



Technical Customer Advisory Committee

AGENDA

Members

Melissa Armijo
Andrew Bernard
Janie Chermak
Robert Fowlie
Dave Hill

Erwin Melis
Amy Miller
Ron Schwarzwald
Scott Verhines

Thursday, August 8, 2019	4:00 PM	ABCGC – 7th Floor Conference Room 7096
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| 1. Call to Order | 4:00-4:05 |
| 2. Approval of Agenda | 4:00-4:05 |
| 3. Approval of June 6, 2019 Action Summary | 4:00-4:05 |
| 4. Presentation on Project Summary: Kirtland Air Force Base, Bulk Fuels Facility | 4:05-4:45 |
| 5. Presentation on Water Authority Environmental Monitoring:
Rio Grande Silvery Minnow 2019 | 4:45-5:25 |
| 6. Public Comment | 5:25-5:30 |
| 7. Adjournment | 5:30 |

NOTICE TO PERSONS WITH DISABILITIES: If you have a disability and require special assistance to participate in this meeting, please contact the Water Utility Authority Office, Suite 5012, Albuquerque/Bernalillo County Government Center, phone 289-3100, as soon as possible prior to the meeting date.



Technical Customer Advisory Committee

ACTION SUMMARY

June 6, 2019

Members Present:

Melissa Armijo
Andrew Bernard
Mike Hightower
Dave Hill
Ege Richardson
Ron Schwarzwaldner
Scott Verhines

Members Excused:

Janie Chermak
Amy Miller

Water Authority Staff Present:

Mark Holstad, Chief Engineer, Collection System Manager
Elizabeth Anderson, Water Quality Program Manager
Frank Roth, Senior Policy Manager
Andres Santiago, Risk Program Manager

Item 1 – Call to Order - Note presence of quorum

The meeting was called to order at 4:01 pm by Vice-Chair Andrew Bernard.

Item 2 – Approval of Agenda

Dave Hill made a motion to approve the agenda. Ege Richardson seconded the motion. The motion passed on a 7-0 vote.

For: 7	Armijo, Bernard, Hightower, Hill, Richardson, Schwarzwaldner, Verhines
Against: 0	
Excused: 2	Chermak, Miller

Item 3 – Approval of May 2, 2019 Action Summary

Dave Hill made a motion to approve the action summary. Ron Schwarzwald seconded the motion. The motion passed on a 7-0 vote.

For: 7 Armijo, Bernard, Hightower, Hill, Richardson, Schwarzwald, Verhines
Against: 0
Excused: 2 Chermak, Miller

Item 4 – Presentation on the Capacity Management Operation Maintenance Plan

Mark Holstad provided an overview of the Capacity Management Operation Maintenance (CMOM) program. He reviewed the components of the CMOM Plan and discussed the policies, activities and challenges from the most recent annual report. He also showed the beneficial impacts of the CMOM program on sanitary sewer overflows with almost a fifty percent decrease in the last five years.

Item 5 – Public Comment

None.

Item 6 – Adjournment

The meeting concluded at 5:17 pm.

Project Summary: Kirtland Air Force Base, Bulk Fuels Facility

Diane Agnew
Environmental Manager
Water Authority
8 August 2019



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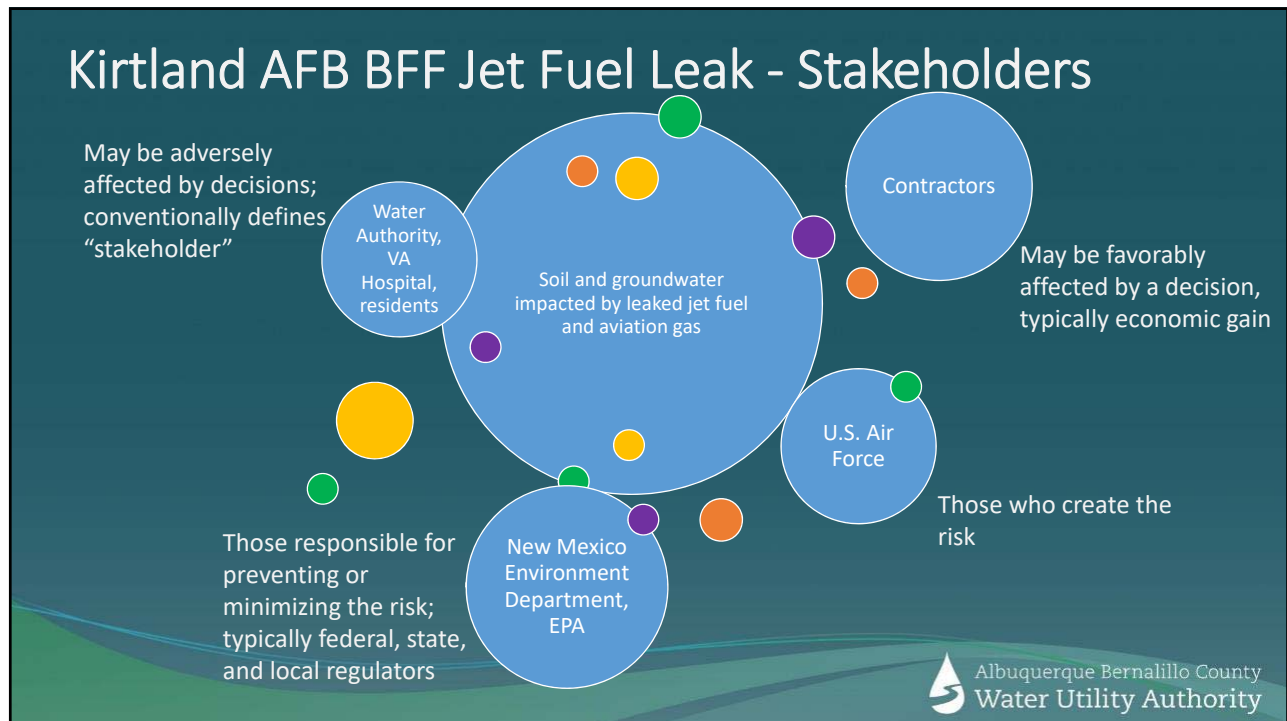
A Brief History

- Kirtland Air Force Base (KAFB) Bulk Fuels Facility (BFF) went into operation in 1953
- Stored and distributed aviation gasoline (AvGas), JP 4, and JP 8
- BFF works discovered fuel on the ground surface in 1999
- Fuel release reported to New Mexico Environment Department (NMED)
- KAFB replaced the entire fueling infrastructure in 2010

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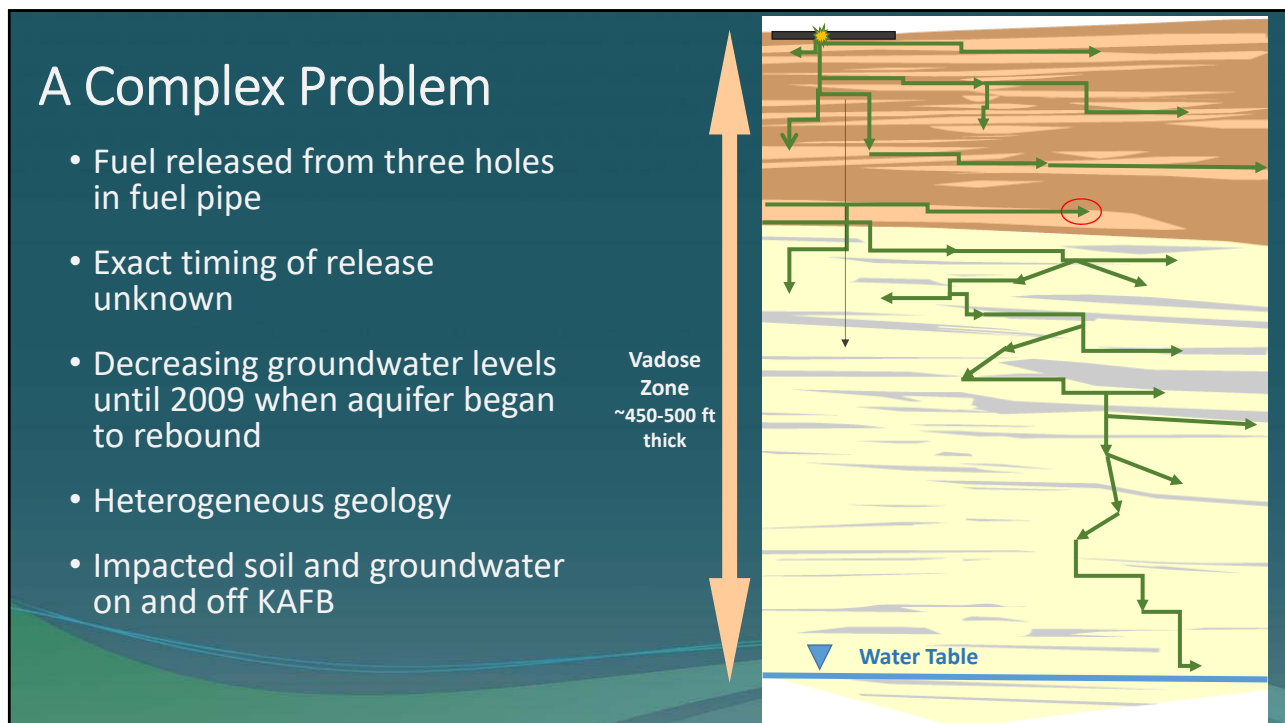
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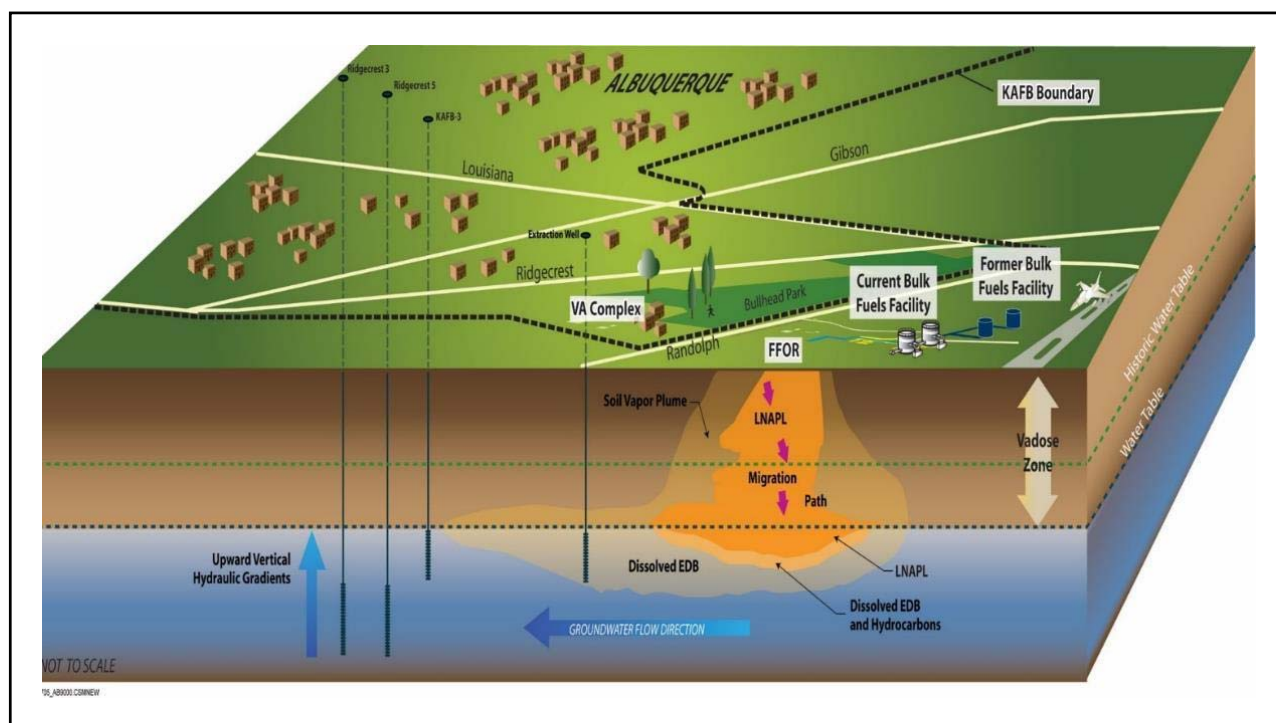
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Contaminants of Concern

Contaminant	NM WQCC Standard ¹	EPA MCL ²
Ethylene dibromide (EDB)	0.05 µg/L	0.05 µg/L
Benzene	5 µg/L	5 µg/L
Toluene	1,000 µg/L	1,000 µg/L
Ethylbenzene	700 µg/L	700 µg/L
Xylenes, Total	620 µg/L	10,000 µg/L
Napthalene	30 µg/L	NS
Any other contaminant detected above NM WQCC standard or MCL		

¹ NM WQCC numeric standards per the NMAC title 20.6.2.3103, Standards for Ground Water of 10,000 mg/L Total Dissolved Solids or Less (NMAC 2004)

² EPA National Primary Drinking Water Regulations, MCLs, and Secondary MCLs, Title 40CFR Part 141

EPA = Environmental Protection Agency

MCL = Maximum contaminant level

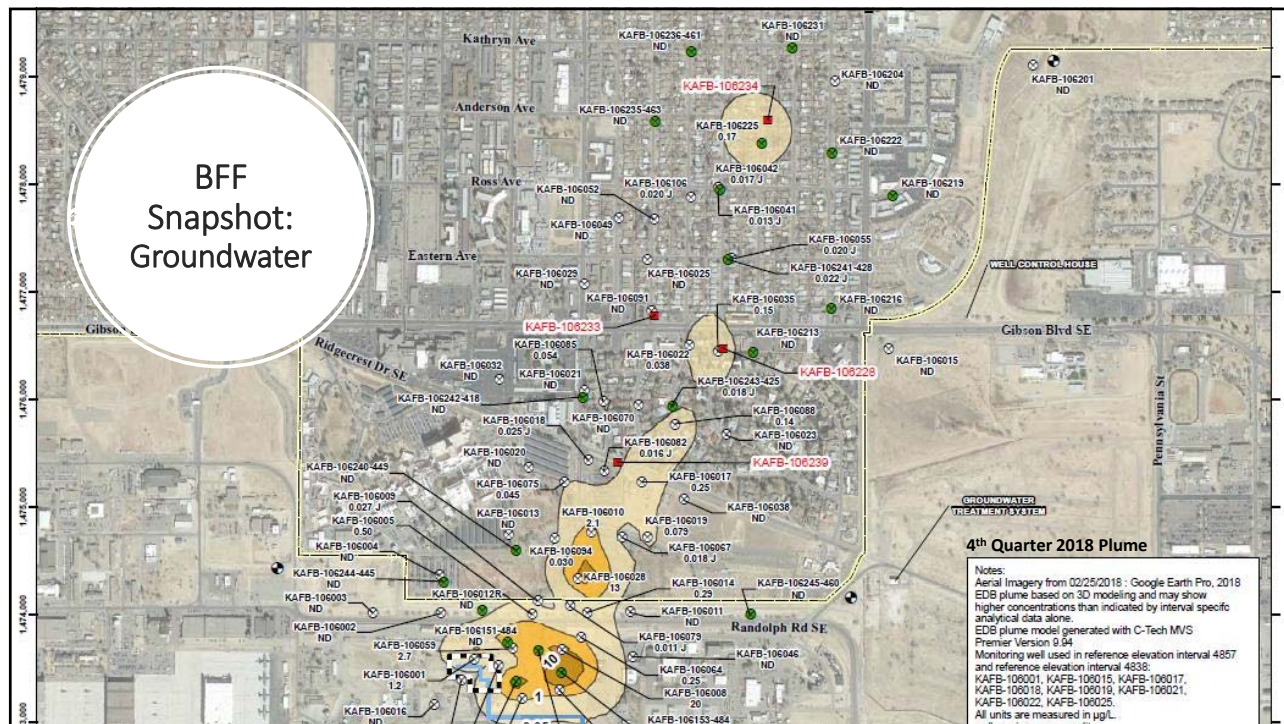
NM = New Mexico

NS = Not specified

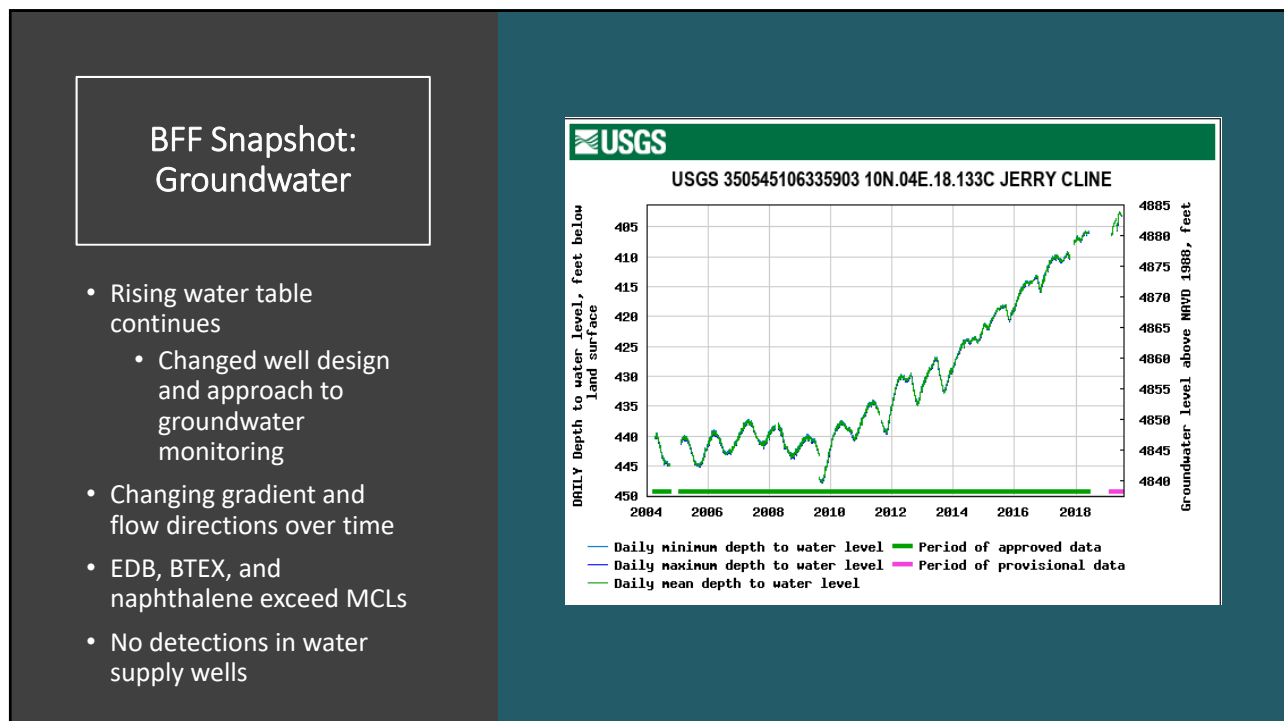
µg/L = micrograms per liter

WQCC = Water Quality Control Commission

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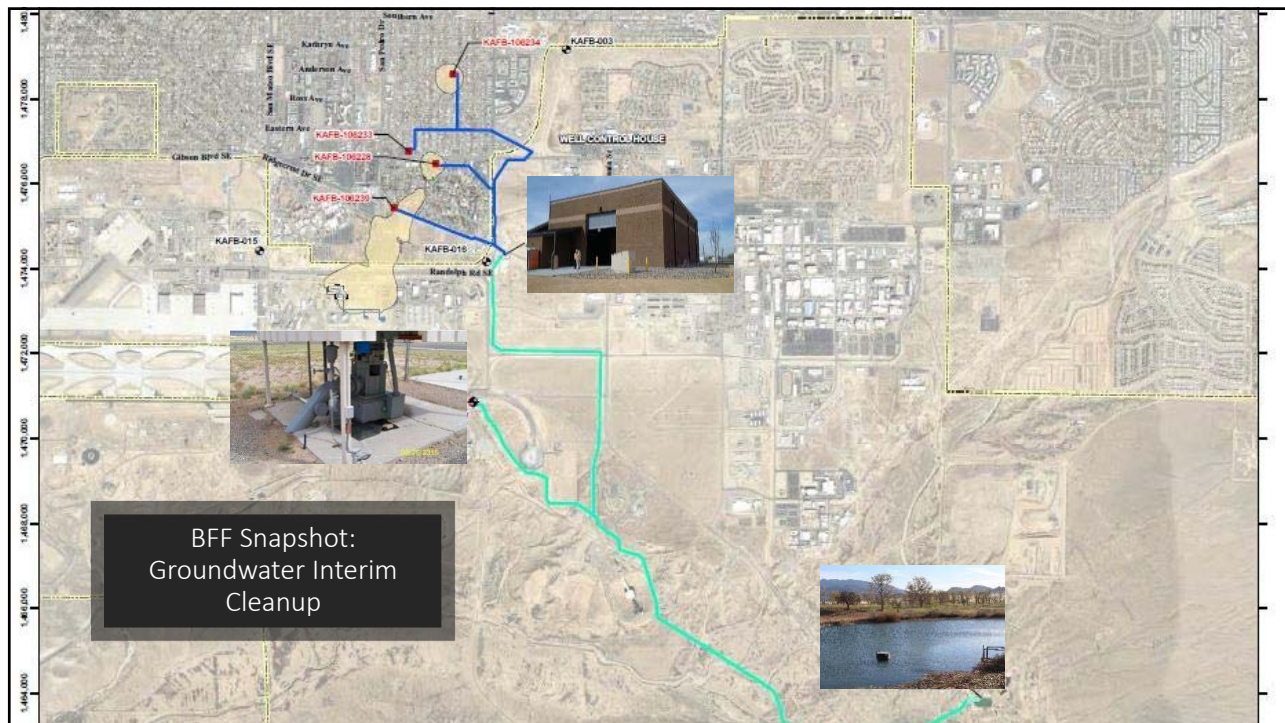
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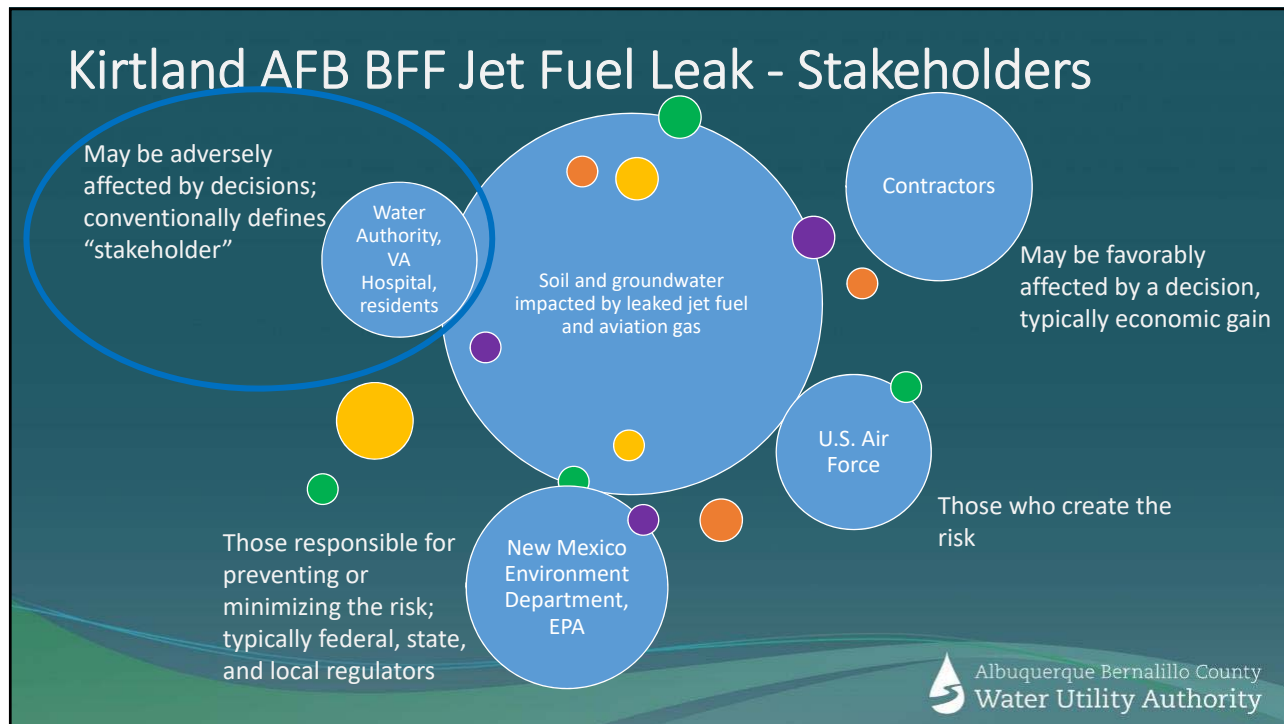
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What is the Water Authority's Role?

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Voluntary Monthly Monitoring of Nearby Supply Wells

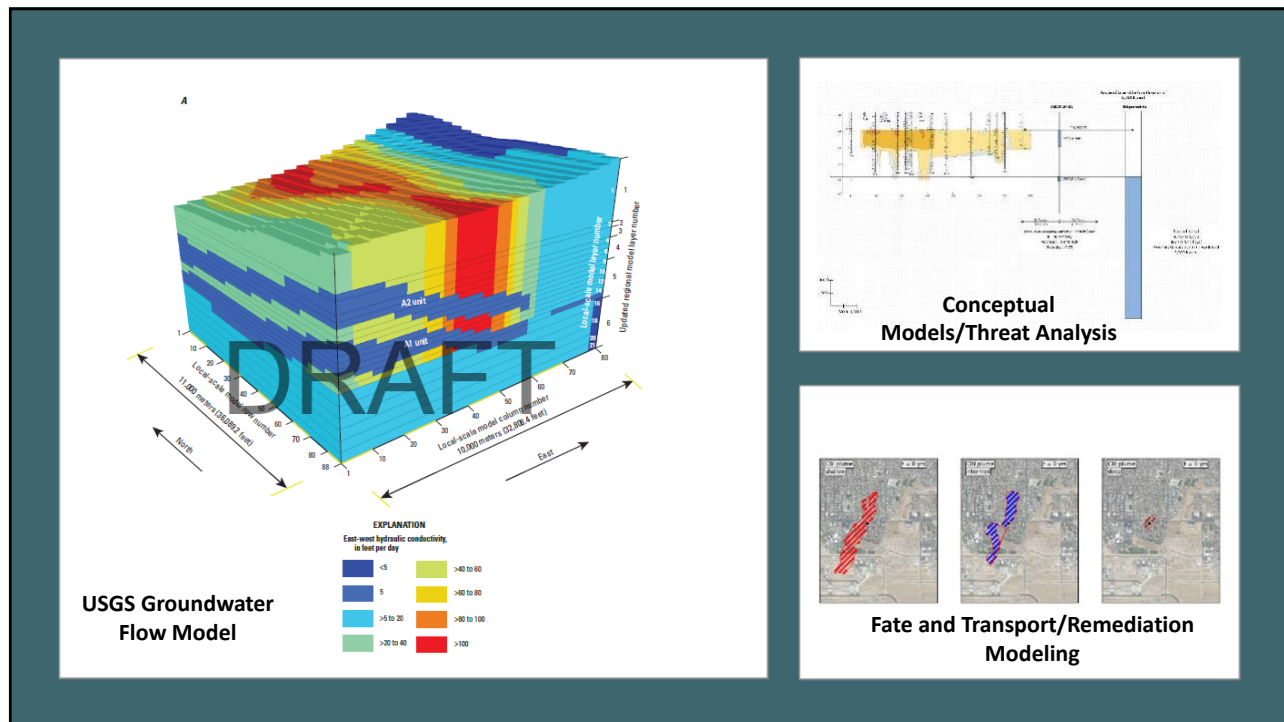
Geologic Interpretation

Work Plan and Technology Review

FIGURE 1-1 SUMMARY OF BFWELL

Stakeholder and Technical Meeting Attendance

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Outstanding Questions

- Budget breakdown
 - Reduction to \$1.3M in Fiscal Year 2019
- Persistent source – remaining fuel in the soil and submerged in groundwater
- Expansion of EDB interim measure to collapse plume
- Definition of EDB at depth
- Capture analysis: a tale of three models
- Adequate sentinel well network for changing groundwater conditions
- Timelines and deliverables



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What is next?

- Continued discussions of source area cleanup
- Air Force has submitted a Phase I RFI Report
- Series of enforcement deadlines set by the NMED
- Vadose zone coring results – November 2019
- Shallow soil vapor sampling – September/October 2019



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Questions?

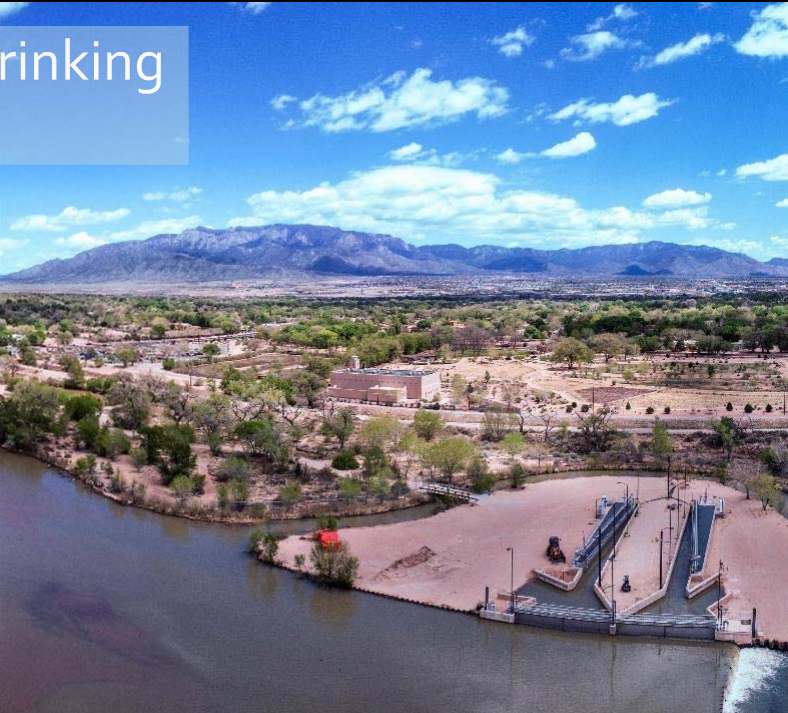
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San Juan-Chama Drinking Water Project

- 2004 Biological Opinion for construction and operation of the SJCDWP
- Issued by U.S. Fish and Wildlife Service according to the Endangered Species Act



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Species Protection



Rio Grande Silvery Minnow,
Hybognathus amarus



Southwestern Willow Flycatcher,
Empidonax trailii extimus

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Habitat Restoration

Two sites near Paseo del Norte Blvd.



La Orilla near Montañó Rd.



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Ongoing Commitments

\$165,000 annually to
City of Albuquerque
Silvery Minnow
Refugium at BioPark



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Ongoing Commitments

Active signatory to the
Middle Rio Grande
Endangered Species
Collaborative Program



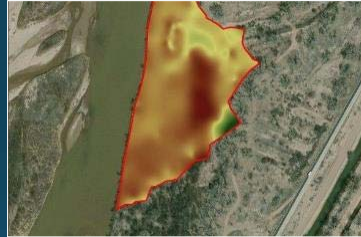
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Ongoing Commitments



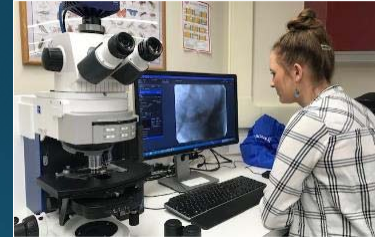
Fish Monitoring

- Eggs
- Larvae and adults



Habitat Monitoring

- Geomorphology
- Vegetation
- Fish Utilization



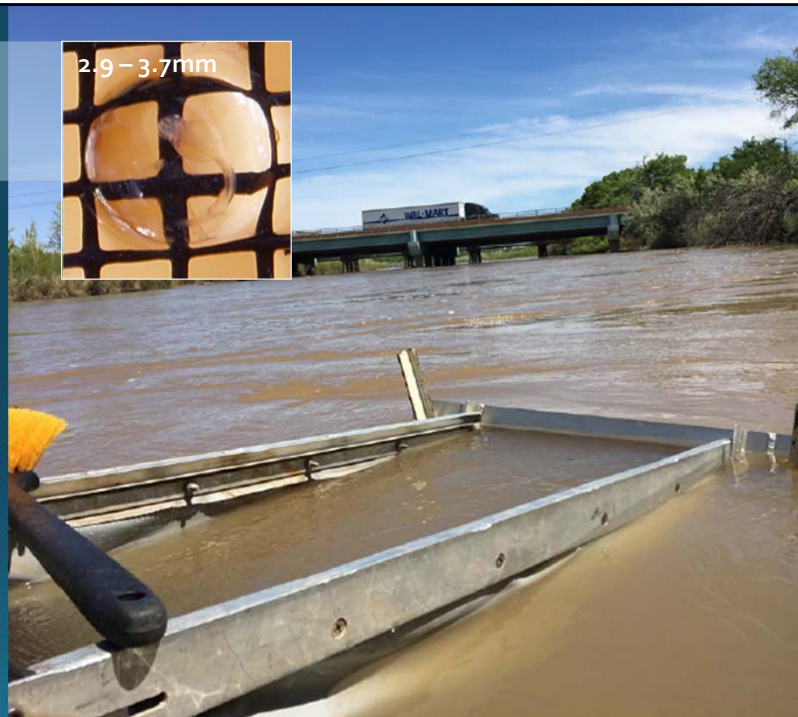
Research

- Otolith Validation Study
- Otolith Aging Study

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Fish Monitoring: Eggs

- Moore Egg Collectors
- Upstream of Water Authority diversion dam every May during spawning season
- Eggs collected go to Albuquerque BioPark
- 2019 – no eggs collected



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Visible Implant Elastomer (VIE) tags:

- White tag = from BioPark; released in Nov. 2018 in Abq. reach
- Yellow tag = from Dexter, NM; released in Oct. 2018 in Abq. reach

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Dip Net - larvae



Fyke Net - adults

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Fish Monitoring: Larvae and Adults

2019 Preliminary Monitoring Data

Rio Grande Silvery Minnow	Number Found	Number of Tagged Fish
Fyke Net (adults)	32	14 (43%)
Dip Net (larvae)	508	N/A



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Habitat Monitoring: Fish Utilization



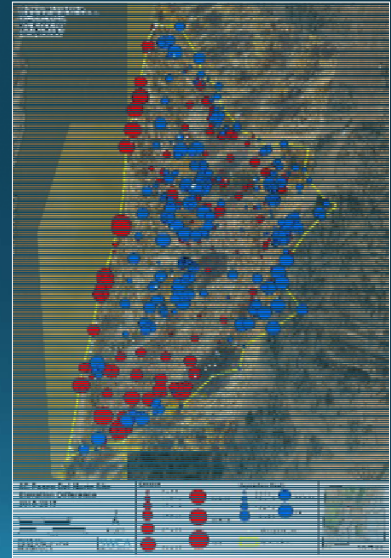
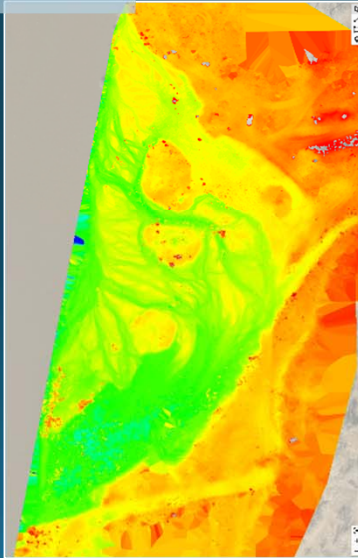
Angostura Reach and San
Acacia Reach monitoring by
Water Authority and NM
Interstate Stream Commission



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Habitat Monitoring: Geomorphology

Paseo del Norte Southeast Restoration Site



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Habitat Monitoring: Fish Utilization


Paseo del Norte - Northwest



Paseo del Norte - Southeast
May 20, 2019

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Research: Otolith Validation Study


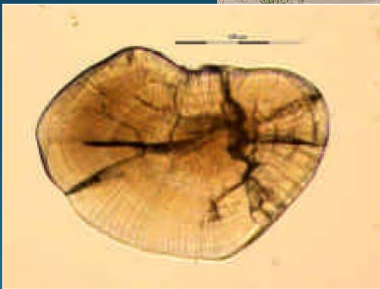


- Otolith /'ōdl, iTH/ – each of the three, oval calcified structures located in the inner ear of vertebrates, including fish
- Validation study to determine deposition rate of “rings” on otoliths of Rio Grande Silvery Minnow
- Results provide a method to accurately estimate the hatch date of a minnow

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Research: Otolith Aging Study

- Aging study to better understand the early life history of the Rio Grande Silvery Minnow
- Hatch dates determined by otolith and larvae capture location to inform habitat utilization (floodplain, channel, etc.)
- Will help to inform management strategies for habitat restoration to benefit the minnow

Otolith from Horwitz et al. 2011

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