

The Metropolitan Water District of Southern California

GENERAL MINERAL AND PHYSICAL ANALYSIS OF METROPOLITAN'S WATER SUPPLIES

TABLE D

July 2023

| CONSTITUENTS                                | UNITS | SOURCE WATERS |                    |              |              |                   |             |                     |              | TREATMENT PLANT EFFLUENTS |        |        |         |       |
|---|-------|---------------|--------------------|--------------|--------------|-------------------|-------------|---------------------|--------------|---------------------------|--------|--------|---------|-------|
|   |       | LAKE HAVASU   | SAN JACINTO TUNNEL | LAKE MATHEWS | CASTAIC LAKE | SILVER- WOOD LAKE | LAKE PERRIS | DIAMOND VALLEY LAKE | LAKE SKINNER | WEY- MOUTH                | DIEMER | JENSEN | SKINNER | MILLS |
| SILICA                                      | mg/L  | 7.1           | 7.2                | 8.4          | 16.9         | 9.8               | 4.1         | 7.2                 | 4.6          | 8.7                       | 8.8    | 16.8   | 6.1     | 6.4   |
| CALCIUM                                     | mg/L  | 81            | 78                 | 73           | 39           | 10                | 28          | 24                  | 49           | 46                        | 44     | 40     | 43      | 20    |
| MAGNESIUM                                   | mg/L  | 28            | 27                 | 27           | 11           | 4                 | 13          | 11                  | 18           | 17                        | 16     | 11     | 16      | 9     |
| SODIUM                                      | mg/L  | 108           | 108                | 101          | 56           | 12                | 59          | 48                  | 72           | 73                        | 70     | 62     | 72      | 46    |
| POTASSIUM                                   | mg/L  | 5.2           | 5.3                | 4.9          | 2.5          | 1.6               | 3.5         | 3.4                 | 3.9          | 3.6                       | 3.5    | 2.4    | 3.7     | 2.7   |
| ALKALINITY, CARBONATE AS CO <sub>3</sub>    | mg/L  | 0             | 4                  | 0            | 0            | 0                 | 0           | 0                   | 0            | 0                         | 0      | 0      | 1       | 5     |
| ALKALINITY, BICARBONATE AS HCO <sub>3</sub> | mg/L  | 168           | 156                | 161          | 112          | 44                | 123         | 98                  | 127          | 115                       | 110    | 117    | 111     | 72    |
| SULFATE                                     | mg/L  | 236           | 236                | 216          | 88           | 10                | 41          | 42                  | 134          | 137                       | 128    | 94     | 122     | 35    |
| CHLORIDE                                    | mg/L  | 107           | 108                | 100          | 50           | 12                | 74          | 60                  | 75           | 68                        | 66     | 54     | 71      | 49    |
| NITRATE                                     | mg/L  | 1.8           | 1.4                | 1.1          | 4.7          | 0.6               | 0.8         | 0.7                 | 0.2          | 1.0                       | 1.1    | 4.7    | 1.0     | 1.0   |
| FLUORIDE                                    | mg/L  | 0.3           | 0.3                | 0.3          | 0.3          | <0.1              | 0.1         | 0.1                 | 0.2          | 0.6                       | 0.7    | 0.6    | 0.7     | 0.7   |
| TOTAL DISSOLVED SOLIDS (TDS)                | mg/L  | 658           | 653                | 612          | 324          | 82                | 285         | 245                 | 420          | 412                       | 393    | 344    | 392     | 210   |
| TOTAL HARDNESS AS CaCO <sub>3</sub>         | mg/L  | 309           | 303                | 287          | 146          | 37                | 120         | 105                 | 195          | 187                       | 176    | 145    | 173     | 84    |
| TOTAL ALKALINITY AS CaCO <sub>3</sub>       | mg/L  | 138           | 134                | 132          | 92           | 36                | 101         | 80                  | 104          | 94                        | 90     | 96     | 93      | 67    |
| FREE CARBON DIOXIDE                         | mg/L  | 2.1           | 1.0                | 3.7          | 4.3          | 1.3               | 3.6         | 2.0                 | 1.9          | 0.9                       | 0.9    | 1.1    | 1.2     | 0.3   |
| pH  | pH    | 8.12          | 8.42               | 7.86         | 7.64         | 7.76              | 7.76        | 7.92                | 8.04         | 8.32                      | 8.31   | 8.23   | 8.20    | 8.71  |
| SPECIFIC CONDUCTANCE                        | µS/cm | 1060          | 1050               | 987          | 553          | 134               | 522         | 442                 | 712          | 704                       | 670    | 583    | 681     | 386   |
| COLOR                                       | CU    | 3             | 2                  | 3            | 5            | 15                | 5           | 5                   | 5            | 1                         | 1      | 1      | 1       | 1     |
| TURBIDITY                                   | NTU   | 0.88          | 0.18               | 1.5          | 1.4          | 3.6               | 0.84        | 0.63                | 0.93         | 0.05                      | 0.03   | 0.04   | 0.07    | 0.05  |
| TEMPERATURE                                 | °C    | 24            | 26                 | 17           | 12           | 23                | 18          | 17                  | 24           | 21                        | 22     | 19     | 28      | 27    |
| BROMIDE                                     | mg/L  | 0.09          | 0.08               | 0.08         | 0.18         | 0.03              | 0.24        | 0.18                | 0.10         | --                        | --     | --     | --      | --    |
| TOTAL ORGANIC CARBON                        | mg/L  | 3.01          | 3.02               | 2.81         | 3.04         | 3.38              | 4.44        | 3.14                | 3.48         | --                        | --     | --     | --      | --    |
| SATURATION INDEX                            | --    | --            | --                 | --           | --           | --                | --          | --                  | --           | 0.54                      | 0.50   | 0.37   | 0.47    | 0.56  |
| STATE PROJECT WATER                         | %     | 0             | 0                  | 0            | 100          | 100               | 100         | 100                 | 43           | 46                        | 51     | 100    | 51      | 100   |