Engineer Development School 2025 Executive Summary

Truckee Meadows Fire & Rescue

Brian Haley

INTRODUCTION

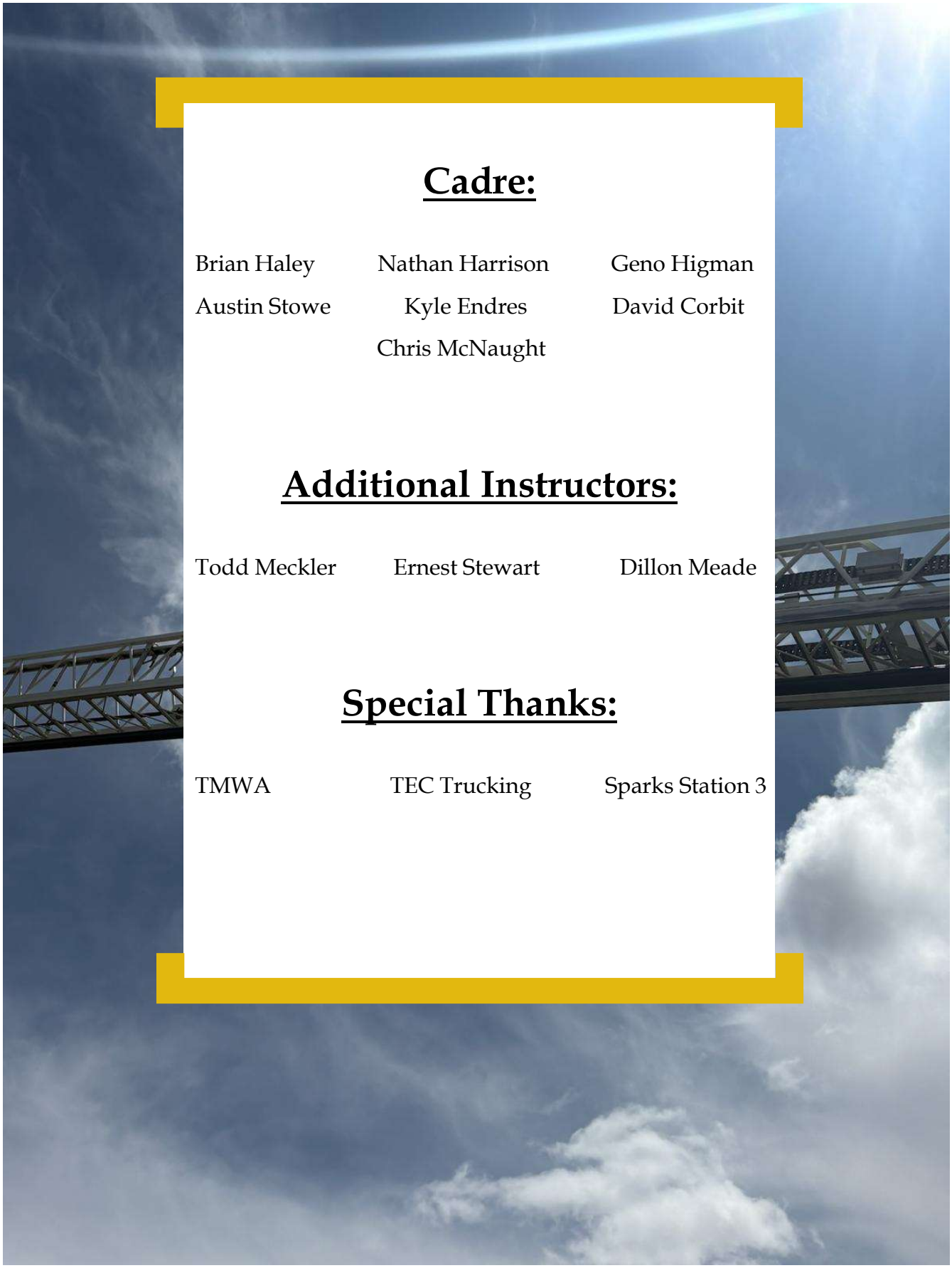
Engineer Development School for 2025 was an exceptionally large lift for all parties involved. The largest EDS class previously was 18 students and this session we hosted 28. TMFR supported the Cadre's request to host two concurrent sessions to facilitate better instructor ratios and student learning. 7 Cadre members committed a total of 876 hours to this endeavor over several months of preparation and the delivery of 4 weeks of instruction. Countless other individuals assisted in various areas to make 2025 a successful academy.

In total, thirteen different apparatus were used throughout EDS across 4 unique locations. Roughly 16,225 feet of hose was pulled during each 2 week academy for a total of 32,450' (6.15 miles) over 4 weeks. Over the course of the month 2.2 million gallons of water was flown (yes you read that right).

The students themselves committed a total of 2800 hours of their own time to attend EDS unpaid. The remainder of the department stepped up and covered the numerous vacancies that were created across all three ranks.

Below I have finally delivered on a longstanding promise to educate the district on what all happens during Engineer Development School. The following is a small snapshot what is covered during the training.

Captain Harrison's visual demonstration of Residual Pressures.



Cadre:

Brian Haley	Nathan Harrison	Geno Higman
Austin Stowe	Kyle Endres	David Corbit
	Chris McNaught	

Additional Instructors:

Todd Meckler	Ernest Stewart	Dillon Meade

Special Thanks:

TMWA	TEC Trucking	Sparks Station 3

Session 1 Students:

Austin Rauh • Cameron Okuma • Jeffery Bode

Bernard Trejo •Leslie Parawan • Tyler Johnson

Tomas Soucek • Daniel Moriarty • Michael Visentin

Blake Miller • John Williams • Chris Perham

Bryan Harter • Jaden Protain

Session 2 Students:

Austin Fotinos • David Watson • Matthew Nuthall

Daniel Rowe • Garrett Schafer • Kyle Colombini

Payton Giambrone • Juris Vaskovskis •Martin Rowson

Ryan Arnaud • Cameron Longobardo • Kason Clary

Cameron Chappell • Federico Areco-Ruiz

Day 1

Vehicle Maintenance:

-Walkthrough with mechanics of various Type 1 engines including:

-Components

-Safety Checks

-In service/Out of service criteria

-Troubleshooting

-Issue reporting

-Daily/Weekly service checks

-Fluid differentiation

Day 2

Ladder Maintenance:

-Walkthrough of Ladder specific systems

-Stabilization in various conditions

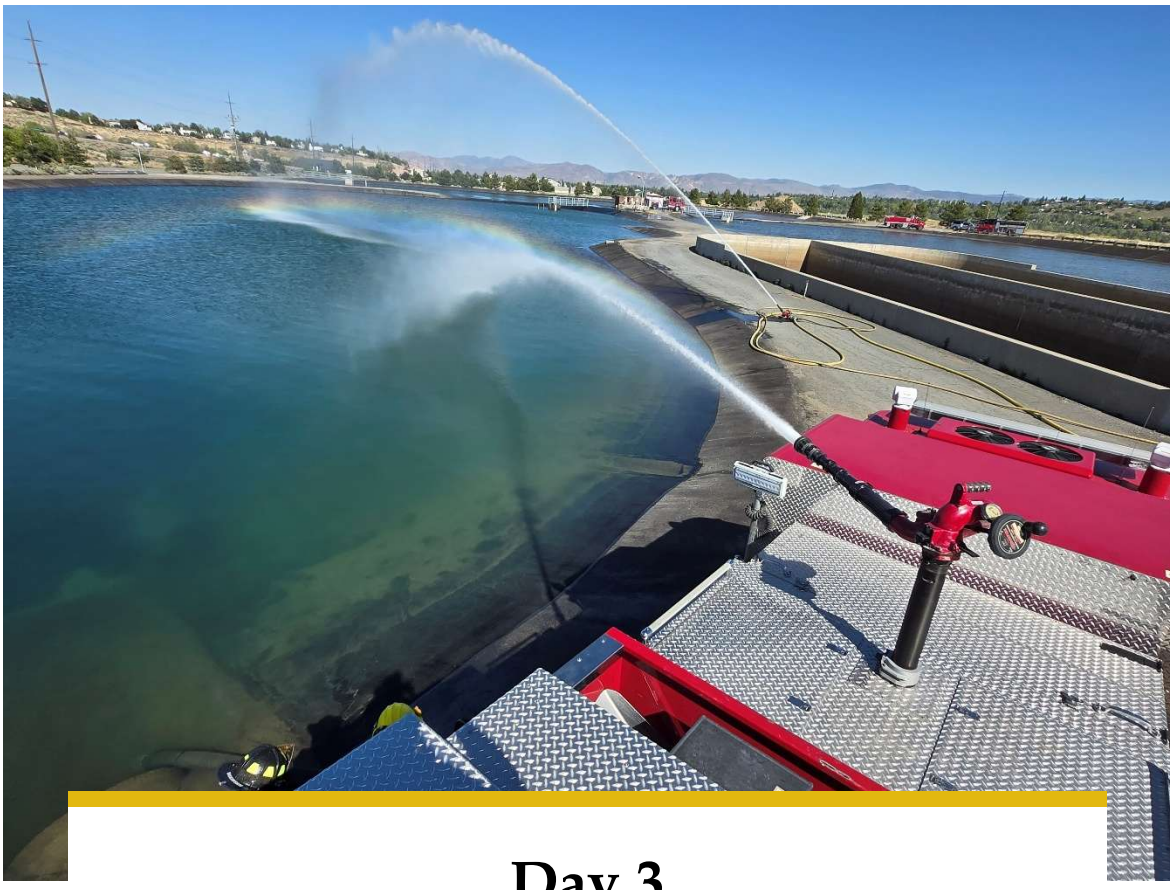
-Specialized system checks

-Interlock familiarization and testing

-Bucket placement drill for depth perception

-Arial placement and building size up for various operations

-Foam Pro system capabilities, types and operations



Day 3

Intro to Pumping:

Five rotation day with stations covering:
-Pumping from draft

-Pumping from hydrant with change overs

-Pumping from a nurse tender operation

-Pump Construction breakout class

-Pressure control systems class (Governor/PRV)

Day 4

Demo Day:

-Dual vs Tandem Pumping

-Residual pressure demonstration (removing opposite intake valve while flowing 1,000 GPM)

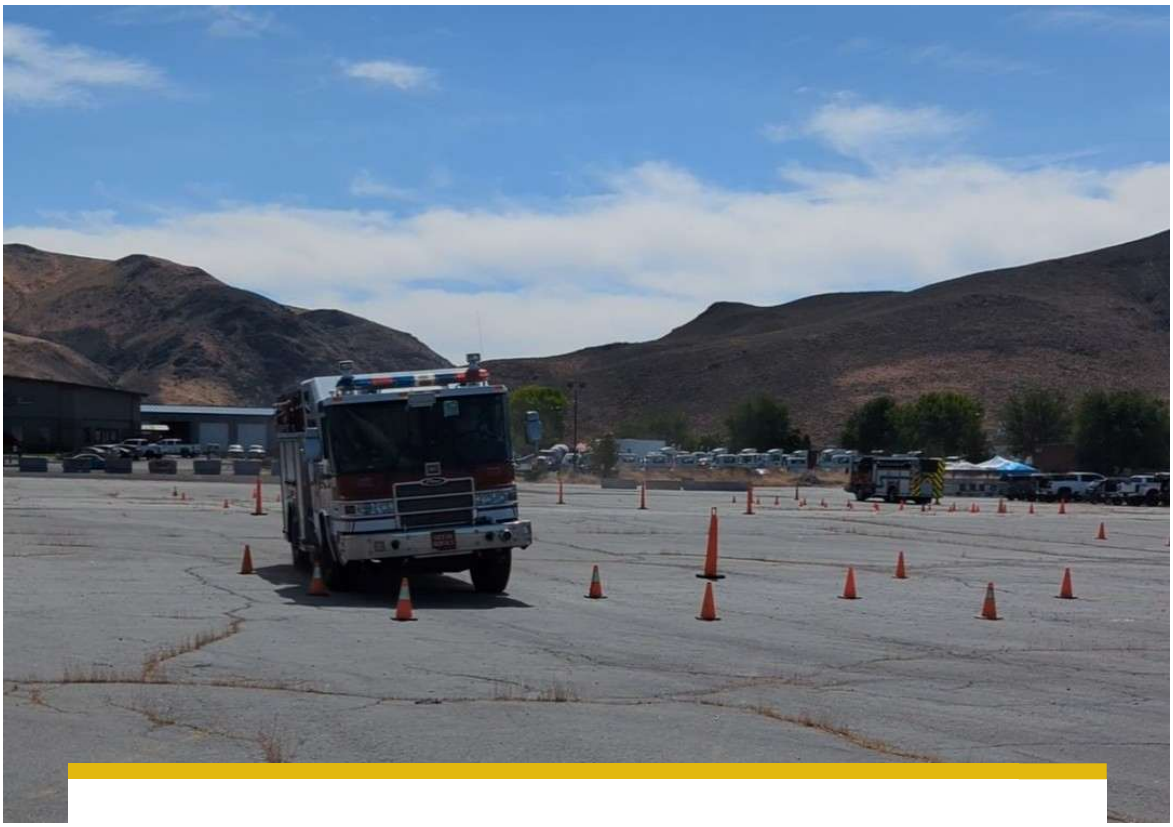
-Two stage pumps

-Relay Pumping

-Ladder pumping (through pump vs stick)

-Calculating Residuals

-2nd In Command class



Day 5

EVOC/Vehicle Operations:

-Cone Course (Multiple Type 1 Engines)

- Collision Avoidance/Controlled Braking drill

-Ladder road course

- On Scene/Accident Operations breakout class

Week 2:
Day 6

Wildland Operations:

-Model 14/Model 34/Type V Rotations including:

-Progressive uphill hose lay

-Drafting

-Mobile Attack

-Differentiate capabilities and pump configurations of the different wildland apparatus

-WUI Operations breakout class

Day 7

Advanced Pumping Day 1:

-Type 1 Change Overs and Spaghetti Factory

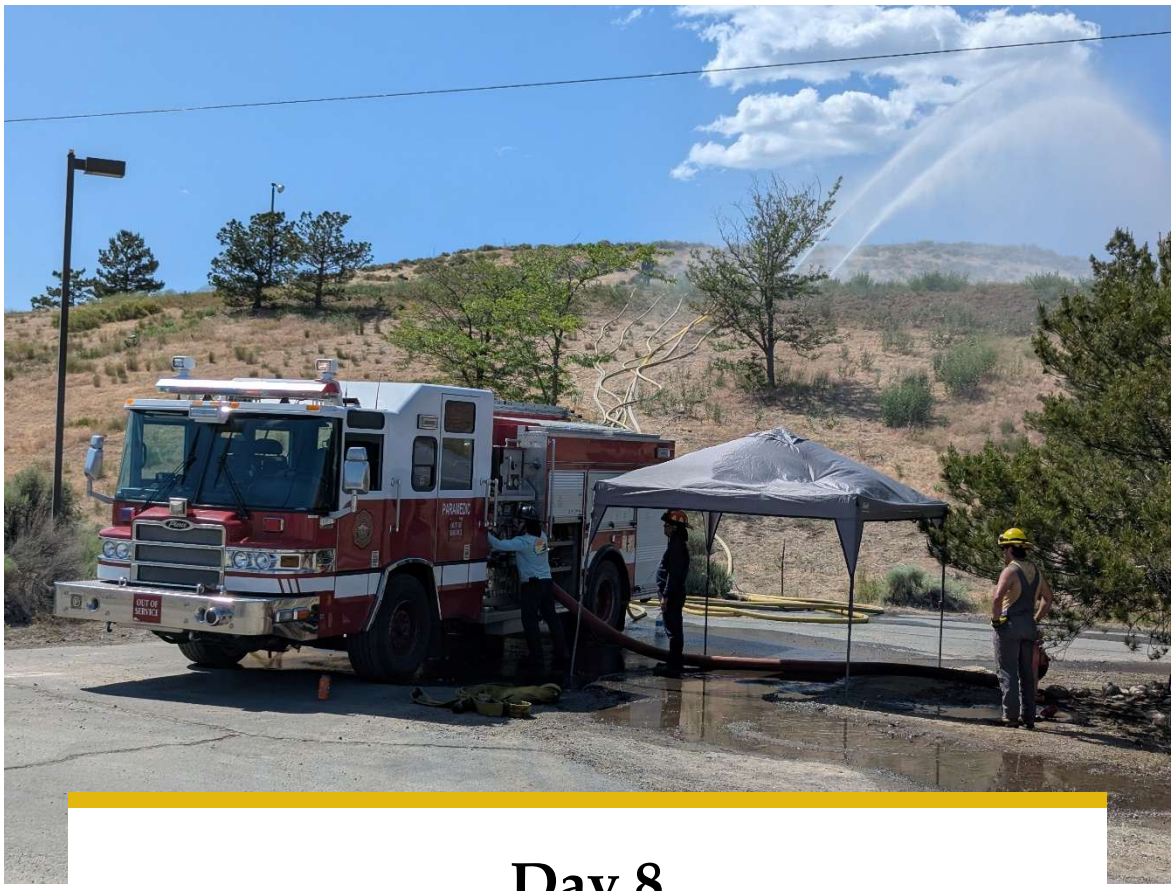
-Type 1 with nurse Tender supply

-Switch back to tank water/loss of supply

-Type 1 to Type 1 simulated low flow hydrant relay

-Ladder pumping from its own hydrant

-Structure Fire placement and on scene operations class



Day 8

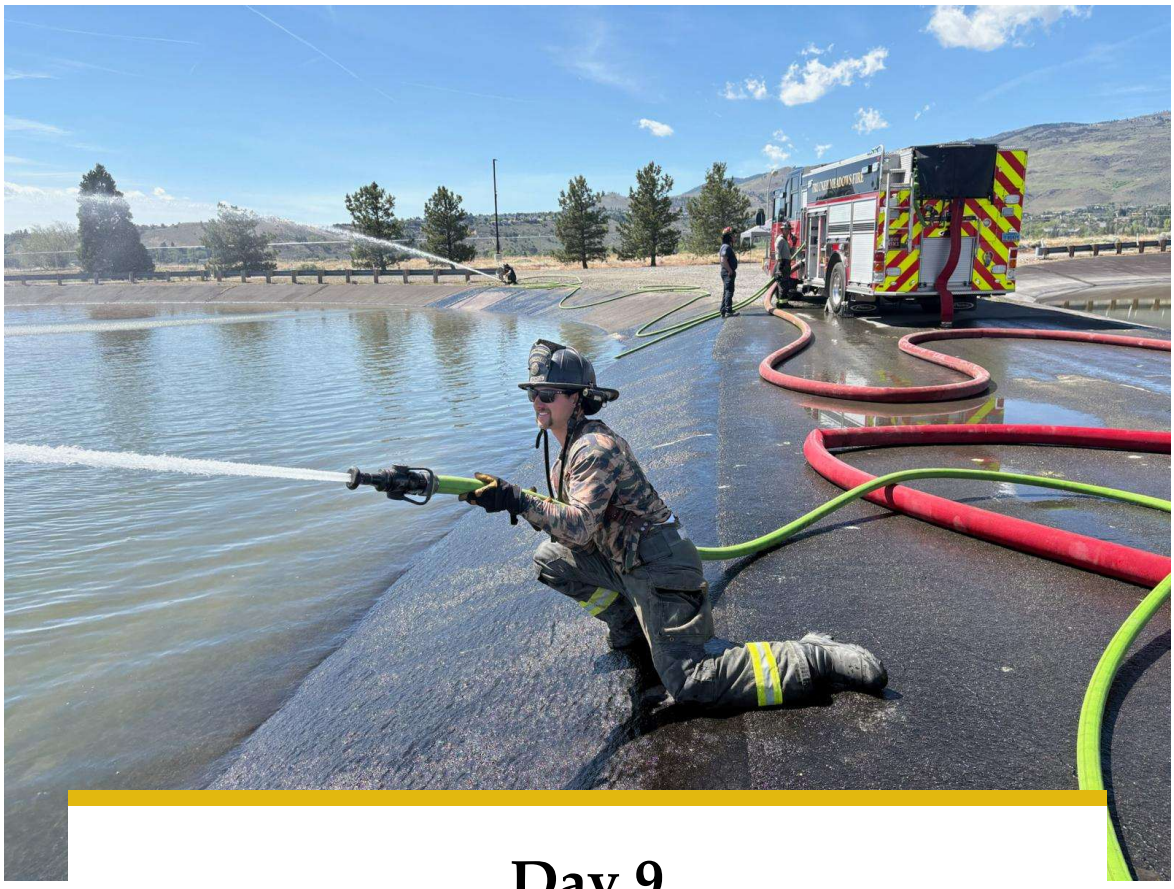
Advanced Pumping Day 2:

-Multi-line evolution with equipment tracking and hose line assignments

-Type 1 supply to Ladder direct and through pump

-Type 1 Jet Siphon multi tank Tender shuttle operation

-Blitz attack transition to multiple interior lines



Day 9

Engine Company Evolutions:

-Dry line forward lay from hydrant

-Randomized hand lines deployed, and water called for in real time

-Supply pumper arrives and relay pumps attack pumper

-Both engineers coordinate flows needed and pressures

Day 10

Wrap up and State Testing:

-Wrap up any missed topics

-Rigs and Site rehabbed

-State Driver Operator test proctored

Rain or shine we're pumping all the time!

Thank you to all those that contribute to make this program possible.