Borrego Valley Groundwater Basin
Borrego Springs Subbasin
Draft Fall 2017 Groundwater Monitoring Results

Borrego Valley Groundwater Basin
Sustainability Plan

Advisory Committee Meeting

January 25, 2018
Groundwater Elevation Monitoring Network

Number of wells monitored: 36

Number of wells with transducers: 11

North Management Area: 6 wells

Central Management Area: 16 wells

South Management Area: 14 wells
North Management Area: Groundwater Elevation

- ID4-3: Trend = -2.52 feet per year
- MW-1: Trend = -3 feet per year
Central Management Area: Groundwater Elevation

**ID4-1**

Trend = -1.85 feet per year

**Airport 2**

Trend = -1.17 feet per year

**ID1-16**

Trend = -1.63 feet per year
South Management Area: Groundwater Elevation

**Groundwater Elevation, in feet above NAVD 88**

- **MW-3**
  - Trend = +1.34 feet per year
  - Trend = -7.15 feet per year

- **MW-5A**
  - Trend = -0.65 feet per year

**Map Details**

- Manual Measurements
- Manual and Transducer Measurement

**Date Range**
- 2001 to 2020

**Location**
- MW-3
- MW-5A
- JC Well
- RH-4
- RH-5
- RH-6
- ID 1-8
- ID 1-1
- RH-3
- ID 1-2
- 11S07E30L1
- Hayden (32Q1)

**Legend**
- 0 0.5 1 Miles
- North
Groundwater Elevation Monitoring Network

Number of wells monitored: 30
- North Management Area: 6 wells
- Central Management Area: 9 wells
- South Management Area: 15 wells

Monitored For:
- Arsenic
- Fluoride
- Radionuclides (gross alpha particle activity)
- Nitrate (as Nitrogen)
- Sulfate
- Total dissolved solids (TDS)

General Minerals

Cations
- Calcium
- Magnesium
- Potassium
- Sodium
- Total hardness

Anions
- Bicarbonate
- Carbonate
- Chloride
- Hydroxide
- Total alkalinity
Central Management Area: Arsenic

Arasnic Wellhead Concentrations
- Green Circle: Less than 1/2 the MCL (5 ug/L)
- Management Areas

Well Screen
- U – Upper Aquifer
- M – Middle Aquifer
- L – Lower Aquifer

Legend:
- ND – Non-detect
- NS – No Sample
- Decrease from last sample
- Increase from last sample
- No change from last sample
- Decreasing trend
- Increasing trend
- No trend

Miles

0 0.5 1
North Management Area: Nitrate

- Decrease from last sample
- Increase from last sample
- No change from last sample
- Decreasing trend
- Increasing trend
- No trend

- ND – Non-detect
- NS – No Sample

Well Screen
- U – Upper Aquifer
- M – Middle Aquifer
- L – Lower Aquifer

Nitrate Wellhead Concentrations
- Less than 1/2 the MCL (5 mg/L)
- Less than the MCL (10 mg/L)
- Management Areas

Map showing nitrate concentrations in different areas, with symbols indicating decrease, increase, no change, decreasing trend, increasing trend, and no trend.
Central Management Area: Nitrate

Nitrate Wellhead Concentrations
- Less than 1/2 the MCL (5 mg/L)
- Management Areas

Decrease from last sample
Increase from last sample
No change from last sample
Decreasing trend
Increasing trend
No trend

ND – Non-detect
NS – No Sample

Well Screen
U – Upper Aquifer
M – Middle Aquifer
L – Lower Aquifer
South Management Area: Nitrate

Nitrate Wellhead Concentrations
- Less than 1/2 the MCL (5 mg/L)
- Greater than the MCL (10 mg/L)
- Management Areas

Well Screen
- U – Upper Aquifer
- M – Middle Aquifer
- L – Lower Aquifer

ND – Non-detect
NS – No Sample

Decrease from last sample
Increase from last sample
No change from last sample
Decreasing trend
Increasing trend
No trend
North Management Area: Sulfate

Sulfate Wellhead Concentrations
- Less than 1/2 secondary MCL (250 mg/L)
- Less than secondary MCL (500 mg/L)
- Management Areas

Sulfate MCL is the upper limit of the secondary MCL

ND – Non-detect
NS – No Sample

Well Screen
U – Upper Aquifer
M – Middle Aquifer
L – Lower Aquifer

Decrease from last sample
Decreasing trend
No trend
Increasing trend
Increase from last sample
Central Management Area: Sulfate

Sulfate Wellhead Concentration
- Less than 1/2 the MCL (250 mg/L)
- Less than the MCL (500 mg/L)
- Management Areas

Sulfate MCL is the upper limit of the secondary MCL

ND – Non-detect
NS – No Sample

Well Screen
U – Upper Aquifer
M – Middle Aquifer
L – Lower Aquifer
South Management Area: Sulfate

Sulfate Wellhead Concentrations
- Less than 1/2 the secondary MCL (250 mg/L)
- Less than the secondary MCL (500 mg/L)
- Greater than the secondary MCL (500 mg/L)
- Management Areas

Sulfate MCL is the upper limit of the secondary MCL

Decrease from last sample
Increase from last sample
No change from last sample
Decreasing trend
Increasing trend
No trend

ND – Non-detect
NS – No Sample

Well Screen
U – Upper Aquifer
M – Middle Aquifer
L – Lower Aquifer
North Management Area: TDS

Total Dissolved Solids (TDS) Wellhead Concentrations
- Less than the secondary MCL (1,000 mg/L)
- Less than 1/2 the secondary MCL (500 mg/L)
- Management Areas

TDS MCL is the upper limit of the secondary MCL

Decrease from last sample
Increase from last sample
No change from last sample
Decreasing trend
Increasing trend
No trend

ND – Non-detect
NS – No Sample

Well Screen
U – Upper Aquifer
M – Middle Aquifer
L – Lower Aquifer

DUDEK
Central Management Area: TDS

Total Dissolved Solids (TDS) Wellhead Concentration

- Less than 1/2 the secondary MCL (500 mg/L)
- Less than the secondary MCL (1,000 mg/L)
- Management Areas

- ND – Non-detect
- NS – No Sample
- Well Screen
  - U – Upper Aquifer
  - M – Middle Aquifer
  - L – Lower Aquifer

TDS MCL is the upper limit of the secondary MCL
South Management Area: TDS

Decrease from last sample
Increase from last sample
No change from last sample
Decreasing trend
Increasing trend
No trend

ND – Non-detect
NS – No Sample
U – Upper Aquifer
M – Middle Aquifer
L – Lower Aquifer

Total Dissolved Solids (TDS) Wellhead Concentrations:
- Less than 1/2 the secondary MCL (500 mg/L)
- Less than the secondary MCL (1,000 mg/L)
- Greater than the secondary MCL (1,000 mg/L)

TDS MCL is the upper limit of the secondary MCL
Radionuclides (Gross Alpha)
Questions and Discussion