



CITY OF NORMAN, OK CITY COUNCIL STUDY SESSION

Municipal Building, Executive Conference Room, 201 West Gray, Norman,
OK 73069

Tuesday, March 19, 2024 at 5:30 PM

AGENDA

It is the policy of the City of Norman that no person or groups of persons shall on the grounds of race, color, religion, ancestry, national origin, age, place of birth, sex, sexual orientation, gender identity or expression, familial status, marital status, including marriage to a person of the same sex, disability, relation, or genetic information, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination in employment activities or in all programs, services, or activities administered by the City, its recipients, sub-recipients, and contractors. In the event of any comments, complaints, modifications, accommodations, alternative formats, and auxiliary aids and services regarding accessibility or inclusion, please contact the ADA Technician at 405-366-5424, Relay Service: 711. To better serve you, five (5) business days' advance notice is preferred.

CALL TO ORDER

AGENDA ITEMS

1. PRESENTATION FROM RED ROCK BEHAVIORIAL HEALTH SERVICES REGARDING THE NEW RED ROCK CRISIS CENTER.
2. DISCUSSION REGARDING THE WATER REUSE PILOT PROGRAM.

ADJOURNMENT



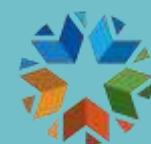
Red Rock Behavioral Health Services

Red Rock Behavioral Health Services: Working to Change Communities Across Oklahoma

Presentation to City of Norman, OK

March 19, 2024

Red Rock is funded, in part, by the Oklahoma Department of Mental Health and Substance Abuse Services.



OKLAHOMA
Mental Health &
Substance Abuse





Verna Foust, MS, LPC
Chief Executive Officer



Red Rock Executive Team



Kile Kuykendall
Chief Financial Officer



**Dr. Wana R. Ellison, PsyD,
LPC, LADC**
Chief Operation Officer,
Outpatient Services



Steve Norwood
Chief Operation Officer,
Specialized Services

Who We Are

Red Rock Behavioral Health Services

- Founded in 1974 under **President Kennedy's Community Mental Health Act**
- 501(c)3 not-for-profit organization certified by the Oklahoma Department of Mental Health and Substance Abuse Services as a **Community Mental Health Center (CMHC)**
- Red Rock is a federally recognized as a **Certified Community Behavioral Health Clinic (CCBHC)**
CCBHC's provide specialized whole person care for individuals with complex needs through intensive Care Coordination
- Accredited by the **Commission on Accreditation of Rehabilitation Facilities (CARF)**



Certified
Community
Behavioral
Health
Clinics





We Are Committed To Our Mission:

To provide high quality, technology driven, *evidence based* practices so all Oklahomans will achieve better health and wellness.

Red Rock Values

Ethics & Integrity

Clinical Excellence

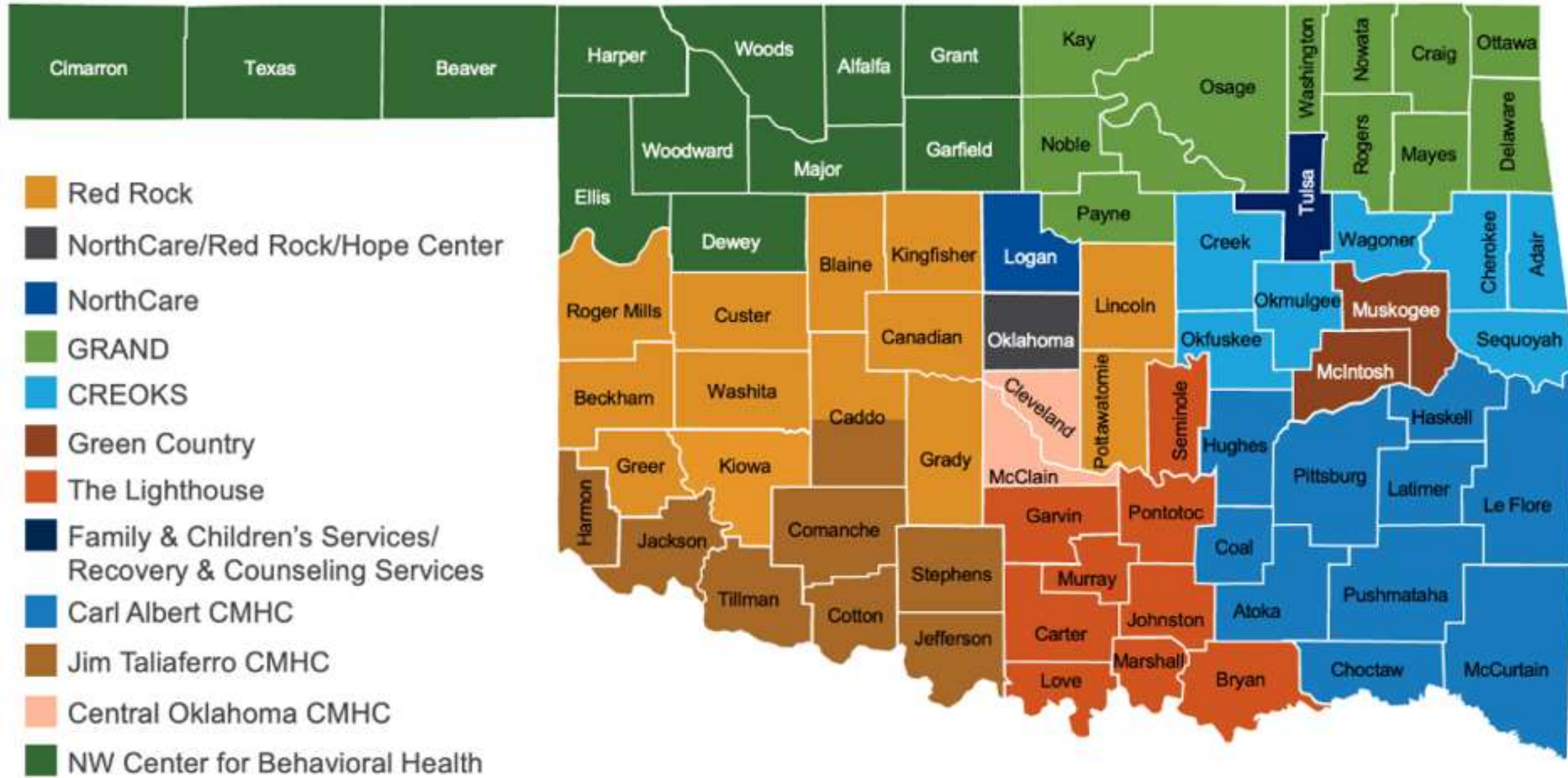
Positive Work Culture

Innovative

Financial Strength

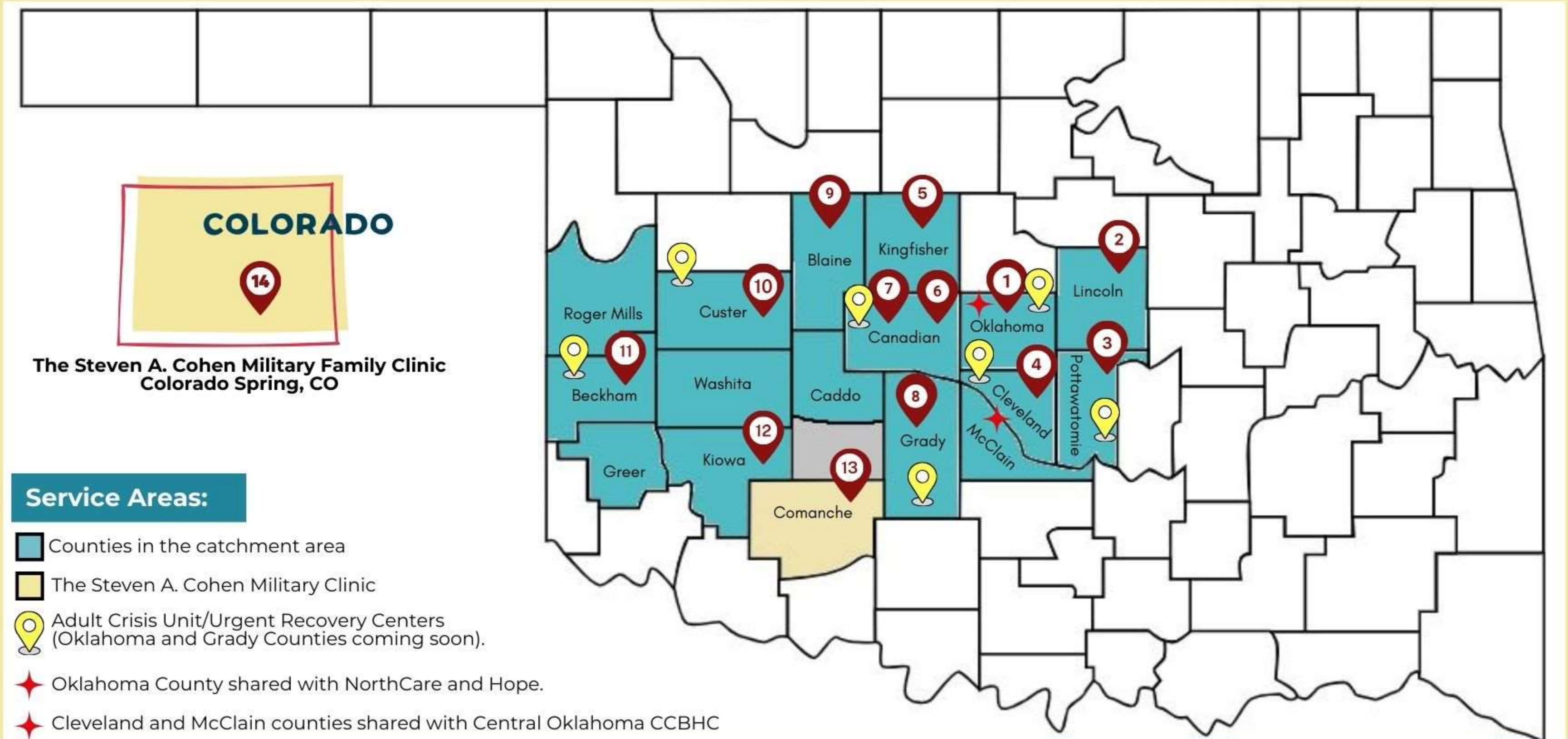
Community Servants

Statewide CCBHCs (Certified Community Behavioral Health Centers)



Red Rock Behavioral Health Services

Locations & Service Areas



City Locations:

- 1) Oklahoma City
- 2) Chandler
- 3) Shawnee
- 4) Norman
- 5) Kingfisher
- 6) El Reno/Canadian County
- 7) Yukon
- 8) Chickasha
- 9) Watonga
- 10) Weatherford
- 11) Elk City
- 12) Hobart
- 13) Lawton
- 14) Colorado Springs, CO



Where We Are



- **Red Rock Chandler Outpatient Office** - Chandler, OK
- **Red Rock Chickasha Outpatient Office** - Chickasha, OK
- **Red Rock Children’s Crisis Unit** - Oklahoma City, OK
- **Red Rock El Reno Outpatient Office & Urgent Recovery Center (URC)** - El Reno, OK
- **Red Rock Elk City Outpatient Office & MAT Clinic & Urgent Recovery Center (URC)** - Elk City, OK
- **Red Rock Expressions Community Center** - Oklahoma City, OK
- **Red Rock Hobart Outpatient Office** - Hobart, OK
- **Red Rock Housing Office (Parkside)** - Oklahoma City, OK
- **Red Rock Housing Office (Parkview Place)** - Oklahoma City, OK
- **Red Rock Jordan’s Crossing** - Oklahoma City, OK
- **Red Rock Kingfisher Outpatient Office** - Kingfisher, OK
- **Red Rock Norman Crisis Unit (Adults)** - Norman, OK
- **Red Rock Norman Outpatient Office** - Norman, OK
- **Red Rock OKC Main Office and Outpatient Office** - Oklahoma City, OK
- **Red Rock OKC MAT Clinic** - Oklahoma City, OK
- **Red Rock OKC PACT Office** - Oklahoma City, OK
- **Red Rock Planet Rock** - Oklahoma City, OK
- **Red Rock Shawnee Crisis Unit (Adults) and Urgent Recovery Center (URC)** - Shawnee, OK
- **Red Rock Shawnee Outpatient Office, PACT, MAT Clinic** - Shawnee, OK
- **Red Rock Virtual/Telehealth Services (Outpatient)** - Oklahoma City, OK
- **Red Rock Virtual/Telehealth Services (Mobile Crisis)** - Oklahoma City, OK
- **Red Rock Watonga Outpatient Office** - Watonga, OK
- **Red Rock Weatherford Crisis Unit (Adults)** - Weatherford, OK
- **Red Rock Weatherford Outpatient Office & MAT Clinic (Medically Assisted Treatment)** - Weatherford, OK
- **Red Rock Yukon Outpatient Office & MAT Clinic (Medically Assisted Treatment)** - Yukon, OK
- **The Steven A. Cohen Military Family Clinic at Red Rock** - Lawton, OK
- **The Steven A. Cohen Military Family Clinic at Red Rock** - Oklahoma City, OK
- **The Steven A. Cohen Military Family Clinic at Red Rock** - Colorado Springs, CO



**Psychiatric
Rehabilitative
Services**



**24/7 Crisis
Response
including
Mobile**



**Quick Access
to Screening,
Assessment, &
Diagnosis**



**Focus on
Mental Health
Care for
Veterans**



**CCBHC
Key
Services**



**Outpatient
Primary Care
Screening &
Monitoring/
Care
Coordination**



**Targeted
Case
Management
Focus on
Social
Determinants**



**Peer Support,
Counseling, &
Family
Support**



**Patient-
centered
Treatment
Planning**



**Outpatient
Mental
Health
& Substance
Use Services**



Primary Care Screening and Monitoring

What is?

- Screening of key health indicators and health risk is completed within 30 days of intake appointment
- Adult Body Mass Index (BMI) screening and follow up
- Weight Assessment and counseling for nutrition for children and adolescents and follow up
- Blood Pressure
- Tobacco Use: screening and cessation intervention
- Screening for clinical depressions and follow up plan
- Unhealthy Alcohol Use
- Diabetes screening for people with schizophrenia or bipolar disorder diagnosis who are prescribed ant-psychotics



What We Do

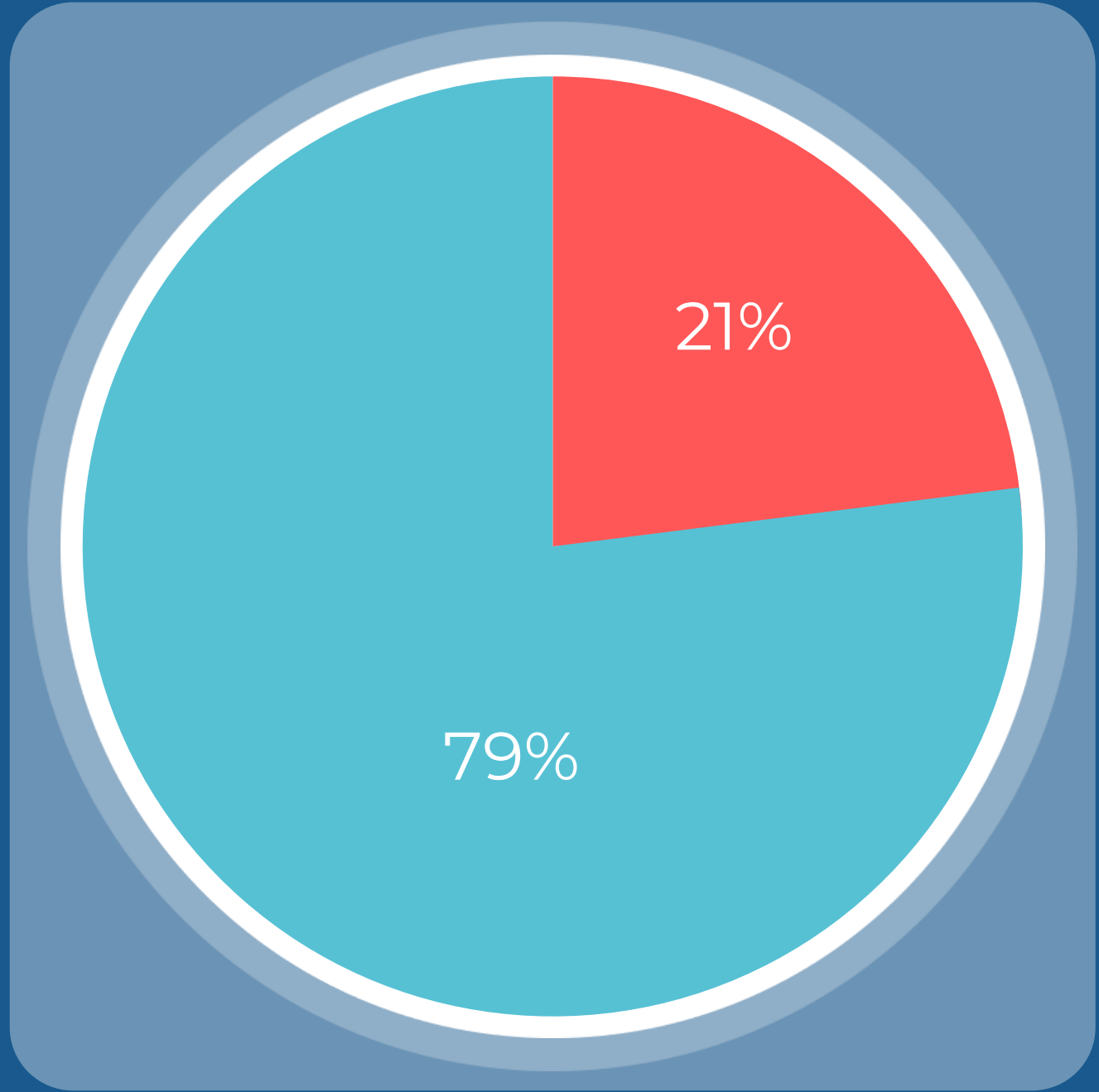
Red Rock BHS provides a comprehensive array of behavioral health services for individuals of all ages who are suffering from mental health, substance use, or co-occurring disorders. We strive to be the foundation of recovery by providing multiple services along a continuum of care.

Our services include but are not limited to: crisis stabilization, traditional outpatient services, psychiatric services, HIV prevention and education, Program for Assertive Community Treatment (PACT) Services, Medication-Assisted Treatment (MAT) services, residential substance use treatment for women with dependent children, treatment court & other court-related services, military family services, community housing, employment services, telehealth services, in-house pharmacy services, and more.



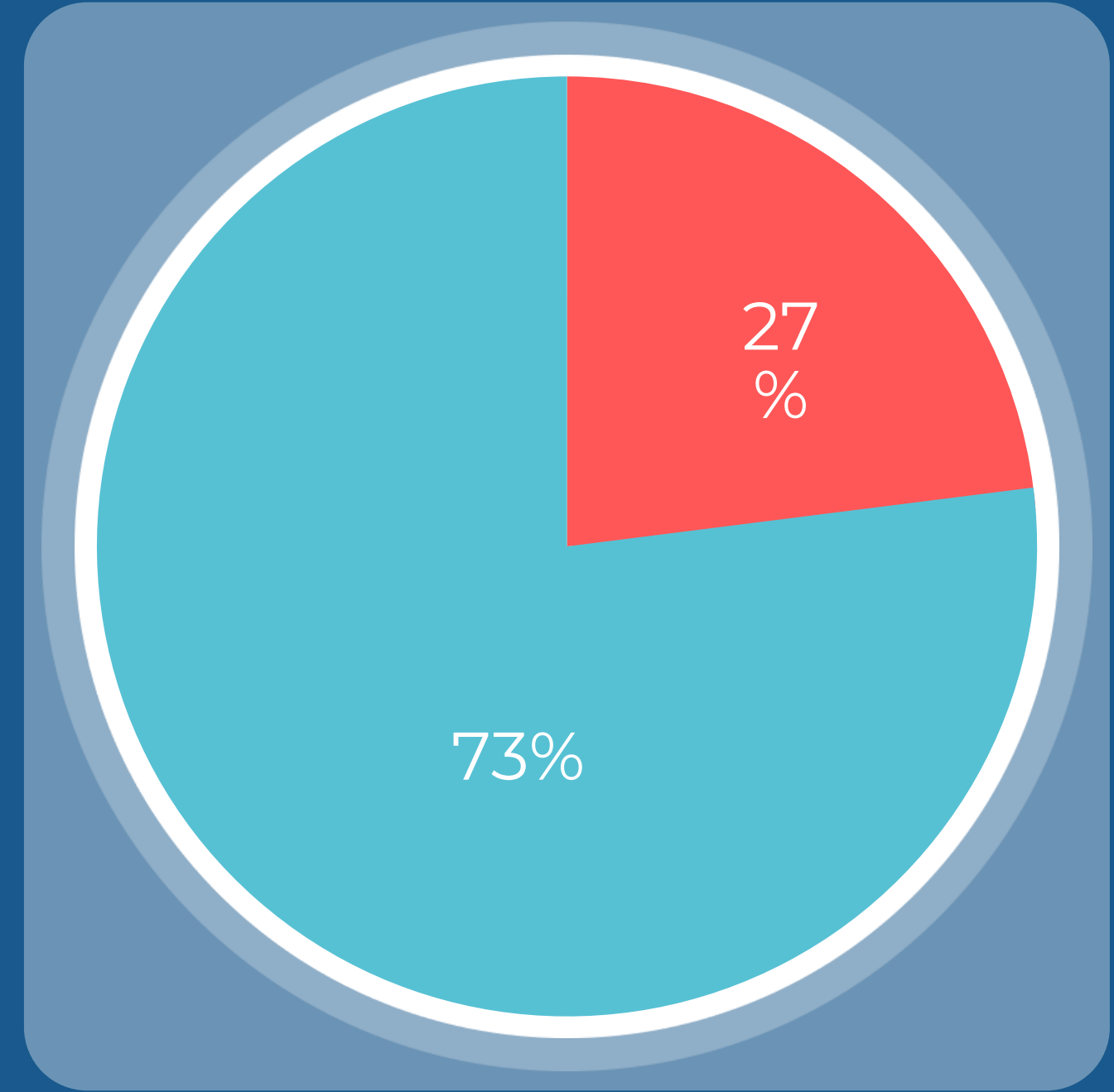
Item 1.

79% of Adults Seen have a Serious Mental Illness
73% of Children have a Serious Emotional Disturbance



SMI

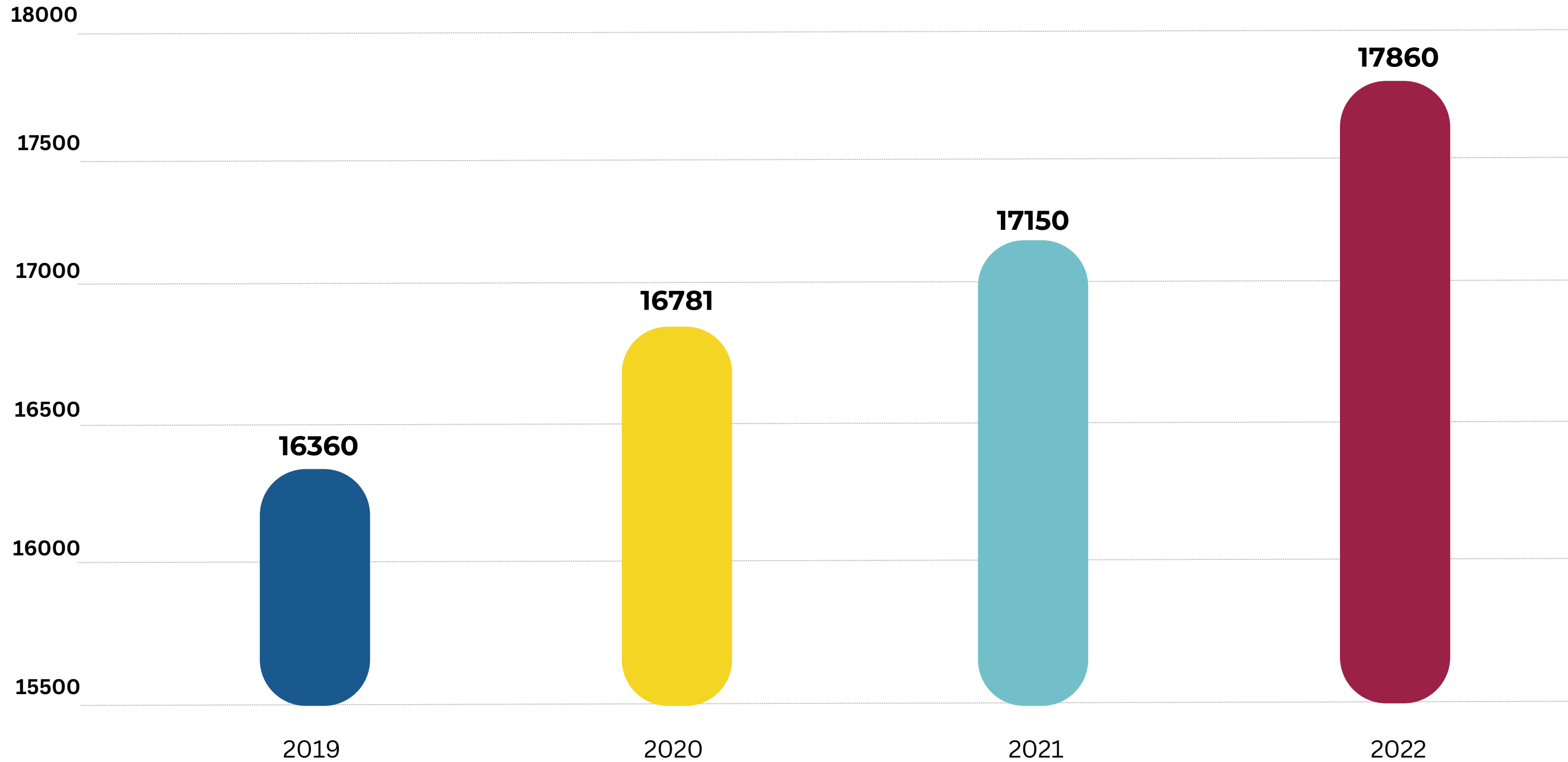
Yes No

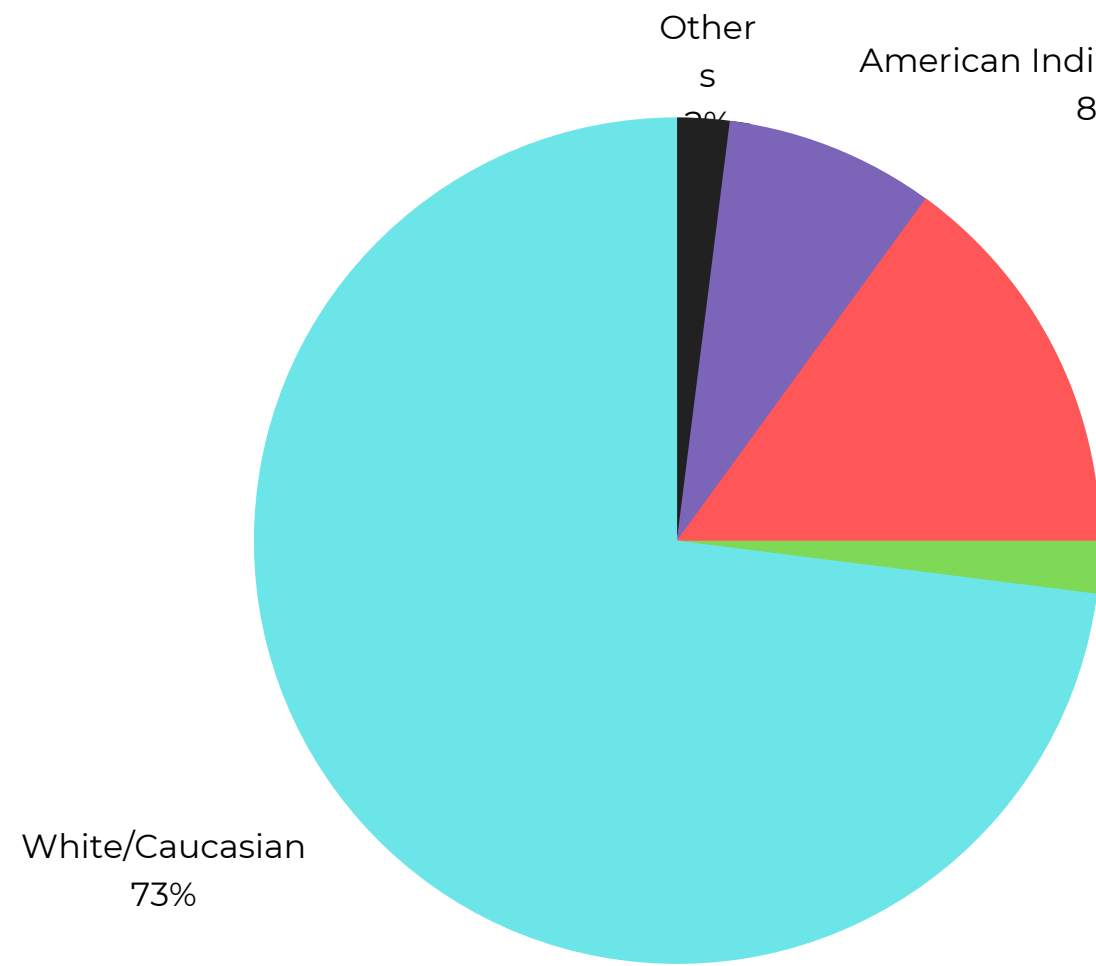


SED

Yes No

Annual number of consumers served by Red Rock

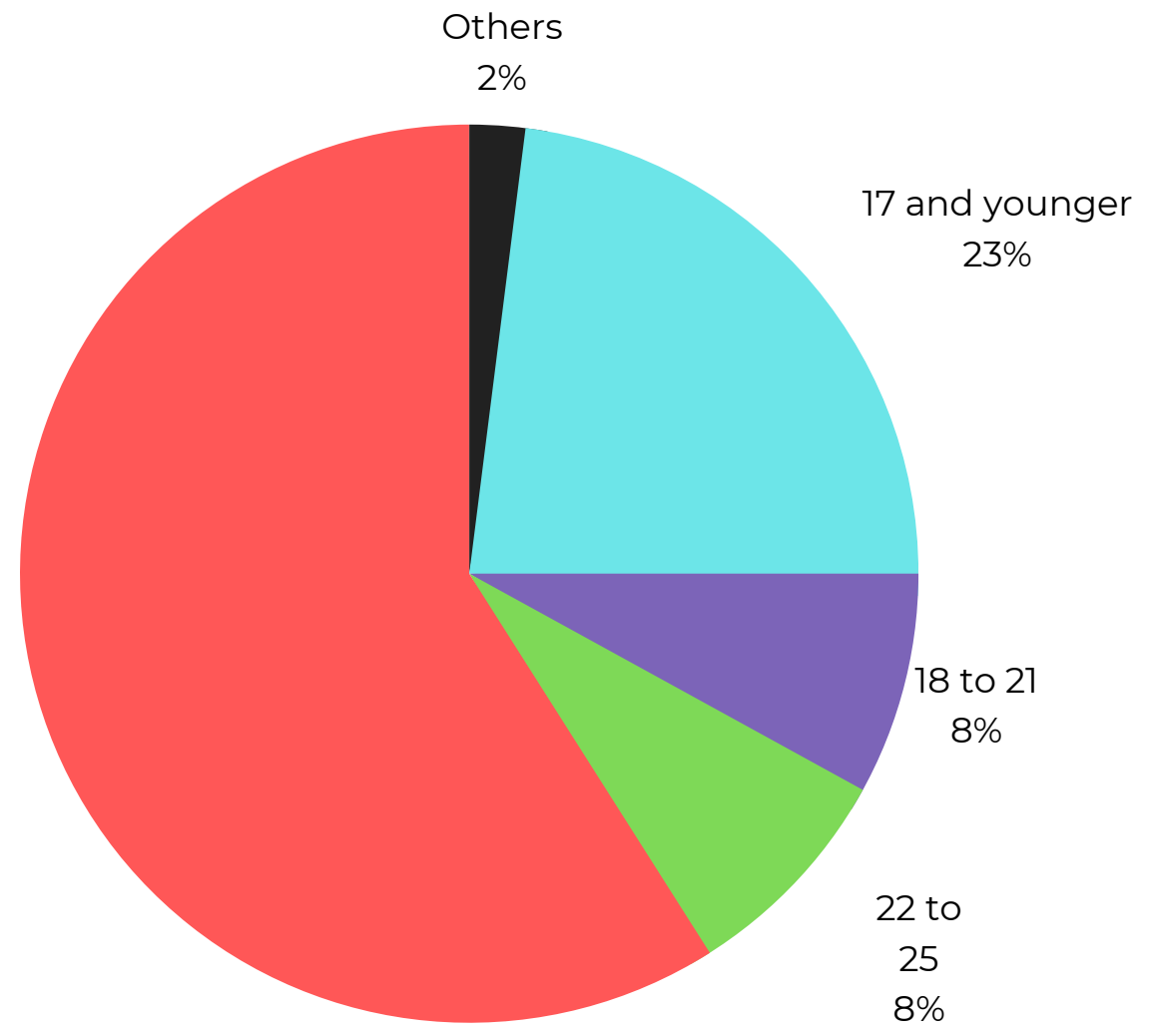




Black or African American
15%

American Indian or Alaskan...
8%

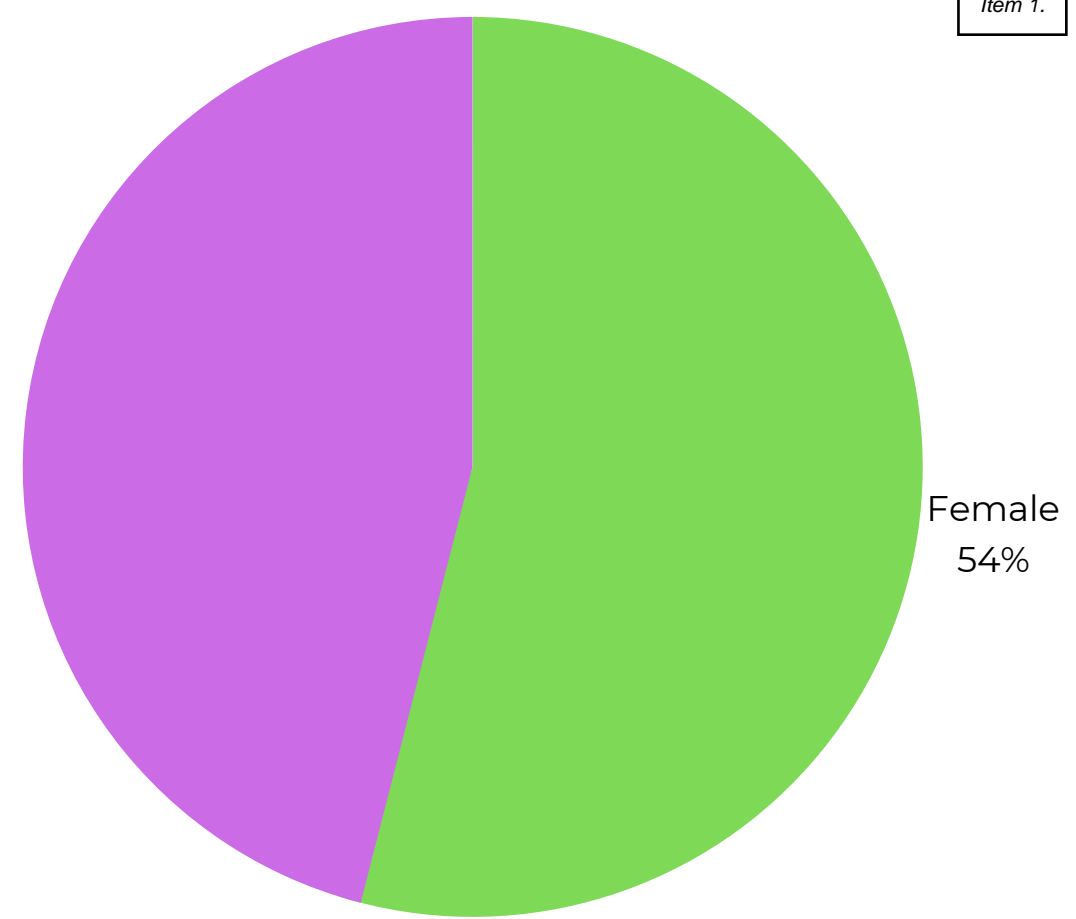
Other
2%



Unknown
2%

26 to 65
59%

Male
46%



Female
54%



Who We Serve - 2023



Clients Served: 17,855

Calls to our Access Center: 121,836

THE CONTINUUM OF CARE AT RED ROCK

Adapted from a model by the Substance Abuse and Mental Health Services Administration (SAMHSA), the Continuum of Care recognizes the need to provide the appropriate level services in order to address behavioral health problems & disorders.

NOTE: The appropriate treatment level & intensity are dependent on the specific needs of the individual. As needs change, levels of care are adjusted for appropriate individualized care.

“Behavioral health is the promotion of mental health, resilience and wellbeing; the treatment of mental and substance use disorders; and the support of those who experience and/or are in recovery from these conditions, along with their families and communities.”

- SAMHSA

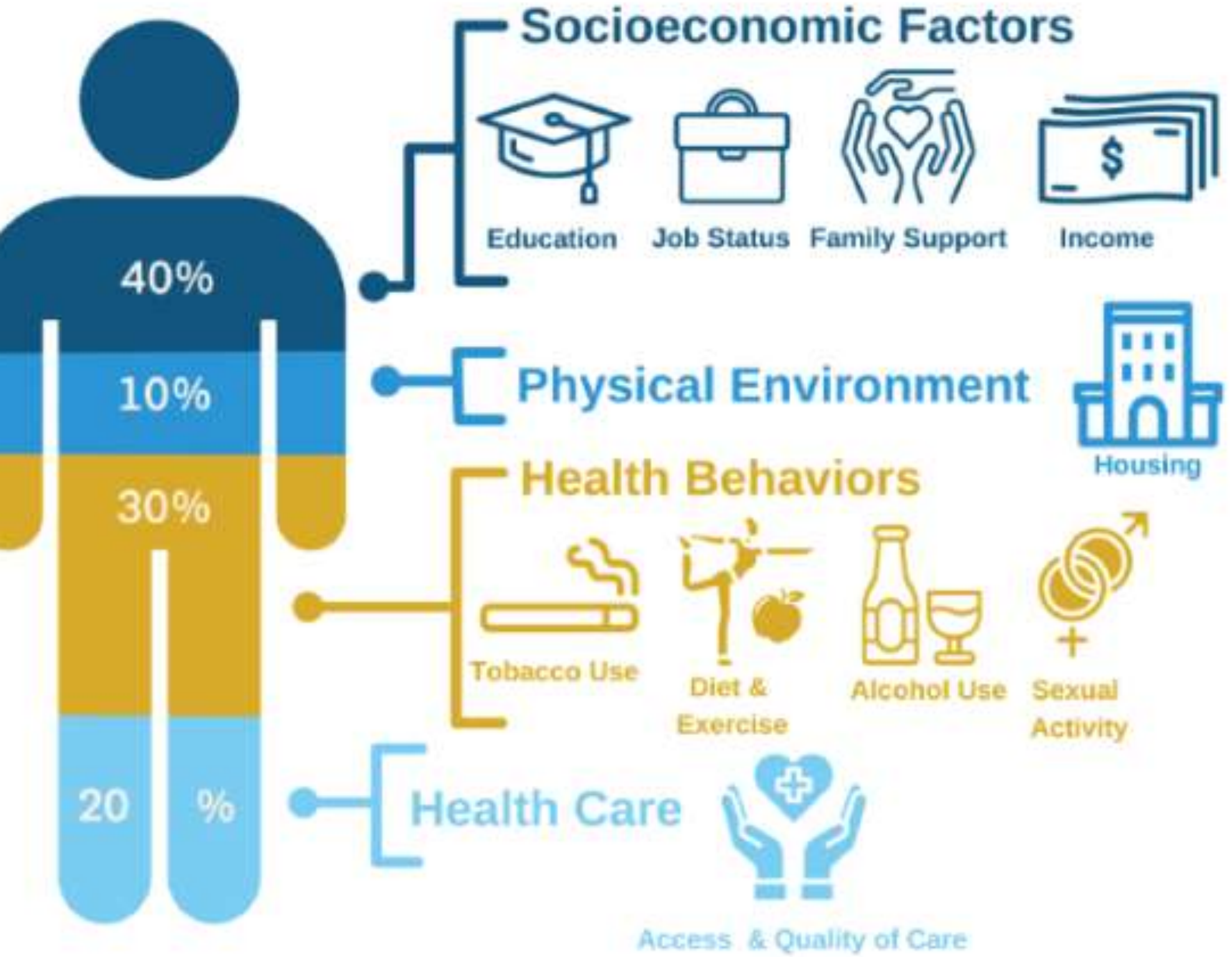


THE CONTINUUM OF CARE TREE

The Continuum of Care Tree above displays the broad array of services offered at Red Rock BHS. Some services may have been omitted from the diagram.

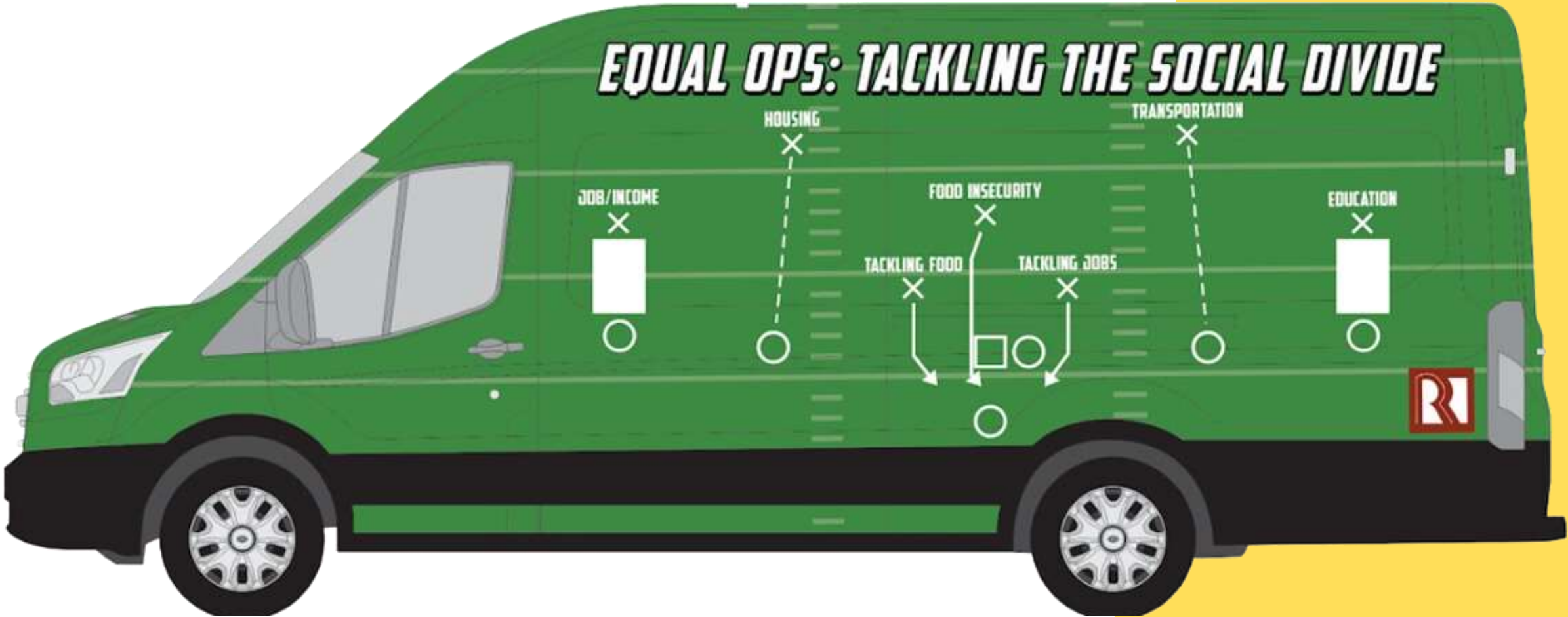
Please visit our website at www.red-rock.com for a complete and updated list of services.

Red Rock received a CCBHC expansion grant for Cleveland and McClain Counties



**\$1 million
a year
over
4 years**

Red Rock Outreach Van for Social Determinants of Health focused on **OU students, homeless and high-risk populations.**



Red Rocks Budget

- Red Rock served almost 18,000 adult children and families last year.
- Red Red's budget is \$77,000,000.
- 930 Employees



Red Rock Services Currently Available in Norman

Adult Crisis Unit and Urgent Recovery Center
900 East Main, Bldg. 52 | Norman, OK 73070

Adult Outpatient Services
900 N. Porter | Norman, OK 73071

Through an RFP process, on Oct. 6th, Red Rock was awarded a CCBHC contract with the ODMHSAS to provide CCBHC services to Cleveland and McClain counties.



RED ROCK BHS ADULT CRISIS UNIT/URGENT RECOVERY CENTER NORMAN, OK

“Preliminary Concept”

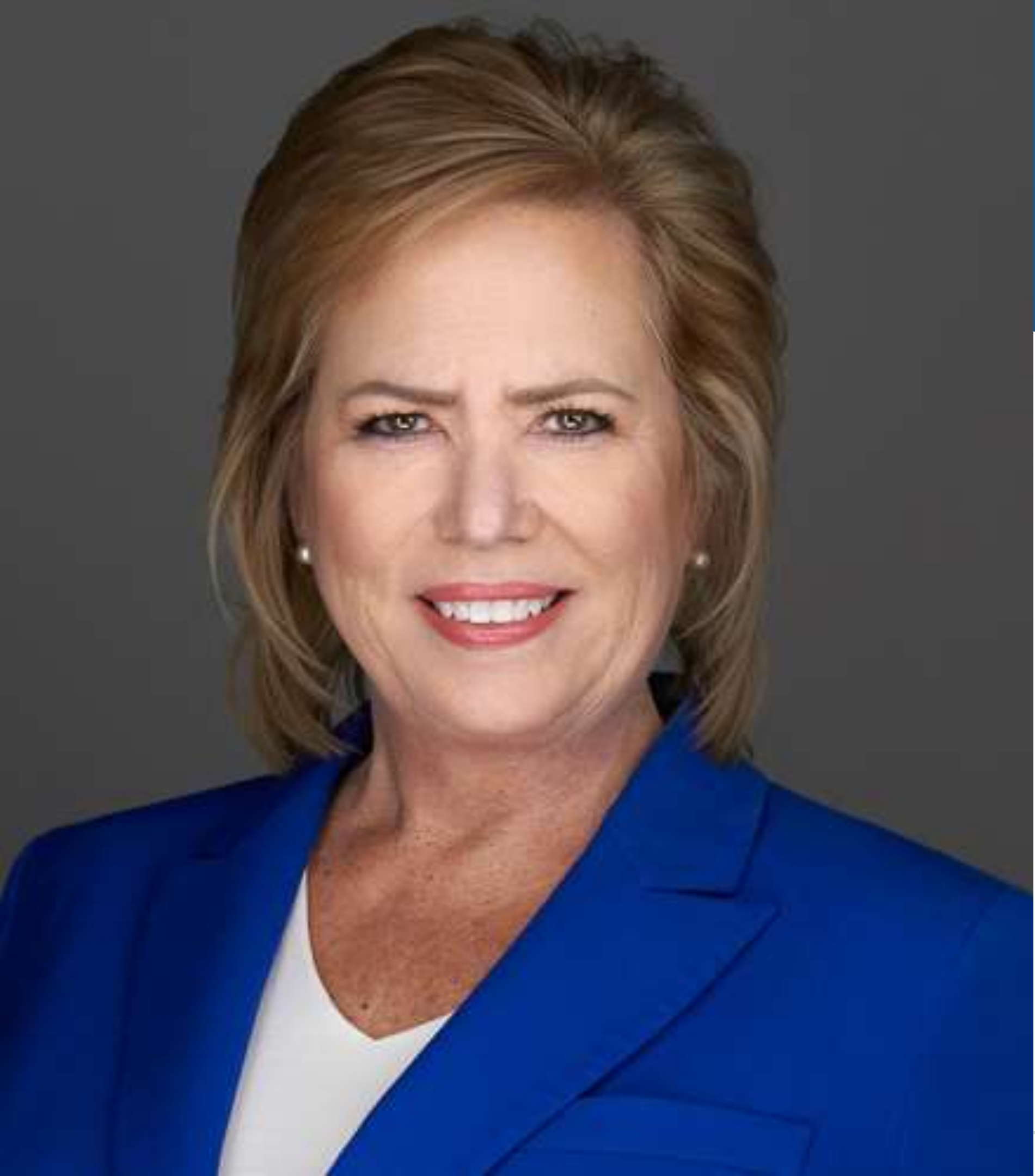


RED ROCK BHS ADULT CRISIS UNIT/URGENT RECOVERY CENTER WEATHERFORD, OK

Grand Opening - July 17, 2020



Funded, in part by,



Verna Foust, MS, LPC-S, NBCC

Chief Executive Officer

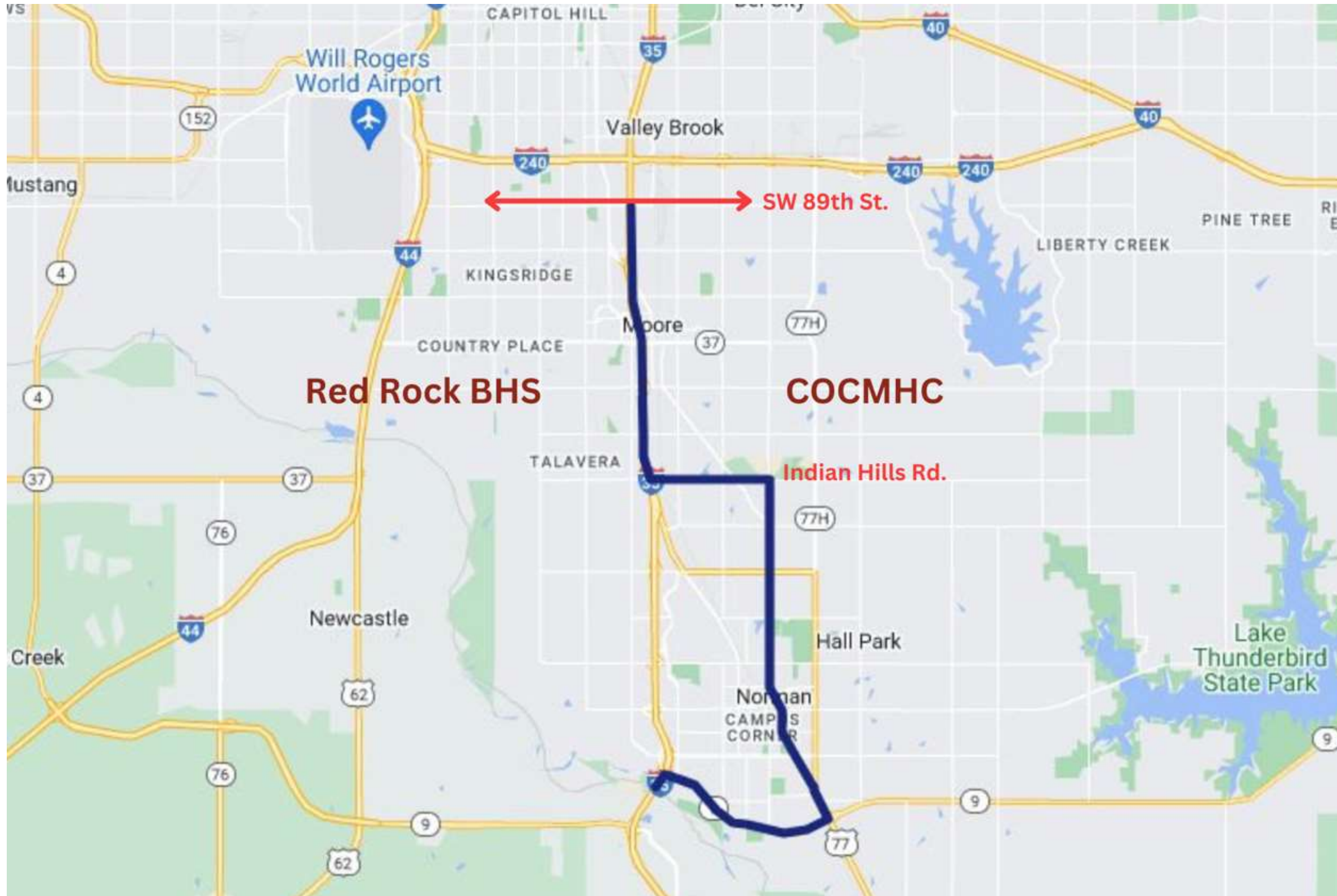
Red Rock BHS
4400 N. Lincoln Blvd
Oklahoma City, OK
73131

Office: 405-425-0438
Cell: 405-620-7830
vfoust@red-rock.com

www.red-rock.com



Cleveland/McClain Counties Catchment Areas





CHRIS MATTINGLY, PE
COLE NIBLETT, PE
MICHAEL WATTS, PE, PHD

March 19, 2024

IPR Field Demonstration Norman City Council Update

OUR AGENDA

- 01.** Project History and Background
- 02.** Pilot Update
- 03.** Next Steps and Future Work



01.

02.

03.

Project History and Background

Multiple studies/reports have been developed over the last 10+ years.

Central Oklahoma Master Conservancy District

Lake Thunderbird Water Reuse Feasibility Study

Final Report

October 2012

ALAN PLUMMER ASSOCIATES, INC. ENVIRONMENTAL ENGINEERS AND SCIENTISTS 1703-001-01

Garver and SPI logos are also present.

Lake Thunderbird Water Reuse Project

Phase 2 – Modeling Impact of IPR on Water Quality

Prepared For: **Central Oklahoma Master Conservancy District (COMCD)**

October 2017

Garver logo and GarverUSA.com are also present.

Lake Thunderbird Augmentation

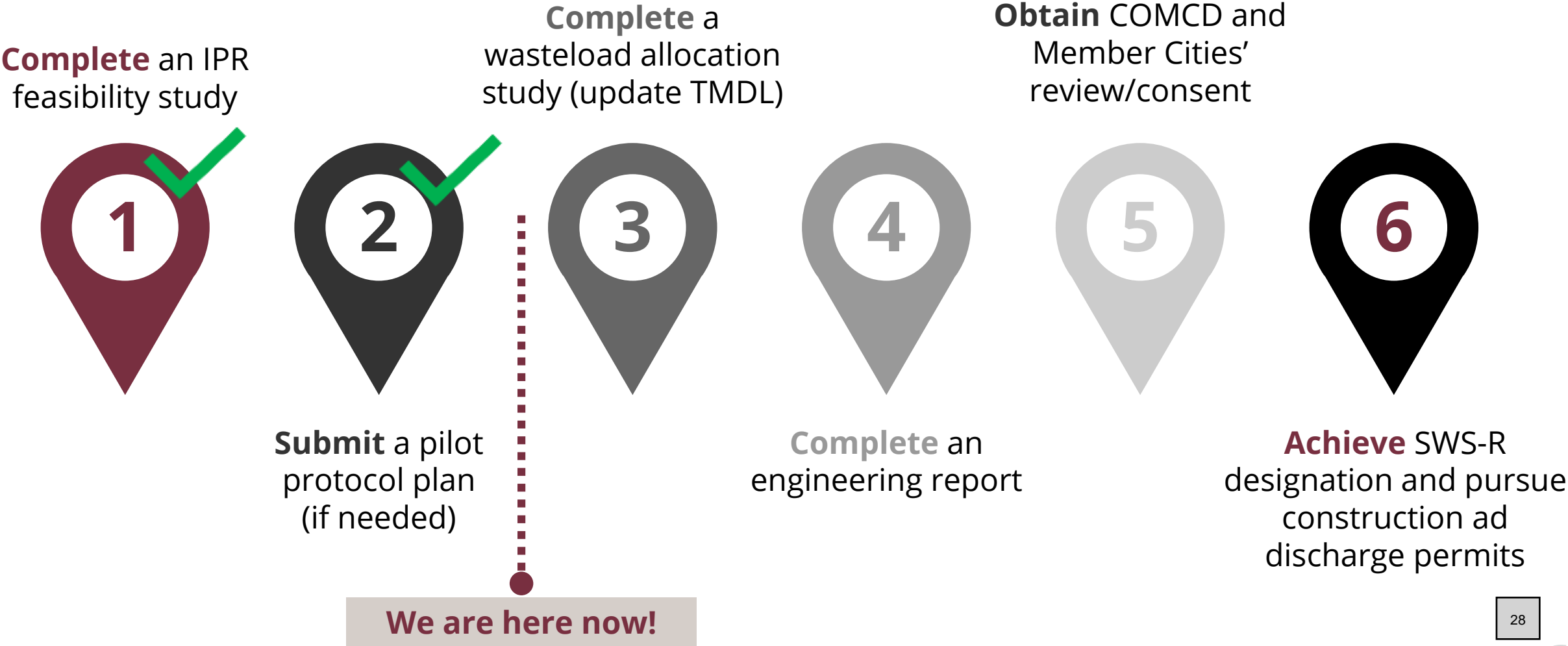
Engineering Report

Prepared For: **Central Oklahoma Master Conservancy District (COMCD)**

February 2015

Garver logo and GarverUSA.com are also present.

Sustained and collaborative efforts with ODEQ throughout the six-step process for any IPR project is required.





01.

02.

03.

Pilot Update

The goal of the Pilot is to identify a treatment approach that does not produce a brine stream, and can reliably provide potable reuse quality product water.



Demonstrate the efficacy of biological nutrient removal (BNR) and tertiary treatment to achieve Safe Drinking Water Act standards



Removal of pathogens and personal care and pharmaceutical products (PPCPs) without the use of high-pressure membranes



The pilot trains encompassed two existing aeration basins, a secondary clarifier, and more at the Norman WRF.

Item 2.



AGS

mUCT
Basin

Tertiary Filtration / AOP
/ Disinfection Area

Two process trains simulated the multi-barrier approach needed at full-scale

Item 2.

Biological
Nutrient Removal

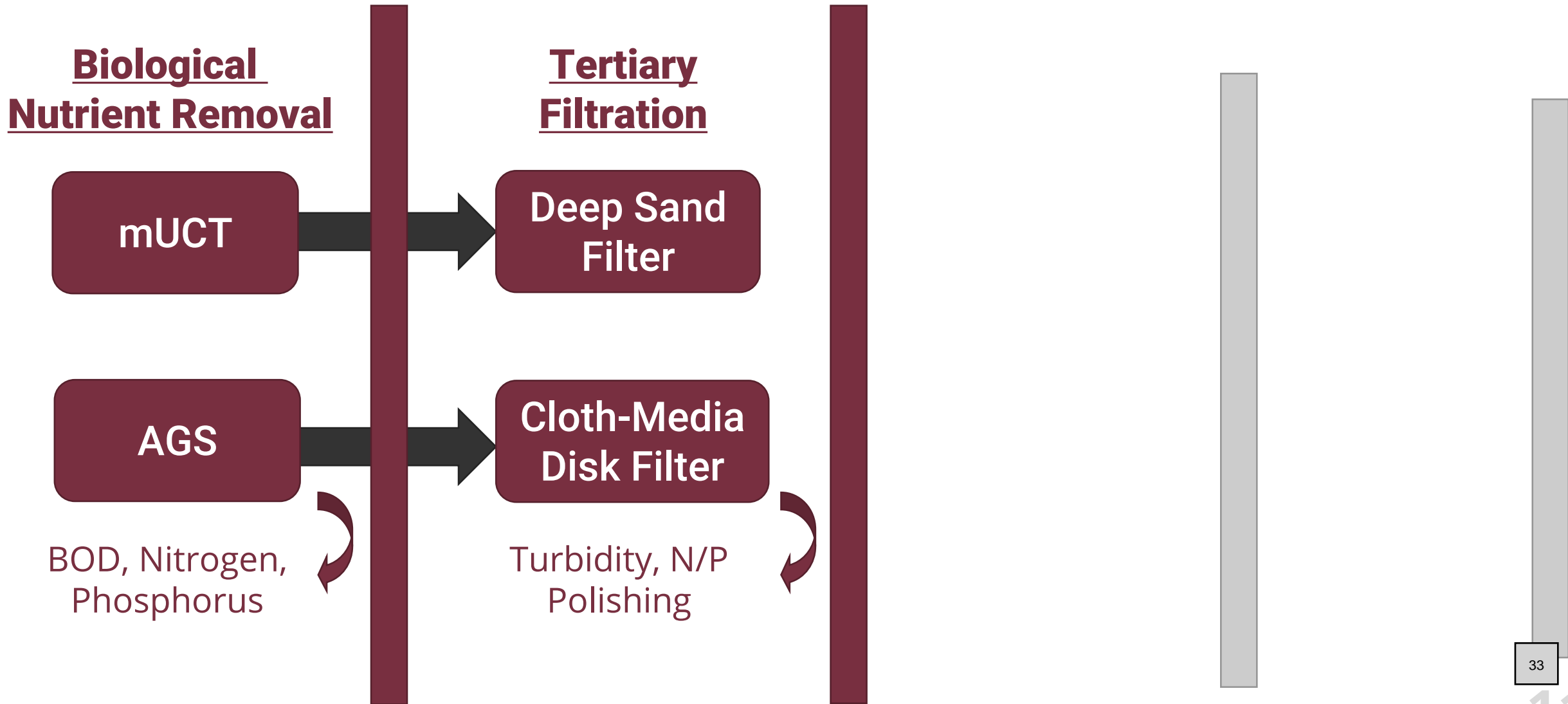


Tertiary
Filtration



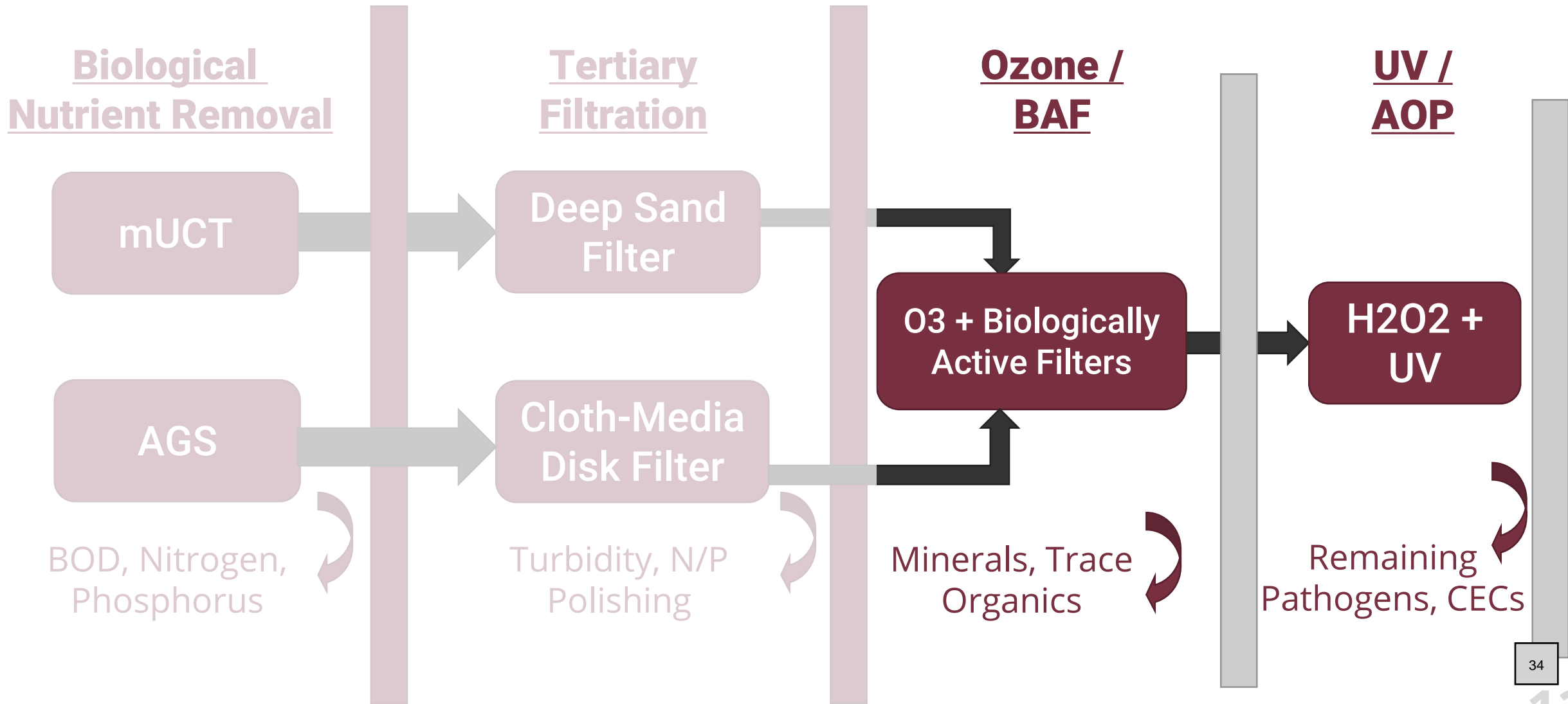
Two process trains simulated the multi-barrier approach needed at full-scale

Item 2.



Two process trains simulated the multi-barrier approach needed at full-scale

Item 2.



Two pilot-scale, tertiary filtration technologies were piloted.



Filtered effluents were further treated with advanced technologies (Ozone+BAF and UV+AOP).



Pilot was successful in tracking the fate of 3 major contaminant groups which will impact future operations and monitoring.



Nutrients

- **Nitrogen**
 - Organic
 - Inorganic
- **Phosphorus**



Pathogens and Indicator Organisms



Organics

- **Organics**
 - BOD₅
 - TOC
 - *Micropollutants*

Pilot was successful in tracking the fate of 3 major contaminant groups which will impact future operations and monitoring.



Nutrients

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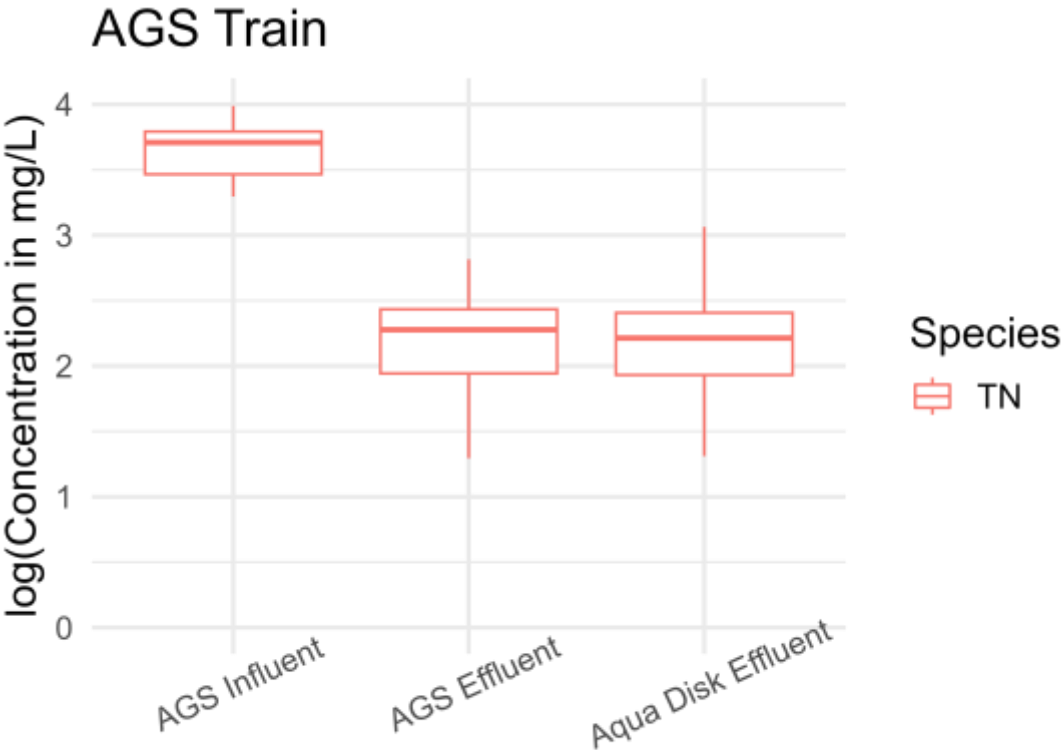
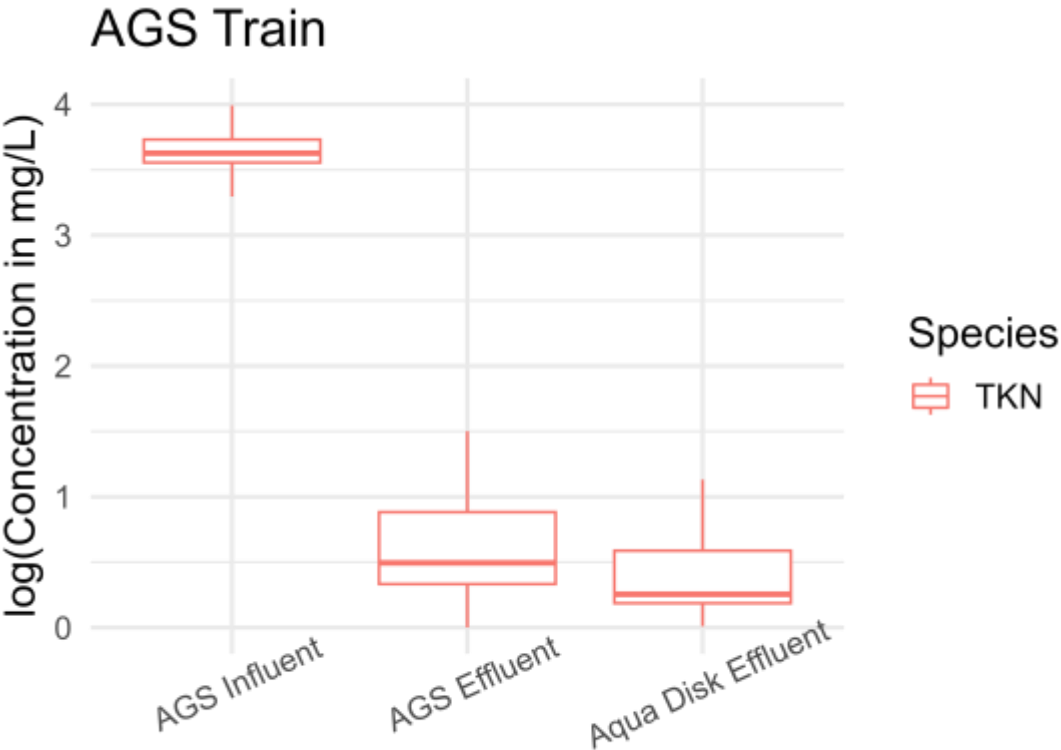
Pathogens and Indicator Organisms



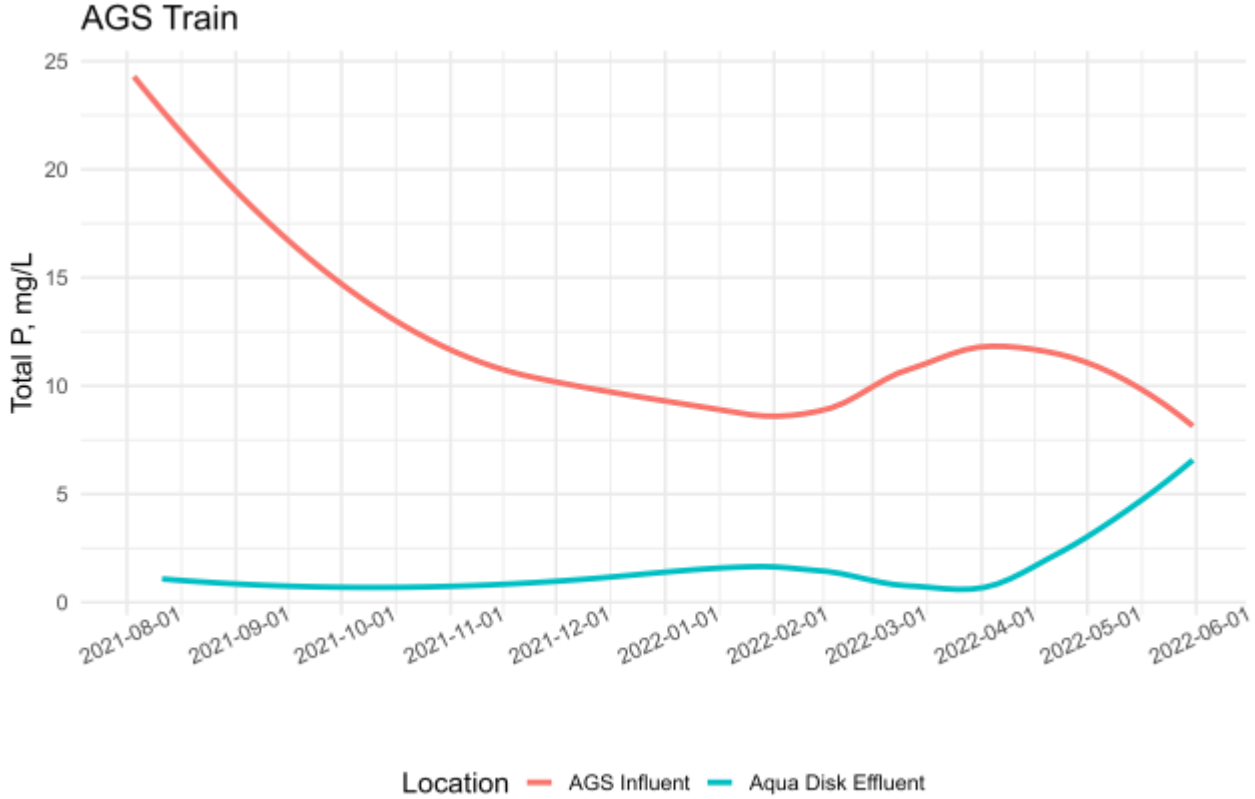
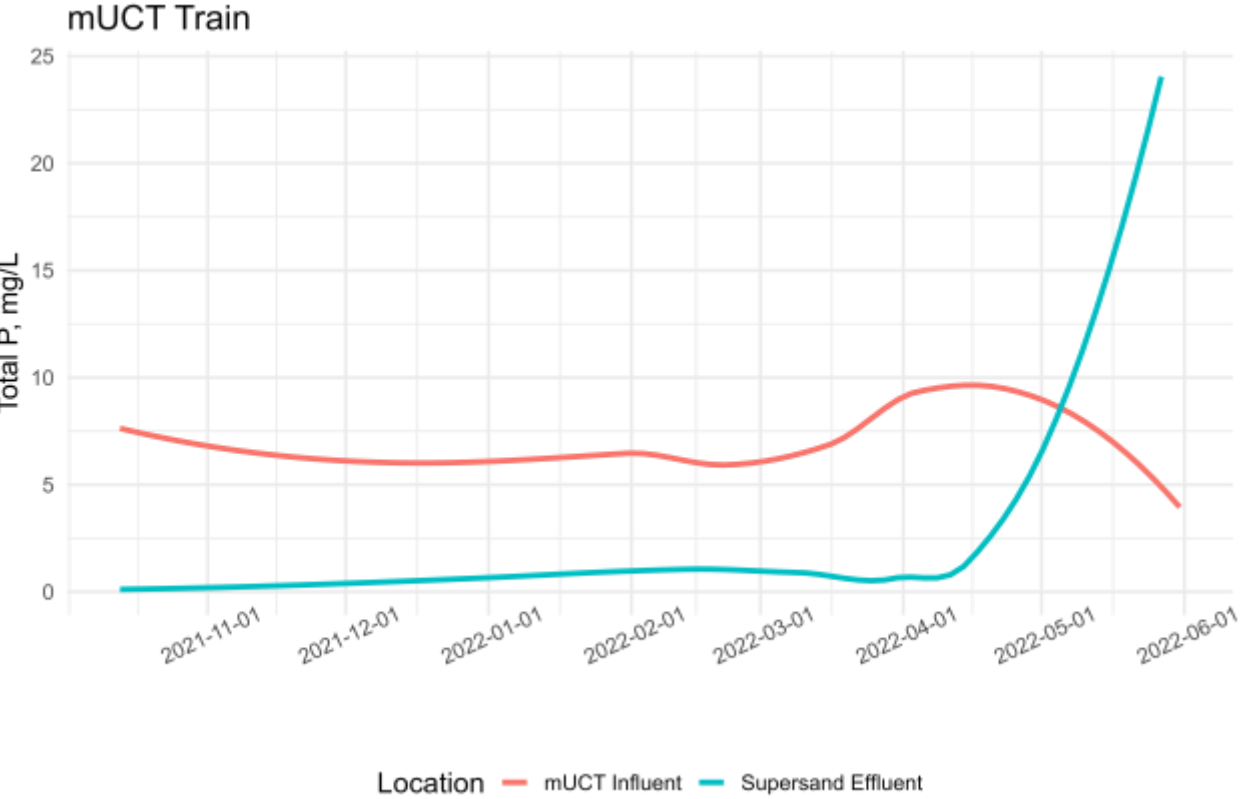
Organics

- **Organics**
 - BOD₅
 - TOC
 - *Micropollutants*

>3-log (99.9%) reduction in TKN and 1.5-log (96%) reduction in TN with the AGS technology and tertiary filtration.



Both Pilot Trains maintained low effluent P, until equipment failures and storm damage in April 2022.



Pilot was successful in tracking the fate of 3 major contaminant groups which will impact future operations and monitoring.



Nutrients

- **Nitrogen**
 - Organic
 - Inorganic
- **Phosphorus**

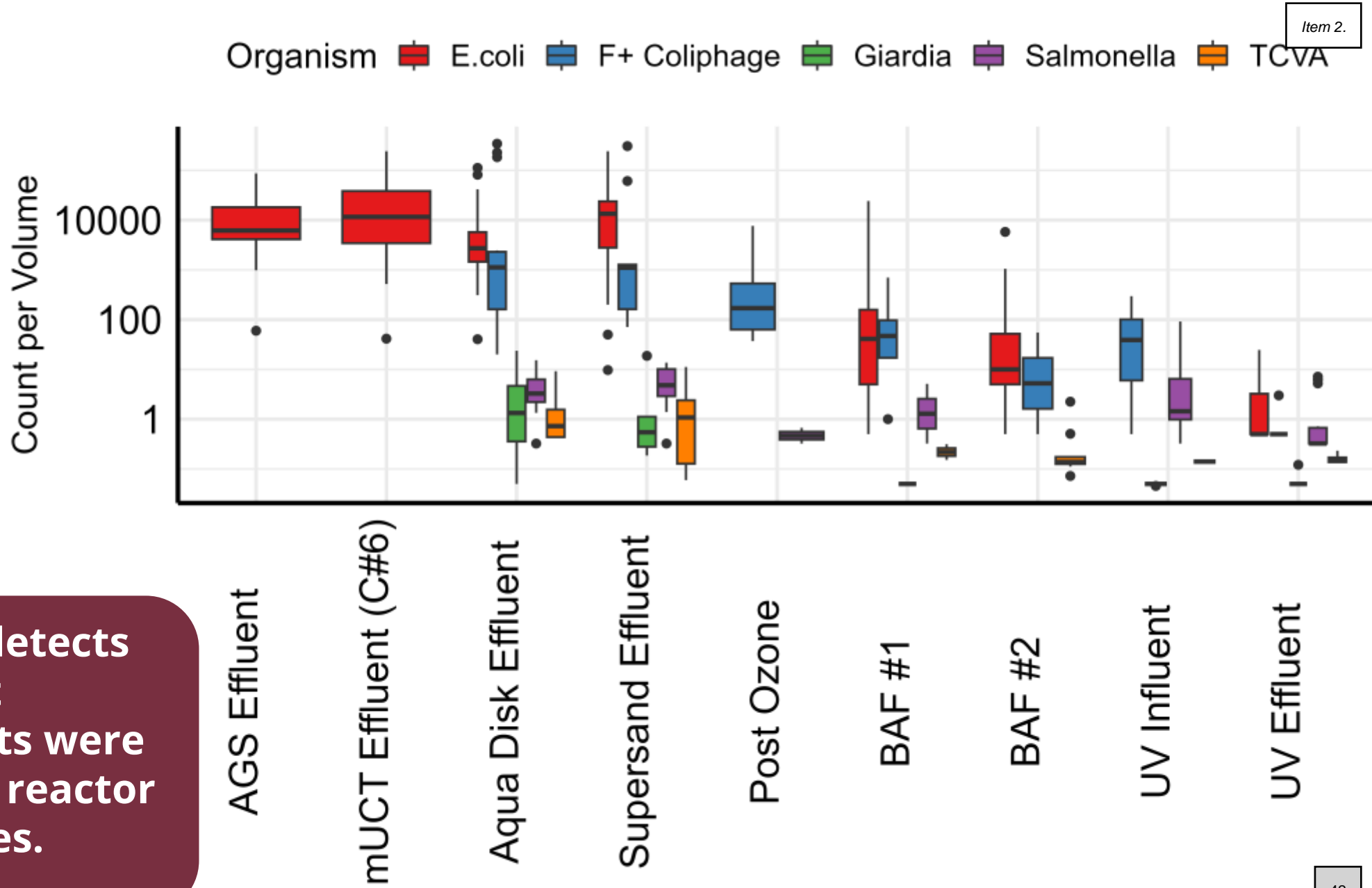


Pathogens and Indicator Organisms



Organics

- **Organics**
 - BOD₅
 - TOC
 - *Micropollutants*



Frequent non-detects and single-digit pathogen counts were observed in UV reactor effluent samples.

Pilot was successful in tracking the fate of 3 major contaminant groups which will impact future operations and monitoring.



Nutrients

- **Nitrogen**
 - Organic
 - Inorganic
- **Phosphorus**



Pathogens and Indicator Organisms

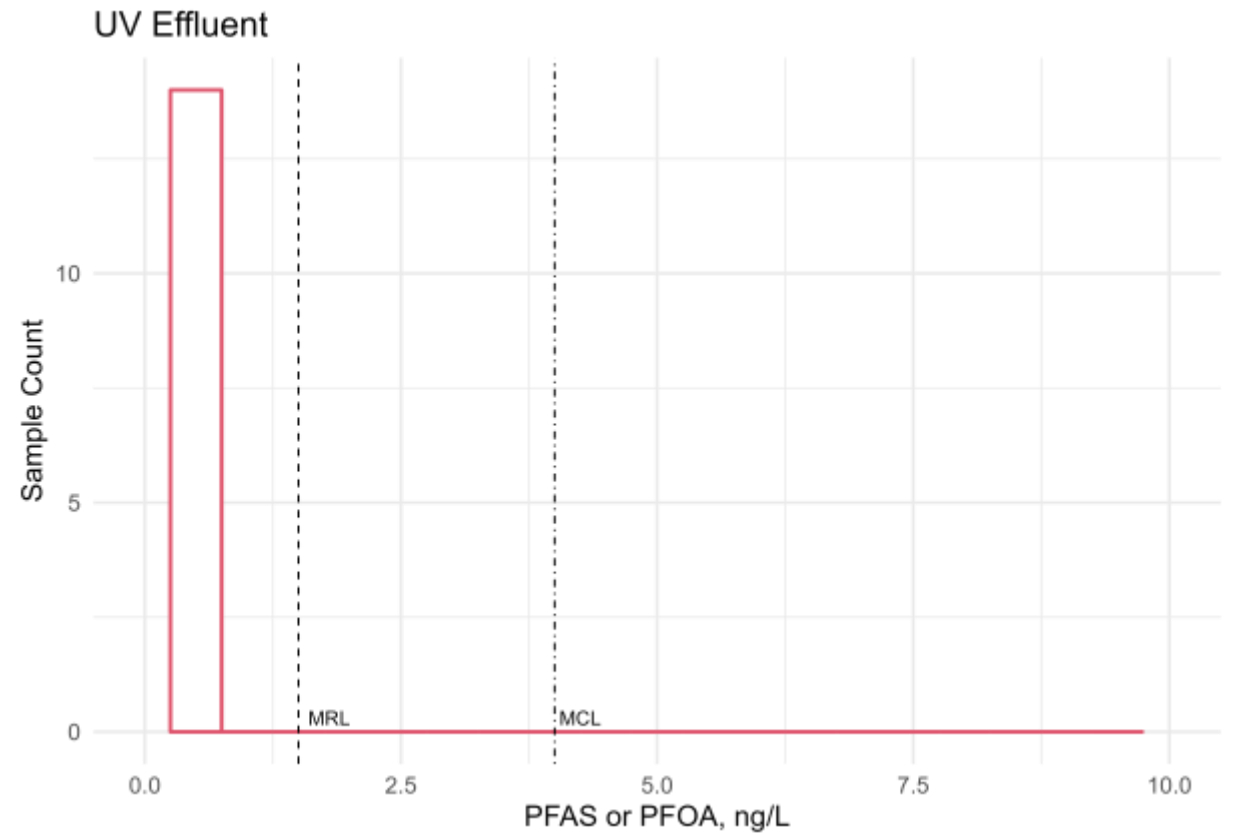
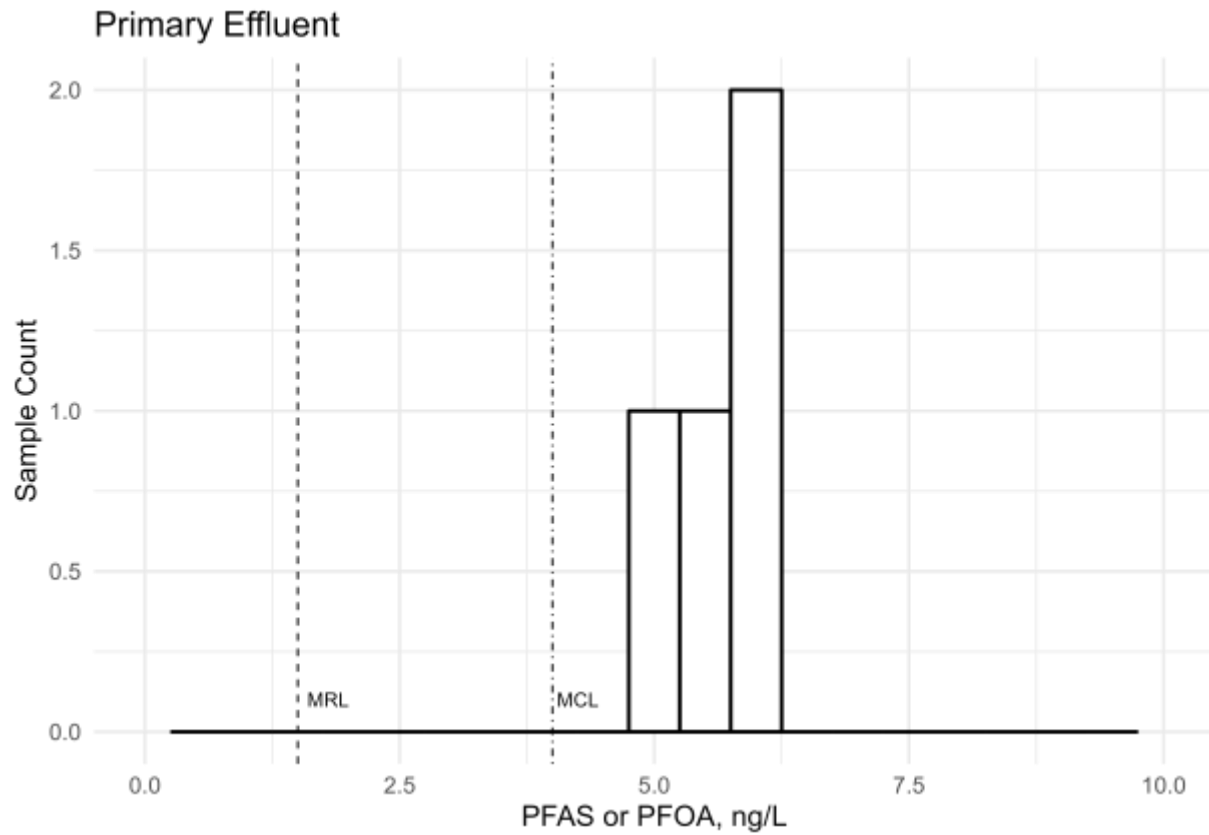


Organics

- **Organics**
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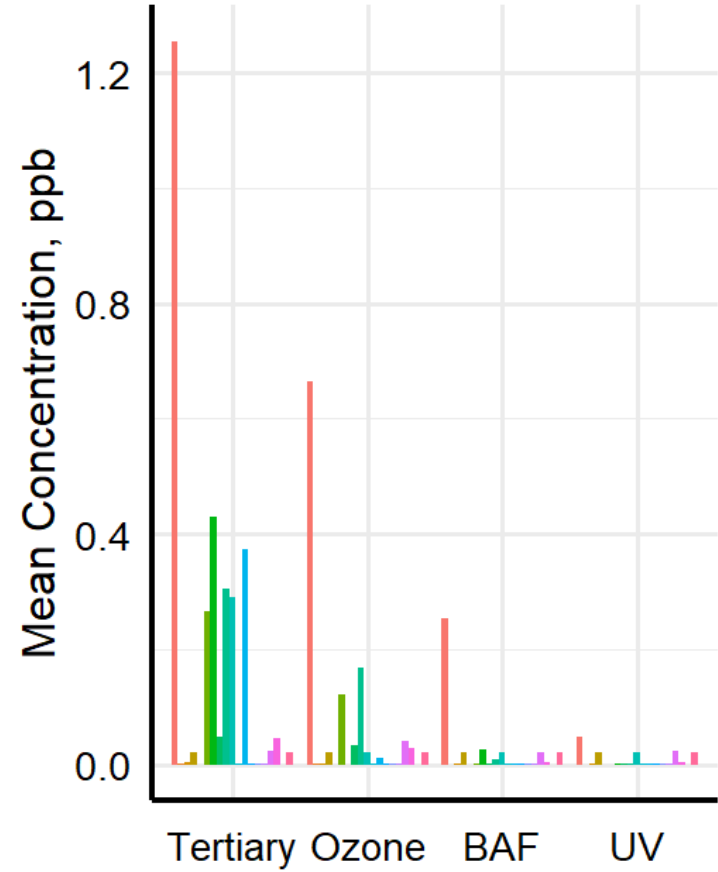
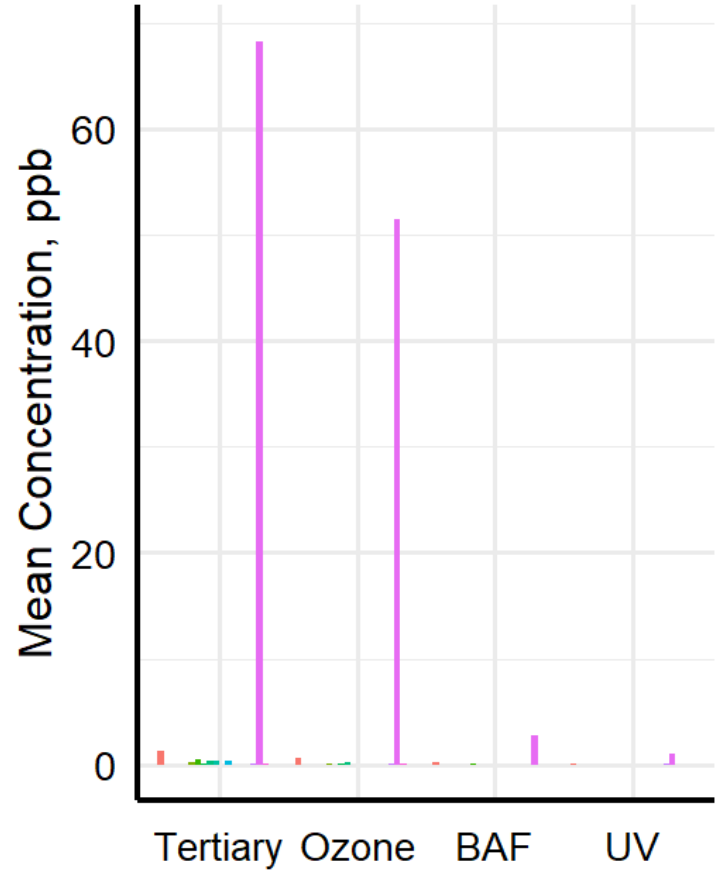
With new, impending regulations, there was significant interest in tracking PFAS through the Pilot Trains.

Item 2.



For unregulated micropollutants, the target of consistent degradation was achieved.

Item 2.



A picture speaks 1,000 words!



AGS Influent



mUCT Influent



Clarifier #6 Effluent



BAF Filter Effluent

A picture speaks 1,000 words!



Much more work to come!

ODEQ review of pilot results (ongoing)

Predictive Lake Optimization Tool (PLOT) project funded by the BOR

National Water Research Institute (NWRI) advisory panel review of pilot results

Many thanks to all of our partners!



THANK YOU FOR YOUR SUPPORT

Item 2.



LAKE THUNDERBIRD REUSE



JAMES M. INHOFE
U.S. SENATOR FOR OKLAHOMA



OKLAHOMA
DEPARTMENT OF COMMERCE

STATE OF OKLAHOMA
HOUSE REPRESENTATIVES



NORMAN CHAMBER
OF COMMERCE



WESTECH

State of Oklahoma
OWRB
WATER RESOURCES BOARD
the water agency

MIDWEST CITY
Where the Spirit Flies High



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company



xylem

The UNIVERSITY of OKLAHOMA
Gallogly College of Engineering
School of Civil Engineering and Environmental Science



Q&A



**COLE NIBLETT, PE |
GARVER**



MCNiblett@GarverUSA.com