079	1,936	2,193	7,286	-14,616	-988	-1,778	-590	-17,971	-10,685	-11,821
2029-2030	685	1,142	7,606	1,816	2,241	13,490	-14,782	-987	-1,731	-589	-18,089	-4,599	-16,420
2030-2031	1,610	1,133	4,242	1,696	2,305	10,986	-14,972	-985	-1,695	-586	-18,238	-7,251	-23,671
2031-2032	8,834	1,243	12,224	1,575	2,286	26,162	-15,175	-984	-1,672	-582	-18,414	7,748	-15,924
2032-2033	2,824	1,155	10,600	1,455	2,308	18,342	-15,358	-978	-1,644	-575	-18,556	-214	-16,137
2033-2034	922	1,110	10,495	1,455	2,287	16,269	-15,458	-975	-1,617	-571	-18,622	-2,352	-18,490
2034-2035	10,590	1,184	8,951	1,455	2,335	24,514	-15,747	-972	-1,583	-567	-18,868	5,646	-12,844
2035-2036	8,957	1,225	23,226	1,455	2,398	37,260	-15,882	-973	-1,565	-563	-18,983	18,277	5,433
2036-2037	15,918	1,357	23,340	1,455	2,358	44,427	-15,980	-972	-1,556	-561	-19,069	25,359	30,792
2037-2038	2,953	1,134	14,864	1,455	2,370	22,776	-16,086	-978	-1,517	-565	-19,146	3,631	34,422
2038-2039	2,306	1,049	10,859	1,455	2,343	18,013	-16,211	-984	-1,451	-571	-19,217	-1,204	33,218
2039-2040	972	1,033	980	1,455	2,384	6,825	-16,308	-991	-1,392	-578	-19,269	-12,445	20,773
2040-2041	2,590	1,037	1,615	1,455	2,443	9,140	-16,412	-990	-1,331	-579	-19,311	-10,171	10,603
2041-2042	899	1,048	375	1,455	2,403	6,180	-16,526	-987	-1,293	-575	-19,381	-13,201	-2,598
2042-2043	1,497	1,049	12,353	1,455	2,415	18,770	-16,637	-982	-1,284	-569	-19,472	-702	-3,300
2043-2044	17,076	1,088	5,055	1,455	2,389	27,062	-16,758	-979	-1,295	-563	-19,595	7,468	4,168
2044-2045	20,425	1,112	8,853	1,455	2,430	34,276	-16,862	-971	-1,290	-555	-19,677	14,598	18,766
2045-2046	6,322	1,065	16,659	1,455	2,489	27,990	-16,975	-966	-1,291	-548	-19,780	8,210	26,976
2046-2047	9,099	1,345	24,464	1,455	2,449	38,812	-17,088	-963	-1,311	-543	-19,904	18,907	45,883
2047-2048	2,279	1,120	12,752	1,455	2,462	20,067	-17,202	-968	-1,313	-543	-20,026	42	45,925
2048-2049	11,645	1,315	9,488	1,455	2,435	26,339	-17,312	-967	-1,274	-544	-20,096	6,243	52,168
2049-2050	8,434	1,260	9,355	1,455	2,477	22,981	-17,424	-969	-1,239	-547	-20,178	2,803	54,970
2050-2051	6,178	1,222	6,975	1,455	2,533	18,363	-17,451	-969	-1,209	-548	-20,177	-1,813	53,157
2051-2052	1,871	1,125	4,765	1,455	2,485	11,701	-17,458	-971	-1,187	-547	-20,163	-8,462	44,695
2052-2053	2,007	1,092	1,653	1,455	2,488	8,695	-17,427	-965	-1,166	-542	-20,100	-11,404	33,291
2053-2054	11,068	1,280	5,762	1,455	2,453	22,017	-17,451	-960	-1,163	-537	-20,111	1,906	35,197
2054-2055	10,916	1,337	980	1,455	2,485	17,173	-17,452	-954	-1,169	-531	-20,105	-2,932	32,265
2055-2056	7,609	1,281	21,749	1,455	2,534	34,629	-17,460	-950	-1,185	-525	-20,121	14,508	46,773
2056-2057	2,040	1,163	6,020	1,455	2,485	13,163	-17,450	-943	-1,196	-517	-20,108	-6,945	39,828
2057-2058	1,172	1,126	3,720	1,455	2,488	9,962	-17,469	-939	-1,188	-513	-20,109	-10,147	29,681
2058-2059	6,425	1,239	16,811	1,455	2,453	28,383	-17,452	-935	-1,195	-509	-20,092	8,291	37,973

2059-2060	24,984	1,186	16,013	1,455	2,485	46,122	-17,460	-935	-1,222	-508	-20,125	25,998	63,970
2060-2061	5,930	1,094	14,361	1,455	2,534	25,373	-17,451	-933	-1,218	-506	-20,108	5,265	69,235
2061-2062	1,995	1,060	3,094	1,455	2,485	10,089	-17,450	-933	-1,192	-506	-20,082	-9,993	59,242
2062-2063	3,474	1,052	5,497	1,455	2,488	13,966	-17,451	-933	-1,163	-506	-20,053	-6,087	53,156
2063-2064	4,530	1,168	4,920	1,455	2,453	14,526	-17,460	-933	-1,157	-507	-20,057	-5,531	47,624
2064-2065	1,322	1,102	980	1,455	2,485	7,344	-17,452	-927	-1,150	-503	-20,031	-12,688	34,937
2065-2066	945	1,085	2,286	1,455	2,534	8,306	-17,452	-921	-1,145	-497	-20,016	-11,710	23,227
2066-2067	8,214	1,242	2,853	1,455	2,485	16,248	-17,446	-914	-1,151	-490	-20,001	-3,753	19,474
2067-2068	1,944	1,161	2,285	1,455	2,488	9,334	-17,460	-908	-1,164	-483	-20,016	-10,682	8,792
2068-2069	1,075	1,123	4,967	1,455	2,453	11,073	-17,452	-897	-1,170	-473	-19,992	-8,919	-127
2069-2070	1,773	1,109	8,924	1,455	2,493	15,753	-17,452	-887	-1,192	-465	-19,996	-4,243	-4,369
2070-2071	793	1,094	11,934	1,455	2,525	17,800	-17,450	-879	-1,215	-457	-20,002	-2,201	-6,571
2071-2072	1,081	1,085	2,745	1,455	2,469	8,835	-17,436	-875	-1,230	-452	-19,993	-11,158	-17,729
2072-2073	24,394	1,440	15,602	1,455	2,473	45,364	-17,452	-866	-1,241	-445	-20,005	25,359	7,630
2073-2074	27,329	1,348	5,708	1,455	2,437	38,277	-17,451	-862	-1,254	-442	-20,010	18,267	25,897
Average[4] **2009-2074**	5,530	1,170	8,490	1,600	2,480	19,270	-16,020	-950	-1,530	-550	-19,040	230	
Min[4] **2009-2074**	520	1,030	0	1,270	2,150	6,180	-17,470	-990	-2,130	-600	-20,180	-13,200	
Max[4] **2009-2074**	27,330	1,440	37,500	2,300	3,210	51,790	-11,980	-860	-1,150	-440	-15,590	33,350	

Notes

1. Horton WWTP & Wright RWRF.
2. Septic Return and Applied Water Return.
3. Underflow to Indio Hills East and Indio Hills West.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
MCSB = Mission Creek Subbasin
DHSSB = Desert Hot Springs Subbasin
GHSA = Garnet Hill Subarea

Table B5

Simulated MCSB Baseline with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)						Simulated Outflows (AFY)					Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Inter-subbasin Underflow with DHSSB	Groundwater Replenishment	Wastewater Return[1]	Return Flows[2]	Total Inflow	Pumping	Evapo-transpiration	Inter-subbasin Underflow with GHSA	Inter-subbasin Underflow with Indio Hills[3]	Total Outflow		
2008-2009	1,262	1,263	1,234	1,367	3,212	8,338	-15,628	-900	-1,965	-526	-19,019	-10,681	0
2009-2010	3,564	1,249	23,856	1,267	3,053	32,989	-14,894	-893	-1,974	-528	-18,289	14,700	14,700
2010-2011	8,679	1,241	37,504	1,318	3,044	51,785	-14,954	-894	-2,058	-525	-18,431	33,354	48,055
2011-2012	1,960	1,136	23,103	1,426	3,008	30,633	-14,686	-906	-2,128	-546	-18,266	12,367	60,422
2012-2013	850	1,097	2,332	1,535	2,987	8,800	-15,363	-917	-2,105	-567	-18,952	-10,152	50,270
2013-2014	572	1,102	3,819	1,643	2,942	10,078	-15,024	-928	-2,068	-569	-18,589	-8,511	41,760
2014-2015	522	1,104	586	1,789	2,805	6,806	-13,700	-937	-2,073	-565	-17,276	-10,469	31,290
2015-2016	536	1,114	0	1,819	2,896	6,364	-13,627	-951	-2,088	-585	-17,251	-10,887	20,404
2016-2017	5,759	1,128	1,909	1,896	2,716	13,408	-13,801	-955	-2,047	-598	-17,401	-3,993	16,411
2017-2018	1,413	1,135	7,737	1,971	2,635	14,890	-14,606	-958	-2,033	-601	-18,198	-3,308	13,102
2018-2019	5,422	1,162	6,686	2,066	2,425	17,761	-13,546	-963	-2,070	-601	-17,181	580	13,682
2019-2020	3,027	1,152	1,341	2,240	2,213	9,973	-13,531	-972	-2,054	-592	-17,148	-7,174	6,508
2020-2021	1,193	1,170	427	2,167	2,221	7,178	-14,457	-969	-1,983	-591	-18,000	-10,823	-4,315
2021-2022	791	1,181	0	2,257	2,225	6,454	-13,623	-968	-1,977	-587	-17,155	-10,702	-15,017
2022-2023	5,700	1,201	5,276	2,204	2,152	16,533	-12,101	-971	-2,000	-591	-15,663	870	-14,147
2023-2024	3,947	1,214	5,432	2,304	2,240	15,137	-11,981	-980	-2,028	-599	-15,588	-451	-14,598
2024-2025	2,526	1,211	8,060	2,056	2,276	16,129	-14,311	-980	-1,926	-582	-17,799	-1,670	-16,268
2025-2026	933	1,183	11,157	2,056	2,265	17,593	-14,126	-981	-1,910	-585	-17,600	-7	-16,275
2026-2027	625	1,153	10,757	2,056	2,225	16,816	-14,291	-982	-1,873	-585	-17,731	-915	-17,190
2027-2028	499	1,134	4,848	2,056	2,221	10,759	-14,465	-986	-1,836	-587	-17,874	-7,114	-24,304
2028-2029	15,609	1,719	7,820	1,936	2,193	29,277	-14,616	-985	-1,798	-586	-17,984	11,293	-13,011
2029-2030	3,084	1,390	3,726	1,816	2,241	12,257	-14,782	-986	-1,757	-587	-18,111	-5,854	-18,866
2030-2031	1,287	1,242	6,087	1,696	2,305	12,618	-14,972	-984	-1,710	-585	-18,251	-5,634	-24,499
2031-2032	852	1,198	13,130	1,575	2,286	19,041	-14,615	-985	-1,700	-583	-17,884	1,157	-23,342
2032-2033	4,511	1,241	14,302	1,454	2,308	23,816	-14,798	-982	-1,689	-579	-18,049	5,767	-17,575
2033-2034	4,996	1,264	12,902	1,454	2,287	22,903	-14,408	-984	-1,695	-580	-17,667	5,236	-12,338
2034-2035	1,269	1,166	3,645	1,455	2,335	9,869	-14,626	-988	-1,665	-581	-17,861	-7,992	-20,331
2035-2036	691	1,122	16,849	1,454	2,398	22,514	-14,762	-994	-1,639	-584	-17,980	4,534	-15,797
2036-2037	509	1,081	15,520	1,453	2,358	20,921	-14,860	-995	-1,622	-584	-18,062	2,860	-12,937
2037-2038	411	1,057	5,943	1,454	2,370	11,235	-14,966	-1,000	-1,602	-586	-18,154	-6,919	-19,856
2038-2039	2,233	1,045	6,129	1,455	2,343	13,206	-15,091	-1,003	-1,569	-589	-18,254	-5,048	-24,904
2039-2040	1,078	1,042	4,686	1,455	2,384	10,645	-15,188	-1,008	-1,553	-593	-18,342	-7,696	-32,600
2040-2041	1,315	1,039	5,828	1,456	2,443	12,081	-15,292	-1,006	-1,529	-590	-18,417	-6,336	-38,936
2041-2042	513	1,037	6,579	1,456	2,403	11,987	-15,405	-1,005	-1,515	-587	-18,512	-6,524	-45,461
2042-2043	830	1,025	14,461	1,455	2,415	20,187	-15,516	-1,003	-1,517	-582	-18,619	1,568	-43,893
2043-2044	428	1,018	1,898	1,456	2,389	7,188	-15,637	-1,005	-1,522	-581	-18,745	-11,556	-55,449
2044-2045	384	1,018	3,236	1,457	2,430	8,525	-15,742	-999	-1,502	-576	-18,820	-10,294	-65,744
2045-2046	372	1,014	14,345	1,456	2,489	19,676	-15,855	-996	-1,499	-571	-18,921	755	-64,988
2046-2047	7,637	1,104	14,788	1,455	2,449	27,433	-15,968	-993	-1,512	-566	-19,038	8,395	-56,593
2047-2048	4,454	1,114	10,079	1,455	2,462	19,563	-16,082	-994	-1,524	-564	-19,164	399	-56,194
2048-2049	1,057	1,034	3,247	1,456	2,435	9,230	-16,192	-991	-1,502	-561	-19,245	-10,015	-66,209
2049-2050	583	1,012	4,949	1,457	2,477	10,477	-16,305	-988	-1,484	-559	-19,335	-8,858	-75,066
2050-2051	472	1,013	2,137	1,457	2,533	7,612	-16,331	-983	-1,476	-554	-19,345	-11,732	-86,799
2051-2052	437	1,019	5,886	1,457	2,485	11,284	-16,339	-980	-1,481	-549	-19,348	-8,064	-94,863
2052-2053	418	1,017	4,199	1,457	2,488	9,579	-16,307	-970	-1,488	-540	-19,306	-9,727	-104,590
2053-2054	400	1,010	12,072	1,456	2,453	17,390	-16,332	-963	-1,509	-533	-19,337	-1,946	-106,536
2054-2055	2,410	1,090	980	1,457	2,485	8,421	-16,332	-957	-1,535	-527	-19,351	-10,929	-117,465
2055-2056	699	1,055	3,708	1,457	2,534	9,453	-16,340	-952	-1,543	-522	-19,358	-9,905	-127,370
2056-2057	493	1,039	2,137	1,457	2,485	7,612	-16,331	-942	-1,533	-513	-19,319	-11,707	-139,077
2057-2058	1,029	1,039	5,136	1,457	2,488	11,150	-16,349	-933	-1,532	-505	-19,319	-8,169	-147,246
2058-2059	10,309	1,256	14,229	1,456	2,453	29,702	-16,332	-924	-1,553	-497	-19,306	10,396	-136,850

2059-2060	20,941	1,247	20,239	1,454	2,485	46,367	-16,340	-920	-1,595	-493	-19,349	27,017	-109,833
2060-2061	3,557	1,070	16,103	1,454	2,534	24,719	-16,332	-916	-1,613	-490	-19,350	5,369	-104,463
2061-2062	1,465	1,022	3,074	1,455	2,485	9,501	-16,330	-915	-1,601	-490	-19,337	-9,835	-114,298
2062-2063	909	1,013	1,575	1,457	2,488	7,442	-16,331	-914	-1,573	-491	-19,308	-11,865	-126,164
2063-2064	2,176	1,014	4,199	1,457	2,453	11,298	-16,341	-912	-1,559	-491	-19,303	-8,005	-134,169
2064-2065	815	1,014	980	1,457	2,485	6,751	-16,332	-904	-1,550	-487	-19,273	-12,522	-146,691
2065-2066	4,041	1,013	13,544	1,456	2,534	22,588	-16,332	-897	-1,561	-481	-19,272	3,316	-143,375
2066-2067	994	999	10,572	1,456	2,485	16,506	-16,326	-892	-1,590	-475	-19,282	-2,777	-146,152
2067-2068	585	989	9,447	1,456	2,488	14,965	-16,340	-889	-1,618	-472	-19,320	-4,355	-150,507
2068-2069	468	982	825	1,457	2,453	6,184	-16,331	-883	-1,617	-468	-19,299	-13,115	-163,622
2069-2070	429	988	980	1,457	2,493	6,347	-16,332	-877	-1,609	-465	-19,282	-12,935	-176,557
2070-2071	8,771	1,329	9,777	1,456	2,525	23,859	-16,330	-870	-1,611	-460	-19,271	4,588	-171,969
2071-2072	2,888	1,124	16,195	1,455	2,469	24,132	-16,316	-867	-1,618	-456	-19,256	4,876	-167,093
2072-2073	983	1,031	12,542	1,455	2,473	18,484	-16,331	-860	-1,613	-451	-19,255	-772	-167,865
2073-2074	623	997	10,197	1,455	2,437	15,708	-16,331	-858	-1,603	-449	-19,242	-3,534	-171,399
Average[4] **2009-2074**	2,580	1,120	7,980	1,600	2,480	15,760	-15,310	-950	-1,710	-550	-18,520	-2,760	
Min[4] **2009-2074**	370	980	0	1,270	2,150	6,180	-16,350	-1,010	-2,130	-600	-19,360	-13,120	
Max[4] **2009-2074**	20,940	1,720	37,500	2,300	3,210	51,790	-11,980	-860	-1,480	-450	-15,590	33,350	

Notes

1. Horton WWTP & Wright RWRF.
2. Septic Return and Applied Water Return.
3. Underflow to Indio Hills East and Indio Hills West.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
MCSB = Mission Creek Subbasin
DHSSB = Desert Hot Springs Subbasin
GHSA = Garnet Hill Subarea

Table B6

Simulated MCSB Near-Term Projects with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)						Simulated Outflows (AFY)					Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Inter-subbasin Underflow with DHSSB	Groundwater Replenishment	Wastewater Return[1]	Return Flows[2]	Total Inflow	Pumping	Evapo-transpiration	Inter-subbasin Underflow with GHSA	Inter-subbasin Underflow with Indio Hills[3]	Total Outflow		
2008-2009	1,262	1,263	1,234	1,367	3,212	8,338	-15,628	-900	-1,965	-526	-19,019	-10,681	0
2009-2010	3,564	1,249	23,856	1,267	3,053	32,989	-14,894	-893	-1,974	-528	-18,289	14,700	14,700
2010-2011	8,679	1,241	37,504	1,318	3,044	51,785	-14,954	-894	-2,058	-525	-18,431	33,354	48,055
2011-2012	1,960	1,136	23,103	1,426	3,008	30,633	-14,686	-906	-2,128	-546	-18,266	12,367	60,422
2012-2013	850	1,097	2,332	1,535	2,987	8,800	-15,363	-917	-2,105	-567	-18,952	-10,152	50,270
2013-2014	572	1,102	3,819	1,643	2,942	10,078	-15,024	-928	-2,068	-569	-18,589	-8,511	41,760
2014-2015	522	1,104	586	1,789	2,805	6,806	-13,700	-937	-2,073	-565	-17,276	-10,469	31,290
2015-2016	536	1,114	0	1,819	2,896	6,364	-13,627	-951	-2,088	-585	-17,251	-10,887	20,404
2016-2017	5,759	1,128	1,909	1,896	2,716	13,408	-13,801	-955	-2,047	-598	-17,401	-3,993	16,411
2017-2018	1,413	1,135	7,737	1,971	2,635	14,890	-14,606	-958	-2,033	-601	-18,198	-3,308	13,102
2018-2019	5,422	1,162	6,686	2,066	2,425	17,761	-13,546	-963	-2,070	-601	-17,181	580	13,682
2019-2020	3,027	1,152	1,341	2,240	2,213	9,973	-13,531	-972	-2,054	-592	-17,148	-7,174	6,508
2020-2021	1,193	1,170	427	2,167	2,221	7,178	-14,457	-969	-1,983	-591	-18,000	-10,823	-4,315
2021-2022	791	1,181	0	2,257	2,225	6,454	-13,623	-968	-1,977	-587	-17,155	-10,702	-15,017
2022-2023	5,700	1,201	5,276	2,204	2,152	16,533	-12,101	-971	-2,000	-591	-15,663	870	-14,147
2023-2024	3,947	1,214	5,432	2,304	2,240	15,137	-11,981	-980	-2,028	-599	-15,588	-451	-14,598
2024-2025	9,233	1,353	9,731	2,056	2,276	24,649	-14,311	-980	-1,932	-582	-17,805	6,844	-7,754
2025-2026	3,331	1,244	12,519	2,056	2,265	21,414	-14,125	-982	-1,919	-585	-17,611	3,803	-3,951
2026-2027	8,630	1,278	11,422	2,056	2,225	25,611	-14,290	-984	-1,884	-586	-17,745	7,866	3,915
2027-2028	1,869	1,196	5,494	2,056	2,221	12,837	-14,464	-990	-1,842	-590	-17,885	-5,049	-1,134
2028-2029	921	1,157	1,079	1,936	2,193	7,286	-14,616	-988	-1,776	-590	-17,970	-10,684	-11,817
2029-2030	685	1,142	7,606	1,816	2,241	13,490	-14,782	-987	-1,729	-589	-18,087	-4,597	-16,415
2030-2031	1,610	1,133	4,242	1,696	2,305	10,986	-14,972	-985	-1,692	-586	-18,235	-7,249	-23,664
2031-2032	8,834	1,243	12,224	1,032	2,286	25,618	-14,616	-985	-1,669	-582	-17,852	7,767	-15,897
2032-2033	2,824	1,154	10,600	1,585	2,308	18,471	-14,798	-980	-1,664	-576	-18,018	453	-15,444
2033-2034	922	1,106	10,495	1,270	2,287	16,081	-14,408	-980	-1,658	-575	-17,621	-1,541	-16,985
2034-2035	10,589	1,178	8,951	1,334	2,335	24,387	-14,626	-981	-1,633	-574	-17,815	6,572	-10,413
2035-2036	8,957	1,216	23,226	1,332	2,398	37,128	-14,762	-986	-1,622	-575	-17,946	19,183	8,770
2036-2037	15,917	1,345	23,340	1,330	2,358	44,290	-14,860	-989	-1,618	-576	-18,044	26,246	35,016
2037-2038	2,952	1,119	14,864	1,331	2,370	22,637	-14,965	-999	-1,584	-584	-18,132	4,505	39,521
2038-2039	2,305	1,033	10,859	1,332	2,343	17,872	-15,091	-1,009	-1,521	-593	-18,214	-342	39,179
2039-2040	971	1,014	980	1,333	2,384	6,682	-15,188	-1,020	-1,466	-603	-18,277	-11,595	27,584
2040-2041	2,589	1,015	1,615	1,334	2,443	8,996	-15,292	-1,022	-1,409	-605	-18,328	-9,331	18,252
2041-2042	898	1,024	375	1,335	2,403	6,035	-15,405	-1,022	-1,376	-603	-18,406	-12,371	5,881
2042-2043	1,496	1,023	12,353	1,335	2,415	18,622	-15,517	-1,020	-1,372	-598	-18,507	115	5,996
2043-2044	17,074	1,060	5,055	1,335	2,389	26,912	-15,637	-1,021	-1,388	-595	-18,641	8,272	14,268
2044-2045	20,423	1,082	8,853	1,335	2,430	34,124	-15,742	-1,016	-1,386	-589	-18,732	15,392	29,660
2045-2046	6,320	1,033	16,659	1,339	2,489	27,839	-15,855	-1,014	-1,387	-584	-18,840	9,000	38,659
2046-2047	9,097	1,310	24,464	1,341	2,449	38,660	-15,967	-1,014	-1,407	-580	-18,969	19,691	58,350
2047-2048	2,276	1,083	12,752	1,347	2,462	19,920	-16,082	-1,022	-1,409	-583	-19,095	825	59,175
2048-2049	11,643	1,276	9,488	1,352	2,435	26,194	-16,191	-1,023	-1,370	-584	-19,168	7,027	66,202
2049-2050	8,432	1,220	9,355	1,357	2,477	22,840	-16,304	-1,026	-1,334	-587	-19,251	3,589	69,791
2050-2051	6,175	1,181	6,975	1,358	2,533	18,222	-16,331	-1,028	-1,305	-587	-19,251	-1,029	68,762
2051-2052	1,868	1,082	4,765	1,358	2,485	11,558	-16,338	-1,032	-1,282	-588	-19,239	-7,681	61,081
2052-2053	2,004	1,048	1,653	1,359	2,488	8,552	-16,307	-1,028	-1,262	-583	-19,180	-10,628	50,453
2053-2054	11,065	1,233	5,762	1,359	2,453	21,872	-16,332	-1,025	-1,261	-580	-19,198	2,675	53,128
2054-2055	10,913	1,290	980	1,359	2,485	17,027	-16,332	-1,022	-1,267	-576	-19,197	-2,170	50,957
2055-2056	7,606	1,232	21,749	1,358	2,534	34,479	-16,340	-1,022	-1,284	-572	-19,219	15,260	66,217
2056-2057	2,036	1,113	6,020	1,358	2,485	13,012	-16,330	-1,018	-1,295	-566	-19,210	-6,198	60,019
2057-2058	1,168	1,075	3,720	1,359	2,488	9,810	-16,348	-1,017	-1,287	-563	-19,217	-9,406	50,613
2058-2059	6,421	1,186	16,811	1,358	2,453	28,228	-16,332	-1,016	-1,296	-561	-19,205	9,023	59,636

2059-2060	24,980	1,131	16,013	1,357	2,485	45,966	-16,340	-1,019	-1,323	-562	-19,243	26,722	86,358
2060-2061	5,925	1,038	14,361	1,357	2,534	25,214	-16,331	-1,018	-1,316	-560	-19,226	5,988	92,347
2061-2062	1,990	1,003	3,094	1,358	2,485	9,930	-16,330	-1,021	-1,287	-561	-19,199	-9,269	83,077
2062-2063	3,469	994	5,497	1,358	2,488	13,806	-16,330	-1,022	-1,256	-561	-19,169	-5,363	77,715
2063-2064	4,526	1,108	4,920	1,358	2,453	14,365	-16,340	-1,024	-1,250	-562	-19,177	-4,812	72,903
2064-2065	1,317	1,042	980	1,359	2,485	7,183	-16,332	-1,020	-1,243	-559	-19,154	-11,971	60,932
2065-2066	940	1,024	2,286	1,360	2,534	8,144	-16,332	-1,017	-1,239	-555	-19,144	-11,000	49,932
2066-2067	8,210	1,178	2,853	1,359	2,485	16,085	-16,326	-1,013	-1,247	-550	-19,136	-3,051	46,881
2067-2068	1,939	1,097	2,285	1,360	2,488	9,170	-16,340	-1,010	-1,262	-544	-19,157	-9,987	36,894
2068-2069	1,070	1,058	4,967	1,360	2,453	10,908	-16,331	-1,000	-1,270	-535	-19,137	-8,229	28,665
2069-2070	1,767	1,043	8,924	1,359	2,493	15,586	-16,332	-993	-1,293	-528	-19,146	-3,560	25,105
2070-2071	787	1,026	11,934	1,358	2,525	17,631	-16,330	-987	-1,318	-521	-19,156	-1,525	23,580
2071-2072	1,075	1,017	2,745	1,359	2,469	8,664	-16,316	-985	-1,335	-516	-19,153	-10,488	13,092
2072-2073	24,390	1,369	15,602	1,357	2,473	45,192	-16,332	-978	-1,347	-510	-19,167	26,024	39,116
2073-2074	27,324	1,276	5,708	1,358	2,437	38,103	-16,331	-976	-1,357	-508	-19,173	18,930	58,046
Average[4] **2009-2074**	5,530	1,140	8,490	1,530	2,480	19,170	-15,310	-990	-1,580	-570	-18,460	720	
Min[4] **2009-2074**	520	990	0	1,030	2,150	6,040	-16,350	-1,030	-2,130	-610	-19,250	-12,370	
Max[4] **2009-2074**	27,320	1,370	37,500	2,300	3,210	51,790	-11,980	-890	-1,240	-510	-15,590	33,350	

Notes

1. Horton WWTP & Wright RWRF.
2. Septic Return and Applied Water Return.
3. Underflow to Indio Hills East and Indio Hills West.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
MCSB = Mission Creek Subbasin
DHSSB = Desert Hot Springs Subbasin
GHSA = Garnet Hill Subarea

Table B7

Simulated MCSB Near-Term Projects with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)						Simulated Outflows (AFY)					Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Inter-subbasin Underflow with DHSSB	Groundwater Replenishment	Wastewater Return[1]	Return Flows[2]	Total Inflow	Pumping	Evapo-transpiration	Inter-subbasin Underflow with GHSA	Inter-subbasin Underflow with Indio Hills[3]	Total Outflow		
2008-2009	1,262	1,263	1,234	1,367	3,212	8,338	-15,628	-900	-1,965	-526	-19,019	-10,681	0
2009-2010	3,564	1,249	23,856	1,267	3,053	32,989	-14,894	-893	-1,974	-528	-18,289	14,700	14,700
2010-2011	8,679	1,241	37,504	1,318	3,044	51,785	-14,954	-894	-2,058	-525	-18,431	33,354	48,055
2011-2012	1,960	1,136	23,103	1,426	3,008	30,633	-14,686	-906	-2,128	-546	-18,266	12,367	60,422
2012-2013	850	1,097	2,332	1,535	2,987	8,800	-15,363	-917	-2,105	-567	-18,952	-10,152	50,270
2013-2014	572	1,102	3,819	1,643	2,942	10,078	-15,024	-928	-2,068	-569	-18,589	-8,511	41,760
2014-2015	522	1,104	586	1,789	2,805	6,806	-13,700	-937	-2,073	-565	-17,276	-10,469	31,290
2015-2016	536	1,114	0	1,819	2,896	6,364	-13,627	-951	-2,088	-585	-17,251	-10,887	20,404
2016-2017	5,759	1,128	1,909	1,896	2,716	13,408	-13,801	-955	-2,047	-598	-17,401	-3,993	16,411
2017-2018	1,413	1,135	7,737	1,971	2,635	14,890	-14,606	-958	-2,033	-601	-18,198	-3,308	13,102
2018-2019	5,422	1,162	6,686	2,066	2,425	17,761	-13,546	-963	-2,070	-601	-17,181	580	13,682
2019-2020	3,027	1,152	1,341	2,240	2,213	9,973	-13,531	-972	-2,054	-592	-17,148	-7,174	6,508
2020-2021	1,193	1,170	427	2,167	2,221	7,178	-14,457	-969	-1,983	-591	-18,000	-10,823	-4,315
2021-2022	791	1,181	0	2,257	2,225	6,454	-13,623	-968	-1,977	-587	-17,155	-10,702	-15,017
2022-2023	5,700	1,201	5,276	2,204	2,152	16,533	-12,101	-971	-2,000	-591	-15,663	870	-14,147
2023-2024	3,947	1,214	5,432	2,304	2,240	15,137	-11,981	-980	-2,028	-599	-15,588	-451	-14,598
2024-2025	2,526	1,211	8,060	2,056	2,276	16,129	-14,311	-980	-1,926	-582	-17,799	-1,670	-16,268
2025-2026	933	1,183	11,157	2,056	2,265	17,593	-14,126	-981	-1,910	-585	-17,600	-7	-16,275
2026-2027	625	1,153	10,757	2,056	2,225	16,816	-14,290	-982	-1,873	-585	-17,731	-915	-17,190
2027-2028	499	1,134	4,848	2,056	2,221	10,759	-14,465	-986	-1,836	-587	-17,874	-7,114	-24,304
2028-2029	15,609	1,719	7,820	1,936	2,193	29,277	-14,616	-985	-1,798	-586	-17,984	11,293	-13,011
2029-2030	3,084	1,390	3,726	1,816	2,241	12,257	-14,781	-986	-1,757	-587	-18,111	-5,854	-18,865
2030-2031	1,287	1,242	6,087	1,696	2,305	12,618	-14,972	-984	-1,709	-585	-18,251	-5,633	-24,498
2031-2032	852	1,199	13,130	1,032	2,286	18,499	-14,615	-984	-1,684	-583	-17,867	632	-23,867
2032-2033	4,511	1,242	14,302	1,584	2,308	23,947	-14,798	-980	-1,689	-577	-18,044	5,903	-17,963
2033-2034	4,996	1,265	12,902	1,269	2,287	22,720	-14,408	-983	-1,695	-577	-17,663	5,056	-12,907
2034-2035	1,269	1,167	3,645	1,335	2,335	9,750	-14,626	-986	-1,664	-579	-17,856	-8,105	-21,013
2035-2036	691	1,124	16,849	1,334	2,398	22,395	-14,762	-991	-1,639	-581	-17,974	4,421	-16,591
2036-2037	509	1,083	15,520	1,333	2,358	20,803	-14,860	-992	-1,623	-580	-18,056	2,747	-13,844
2037-2038	411	1,059	5,943	1,333	2,370	11,117	-14,966	-996	-1,603	-583	-18,147	-7,031	-20,875
2038-2039	2,233	1,048	6,129	1,334	2,343	13,087	-15,091	-999	-1,571	-585	-18,246	-5,159	-26,034
2039-2040	1,078	1,045	4,686	1,334	2,384	10,527	-15,188	-1,003	-1,554	-588	-18,333	-7,807	-33,840
2040-2041	1,315	1,043	5,828	1,334	2,443	11,963	-15,292	-1,000	-1,531	-585	-18,408	-6,445	-40,285
2041-2042	513	1,041	6,579	1,335	2,403	11,870	-15,405	-999	-1,516	-582	-18,502	-6,631	-46,917
2042-2043	830	1,029	14,461	1,334	2,415	20,070	-15,517	-997	-1,518	-577	-18,608	1,462	-45,455
2043-2044	428	1,022	1,898	1,335	2,389	7,072	-15,637	-998	-1,523	-575	-18,732	-11,660	-57,114
2044-2045	384	1,023	3,236	1,336	2,430	8,410	-15,742	-992	-1,502	-570	-18,806	-10,396	-67,511
2045-2046	372	1,020	14,345	1,340	2,489	19,566	-15,855	-987	-1,499	-565	-18,906	660	-66,851
2046-2047	7,637	1,110	14,788	1,343	2,449	27,328	-15,968	-984	-1,511	-559	-19,022	8,306	-58,545
2047-2048	4,454	1,120	10,079	1,348	2,462	19,463	-16,082	-985	-1,522	-557	-19,146	316	-58,229
2048-2049	1,057	1,040	3,247	1,354	2,435	9,134	-16,192	-981	-1,499	-554	-19,226	-10,092	-68,321
2049-2050	583	1,018	4,949	1,359	2,477	10,387	-16,305	-978	-1,481	-552	-19,315	-8,929	-77,249
2050-2051	472	1,020	2,137	1,360	2,533	7,522	-16,332	-973	-1,472	-547	-19,324	-11,802	-89,051
2051-2052	437	1,025	5,886	1,360	2,485	11,194	-16,339	-969	-1,476	-542	-19,326	-8,132	-97,183
2052-2053	418	1,024	4,199	1,360	2,488	9,489	-16,307	-960	-1,483	-533	-19,282	-9,793	-106,976
2053-2054	400	1,017	12,072	1,359	2,453	17,300	-16,332	-952	-1,502	-525	-19,312	-2,011	-108,988
2054-2055	2,410	1,097	980	1,360	2,485	8,332	-16,332	-945	-1,528	-519	-19,324	-10,992	-119,980
2055-2056	700	1,062	3,708	1,360	2,534	9,364	-16,340	-941	-1,535	-514	-19,330	-9,966	-129,946
2056-2057	493	1,047	2,137	1,360	2,485	7,522	-16,331	-930	-1,523	-505	-19,289	-11,767	-141,713
2057-2058	1,029	1,046	5,136	1,360	2,488	11,061	-16,349	-920	-1,521	-497	-19,288	-8,227	-149,941
2058-2059	10,309	1,264	14,229	1,359	2,453	29,613	-16,332	-911	-1,540	-489	-19,273	10,340	-139,601

2059-2060	20,942	1,255	20,239	1,357	2,485	46,278	-16,340	-908	-1,581	-485	-19,314	26,963	-112,637
2060-2061	3,558	1,078	16,103	1,357	2,534	24,630	-16,332	-903	-1,596	-482	-19,312	5,318	-107,320
2061-2062	1,465	1,030	3,074	1,358	2,485	9,413	-16,330	-902	-1,583	-482	-19,297	-9,884	-117,204
2062-2063	909	1,022	1,575	1,359	2,488	7,354	-16,331	-900	-1,552	-482	-19,266	-11,912	-129,116
2063-2064	2,176	1,022	4,199	1,360	2,453	11,209	-16,340	-898	-1,538	-483	-19,259	-8,050	-137,165
2064-2065	815	1,023	980	1,360	2,485	6,663	-16,332	-890	-1,527	-478	-19,228	-12,565	-149,730
2065-2066	4,041	1,021	13,544	1,359	2,534	22,500	-16,332	-883	-1,537	-472	-19,225	3,275	-146,456
2066-2067	994	1,007	10,572	1,358	2,485	16,417	-16,326	-877	-1,564	-466	-19,233	-2,816	-149,271
2067-2068	585	997	9,447	1,358	2,488	14,876	-16,340	-875	-1,590	-463	-19,268	-4,392	-153,663
2068-2069	468	990	825	1,359	2,453	6,096	-16,331	-868	-1,588	-459	-19,246	-13,150	-166,813
2069-2070	429	997	980	1,360	2,493	6,259	-16,332	-862	-1,578	-456	-19,227	-12,968	-179,781
2070-2071	8,771	1,338	9,777	1,359	2,525	23,771	-16,330	-855	-1,577	-451	-19,213	4,558	-175,223
2071-2072	2,889	1,133	16,195	1,358	2,469	24,044	-16,316	-852	-1,581	-446	-19,195	4,849	-170,374
2072-2073	983	1,040	12,542	1,358	2,473	18,396	-16,331	-845	-1,574	-441	-19,192	-796	-171,170
2073-2074	623	1,005	10,197	1,358	2,437	15,620	-16,331	-843	-1,562	-440	-19,175	-3,555	-174,725
Average[4] **2009-2074**	2,580	1,120	7,980	1,530	2,480	15,690	-15,310	-950	-1,700	-540	-18,500	-2,810	
Min[4] **2009-2074**	370	990	0	1,030	2,150	6,100	-16,350	-1,000	-2,130	-600	-19,330	-13,150	
Max[4] **2009-2074**	20,940	1,720	37,500	2,300	3,210	51,790	-11,980	-840	-1,470	-440	-15,590	33,350	

Notes

1. Horton WWTP & Wright RWRF.
2. Septic Return and Applied Water Return.
3. Underflow to Indio Hills East and Indio Hills West.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
MCSB = Mission Creek Subbasin
DHSSB = Desert Hot Springs Subbasin
GHSA = Garnet Hill Subarea

Table B8

Simulated MCSB Future Projects with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)						Simulated Outflows (AFY)					Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Inter-subbasin Underflow with DHSSB	Groundwater Replenishment	Wastewater Return[1]	Return Flows[2]	Total Inflow	Pumping	Evapo-transpiration	Inter-subbasin Underflow with GHSA	Inter-subbasin Underflow with Indio Hills[3]	Total Outflow		
2008-2009	1,262	1,263	1,234	1,367	3,212	8,338	-15,628	-900	-1,965	-526	-19,019	-10,681	0
2009-2010	3,564	1,249	23,856	1,267	3,053	32,989	-14,894	-893	-1,974	-528	-18,289	14,700	14,700
2010-2011	8,679	1,241	37,504	1,318	3,044	51,785	-14,954	-894	-2,058	-525	-18,431	33,354	48,055
2011-2012	1,960	1,136	23,103	1,426	3,008	30,633	-14,686	-906	-2,128	-546	-18,266	12,367	60,422
2012-2013	850	1,097	2,332	1,535	2,987	8,800	-15,363	-917	-2,105	-567	-18,952	-10,152	50,270
2013-2014	572	1,102	3,819	1,643	2,942	10,078	-15,024	-928	-2,068	-569	-18,589	-8,511	41,760
2014-2015	522	1,104	586	1,789	2,805	6,806	-13,700	-937	-2,073	-565	-17,276	-10,469	31,290
2015-2016	536	1,114	0	1,819	2,896	6,364	-13,627	-951	-2,088	-585	-17,251	-10,887	20,404
2016-2017	5,759	1,128	1,909	1,896	2,716	13,408	-13,801	-955	-2,047	-598	-17,401	-3,993	16,411
2017-2018	1,413	1,135	7,737	1,971	2,635	14,890	-14,606	-958	-2,033	-601	-18,198	-3,308	13,102
2018-2019	5,422	1,162	6,686	2,066	2,425	17,761	-13,546	-963	-2,070	-601	-17,181	580	13,682
2019-2020	3,027	1,152	1,341	2,240	2,213	9,973	-13,531	-972	-2,054	-592	-17,148	-7,174	6,508
2020-2021	1,193	1,170	427	2,167	2,221	7,178	-14,457	-969	-1,983	-591	-18,000	-10,823	-4,315
2021-2022	791	1,181	0	2,257	2,225	6,454	-13,623	-968	-1,977	-587	-17,155	-10,702	-15,017
2022-2023	5,700	1,201	5,276	2,204	2,152	16,533	-12,101	-971	-2,000	-591	-15,663	870	-14,147
2023-2024	3,947	1,214	5,432	2,304	2,240	15,137	-11,981	-980	-2,028	-599	-15,588	-451	-14,598
2024-2025	9,233	1,353	9,731	2,056	2,276	24,649	-14,311	-980	-1,932	-582	-17,805	6,844	-7,754
2025-2026	3,331	1,244	12,519	2,056	2,265	21,414	-14,125	-982	-1,919	-585	-17,611	3,803	-3,951
2026-2027	8,630	1,278	11,422	2,056	2,225	25,611	-14,290	-984	-1,884	-586	-17,745	7,866	3,915
2027-2028	1,869	1,196	5,494	2,056	2,221	12,837	-14,464	-990	-1,842	-590	-17,885	-5,049	-1,134
2028-2029	921	1,157	1,079	1,936	2,193	7,286	-14,616	-988	-1,776	-590	-17,970	-10,684	-11,817
2029-2030	685	1,142	7,606	1,816	2,241	13,490	-14,782	-987	-1,729	-589	-18,087	-4,597	-16,414
2030-2031	1,610	1,133	4,242	1,696	2,305	10,986	-14,972	-985	-1,692	-586	-18,235	-7,248	-23,663
2031-2032	8,834	1,243	12,224	1,032	2,286	25,618	-14,615	-985	-1,669	-582	-17,851	7,767	-15,895
2032-2033	2,824	1,154	10,600	1,585	2,308	18,471	-14,798	-980	-1,663	-576	-18,017	454	-15,442
2033-2034	922	1,106	10,495	1,270	2,287	16,081	-14,408	-980	-1,657	-575	-17,620	-1,539	-16,981
2034-2035	10,589	1,177	9,986	1,334	2,335	25,420	-14,626	-981	-1,632	-575	-17,814	7,606	-9,375
2035-2036	8,952	1,212	24,266	1,332	2,398	38,160	-14,762	-986	-1,623	-576	-17,947	20,213	10,837
2036-2037	15,905	1,336	24,385	1,330	2,358	45,315	-14,860	-991	-1,621	-577	-18,049	27,266	38,103
2037-2038	2,934	1,109	15,915	1,331	2,370	23,659	-14,965	-1,002	-1,585	-585	-18,137	5,521	43,625
2038-2039	2,284	1,020	11,915	1,332	2,343	18,894	-15,091	-1,013	-1,519	-596	-18,218	676	44,300
2039-2040	952	1,001	980	1,333	2,384	6,650	-15,187	-1,024	-1,460	-607	-18,279	-11,629	32,672
2040-2041	2,574	1,001	3,219	1,334	2,443	10,571	-15,292	-1,026	-1,399	-609	-18,326	-7,755	24,917
2041-2042	884	1,007	1,446	1,335	2,403	7,076	-15,405	-1,027	-1,366	-607	-18,405	-11,329	13,587
2042-2043	1,481	1,005	13,428	1,334	2,415	19,664	-15,516	-1,026	-1,363	-603	-18,508	1,156	14,743
2043-2044	17,058	1,039	6,135	1,335	2,389	27,956	-15,637	-1,028	-1,379	-600	-18,644	9,312	24,055
2044-2045	20,408	1,063	7,027	1,335	2,430	32,264	-15,742	-1,024	-1,373	-595	-18,733	13,531	37,586
2045-2046	6,310	1,015	17,750	1,339	2,489	28,902	-15,855	-1,023	-1,368	-591	-18,836	10,066	47,652
2046-2047	9,082	1,281	29,354	1,340	2,449	43,505	-15,968	-1,024	-1,395	-588	-18,975	24,531	72,183
2047-2048	2,239	1,044	16,788	1,346	2,462	23,878	-16,081	-1,034	-1,402	-591	-19,108	4,770	76,953
2048-2049	11,589	1,229	12,940	1,351	2,435	29,544	-16,191	-1,037	-1,356	-594	-19,178	10,366	87,319
2049-2050	8,373	1,166	12,778	1,356	2,477	26,150	-16,304	-1,043	-1,313	-599	-19,259	6,891	94,210
2050-2051	6,117	1,122	9,806	1,357	2,533	20,933	-16,331	-1,048	-1,274	-602	-19,255	1,678	95,888
2051-2052	1,814	1,020	7,044	1,358	2,485	13,721	-16,338	-1,055	-1,243	-605	-19,240	-5,519	90,368
2052-2053	1,957	985	3,157	1,358	2,488	9,945	-16,307	-1,054	-1,216	-602	-19,178	-9,233	81,135
2053-2054	11,026	1,168	8,290	1,358	2,453	24,295	-16,331	-1,054	-1,211	-600	-19,196	5,099	86,234
2054-2055	10,881	1,223	980	1,359	2,485	16,928	-16,331	-1,053	-1,215	-597	-19,196	-2,268	83,966
2055-2056	7,580	1,167	23,150	1,357	2,534	35,788	-16,340	-1,055	-1,225	-594	-19,214	16,574	100,540
2056-2057	2,012	1,046	8,612	1,357	2,485	15,511	-16,330	-1,053	-1,232	-589	-19,204	-3,692	96,848
2057-2058	1,144	1,006	5,739	1,358	2,488	11,736	-16,348	-1,054	-1,220	-587	-19,209	-7,474	89,374
2058-2059	6,395	1,111	20,854	1,356	2,453	32,169	-16,331	-1,055	-1,230	-586	-19,201	12,968	102,342

2059-2060	24,943	1,050	16,812	1,356	2,485	46,646	-16,340	-1,060	-1,255	-588	-19,243	27,403	129,745
2060-2061	5,878	953	17,793	1,356	2,534	28,515	-16,331	-1,062	-1,240	-587	-19,219	9,295	139,041
2061-2062	1,946	917	4,956	1,357	2,485	11,662	-16,330	-1,066	-1,199	-588	-19,183	-7,522	131,519
2062-2063	3,435	908	7,958	1,358	2,488	16,147	-16,330	-1,068	-1,158	-589	-19,145	-2,998	128,522
2063-2064	4,498	1,020	7,238	1,358	2,453	16,567	-16,340	-1,072	-1,148	-590	-19,151	-2,584	125,938
2064-2065	1,293	956	980	1,359	2,485	7,073	-16,331	-1,070	-1,136	-587	-19,125	-12,052	113,886
2065-2066	925	942	2,392	1,359	2,534	8,152	-16,332	-1,069	-1,125	-584	-19,110	-10,957	102,928
2066-2067	8,203	1,098	4,655	1,359	2,485	17,801	-16,326	-1,066	-1,128	-579	-19,099	-1,299	101,630
2067-2068	1,934	1,017	3,947	1,359	2,488	10,746	-16,340	-1,066	-1,142	-576	-19,124	-8,378	93,251
2068-2069	1,062	978	7,297	1,359	2,453	13,149	-16,332	-1,060	-1,151	-569	-19,111	-5,963	87,289
2069-2070	1,754	960	10,642	1,359	2,493	17,208	-16,331	-1,056	-1,174	-565	-19,126	-1,918	85,370
2070-2071	766	940	14,821	1,358	2,525	20,410	-16,330	-1,054	-1,197	-561	-19,141	1,269	86,639
2071-2072	1,047	927	4,520	1,358	2,469	10,322	-16,315	-1,056	-1,210	-560	-19,141	-8,819	77,820
2072-2073	24,364	1,273	19,343	1,357	2,473	48,809	-16,332	-1,052	-1,221	-556	-19,160	29,649	107,469
2073-2074	27,287	1,174	8,223	1,357	2,437	40,478	-16,331	-1,054	-1,231	-556	-19,172	21,307	128,775
Average[4] **2009-2074**	5,510	1,110	9,610	1,530	2,480	20,240	-15,310	-1,010	-1,550	-580	-18,450	1,790	
Min[4] **2009-2074**	520	910	0	1,030	2,150	6,360	-16,350	-1,070	-2,130	-610	-19,260	-12,050	
Max[4] **2009-2074**	27,290	1,350	37,500	2,300	3,210	51,790	-11,980	-890	-1,120	-530	-15,590	33,350	

Notes

1. Horton WWTP & Wright RWRF.
2. Septic Return and Applied Water Return.
3. Underflow to Indio Hills East and Indio Hills West.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
MCSB = Mission Creek Subbasin
DHSSB = Desert Hot Springs Subbasin
GHSA = Garnet Hill Subarea

Table B9

Simulated MCSB Future Projects with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)						Simulated Outflows (AFY)					Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Inter-subbasin Underflow with DHSSB	Groundwater Replenishment	Wastewater Return[1]	Return Flows[2]	Total Inflow	Pumping	Evapo-transpiration	Inter-subbasin Underflow with GHSA	Inter-subbasin Underflow with Indio Hills[3]	Total Outflow		
2008-2009	1,262	1,263	1,234	1,367	3,212	8,338	-15,628	-900	-1,965	-526	-19,019	-10,681	0
2009-2010	3,564	1,249	23,856	1,267	3,053	32,989	-14,894	-893	-1,974	-528	-18,289	14,700	14,700
2010-2011	8,679	1,241	37,504	1,318	3,044	51,785	-14,954	-894	-2,058	-525	-18,431	33,354	48,055
2011-2012	1,960	1,136	23,103	1,426	3,008	30,633	-14,686	-906	-2,128	-546	-18,266	12,367	60,422
2012-2013	850	1,097	2,332	1,535	2,987	8,800	-15,363	-917	-2,105	-567	-18,952	-10,152	50,270
2013-2014	572	1,102	3,819	1,643	2,942	10,078	-15,024	-928	-2,068	-569	-18,589	-8,511	41,760
2014-2015	522	1,104	586	1,789	2,805	6,806	-13,700	-937	-2,073	-565	-17,276	-10,469	31,290
2015-2016	536	1,114	0	1,819	2,896	6,364	-13,627	-951	-2,088	-585	-17,251	-10,887	20,404
2016-2017	5,759	1,128	1,909	1,896	2,716	13,408	-13,801	-955	-2,047	-598	-17,401	-3,993	16,411
2017-2018	1,413	1,135	7,737	1,971	2,635	14,890	-14,606	-958	-2,033	-601	-18,198	-3,308	13,102
2018-2019	5,422	1,162	6,686	2,066	2,425	17,761	-13,546	-963	-2,070	-601	-17,181	580	13,682
2019-2020	3,027	1,152	1,341	2,240	2,213	9,973	-13,531	-972	-2,054	-592	-17,148	-7,174	6,508
2020-2021	1,193	1,170	427	2,167	2,221	7,178	-14,457	-969	-1,983	-591	-18,000	-10,823	-4,315
2021-2022	791	1,181	0	2,257	2,225	6,454	-13,623	-968	-1,977	-587	-17,155	-10,702	-15,017
2022-2023	5,700	1,201	5,276	2,204	2,152	16,533	-12,101	-971	-2,000	-591	-15,663	870	-14,147
2023-2024	3,947	1,214	5,432	2,304	2,240	15,137	-11,981	-980	-2,028	-599	-15,588	-451	-14,598
2024-2025	2,526	1,211	8,060	2,056	2,276	16,129	-14,311	-980	-1,926	-582	-17,799	-1,670	-16,268
2025-2026	933	1,183	11,157	2,056	2,265	17,593	-14,126	-981	-1,910	-585	-17,600	-7	-16,275
2026-2027	625	1,153	10,757	2,056	2,225	16,816	-14,290	-982	-1,873	-585	-17,731	-915	-17,190
2027-2028	499	1,134	4,848	2,056	2,221	10,759	-14,465	-986	-1,836	-587	-17,874	-7,114	-24,304
2028-2029	15,609	1,719	7,820	1,936	2,193	29,277	-14,616	-985	-1,798	-586	-17,984	11,293	-13,011
2029-2030	3,084	1,390	3,726	1,816	2,241	12,257	-14,781	-986	-1,757	-587	-18,111	-5,854	-18,865
2030-2031	1,287	1,242	6,087	1,696	2,305	12,618	-14,972	-984	-1,709	-585	-18,251	-5,633	-24,498
2031-2032	852	1,199	13,130	1,032	2,286	18,499	-14,615	-984	-1,684	-583	-17,867	632	-23,867
2032-2033	4,511	1,242	14,302	1,584	2,308	23,947	-14,798	-980	-1,689	-577	-18,044	5,903	-17,963
2033-2034	4,996	1,265	12,902	1,269	2,287	22,720	-14,408	-983	-1,695	-577	-17,663	5,056	-12,907
2034-2035	1,268	1,166	4,680	1,335	2,335	10,784	-14,626	-986	-1,665	-579	-17,857	-7,073	-19,980
2035-2036	686	1,121	17,889	1,333	2,398	23,427	-14,762	-991	-1,642	-581	-17,977	5,450	-14,530
2036-2037	498	1,076	16,566	1,332	2,358	21,831	-14,860	-993	-1,627	-581	-18,061	3,770	-10,759
2037-2038	396	1,050	6,993	1,333	2,370	12,143	-14,966	-998	-1,606	-584	-18,154	-6,011	-16,770
2038-2039	2,216	1,036	7,185	1,333	2,343	14,114	-15,091	-1,002	-1,572	-588	-18,253	-4,139	-20,909
2039-2040	1,060	1,031	5,746	1,333	2,384	11,555	-15,188	-1,007	-1,554	-592	-18,341	-6,786	-27,695
2040-2041	1,296	1,027	6,894	1,334	2,443	12,994	-15,292	-1,006	-1,529	-590	-18,416	-5,423	-33,117
2041-2042	494	1,023	7,650	1,334	2,403	12,903	-15,405	-1,006	-1,512	-587	-18,511	-5,607	-38,725
2042-2043	811	1,009	15,537	1,334	2,415	21,106	-15,516	-1,005	-1,513	-584	-18,618	2,487	-36,237
2043-2044	408	1,000	2,979	1,335	2,389	8,110	-15,637	-1,008	-1,516	-583	-18,744	-10,634	-46,871
2044-2045	365	1,000	3,344	1,336	2,430	8,476	-15,742	-1,003	-1,494	-579	-18,818	-10,342	-57,214
2045-2046	356	996	15,436	1,339	2,489	20,616	-15,855	-1,001	-1,488	-575	-18,919	1,698	-55,516
2046-2047	7,621	1,083	16,479	1,343	2,449	28,975	-15,968	-999	-1,499	-571	-19,037	9,939	-45,578
2047-2048	4,435	1,089	12,155	1,348	2,462	21,488	-16,082	-1,002	-1,511	-570	-19,165	2,324	-43,254
2048-2049	1,034	1,007	4,693	1,354	2,435	10,522	-16,192	-1,000	-1,487	-568	-19,247	-8,724	-51,978
2049-2050	559	982	6,582	1,359	2,477	11,957	-16,304	-999	-1,466	-568	-19,337	-7,380	-59,358
2050-2051	447	981	3,469	1,359	2,533	8,789	-16,331	-997	-1,456	-565	-19,348	-10,559	-69,917
2051-2052	413	984	7,619	1,359	2,485	12,860	-16,339	-995	-1,458	-561	-19,353	-6,493	-76,410
2052-2053	394	980	5,751	1,359	2,488	10,973	-16,308	-988	-1,465	-554	-19,315	-8,342	-84,752
2053-2054	375	970	14,468	1,358	2,453	19,623	-16,332	-983	-1,487	-548	-19,350	273	-84,479
2054-2055	2,384	1,047	980	1,359	2,485	8,255	-16,332	-979	-1,514	-543	-19,368	-11,114	-95,593
2055-2056	677	1,014	3,271	1,360	2,534	8,856	-16,340	-977	-1,516	-540	-19,374	-10,517	-106,110
2056-2057	478	1,000	3,469	1,360	2,485	8,792	-16,331	-968	-1,500	-532	-19,331	-10,540	-116,650
2057-2058	1,019	998	6,789	1,360	2,488	12,655	-16,349	-961	-1,499	-525	-19,333	-6,679	-123,329
2058-2059	10,298	1,212	16,323	1,358	2,453	31,644	-16,332	-954	-1,521	-518	-19,325	12,319	-111,010

2059-2060	20,926	1,200	20,528	1,357	2,485	46,495	-16,340	-952	-1,563	-515	-19,370	27,125	-83,885
2060-2061	3,534	1,021	18,399	1,356	2,534	26,844	-16,331	-950	-1,576	-513	-19,370	7,474	-76,411
2061-2062	1,438	970	4,506	1,358	2,485	10,757	-16,330	-952	-1,558	-515	-19,355	-8,598	-85,009
2062-2063	885	961	2,846	1,359	2,488	8,540	-16,330	-953	-1,524	-517	-19,323	-10,784	-95,793
2063-2064	2,156	960	5,751	1,359	2,453	12,679	-16,340	-954	-1,508	-518	-19,320	-6,641	-102,434
2064-2065	799	961	980	1,360	2,485	6,584	-16,332	-947	-1,497	-515	-19,292	-12,708	-115,142
2065-2066	4,028	960	14,651	1,359	2,534	23,532	-16,332	-943	-1,506	-510	-19,291	4,241	-110,901
2066-2067	982	944	12,807	1,358	2,485	18,576	-16,326	-939	-1,535	-505	-19,305	-729	-111,630
2067-2068	568	930	11,562	1,358	2,488	16,906	-16,339	-939	-1,565	-503	-19,347	-2,441	-114,071
2068-2069	447	921	2,016	1,359	2,453	7,195	-16,331	-935	-1,563	-500	-19,329	-12,134	-126,205
2069-2070	408	928	980	1,360	2,493	6,169	-16,331	-931	-1,549	-498	-19,310	-13,142	-139,347
2070-2071	8,757	1,267	11,664	1,358	2,525	25,571	-16,330	-927	-1,544	-494	-19,295	6,275	-133,071
2071-2072	2,871	1,059	19,033	1,357	2,469	26,789	-16,315	-926	-1,548	-491	-19,280	7,510	-125,562
2072-2073	958	962	14,456	1,357	2,473	20,206	-16,331	-922	-1,539	-487	-19,279	927	-124,635
2073-2074	591	924	12,392	1,357	2,437	17,702	-16,331	-922	-1,525	-487	-19,265	-1,564	-126,199
Average[4] **2009-2074**	2,570	1,090	8,780	1,530	2,480	16,450	-15,310	-970	-1,690	-560	-18,520	-2,070	
Min[4] **2009-2074**	360	920	0	1,030	2,150	6,170	-16,350	-1,010	-2,130	-600	-19,370	-13,140	
Max[4] **2009-2074**	20,930	1,720	37,500	2,300	3,210	51,790	-11,980	-890	-1,460	-490	-15,590	33,350	

Notes

1. Horton WWTP & Wright RWRF.
2. Septic Return and Applied Water Return.
3. Underflow to Indio Hills East and Indio Hills West.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
MCSB = Mission Creek Subbasin
DHSSB = Desert Hot Springs Subbasin
GHSA = Garnet Hill Subarea

Table B10

Simulated GHSA Baseline with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[4]	Simulated Inflows (AFY)					Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Nancy Wright RWRF[1]	Return Flow	Inter-Subbasin Underflow with Mission Creek	Total Inflow	Pumping	Inter-Subbasin Underflow with Indio Hills West[2]	Inter-Subbasin Underflow with Indio Subbasin	Total Outflow		
2008-2009	4,214	0	113	1,965	6,292	-470	-45	-1,102	-1,617	4,675	0
2009-2010	4,989	0	109	1,974	7,071	-442	-20	-3,616	-4,078	2,993	2,993
2010-2011	8,370	0	105	2,058	10,533	-666	-27	-4,904	-5,597	4,936	7,929
2011-2012	5,159	0	104	2,128	7,391	-391	-38	-2,357	-2,786	4,605	12,533
2012-2013	2,983	0	102	2,105	5,190	-309	-50	-2,290	-2,649	2,541	15,075
2013-2014	2,112	0	103	2,068	4,283	-364	-62	-5,809	-6,235	-1,953	13,122
2014-2015	2,103	0	104	2,073	4,280	-451	-75	-8,138	-8,664	-4,385	8,737
2015-2016	1,820	0	105	2,088	4,013	-434	-87	-9,322	-9,843	-5,830	2,908
2016-2017	3,681	0	101	2,047	5,830	-522	-95	-8,268	-8,885	-3,056	-148
2017-2018	2,454	0	92	2,033	4,579	-323	-97	-3,029	-3,449	1,130	982
2018-2019	6,702	0	85	2,070	8,858	-229	-92	-3,455	-3,777	5,081	6,064
2019-2020	9,592	0	79	2,054	11,725	-286	-85	-3,224	-3,594	8,130	14,194
2020-2021	9,063	0	77	1,983	11,124	-266	-77	-3,959	-4,302	6,822	21,016
2021-2022	7,252	0	78	1,977	9,306	-391	-72	-6,446	-6,909	2,396	23,412
2022-2023	12,665	0	76	2,000	14,741	-166	-70	-8,428	-8,665	6,077	29,489
2023-2024	16,692	0	84	2,028	18,804	-559	-68	-5,947	-6,574	12,229	41,718
2024-2025	8,253	137	86	1,932	10,408	-461	-57	2,149	1,631	12,038	53,757
2025-2026	7,565	158	83	1,919	9,724	-456	-32	4,485	3,997	13,721	67,478
2026-2027	4,826	177	83	1,884	6,969	-456	0	789	332	7,301	74,779
2027-2028	3,518	196	82	1,843	5,638	-457	30	-4,886	-5,313	325	75,104
2028-2029	2,979	333	82	1,778	5,172	-453	57	-4,804	-5,200	-28	75,076
2029-2030	2,794	473	83	1,731	5,080	-462	80	-5,137	-5,519	-439	74,637
2030-2031	5,694	609	83	1,695	8,081	-455	102	-5,286	-5,639	2,442	77,079
2031-2032	3,694	745	85	1,672	6,195	-458	122	-2,421	-2,757	3,438	80,517
2032-2033	2,639	881	86	1,644	5,249	-456	140	-1,299	-1,615	3,634	84,151
2033-2034	6,095	898	87	1,617	8,697	-453	157	-70	-366	8,331	92,482
2034-2035	5,978	962	87	1,583	8,610	-463	173	4,596	4,307	12,917	105,398
2035-2036	9,224	962	88	1,565	11,839	-456	188	9,876	9,608	21,447	126,846
2036-2037	4,762	962	88	1,556	7,368	-459	201	10,925	10,667	18,035	144,881
2037-2038	3,222	961	88	1,517	5,788	-453	213	7,337	7,097	12,886	157,766
2038-2039	2,469	960	89	1,451	4,969	-461	224	847	610	5,579	163,345
2039-2040	2,194	960	89	1,392	4,635	-461	233	-5,691	-5,919	-1,284	162,062
2040-2041	1,983	960	89	1,331	4,363	-456	240	-10,192	-10,408	-6,045	156,017
2041-2042	1,642	960	90	1,293	3,985	-456	246	-10,262	-10,471	-6,486	149,530
2042-2043	8,698	961	90	1,284	11,033	-453	252	-11,431	-11,632	-600	148,931
2043-2044	10,959	961	90	1,295	13,306	-462	259	-10,248	-10,452	2,854	151,785
2044-2045	5,639	962	91	1,290	7,982	-456	264	-5,107	-5,298	2,683	154,468
2045-2046	5,382	967	91	1,291	7,731	-456	270	411	224	7,956	162,424
2046-2047	3,572	972	92	1,311	5,946	-456	277	2,543	2,365	8,311	170,735
2047-2048	6,416	976	92	1,313	8,797	-454	285	-98	-266	8,531	179,266
2048-2049	5,498	981	92	1,274	7,845	-462	291	-1,934	-2,105	5,740	185,006
2049-2050	4,336	986	93	1,239	6,653	-455	298	-3,820	-3,977	2,675	187,681
2050-2051	2,962	986	93	1,209	5,250	-457	304	-7,572	-7,725	-2,475	185,206
2051-2052	2,531	986	93	1,187	4,796	-457	310	-11,857	-12,004	-7,208	177,998
2052-2053	5,998	986	93	1,166	8,242	-453	314	-14,888	-15,028	-6,785	171,212
2053-2054	6,625	986	93	1,163	8,867	-463	318	-13,483	-13,627	-4,760	166,452
2054-2055	5,374	986	93	1,169	7,623	-455	323	-7,228	-7,360	263	166,715
2055-2056	3,395	987	93	1,185	5,660	-460	329	-6,664	-6,794	-1,134	165,581
2056-2057	2,643	987	93	1,196	4,919	-453	333	-11,478	-11,598	-6,678	158,902
2057-2058	3,849	987	93	1,188	6,117	-461	339	-10,965	-11,088	-4,970	153,932
2058-2059	12,359	987	93	1,195	14,635	-460	345	-4,854	-4,968	9,666	163,598

2059-2060	6,619	988	93	1,222	8,921	-457	352	156	51	8,972	172,570
2060-2061	3,662	988	93	1,218	5,960	-456	357	-3,761	-3,860	2,100	174,670
2061-2062	3,638	987	93	1,192	5,910	-453	363	-9,635	-9,726	-3,815	170,854
2062-2063	3,410	987	93	1,163	5,654	-461	368	-13,400	-13,493	-7,839	163,015
2063-2064	2,637	988	93	1,157	4,875	-457	374	-13,187	-13,269	-8,394	154,621
2064-2065	2,293	988	93	1,150	4,524	-456	378	-13,508	-13,586	-9,063	145,558
2065-2066	4,673	988	93	1,145	6,899	-456	382	-16,196	-16,270	-9,371	136,187
2066-2067	3,055	988	93	1,151	5,287	-453	386	-17,291	-17,357	-12,070	124,117
2067-2068	2,356	989	93	1,164	4,602	-463	392	-17,425	-17,496	-12,894	111,223
2068-2069	2,255	989	93	1,170	4,508	-455	396	-14,338	-14,396	-9,889	101,334
2069-2070	2,072	989	93	1,192	4,346	-457	402	-10,851	-10,907	-6,560	94,774
2070-2071	1,940	989	92	1,215	4,236	-456	408	-12,018	-12,066	-7,830	86,944
2071-2072	11,992	990	91	1,230	14,303	-454	415	-12,654	-12,693	1,610	88,554
2072-2073	15,512	990	91	1,241	17,835	-463	421	-12,598	-12,639	5,196	93,749
2073-2074	7,212	990	91	1,254	9,547	-455	428	-11,565	-11,592	-2,045	91,704
Average[3] **2009-2074**	5,290	660	90	1,530	7,570	-440	180	-5,850	-6,110	1,460	
Min[3] **2009-2074**	1,640	0	80	1,150	3,980	-670	-100	-17,420	-17,500	-12,890	
Max[3] **2009-2074**	16,690	990	110	2,130	18,800	-170	430	10,920	10,670	21,450	

Notes

1. Nancy Wright Regional Wastewater Reclamation Facility
2. Indio Hills west of Banning Fault. Inter-subbasin underflows show both inflows into and outflows out of the Garnet Hill Subarea.
3. Average, minimum (min), maximum (max) values rounded to the nearest 10 units. Minimum represents the smallest storage change, while maximum represents the largest storage change, regardless of of whether flow is into (+) or out of (-) Garnet Hill Subarea.
4. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
GHSA = Garnet Hill Subarea

Table B11

Simulated GHSA Baseline with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[4]	Simulated Inflows (AFY)					Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Nancy Wright RWRF[1]	Return Flow	Inter-Subbasin Underflow with Mission Creek	Total Inflow	Pumping	Inter-Subbasin Underflow with Indio Hills West[2]	Inter-Subbasin Underflow with Indio Subbasin	Total Outflow		
2008-2009	4,214	0	113	1,965	6,292	-470	-45	-1,102	-1,617	4,675	0
2009-2010	4,989	0	109	1,974	7,071	-442	-20	-3,616	-4,078	2,993	2,993
2010-2011	8,370	0	105	2,058	10,533	-666	-27	-4,904	-5,597	4,936	7,929
2011-2012	5,159	0	104	2,128	7,391	-391	-38	-2,357	-2,786	4,605	12,533
2012-2013	2,983	0	102	2,105	5,190	-309	-50	-2,290	-2,649	2,541	15,075
2013-2014	2,112	0	103	2,068	4,283	-364	-62	-5,809	-6,235	-1,953	13,122
2014-2015	2,103	0	104	2,073	4,280	-451	-75	-8,138	-8,664	-4,385	8,737
2015-2016	1,820	0	105	2,088	4,013	-434	-87	-9,322	-9,843	-5,830	2,908
2016-2017	3,681	0	101	2,047	5,830	-522	-95	-8,268	-8,885	-3,056	-148
2017-2018	2,454	0	92	2,033	4,579	-323	-97	-3,029	-3,449	1,130	982
2018-2019	6,702	0	85	2,070	8,858	-229	-92	-3,455	-3,777	5,081	6,064
2019-2020	9,592	0	79	2,054	11,725	-286	-85	-3,224	-3,594	8,130	14,194
2020-2021	9,063	0	77	1,983	11,124	-266	-77	-3,959	-4,302	6,822	21,016
2021-2022	7,252	0	78	1,977	9,306	-391	-72	-6,446	-6,909	2,396	23,412
2022-2023	12,665	0	76	2,000	14,741	-166	-70	-8,428	-8,665	6,077	29,489
2023-2024	16,692	0	84	2,028	18,804	-559	-68	-5,947	-6,574	12,229	41,718
2024-2025	7,959	137	86	1,926	10,108	-461	-57	1,532	1,013	11,122	52,840
2025-2026	4,421	158	83	1,910	6,571	-456	-32	3,157	2,669	9,240	62,080
2026-2027	3,469	177	83	1,873	5,602	-456	-1	-680	-1,137	4,465	66,545
2027-2028	7,202	196	82	1,836	9,316	-457	30	-4,629	-5,056	4,260	70,805
2028-2029	3,977	334	82	1,798	6,191	-453	57	-3,502	-3,899	2,292	73,097
2029-2030	2,587	473	83	1,757	4,900	-462	81	-4,788	-5,169	-270	72,828
2030-2031	2,287	609	83	1,710	4,688	-455	103	-5,023	-5,376	-687	72,140
2031-2032	2,097	745	85	1,700	4,627	-458	123	-1,732	-2,067	2,560	74,700
2032-2033	2,743	881	86	1,689	5,399	-456	141	736	421	5,820	80,521
2033-2034	1,963	898	87	1,695	4,642	-453	158	1,140	845	5,487	86,008
2034-2035	2,171	962	87	1,665	4,886	-463	174	1,818	1,530	6,415	92,423
2035-2036	1,681	962	88	1,639	4,370	-456	189	3,051	2,784	7,155	99,577
2036-2037	1,297	962	88	1,622	3,969	-459	202	529	272	4,241	103,819
2037-2038	1,125	961	88	1,602	3,777	-453	214	-3,327	-3,566	211	104,030
2038-2039	13,555	961	89	1,569	16,174	-461	225	-7,430	-7,666	8,507	112,537
2039-2040	11,366	961	89	1,553	13,969	-461	235	-9,155	-9,380	4,589	117,126
2040-2041	4,822	961	89	1,529	7,402	-456	244	-10,325	-10,537	-3,136	113,990
2041-2042	3,017	961	90	1,515	5,583	-456	252	-9,221	-9,424	-3,841	110,149
2042-2043	2,250	962	90	1,517	4,819	-453	261	-9,893	-10,085	-5,266	104,883
2043-2044	2,551	962	90	1,522	5,125	-462	270	-10,482	-10,675	-5,549	99,334
2044-2045	2,063	963	91	1,502	4,619	-456	278	-7,838	-8,016	-3,397	95,937
2045-2046	1,813	968	91	1,499	4,371	-456	286	-5,426	-5,597	-1,225	94,712
2046-2047	1,592	973	92	1,512	4,168	-456	295	-4,972	-5,133	-965	93,747
2047-2048	1,349	977	92	1,524	3,942	-454	304	-7,430	-7,579	-3,637	90,110
2048-2049	1,228	982	92	1,502	3,804	-462	312	-10,089	-10,239	-6,436	83,674
2049-2050	1,113	987	93	1,484	3,677	-455	320	-12,273	-12,408	-8,732	74,943
2050-2051	1,709	987	93	1,476	4,265	-457	328	-14,661	-14,790	-10,525	64,418
2051-2052	5,764	988	93	1,481	8,325	-457	336	-16,777	-16,897	-8,572	55,846
2052-2053	2,587	988	93	1,488	5,156	-453	343	-17,601	-17,711	-12,554	43,292
2053-2054	1,722	988	93	1,509	4,312	-463	351	-16,488	-16,600	-12,288	31,004
2054-2055	1,588	989	93	1,535	4,205	-455	359	-12,741	-12,836	-8,632	22,372
2055-2056	1,279	989	93	1,543	3,904	-460	369	-12,494	-12,585	-8,681	13,691
2056-2057	1,105	989	93	1,533	3,720	-453	377	-15,346	-15,422	-11,701	1,990
2057-2058	1,385	989	93	1,532	3,999	-461	386	-14,389	-14,465	-10,465	-8,476
2058-2059	1,468	990	93	1,553	4,103	-460	395	-7,365	-7,430	-3,327	-11,803

2059-2060	1,359	990	93	1,595	4,037	-457	406	-1,749	-1,800	2,236	-9,567
2060-2061	945	990	93	1,613	3,640	-456	414	-4,671	-4,713	-1,073	-10,639
2061-2062	758	990	93	1,601	3,442	-453	423	-9,941	-9,971	-6,530	-17,169
2062-2063	675	990	93	1,573	3,330	-461	431	-13,501	-13,531	-10,202	-27,371
2063-2064	760	990	93	1,559	3,402	-457	439	-14,026	-14,043	-10,641	-38,012
2064-2065	2,481	990	93	1,550	5,114	-456	445	-14,464	-14,476	-9,362	-47,373
2065-2066	2,869	990	93	1,561	5,513	-456	451	-14,382	-14,387	-8,875	-56,248
2066-2067	1,485	990	93	1,590	4,157	-453	457	-12,532	-12,528	-8,371	-64,619
2067-2068	957	990	93	1,618	3,658	-463	464	-12,995	-12,994	-9,336	-73,955
2068-2069	915	990	93	1,617	3,616	-455	469	-13,205	-13,191	-9,575	-83,530
2069-2070	11,434	990	93	1,609	14,126	-457	475	-10,374	-10,355	3,771	-79,759
2070-2071	4,357	991	92	1,611	7,050	-456	481	-5,447	-5,421	1,628	-78,131
2071-2072	2,110	991	91	1,618	4,810	-454	489	-4,228	-4,194	616	-77,515
2072-2073	1,383	991	91	1,613	4,078	-463	494	-6,717	-6,686	-2,608	-80,122
2073-2074	1,179	990	91	1,603	3,864	-455	499	-8,837	-8,792	-4,928	-85,050
Average[3] **2009-2075**	3,690	660	90	1,710	6,160	-440	210	-7,140	-7,380	-1,220	
Min[3] **2009-2075**	670	0	80	1,480	3,330	-670	-100	-17,600	-17,710	-12,550	
Max[3] **2009-2075**	16,690	990	110	2,130	18,800	-170	500	3,160	2,780	12,230	

Notes

1. Nancy Wright Regional Wastewater Reclamation Facility
2. Indio Hills west of Banning Fault. Inter-subbasin underflows show both inflows into and outflows out of the Garnet Hill Subarea.
3. Average, minimum (min), maximum (max) values rounded to the nearest 10 units. Minimum represents the smallest storage change, while maximum represents the largest storage change, regardless of of whether flow is into (+) or out of (-) Garnet Hill Subarea.
4. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
GHSA = Garnet Hill Subarea

Table B12

Simulated GHSA Near-Term Projects with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[4]	Simulated Inflows (AFY)					Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Nancy Wright RWRF[1]	Return Flow	Inter-Subbasin Underflow with Mission Creek	Total Inflow	Pumping	Inter-Subbasin Underflow with Indio Hills West[2]	Inter-Subbasin Underflow with Indio Subbasin	Total Outflow		
2008-2009	4,214	0	113	1,965	6,292	-470	-45	-1,102	-1,617	4,675	0
2009-2010	4,989	0	109	1,974	7,071	-442	-20	-3,616	-4,078	2,993	2,993
2010-2011	8,370	0	105	2,058	10,533	-666	-27	-4,904	-5,597	4,936	7,929
2011-2012	5,159	0	104	2,128	7,391	-391	-38	-2,357	-2,786	4,605	12,533
2012-2013	2,983	0	102	2,105	5,190	-309	-50	-2,290	-2,649	2,541	15,075
2013-2014	2,112	0	103	2,068	4,283	-364	-62	-5,809	-6,235	-1,953	13,122
2014-2015	2,103	0	104	2,073	4,280	-451	-75	-8,138	-8,664	-4,385	8,737
2015-2016	1,820	0	105	2,088	4,013	-434	-87	-9,322	-9,843	-5,830	2,908
2016-2017	3,681	0	101	2,047	5,830	-522	-95	-8,268	-8,885	-3,056	-148
2017-2018	2,454	0	92	2,033	4,579	-323	-97	-3,029	-3,449	1,130	982
2018-2019	6,702	0	85	2,070	8,858	-229	-92	-3,455	-3,777	5,081	6,064
2019-2020	9,592	0	79	2,054	11,725	-286	-85	-3,224	-3,594	8,130	14,194
2020-2021	9,063	0	77	1,983	11,124	-266	-77	-3,959	-4,302	6,822	21,016
2021-2022	7,252	0	78	1,977	9,306	-391	-72	-6,446	-6,909	2,396	23,412
2022-2023	12,665	0	76	2,000	14,741	-166	-70	-8,428	-8,665	6,077	29,489
2023-2024	16,692	0	84	2,028	18,804	-559	-68	-5,947	-6,574	12,229	41,718
2024-2025	8,224	137	86	1,932	10,379	-461	-57	2,155	1,636	12,015	53,733
2025-2026	8,976	158	83	1,919	11,136	-456	-32	4,324	3,836	14,971	68,705
2026-2027	5,022	177	83	1,884	7,166	-456	0	787	330	7,496	76,201
2027-2028	3,245	196	82	1,842	5,365	-457	30	-4,835	-5,262	103	76,304
2028-2029	2,782	333	82	1,776	4,974	-453	57	-4,749	-5,145	-172	76,132
2029-2030	2,501	473	83	1,729	4,785	-462	81	-5,037	-5,418	-633	75,499
2030-2031	7,208	609	83	1,692	9,592	-455	102	-5,354	-5,707	3,885	79,385
2031-2032	4,165	745	85	1,669	6,664	-458	122	-2,286	-2,622	4,042	83,427
2032-2033	2,616	217	86	1,664	4,583	-456	141	-1,057	-1,373	3,210	86,637
2033-2034	8,093	0	87	1,658	9,838	-453	158	-21	-317	9,521	96,158
2034-2035	8,024	0	87	1,633	9,744	-463	173	4,732	4,443	14,187	110,345
2035-2036	13,190	0	88	1,622	14,900	-456	188	9,871	9,603	24,503	134,848
2036-2037	6,223	0	88	1,618	7,930	-459	201	11,259	11,002	18,931	153,779
2037-2038	3,885	0	88	1,584	5,557	-453	214	7,757	7,517	13,075	166,854
2038-2039	2,570	0	89	1,521	4,180	-461	225	1,334	1,097	5,277	172,131
2039-2040	2,084	0	89	1,466	3,639	-461	234	-5,148	-5,375	-1,736	170,395
2040-2041	1,700	0	89	1,409	3,199	-456	241	-9,570	-9,786	-6,587	163,808
2041-2042	1,839	0	90	1,376	3,304	-456	247	-9,618	-9,827	-6,523	157,285
2042-2043	12,681	0	90	1,372	14,143	-453	252	-11,150	-11,351	2,793	160,078
2043-2044	15,843	0	90	1,388	17,321	-462	259	-9,936	-10,139	7,182	167,260
2044-2045	7,612	0	91	1,386	9,088	-456	264	-4,370	-4,562	4,526	171,786
2045-2046	7,359	0	91	1,387	8,837	-456	270	1,180	994	9,831	181,617
2046-2047	4,456	0	92	1,407	5,955	-456	276	3,456	3,277	9,231	190,848
2047-2048	8,771	0	92	1,409	10,272	-454	283	649	479	10,751	201,599
2048-2049	7,313	0	92	1,370	8,774	-462	289	-1,085	-1,258	7,517	209,116
2049-2050	5,525	0	93	1,334	6,952	-455	295	-2,877	-3,037	3,915	213,031
2050-2051	3,305	0	93	1,305	4,703	-457	300	-6,537	-6,694	-1,991	211,040
2051-2052	2,596	0	93	1,282	3,971	-457	306	-10,770	-10,922	-6,951	204,089
2052-2053	7,857	0	93	1,262	9,212	-453	309	-13,977	-14,121	-4,909	199,180
2053-2054	8,908	0	93	1,261	10,261	-463	313	-12,508	-12,658	-2,397	196,783
2054-2055	7,172	0	93	1,267	8,533	-455	317	-6,027	-6,165	2,367	199,150
2055-2056	3,935	0	93	1,284	5,312	-460	322	-5,329	-5,467	-154	198,996
2056-2057	2,696	0	93	1,295	4,084	-453	326	-10,170	-10,298	-6,213	192,782
2057-2058	4,726	0	93	1,287	6,106	-461	330	-9,682	-9,812	-3,707	189,076
2058-2059	17,817	0	93	1,296	19,206	-460	336	-3,864	-3,988	15,218	204,294

2059-2060	9,021	0	93	1,323	10,436	-457	342	1,587	1,471	11,908	216,202
2060-2061	4,427	0	93	1,316	5,836	-456	346	-2,308	-2,417	3,418	219,620
2061-2062	4,314	0	93	1,287	5,694	-453	351	-8,291	-8,393	-2,700	216,920
2062-2063	3,918	0	93	1,256	5,267	-461	356	-12,044	-12,150	-6,883	210,038
2063-2064	2,855	0	93	1,250	4,199	-457	361	-11,727	-11,823	-7,624	202,414
2064-2065	2,209	0	93	1,243	3,544	-456	364	-11,990	-12,083	-8,539	193,875
2065-2066	5,948	0	93	1,239	7,280	-456	367	-14,843	-14,931	-7,651	186,224
2066-2067	3,353	0	93	1,247	4,693	-453	371	-15,788	-15,869	-11,176	175,048
2067-2068	2,282	0	93	1,262	3,638	-463	376	-15,848	-15,935	-12,298	162,750
2068-2069	2,276	0	93	1,270	3,639	-455	380	-12,689	-12,764	-9,126	153,625
2069-2070	1,978	0	93	1,293	3,364	-457	385	-9,085	-9,157	-5,793	147,831
2070-2071	1,615	0	92	1,318	3,025	-456	390	-10,294	-10,360	-7,334	140,497
2071-2072	17,718	0	91	1,335	19,145	-454	397	-11,564	-11,621	7,524	148,020
2072-2073	22,444	0	91	1,347	23,882	-463	402	-11,586	-11,646	12,236	160,256
2073-2074	9,963	0	91	1,357	11,412	-455	408	-10,138	-10,184	1,228	161,484
Average[3] **2009-2075**	6,290	50	90	1,580	8,010	-440	180	-5,230	-5,490	2,520	
Min[3] **2009-2075**	1,610	0	80	1,240	3,030	-670	-100	-15,850	-15,940	-12,300	
Max[3] **2009-2075**	22,440	740	110	2,130	23,880	-170	410	11,260	11,000	24,500	

Notes
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3. Average, minimum (min), maximum (max) values rounded to the nearest 10 units. Minimum represents the smallest storage change, while maximum represents the largest storage change, regardless of of whether flow is into (+) or out of (-) Garnet Hill Subarea.
4. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
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GHSA = Garnet Hill Subarea

Table B13

Simulated GHSA Near-Term Projects with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[4]	Simulated Inflows (AFY)					Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Nancy Wright RWRF[1]	Return Flow	Inter-Subbasin Underflow with Mission Creek	Total Inflow	Pumping	Inter-Subbasin Underflow with Indio Hills West[2]	Inter-Subbasin Underflow with Indio Subbasin	Total Outflow		
2008-2009	4,214	0	113	1,965	6,292	-470	-45	-1,102	-1,617	4,675	0
2009-2010	4,989	0	109	1,974	7,071	-442	-20	-3,616	-4,078	2,993	2,993
2010-2011	8,370	0	105	2,058	10,533	-666	-27	-4,904	-5,597	4,936	7,929
2011-2012	5,159	0	104	2,128	7,391	-391	-38	-2,357	-2,786	4,605	12,533
2012-2013	2,983	0	102	2,105	5,190	-309	-50	-2,290	-2,649	2,541	15,075
2013-2014	2,112	0	103	2,068	4,283	-364	-62	-5,809	-6,235	-1,953	13,122
2014-2015	2,103	0	104	2,073	4,280	-451	-75	-8,138	-8,664	-4,385	8,737
2015-2016	1,820	0	105	2,088	4,013	-434	-87	-9,322	-9,843	-5,830	2,908
2016-2017	3,681	0	101	2,047	5,830	-522	-95	-8,268	-8,885	-3,056	-148
2017-2018	2,454	0	92	2,033	4,579	-323	-97	-3,029	-3,449	1,130	982
2018-2019	6,702	0	85	2,070	8,858	-229	-92	-3,455	-3,777	5,081	6,064
2019-2020	9,592	0	79	2,054	11,725	-286	-85	-3,224	-3,594	8,130	14,194
2020-2021	9,063	0	77	1,983	11,124	-266	-77	-3,959	-4,302	6,822	21,016
2021-2022	7,252	0	78	1,977	9,306	-391	-72	-6,446	-6,909	2,396	23,412
2022-2023	12,665	0	76	2,000	14,741	-166	-70	-8,428	-8,665	6,077	29,489
2023-2024	16,692	0	84	2,028	18,804	-559	-68	-5,947	-6,574	12,229	41,718
2024-2025	7,959	137	86	1,926	10,108	-461	-57	1,535	1,016	11,124	52,843
2025-2026	4,421	158	83	1,910	6,571	-456	-32	3,161	2,673	9,244	62,087
2026-2027	3,469	177	83	1,873	5,602	-456	-1	-663	-1,120	4,482	66,569
2027-2028	7,202	196	82	1,836	9,316	-457	30	-4,584	-5,012	4,304	70,873
2028-2029	3,977	334	82	1,798	6,190	-453	57	-3,416	-3,812	2,378	73,251
2029-2030	2,586	473	83	1,757	4,899	-462	81	-4,653	-5,034	-136	73,116
2030-2031	2,285	609	83	1,709	4,686	-455	103	-4,827	-5,180	-494	72,622
2031-2032	2,095	745	85	1,684	4,609	-458	123	-1,459	-1,794	2,815	75,438
2032-2033	2,740	217	86	1,689	4,732	-456	141	1,085	771	5,502	80,940
2033-2034	1,959	0	87	1,695	3,741	-453	158	1,561	1,266	5,008	85,947
2034-2035	2,167	0	87	1,664	3,918	-463	174	2,319	2,030	5,948	91,896
2035-2036	1,675	0	88	1,639	3,402	-456	189	3,634	3,367	6,769	98,665
2036-2037	1,289	0	88	1,623	3,001	-459	202	1,166	909	3,910	102,575
2037-2038	1,117	0	88	1,603	2,808	-453	214	-2,641	-2,880	-72	102,503
2038-2039	13,541	0	89	1,571	15,201	-461	225	-6,683	-6,920	8,281	110,784
2039-2040	11,352	0	89	1,554	12,996	-461	235	-8,342	-8,568	4,428	115,211
2040-2041	4,809	0	89	1,531	6,429	-456	243	-9,453	-9,666	-3,237	111,974
2041-2042	3,003	0	90	1,516	4,609	-456	251	-8,276	-8,481	-3,872	108,103
2042-2043	2,235	0	90	1,518	3,844	-453	259	-8,889	-9,083	-5,240	102,863
2043-2044	2,535	0	90	1,523	4,148	-462	267	-9,418	-9,612	-5,465	97,398
2044-2045	2,047	0	91	1,502	3,640	-456	274	-6,686	-6,867	-3,227	94,172
2045-2046	1,796	0	91	1,499	3,386	-456	282	-4,191	-4,365	-979	93,193
2046-2047	1,573	0	92	1,511	3,176	-456	290	-3,691	-3,857	-681	92,511
2047-2048	1,330	0	92	1,522	2,944	-454	298	-6,139	-6,295	-3,351	89,161
2048-2049	1,208	0	92	1,499	2,799	-462	305	-8,774	-8,931	-6,132	83,029
2049-2050	1,094	0	93	1,481	2,667	-455	312	-10,927	-11,070	-8,403	74,626
2050-2051	1,688	0	93	1,472	3,253	-457	319	-13,294	-13,432	-10,179	64,446
2051-2052	5,736	0	93	1,476	7,304	-457	326	-15,379	-15,510	-8,205	56,241
2052-2053	2,568	0	93	1,483	4,143	-453	332	-16,187	-16,309	-12,166	44,075
2053-2054	1,703	0	93	1,502	3,298	-463	339	-15,035	-15,159	-11,861	32,214
2054-2055	1,570	0	93	1,528	3,190	-455	346	-11,216	-11,326	-8,135	24,079
2055-2056	1,261	0	93	1,535	2,889	-460	354	-10,938	-11,044	-8,155	15,925
2056-2057	1,088	0	93	1,523	2,704	-453	361	-13,799	-13,892	-11,187	4,737
2057-2058	1,367	0	93	1,521	2,981	-461	369	-12,799	-12,892	-9,911	-5,174
2058-2059	1,449	0	93	1,540	3,082	-460	377	-5,579	-5,661	-2,579	-7,753

2059-2060	1,339	0	93	1,581	3,014	-457	386	148	77	3,091	-4,662
2060-2061	925	0	93	1,596	2,615	-456	393	-2,869	-2,931	-317	-4,979
2061-2062	737	0	93	1,583	2,413	-453	401	-8,221	-8,273	-5,860	-10,839
2062-2063	654	0	93	1,552	2,299	-461	408	-11,790	-11,843	-9,544	-20,382
2063-2064	739	0	93	1,538	2,370	-457	416	-12,268	-12,309	-9,939	-30,321
2064-2065	2,452	0	93	1,527	4,073	-456	420	-12,674	-12,710	-8,638	-38,959
2065-2066	2,841	0	93	1,537	4,471	-456	425	-12,558	-12,589	-8,118	-47,077
2066-2067	1,468	0	93	1,564	3,124	-453	430	-10,660	-10,682	-7,558	-54,635
2067-2068	942	0	93	1,590	2,625	-463	436	-11,112	-11,139	-8,513	-63,148
2068-2069	900	0	93	1,588	2,581	-455	440	-11,317	-11,332	-8,751	-71,900
2069-2070	11,354	0	93	1,578	13,024	-457	445	-8,297	-8,309	4,716	-67,184
2070-2071	4,340	0	92	1,577	6,009	-456	451	-3,259	-3,265	2,745	-64,439
2071-2072	2,098	0	91	1,581	3,771	-454	457	-2,032	-2,030	1,741	-62,698
2072-2073	1,370	0	91	1,574	3,035	-463	461	-4,625	-4,627	-1,591	-64,289
2073-2074	1,163	0	91	1,562	2,816	-455	466	-6,789	-6,778	-3,962	-68,251
Average[3] **2009-2075**	3,680	50	90	1,700	5,520	-440	200	-6,240	-6,490	-960	
Min[3] **2009-2075**	650	0	80	1,470	2,300	-670	-100	-16,190	-16,310	-12,170	
Max[3] **2009-2075**	16,690	740	110	2,130	18,800	-170	470	3,630	3,370	12,230	

Notes
1. Nancy Wright Regional Wastewater Reclamation Facility
2. Indio Hills west of Banning Fault. Inter-subbasin underflows show both inflows into and outflows out of the Garnet Hill Subarea.
3. Average, minimum (min), maximum (max) values rounded to the nearest 10 units. Minimum represents the smallest storage change, while maximum represents the largest storage change, regardless of of whether flow is into (+) or out of (-) Garnet Hill Subarea.
4. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AF = acre-feet
AFY = acre-feet per year
GHSA = Garnet Hill Subarea

Table B14

Simulated GHSA Future Projects with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[4]	Simulated Inflows (AFY)					Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Nancy Wright RWRF[1]	Return Flow	Inter-Subbasin Underflow with Mission Creek	Total Inflow	Pumping	Inter-Subbasin Underflow with Indio Hills West[2]	Inter-Subbasin Underflow with Indio Subbasin	Total Outflow		
2008-2009	4,214	0	113	1,965	6,292	-470	-45	-1,102	-1,617	4,675	0
2009-2010	4,989	0	109	1,974	7,071	-442	-20	-3,616	-4,078	2,993	2,993
2010-2011	8,370	0	105	2,058	10,533	-666	-27	-4,904	-5,597	4,936	7,929
2011-2012	5,159	0	104	2,128	7,391	-391	-38	-2,357	-2,786	4,605	12,533
2012-2013	2,983	0	102	2,105	5,190	-309	-50	-2,290	-2,649	2,541	15,075
2013-2014	2,112	0	103	2,068	4,283	-364	-62	-5,809	-6,235	-1,953	13,122
2014-2015	2,103	0	104	2,073	4,280	-451	-75	-8,138	-8,664	-4,385	8,737
2015-2016	1,820	0	105	2,088	4,013	-434	-87	-9,322	-9,843	-5,830	2,908
2016-2017	3,681	0	101	2,047	5,830	-522	-95	-8,268	-8,885	-3,056	-148
2017-2018	2,454	0	92	2,033	4,579	-323	-97	-3,029	-3,449	1,130	982
2018-2019	6,702	0	85	2,070	8,858	-229	-92	-3,455	-3,777	5,081	6,064
2019-2020	9,592	0	79	2,054	11,725	-286	-85	-3,224	-3,594	8,130	14,194
2020-2021	9,063	0	77	1,983	11,124	-266	-77	-3,959	-4,302	6,822	21,016
2021-2022	7,252	0	78	1,977	9,306	-391	-72	-6,446	-6,909	2,396	23,412
2022-2023	12,665	0	76	2,000	14,741	-166	-70	-8,428	-8,665	6,077	29,489
2023-2024	16,692	0	84	2,028	18,804	-559	-68	-5,947	-6,574	12,229	41,718
2024-2025	8,224	137	86	1,932	10,379	-461	-57	2,156	1,638	12,016	53,735
2025-2026	8,976	158	83	1,919	11,136	-456	-32	4,332	3,844	14,980	68,715
2026-2027	5,022	177	83	1,884	7,166	-456	0	808	351	7,517	76,232
2027-2028	3,245	196	82	1,842	5,364	-457	30	-4,800	-5,228	137	76,368
2028-2029	2,781	333	82	1,776	4,973	-453	57	-4,699	-5,095	-122	76,246
2029-2030	2,500	473	83	1,729	4,784	-462	81	-4,971	-5,352	-568	75,678
2030-2031	7,206	609	83	1,692	9,590	-455	102	-5,271	-5,624	3,966	79,644
2031-2032	4,163	745	85	1,669	6,661	-458	122	-2,185	-2,521	4,141	83,784
2032-2033	2,614	217	86	1,663	4,580	-456	140	-941	-1,256	3,323	87,108
2033-2034	8,104	0	87	1,657	9,847	-453	157	430	134	9,981	97,089
2034-2035	8,038	0	87	1,632	9,757	-463	173	5,731	5,442	15,199	112,287
2035-2036	13,198	0	88	1,623	14,909	-456	188	11,282	11,015	25,924	138,211
2036-2037	6,227	0	88	1,621	7,936	-459	201	12,878	12,621	20,557	158,768
2037-2038	3,881	0	88	1,585	5,555	-453	213	9,478	9,238	14,793	173,561
2038-2039	2,553	0	89	1,519	4,161	-461	224	2,927	2,690	6,851	180,412
2039-2040	2,050	0	89	1,460	3,599	-461	233	-3,887	-4,115	-516	179,896
2040-2041	1,662	0	89	1,399	3,151	-456	239	-8,609	-8,826	-5,675	174,221
2041-2042	1,815	0	90	1,366	3,271	-456	245	-8,564	-8,775	-5,504	168,718
2042-2043	12,633	0	90	1,363	14,086	-453	250	-10,061	-10,264	3,821	172,539
2043-2044	15,809	0	90	1,379	17,278	-462	256	-8,676	-8,882	8,396	180,935
2044-2045	7,596	0	91	1,373	9,060	-456	260	-2,691	-2,887	6,173	187,109
2045-2046	7,387	0	91	1,368	8,846	-456	266	4,327	4,136	12,982	200,090
2046-2047	4,489	0	92	1,395	5,975	-456	271	8,163	7,979	13,954	214,044
2047-2048	8,764	0	92	1,402	10,258	-454	278	5,835	5,660	15,918	229,962
2048-2049	7,287	0	92	1,356	8,735	-462	283	4,276	4,097	12,833	242,795
2049-2050	5,476	0	93	1,313	6,882	-455	288	2,432	2,265	9,147	251,942
2050-2051	3,211	0	93	1,274	4,578	-457	292	-2,249	-2,413	2,164	254,106
2051-2052	2,482	0	93	1,243	3,818	-457	297	-7,643	-7,804	-3,986	250,120
2052-2053	7,711	0	93	1,216	9,019	-453	298	-11,606	-11,761	-2,742	247,378
2053-2054	8,810	0	93	1,211	10,115	-463	301	-9,839	-10,000	114	247,492
2054-2055	7,135	0	93	1,215	8,442	-455	303	-1,706	-1,858	6,584	254,077
2055-2056	3,876	0	93	1,225	5,193	-460	306	-1,149	-1,302	3,891	257,968
2056-2057	2,624	0	93	1,232	3,949	-453	308	-7,305	-7,450	-3,502	254,467
2057-2058	4,685	0	93	1,220	5,998	-461	312	-6,404	-6,553	-556	253,911
2058-2059	17,708	0	93	1,230	19,031	-460	315	1,531	1,386	20,417	274,328

2059-2060	8,999	0	93	1,255	10,347	-457	320	7,932	7,794	18,142	292,469
2060-2061	4,390	0	93	1,240	5,722	-456	323	2,983	2,850	8,573	301,042
2061-2062	4,230	0	93	1,199	5,522	-453	326	-4,444	-4,571	951	301,993
2062-2063	3,829	0	93	1,158	5,079	-461	329	-9,240	-9,372	-4,293	297,700
2063-2064	2,824	0	93	1,148	4,065	-457	333	-8,800	-8,924	-4,859	292,841
2064-2065	2,174	0	93	1,136	3,403	-456	334	-9,096	-9,218	-5,815	287,026
2065-2066	5,882	0	93	1,125	7,099	-456	336	-12,210	-12,331	-5,231	281,795
2066-2067	3,356	0	93	1,128	4,576	-453	338	-13,061	-13,176	-8,600	273,195
2067-2068	2,315	0	93	1,142	3,550	-463	341	-12,881	-13,003	-9,453	263,742
2068-2069	2,336	0	93	1,151	3,579	-455	344	-8,880	-8,991	-5,412	258,330
2069-2070	2,038	0	93	1,174	3,304	-457	347	-4,483	-4,593	-1,288	257,042
2070-2071	1,646	0	92	1,197	2,934	-456	352	-6,288	-6,392	-3,457	253,585
2071-2072	17,516	0	91	1,210	18,818	-454	358	-7,342	-7,438	11,379	264,964
2072-2073	22,225	0	91	1,221	23,538	-463	362	-7,736	-7,837	15,701	280,665
2073-2074	9,985	0	91	1,231	11,307	-455	367	-6,563	-6,651	4,656	285,321
Average[3] **2009-2075**	6,270	50	90	1,550	7,950	-440	170	-3,290	-3,560	4,390	
Min[3] **2009-2075**	1,650	0	80	1,120	2,930	-670	-100	-13,060	-13,180	-9,450	
Max[3] **2009-2075**	22,230	740	110	2,130	23,540	-170	370	12,880	12,620	25,920	

Notes

1. Nancy Wright Regional Wastewater Reclamation Facility
2. Indio Hills west of Banning Fault. Inter-subbasin underflows show both inflows into and outflows out of the Garnet Hill Subarea.
3. Average, minimum (min), maximum (max) values rounded to the nearest 10 units. Minimum represents the smallest storage change, while maximum represents the largest storage change, regardless of of whether flow is into (+) or out of (-) Garnet Hill Subarea.
4. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations

AF = acre-feet
AFY = acre-feet per year
GHSA = Garnet Hill Subarea

Table B15

Simulated GHSA Future Projects with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[4]	Simulated Inflows (AFY)					Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Nancy Wright RWRF[1]	Return Flow	Inter-Subbasin Underflow with Mission Creek	Total Inflow	Pumping	Inter-Subbasin Underflow with Indio Hills West[2]	Inter-Subbasin Underflow with Indio Subbasin	Total Outflow		
2008-2009	4,214	0	113	1,965	6,292	-470	-45	-1,102	-1,617	4,675	0
2009-2010	4,989	0	109	1,974	7,071	-442	-20	-3,616	-4,078	2,993	2,993
2010-2011	8,370	0	105	2,058	10,533	-666	-27	-4,904	-5,597	4,936	7,929
2011-2012	5,159	0	104	2,128	7,391	-391	-38	-2,357	-2,786	4,605	12,533
2012-2013	2,983	0	102	2,105	5,190	-309	-50	-2,290	-2,649	2,541	15,075
2013-2014	2,112	0	103	2,068	4,283	-364	-62	-5,809	-6,235	-1,953	13,122
2014-2015	2,103	0	104	2,073	4,280	-451	-75	-8,138	-8,664	-4,385	8,737
2015-2016	1,820	0	105	2,088	4,013	-434	-87	-9,322	-9,843	-5,830	2,908
2016-2017	3,681	0	101	2,047	5,830	-522	-95	-8,268	-8,885	-3,056	-148
2017-2018	2,454	0	92	2,033	4,579	-323	-97	-3,029	-3,449	1,130	982
2018-2019	6,702	0	85	2,070	8,858	-229	-92	-3,455	-3,777	5,081	6,064
2019-2020	9,592	0	79	2,054	11,725	-286	-85	-3,224	-3,594	8,130	14,194
2020-2021	9,063	0	77	1,983	11,124	-266	-77	-3,959	-4,302	6,822	21,016
2021-2022	7,252	0	78	1,977	9,306	-391	-72	-6,446	-6,909	2,396	23,412
2022-2023	12,665	0	76	2,000	14,741	-166	-70	-8,428	-8,665	6,077	29,489
2023-2024	16,692	0	84	2,028	18,804	-559	-68	-5,947	-6,574	12,229	41,718
2024-2025	7,959	137	86	1,926	10,108	-461	-57	1,535	1,016	11,124	52,843
2025-2026	4,421	158	83	1,910	6,571	-456	-32	3,161	2,673	9,244	62,087
2026-2027	3,469	177	83	1,873	5,602	-456	-1	-663	-1,120	4,482	66,569
2027-2028	7,202	196	82	1,836	9,316	-457	30	-4,584	-5,012	4,304	70,873
2028-2029	3,977	334	82	1,798	6,190	-453	57	-3,416	-3,812	2,378	73,251
2029-2030	2,586	473	83	1,757	4,899	-462	81	-4,653	-5,034	-136	73,116
2030-2031	2,285	609	83	1,709	4,686	-455	103	-4,827	-5,180	-494	72,622
2031-2032	2,095	745	85	1,684	4,609	-458	123	-1,459	-1,794	2,815	75,438
2032-2033	2,740	217	86	1,689	4,732	-456	141	1,085	771	5,502	80,940
2033-2034	1,974	0	87	1,695	3,756	-453	158	1,877	1,582	5,338	86,278
2034-2035	2,185	0	87	1,665	3,938	-463	174	3,124	2,835	6,773	93,051
2035-2036	1,692	0	88	1,642	3,421	-456	189	4,787	4,520	7,941	100,992
2036-2037	1,301	0	88	1,627	3,016	-459	202	2,481	2,224	5,241	106,233
2037-2038	1,122	0	88	1,606	2,817	-453	214	-1,241	-1,480	1,337	107,569
2038-2039	13,533	0	89	1,572	15,194	-461	224	-5,196	-5,433	9,762	117,331
2039-2040	11,341	0	89	1,554	12,984	-461	235	-6,770	-6,996	5,988	123,319
2040-2041	4,798	0	89	1,529	6,416	-456	242	-7,812	-8,026	-1,609	121,710
2041-2042	2,989	0	90	1,512	4,592	-456	250	-6,538	-6,744	-2,152	119,557
2042-2043	2,205	0	90	1,513	3,808	-453	258	-7,385	-7,581	-3,773	115,785
2043-2044	2,512	0	90	1,516	4,119	-462	266	-8,005	-8,201	-4,082	111,703
2044-2045	2,029	0	91	1,494	3,614	-456	272	-5,034	-5,217	-1,603	110,099
2045-2046	1,787	0	91	1,488	3,365	-456	279	-2,212	-2,389	976	111,075
2046-2047	1,571	0	92	1,499	3,162	-456	286	-1,310	-1,479	1,683	112,759
2047-2048	1,320	0	92	1,511	2,923	-454	294	-3,674	-3,833	-911	111,848
2048-2049	1,195	0	92	1,487	2,774	-462	300	-6,339	-6,500	-3,726	108,122
2049-2050	1,075	0	93	1,466	2,634	-455	306	-8,498	-8,647	-6,013	102,109
2050-2051	1,646	0	93	1,456	3,195	-457	312	-11,256	-11,401	-8,206	93,903
2051-2052	5,689	0	93	1,458	7,240	-457	319	-13,501	-13,639	-6,400	87,503
2052-2053	2,532	0	93	1,465	4,090	-453	324	-14,482	-14,611	-10,521	76,981
2053-2054	1,693	0	93	1,487	3,273	-463	329	-13,295	-13,428	-10,155	66,826
2054-2055	1,571	0	93	1,514	3,178	-455	335	-9,001	-9,120	-5,942	60,884
2055-2056	1,243	0	93	1,516	2,852	-460	343	-8,907	-9,023	-6,172	54,712
2056-2057	1,063	0	93	1,500	2,656	-453	349	-12,343	-12,447	-9,791	44,921
2057-2058	1,369	0	93	1,499	2,961	-461	356	-11,199	-11,304	-8,343	36,578
2058-2059	1,480	0	93	1,521	3,094	-460	364	-2,785	-2,882	213	36,791

2059-2060	1,364	0	93	1,563	3,019	-457	372	3,742	3,657	6,676	43,466
2060-2061	925	0	93	1,576	2,594	-456	378	223	145	2,739	46,205
2061-2062	712	0	93	1,558	2,363	-453	386	-6,002	-6,070	-3,707	42,498
2062-2063	621	0	93	1,524	2,238	-461	392	-10,214	-10,283	-8,045	34,453
2063-2064	730	0	93	1,508	2,331	-457	398	-10,701	-10,760	-8,428	26,025
2064-2065	2,419	0	93	1,497	4,010	-456	402	-11,064	-11,119	-7,109	18,916
2065-2066	2,836	0	93	1,506	4,435	-456	406	-10,725	-10,775	-6,340	12,576
2066-2067	1,495	0	93	1,535	3,123	-453	411	-8,317	-8,359	-5,236	7,339
2067-2068	963	0	93	1,565	2,621	-463	416	-8,710	-8,757	-6,136	1,203
2068-2069	921	0	93	1,563	2,577	-455	420	-8,953	-8,988	-6,411	-5,207
2069-2070	11,258	0	93	1,549	12,900	-457	424	-5,291	-5,324	7,577	2,369
2070-2071	4,377	0	92	1,544	6,014	-456	429	370	343	6,357	8,726
2071-2072	2,132	0	91	1,548	3,772	-454	435	1,706	1,687	5,459	14,185
2072-2073	1,367	0	91	1,539	2,997	-463	438	-1,726	-1,750	1,247	15,432
2073-2074	1,165	0	91	1,525	2,781	-455	443	-4,377	-4,389	-1,608	13,824
Average[3] **2009-2075**	3,680	50	90	1,690	5,510	-440	190	-4,980	-5,230	280	
Min[3] **2009-2075**	620	0	80	1,460	2,240	-670	-100	-14,480	-14,610	-10,520	
Max[3] **2009-2075**	16,690	740	110	2,130	18,800	-170	440	4,790	4,520	12,230	

Notes
1. Nancy Wright Regional Wastewater Reclamation Facility
2. Indio Hills west of Banning Fault. Inter-subbasin underflows show both inflows into and outflows out of the Garnet Hill Subarea.
3. Average, minimum (min), maximum (max) values rounded to the nearest 10 units. Minimum represents the smallest storage change, while maximum represents the largest storage change, regardless of of whether flow is into (+) or out of (-) Garnet Hill Subarea.
4. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AF = acre-feet
AFY = acre-feet per year
GHSA = Garnet Hill Subarea

Table B16

Simulated DHSSB Baseline with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)				Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Desert Crest WWTP	Return Flow[1]	Total Inflow	Pumping[2]	Inter-Subbasin with Mission Creek	Inter-Subbasin with Indio Hills East[3]	Total Outflow		
2008-2009	330	52	2,761	3,143	-1,691	-1,263	-644	-3,598	-455	0
2009-2010	282	52	2,554	2,887	-1,691	-1,249	-639	-3,578	-691	-691
2010-2011	3,228	50	2,385	5,662	-1,691	-1,241	-632	-3,564	2,098	1,407
2011-2012	478	45	2,393	2,915	-1,691	-1,136	-628	-3,456	-540	866
2012-2013	316	44	2,416	2,776	-1,691	-1,097	-620	-3,408	-632	234
2013-2014	257	43	2,383	2,684	-1,691	-1,102	-614	-3,407	-723	-489
2014-2015	227	44	2,171	2,442	-1,691	-1,104	-608	-3,403	-960	-1,449
2015-2016	205	40	2,178	2,424	-1,691	-1,114	-604	-3,408	-985	-2,434
2016-2017	3,013	48	2,350	5,410	-1,691	-1,128	-596	-3,415	1,995	-439
2017-2018	1,197	51	2,377	3,626	-1,691	-1,135	-590	-3,416	209	-230
2018-2019	4,428	48	2,201	6,677	-1,691	-1,162	-585	-3,437	3,240	3,010
2019-2020	4,324	53	2,320	6,697	-1,691	-1,152	-581	-3,424	3,273	6,283
2020-2021	920	49	2,563	3,532	-1,691	-1,170	-574	-3,435	98	6,380
2021-2022	1,352	49	2,462	3,864	-1,691	-1,181	-569	-3,440	424	6,804
2022-2023	3,859	50	2,226	6,134	-1,691	-1,201	-564	-3,456	2,678	9,482
2023-2024	2,451	48	2,244	4,743	-1,691	-1,214	-561	-3,465	1,278	10,760
2024-2025	4,759	49	2,036	6,844	-1,698	-1,353	-550	-3,600	3,244	14,004
2025-2026	1,026	49	2,244	3,319	-1,698	-1,244	-547	-3,488	-169	13,835
2026-2027	1,808	49	2,168	4,024	-1,698	-1,278	-544	-3,520	504	14,340
2027-2028	429	49	2,178	2,656	-1,701	-1,196	-542	-3,439	-784	13,556
2028-2029	350	49	2,120	2,518	-1,698	-1,157	-537	-3,392	-873	12,683
2029-2030	302	49	2,147	2,498	-1,698	-1,142	-534	-3,374	-877	11,806
2030-2031	270	49	2,083	2,402	-1,698	-1,133	-531	-3,362	-961	10,845
2031-2032	1,768	49	2,093	3,909	-1,701	-1,243	-530	-3,474	435	11,281
2032-2033	241	49	2,119	2,408	-1,698	-1,155	-526	-3,379	-971	10,310
2033-2034	219	49	2,136	2,403	-1,698	-1,110	-523	-3,331	-927	9,383
2034-2035	2,000	0	2,158	4,158	-1,698	-1,184	-521	-3,403	756	10,138
2035-2036	1,904	0	2,174	4,079	-1,701	-1,225	-520	-3,446	633	10,771
2036-2037	4,372	0	2,169	6,541	-1,698	-1,357	-516	-3,570	2,971	13,742
2037-2038	416	0	2,169	2,585	-1,698	-1,134	-514	-3,345	-761	12,981
2038-2039	272	0	2,135	2,407	-1,698	-1,049	-511	-3,259	-852	12,129
2039-2040	224	0	2,160	2,383	-1,701	-1,033	-510	-3,245	-862	11,268
2040-2041	195	0	2,183	2,378	-1,698	-1,037	-507	-3,241	-863	10,405
2041-2042	178	0	2,179	2,357	-1,698	-1,048	-504	-3,250	-893	9,512
2042-2043	164	0	2,180	2,344	-1,698	-1,049	-502	-3,249	-906	8,606
2043-2044	1,808	0	2,147	3,955	-1,701	-1,088	-501	-3,291	664	9,270
2044-2045	2,447	0	2,173	4,621	-1,698	-1,112	-498	-3,308	1,313	10,583
2045-2046	711	0	2,203	2,914	-1,698	-1,065	-496	-3,258	-344	10,239
2046-2047	4,455	0	2,206	6,661	-1,698	-1,345	-494	-3,536	3,125	13,364
2047-2048	273	0	2,215	2,488	-1,701	-1,120	-493	-3,314	-826	12,538
2048-2049	3,738	0	2,190	5,928	-1,698	-1,315	-490	-3,503	2,425	14,962
2049-2050	3,020	0	2,224	5,245	-1,698	-1,260	-488	-3,446	1,799	16,761
2050-2051	1,808	0	2,247	4,056	-1,698	-1,222	-486	-3,407	649	17,410
2051-2052	298	0	2,241	2,538	-1,701	-1,125	-486	-3,312	-774	16,636
2052-2053	223	0	2,239	2,461	-1,698	-1,092	-483	-3,273	-812	15,825
2053-2054	4,986	0	2,203	7,189	-1,698	-1,280	-481	-3,458	3,731	19,556
2054-2055	3,838	0	2,227	6,065	-1,698	-1,337	-479	-3,514	2,551	22,106
2055-2056	1,735	0	2,247	3,982	-1,701	-1,281	-479	-3,461	521	22,627
2056-2057	376	0	2,241	2,616	-1,698	-1,163	-476	-3,337	-720	21,907
2057-2058	278	0	2,239	2,517	-1,698	-1,126	-475	-3,298	-782	21,125
2058-2059	2,365	0	2,203	4,568	-1,698	-1,239	-473	-3,410	1,158	22,283
2059-2060	1,577	0	2,227	3,804	-1,701	-1,186	-473	-3,360	444	22,726

2060-2061	422	0	2,247	2,670	-1,698	-1,094	-470	-3,262	-592	22,134
2061-2062	263	0	2,241	2,503	-1,698	-1,060	-469	-3,227	-723	21,411
2062-2063	208	0	2,239	2,446	-1,698	-1,052	-467	-3,217	-771	20,640
2063-2064	1,705	0	2,203	3,908	-1,701	-1,168	-467	-3,337	571	21,211
2064-2065	174	0	2,227	2,400	-1,698	-1,102	-465	-3,265	-864	20,347
2065-2066	153	0	2,247	2,400	-1,698	-1,085	-463	-3,246	-846	19,502
2066-2067	3,570	0	2,241	5,810	-1,698	-1,242	-462	-3,401	2,409	21,911
2067-2068	592	0	2,239	2,831	-1,701	-1,161	-462	-3,324	-493	21,417
2068-2069	298	0	2,203	2,501	-1,698	-1,123	-460	-3,280	-779	20,638
2069-2070	213	0	2,213	2,426	-1,698	-1,109	-459	-3,265	-839	19,799
2070-2071	174	0	2,229	2,403	-1,698	-1,094	-457	-3,249	-846	18,953
2071-2072	153	0	2,222	2,375	-1,701	-1,085	-458	-3,244	-869	18,085
2072-2073	9,522	0	2,220	11,743	-1,698	-1,440	-456	-3,594	8,149	26,234
2073-2074	3,843	0	2,185	6,028	-1,698	-1,348	-455	-3,500	2,527	28,761
Average[4] **2009-2074**	1,560	20	2,240	3,820	-1,700	-1,170	-520	-3,390	430	
Min[4] **2009-2074**	150	0	2,040	2,340	-1,700	-1,440	-640	-3,600	-980	
Max[4] **2009-2074**	9,520	50	2,760	11,740	-1,690	-1,030	-450	-3,220	8,150	

Notes
1. Applied Water and Septic Return.
2. Pumping from Mayer et al., 2007.
3. Discharge at General Head Boundary located along bottom edge of model where Desert Hot Springs Subbasin flows into the Indio Subbasin.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AF = acre-feet
AFY = acre-feet per year
DHSSB = Desert Hot Spring Subbasin

Table B17

Simulated DHSSB Baseline with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)				Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Desert Crest WWTP	Return Flow[1]	Total Inflow	Pumping[2]	Inter-Subbasin with Mission Creek	Inter-Subbasin with Indio Hills East[3]	Total Outflow		
2008-2009	330	52	2,761	3,143	-1,691	-1,263	-644	-3,598	-455	0
2009-2010	282	52	2,554	2,887	-1,691	-1,249	-639	-3,578	-691	-691
2010-2011	3,228	50	2,385	5,662	-1,691	-1,241	-632	-3,564	2,098	1,407
2011-2012	478	45	2,393	2,915	-1,691	-1,136	-628	-3,456	-540	866
2012-2013	316	44	2,416	2,776	-1,691	-1,097	-620	-3,408	-632	234
2013-2014	257	43	2,383	2,684	-1,691	-1,102	-614	-3,407	-723	-489
2014-2015	227	44	2,171	2,442	-1,691	-1,104	-608	-3,403	-960	-1,449
2015-2016	205	40	2,178	2,424	-1,691	-1,114	-604	-3,408	-985	-2,434
2016-2017	3,013	48	2,350	5,410	-1,691	-1,128	-596	-3,415	1,995	-439
2017-2018	1,197	51	2,377	3,626	-1,691	-1,135	-590	-3,416	209	-230
2018-2019	4,428	48	2,201	6,677	-1,691	-1,162	-585	-3,437	3,240	3,010
2019-2020	4,324	53	2,320	6,697	-1,691	-1,152	-581	-3,424	3,273	6,283
2020-2021	920	49	2,563	3,532	-1,691	-1,170	-574	-3,435	98	6,380
2021-2022	1,352	49	2,462	3,864	-1,691	-1,181	-569	-3,440	424	6,804
2022-2023	3,859	50	2,226	6,134	-1,691	-1,201	-564	-3,456	2,678	9,482
2023-2024	2,451	48	2,244	4,743	-1,691	-1,214	-561	-3,465	1,278	10,760
2024-2025	610	49	2,036	2,695	-1,698	-1,211	-550	-3,458	-763	9,997
2025-2026	401	49	2,244	2,694	-1,698	-1,183	-547	-3,427	-733	9,264
2026-2027	330	49	2,168	2,546	-1,698	-1,153	-544	-3,395	-848	8,415
2027-2028	288	49	2,178	2,515	-1,701	-1,134	-542	-3,377	-863	7,553
2028-2029	10,844	49	2,120	13,013	-1,698	-1,719	-537	-3,955	9,058	16,611
2029-2030	1,097	49	2,147	3,293	-1,698	-1,390	-534	-3,622	-330	16,281
2030-2031	545	49	2,083	2,677	-1,698	-1,242	-532	-3,471	-795	15,486
2031-2032	390	49	2,093	2,531	-1,701	-1,198	-530	-3,430	-899	14,587
2032-2033	1,395	49	2,119	3,563	-1,698	-1,241	-526	-3,465	98	14,685
2033-2034	1,622	49	2,136	3,806	-1,698	-1,264	-523	-3,485	321	15,006
2034-2035	255	0	2,158	2,413	-1,698	-1,166	-521	-3,384	-971	14,035
2035-2036	226	0	2,174	2,401	-1,701	-1,122	-519	-3,343	-942	13,093
2036-2037	207	0	2,169	2,376	-1,698	-1,081	-515	-3,294	-918	12,175
2037-2038	192	0	2,169	2,361	-1,698	-1,057	-513	-3,267	-907	11,268
2038-2039	181	0	2,135	2,316	-1,698	-1,045	-510	-3,253	-937	10,331
2039-2040	169	0	2,160	2,329	-1,701	-1,042	-509	-3,253	-924	9,408
2040-2041	159	0	2,183	2,342	-1,698	-1,039	-505	-3,242	-900	8,508
2041-2042	152	0	2,179	2,331	-1,698	-1,037	-503	-3,238	-907	7,601
2042-2043	145	0	2,180	2,324	-1,698	-1,025	-501	-3,224	-899	6,701
2043-2044	140	0	2,147	2,287	-1,701	-1,018	-500	-3,219	-932	5,770
2044-2045	133	0	2,173	2,306	-1,698	-1,018	-496	-3,212	-906	4,863
2045-2046	127	0	2,203	2,330	-1,698	-1,014	-494	-3,206	-877	3,987
2046-2047	2,155	0	2,206	4,361	-1,698	-1,104	-492	-3,294	1,067	5,054
2047-2048	1,363	0	2,215	3,578	-1,701	-1,114	-491	-3,307	271	5,325
2048-2049	186	0	2,190	2,376	-1,698	-1,034	-488	-3,220	-844	4,481
2049-2050	151	0	2,224	2,375	-1,698	-1,012	-486	-3,196	-821	3,660
2050-2051	135	0	2,247	2,382	-1,698	-1,013	-484	-3,195	-813	2,846
2051-2052	125	0	2,241	2,366	-1,701	-1,019	-484	-3,204	-838	2,008
2052-2053	117	0	2,239	2,355	-1,698	-1,017	-481	-3,196	-840	1,168
2053-2054	112	0	2,203	2,315	-1,698	-1,010	-479	-3,187	-872	296
2054-2055	1,191	0	2,227	3,418	-1,698	-1,090	-478	-3,265	153	449
2055-2056	112	0	2,247	2,359	-1,701	-1,055	-478	-3,234	-875	-426
2056-2057	103	0	2,241	2,344	-1,698	-1,039	-475	-3,212	-868	-1,294
2057-2058	99	0	2,239	2,338	-1,698	-1,039	-474	-3,210	-872	-2,166
2058-2059	3,003	0	2,203	5,205	-1,698	-1,256	-472	-3,426	1,779	-387
2059-2060	2,241	0	2,227	4,468	-1,701	-1,247	-472	-3,420	1,048	660

2060-2061	272	0	2,247	2,520	-1,698	-1,070	-470	-3,238	-718	-58
2061-2062	163	0	2,241	2,403	-1,698	-1,022	-469	-3,188	-785	-843
2062-2063	128	0	2,239	2,367	-1,698	-1,013	-468	-3,179	-812	-1,655
2063-2064	113	0	2,203	2,315	-1,701	-1,014	-468	-3,183	-868	-2,523
2064-2065	100	0	2,227	2,327	-1,698	-1,014	-465	-3,177	-851	-3,373
2065-2066	93	0	2,247	2,340	-1,698	-1,013	-464	-3,175	-835	-4,208
2066-2067	88	0	2,241	2,328	-1,698	-999	-463	-3,160	-832	-5,040
2067-2068	84	0	2,239	2,323	-1,701	-989	-464	-3,154	-831	-5,871
2068-2069	82	0	2,203	2,285	-1,698	-982	-461	-3,141	-855	-6,726
2069-2070	78	0	2,213	2,291	-1,698	-988	-460	-3,146	-855	-7,581
2070-2071	5,159	0	2,229	7,388	-1,698	-1,329	-459	-3,486	3,902	-3,680
2071-2072	317	0	2,222	2,540	-1,701	-1,124	-460	-3,285	-745	-4,424
2072-2073	166	0	2,220	2,386	-1,698	-1,031	-457	-3,186	-800	-5,224
2073-2074	130	0	2,185	2,314	-1,698	-997	-457	-3,151	-836	-6,061
Average[4] **2009-2074**	980	20	2,240	3,230	-1,700	-1,120	-520	-3,330	-100	
Min[4] **2009-2074**	80	0	2,040	2,290	-1,700	-1,720	-640	-3,950	-980	
Max[4] **2009-2074**	10,840	50	2,760	13,010	-1,690	-980	-460	-3,140	9,060	

Notes
1. Applied Water and Septic Return.
2. Pumping from Mayer et al., 2007.
3. Discharge at General Head Boundary located along bottom edge of model where Desert Hot Springs Subbasin flows into the Indio Subbasin.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AF = acre-feet
AFY = acre-feet per year
DHSSB = Desert Hot Spring Subbasin

Table B18

Simulated DHSSB Near-Term Projects with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)				Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Desert Crest WWTP	Return Flow[1]	Total Inflow	Pumping[2]	Inter-Subbasin with Mission Creek	Inter-Subbasin with Indio Hills East[3]	Total Outflow		
2008-2009	330	52	2,761	3,143	-1,691	-1,263	-644	-3,598	-455	0
2009-2010	282	52	2,554	2,887	-1,691	-1,249	-639	-3,578	-691	-691
2010-2011	3,228	50	2,385	5,662	-1,691	-1,241	-632	-3,564	2,098	1,407
2011-2012	478	45	2,393	2,915	-1,691	-1,136	-628	-3,456	-540	866
2012-2013	316	44	2,416	2,776	-1,691	-1,097	-620	-3,408	-632	234
2013-2014	257	43	2,383	2,684	-1,691	-1,102	-614	-3,407	-723	-489
2014-2015	227	44	2,171	2,442	-1,691	-1,104	-608	-3,403	-960	-1,449
2015-2016	205	40	2,178	2,424	-1,691	-1,114	-604	-3,408	-985	-2,434
2016-2017	3,013	48	2,350	5,410	-1,691	-1,128	-596	-3,415	1,995	-439
2017-2018	1,197	51	2,377	3,626	-1,691	-1,135	-590	-3,416	209	-230
2018-2019	4,428	48	2,201	6,677	-1,691	-1,162	-585	-3,437	3,240	3,010
2019-2020	4,324	53	2,320	6,697	-1,691	-1,152	-581	-3,424	3,273	6,283
2020-2021	920	49	2,563	3,532	-1,691	-1,170	-574	-3,435	98	6,380
2021-2022	1,352	49	2,462	3,864	-1,691	-1,181	-569	-3,440	424	6,804
2022-2023	3,859	50	2,226	6,134	-1,691	-1,201	-564	-3,456	2,678	9,482
2023-2024	2,451	48	2,244	4,743	-1,691	-1,214	-561	-3,465	1,278	10,760
2024-2025	4,759	49	2,036	6,844	-1,698	-1,353	-550	-3,600	3,244	14,004
2025-2026	1,026	49	2,244	3,319	-1,698	-1,244	-547	-3,488	-169	13,835
2026-2027	1,808	49	2,168	4,024	-1,698	-1,278	-544	-3,520	504	14,340
2027-2028	429	49	2,178	2,656	-1,701	-1,196	-542	-3,439	-784	13,556
2028-2029	350	49	2,120	2,518	-1,698	-1,157	-537	-3,392	-873	12,683
2029-2030	302	49	2,147	2,498	-1,698	-1,142	-534	-3,374	-877	11,806
2030-2031	270	49	2,083	2,402	-1,698	-1,133	-531	-3,362	-961	10,845
2031-2032	1,768	49	2,093	3,909	-1,701	-1,243	-530	-3,474	435	11,281
2032-2033	241	49	2,119	2,408	-1,698	-1,154	-526	-3,378	-970	10,311
2033-2034	219	49	2,136	2,403	-1,698	-1,106	-523	-3,327	-924	9,387
2034-2035	2,000	0	2,158	4,158	-1,698	-1,178	-521	-3,397	762	10,149
2035-2036	1,904	0	2,174	4,079	-1,701	-1,216	-519	-3,437	642	10,790
2036-2037	4,372	0	2,169	6,541	-1,698	-1,345	-516	-3,558	2,983	13,774
2037-2038	416	0	2,169	2,584	-1,698	-1,119	-513	-3,330	-746	13,028
2038-2039	272	0	2,135	2,406	-1,698	-1,033	-511	-3,241	-835	12,193
2039-2040	223	0	2,160	2,383	-1,701	-1,014	-509	-3,225	-842	11,352
2040-2041	195	0	2,183	2,378	-1,698	-1,015	-505	-3,218	-840	10,511
2041-2042	177	0	2,179	2,356	-1,698	-1,024	-503	-3,224	-868	9,643
2042-2043	164	0	2,180	2,343	-1,698	-1,023	-500	-3,221	-878	8,765
2043-2044	1,808	0	2,147	3,954	-1,701	-1,060	-499	-3,261	694	9,459
2044-2045	2,447	0	2,173	4,620	-1,698	-1,082	-496	-3,275	1,345	10,803
2045-2046	711	0	2,203	2,914	-1,698	-1,033	-493	-3,224	-310	10,494
2046-2047	4,455	0	2,206	6,661	-1,698	-1,310	-491	-3,498	3,163	13,656
2047-2048	273	0	2,215	2,488	-1,701	-1,083	-490	-3,275	-787	12,870
2048-2049	3,737	0	2,190	5,927	-1,698	-1,276	-487	-3,461	2,466	15,336
2049-2050	3,020	0	2,224	5,244	-1,698	-1,220	-485	-3,402	1,842	17,178
2050-2051	1,808	0	2,247	4,055	-1,698	-1,181	-483	-3,361	694	17,873
2051-2052	297	0	2,241	2,538	-1,701	-1,082	-482	-3,265	-727	17,145
2052-2053	222	0	2,239	2,461	-1,698	-1,048	-478	-3,224	-763	16,382
2053-2054	4,986	0	2,203	7,189	-1,698	-1,233	-476	-3,408	3,781	20,163
2054-2055	3,838	0	2,227	6,064	-1,698	-1,290	-474	-3,462	2,603	22,766
2055-2056	1,734	0	2,247	3,982	-1,701	-1,232	-474	-3,407	575	23,341
2056-2057	375	0	2,241	2,616	-1,698	-1,113	-471	-3,281	-665	22,676
2057-2058	278	0	2,239	2,516	-1,698	-1,075	-469	-3,241	-725	21,951
2058-2059	2,365	0	2,203	4,568	-1,698	-1,186	-467	-3,351	1,217	23,168
2059-2060	1,576	0	2,227	3,803	-1,701	-1,131	-466	-3,299	504	23,672

2060-2061	422	0	2,247	2,669	-1,698	-1,038	-463	-3,199	-530	23,142
2061-2062	262	0	2,241	2,503	-1,698	-1,003	-462	-3,163	-660	22,482
2062-2063	207	0	2,239	2,446	-1,698	-994	-460	-3,151	-706	21,776
2063-2064	1,704	0	2,203	3,907	-1,701	-1,108	-460	-3,269	638	22,414
2064-2065	173	0	2,227	2,400	-1,698	-1,042	-457	-3,196	-796	21,618
2065-2066	153	0	2,247	2,400	-1,698	-1,024	-455	-3,176	-777	20,842
2066-2067	3,569	0	2,241	5,810	-1,698	-1,178	-453	-3,329	2,481	23,322
2067-2068	592	0	2,239	2,830	-1,701	-1,097	-453	-3,251	-421	22,901
2068-2069	298	0	2,203	2,501	-1,698	-1,058	-450	-3,206	-706	22,196
2069-2070	212	0	2,213	2,425	-1,698	-1,043	-449	-3,189	-764	21,431
2070-2071	173	0	2,229	2,402	-1,698	-1,026	-448	-3,172	-770	20,662
2071-2072	152	0	2,222	2,375	-1,701	-1,017	-448	-3,166	-791	19,871
2072-2073	9,522	0	2,220	11,743	-1,698	-1,369	-445	-3,512	8,231	28,102
2073-2074	3,842	0	2,185	6,027	-1,698	-1,276	-444	-3,418	2,609	30,711
Average[4] **2009-2074**	1,560	20	2,240	3,820	-1,700	-1,140	-520	-3,360	460	
Min[4] **2009-2074**	150	0	2,040	2,340	-1,700	-1,370	-640	-3,600	-980	
Max[4] **2009-2074**	9,520	50	2,760	11,740	-1,690	-990	-440	-3,150	8,230	

Notes
1. Applied Water and Septic Return.
2. Pumping from Mayer et al., 2007.
3. Discharge at General Head Boundary located along bottom edge of model where Desert Hot Springs Subbasin flows into the Indio Subbasin.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AF = acre-feet
AFY = acre-feet per year
DHSSB = Desert Hot Spring Subbasin

Table B19

Simulated DHSSB Near-Term Projects with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)				Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Desert Crest WWTP	Return Flow[1]	Total Inflow	Pumping[2]	Inter-Subbasin with Mission Creek	Inter-Subbasin with Indio Hills East[3]	Total Outflow		
2008-2009	330	52	2,761	3,143	-1,691	-1,263	-644	-3,598	-455	0
2009-2010	282	52	2,554	2,887	-1,691	-1,249	-639	-3,578	-691	-691
2010-2011	3,228	50	2,385	5,662	-1,691	-1,241	-632	-3,564	2,098	1,407
2011-2012	478	45	2,393	2,915	-1,691	-1,136	-628	-3,456	-540	866
2012-2013	316	44	2,416	2,776	-1,691	-1,097	-620	-3,408	-632	234
2013-2014	257	43	2,383	2,684	-1,691	-1,102	-614	-3,407	-723	-489
2014-2015	227	44	2,171	2,442	-1,691	-1,104	-608	-3,403	-960	-1,449
2015-2016	205	40	2,178	2,424	-1,691	-1,114	-604	-3,408	-985	-2,434
2016-2017	3,013	48	2,350	5,410	-1,691	-1,128	-596	-3,415	1,995	-439
2017-2018	1,197	51	2,377	3,626	-1,691	-1,135	-590	-3,416	209	-230
2018-2019	4,428	48	2,201	6,677	-1,691	-1,162	-585	-3,437	3,240	3,010
2019-2020	4,324	53	2,320	6,697	-1,691	-1,152	-581	-3,424	3,273	6,283
2020-2021	920	49	2,563	3,532	-1,691	-1,170	-574	-3,435	98	6,380
2021-2022	1,352	49	2,462	3,864	-1,691	-1,181	-569	-3,440	424	6,804
2022-2023	3,859	50	2,226	6,134	-1,691	-1,201	-564	-3,456	2,678	9,482
2023-2024	2,451	48	2,244	4,743	-1,691	-1,214	-561	-3,465	1,278	10,760
2024-2025	610	49	2,036	2,695	-1,698	-1,211	-550	-3,458	-763	9,997
2025-2026	401	49	2,244	2,694	-1,698	-1,183	-547	-3,427	-733	9,264
2026-2027	330	49	2,168	2,546	-1,698	-1,153	-544	-3,395	-848	8,415
2027-2028	288	49	2,178	2,515	-1,701	-1,134	-542	-3,377	-863	7,553
2028-2029	10,844	49	2,120	13,013	-1,698	-1,719	-537	-3,955	9,058	16,611
2029-2030	1,097	49	2,147	3,293	-1,698	-1,390	-534	-3,622	-330	16,281
2030-2031	545	49	2,083	2,677	-1,698	-1,242	-532	-3,471	-795	15,486
2031-2032	390	49	2,093	2,531	-1,701	-1,199	-530	-3,431	-900	14,587
2032-2033	1,395	49	2,119	3,563	-1,698	-1,242	-526	-3,466	97	14,683
2033-2034	1,622	49	2,136	3,806	-1,698	-1,265	-523	-3,486	320	15,003
2034-2035	255	0	2,158	2,413	-1,698	-1,167	-521	-3,386	-973	14,030
2035-2036	226	0	2,174	2,401	-1,701	-1,124	-519	-3,345	-944	13,086
2036-2037	207	0	2,169	2,376	-1,698	-1,083	-516	-3,296	-920	12,166
2037-2038	192	0	2,169	2,361	-1,698	-1,059	-513	-3,270	-909	11,257
2038-2039	181	0	2,135	2,316	-1,698	-1,048	-511	-3,256	-940	10,317
2039-2040	169	0	2,160	2,329	-1,701	-1,045	-510	-3,256	-927	9,389
2040-2041	159	0	2,183	2,342	-1,698	-1,043	-506	-3,246	-904	8,486
2041-2042	152	0	2,179	2,331	-1,698	-1,041	-503	-3,242	-911	7,575
2042-2043	145	0	2,180	2,324	-1,698	-1,029	-501	-3,228	-904	6,671
2043-2044	140	0	2,147	2,287	-1,701	-1,022	-500	-3,224	-937	5,734
2044-2045	133	0	2,173	2,306	-1,698	-1,023	-497	-3,218	-912	4,822
2045-2046	127	0	2,203	2,330	-1,698	-1,020	-495	-3,212	-882	3,940
2046-2047	2,155	0	2,206	4,361	-1,698	-1,110	-493	-3,300	1,061	5,002
2047-2048	1,363	0	2,215	3,578	-1,701	-1,120	-492	-3,313	265	5,266
2048-2049	186	0	2,190	2,376	-1,698	-1,040	-489	-3,227	-851	4,415
2049-2050	151	0	2,224	2,375	-1,698	-1,018	-487	-3,203	-828	3,588
2050-2051	135	0	2,247	2,382	-1,698	-1,020	-485	-3,202	-820	2,768
2051-2052	125	0	2,241	2,366	-1,701	-1,025	-485	-3,211	-846	1,922
2052-2053	117	0	2,239	2,356	-1,698	-1,024	-482	-3,203	-847	1,075
2053-2054	112	0	2,203	2,315	-1,698	-1,017	-480	-3,195	-879	195
2054-2055	1,191	0	2,227	3,418	-1,698	-1,097	-478	-3,273	145	340
2055-2056	112	0	2,247	2,359	-1,701	-1,062	-478	-3,242	-883	-542
2056-2057	103	0	2,241	2,344	-1,698	-1,047	-476	-3,220	-876	-1,419
2057-2058	99	0	2,239	2,338	-1,698	-1,046	-474	-3,219	-881	-2,299
2058-2059	3,003	0	2,203	5,206	-1,698	-1,264	-473	-3,435	1,771	-529
2059-2060	2,241	0	2,227	4,468	-1,701	-1,255	-473	-3,429	1,039	510

2060-2061	273	0	2,247	2,520	-1,698	-1,078	-471	-3,247	-727	-217
2061-2062	163	0	2,241	2,404	-1,698	-1,030	-470	-3,197	-794	-1,011
2062-2063	128	0	2,239	2,367	-1,698	-1,022	-469	-3,188	-821	-1,832
2063-2064	113	0	2,203	2,316	-1,701	-1,022	-469	-3,192	-877	-2,709
2064-2065	100	0	2,227	2,327	-1,698	-1,023	-466	-3,187	-860	-3,568
2065-2066	93	0	2,247	2,340	-1,698	-1,021	-465	-3,184	-844	-4,413
2066-2067	88	0	2,241	2,328	-1,698	-1,007	-464	-3,169	-841	-5,254
2067-2068	84	0	2,239	2,323	-1,701	-997	-465	-3,163	-841	-6,094
2068-2069	82	0	2,203	2,285	-1,698	-990	-462	-3,150	-865	-6,959
2069-2070	78	0	2,213	2,291	-1,698	-997	-461	-3,156	-865	-7,824
2070-2071	5,159	0	2,229	7,388	-1,698	-1,338	-460	-3,496	3,892	-3,932
2071-2072	318	0	2,222	2,540	-1,701	-1,133	-461	-3,295	-755	-4,687
2072-2073	166	0	2,220	2,386	-1,698	-1,040	-459	-3,196	-810	-5,497
2073-2074	130	0	2,185	2,315	-1,698	-1,005	-458	-3,161	-846	-6,343
Average[4] **2009-2074**	980	20	2,240	3,230	-1,700	-1,120	-520	-3,340	-100	
Min[4] **2009-2074**	80	0	2,040	2,290	-1,700	-1,720	-640	-3,950	-980	
Max[4] **2009-2074**	10,840	50	2,760	13,010	-1,690	-990	-460	-3,150	9,060	

Notes
1. Applied Water and Septic Return.
2. Pumping from Mayer et al., 2007.
3. Discharge at General Head Boundary located along bottom edge of model where Desert Hot Springs Subbasin flows into the Indio Subbasin.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AF = acre-feet
AFY = acre-feet per year
DHSSB = Desert Hot Spring Subbasin

Table B20

Simulated DHSSB Future Projects with CM5 RCP 4.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

Water Year[5]	Simulated Inflows (AFY)				Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Desert Crest WWTP	Return Flow[1]	Total Inflow	Pumping[2]	Inter-Subbasin with Mission Creek	Inter-Subbasin with Indio Hills East[3]	Total Outflow		
2008-2009	330	52	2,761	3,143	-1,691	-1,263	-644	-3,598	-455	0
2009-2010	282	52	2,554	2,887	-1,691	-1,249	-639	-3,578	-691	-691
2010-2011	3,228	50	2,385	5,662	-1,691	-1,241	-632	-3,564	2,098	1,407
2011-2012	478	45	2,393	2,915	-1,691	-1,136	-628	-3,456	-540	866
2012-2013	316	44	2,416	2,776	-1,691	-1,097	-620	-3,408	-632	234
2013-2014	257	43	2,383	2,684	-1,691	-1,102	-614	-3,407	-723	-489
2014-2015	227	44	2,171	2,442	-1,691	-1,104	-608	-3,403	-960	-1,449
2015-2016	205	40	2,178	2,424	-1,691	-1,114	-604	-3,408	-985	-2,434
2016-2017	3,013	48	2,350	5,410	-1,691	-1,128	-596	-3,415	1,995	-439
2017-2018	1,197	51	2,377	3,626	-1,691	-1,135	-590	-3,416	209	-230
2018-2019	4,428	48	2,201	6,677	-1,691	-1,162	-585	-3,437	3,240	3,010
2019-2020	4,324	53	2,320	6,697	-1,691	-1,152	-581	-3,424	3,273	6,283
2020-2021	920	49	2,563	3,532	-1,691	-1,170	-574	-3,435	98	6,380
2021-2022	1,352	49	2,462	3,864	-1,691	-1,181	-569	-3,440	424	6,804
2022-2023	3,859	50	2,226	6,134	-1,691	-1,201	-564	-3,456	2,678	9,482
2023-2024	2,451	48	2,244	4,743	-1,691	-1,214	-561	-3,465	1,278	10,760
2024-2025	4,759	49	2,036	6,844	-1,698	-1,353	-550	-3,600	3,244	14,004
2025-2026	1,026	49	2,244	3,319	-1,698	-1,244	-547	-3,488	-169	13,835
2026-2027	1,808	49	2,168	4,024	-1,698	-1,278	-544	-3,520	504	14,340
2027-2028	429	49	2,178	2,656	-1,701	-1,196	-542	-3,439	-784	13,556
2028-2029	350	49	2,120	2,518	-1,698	-1,157	-537	-3,392	-873	12,683
2029-2030	302	49	2,147	2,498	-1,698	-1,142	-534	-3,374	-877	11,806
2030-2031	270	49	2,083	2,402	-1,698	-1,133	-531	-3,362	-961	10,845
2031-2032	1,768	49	2,093	3,909	-1,701	-1,243	-530	-3,474	435	11,281
2032-2033	241	49	2,119	2,408	-1,698	-1,154	-526	-3,378	-970	10,311
2033-2034	219	49	2,136	2,403	-1,698	-1,106	-523	-3,327	-924	9,387
2034-2035	2,000	0	2,158	4,158	-1,698	-1,177	-521	-3,395	763	10,150
2035-2036	1,904	0	2,174	4,078	-1,701	-1,212	-519	-3,433	646	10,795
2036-2037	4,372	0	2,169	6,541	-1,698	-1,336	-516	-3,550	2,991	13,787
2037-2038	416	0	2,169	2,584	-1,698	-1,109	-513	-3,320	-735	13,051
2038-2039	272	0	2,135	2,406	-1,698	-1,020	-511	-3,228	-822	12,230
2039-2040	223	0	2,160	2,383	-1,701	-1,001	-509	-3,211	-828	11,401
2040-2041	195	0	2,183	2,378	-1,698	-1,001	-505	-3,204	-826	10,575
2041-2042	177	0	2,179	2,356	-1,698	-1,007	-503	-3,208	-852	9,723
2042-2043	163	0	2,180	2,343	-1,698	-1,005	-500	-3,203	-860	8,863
2043-2044	1,807	0	2,147	3,954	-1,701	-1,039	-499	-3,240	714	9,578
2044-2045	2,447	0	2,173	4,620	-1,698	-1,063	-495	-3,256	1,364	10,942
2045-2046	711	0	2,203	2,914	-1,698	-1,015	-493	-3,205	-292	10,650
2046-2047	4,454	0	2,206	6,661	-1,698	-1,281	-491	-3,469	3,191	13,841
2047-2048	272	0	2,215	2,487	-1,701	-1,044	-490	-3,235	-748	13,094
2048-2049	3,737	0	2,190	5,927	-1,698	-1,229	-486	-3,413	2,514	15,607
2049-2050	3,019	0	2,224	5,243	-1,698	-1,166	-484	-3,347	1,896	17,504
2050-2051	1,807	0	2,247	4,055	-1,698	-1,122	-482	-3,301	753	18,257
2051-2052	297	0	2,241	2,537	-1,701	-1,020	-481	-3,202	-665	17,592
2052-2053	221	0	2,239	2,460	-1,698	-985	-477	-3,160	-700	16,892
2053-2054	4,985	0	2,203	7,188	-1,698	-1,168	-475	-3,340	3,848	20,740
2054-2055	3,837	0	2,227	6,064	-1,698	-1,223	-473	-3,394	2,670	23,410
2055-2056	1,734	0	2,247	3,981	-1,701	-1,167	-472	-3,340	641	24,051
2056-2057	375	0	2,241	2,615	-1,698	-1,046	-469	-3,212	-597	23,454
2057-2058	277	0	2,239	2,515	-1,698	-1,006	-467	-3,170	-655	22,799
2058-2059	2,364	0	2,203	4,567	-1,698	-1,111	-465	-3,274	1,293	24,092
2059-2060	1,575	0	2,227	3,802	-1,701	-1,050	-464	-3,216	587	24,678

2060-2061	421	0	2,247	2,668	-1,698	-953	-461	-3,112	-444	24,235
2061-2062	261	0	2,241	2,502	-1,698	-917	-459	-3,074	-572	23,662
2062-2063	206	0	2,239	2,445	-1,698	-908	-457	-3,063	-618	23,044
2063-2064	1,704	0	2,203	3,907	-1,701	-1,020	-456	-3,178	729	23,773
2064-2065	172	0	2,227	2,399	-1,698	-956	-453	-3,107	-708	23,065
2065-2066	152	0	2,247	2,399	-1,698	-942	-451	-3,091	-692	22,373
2066-2067	3,569	0	2,241	5,809	-1,698	-1,098	-449	-3,245	2,564	24,938
2067-2068	591	0	2,239	2,829	-1,701	-1,017	-449	-3,167	-338	24,600
2068-2069	297	0	2,203	2,500	-1,698	-978	-446	-3,121	-621	23,979
2069-2070	211	0	2,213	2,424	-1,698	-960	-444	-3,102	-678	23,301
2070-2071	172	0	2,229	2,401	-1,698	-940	-443	-3,081	-679	22,621
2071-2072	151	0	2,222	2,374	-1,701	-927	-442	-3,071	-697	21,924
2072-2073	9,523	0	2,220	11,743	-1,698	-1,273	-440	-3,410	8,333	30,257
2073-2074	3,840	0	2,185	6,025	-1,698	-1,174	-438	-3,310	2,715	32,972
Average[4] **2009-2074**	1,560	20	2,240	3,820	-1,700	-1,110	-520	-3,320	490	
Min[4] **2009-2074**	150	0	2,040	2,340	-1,700	-1,350	-640	-3,600	-980	
Max[4] **2009-2074**	9,520	50	2,760	11,740	-1,690	-910	-440	-3,060	8,330	

Notes
1. Applied Water and Septic Return.
2. Pumping from Mayer et al., 2007.
3. Discharge at General Head Boundary located along bottom edge of model where Desert Hot Springs Subbasin flows into the Indio Subbasin.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

Abbreviations
AF = acre-feet
AFY = acre-feet per year
DHSSB = Desert Hot Spring Subbasin

Table B21

Simulated DHSSB Future Projects with MIROC5 RCP 8.5 Climate Change Scenario Water Balance 2009 - 2074

Mission Creek Subbasin Alternative Update

Coachella Valley, California

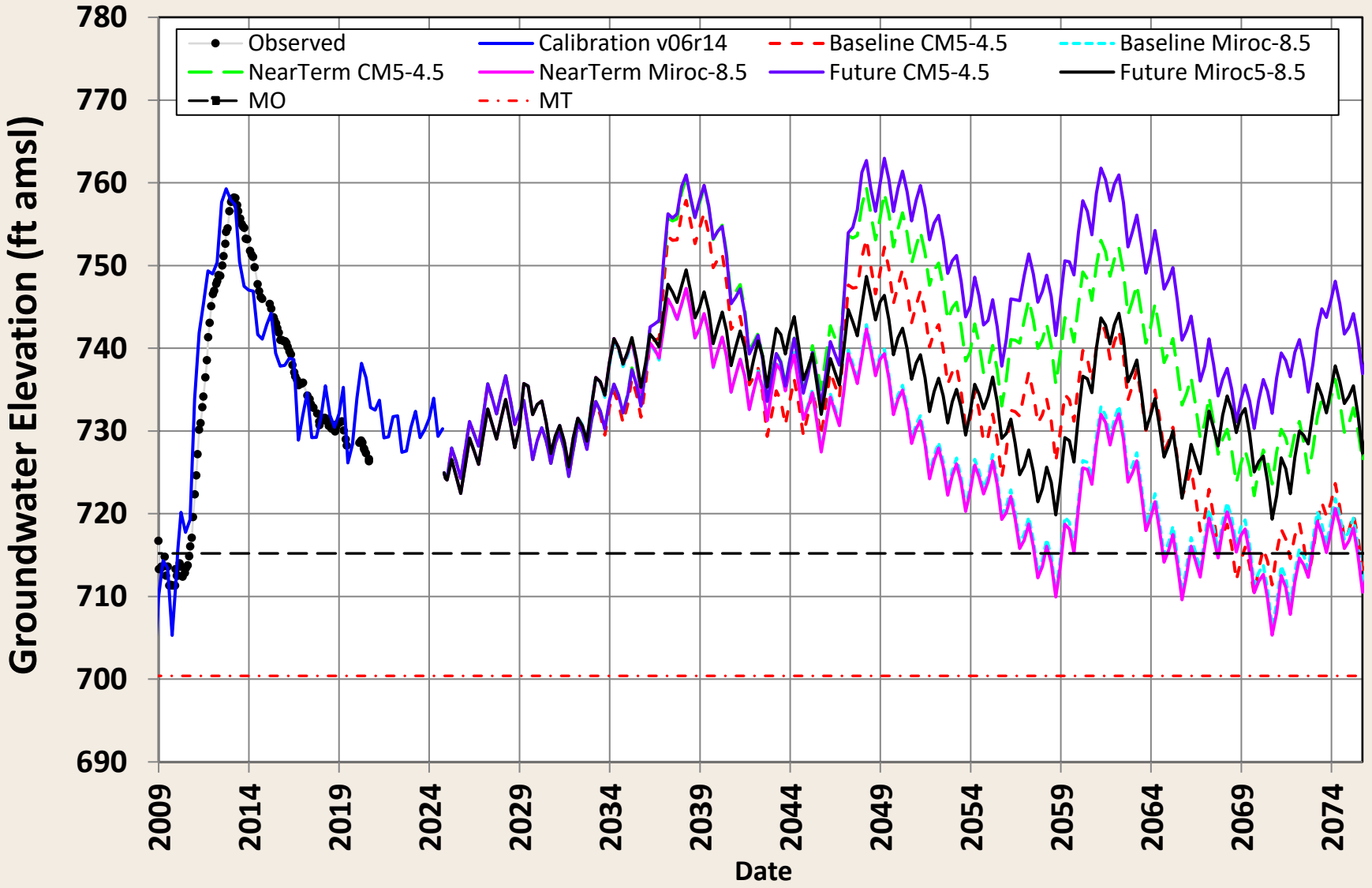
Water Year[5]	Simulated Inflows (AFY)				Simulated Outflows (AFY)				Change in Storage (AFY)	Cumulative Change in Storage (AF)
	Natural Recharge	Desert Crest WWTP	Return Flow[1]	Total Inflow	Pumping[2]	Inter-Subbasin with Mission Creek	Inter-Subbasin with Indio Hills East[3]	Total Outflow		
2008-2009	330	52	2,761	3,143	-1,691	-1,263	-644	-3,598	-455	0
2009-2010	282	52	2,554	2,887	-1,691	-1,249	-639	-3,578	-691	-691
2010-2011	3,228	50	2,385	5,662	-1,691	-1,241	-632	-3,564	2,098	1,407
2011-2012	478	45	2,393	2,915	-1,691	-1,136	-628	-3,456	-540	866
2012-2013	316	44	2,416	2,776	-1,691	-1,097	-620	-3,408	-632	234
2013-2014	257	43	2,383	2,684	-1,691	-1,102	-614	-3,407	-723	-489
2014-2015	227	44	2,171	2,442	-1,691	-1,104	-608	-3,403	-960	-1,449
2015-2016	205	40	2,178	2,424	-1,691	-1,114	-604	-3,408	-985	-2,434
2016-2017	3,013	48	2,350	5,410	-1,691	-1,128	-596	-3,415	1,995	-439
2017-2018	1,197	51	2,377	3,626	-1,691	-1,135	-590	-3,416	209	-230
2018-2019	4,428	48	2,201	6,677	-1,691	-1,162	-585	-3,437	3,240	3,010
2019-2020	4,324	53	2,320	6,697	-1,691	-1,152	-581	-3,424	3,273	6,283
2020-2021	920	49	2,563	3,532	-1,691	-1,170	-574	-3,435	98	6,380
2021-2022	1,352	49	2,462	3,864	-1,691	-1,181	-569	-3,440	424	6,804
2022-2023	3,859	50	2,226	6,134	-1,691	-1,201	-564	-3,456	2,678	9,482
2023-2024	2,451	48	2,244	4,743	-1,691	-1,214	-561	-3,465	1,278	10,760
2024-2025	610	49	2,036	2,695	-1,698	-1,211	-550	-3,458	-763	9,997
2025-2026	401	49	2,244	2,694	-1,698	-1,183	-547	-3,427	-733	9,264
2026-2027	330	49	2,168	2,546	-1,698	-1,153	-544	-3,395	-848	8,415
2027-2028	288	49	2,178	2,515	-1,701	-1,134	-542	-3,377	-863	7,553
2028-2029	10,844	49	2,120	13,013	-1,698	-1,719	-537	-3,955	9,058	16,611
2029-2030	1,097	49	2,147	3,293	-1,698	-1,390	-534	-3,622	-330	16,281
2030-2031	545	49	2,083	2,677	-1,698	-1,242	-532	-3,471	-795	15,486
2031-2032	390	49	2,093	2,531	-1,701	-1,199	-530	-3,431	-900	14,587
2032-2033	1,395	49	2,119	3,563	-1,698	-1,242	-526	-3,466	97	14,683
2033-2034	1,622	49	2,136	3,806	-1,698	-1,265	-523	-3,486	320	15,003
2034-2035	255	0	2,158	2,413	-1,698	-1,166	-521	-3,385	-972	14,031
2035-2036	226	0	2,174	2,401	-1,701	-1,121	-519	-3,342	-941	13,091
2036-2037	207	0	2,169	2,376	-1,698	-1,076	-516	-3,290	-913	12,177
2037-2038	192	0	2,169	2,360	-1,698	-1,050	-513	-3,261	-900	11,277
2038-2039	181	0	2,135	2,316	-1,698	-1,036	-511	-3,245	-929	10,348
2039-2040	169	0	2,160	2,329	-1,701	-1,031	-509	-3,242	-913	9,434
2040-2041	159	0	2,183	2,342	-1,698	-1,027	-506	-3,230	-888	8,546
2041-2042	152	0	2,179	2,331	-1,698	-1,023	-503	-3,224	-893	7,653
2042-2043	144	0	2,180	2,324	-1,698	-1,009	-501	-3,208	-884	6,770
2043-2044	140	0	2,147	2,287	-1,701	-1,000	-500	-3,201	-914	5,855
2044-2045	132	0	2,173	2,306	-1,698	-1,000	-496	-3,194	-888	4,967
2045-2046	127	0	2,203	2,329	-1,698	-996	-494	-3,188	-858	4,109
2046-2047	2,155	0	2,206	4,361	-1,698	-1,083	-492	-3,273	1,088	5,197
2047-2048	1,363	0	2,215	3,578	-1,701	-1,089	-491	-3,282	296	5,493
2048-2049	186	0	2,190	2,376	-1,698	-1,007	-488	-3,192	-817	4,677
2049-2050	151	0	2,224	2,375	-1,698	-982	-486	-3,165	-791	3,886
2050-2051	134	0	2,247	2,382	-1,698	-981	-484	-3,163	-781	3,105
2051-2052	125	0	2,241	2,365	-1,701	-984	-483	-3,169	-803	2,302
2052-2053	116	0	2,239	2,355	-1,698	-980	-480	-3,158	-803	1,499
2053-2054	112	0	2,203	2,315	-1,698	-970	-478	-3,146	-831	668
2054-2055	1,191	0	2,227	3,418	-1,698	-1,047	-477	-3,222	196	864
2055-2056	111	0	2,247	2,359	-1,701	-1,014	-476	-3,192	-833	31
2056-2057	103	0	2,241	2,343	-1,698	-1,000	-474	-3,171	-828	-797
2057-2058	99	0	2,239	2,337	-1,698	-998	-472	-3,168	-831	-1,628
2058-2059	3,002	0	2,203	5,205	-1,698	-1,212	-471	-3,380	1,825	197
2059-2060	2,241	0	2,227	4,467	-1,701	-1,200	-471	-3,372	1,096	1,293

2060-2061	272	0	2,247	2,519	-1,698	-1,021	-468	-3,186	-667	626
2061-2062	162	0	2,241	2,403	-1,698	-970	-467	-3,134	-731	-106
2062-2063	128	0	2,239	2,366	-1,698	-961	-465	-3,124	-758	-864
2063-2064	112	0	2,203	2,315	-1,701	-960	-465	-3,127	-812	-1,676
2064-2065	100	0	2,227	2,326	-1,698	-961	-462	-3,121	-795	-2,470
2065-2066	92	0	2,247	2,339	-1,698	-960	-461	-3,119	-779	-3,249
2066-2067	87	0	2,241	2,328	-1,698	-944	-460	-3,101	-774	-4,023
2067-2068	83	0	2,239	2,322	-1,701	-930	-460	-3,091	-769	-4,792
2068-2069	82	0	2,203	2,285	-1,698	-921	-457	-3,076	-791	-5,584
2069-2070	78	0	2,213	2,291	-1,698	-928	-456	-3,082	-791	-6,375
2070-2071	5,158	0	2,229	7,388	-1,698	-1,267	-455	-3,420	3,968	-2,407
2071-2072	317	0	2,222	2,539	-1,701	-1,059	-455	-3,215	-676	-3,082
2072-2073	165	0	2,220	2,386	-1,698	-962	-452	-3,112	-726	-3,809
2073-2074	129	0	2,185	2,314	-1,698	-924	-451	-3,073	-759	-4,568
Average[4] **2009-2074**	980	20	2,240	3,230	-1,700	-1,090	-520	-3,310	-80	
Min[4] **2009-2074**	80	0	2,040	2,280	-1,700	-1,720	-640	-3,950	-980	
Max[4] **2009-2074**	10,840	50	2,760	13,010	-1,690	-920	-450	-3,070	9,060	

Notes
1. Applied Water and Septic Return.
2. Pumping from Mayer et al., 2007.
3. Discharge at General Head Boundary located along bottom edge of model where Desert Hot Springs Subbasin flows into the Indio Subbasin.
4. Average, minimum (min), maximum (max) values rounded to the nearest 10 units.
5. Water year (WY) is defined by October 1st of the leading year through September 30th of the following year; i.e., WY 2024-2025 is defined by October 1, 2024 through September 30, 2025.

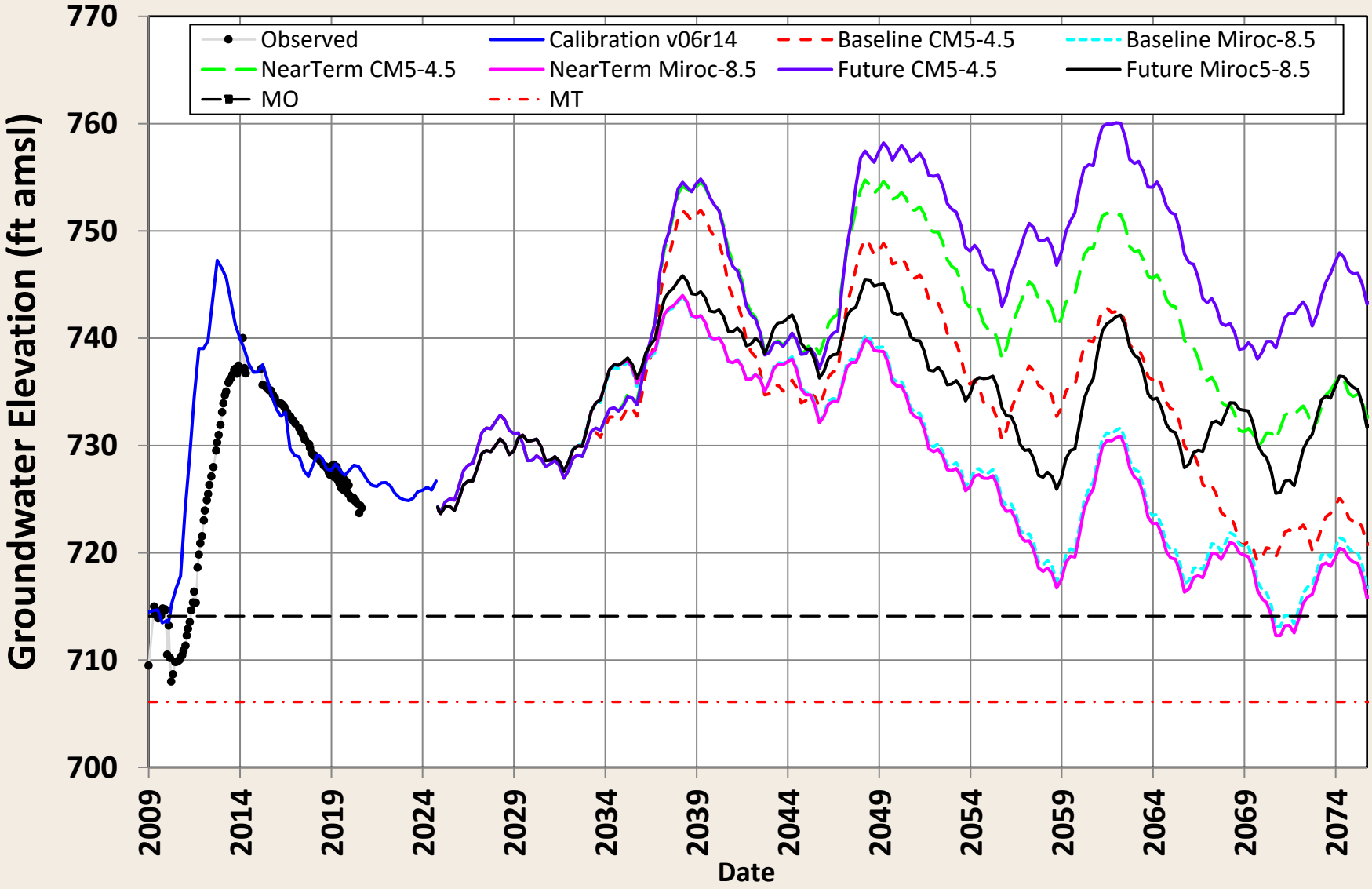
Abbreviations
AF = acre-feet
AFY = acre-feet per year
DHSSB = Desert Hot Spring Subbasin

2S4E-23N02_MCSB



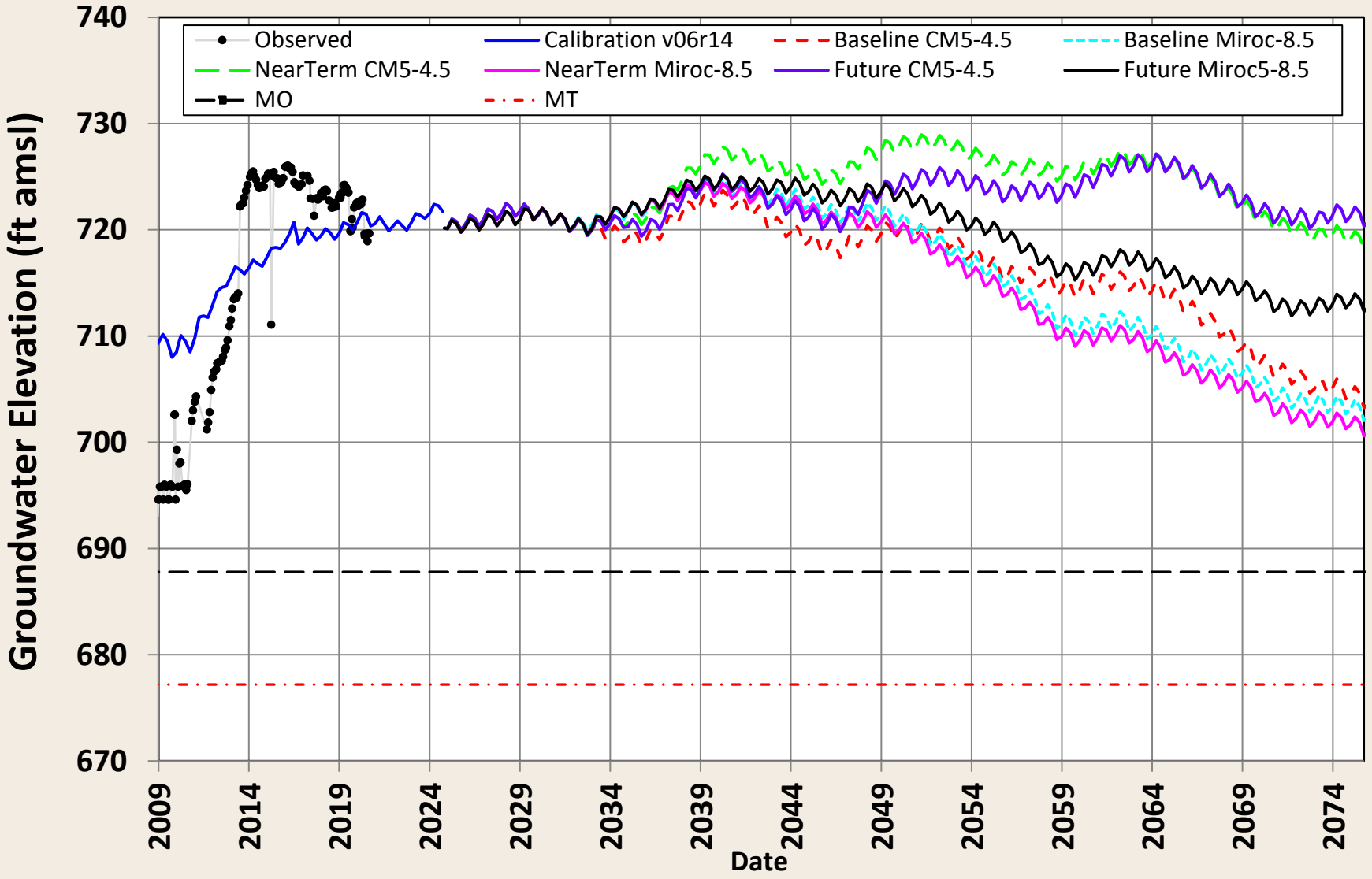
Note: Simulated Heads adjusted downward to align with historical observed groundwater elevations.

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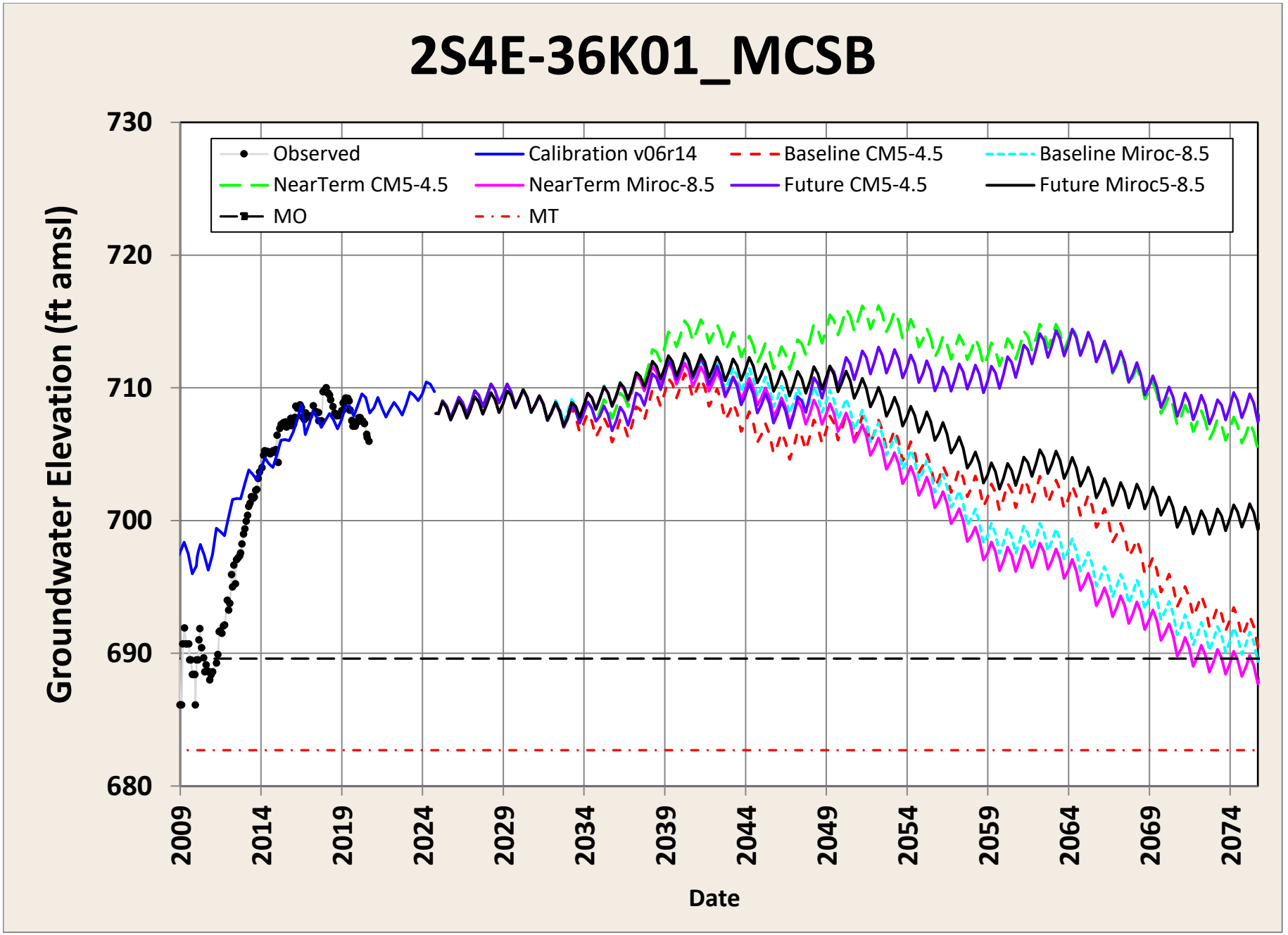


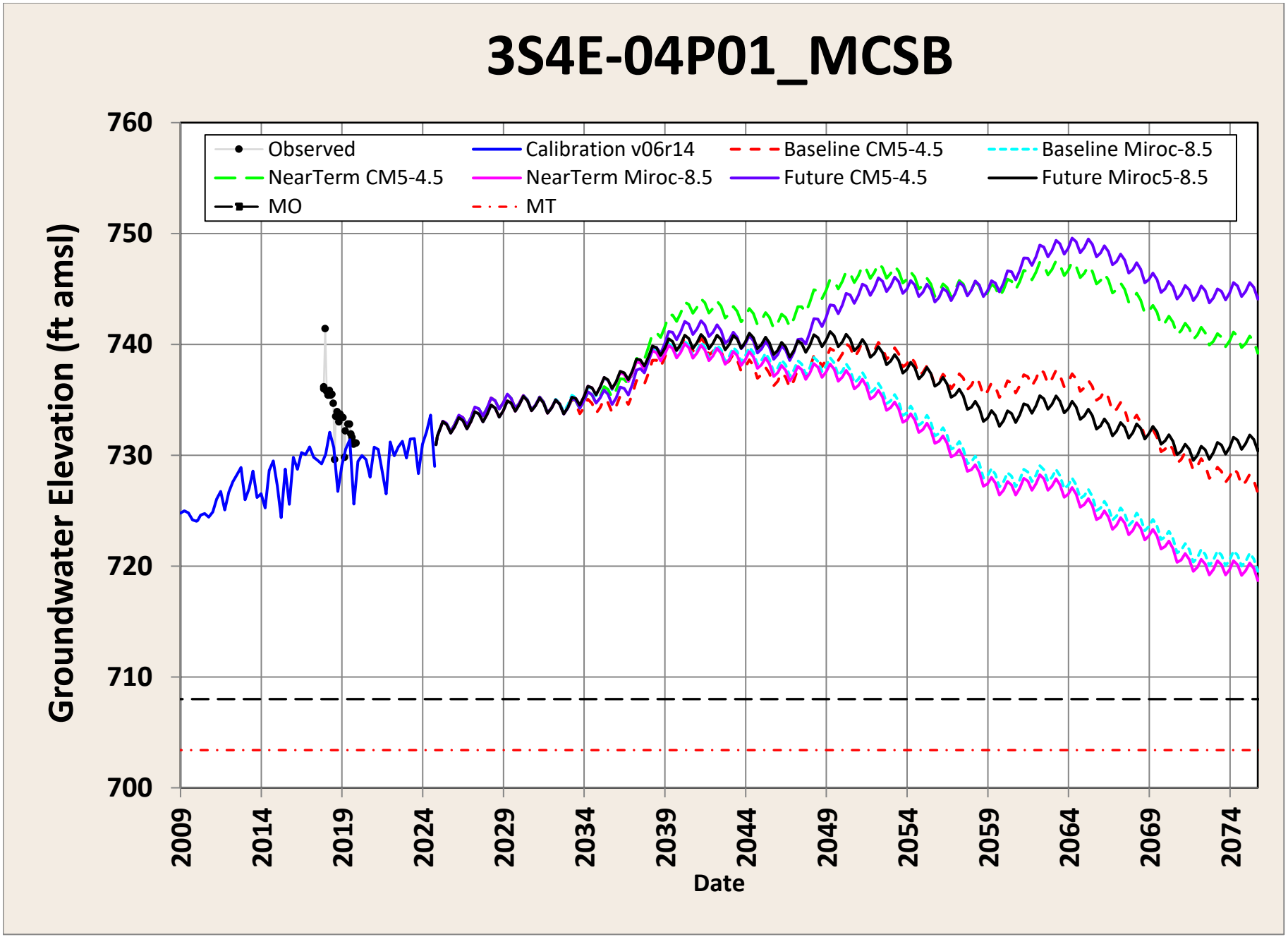
Note: Simulated Heads adjusted downward to align with historical observed groundwater elevations.

2S4E-36D01_MCSB

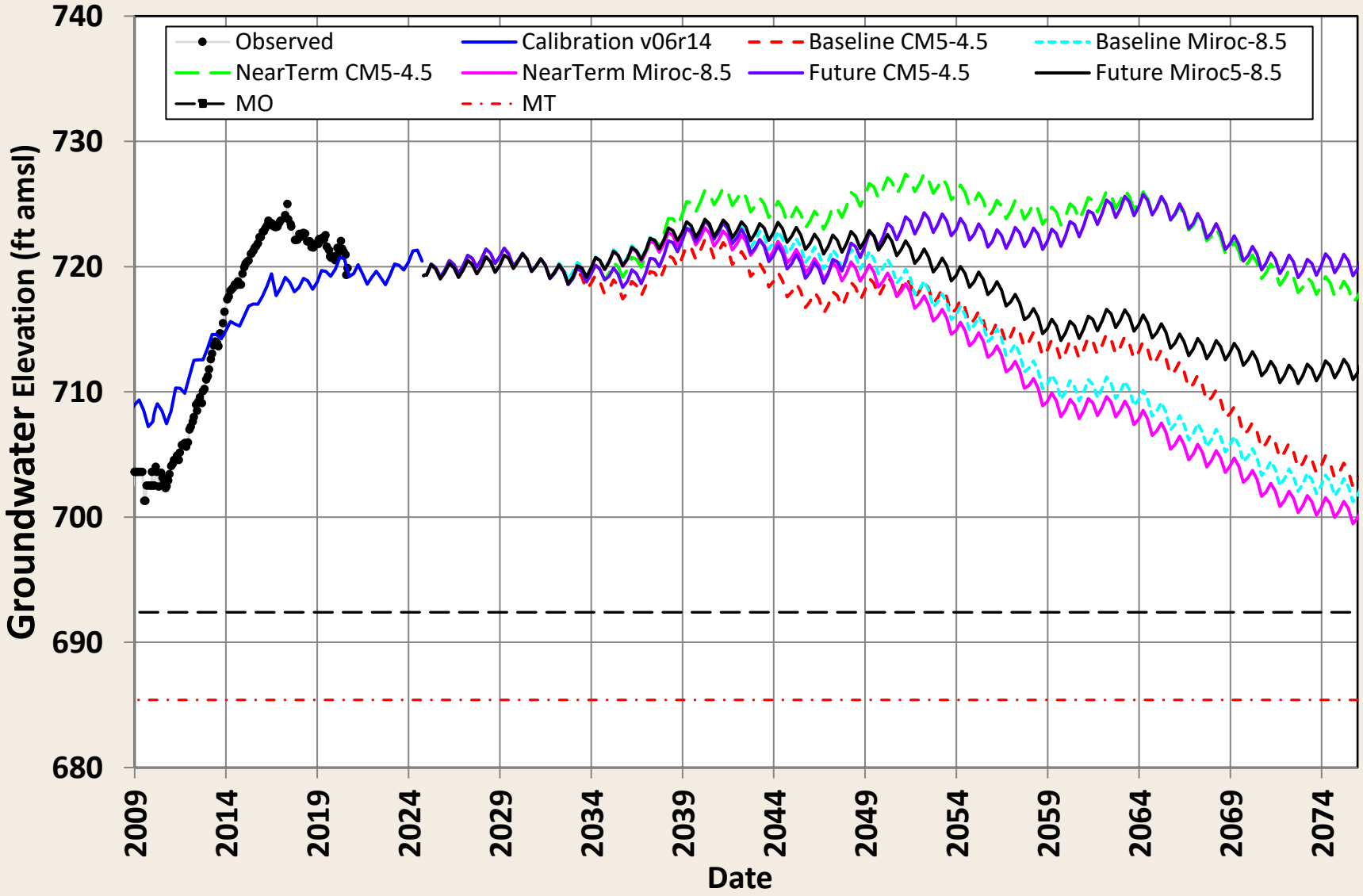


Note: Simulated Heads adjusted upward to align with historical observed groundwater elevations.


2S4E-36K01_MCSB
Groundwater Elevation (ft amsl)
730
720
710
700
690
680
2009
2014
2019
2024
2029
2034
2039
2044
2049
2054
2059
2064
2069
2074
Date
Observed
Calibration v06r14
Baseline CM5-4.5
Baseline Miroc-8.5
NearTerm CM5-4.5
NearTerm Miroc-8.5
Future CM5-4.5
Future Miroc5-8.5
MO
MT

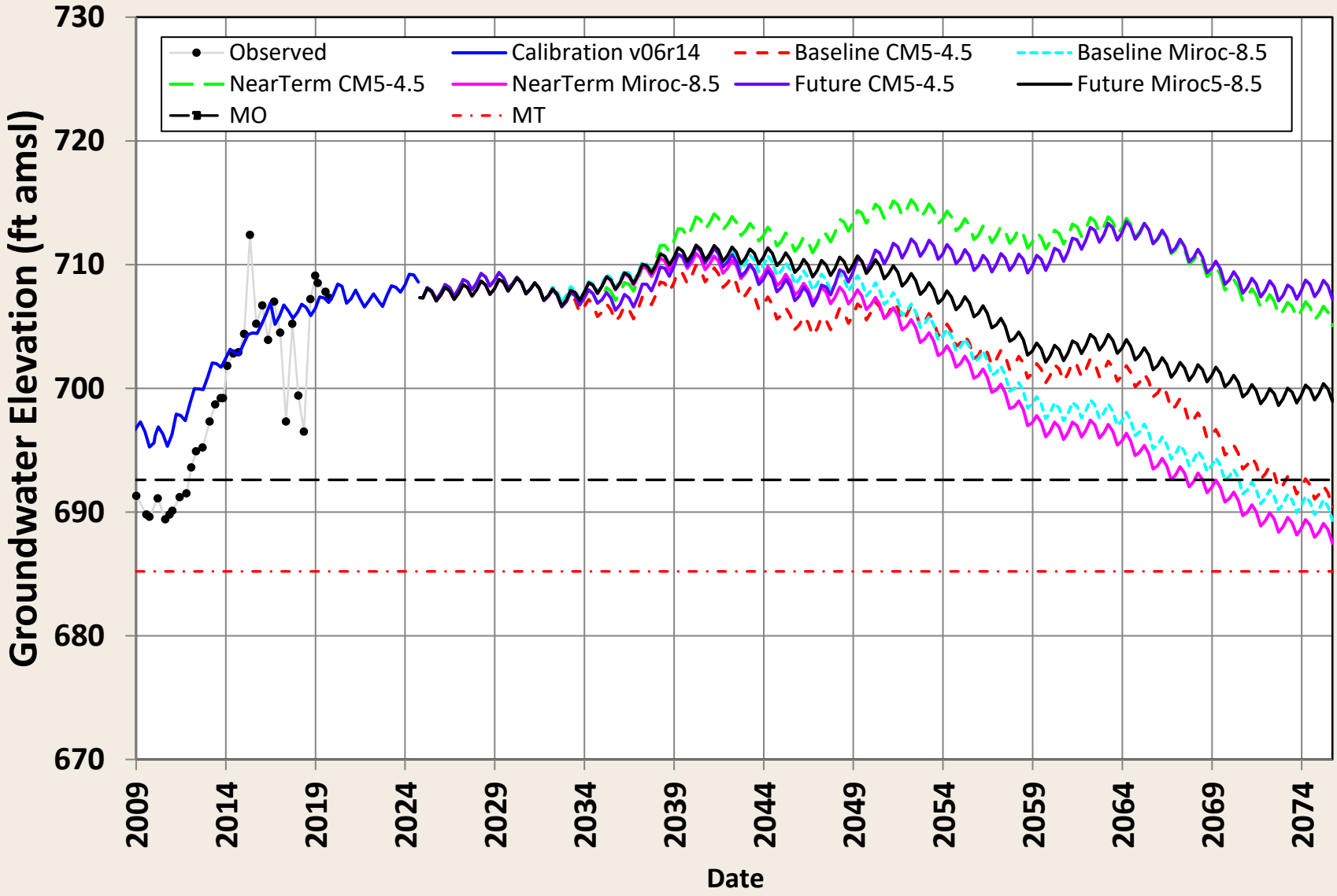

3S4E-04P01_MCSB
Groundwater Elevation (ft amsl)
760
750
740
730
720
710
700
2009
2014
2019
2024
2029
2034
2039
2044
2049
2054
2059
2064
2069
2074
Date
Observed
Calibration v06r14
Baseline CM5-4.5
Baseline Miroc-8.5
NearTerm CM5-4.5
NearTerm Miroc-8.5
Future CM5-4.5
Future Miroc5-8.5
MO
MT

3S4E-11L04_MCSB

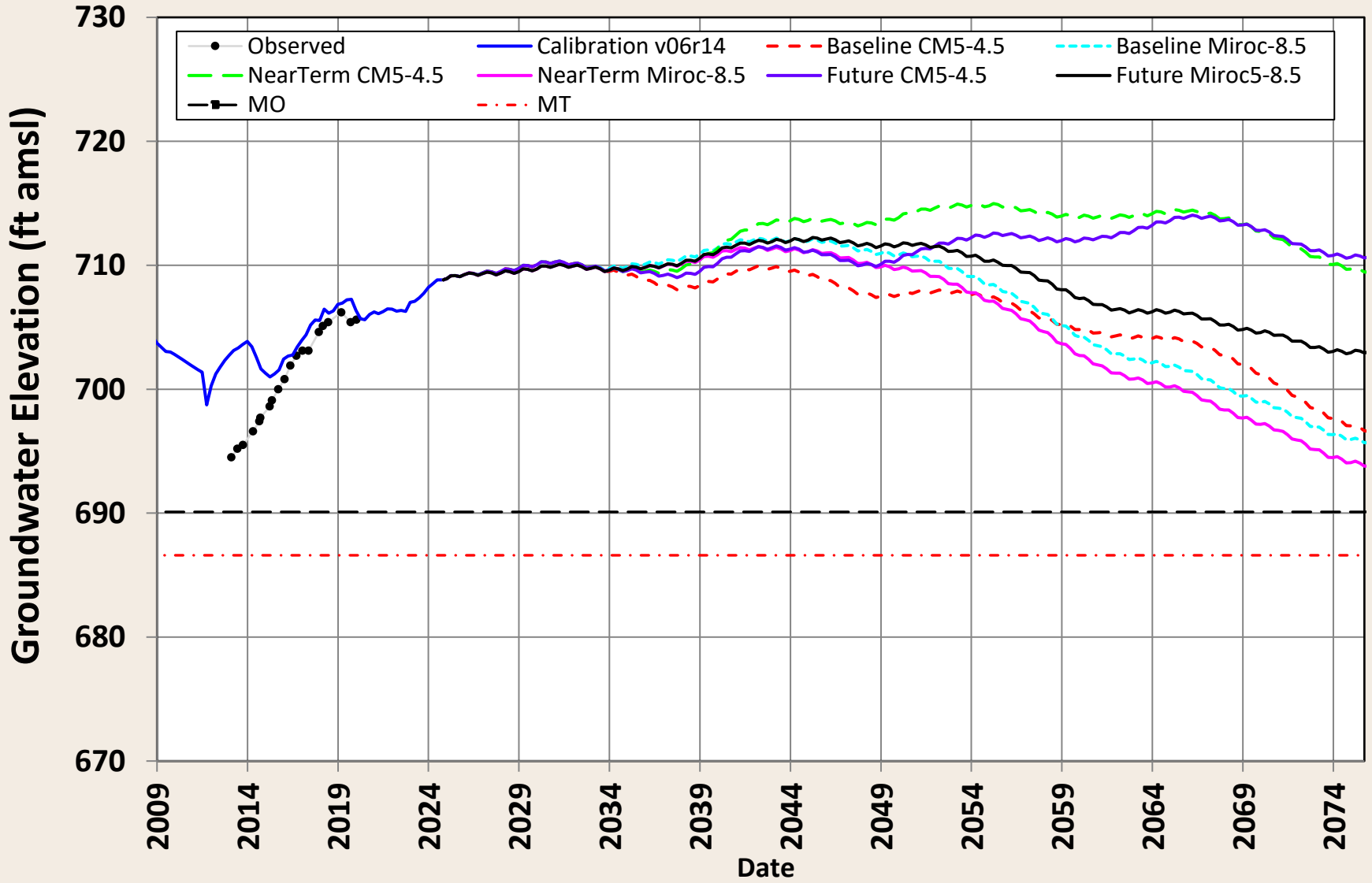


Note: Simulated Heads adjusted upward to align with historical observed groundwater elevations.

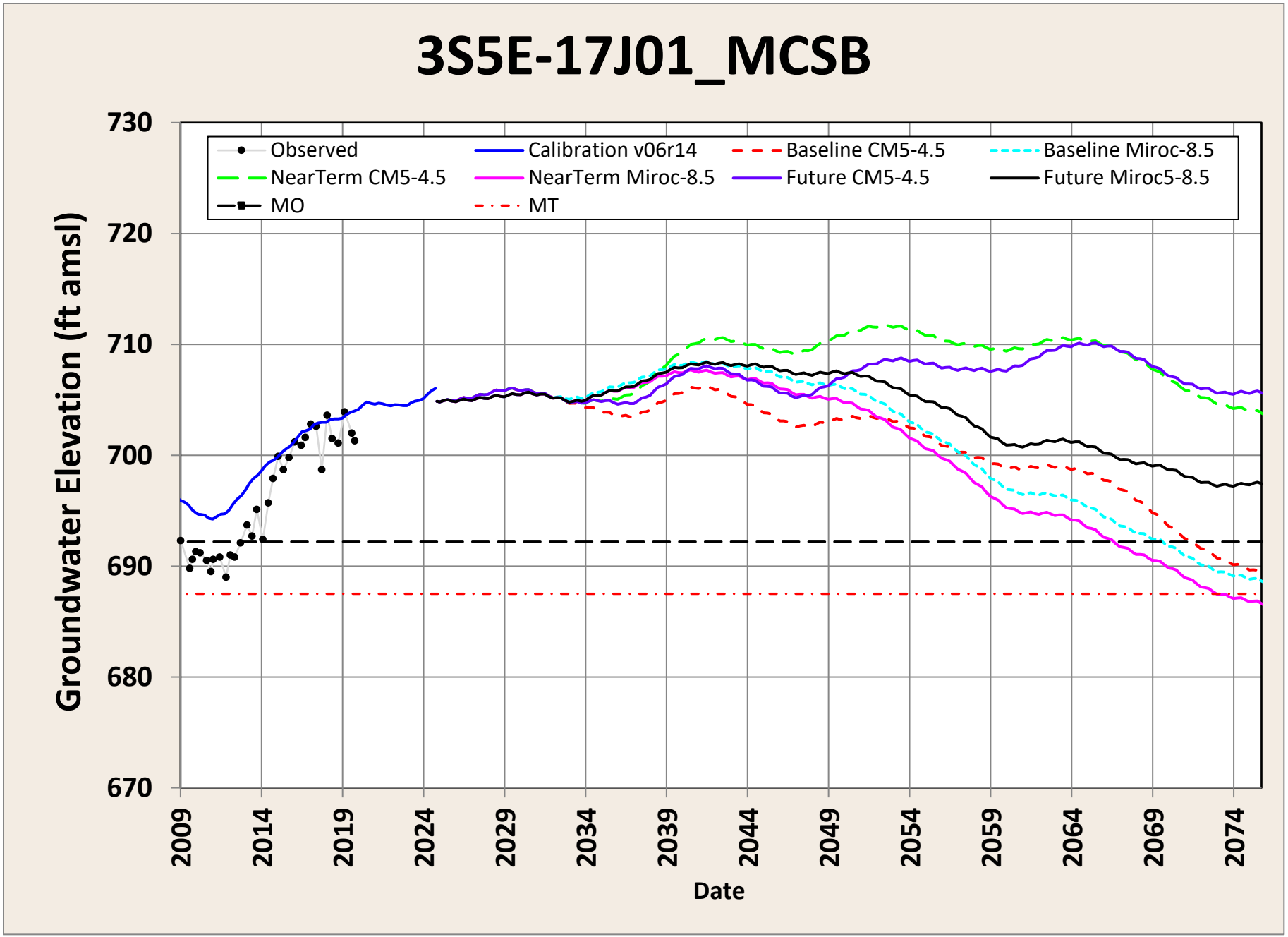
3S4E-12C01-MCSB



3S5E-15R01_MCSB



Note: Simulated Heads adjusted upward to align with historical observed groundwater elevations.


3S5E-17J01_MCSB
Groundwater Elevation (ft amsl)
730
720
710
700
690
680
670
2009
2014
2019
2024
2029
2034
2039
2044
2049
2054
2059
2064
2069
2074
Date
Observed
Calibration v06r14
Baseline CM5-4.5
Baseline Miroc-8.5
NearTerm CM5-4.5
NearTerm Miroc-8.5
Future CM5-4.5
Future Miroc5-8.5
MO
MT

Appendix C: Outreach and Engagement Plan

Appendix C: Outreach and Engagement Plan

TABLE OF CONTENTS

A1. Introduction **1**

A2. Interest-holder Identification **1**

C3. Public Workshops **4**

Acronyms and Abbreviations

Acronym	Definition
DWR	California Department of Water Resources
CVWD	Coachella Valley Water District
DWA	Desert Water Agency
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
MC-GH WMP	Mission Creek-Garnet Hill Water Management Plan
MCSB	Mission Creek Subbasin
MSWD	Mission Springs Water District
NGO	Nongovernmental Organization
SGMA	Sustainable Groundwater Management Act
SWP	State Water Project
WSP	WSP USA Inc.

C1. Introduction

The Coachella Valley Water District (CVWD), Desert Water Agency (DWA), and Mission Springs Water District (MSWD), collectively the Agencies, manage groundwater resources in the Mission Creek Subbasin (MCSB) as the Management Committee and have prepared the 2027 Mission Creek Subbasin Alternative Plan Update (2027 MCSB Update) to evaluate groundwater management since the preceding update and to guide continued sustainable management. The 2027 MCSB Update brings together current groundwater information, revised demand projections, updated groundwater modeling, sustainable management criteria (SMCs), and projects and management actions (PMAs), and supports implementation of the Sustainable Groundwater Management Act (SGMA). Outreach and engagement is a required element of SGMA and thus is conducted as part of the 2027 MCSB Update.

In the MCSB, the groundwater sustainability planning requirements of SGMA were met through an Alternative Plan, consisting of the 2013 Mission Creek-Garnet Hill Water Management Plan (MC-GH WMP) and the 2016 Bridge Document. The 2013 MC-GH WMP was an existing water management plan that was implemented to manage water resources, including groundwater, in the MCSB and Garnet Hill Subarea. The 2016 Bridge Document showed how the 2013 MC-GH WMP is the functional equivalent of a Groundwater Sustainability Plan (GSP) under SGMA. Together, these documents form the Mission Creek Subbasin Alternative Plan, which was approved in July 2019 by the California Department of Water Resources (DWR). As part of the SGMA-required 5-year updates to Alternative Plans, the 2022 Mission Creek Subbasin Alterative Update (2022 MCSB Update) was prepared and submitted to DWR in November 2021. The next update is due for submittal to DWR by January 1, 2027. This appendix summarizes outreach and engagement activities conducted by the Management Committee to inform and support development of the 2027 MCSB Update.

C2. Stakeholder Identification

The term “stakeholder” refers to representatives of agencies, tribes, nonprofit groups, nongovernmental organizations (NGO), government organizations, private residents, and adjacent Groundwater Sustainability Agencies (GSAs) who are interested in or could be affected by the development and implementation of the Alternative Plan Update. The stakeholder contact list developed for the 2022 MCSB Update served as the basis for outreach during the current planning cycle. The list was reviewed and updated to reflect current organizations, representatives, and contact information, and to remove contacts that were no longer applicable or could not be verified.

The updated contact list includes local, regional, state, and federal agencies; water agencies and neighboring groundwater management entities; Tribal representatives; cities and Riverside County departments; community-based and environmental justice organizations; business and industry groups; consultants; and interested individuals. Agency Public Information Officers and other project contacts

supported the review, and the list was updated throughout preparation of the Alternative Plan Update as additional or revised contact information became available.

Although no federally recognized Tribes or Tribal lands are located within the MCSB Alternative Plan Update Planning Area (Planning Area), the Planning Area may encompass Tribal ancestral lands, and management activities could affect neighboring subbasins that support overlying Tribal lands. To maintain communication regarding public meetings and the 2027 MCSB Update, outreach was extended to the Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Indians, Cabazon Band of Mission Indians, 29 Palms Band of Mission Indians, Morongo Band of Mission Indians, and Torres-Martinez Desert Cahuilla Indians.

The organizations that are currently a part of the stakeholder list are found in **Table C-1**.

Table C-1: Stakeholders Invited to Participate in 2027 MCSB Update

Organization Name
29 Palms Band of Mission Indians
Advancing Desert Hot Springs
Agua Caliente Band of Cahuilla Indians
Alianza Neighborhoods Action Team
Assemblyman Eduardo Garcia's Office
Augustine Band of Cahuilla Indians
Building Healthy Communities
Bureau of Indian Affairs
CA Department of Housing and Community Development
Cabazon Band of Mission Indians
Cabazon Water District
California Department of Water Resources (DWR)
Catholic Charities
City of Banning
City of Cathedral City
City of Coachella / Coachella Water Authority
City of Desert Hot Springs
City of Indian Wells
City of Indio / Indio Water Authority
City of La Quinta
City of Palm Desert
City of Palm Springs
City of Rancho Mirage
Clean Water Action
Clinicas de Salud
Coachella Rural Legal Assistance
Coachella Valley Association of Governments
Coachella Valley Association of Governments / Coachella Valley MSHCP

Organization Name
Coachella Valley Cannabis Alliance Network (CVCAN)
Coachella Valley Housing Coalition
Coachella Valley Mosquito and Vector Control District
Coachella Valley Resource Conservation District
Coachella Valley Economic Partnership
Coachella Valley Water District
Comcast
County of Riverside
County of Riverside Transportation and Land Use Management
Desert Edge Community Council
Desert Healthcare District
Desert Water Agency
Desert Hot Springs (DHS) Hoteliers
El Sol Neighborhood Education Center
Environmental Justice Coalition for Water
Friends of the Desert Mountains
Golf Course Superintendents Association of America
Golf Course Task Force (Coachella Valley Golf and Water Task Force)
Leadership Council for Justice and Accountability
Lideres Campesinas
Mission Springs Water District
Morongo Band of Mission Indians
Natural Science Collaborative of the Desert Region
Palms Springs Unified School District
Pueblo Unido Community Development Corporation (CDC)
Rural Community Assistance Corporation (RCAC)
Regional Water Quality Control Board, Colorado River Region
Representative from Supervisor Manuel Perez
Rincon Consultants
Riverside County Economic Development Agency (EDA)
Riverside County Flood Control and Water Conservation District
Riverside County Transportation
San Gorgonio Pass Water Agency
Thousand Palms Community Council
TKE Engineering
United States Department of Agriculture (USDA)
USDA Rural Development
Valley Sanitary District
Wildland Conservancy

C3. Mission Creek Subbasin SGMA Website

The Mission Creek Subbasin SGMA website (https://www.missioncreeksubbasinsgma.org/) was maintained and updated throughout preparation of the 2027 MCSB Update to provide a centralized source of project information and document outreach and engagement activities. The website provides information about SGMA, the 2027 MCSB Update, public meetings, project materials, and groundwater data and information.

The website allows for interested persons to subscribe to a mailing list for project news and announcements. This feature supplements direct distribution to the maintained Interest-holder contact list and provides another means of notifying the broader public about workshops, meetings, newly available materials, and other engagement opportunities. Outreach materials and announcements were provided in English and Spanish, as appropriate, and translation support was made available to support participation

C3. Public Workshops

Three public community workshops were conducted for the 2027 MCSB Update. The workshops informed interest holders and the general public about project progress, presented technical information, solicited data and input, and provided opportunities to ask questions and comment on key planning topics. The October 2025 workshop was conducted in a hybrid format with both in-person and virtual participation. Based on feedback from participants, the April and September 2026 workshops were held virtually via Zoom. Meeting materials and recordings are available on the Mission Creek Subbasin SGMA website (https://www.missioncreeksubbasinsgma.org/).

1. Wednesday, October 29, 2025 (hybrid)
2. Tuesday, July 21, 2026 (virtual via Zoom)
3. Thursday, October 29, 2026 (virtual via Zoom)

C4. Implementation Timeline

The following timeline summarizes outreach and engagement activities conducted for the 2027 MCSB Update.

- May 2025 – Initiation of 2027 MCSB Update activities.
- July 2025 – Public Outreach and Communications Plan prepared and outreach activities initiated.
- August 2025 – Project website updated with 2027 MCSB Update information, schedule, and stakeholder resources.
- October 29, 2025 – Public Workshop #1 held to introduce the 2027 MCSB Update process, provide a SGMA overview, and present the project schedule.
- July 21, 2026 – Public Workshop #2 held to provide an update on 2027 MCSB Update development and present technical findings.
- October 29, 2026 – Public Workshop #3 will present the draft 2027 MCSB Update and solicit stakeholder feedback.
- November 2026 – Agencies will hold study sessions with their Boards to review the 2027 MCSB Update findings.
- December 2026 – Agencies will hold public hearings with their Boards to consider adoption of the 2027 MCSB Update.

Throughout 2025 and 2026, ongoing stakeholder engagement activities included website maintenance, stakeholder e-mail notifications, bilingual outreach efforts, disadvantaged community outreach, tribal coordination, and Management Committee meetings.

Appendix D: Comments and Responses

(To Be Included in Final Report)

Appendix E: Agency Board Resolutions

(To Be Included in Final Report)