



Overview of Emissions from Oil & Gas Development

Significant Source of NOx

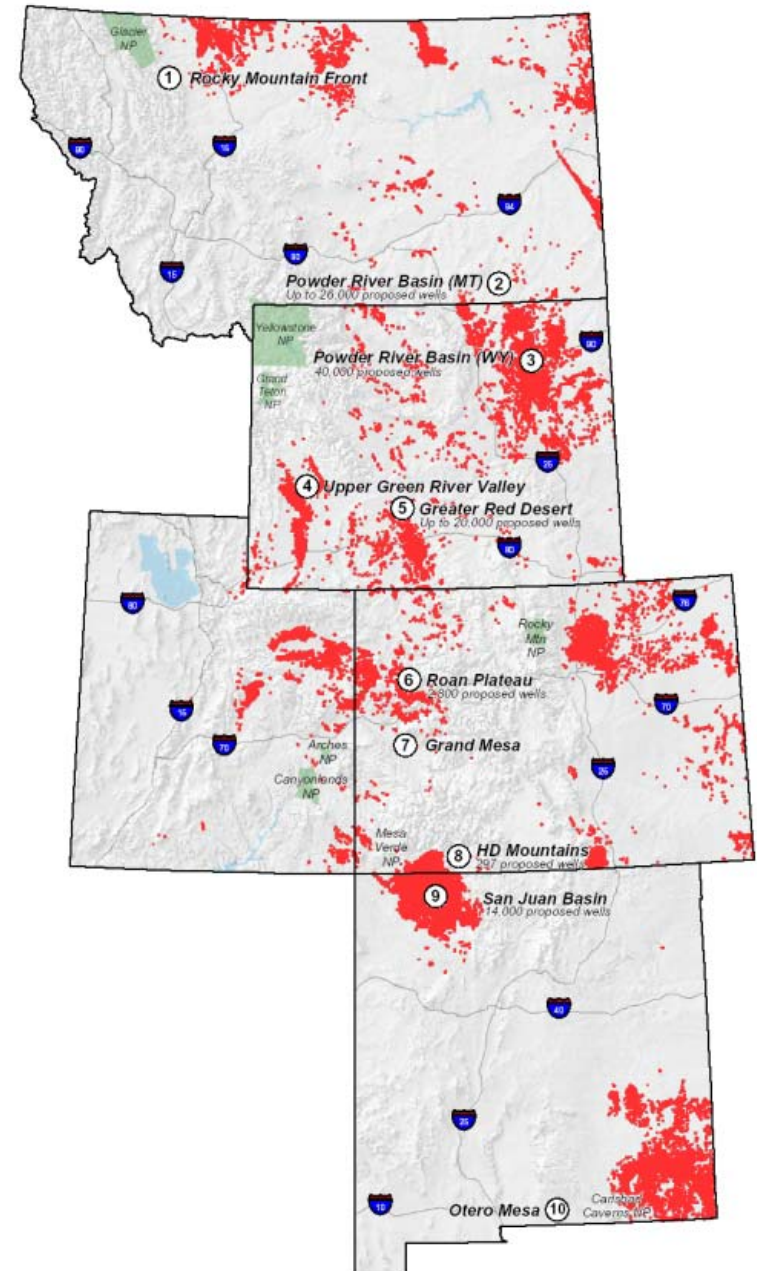
- Reciprocating internal combustion engines (ICEs) comprise the second largest category of NOx emissions in the WRAP region (1996)
 - Coal-fired boilers = 608,000 tons
 - Point source ICEs = 162,000 tons
 - Cement kilns = 41,000 tons
- Most ICEs appear to be compressors for the transportation of natural gas

Significant Source of NOx

- In addition, there are 180,000 tons of NOx in the 1996 area source inventory under “industrial natural gas combustion”
 - How much of this is oil & gas development?
- The vast majority of emissions from this sector are not BART-eligible

Activity Levels Expected to Grow

- Approximately 90,000 oil & gas wells today in MT, WY, UT, CO, and NM
- Almost 90,000 more proposed in these states



Variable Inventory Methods

- Reporting & permitting thresholds may vary
- Classification codes vary by state and age of engine

	Point 202002xx ICEs / Gas-Fired	Point 31000203 Gas Prod. / Compressors	Area 2102006xxx Ind./ Gas Combustion
AZ	5,536	11,189	41,877
NM	59,697	0	16,597
UT	8,133	1,428	0

- Precisely how are emissions calculated?
- How will they be projected to 2018?

Current Regional Activities

- Western state / WESTAR/ regional EPA partnership
 - Focusing mostly VOCs and HAPs from flash emissions
 - Collecting information from industry
 - Other highlights ???
- Other regional activities ???