The Sustainable Groundwater Management Act and the Borrego Valley Groundwater Basin Boundary Modification

Town Hall Meeting
Borrego Water District

MARCH 30, 2016

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SGMA Background

- California Senate Bills 1168 (Pavley), 1319 (Pavley), and Assembly Bill 1739 (Dickinson)
- Signed into law by Governor Brown September, 2014
- Took effect January 1, 2015
- Applies to all medium and high priority basins as defined by Department Water Resources in Bulletin 118
- Borrego Water District and County(s) are the presumptive parties of responsibility to comply with the legislation for the Borrego Valley Groundwater Basin

SGMA Background

SGMA Components:

- **Department of Water Resources assigns priority (low, medium, high) to each basin recognized by the State based on a number of factors, including:**
  - **Basin population**
  - **Number of public and private wells**
  - **Irrigated acreage**
  - **Reliance on groundwater as a primary source**
  - **Existing negative impacts**
    - Overdraft, land subsidence, water quality degradation, impacts to surface/groundwater connectivity

The Borrego Valley Groundwater Basin is designated medium priority (final designation: critical overdraft)

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SGMA Background

- **Medium and High Priority Basins are required to achieve "sustainable management" by January 31, 2042 with "Critically Overdraft" Basins by January 31, 2040**

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SGMA Background

- **Sustainable Management is defined as the avoidance of "undesirable results" including:**
  - **Chronic lowering of Groundwater levels**
  - **Significant and unreasonable reduction in Groundwater Storage**
  - **Significant and unreasonable degradation of water quality**
  - **Land subsidence due to collapsing of aquifer pore space**
  - **Surface water depletions that have significant and unreasonable impacts on beneficial uses**

SGMA Background

Groundwater Sustainability Agency (GSA)

- May consist of a local agency or combination of local agencies
- Local water supply, water planning agency, or Public Utility Commission regulated private water company responsible for the implementation of SGMA
- GSAs may have significant planning, financial, regulatory, and enforcement powers but do not have the ability to determine water rights
- Flexibility in structure but may employ a Joint Powers Authority (JPA) or Memorandum of Understanding (MOU)
- Must solicit and consider the input and interests of a variety of stakeholders within the basin

SGMA Background

Groundwater Sustainability Agency tools that may be implemented for managing groundwater sustainability:

- **Require registration of wells**
- **Require measurement of groundwater extraction**
- **Require annual extraction reports**
- **Impose extraction limits on individual well**
- **Assess fees to implement local Groundwater Sustainability Plans'**
- **Request revisions to basin boundaries**

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SGMA Background

Groundwater Sustainability Plan (GSP):

- Results in “sustainable conditions” within 20 years of adoption
- Must be approved by Department of Water Resources by 2020
- GSP must include technical information regarding:
  - Hydrogeological conditions of the aquifer
  - Historical and projected water demands
  - Potential areas of recharge
  - Measureable objectives and milestones toward sustainability
  - A monitoring and management plan

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SGMA Background

State Review and Intervention:

- May intervene if Groundwater Sustainability Agency (GSA) not formed
- May intervene if Groundwater Sustainability Plan (GSP) is inadequate
- Can designate basin as “probationary”
- May impose interim plan until local GSA develops adequate GSP

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SGMA Background

- **Participation in SGMA is not required from the following:**
  - **The Federal Government**
  - **Recognized Indian Tribes**
  - **Previously Adjudicated Basins**
  - **Those Basins designated as low priority by the Department of Water Resources**

De minimis extractors:

Those domestic well users producing less than 2 acre-feet/year. May be Exempt from:

- Metering requirements of a GSA/GSP
- Regulatory Pumping Fees
- Reporting extractions to the State

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Important SGMA Dates

Date	Benchmark
March 28, 2016	Borrego Valley Groundwater Basin Boundary Modification application submitted
March 31, 2016	Basin Boundary Adjustment Applications Due
June 1, 2016	DWR Regulations for GSPs Due
August 1, 2016	DWR draft on Basin Boundary Modification requests
June 30, 2017	Deadline for GSA Formation
January 31, 2020	GSPs Due for “Critically Overdrafted” Basins (BVGB)
January 31, 2022	GSPs Due for Non-Critical basins
January 31, 2040 - 2042	Basins Must Achieve Sustainability

BVGB Boundary Adjustment for SGMA

- **Borrego Water District and County as the Groundwater Sustainability Agency for the Borrego Valley Groundwater Basin should seek to modify the basin boundaries drawn in the 2003 version of DWR Bulletin 118 to address the area of the basin experiencing overdraft.**
- **Unlike the 1975 and 1980 versions of Bulletin 118, the basin boundary was extended approximately 30 miles to the southeast in the 2003 version.**

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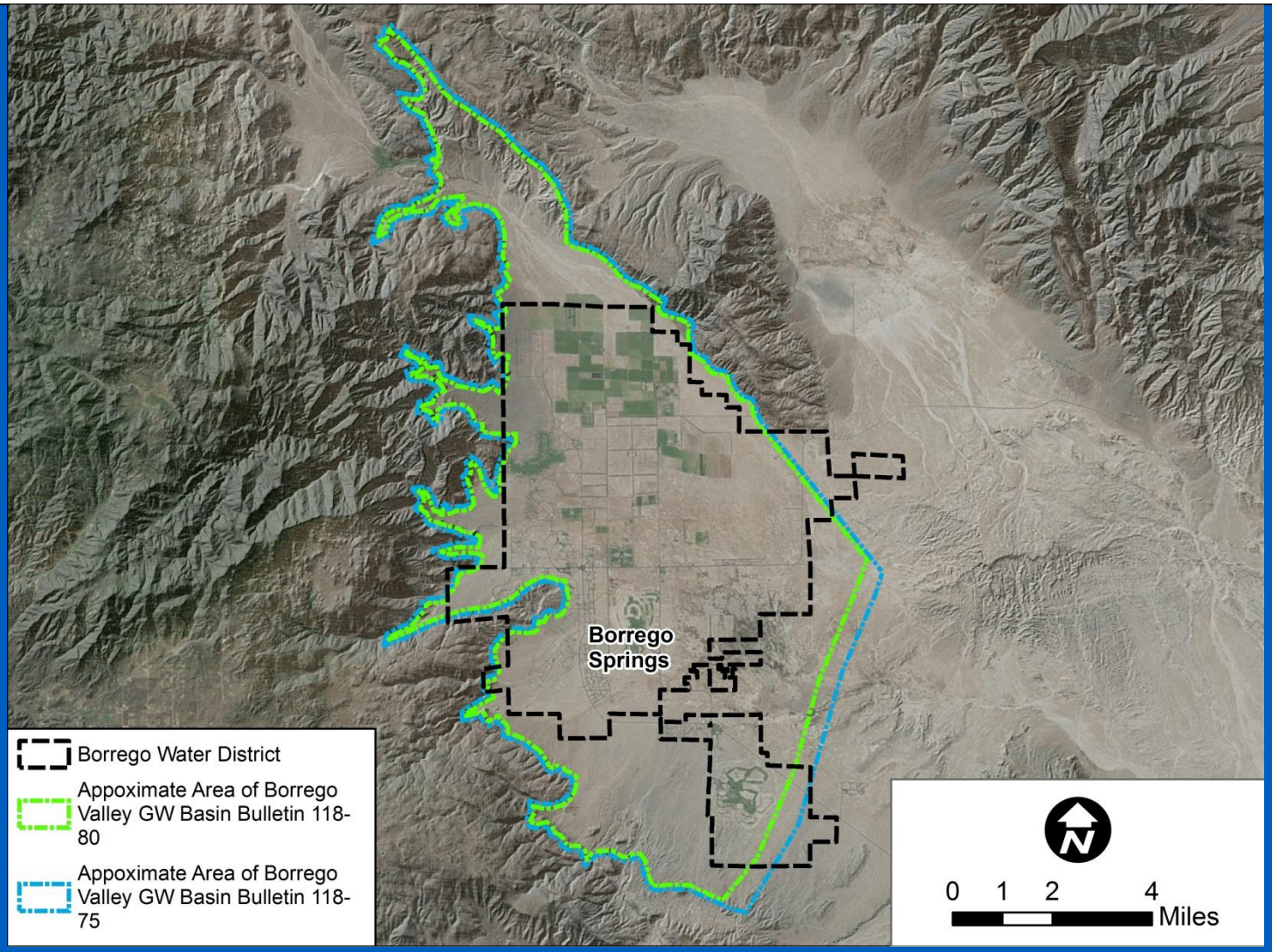
1975 and 1980 DWR Bulletin 118 Basin Boundaries



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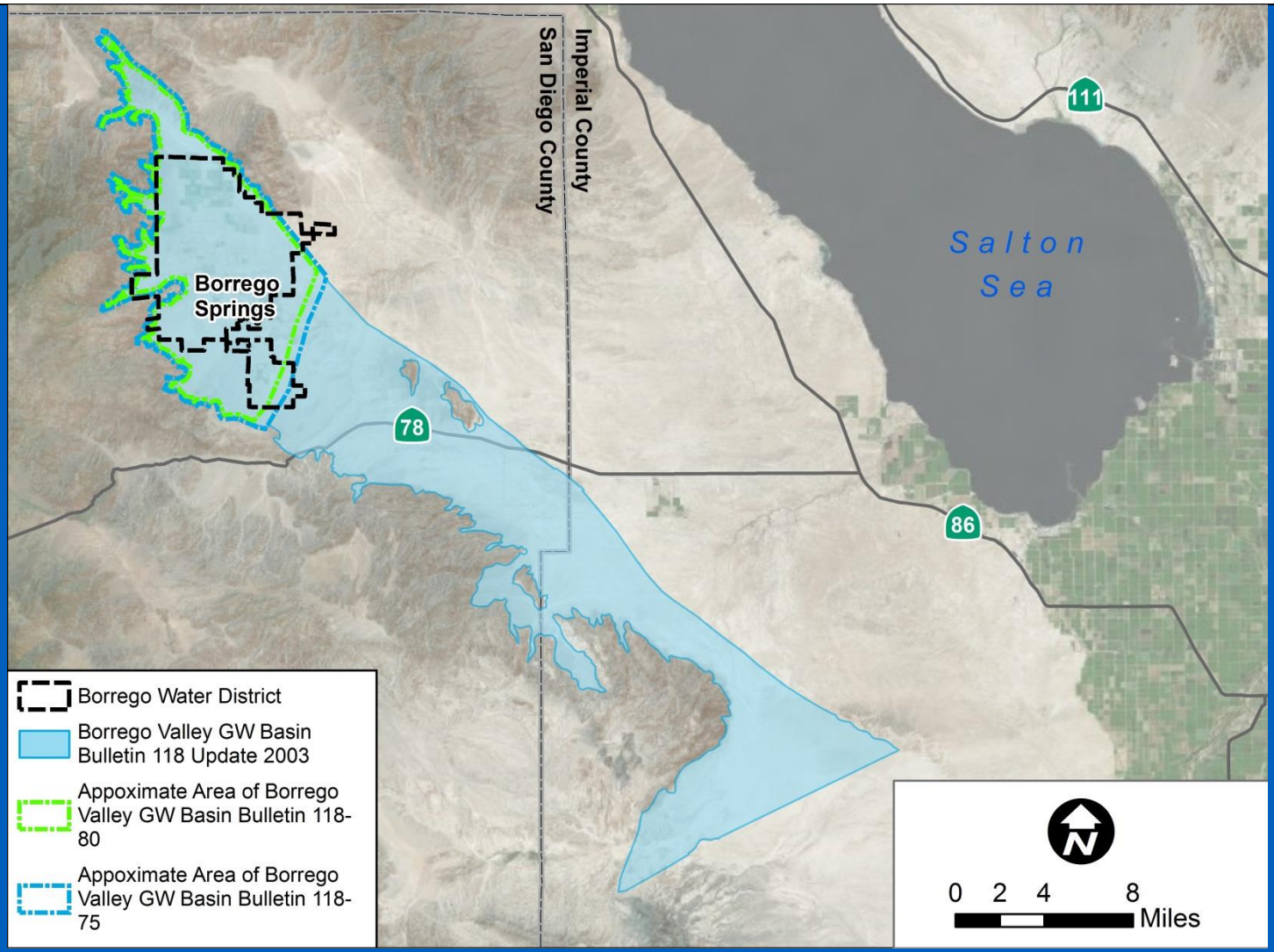
2003 DWR Bulletin 118 Basin Boundary



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Categories of Basin Boundary Modifications

- **Technical**
  - **Basin boundaries should be scientifically based reflecting hydrogeologic boundaries rather than arbitrary jurisdictional boundaries**
- **Jurisdictional**
  - **Basins should be large enough to maximize basin management opportunities and not exclude problem areas – not fractionalized by jurisdictional boundaries**

Technical Rationale for Subdividing Basin

- Limited Area of Basin Experiencing Overdraft
- Structural Basis for Limited Area of Overdraft

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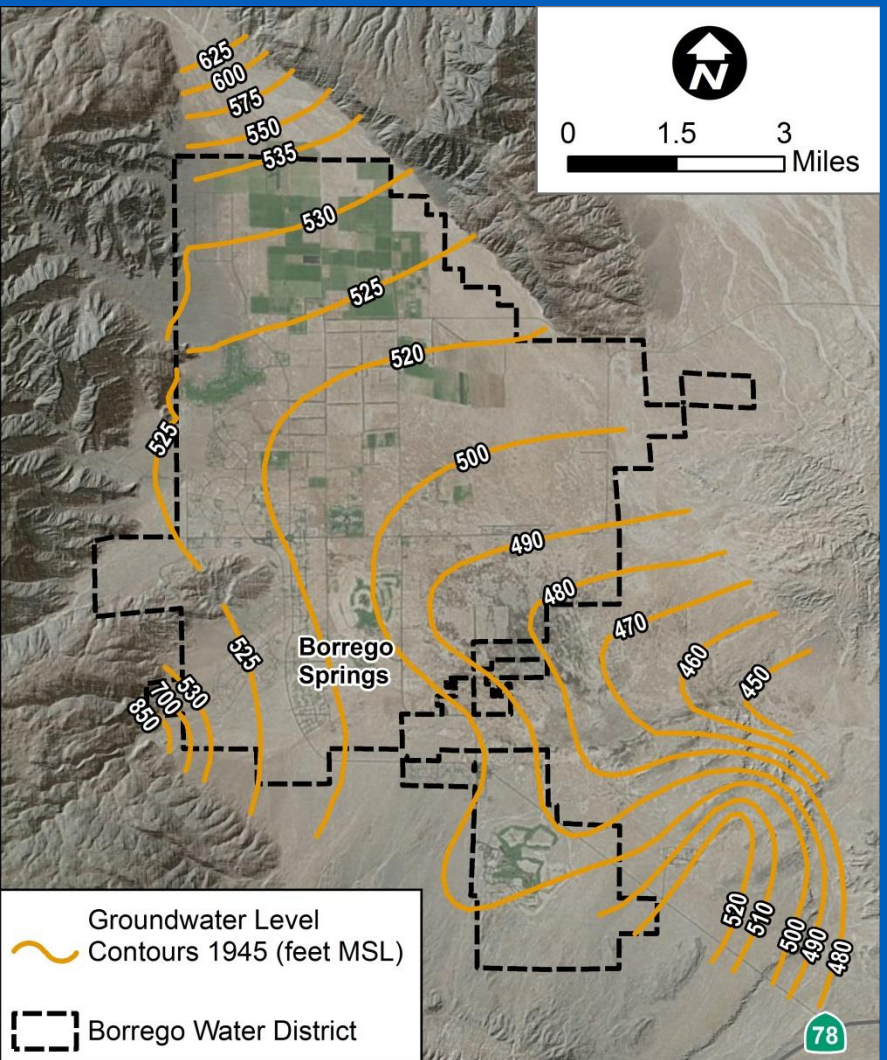
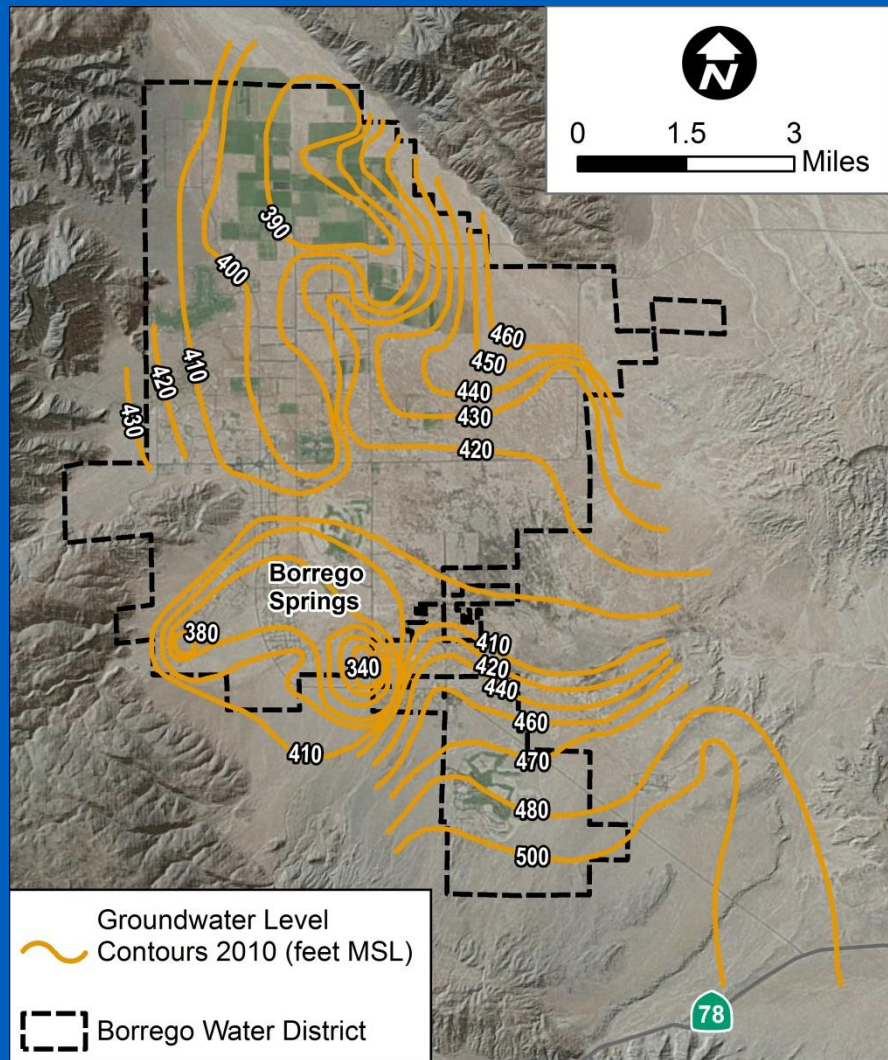
Comparison of 1945 and 2010 Groundwater Levels

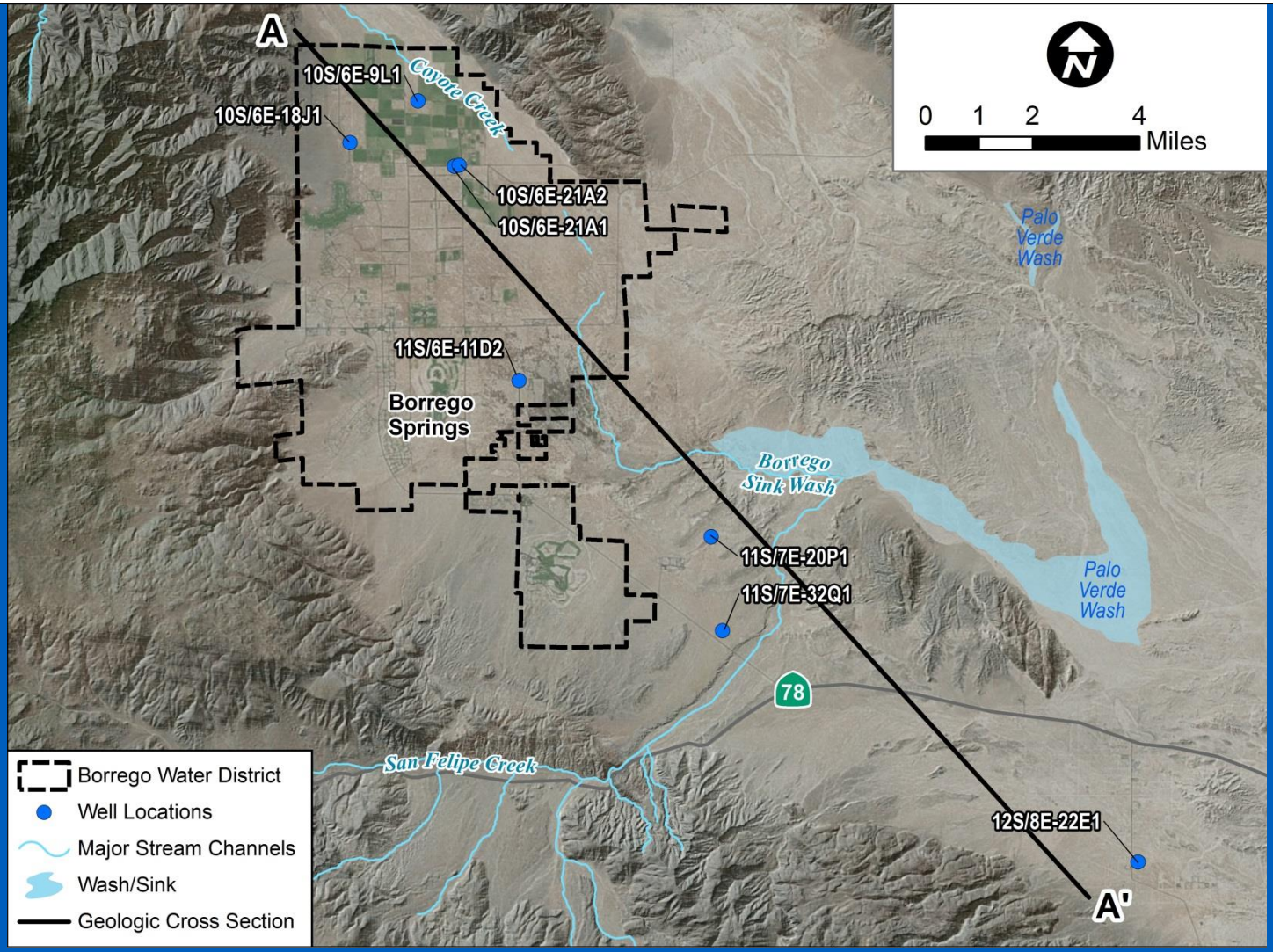
1945 Contours



2010 Contours



Locations of Wells with Long-term Groundwater Level Records



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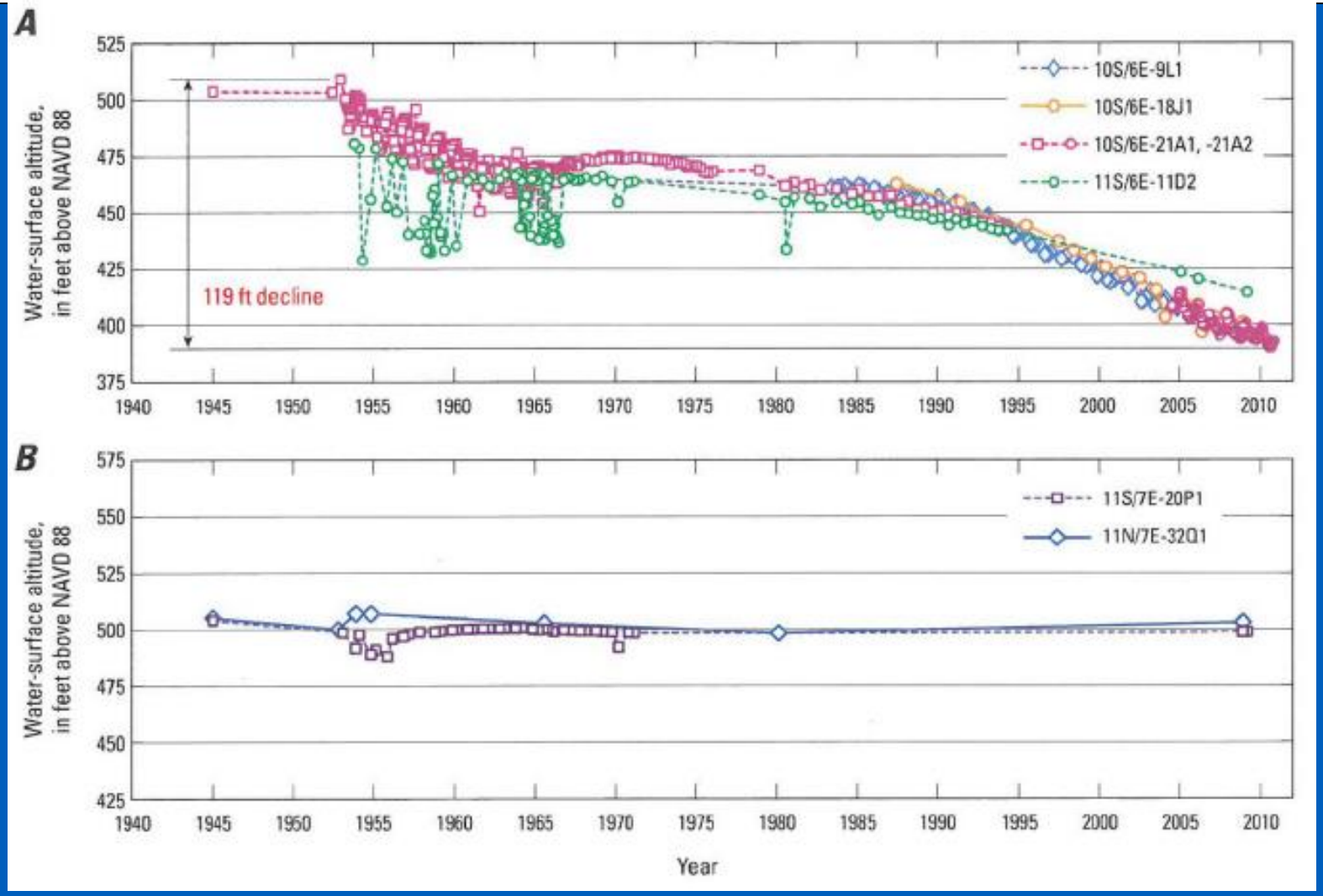
Groundwater Levels 1945 - 2010



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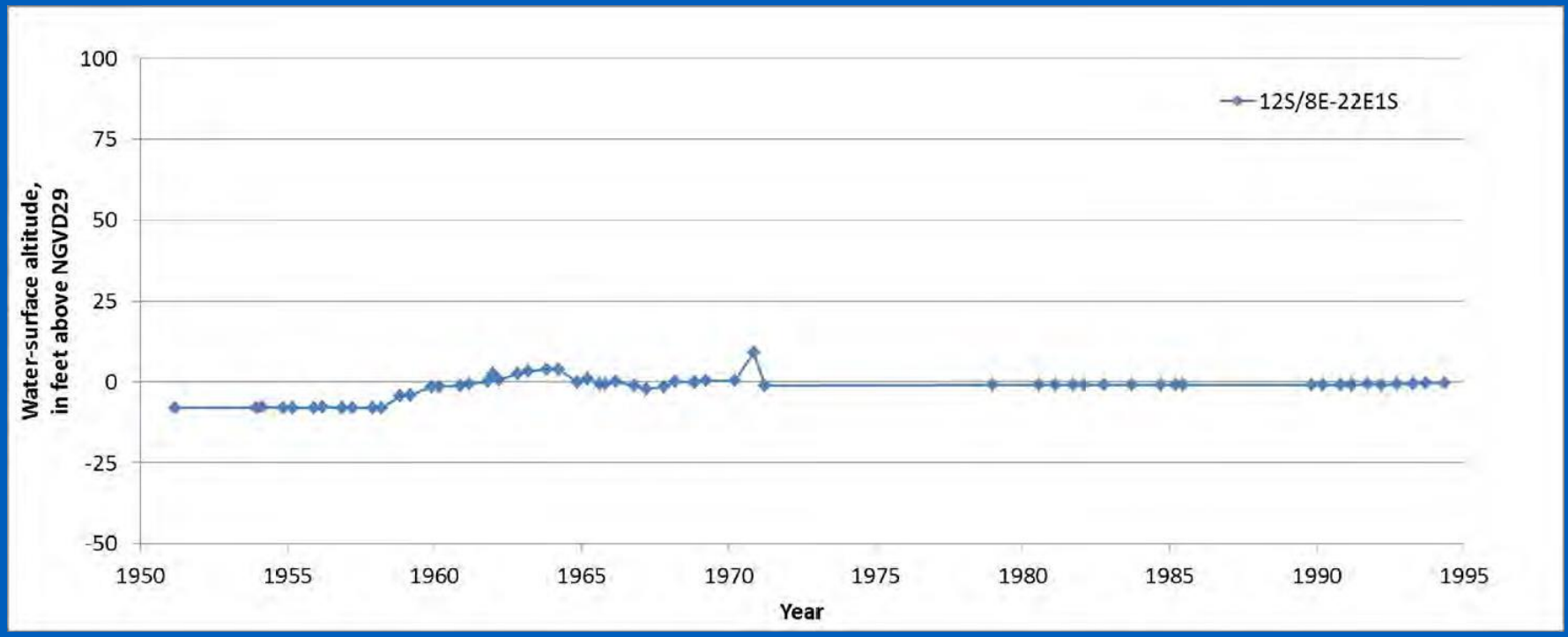
Groundwater Levels: Well 12S/8E-22E1S



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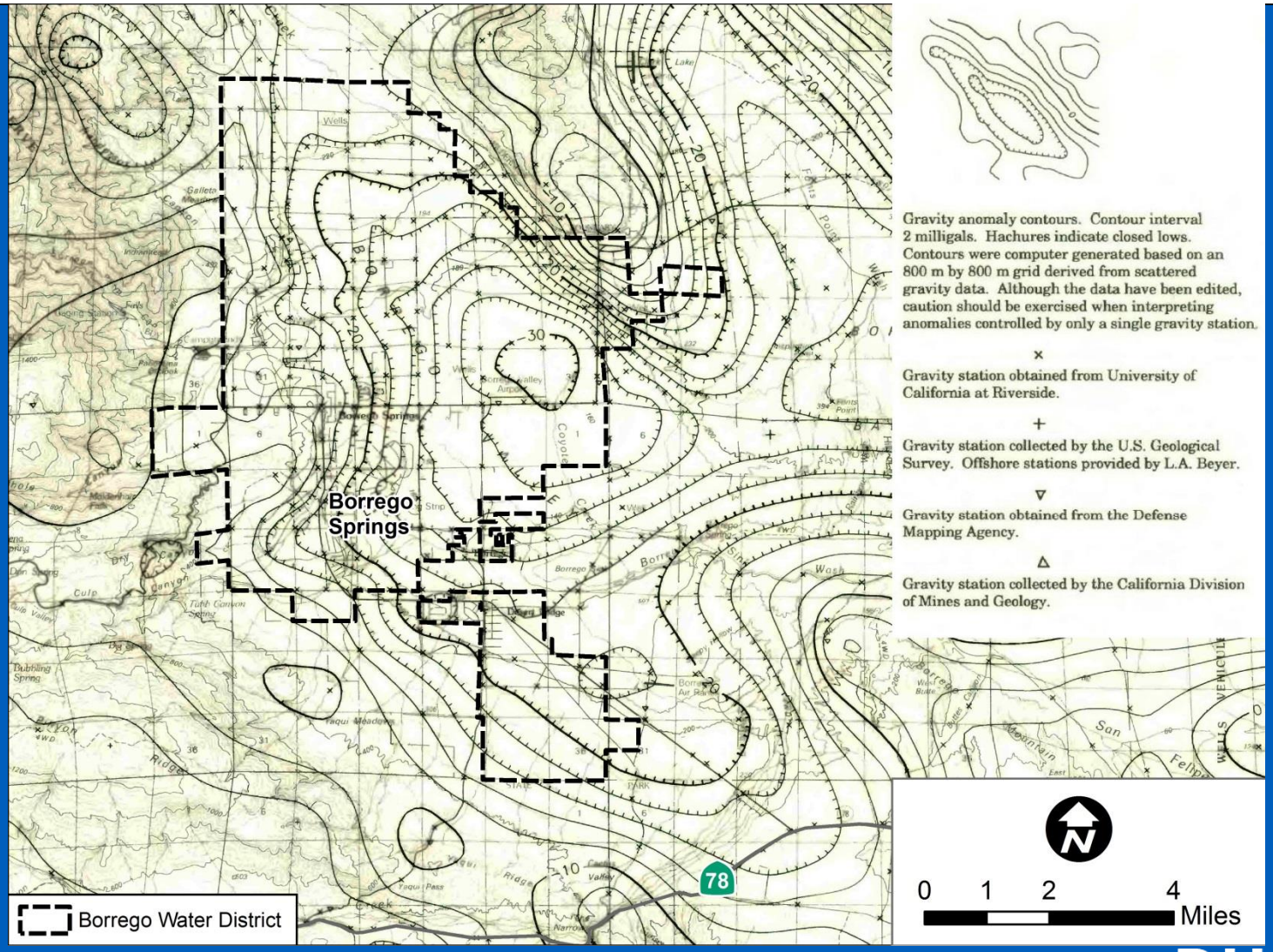
USGS Gravity Survey Map



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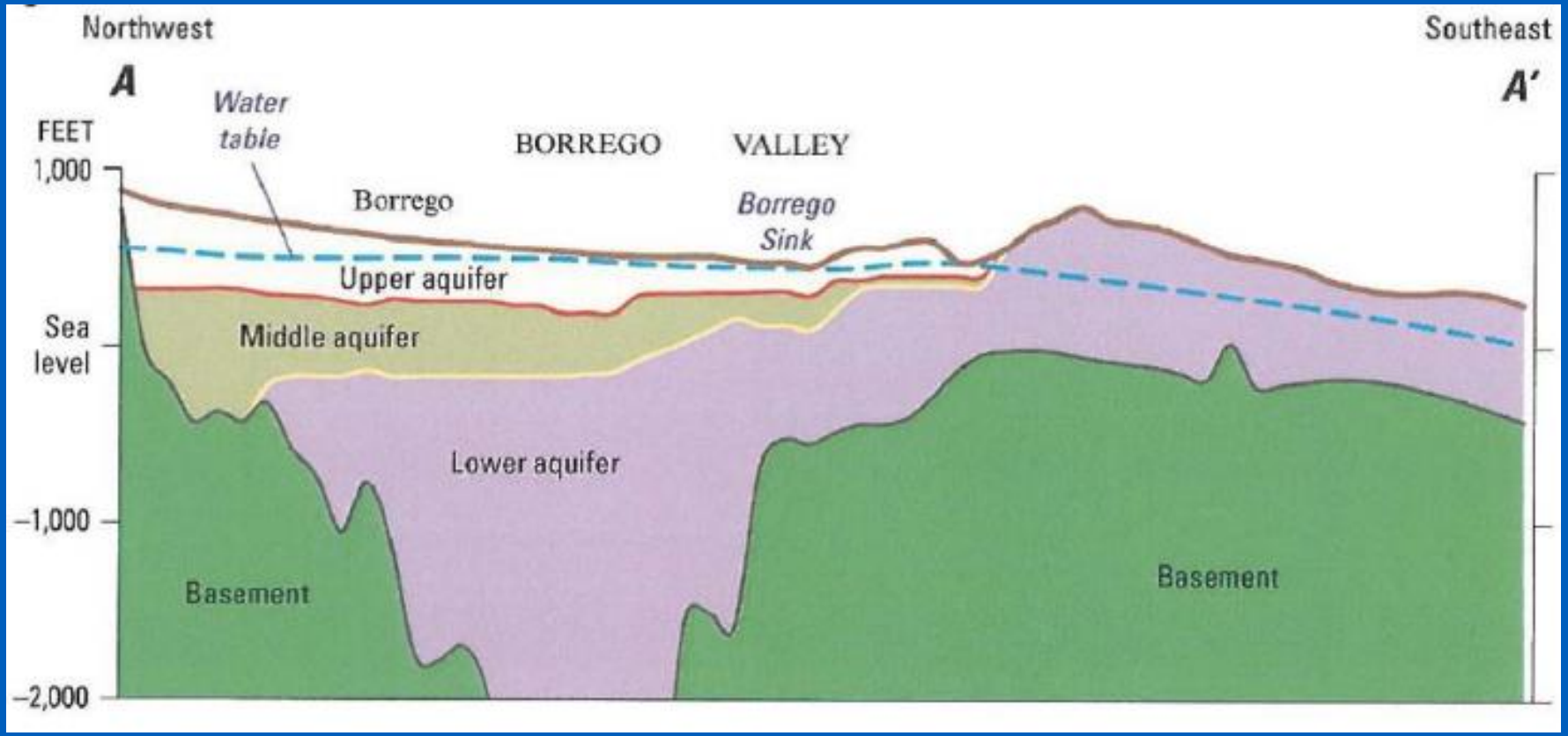
USGS Cross-section Showing Basement



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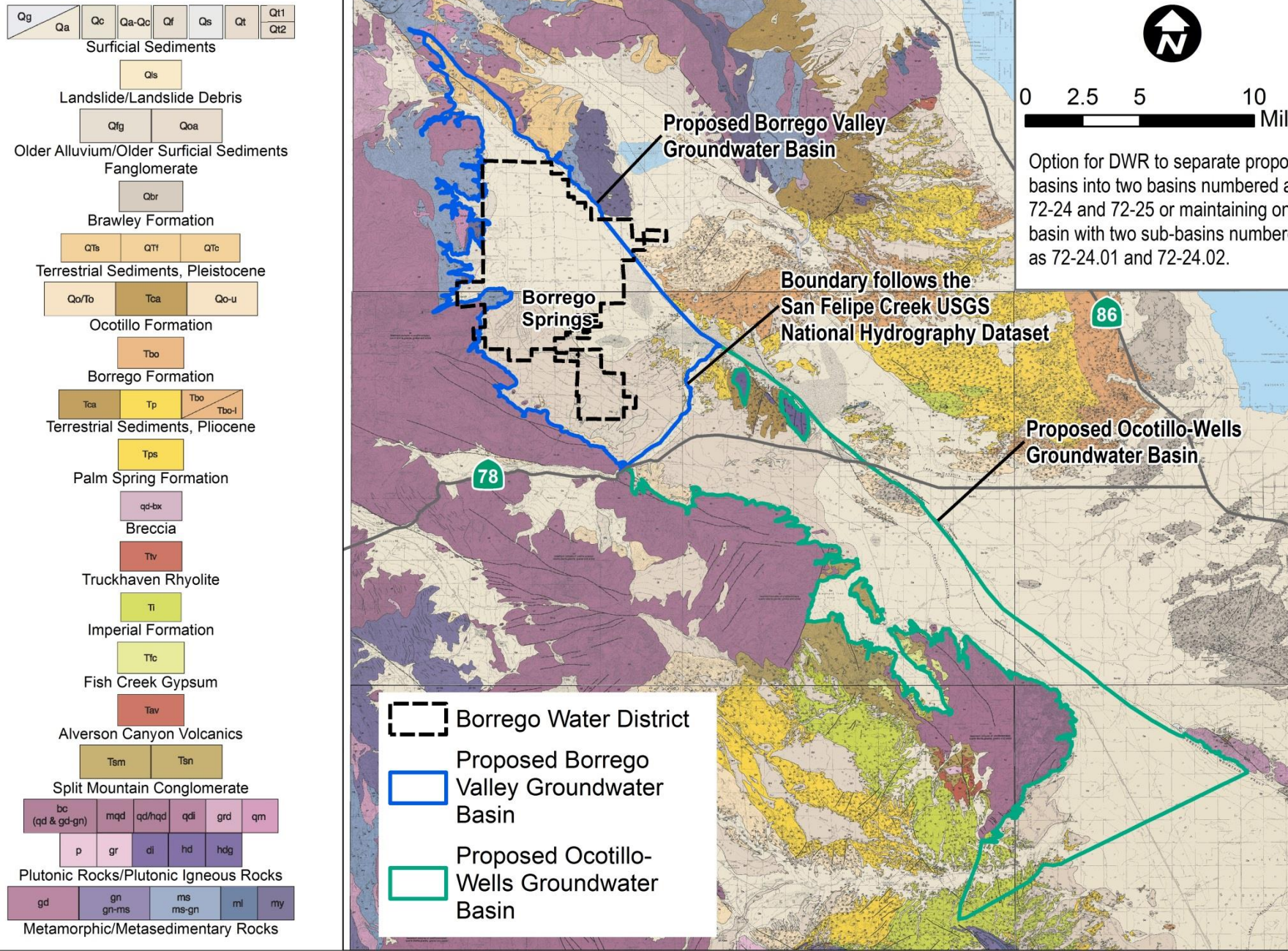
Proposed Borrego Sub-Basin Boundary



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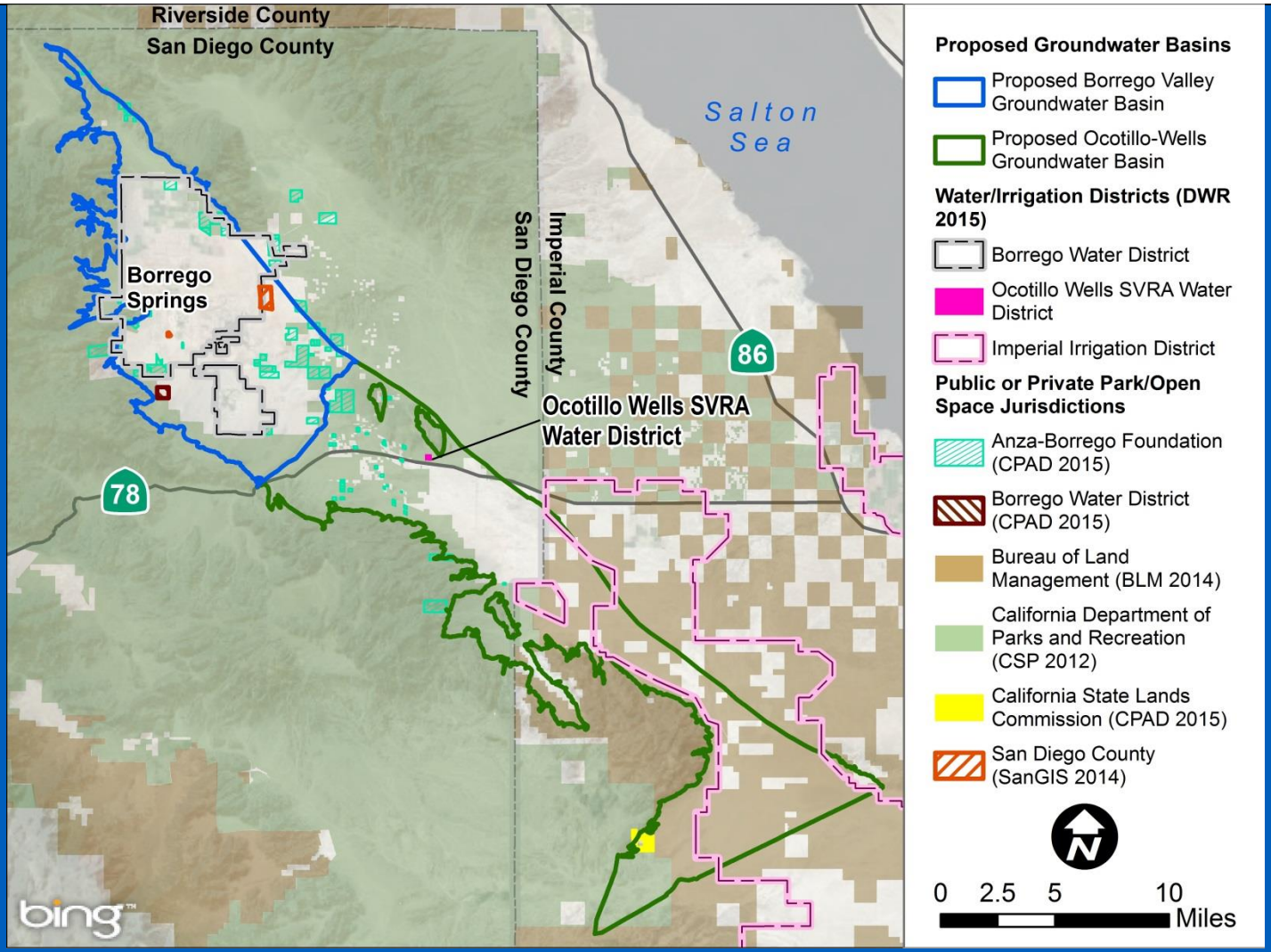

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Questions and Opportunity for Public Comment

- As part of the Regulations for Basin Boundary Modification Request process, Department of Water Resources (DWR) requires outreach and solicitation of comments from the public and local agencies
- Comments on the Basin Boundary Modification Request may be submitted during a 30 day period once DWR has determined the application complete at the following website:

http://sgma.water.ca.gov/basinmod/public/requests