

3-027 SANTA MARGARITA

Basin Boundaries

Summary

The Santa Margarita groundwater basin is a triangularly shaped basin located in central Santa Cruz County. The northeastern boundary is the northwest/southeast trending Zayante Fault. The southern boundary, or base of the triangle, consists of both geologic and jurisdictional boundary lines. The southwestern boundary consists primarily of the northwest/southeast trending Ben Lomond Fault. The northern extent of the basin ends where the Zayante and Ben Lomond Faults intersect. The basin boundary is defined by twelve (12) segments detailed in the descriptions below.

Segment Descriptions

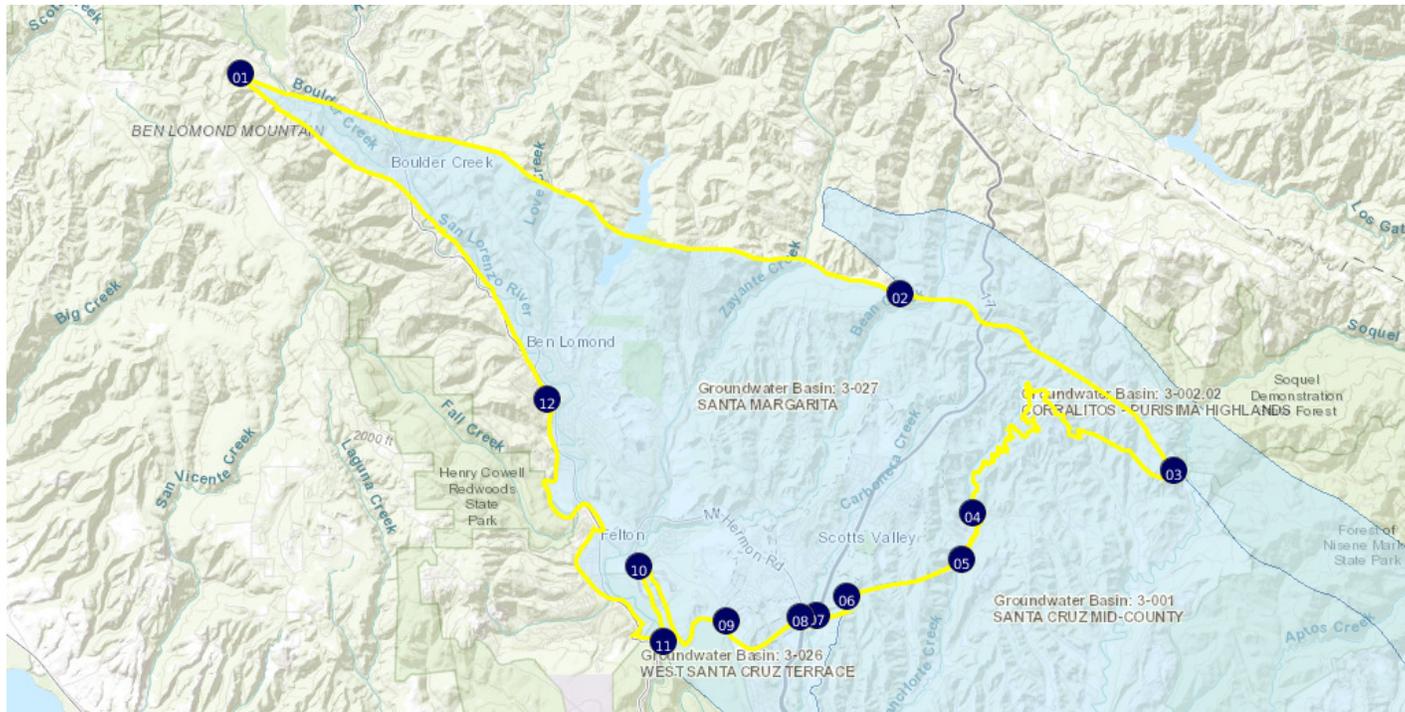
| <u>Segment Label</u> | <u>Segment Type</u> | <u>Description</u> | <u>Ref</u> |
|----------------------|------------------------------|--|------------|
| 1-2 | ^E Fault | Continues from point (1) and follows Zayante Fault to point (2). | {a} |
| 2-3 | ^I Fault | Continues from point (2) and follows Zayante Fault to point (3). | {b} |
| 3-4 | ^I Non-Alluvial | Continues from point (3) and follows the contact of Lompico Sandstone with Purisima Formation to point (4). | {c} |
| 4-5 | ^I Stream | Continues from point (4) and follows Branciforte Creek to point (5). | {d} |
| 5-6 | ^I Non-Alluvial | Continues from point (5) and follows the granitic high to point (6). | {c} |
| 6-7 | ^I Water Agency | Continues from point (6) and follows the southern boundary of Scotts Valley Water District to point (7). | {e} |
| 7-8 | ^I Water Agency | Continues from point (7) and follows the southern boundary of Scotts Valley Water District to point (8). | {e} |
| 8-9 | ^I Non-Alluvial | Continues from point (8) and generally follows the granitic high to point (9). | {c} |
| 9-10 | ^I Non-Alluvial | Continues from point (09) and follows the contact of Locatelli Formation with Lompico Formation to point (10). | {c} |
| 10-11 | ^I Fault | Continues from point (10) and generally follows the Ben Lomond Fault to point (11). | {c} |
| 11-12 | ^E Alluvial | Continues from point (11) and generally follows the contact of Quaternary alluvium with Miocene sediments to point (12). | {f} |
| 12-1 | ^E Fault | Continues from point (12) and follows the Ben Lomond Fault and ends at point (1). | {f} |

Significant Coordinates

| <u>Point</u> | <u>Latitude</u> | <u>Longitude</u> | |
|---------------------|------------------------|-------------------------|--|
| 1 | 37.14417295 | -122.163326739 | |
| 2 | 37.100123973 | -121.99788331 | |
| 3 | 37.064938214 | -121.929078065 | |
| 4 | 37.056397231 | -121.979588457 | |
| 5 | 37.046943147 | -121.98245618 | |
| 6 | 37.03969016 | -122.011331692 | |
| 7 | 37.035708425 | -122.018846322 | |
| 8 | 37.035402675 | -122.022843278 | |
| 9 | 37.034582627 | -122.04144509 | |
| 10 | 37.045732519 | -122.063265904 | |
| 11 | 37.030485789 | -122.057120912 | |
| 12 | 37.079155824 | -122.086539595 | |

Map

3-027 SANTA MARGARITA



<https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=3-027>

References

| <u>Ref</u> | <u>Citation</u> | <u>Pub Date</u> | <u>Global ID</u> |
|------------|---|-----------------|------------------|
| {a} | California Geological Survey (CGS), Fault Activity Map of California, Geologic Data Map No. 6. URL: http://earthquake.usgs.gov/hazards/qfaults/ | 2010 | 40 |
| {b} | California Geological Survey (CGS), Geologic Map of California, Geologic Data Map No. 2, C. W. Jennings, C. Gutierrez, W. Bryant, G. Saucedo, and C. Wills. URL: http://maps.conservation.ca.gov/cgs/gmc/ | 2010 | 43 |
| {c} | BBMRS | varies | 45 |
| {d} | United States Geological Survey (USGS), National Hydrography Dataset, Flowline Dataset for California, note: Coordinated effort among the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA). URL: http://nhd.usgs.gov/data.html | 2/1/2016 | 1 |
| {e} | California Department of Water Resources (DWR), Water Agencies Dataset. URL: https://gis.water.ca.gov/app/bbat/ | 2016 | 48 |
| {f} | California Geological Survey (CGS), Regional Geologic Map No. 5A, San Francisco-San Jose Quadrangle, 1:250,000, D.L. Wagner, E.J. Bortugno, and R.D. McJunkin. URL: http://www.quake.ca.gov/gmaps/RGM/sfsj/sfsj.html | 1991 | 8 |

Footnotes

- I: Internal
- E: External