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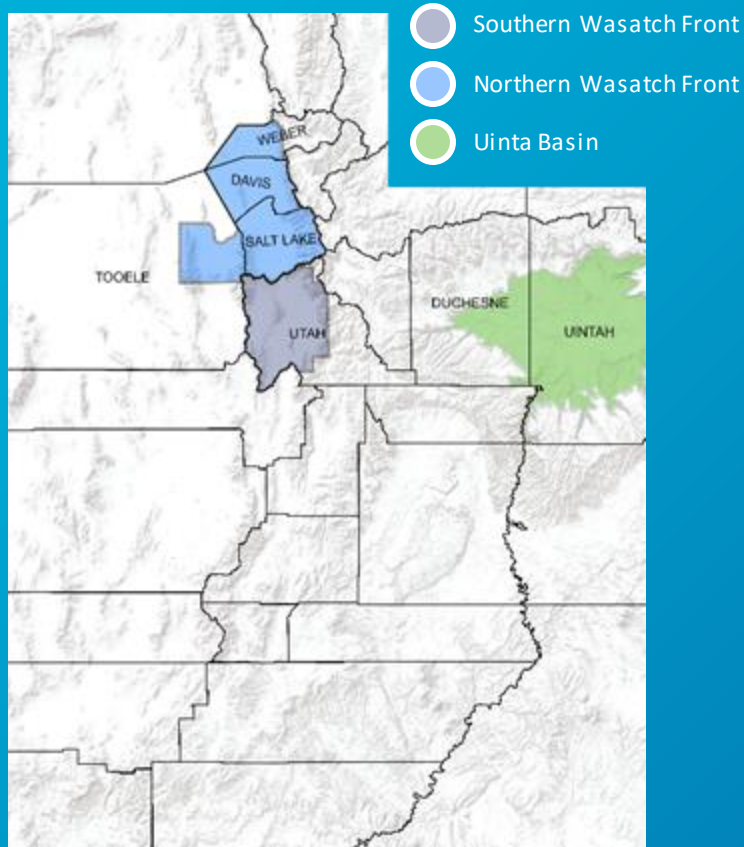
# Utah DAQ and Ozone NAAQS Initiatives

Sheila Vance



UTAH DEPARTMENT of  
ENVIRONMENTAL QUALITY  
**AIR  
QUALITY**

# Ozone Nonattainment Areas



## Ozone

3 NAA in Utah for 2015 NAAQS at 70 ppb

## Status

**NWF:** Moderate

**SWF:** Marginal/Attained standard by attainment date

**UB:** Marginal/Second 1-year extension submitted

## – Regulatory Status

- Marginal Classification
- Did not attain by August 2021
- Met requirements for extension requests
- DAAD approved 1<sup>st</sup> year extension





## — Regulatory Status

- Originally Marginal Classification
- Did not attain by August 2021
- DAAD bumped up to Moderate Classification



# Uinta Basin Wintertime Ozone

Unique Geography

Cold air inversion

Snow on ground reflects  
sunlight

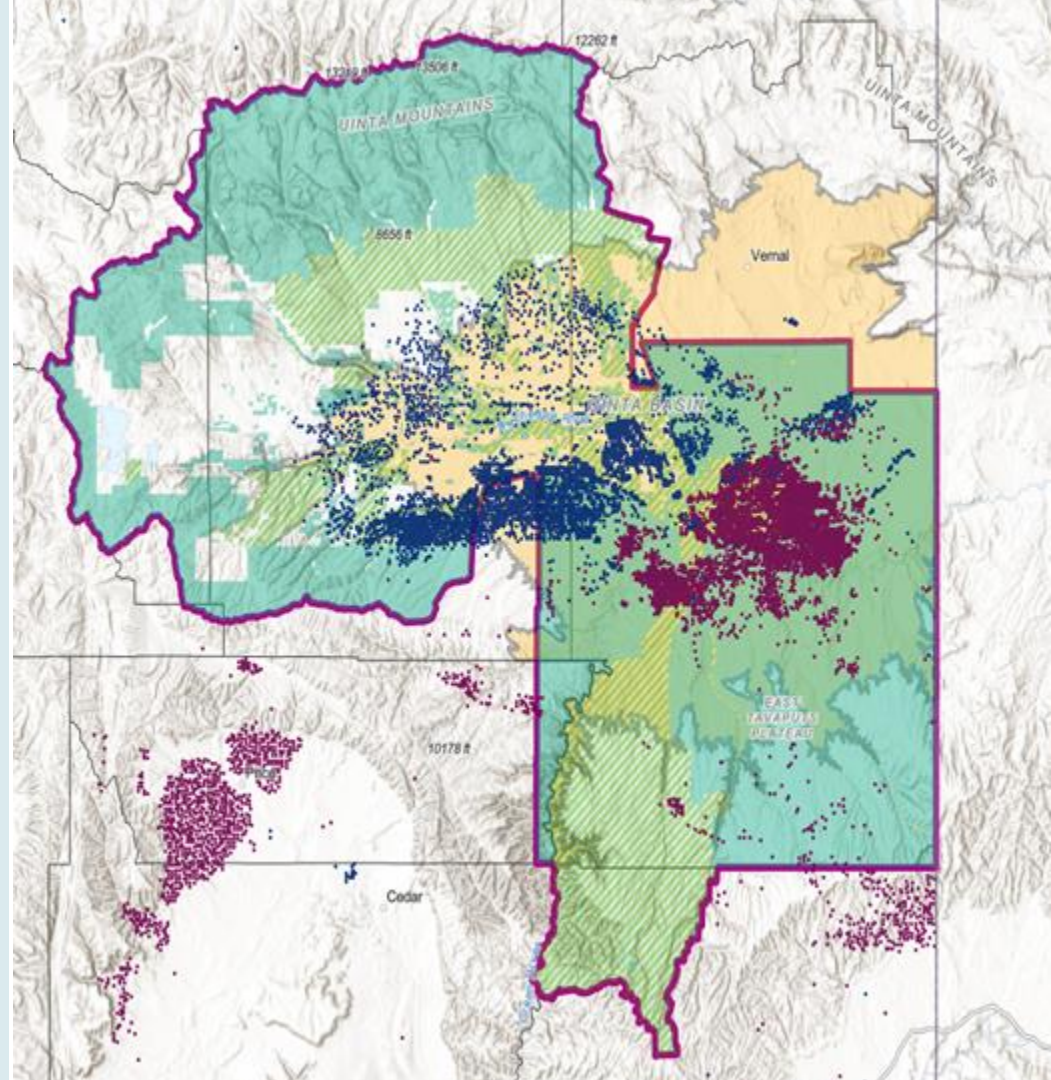
Rural area with dense oil and  
gas exploration & production

# Uintah Basin

## Complex Jurisdiction

NAA shared between EPA, Ute  
Tribe and Utah Division Air Quality

Different regulatory requirements  
between agencies



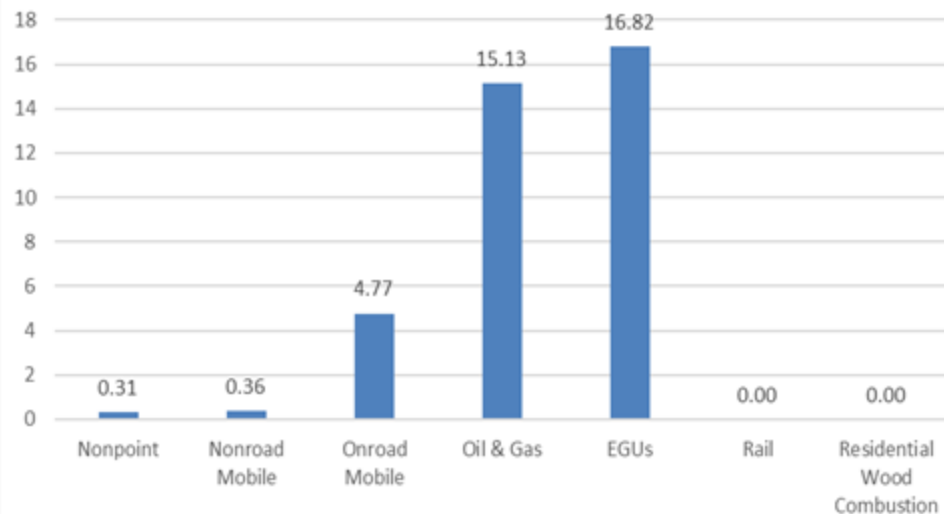
# UB 2017 Inventory

## Uinta Basin Nonattainment Area

### NOX tons per day

Representative O3 day: Feb 7 2013

Based on 2017 v1.90 OGEI

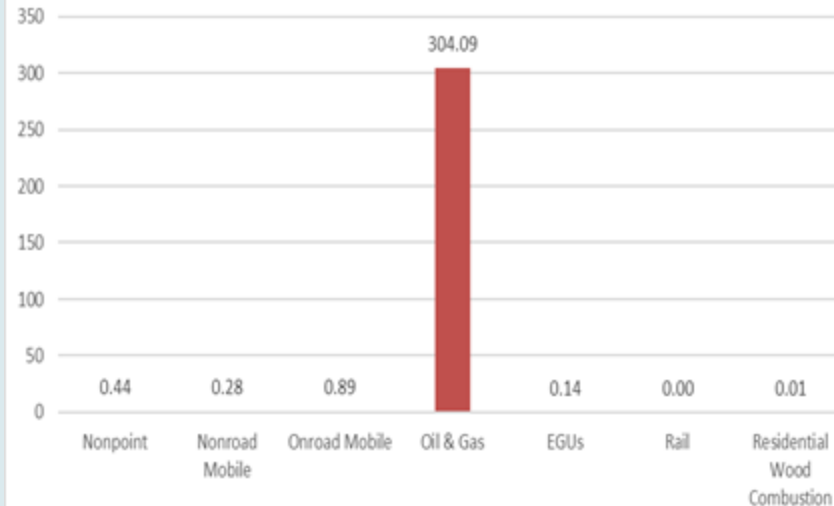


## Uinta Basin Nonattainment Area

### VOC tons per day

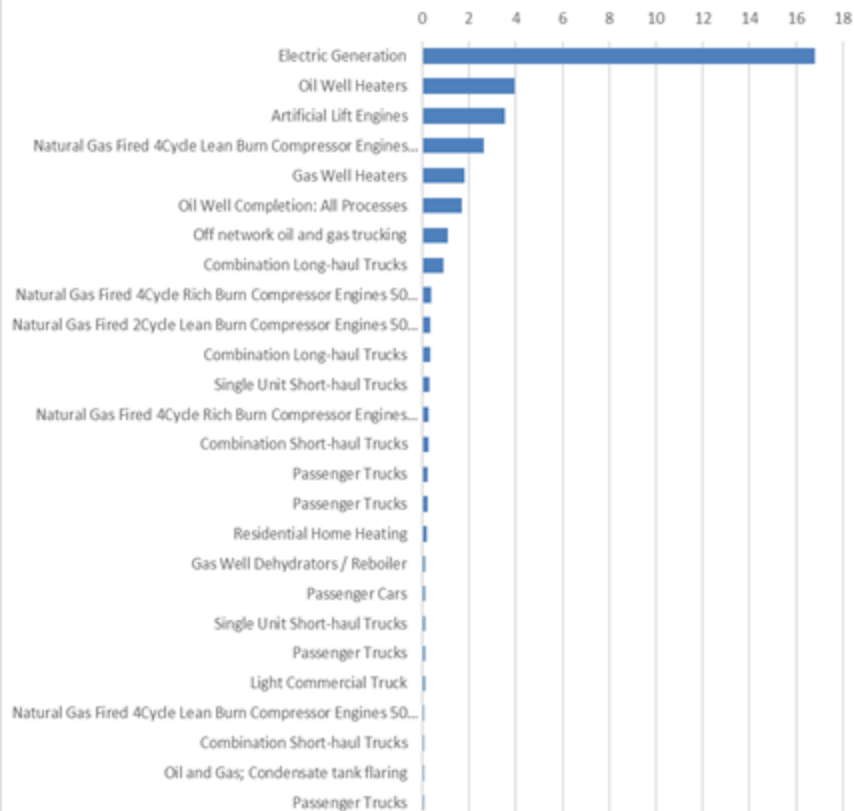
Representative O3 day: Feb 7 2013

Based on 2017 v1.90 OGEI

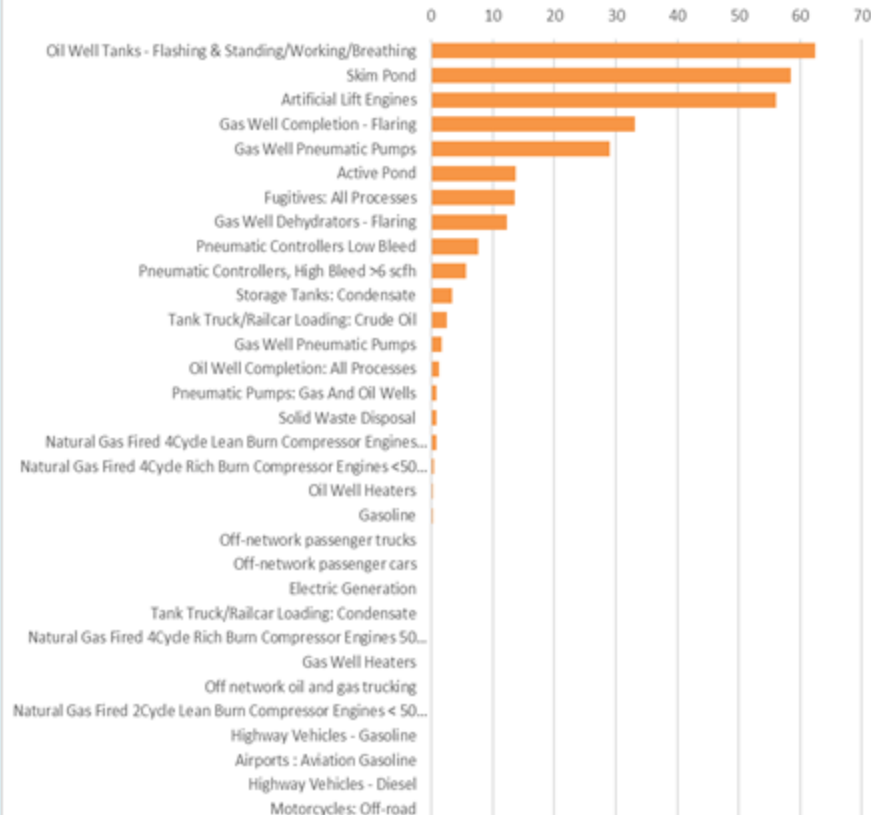


# UB 2017 Inventory

NOx tons per day (representative O3 day: February 7th 2013)



VOC tons per day (representative O3 day: February 7th 2013)







## Oil and Gas Rules

- Proposed lower threshold for tank controls on oil tanks
- Equated throughput to 4 tpy BACT for tank controls, lowered from 8,000 bbls to 3,200 bbls
- Removed AO exclusions from PBR
- AQB did not approve for final rulemaking
- Working with Industry on pressurized liquid sampling protocol and reviewing recent sampling results and will re-propose rules
- Engines large source of reactive VOCs, evaluating better management and controls

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# NWF Proposed Rules



## Lawn and Garden

Mandatory Action Days  
2-stroke equipment only



## Hot Mix Asphalt

Blue Smoke Controls  
VOC Tank Controls



## Boilers

2-5 MMBtu  
5+ MMBtu

# Lawn & Garden

- Only on Mandatory Action Days (Predicted  $O_3 > 70$  ppb)
  - Average 41 Mandatory Action Days per  $O_3$  season
- Only 2-stroke gas powered equipment
  - Leaf blowers, string trimmers, tillers, hedge trimmers, and chainsaws (<6hp)
  - Does not include lawn mowers or other 4-stroke equipment
  - Zero emission equipment is exempt
- Accounts for ~3 tpd of VOC emissions
- Only apply to NWF counties: Davis, Weber, Tooele and Salt Lake County
- Will not impact the sale of this equipment
- Hope to pair a large incentive program with this especially as it impacts small businesses



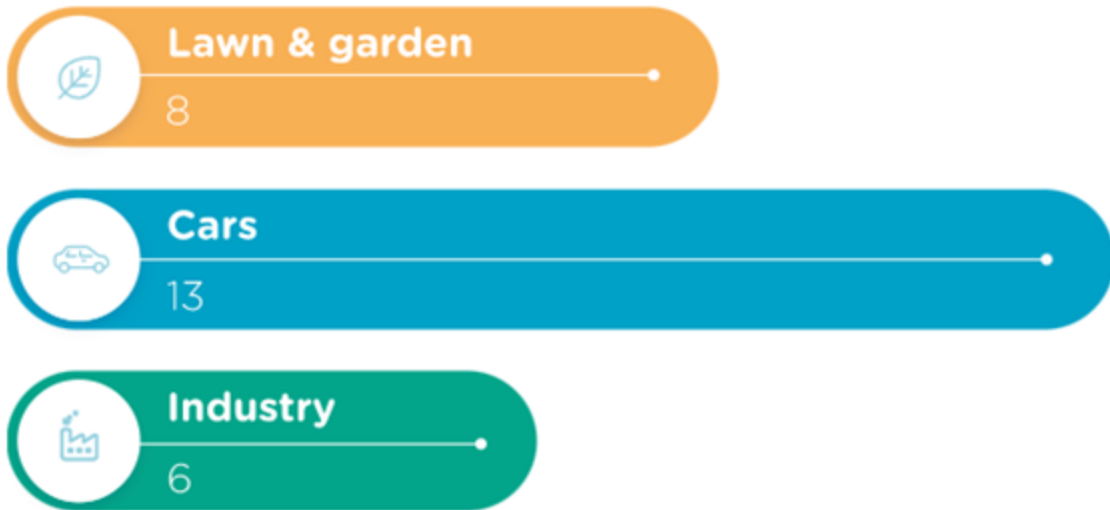
# Lawn & Garden

## VOC EMISSIONS

TONS PER DAY

for the N. WASATCH FRONT

Lawn and garden equipment contribute a significant amount of pollution to our air.



# Hot Mix Asphalt (HMA)

- Require HMA facilities to install:
  - Blue Smoke Controls on HMA plant:  
Drums, conveyors, silos and loading facilities
  - VOC Controls on stationary oil tanks
- ~0.55 tpd VOC emission reduction
- Will apply to stationary plants only
- NWF counties: Davis, Weber, Tooele and Salt Lake counties



# Boilers

- Will be separated into two rules:
- 2 - 5 MMBtu natural gas boilers
  - New purchases and burner replacements only
  - Does not require replacements or retrofits for any existing equipment
  - Sets standard at 9 ppmv
  - 1,614 boilers in the NWF NAA account for 4.2 tpd NO<sub>x</sub> emissions
  - Rule will result in a reduction of 3.7 tpd of NO<sub>x</sub> from these boilers
- 5+ MMBtu natural gas boilers
  - New purchases and burner replacements only
  - Also sets the standard at 9 ppmv
  - 519 boilers in the NAA account for 4.3 tpd NO<sub>x</sub> emissions
  - Rule will result in a reduction of 3.1 tpd of NO<sub>x</sub> from these boilers
- Long implementation timeline since the life of equipment can be long
- NWF counties: Davis, Weber, Tooele and Salt Lake County

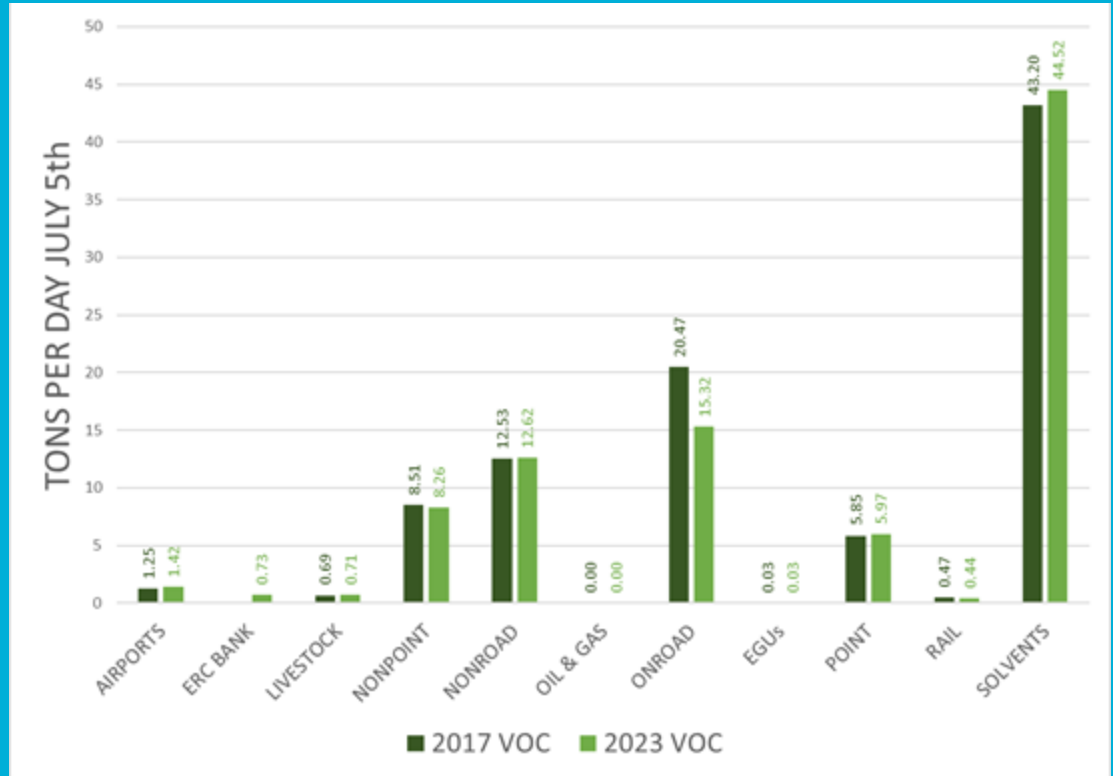


# NWF Inventories

RFP for the NWF NAA is ~10.5 tpd of VOCs for this round of SIP planning

VOC emission reductions from planned rules is ~3.5 tpd

## NWF 2017 vs 2023 VOC Emissions



# Questions?



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