6-012.01 OWENS VALLEY

Basin Boundaries

Summary

The Owens Valley groundwater subbasin is a relatively narrow and long north-south trending basin that extends approximately 125 miles from Benton Valley in southeastern Mono County to Haiwee in southwestern Inyo County. The subbasin underlies Benton, Hammil, and Chalfant Valleys in Mono County and underlies Round Valley and Owens Valley in Inyo County. The subbasin is bound by impermeable rocks of the Benton Range on the north, the Coso Range on the south, the Sierra Nevada on the west, and the White and Inyo Mountians on the east (Jennings 1958; DWR 1964; Matthews and Burnett 1965; Strand 1967; Danskin 1998). The numerous valleys overlying the subbasin are drained by several creeks to the Owens River, which flows southward to Owens (Dry) Lake, a closed drainage depression in the southern part of the Owens Valley. Average annual precipitation is 30 inches in the Sierra Nevada, seven to 10inches in the White and Inyo Mountains, and four to six inches on the Owens Valley floor (Groeneveld and others 1986a; 1986b; Duell 1990; Hollett and others 1991).The subbasin boundary is defined by twenty-eight (28) segments detailed in the descriptions below.

Segment Descriptions

Segment Label	Segment Type	Description	Ref
1-2	E State	Begins from point (1) and follows the California-Nevada border to point (2).	{a}
2-3	E Alluvial	Continues from point (2) and generally follows the contact of Quaternary alluvium with Precambrian to Mesozoic metasedimentary rocks and Mesozoic plutonic and metavolcanic rocks to point (3).	{a}
3-4	E Management Area	Continues from point (3) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (4).	{b}
4-5	I Management Area	Continues from point (4) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (5).	{b}
5-6	E Management Area	Continues from point (5) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (6).	{b}
6-7	I Management Area	Continues from point (6) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (7).	{b}
7-8	E Management Area	Continues from point (7) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (8).	{b}
8-9	I Management Area	Continues from point (8) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (9).	{b}
9-10	E	Continues from point (9) and follows the boundary subject to the Green	{b}

	Management Area	Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (10).	
10-11	I Management Area	Continues from point (10) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (11).	{b}
11-12	E Management Area	Continues from point (11) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (12).	{b}
12-13	E Alluvial	Continues from point (12) and follows the contact of Quaternary alluvium with Mesozoic plutonic rocks, Pleistocene nonmarine rocks, and Bishop Tuff to point (13).	{c}
13-14	E Management Area	Continues from point (13) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (14).	{b}
14-15	I Management Area	Continues from point (14) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (15).	{b}
15-16	E Management Area	Continues from point (15) and follows the boundary subject to the Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County to point (16)	{b}
16-1	E Alluvial	Continues from point (16) and generally follows the contact of Quaternary alluvium with Mesozoic plutonic rocks, Plio-Pleistocene volcanic rocks, and Bishop Tuff and ends at point (1).	{a}
17-17	E Alluvial	Island within the basin boundary: Begins from point (17) and generally follows the contact of Quaternary alluvium with Mesozoic plutonic and volcanic rocks and ends at point (17).	{a}
18-18	E Alluvial	Island within the basin boundary: Begins from point (18) and follows the contact of Quaternary alluvium with Mesozoic plutonic rocks and ends at point (18).	{a}
19-19	E Alluvial	Island within the basin boundary: Begins from point (19) and follows the contact of Quaternary alluvium with Mesozoic plutonic rocks and ends at point (19).	{a}
20-20	E Alluvial	Island within the basin boundary: Begins at point (20) and follows the contact of Quaternary alluvium with Pleistocene volcanic rocks and ends at point (20).	{a}
21-21	E Alluvial	Island within the basin boundary: Begins from point (21) and generally follows the contact of Quaternary alluvium with a landslide deposit of the Poverty Hills and Quaternary basalt and ends at point (21).	{a}
22-22	E Alluvial	Island within the basin boundary: Begins from point (22) and follows the contact of Quaternary alluvium with Pleistocene volcanic rocks and ends at point (22).	{a}
23-23	E Alluvial	Island within the basin boundary: Begins from point (23) and follows the contact of Quaternary alluvium with Pleistocene volcanic rocks and ends at point (23).	{d}

24-24	E Alluvial	Island within the basin boundary: Begins from point (24) and follows the contact of Quaternary alluvium with Mesozoic granitic rocks and ends at point (24).	{d}
25-25	E Alluvial	Island within the basin boundary: Begins at point (25) and follows the contact of Quaternary alluvium with Mesozoic granitic and Jurassic-Triassic metavolcanic rocks and ends at point (25).	{d}
26-26	E Alluvial	Island within the basin boundary: Begins from point (26) and follows the contact of Quaternary alluvium with Mesozoic granitic rocks and Jurassic-Triassic metavolcanic rocks and ends at point (26).	{d}
27-27	E Alluvial	Island within the basin boundary: Begins from point (27) and follows the contact of Quaternary alluvium with various Tertiary volcanic rocks and ends at point (27).	{e}
28-28	E Alluvial	Island within the basin boundary: Begins from point (28) and follows the contact of Quaternary alluvium with Mesozoic granitic rocks and Pre-Cretaceous metamorphic rocks and ends at point (28).	{e}

Significant Coordinates

Point	Latitude	Longitude
1	37.920222728	-118.461312951
2	37.876529821	-118.400525274
3	37.463053074	-118.320313773
4	36.350283214	-117.806365133
5	36.345400966	-117.811441351
6	36.234546963	-117.900026989
7	36.234609077	-117.903310247
8	36.215405139	-117.909150194
9	36.199673401	-117.905923472
10	36.13742331	-117.960394976
11	36.144587867	-118.022372587
12	37.463189877	-118.639119662
13	37.46302528	-118.592603326
14	37.426402498	-118.409353057
15	37.427055874	-118.404556141
16	37.462859122	-118.369815901
17	37.387285353	-118.542821332
18	37.360087177	-118.502731258
19	37.083223044	-118.360292907
20	37.060726244	-118.311092331
21	37.070669227	-118.249674408
22	37.005614122	-118.29772837
23	36.947710681	-118.248906216
24	36.827659808	-118.250968105
25	36.67290748	-118.124759127
26	36.6042091	-118.079786699
27	36.360204734	-117.826711663
28	36.301494636	-117.900729901

Map

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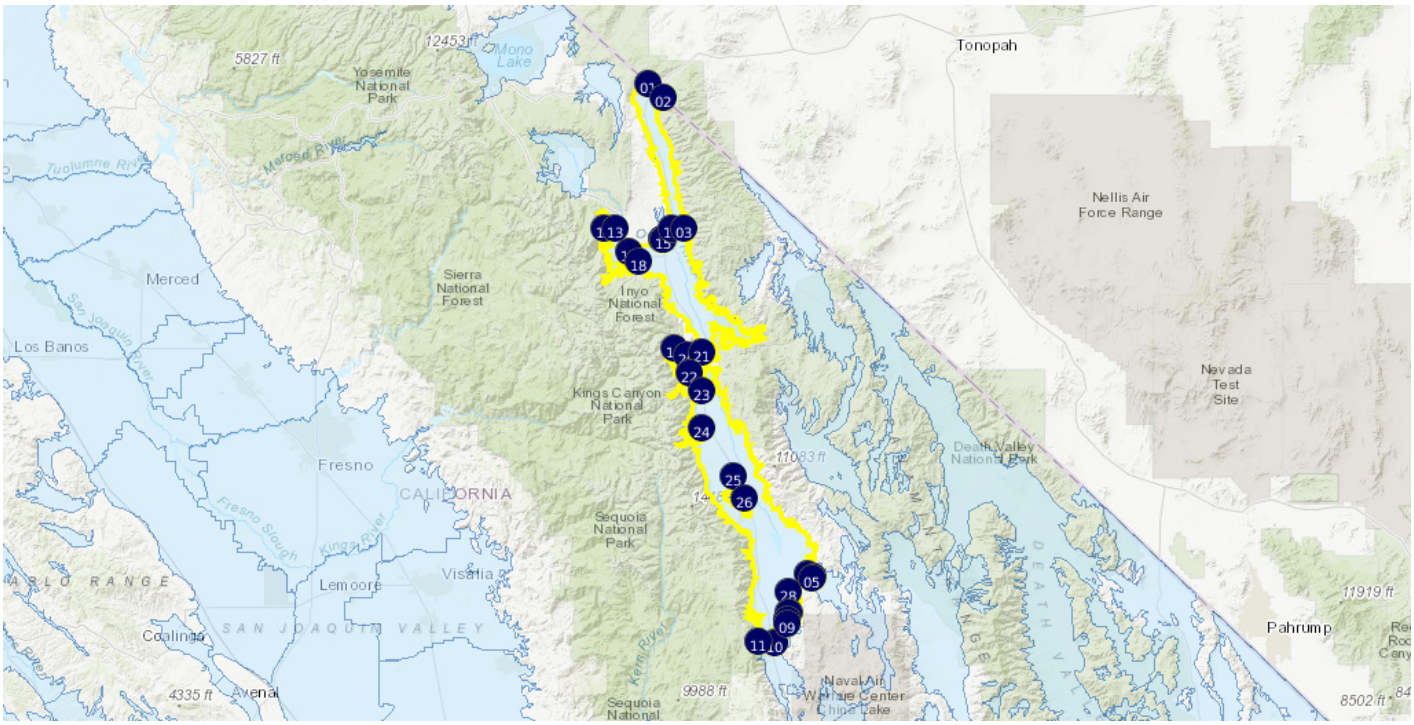

https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=6-012.01

References

Ref	Citation
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{b}	City of Los Angeles, Green Book for the Long-Term Groundwater Management Plan for the Owens Vall Inyo County, G. James, D. Groeneveld, B. Hutchison, D.C. Williams, R.H. Rawson, E.L. Coufal.http://www.water.ca.gov/groundwater/docs/GWMP/SL-2_InyoCounty-LosAngelesDWP_GWMP_1990.
{c}	California Geological Survey (CGS), Geologic Map of California, Geologic Data Map No. 2, C. W. Jenn Gutierrez, W. Bryant, G. Saucedo, and C. Wills.URL: http://maps.conservation.ca.gov/cgs/gmc/
{d}	California Geological Survey (CGS), Geologic Atlas of California Map No. 005, Fresno Sheet, , 1:250,0(A. Matthews and John L. Burnett.URL: http://www.quake.ca.gov/gmaps/GAM/fresno/fresno.html
{e}	California Geological Survey (CGS), Geologic Atlas of California Map No. 004, Death Valley Sheet, , 1: Robert Streitz and Melvin C. Stinson .URL: http://www.quake.ca.gov/gmaps/GAM/deathvalley/deathvalley.

Footnotes

- I: Internal
- E: External