



**JOSHUA BASIN WATER DISTRICT**  
**REGULAR MEETING OF THE BOARD OF DIRECTORS**  
**WEDNESDAY, OCTOBER 16, 2019, AT 6:30 PM**  
**61750 CHOLLITA ROAD, JOSHUA TREE, CA 92252**

**AGENDA**

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **DETERMINATION OF A QUORUM**
4. **APPROVAL OF AGENDA**
5. **PUBLIC COMMENT**  
Members of the public may address the Board at this time with regard to matters within the Board’s jurisdiction that are not listed on the agenda. State law prohibits the Board of Directors from discussing or taking action on items not included on the agenda. Members of the public will have the opportunity for public comment on any item listed on the agenda when it is addressed on the agenda. Please limit comments to three (3) minutes or less.
6. **CONSENT CALENDAR –**
  - Draft Minutes – September 18, 2019
7. **MEMORIAL RESOLUTION NO. 19-1013 OF THE BOARD OF DIRECTORS HONORING MICKEY LUCKMAN** – Recommend that the Board of Directors adopt Resolution No. 19-1013 and present to Ms. Jennifer Carter (Mickey Luckman’s Daughter).
8. **WASTEWATER TREATMENT STRATEGY UPDATE** – Recommend that the Board of Directors receive a presentation outlining the District’s Wastewater Treatment Strategy Update and provide input on how to proceed.
9. **GENERAL MANAGER REPORT** – Mark Ban
10. **DIRECTOR COMMENTS & REPORTS ON MEETINGS ATTENDED**
  - Mojave Water Agency Board of Directors Meeting – September 26, 2019, at 9:30 a.m. – President Johnson
  - Legislative & Public Information Committee – October 2, 2019, at 9:30 a.m. -Vice President Unger, Director Floen, and Kathleen Radnich
  - Finance Committee – October 9, 2019, at 9:00 a.m.– President Johnson and Vice President Unger – Canceled
  - Water Resources & Operations Committee – October 9, 2019, at 10:30 a.m. Director Hund and Director Reynolds
  - Mojave Water Agency Board of Directors Meeting – October 9, 2019 (Changed from October 10, 2019)– Director Floen

Pages 3-5

Page 6

Pages 7-35

11. **FUTURE AGENDA ITEMS, DIRECTOR MEETINGS, AND TRAINING OPPORTUNITIES**

- Mojave Water Agency Technical Advisory Committee-October 21, 2019, at 9:30 a.m. (Rescheduled from October 3, 2019)-Vice President Unger
- Association San Bernardino County Special District (ASBCSD) Dinner-West Valley Water District- Sierra Lakes Golf Club, Fontana-October 21, 2019, at 6:00 p.m. -Director Reynolds
- Hi Desert Water Agency Board of Directors Meeting-October 23, 2019, at 5:30 p.m.-
- Mojave Water Agency Board of Directors Meeting-October 23, 2019, at 8:30 a.m. (note time change) – Vice President Unger
- Morongo Basin Pipeline Commission October 29, 2019, at 2:00 p.m. – President Johnson (location still to be determined).
- Bighorn Desert View Water Agency Board of Directors Meeting – October 29, 2019, at 6:00 p.m. –
- Twentynine Palms Board of Directors Meeting – October 30, 2019, at 4:00 p.m.-

INFORMATION

The public is invited to comment on any item on the Agenda during discussion of that item.

Any person with a disability who requires accommodation in order to participate in this meeting should telephone Joshua Basin Water District at (760) 974-0072, at least 48 hours prior to the meeting in order to make a request for a disability-related modification or accommodation.

Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the District's office located at 61750 Chollita Road, Joshua Tree, California 92252 during normal business hours.

JOSHUA BASIN WATER DISTRICT  
REGULAR MEETING MINUTES  
WEDNESDAY, SEPTEMBER 18, 2019

CALL TO ORDER/PLEDGE OF ALLEGIANCE – President Johnson called the meeting to order at 6:30 p.m.

DETERMINATION OF A QUORUM – President Johnson, Vice President Unger, Director Floen, Director Hund, and Director Reynolds.

STAFF PRESENT –Mark Ban, GM, Susan Greer, AGM-Controller, Sarah Johnson, Director of Administration, and Beverly Waszak, Executive Assistant

CONSULTANTS PRESENT – Jeff Hoskinson, Atkinson, Andelson, Loya, Rudd, Romo, and Kathleen Radnich, Public Outreach

APPROVAL OF AGENDA – Vice President Unger made a change to Item #7 with the addition of David Carrillo to be appointed to the Citizens Advisory Council.

Director Reynolds moved to approve the Agenda. Director Hund seconded.

MSC<sup>1</sup> (Reynolds/Hund) motion carried by the following vote:

Ayes: Floen, Hund, Johnson, Reynolds, and Unger  
Noes: None  
Absent: None  
Abstain: None

PUBLIC COMMENT –Fred Jaross, Joshua Tree, proposed that Yucca Valley put a regional plant in Joshua Tree instead of having to pump up hill by Home Depot. This move would incur savings to the College, Hospital, and Sheriff's office.

CONSENT CALENDAR – Board of Directors approved the consent calendar with the following vote.

MSC<sup>1</sup> (Floen/Unger) motion carried by the following vote:

Ayes: Floen, Hund, Johnson, Reynolds, and Unger  
Noes: None  
Absent: None  
Abstain: None

BOARD TO APPONT NEW CITIZENS ADVISORY COUNCIL MEMBER – Karen Tracy, Chairperson, Citizens Advisory Council, explained that Dave Mistal was not present and introduced David Carrillo to the Board of Directors. After a brief Q&A with the Board of Directors, the Board of Directors appointed David Carrillo to the Citizens Advisory Council.

MSC<sup>1</sup> (Reynolds/Unger) motion carried by the following vote:

Ayes: Floen, Hund, Johnson, Reynolds, and Unger  
Noes: None  
Absent: None  
Abstain: None

Dave Mistal, who was originally on the Agenda to be appointed, did not attend the Board meeting and therefore was not appointed to the Council.

JOSHUA BASIN WATER DISTRICT (“THE DISTRICT”) ATTORNEY REPRESENTATION –Jeff Hoskinson, Partner, Atkinson, Andelson, Loya, Rudd, and Romo gave a brief overview of their firm. This was followed by a Q&A period with the Board of Directors. Director Hund motioned to approve Atkinson, Andelson, Loya, Rudd, and Romo to represent the District. Director Unger seconded.

MSC<sup>1</sup> (Hund/Unger) motion carried by the following vote:

Ayes: Floen, Hund, Johnson, and Unger  
Noes: Reynolds  
Absent: None  
Abstain: None

ADOPT RESOLUTION NO. 19-1009 IMPLEMENTING POLICY TO REQUIRE OWNER AUTHORIZATION FOR TENANT ACCOUNTS AND ALLOWING OWNER CONTINUOUS SERVICE AGREEMENT – AGM Greer gave the staff report followed by a brief Q&A with the Board of Directors.

PUBLIC COMMENT – Jane Jarlsberg, Joshua Tree, asked what the percentage is of landlords that include water in their rental agreements.

AGM Greer responded that she didn’t know and there was no way for her to know the amount.

Barbara Delph, Joshua Tree, stated that the Board owes the fiscal responsibility to the rate payers and not the landlords. The landlord’s profit from rentals and receive tax breaks, and they should be screening their renters, but if not, that is on the landlord. The ratepayers should not have to absorb the problems that the landlords bring on themselves.

PUBLIC COMMENTS CLOSED –

Vice President Unger motioned to adopt Resolution No. 19-1009 implementing policy to require owner authorization for tenant accounts and allowing Owner Continuous Service Agreement. President Johnson seconded.

MSC<sup>1</sup> (Unger/Johnson) motion carried by the following vote:

Ayes: Floen, Hund, Johnson, and Unger  
Noes: Reynolds  
Absent: None  
Abstain: None

ADOPT RESOLUTION NO. 19-1008 ESTABLISHING THE APPROPRIATION LIMIT FOR 2019-2020- AGM Greer gave the staff report followed by a brief Q&A with the Board of Directors. Director Reynolds motioned to adopt Resolution No. 19-1008 establishing the Appropriation Limit for 2019-2020. Director Hund seconded.

MSC<sup>1</sup> (Reynolds/Hund) motion carried by the following vote:

Ayes: Floen, Hund, Johnson, Reynolds, and Unger  
Noes: None  
Absent: None  
Abstain: None

GENERAL MANAGER REPORT – GM Ban updated the Board of Directors on the Saddleback mainline replacement project and 4-Log treatment for Well 14.

DIRECTOR COMMENTS & REPORTS ON MEETINGS ATTENDED –

Kathleen Radnich, Public Outreach Consultant reported on the “Great Shake Out”, District Tours, Low Income Assistance Program, Evaporative/Swamp Cooler Study, Farmers Market, and the Legislative and Public Information Committee.

Director Floen reported on the Mojave Water Agency Board of Directors meeting he attended on September 12, 2019.

**DIRECTOR MEETINGS, AND TRAINING OPPORTUNITIES-**

President Johnson read off the list of upcoming meetings.

ADJOURNMENT – President Johnson adjourned the Board of Directors meeting at 7:57 p.m.

Respectfully submitted,

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Mark Ban, General Manager and Secretary of the Board

DRAFT

**RESOLUTION NO. 19-1013**

**A MEMORIAL RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE JOSHUA BASIN WATER DISTRICT  
HONORING MICKEY LUCKMAN**

**WHEREAS**, the Joshua Basin Water District has lost a valued member and leader, with the passing of Mickey Luckman on June 9, 2019; and

**WHEREAS**, not just Joshua Tree, but the entire Morongo Basin community lost a strong, forward-thinking, and knowledgeable leader and mentor; and

**WHEREAS**, she previously served on many local boards of directors, such as the Mojave Desert Land Trust and Basin Wide Foundation among many others, including the last 11 years on the Board of Directors of the Joshua Basin Water District; and

**WHEREAS**, she was a strong conservationist, loved nature and believed in each person taking responsibility for the planet; and

**WHEREAS**, she was a talented artist and a big supporter of the Morongo Basin artist community; and

**WHEREAS**, she valued every person and living thing and believed in peace, goodness and compassion; and

**WHEREAS**, Mickey Luckman has served as a good friend and colleague to Joshua Basin Water District, the Joshua Tree community, and the Morongo Basin; and

**WHEREAS**, although she will be missed very much, her legacy, reflected in some of the important decisions that she helped to make, which defended, supported and improved the District, will live on.

**NOW THEREFORE BE IT RESOLVED**, that the Joshua Basin Water District recognizes the commitment Mickey Luckman exhibited for more than a decade by serving on its Board of Directors, including 4 years as Board President, and hereby expresses its appreciation and gratitude for her many achievements and contributions to the Joshua Basin Water District and the entire Joshua Tree community.

**BE IT FURTHER RESOLVED**, that the Board of Directors of the Joshua Basin Water District does hereby adjourn its regular meeting of October 16, 2019 in memory of "Mickey Luckman".

By: \_\_\_\_\_  
Robert Johnson, President, Board of Directors

Attest: \_\_\_\_\_  
Mark Ban, General Manager and Board Secretary

JOSHUA BASIN WATER DISTRICT  
MEETING AGENDA REPORT

Meeting of the Board of Directors

October 16, 2019

Report to: President and Board of Directors

Prepared by: Mark Ban, General Manager

**TOPIC: WASTEWATER TREATMENT STRATEGY UPDATE**

**RECOMMENDATION:** Board of Directors to receive a presentation outlining the District's Wastewater Treatment Strategy update and provide input on how to proceed.

**ANALYSIS:**

A portion of the District's fiscal year 2019-20 budget has been allocated toward the update of its 2009 Wastewater Treatment Strategy (the "Strategy"). Dudek Engineering, the author of the original Strategy, has been contracted with the District to complete this update and has been working with staff to develop a "kickoff" presentation that will bring the Board of Directors (the "Board") up to speed on the highlights of the original Strategy while focusing on recent wastewater treatment system installations and the impacts septage is having on District groundwater wells.

The original Strategy delineated a boundary referred to as the "Wastewater Treatment Strategy Area" in which new developments, both residential and commercial, are required to pay a fee based on a development's wastewater discharge rate referred to as an equivalent dwelling unit (EDU). These funds are earmarked to assist in the planning and development of a future wastewater collection, treatment and disposal method. To date, approximately one-million dollars in funds have been collected through this fee mostly influenced by payments made by the Hi-Desert Medical Center.

Current water quality data suggests that the infiltration of septage from septic tanks in the downtown area have increased nitrate levels in District groundwater well 10 causing concentrations to rise above half the maximum contaminant level (MCL) set by the State Water Resources Control Board, Division of Drinking Water. Increased nitrate concentrations have also been realized in test wells constructed by the United States Geological Survey (USGS). While this does not pose a current health risk to our customers, it does require the District to sample the well for nitrates at an increased frequency while solidifying the need to consider the current impacts as part of the updated Strategy.

Based on the information provided during the presentation, staff, along with Mike Metts from Dudek Engineering, will begin a dialogue with the Board that influences the next steps to be taken as part of the Strategy's update. Topics to consider will include: the current method of financing future wastewater improvements and other financing mechanisms available to the District; septage infiltration and its impacts on the District's water supply; potential solutions available for the collection and treatment of wastewater; and future workshops and stakeholder outreach efforts.

# WASTEWATER TREATMENT STRATEGY UPDATE

BOARD WORKSHOP



611750 Cholita Road  
Joshua Tree, California 92252

Presentation: October 16, 2019

**DUDEK**



# Wastewater Treatment Strategy Update

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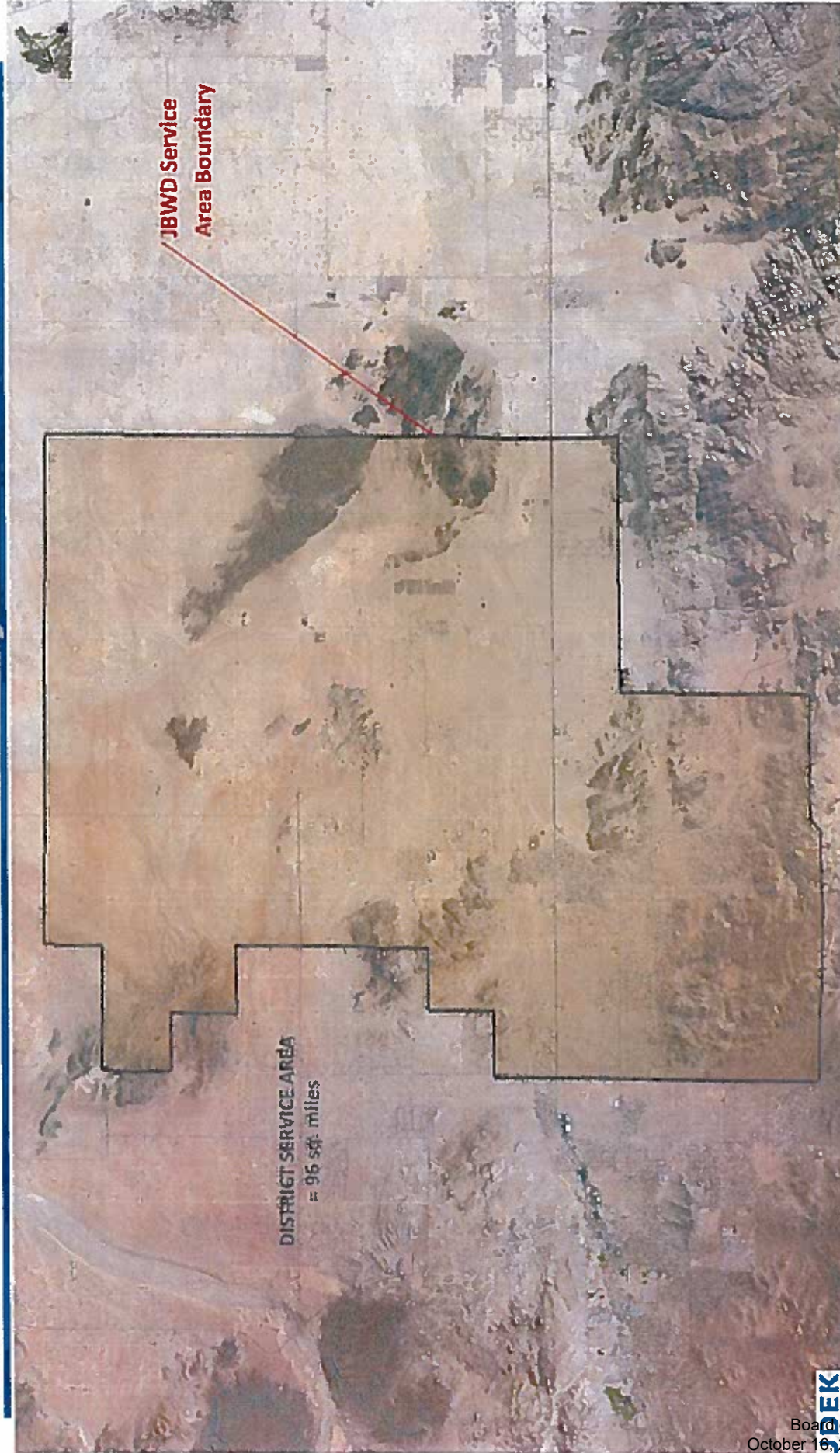
## Agenda

- Service Area Discussion
- Original WTS Study Area
- Wastewater Production
- Nitrate Production
- Near Term Solutions
- Next Steps



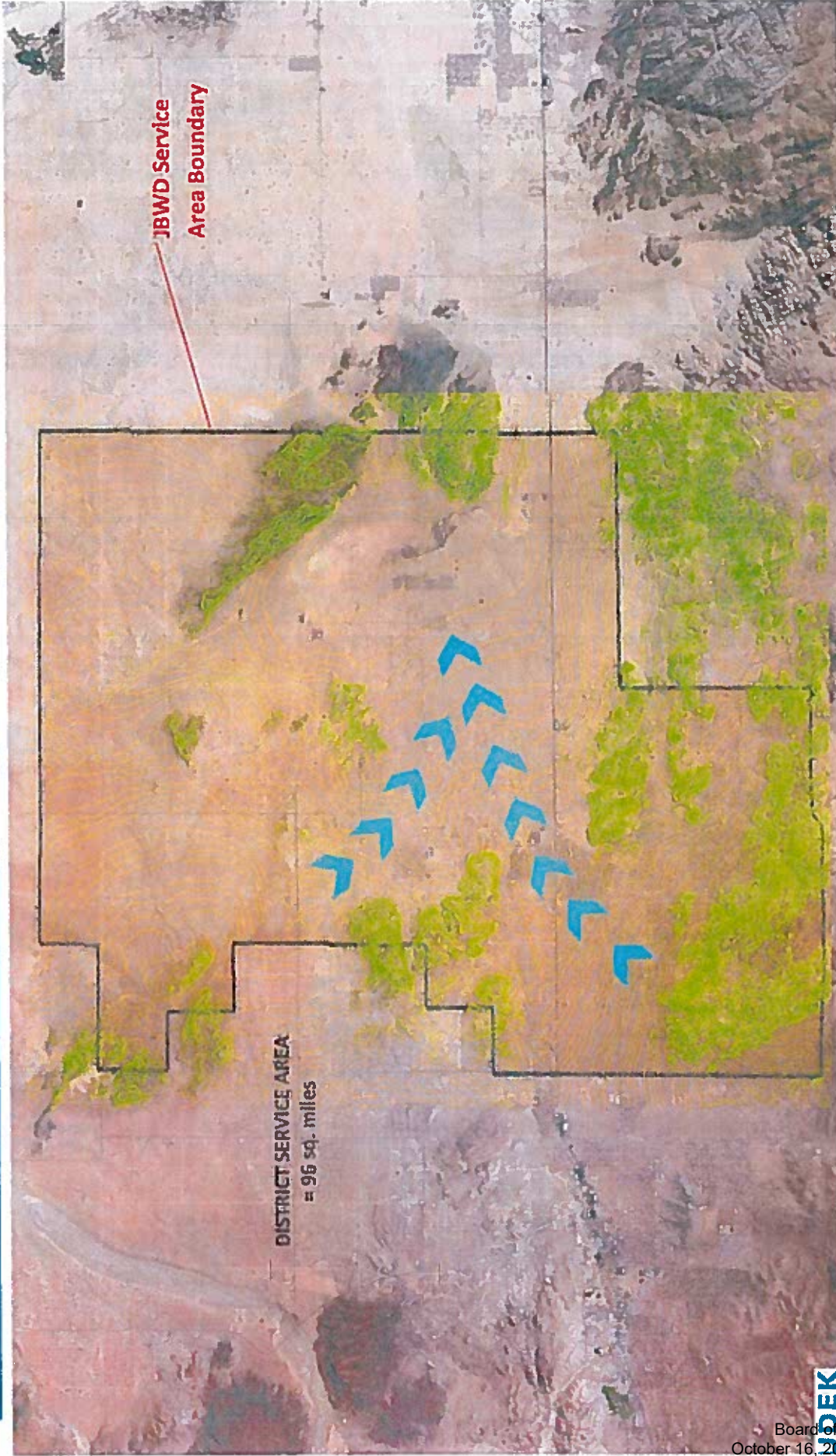
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# District Service Boundary



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# Local Topography

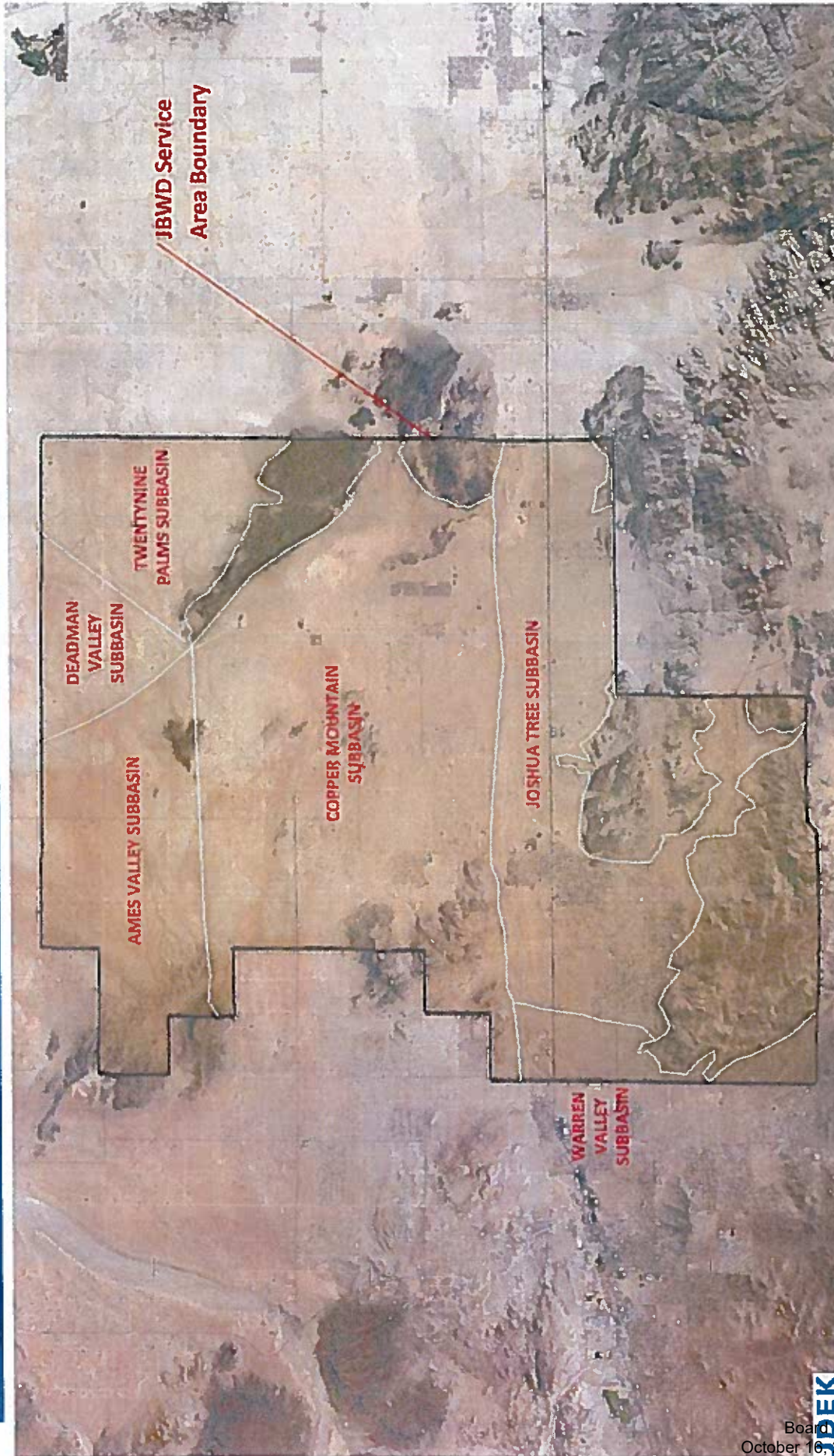


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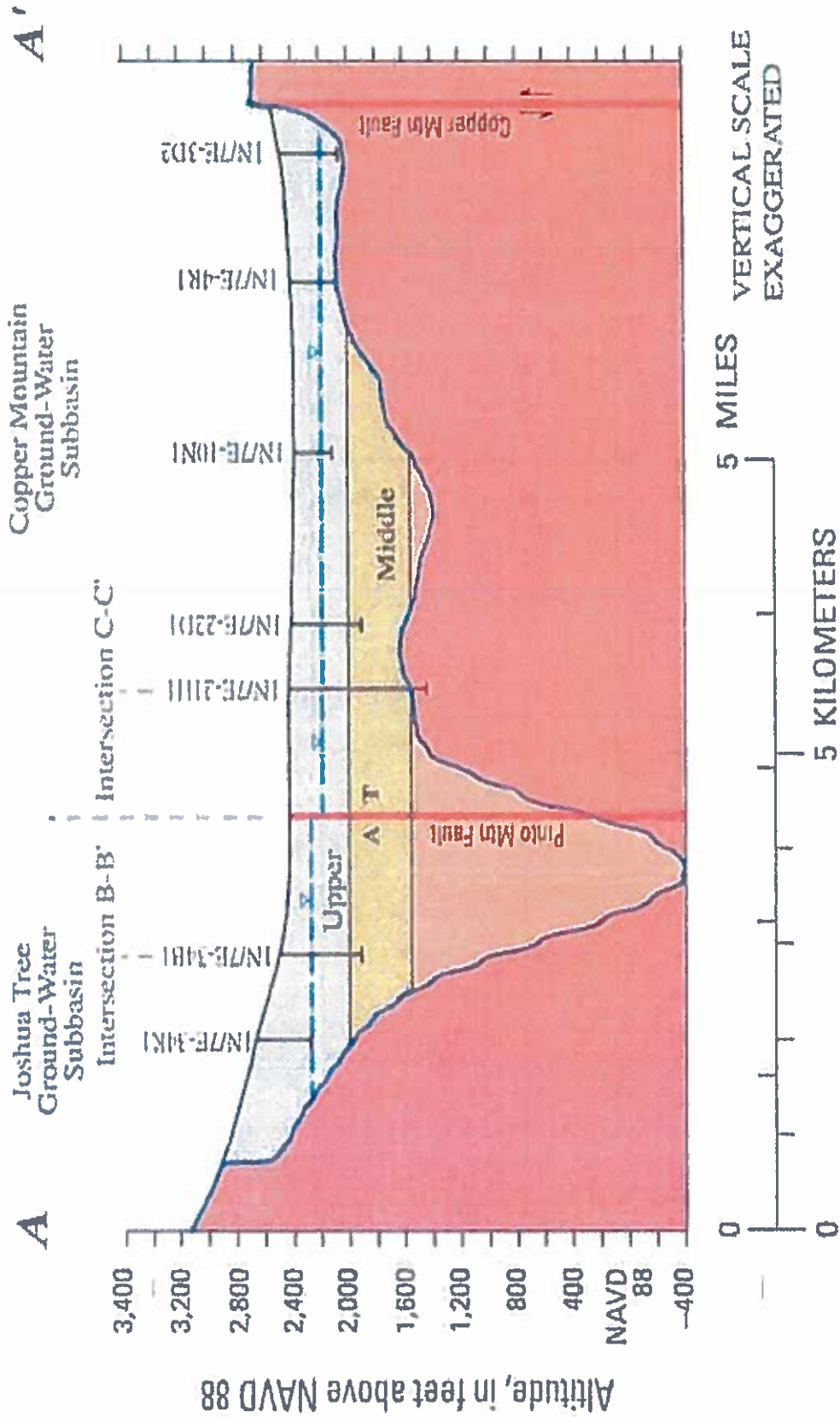
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# Local Groundwater Basin Boundaries



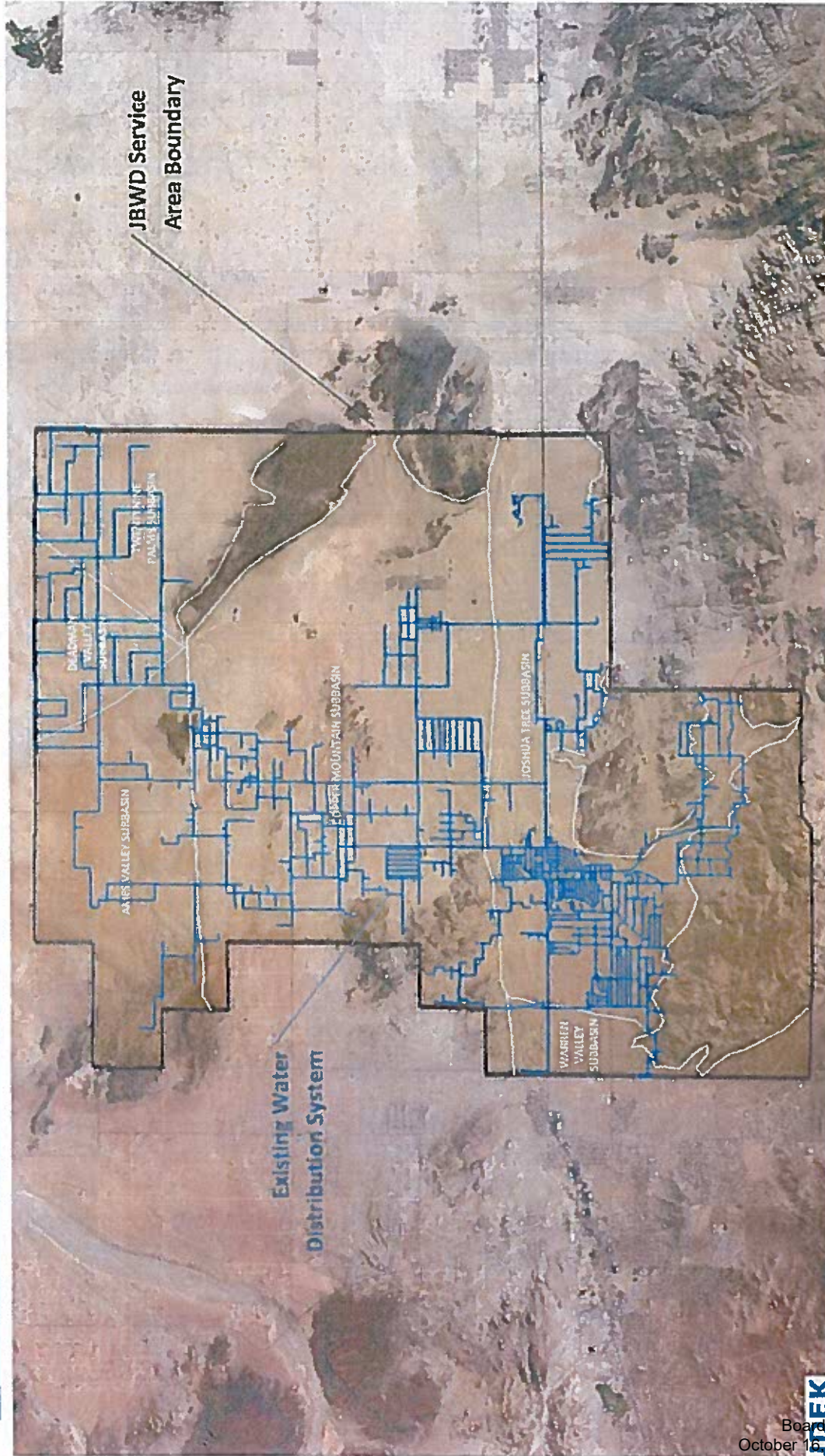
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# Groundwater Basin Cross Section



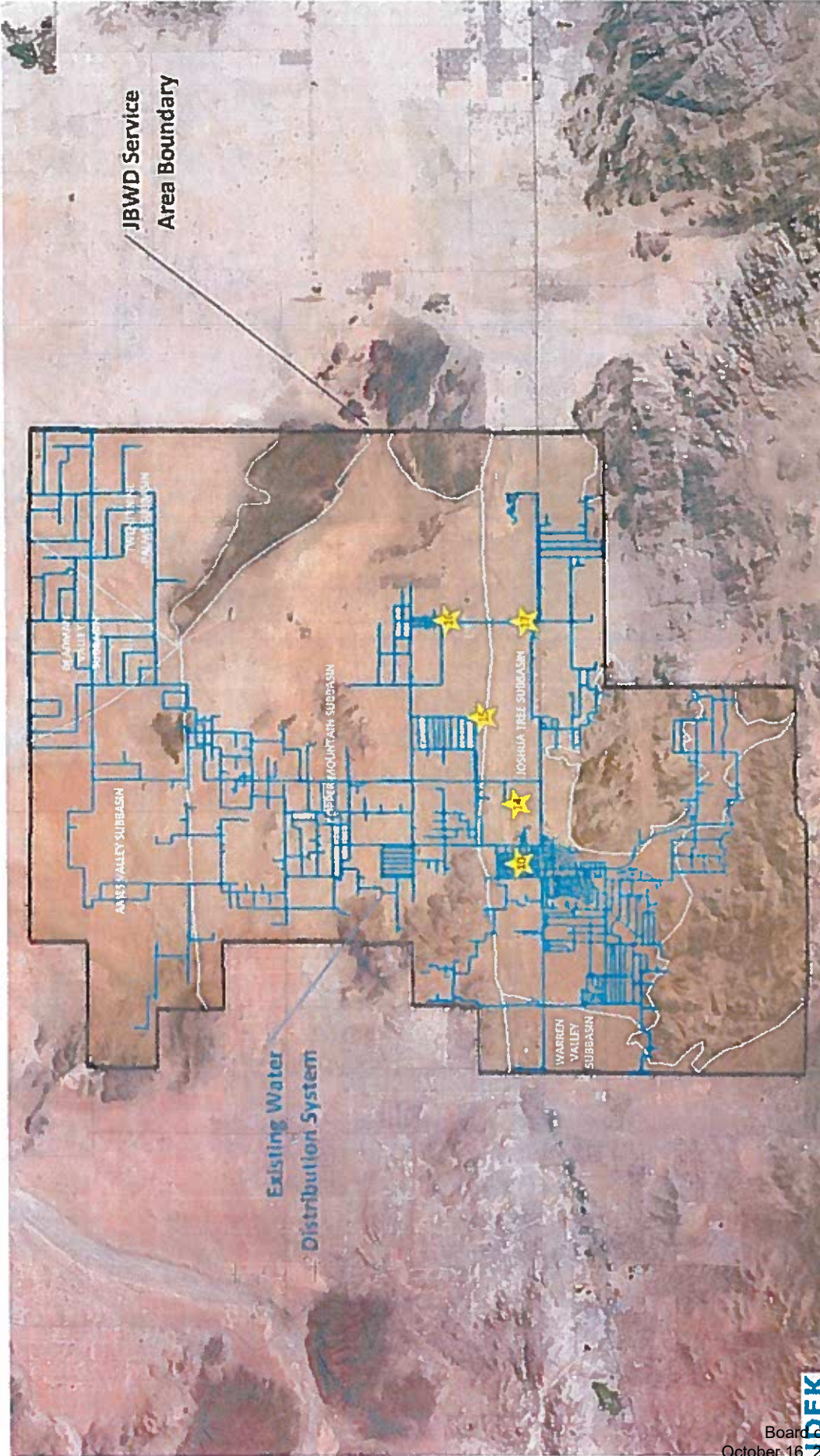
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# Existing Water Distribution System



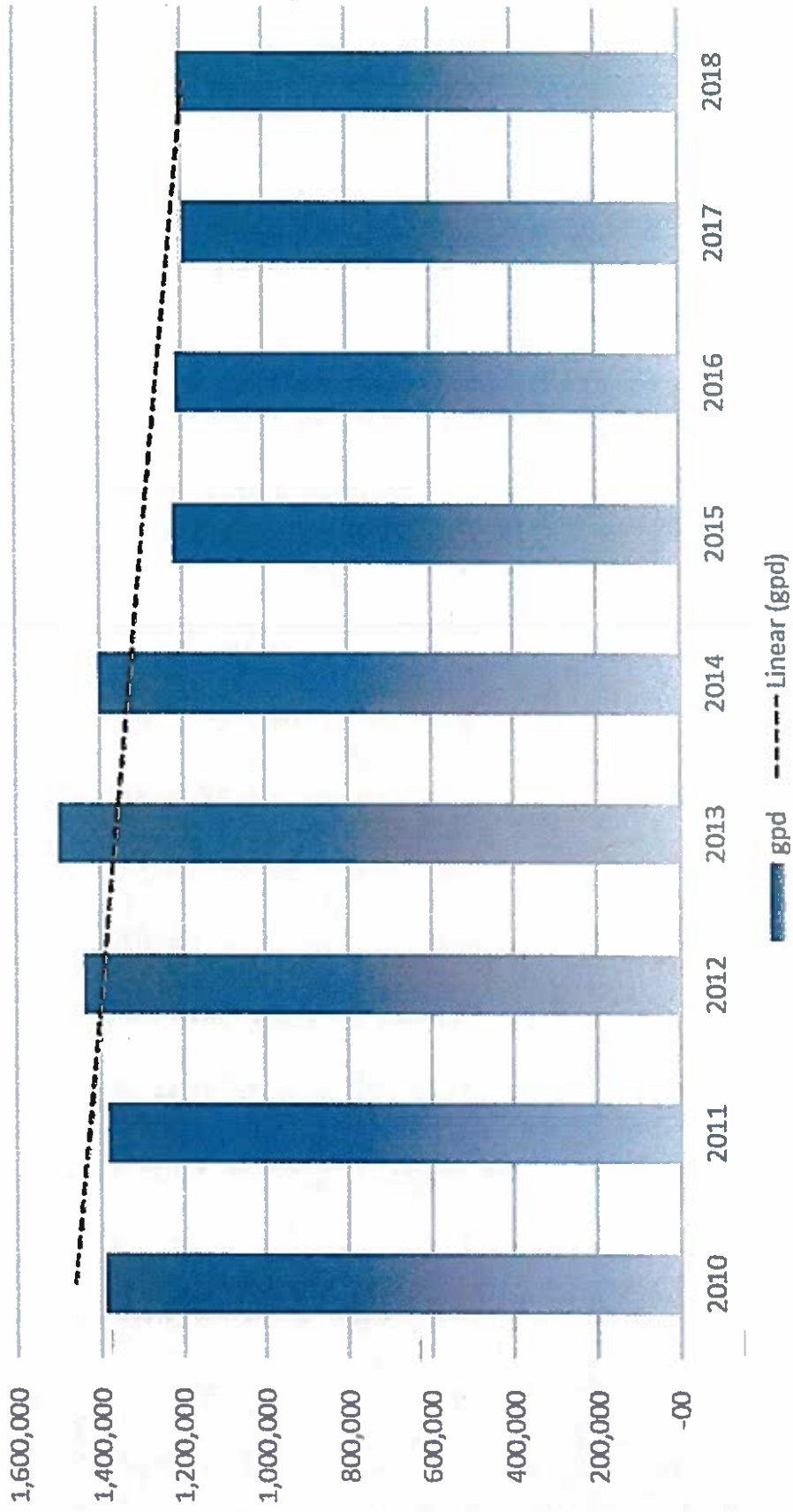
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# Production Well Locations



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# Potable Water Consumption



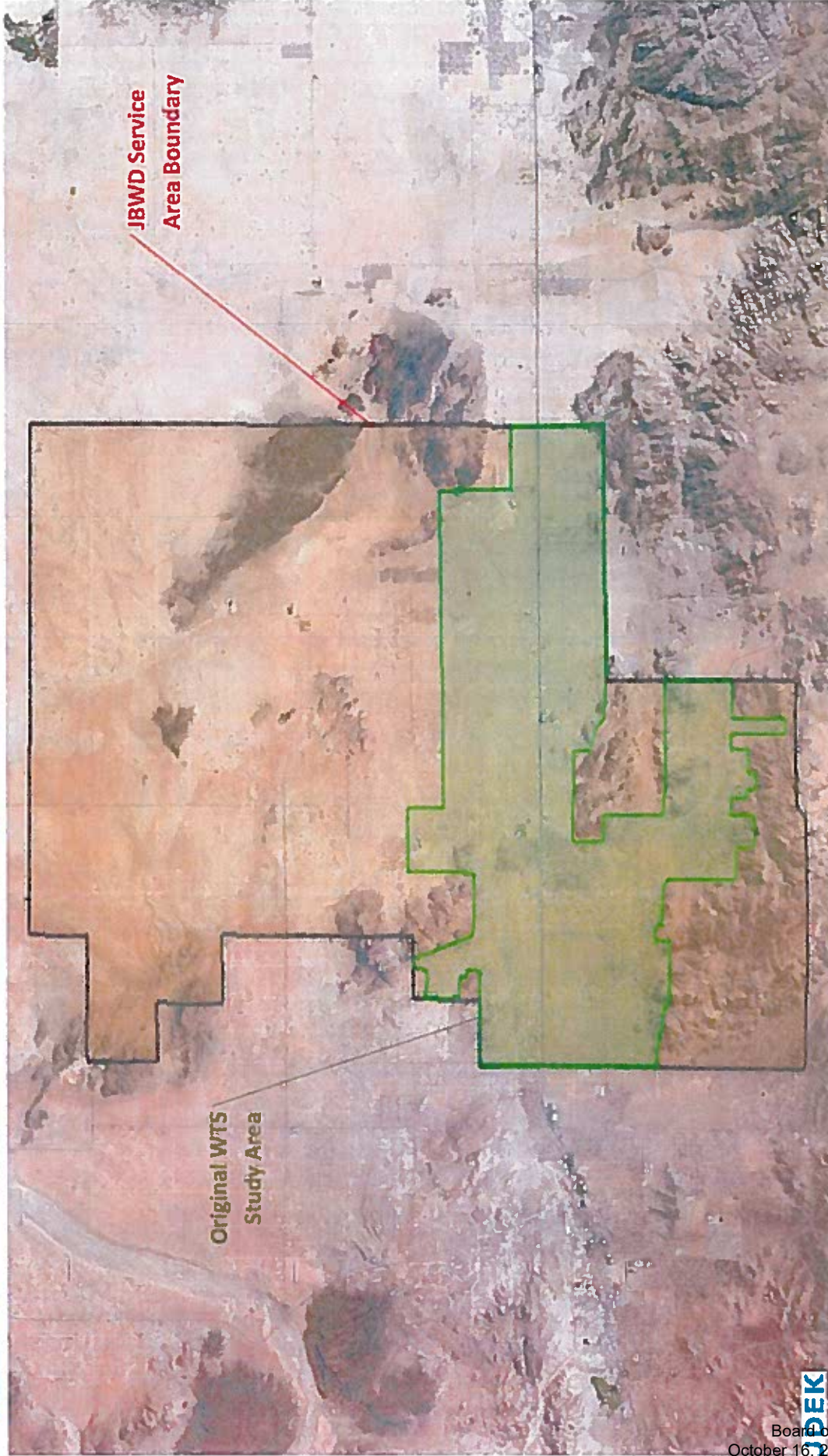
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JOSHUA BASIN  
WATER DISTRICT

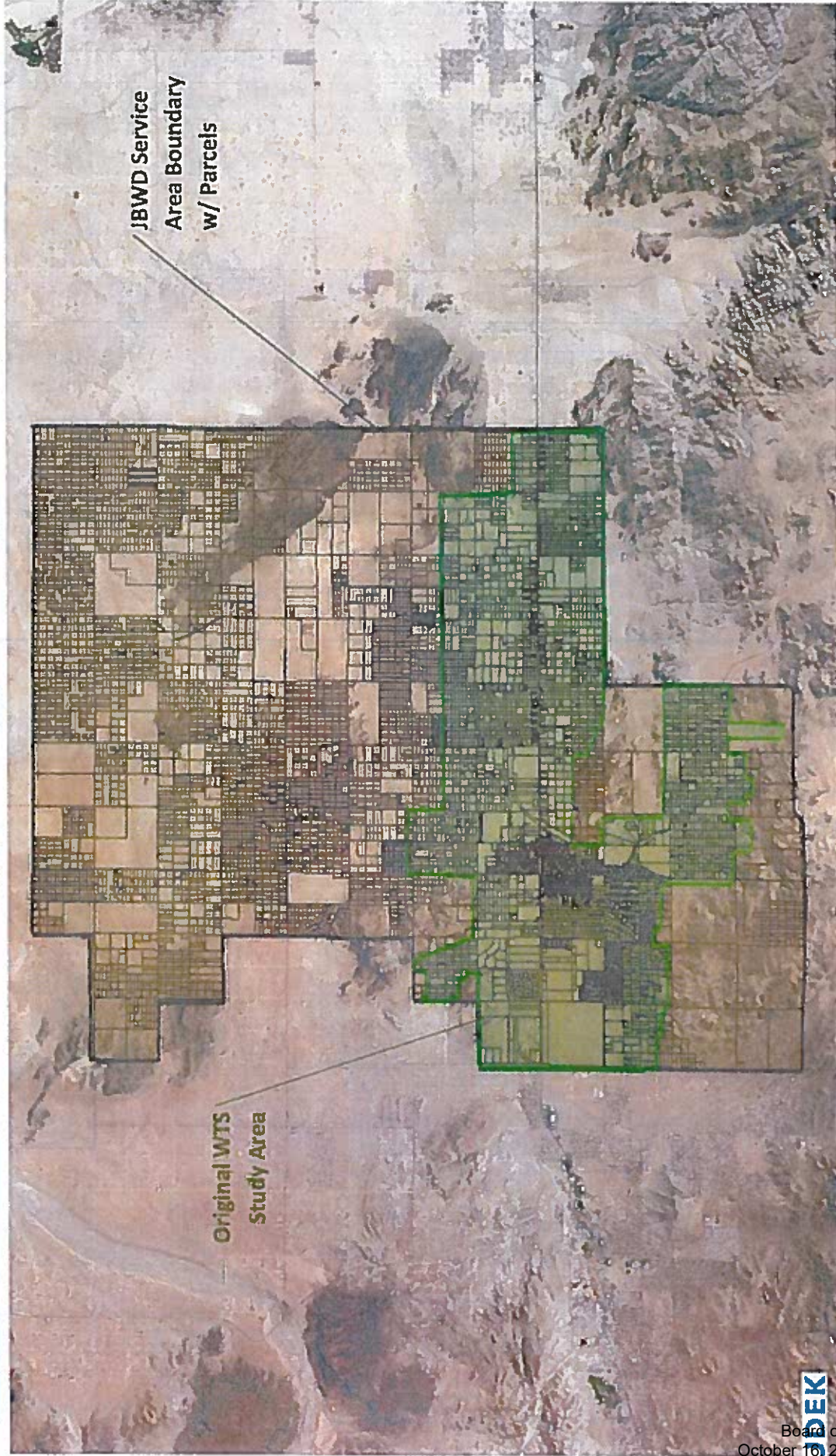


# Original WTS Study Area



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# District Parcel Map



JBW/D Service Area Boundary w/ Parcels

Original WTS Study Area



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# Summarize Old WTS statistics and rules

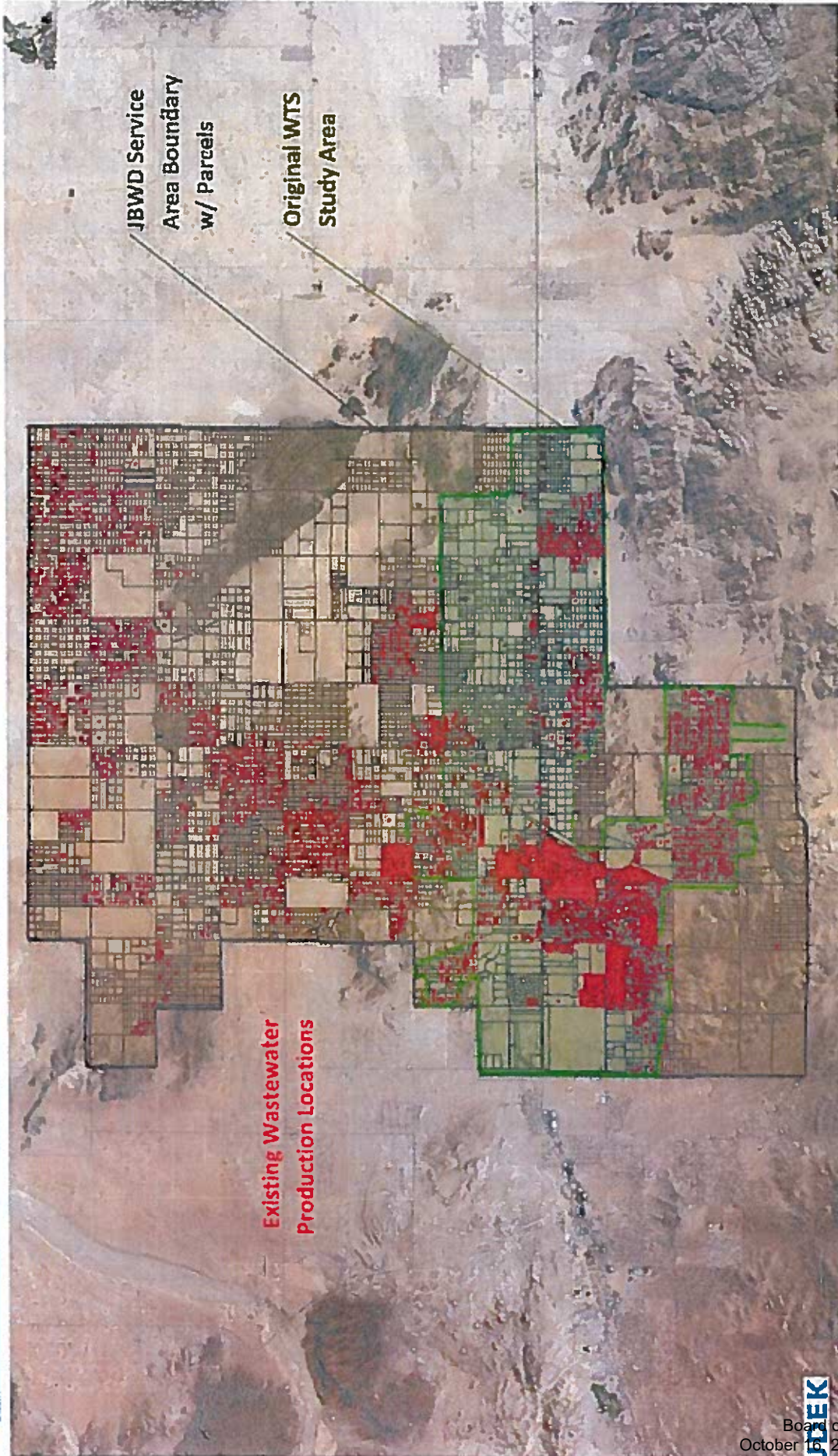
## Original WTS Statistics

- Total Parcels: 7,002      Developed Parcels: 4,488
- Study Area: Approximately 1/3 of District Service Area
- Existing Customers were excluded
- Development less than 2.0 EDU/acre were excluded
- USGS: Nitrate impact to Well 10 within 10-15 years
- Impact of existing customers not evaluated
- New customers carried full burden of groundwater protection
- Minimal advancement of needed groundwater protection goals



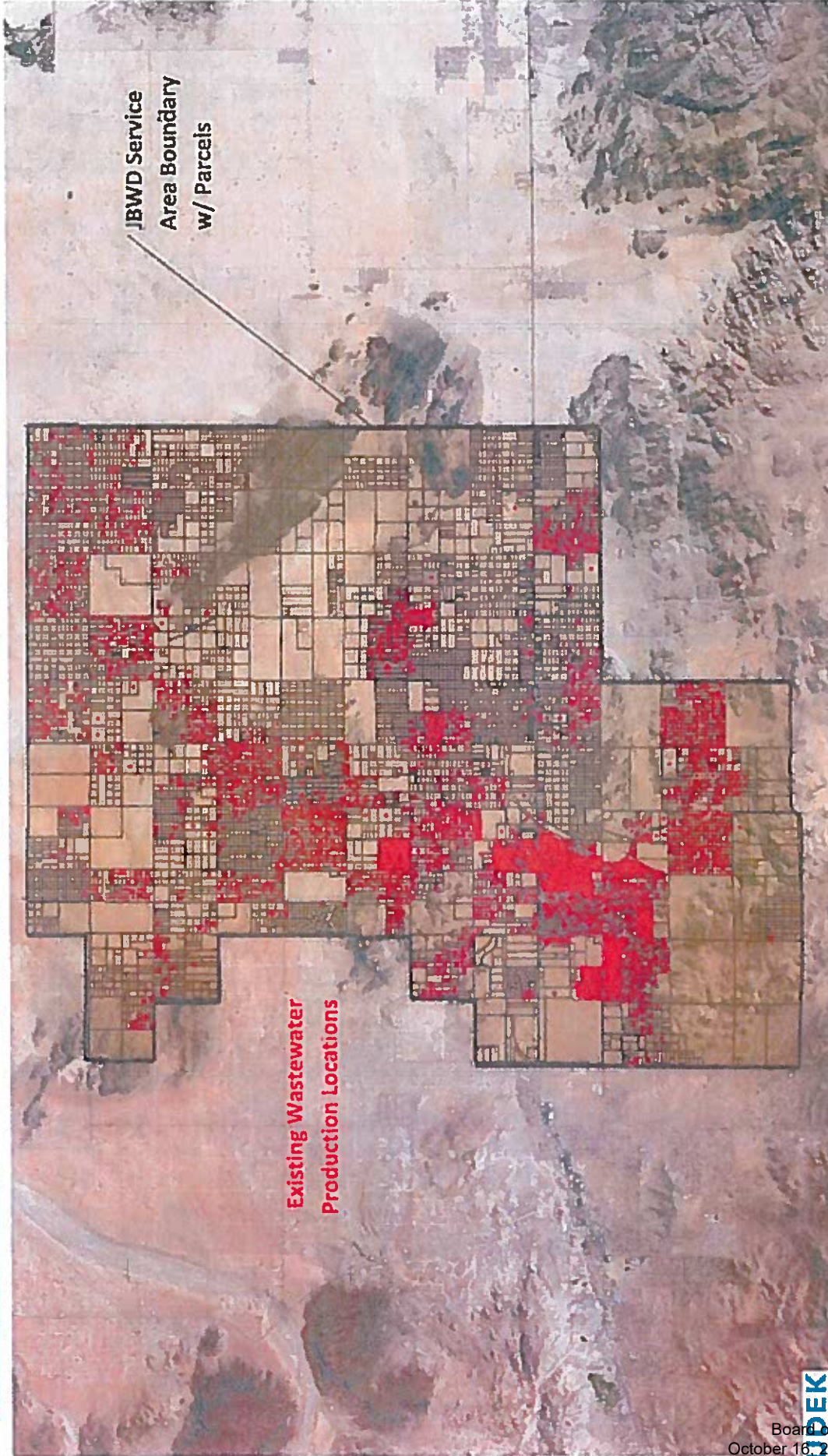
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# Updated WTS Study Area



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# Wastewater Production



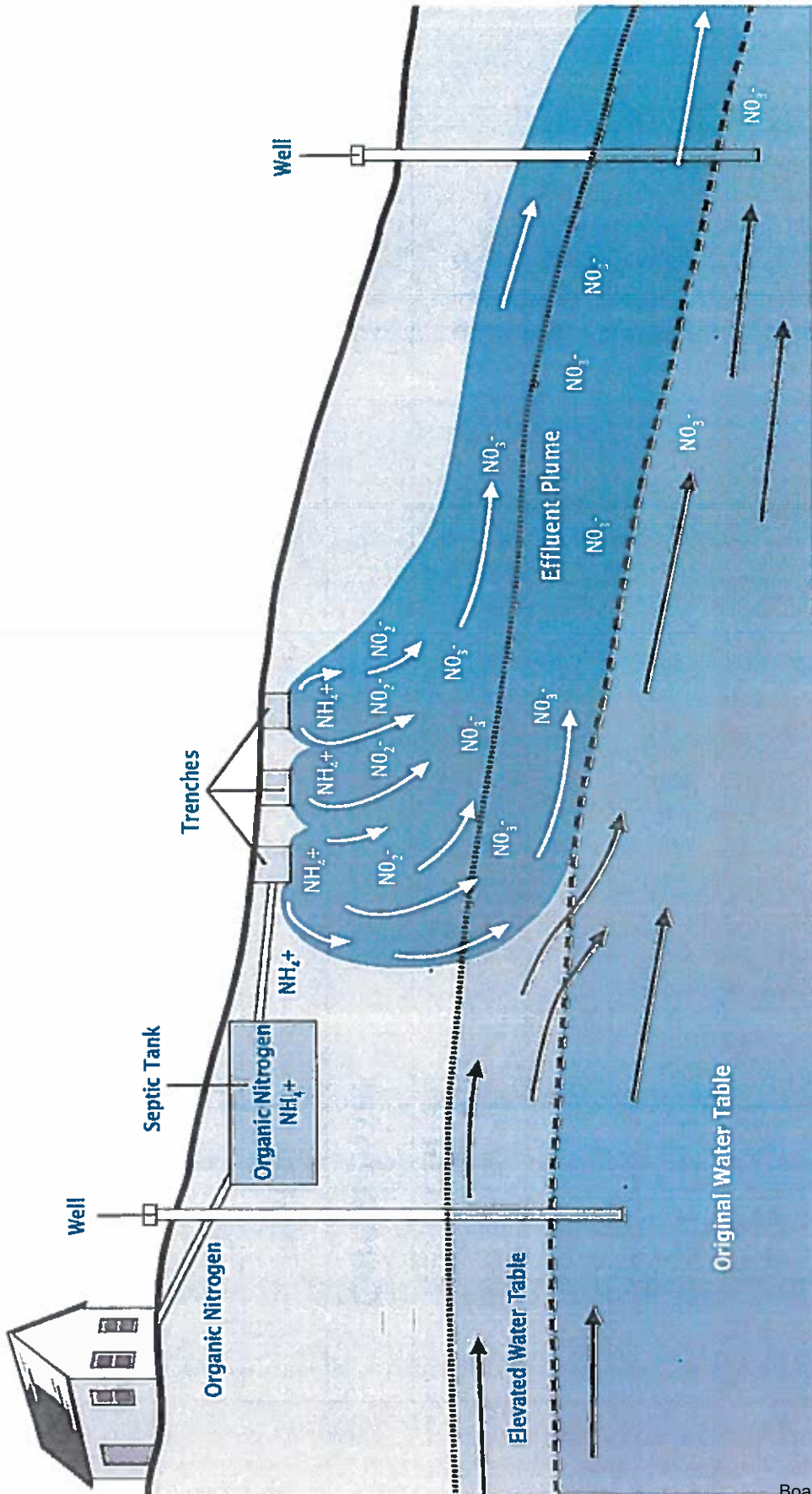
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# Wastewater Production by Land Use

Land Use	Wastewater Flow (gpd)	Land Use Percentage
Single Family Residential	878,922	92.5%
Institutional	134,443	4.5%
Multi-family Residential	73,782	1.1%
Commercial	31,358	1.9%
<b>TOTAL</b>	<b>1,118,505</b>	<b>100.0%</b>



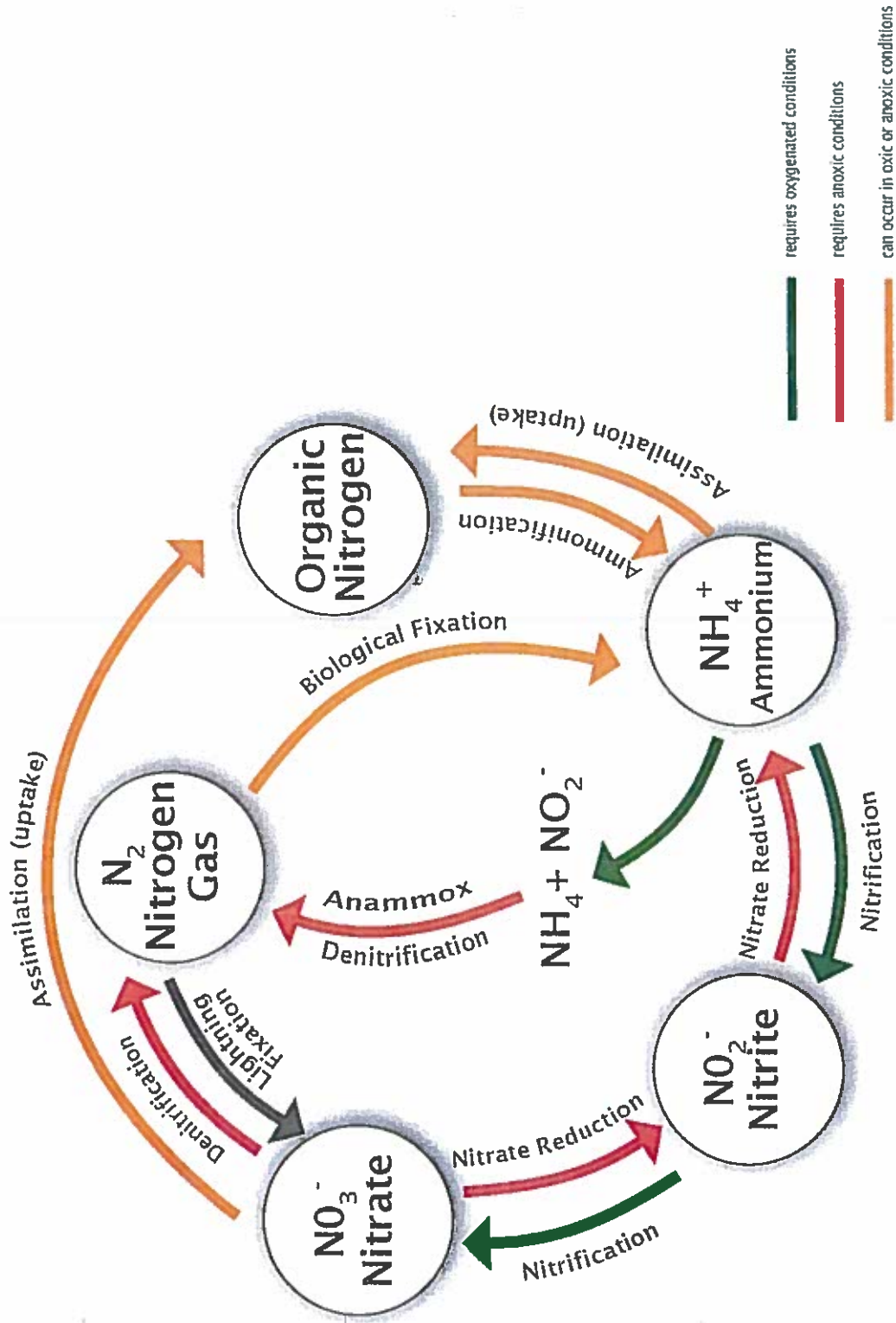
# Nitrate Production from Septic Systems



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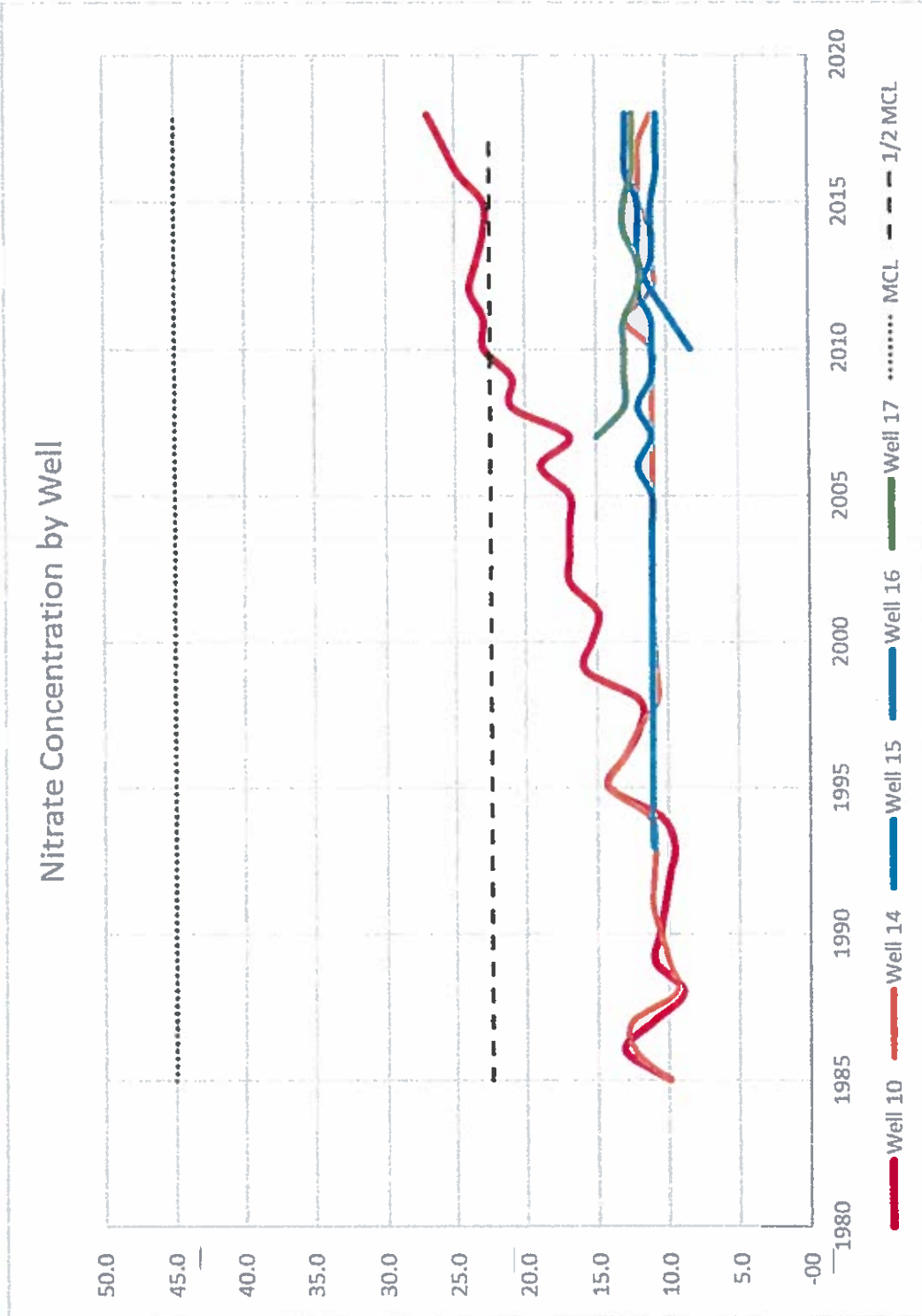


# Simplified Nitrogen Cycle



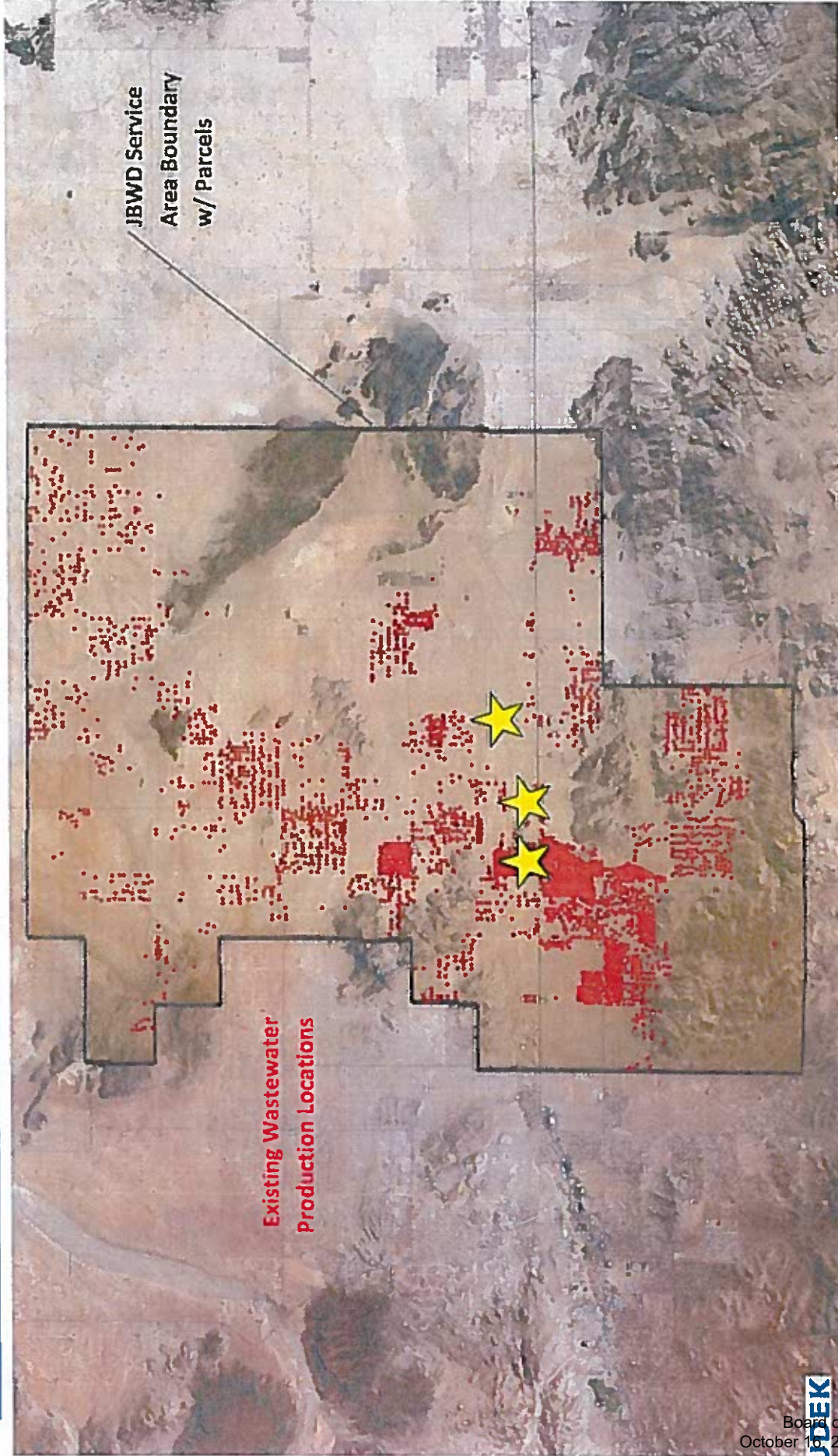


# Historical Nitrate Concentration

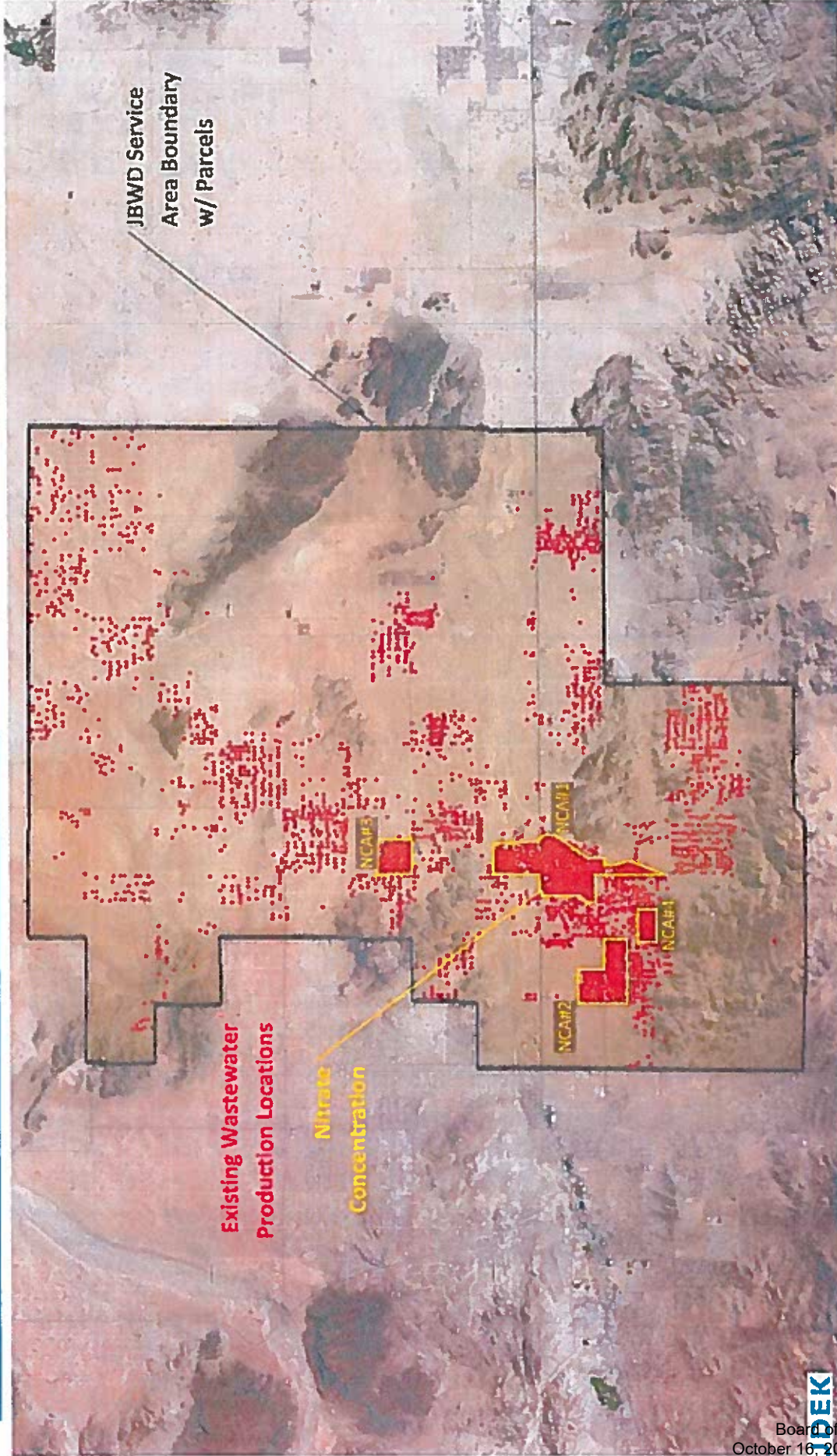


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# Nitrate Production Locations

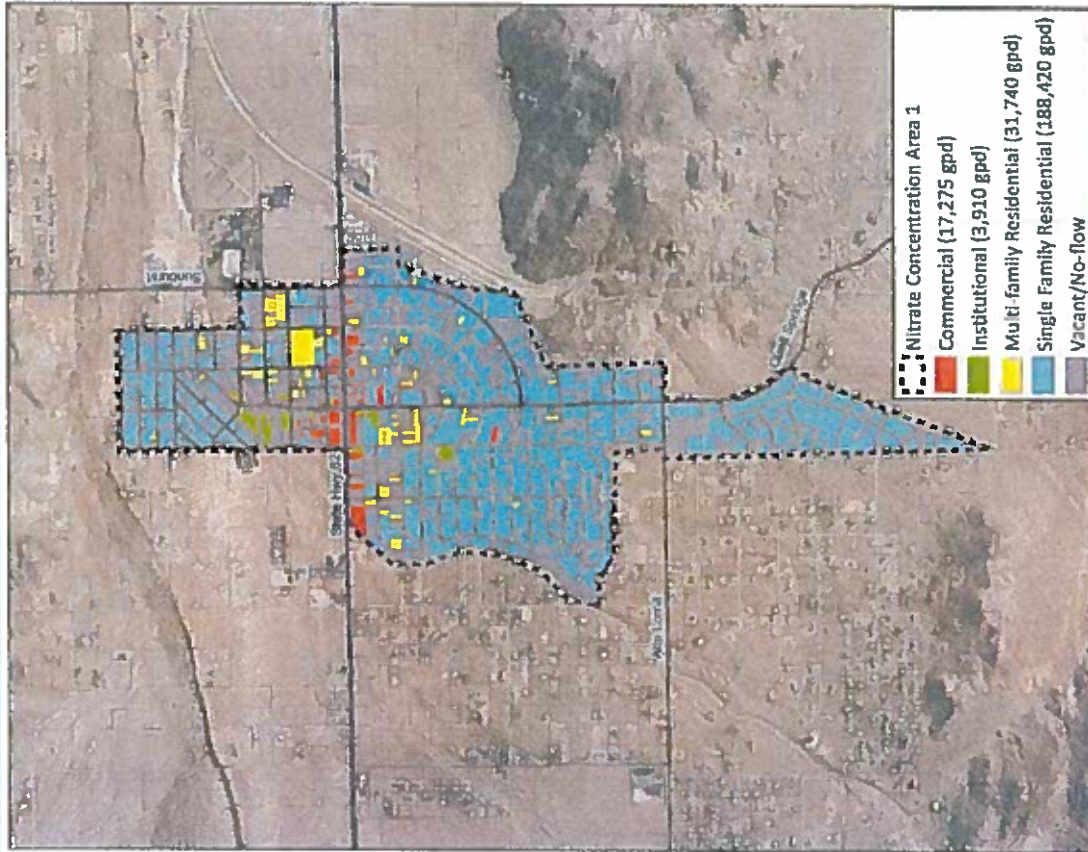


# Nitrate Concentration Areas



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# Nitrate Concentration Area #1



# Nitrate Concentration Area #2



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# Nitrate Concentration Area #3



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# Nitrate Concentration Area #4



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# Wastewater Production Comparison

Area Description	Total Parcels	Active Parcels	Wastewater Flow (gpd)	Open Parcel Percentage	Discharge Density (gpd/parcel)
JBWD District	13,067	4,488	1,118,505	34%	249
Original WTS Study Area	7,002	3,131	833,009	45%	266
NCA#1	1,933	1,241	241,669	64%	195
NCA#2	540	373	66,371	69%	178
NCA#3	285	187	36,976	66%	198
NCA#4	139	107	15,747	77%	147





# Near-Term Solutions

- **NCA-1/Downtown Treatment Facility**
  - Rising Well 10 nitrate concentrations
  - Facility located east of Border Avenue
  - Approximate Capacity: 500,000 gallons per day
  
- **Groundwater Protection**
  - Extends beyond the Original WTS Study Area
  - All customers receive drinking water from Joshua Basin
  - Groundwater protection is all customers' responsibility
  
- **Ongoing Groundwater Monitoring**
  - Track NCA areas for future groundwater protection needs



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## Next Steps

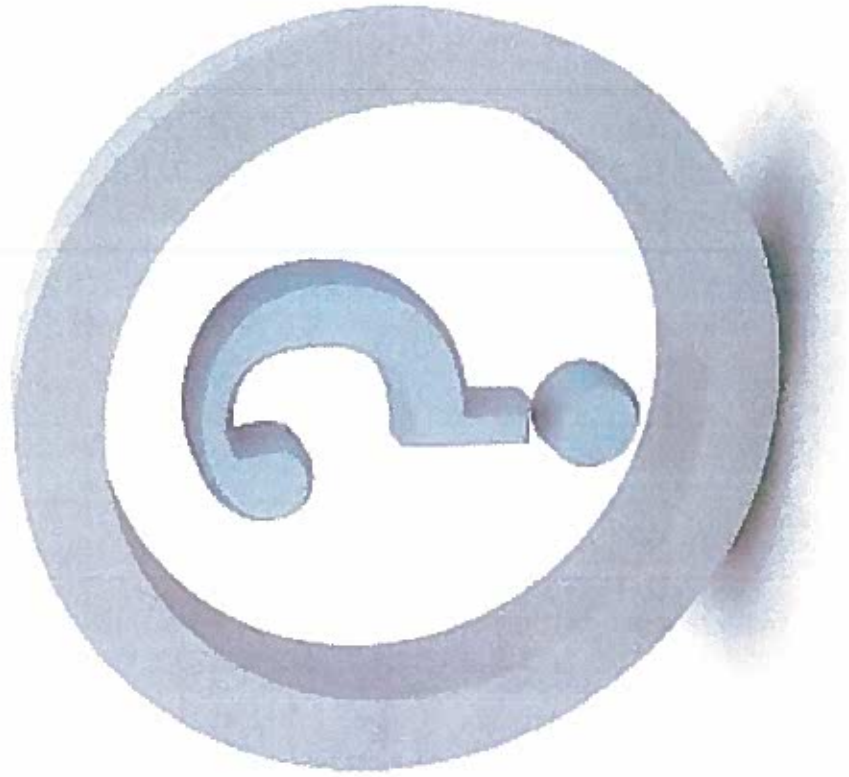
- **Conceptual Design of Downtown (NCA#1) Treatment Facility**
- **District-wide Groundwater Protection Funding**
- **Ongoing Wastewater Treatment Planning**
- **Finalization of Updated WTS**
- **Wastewater Strategy becomes Wastewater Plan**



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# Questions

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