



OVERVIEW OF 2014 O&G EMISSIONS DATA

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OUTLINE

- Overview
- Uinta Basin, Utah
- Tribal Sources
- Emission Trends
- Greater San Juan and Permian Basin future year inventory

OVERVIEW

- 2014 emission inventories completed
 - Greater San Juan (CO, NM) and Permian (NM)
 - Final report, inventory spreadsheets: <https://www.wrapair2.org/SanJuanPermian.aspx>
 - Other Intermountain West Basins
 - Final memo, inventory spreadsheets: <http://vibe.cira.colostate.edu/wiki/wiki/9170/2014-oil-and-gas-emissions-inventories>



 AAPG Geologic Boundaries

UINTA BASIN

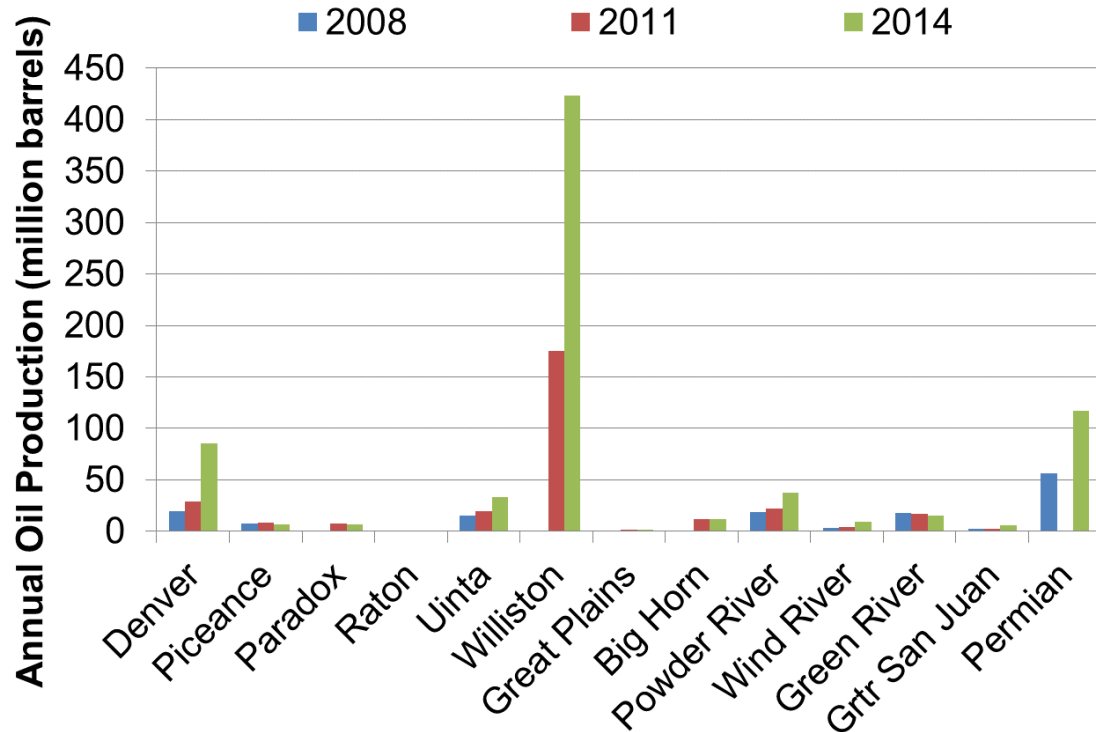
- Draft Emissions
 - Based on 2014 NEI
- Final Emissions
 - Incorporate [2014 Air Agencies Oil and Gas Emission Inventory](#) (Duchesne and Uinta Counties)
 - Based on 2014 NEI for other counties
- Additional Note
 - [2014 Air Agencies Oil and Gas Emission Inventory](#) wastewater pond emissions revised after development of Final IWDW inventory
 - Updated [2014 Air Agencies Oil and Gas Emission Inventory](#) wastewater pond emissions will need to be swapped in for any future modeling

TRIBAL SOURCES

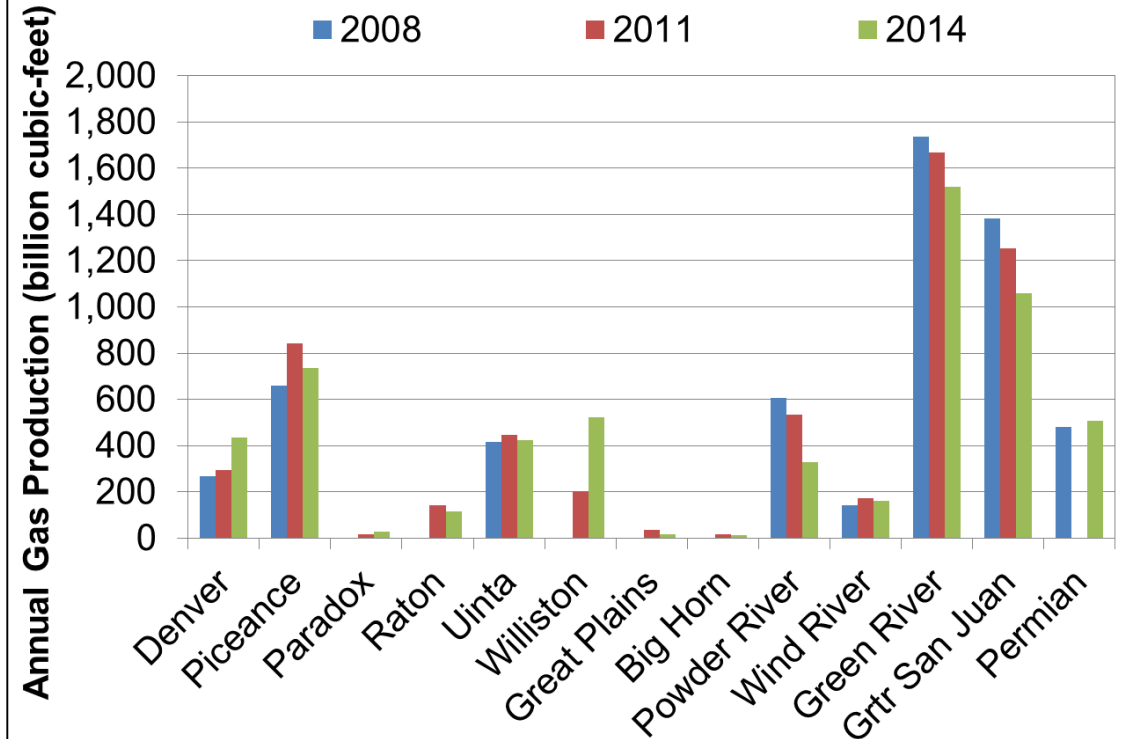
- SUIT emission inventory is the basis of nonpoint emissions in Colorado portion of Greater San Juan Basin
- Uinta Basin [2014 Air Agencies Oil and Gas Emission Inventory](#) includes tribal emissions (“Reservation or Indian Country”)
- Other tribal areas
 - Nonpoint sources: Emissions allocated to tribal areas based on the fraction of O&G activity surrogate in a given county on tribal land
 - Point sources: Based on 2014 NEI and/or data submitted by EPA Region 6/8/9
 - Includes major Part 70 or Part 71 and minor Tribal MNSR midstream facilities

O&G PRODUCTION TRENDS

2008-2014 Oil Production Emission Trends for Intermountain West O&G Basins

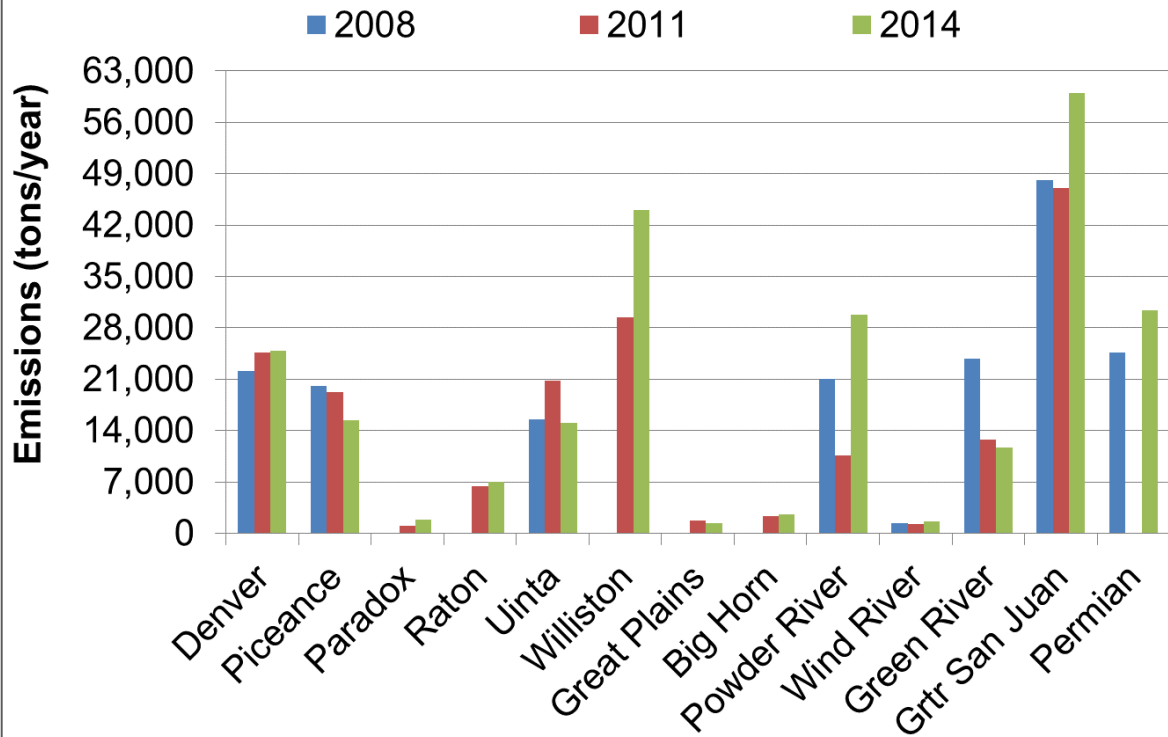


2008-2014 Gas Production Emission Trends for Intermountain West O&G Basins

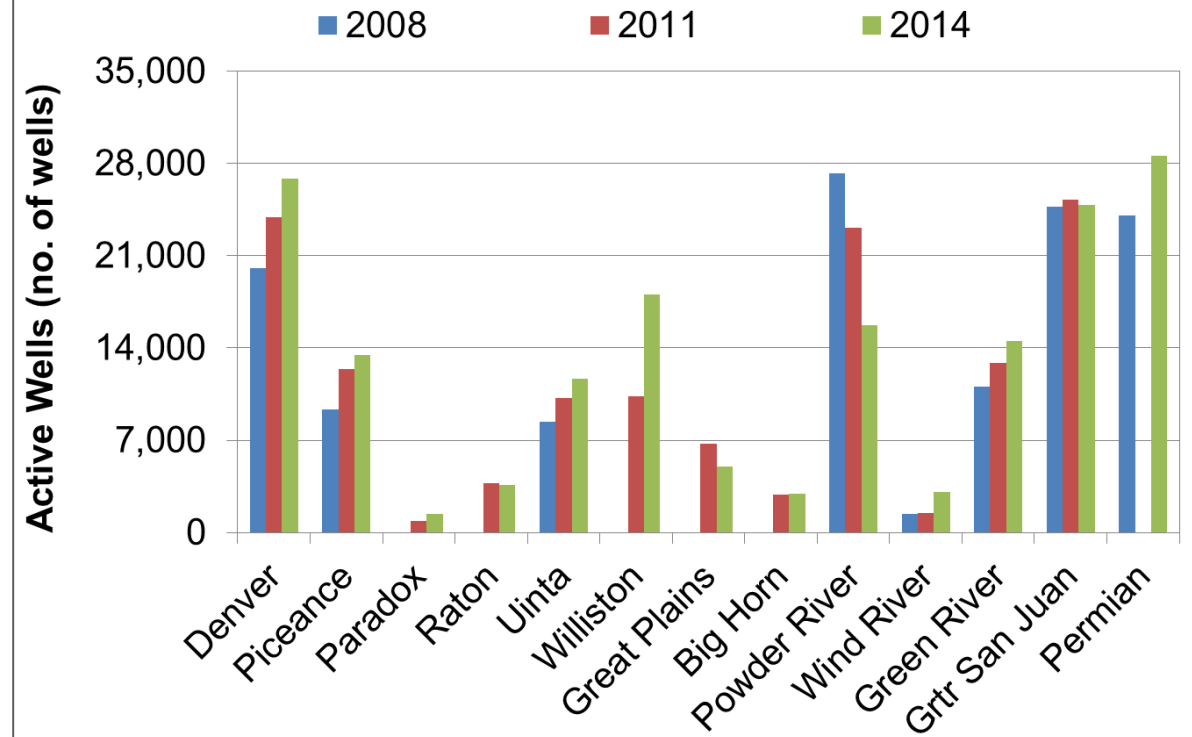


O&G EMISSION INVENTORY TRENDS

2008-2014 **NO_x** Emission Trends for Intermountain West O&G Basins

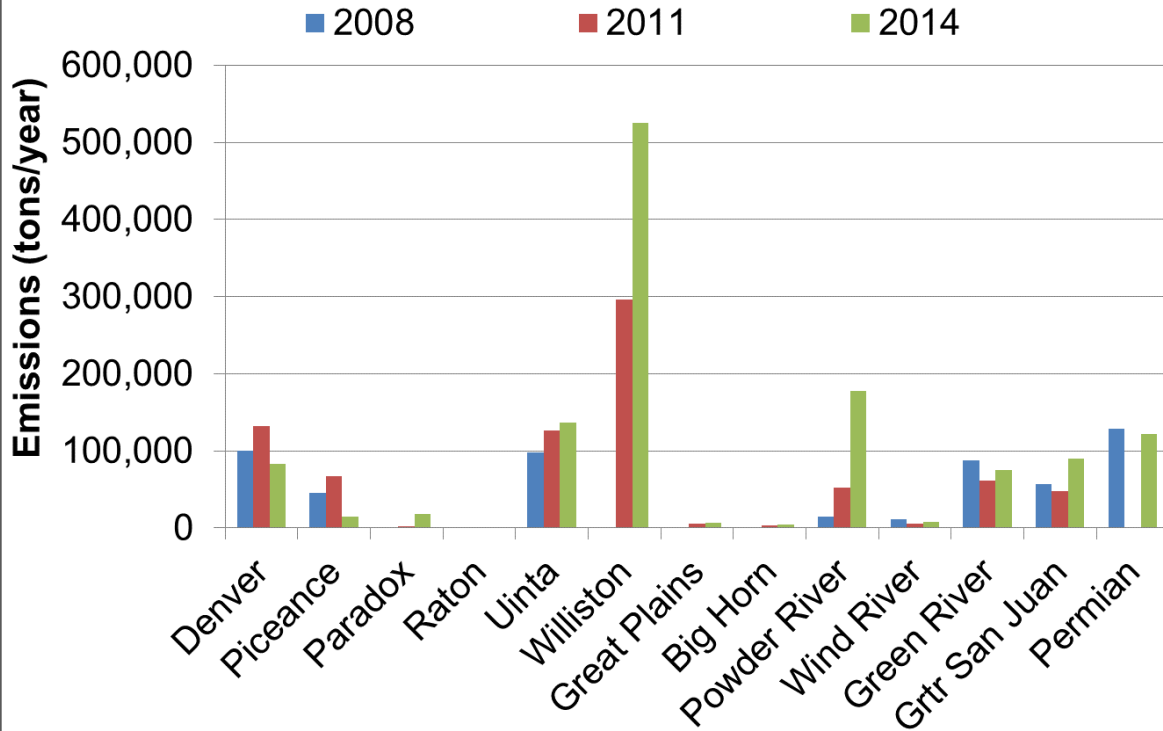


2008-2014 **Active Well Count** Emission Trends for Intermountain West O&G Basins

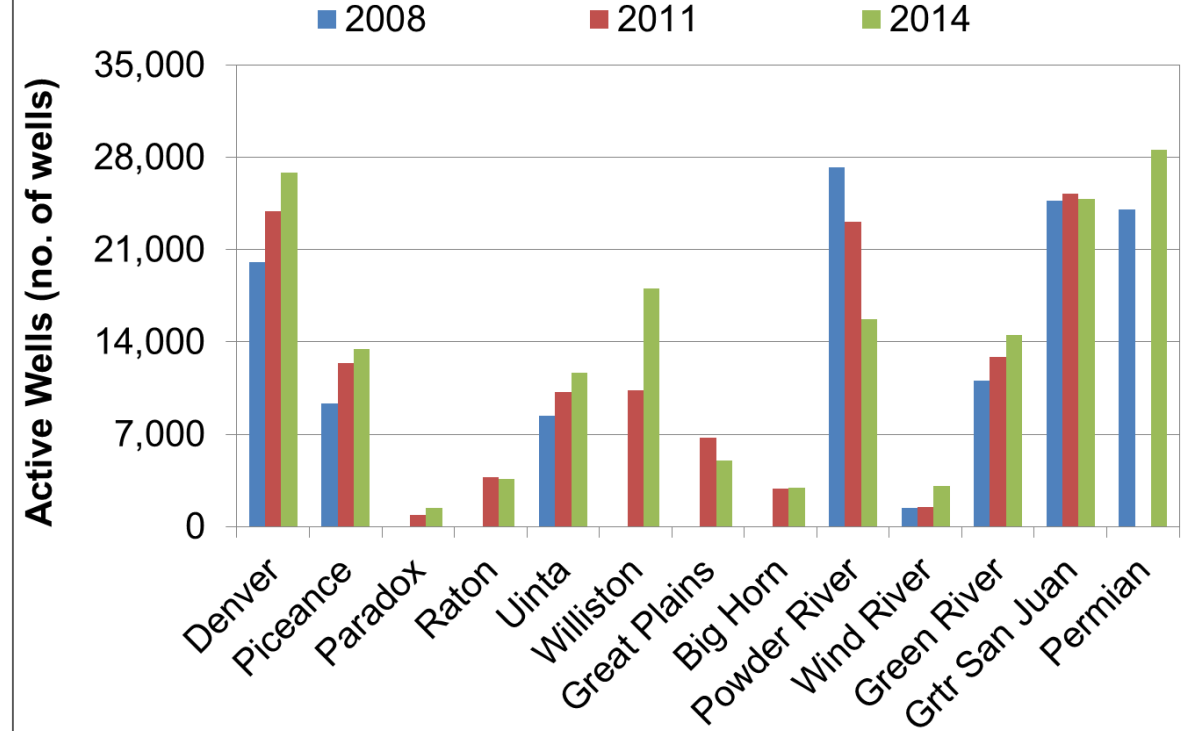


O&G EMISSION INVENTORY TRENDS

2008-2014 **VOC** Emission Trends for Intermountain West O&G Basins



2008-2014 **Active Well Count** Emission Trends for Intermountain West O&G Basins



GREATER SAN JUAN AND PERMIAN BASINS FUTURE YEAR FORECAST

- Expected completion of Draft Report mid-January 2018
- Expected completion of final report in February 2018
- Emission Inventory Forecast Methodology memorandum available at https://www.wrapair2.org/pdf/OG_ForecastMethod_13Sep2017_memo.pdf

QUESTIONS?

BASIS OF EMISSIONS: NONPOINT SOURCES

Basin	State	Data Source
Denver-Julesburg	CO	2014 NEI
Piceance	CO	
Paradox	CO,UT	
Raton	CO, NM	
Uinta	UT	
Big Horn	WY, MT	WYDEQ, 2014 NEI
Powder River	WY, MT, SD	WYDEQ, 2014 NEI
Green River Basin	WY, CO	WYDEQ, 2014 NEI
Central Western Overthrust	WY	WYDEQ
Wind River	WY	WYDEQ
Williston	MT, ND, SD	2014 NEI
Sweetgrass Arch	MT	2014 NEI
Central Montana Uplift	MT	2014 NEI
Greater San Juan	CO, NM	Survey, SUIT EI, GHGRP, EPA 2011 NEI O&G Tool, CARMMS 1.0
Permian	NM	TCEQ O&G EI, GHGRP, EPA 2011 NEI O&G Tool

BASIS OF EMISSIONS: POINT SOURCES

Basin	State	Data Source
Denver-Julesburg	CO	CDPHE
Piceance	CO	CDPHE
Paradox	CO,UT	CDPHE, 2014 NEI
Uinta	UT	UTDEQ, 2014 NEI
Raton	CO, NM	CDPHE, 2014 NEI
Big Horn	WY, MT	WYDEQ, 2014 NEI
Powder River	WY, MT, SD	WYDEQ, 2014 NEI, EPA Region 8
Green River Basin	WY, CO	WYDEQ, CDPHE
Central Western Overthrust	WY	WYDEQ
Wind River	WY	WYDEQ, EPA Region 8
Williston	MT, ND, SD	2014 NEI, EPA Region 8
Sweetgrass Arch	MT	2014 NEI, EPA Region 8
Central Montana Uplift	MT	2014 NEI
Greater San Juan	CO, NM	NMED, CDPHE, EPA Regions 6, 8, & 9
Permian	NM	NMED