

UTAH DEPARTMENT *of*
ENVIRONMENTAL QUALITY
**AIR
QUALITY**

AIR QUALITY
UPDATE 9/18/2019

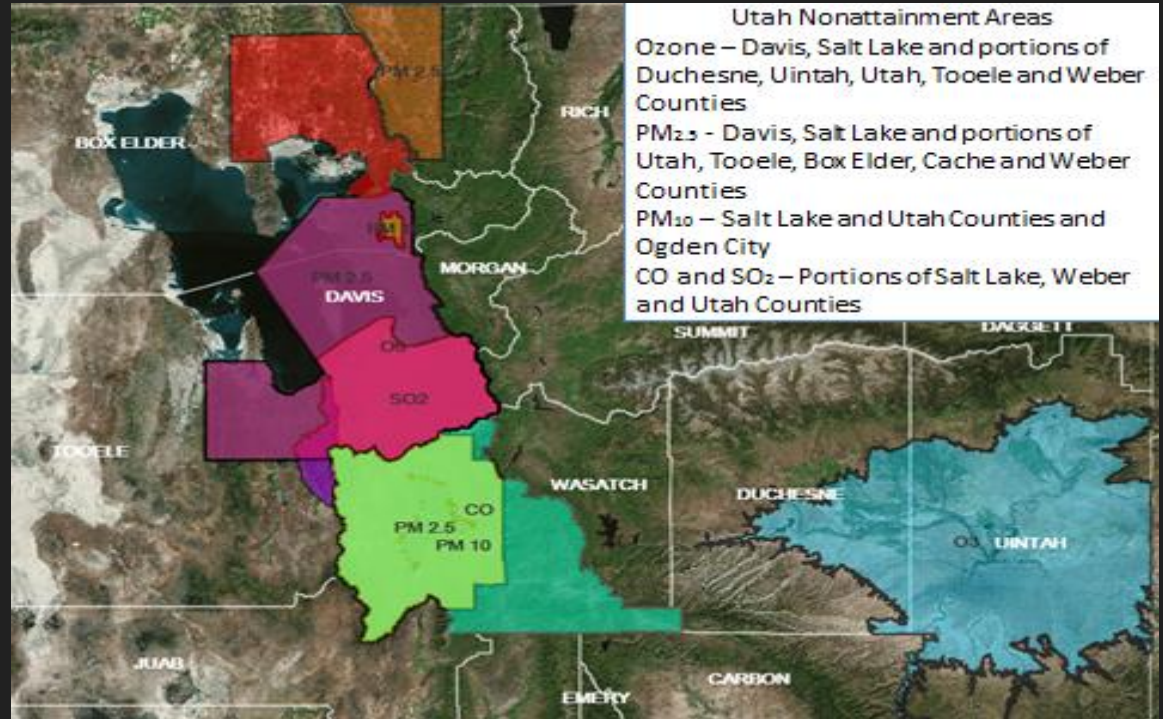
Air Quality Update

Non-attainment

Focused on meeting federal air quality standards through planning, permitting and compliance

Clean Data Determinations for Logan, Provo and Salt Lake (pending) Non-attainment areas

Maintenance Plans Proposed
Implementation Plan for Salt Lake Non-attainment area



SUCCESS Framework Target: Air Quality

Division of Air Quality Goal

Reduce annual statewide emissions by 100,000 tons by 2026, a **25 percent** per capita reduction.

Governor's Proposed Budget

Allocate \$100 million to fund high-return air-quality improvement projects. The total air quality improvements appropriation for FY 2020 is \$28.7M.

Air-Quality Improvement Projects

Select strategies that generate the greatest pollution reduction at the lowest cost.



<https://deq.utah.gov/air-quality/division-of-air-quality-2018-state-of-the-environment-report>

An Investment in Utah's Air Quality

- Data-driven air quality solutions
- Responsive to Utah's growing population
- Two-prong approach
 - State leadership
 - Public engagement
- Funding for projects with the highest potential to improve air quality



Update on Utah's VW Settlement (June, 2019)

Utah's Total Settlement		\$35,177,506	
Trustee Administrative Costs	1.4%	\$34,685,021	
	\$492,485.09		
Eligible Mitigation Action Category	Environmental Mitigation Plan Percentage Commitments	\$ Amounts	Status
Class 8 Local Freight Trucks	73.5% (with increased incentive for all-electric that would include 100% funding for EV infrastructure)	\$25,493,490	*50 applications received from government entities, totaling \$66,821,184
Class 4-7 Local Freight Trucks			*379 vehicle/engine replacement projects to evaluate
Class 4-8 School, Shuttle, or Transit Bus			*Anticipate making award announcements next month
Light-Duty Zero Emission Vehicle Supply Equipment (EV Charging Equipment)	11%	\$3,815,352	*19 awards to government entities announced (see list below) *Awardees have three years to complete projects
Diesel Emission Reduction Act (DERA) Option	7%	\$2,634,327	*Funds will be used to match EPA's State Clean Diesel allocations for ten years *First funding request will include \$869,421 for FY17, FY18, and FY19
Administrative Costs (for all categories, except DERA)	8.5%	\$2,724,309	
Total	100.0%	\$34,667,479	



EV Charging Equipment Awards	
Clinton City	\$60,129
Davis Technical College	\$49,000
Utah Division of Facilities and Construction Management (DFCM)	\$49,401
Kamas City	\$41,227
Kaysville City	\$69,988
Lehi City	\$16,755
Murray City Power	\$157,608
Orem City	\$308,269
Provo City	\$752,500
Price City Municipal	\$97,951
Salt Lake County Health Department	\$603,095
Sandy City	\$118,982
Saratoga Springs	\$26,788
South Salt Lake City	\$136,517
Timpanogos Cave National Monument	\$10,966
Utah Department of Transportation (UDOT)	\$949,672
Utah Valley University	\$99,000
Weber State University	\$143,694
West Valley City	\$140,564
Total	\$3,832,106

Planning Stages Launched July 2019:

- Budget project to increase low-income rebate.
- Build application-processing system to meet the bill objectives.
- Build project relational database for accounting, project tracking and data mining.
- Staged monthly award release Fall 2019 in Targeted Area.

Wood Stove



Recycled



Conversion



DAQ Wood Smoke Conversion Projects

Current Federal Airshed Grants

\$2.7M – Salt Lake, Davis, Box Elder, Toole, Weber Counties
\$2.6M Spent, 834 Conversions
Estimated Completion: Summer 2019

\$2.5M – Utah County
\$1.5M Spent, 479 Conversions
Estimated Completion: Winter 2019-2020

\$2.5M – Cache County
\$1.3M Spent, 413 Conversions
Estimated Completion: Summer 2020

Air Quality Research



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Air Quality Research Projects

- Wasatch Front Ammonia and Chloride Observations (WaFACO)
- Jordan Narrows Gap Ammonia Transport Study
- Ammonia Emission Assessment from Diesel and Gasoline Engines under Utah-Specific Conditions
- Aethalometer Study for Estimating Compliance with Wood-burning calls
- TRAX Air-Quality Observation Project
- Daily Wintertime PM_{2.5} Speciation at Hawthorne and Smithfield
- Bountiful City Dichloromethane and Formaldehyde Source Apportionment Study
- Composition of Volatile Organic Compound Emissions from Oil and Gas Wells in the Uinta Basin
- Air Quality Research Roadmap (AIR2)
Future collaboration during the FY 2020 funding cycle and beyond

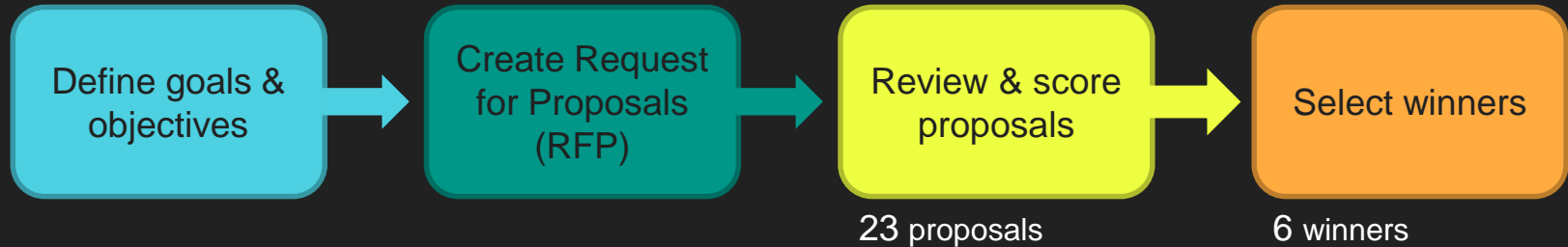


<https://deq.utah.gov/air-quality/current-research>

Science for Solutions Research Grant

Focus on State regulatory & policy goals

Fair way to distribute funding (\$500,000)



2020 Research



Model Performance Improvement

- Investigating Sources of Ammonia Uncertainty in Modeling the Salt Lake City PM_{2.5} Nonattainment Area
- Improving WRF/CMAQ Model Performance using Satellite Data Assimilation Technique for the Uintah Basin
- Improving volatile organic compound emission estimates for the Uintah Basin

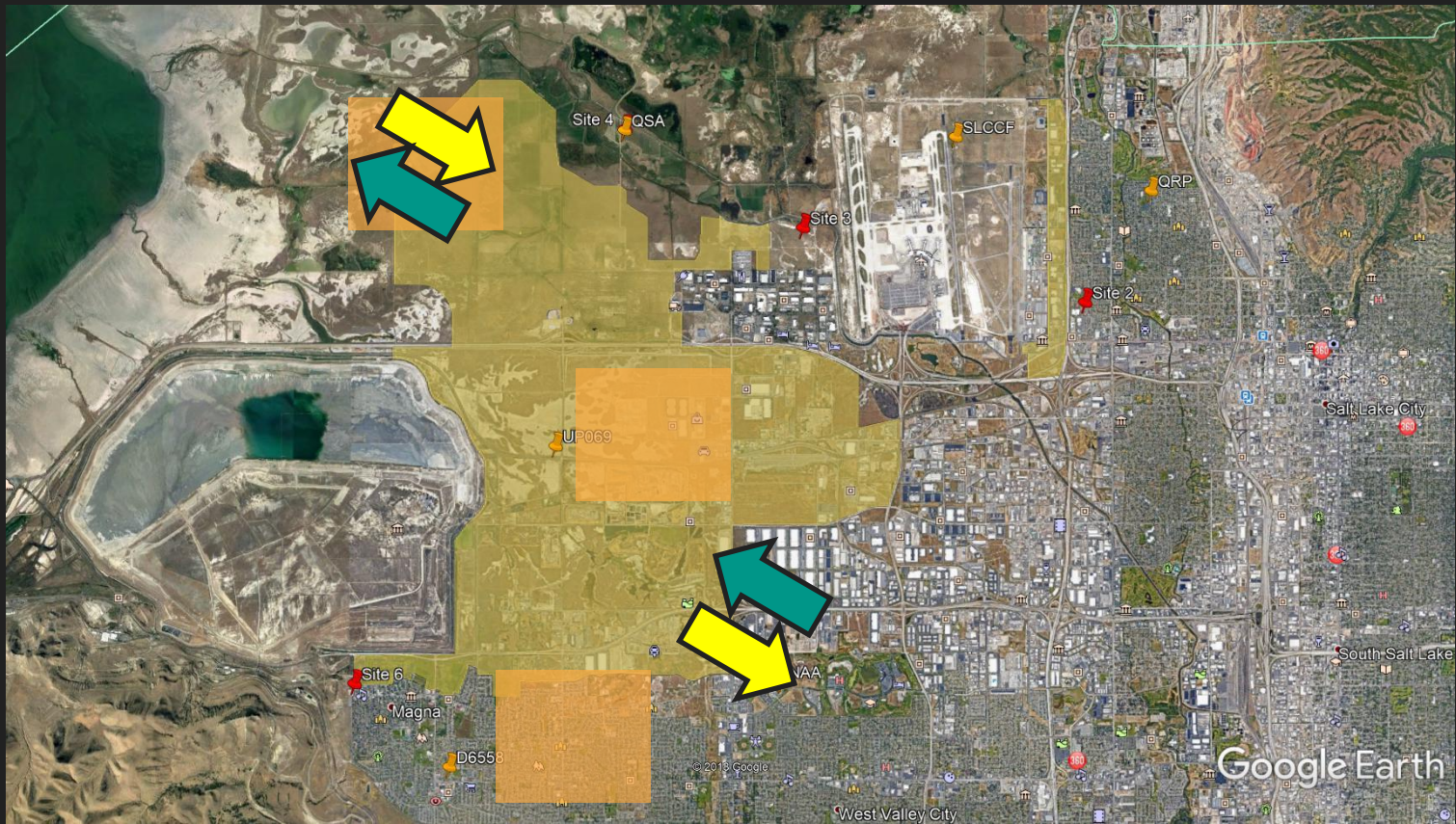
Pollution Transport

- The Red Butte Canyon Air Mass Exchange and Pollution Transport Study
- The Red Butte Canyon Ozone Network: leveraging existing infrastructure to probe background concentrations, canyon flows and stratospheric oxidant exchange

Dust Storm Impacts

- Characterizing Air Quality Impacts from Exceptional Events along the Wasatch Front





Winter Winds

Yellow arrows: Daytime

Blue arrows: Nighttime

Yellow overlay: Inland Port region

Orange overlay: Possible monitor location

**Inland Port
Analysis**

Other Projects

Dust transport study

June & August



Prescribed fire study

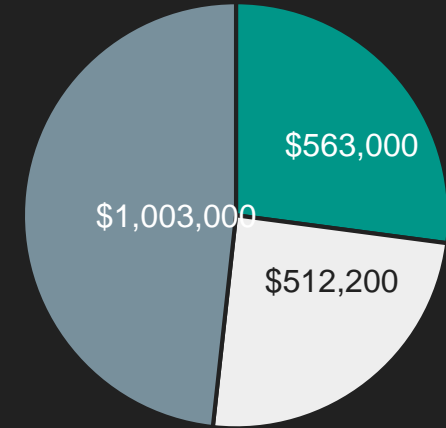
September



Annual Fee for Permitted Sources

NSR Program Funding

Total AO	NSR Sources (excluding PBR)	NSR Annual Fee	Annual Revenue
AO's 5- 19 tpy PTE	349	\$ 100.00	\$ 34,900.00
AO's 20- 49 tpy PTE	726	\$ 300.00	\$ 217,800.00
AO's 50-99 tpy PTE	219	\$ 600.00	\$ 131,400.00
AO's 100-249 tpy PTE	250	\$ 1,000.00	\$ 250,000.00
AO's over 250 tpy PTE	92	\$ 1,500.00	\$ 138,000.00
NSR Total	1636		\$ 772,100.00
Total Permit by Rule (PBR)			
PBR w/controls	312	\$ 100.00	\$ 31,200.00
PBR w/o controls	2189	\$ -	\$ -
PBR Total	2501		\$ 31,200.00
Total Revenue			\$ 803,300.00
Looking to replace		General Fund	\$ 500,000.00
		Federal Funds	\$ 300,000.00



- Permitting Fees
- Federal Grant
- General Fund FY 2019



Nonroad Emissions Inventory

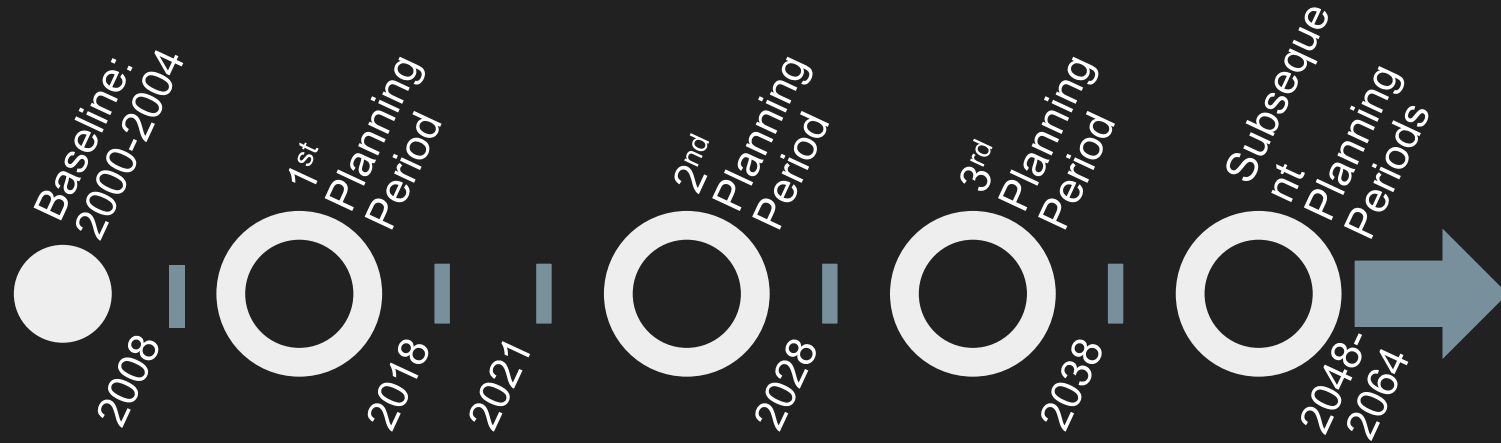




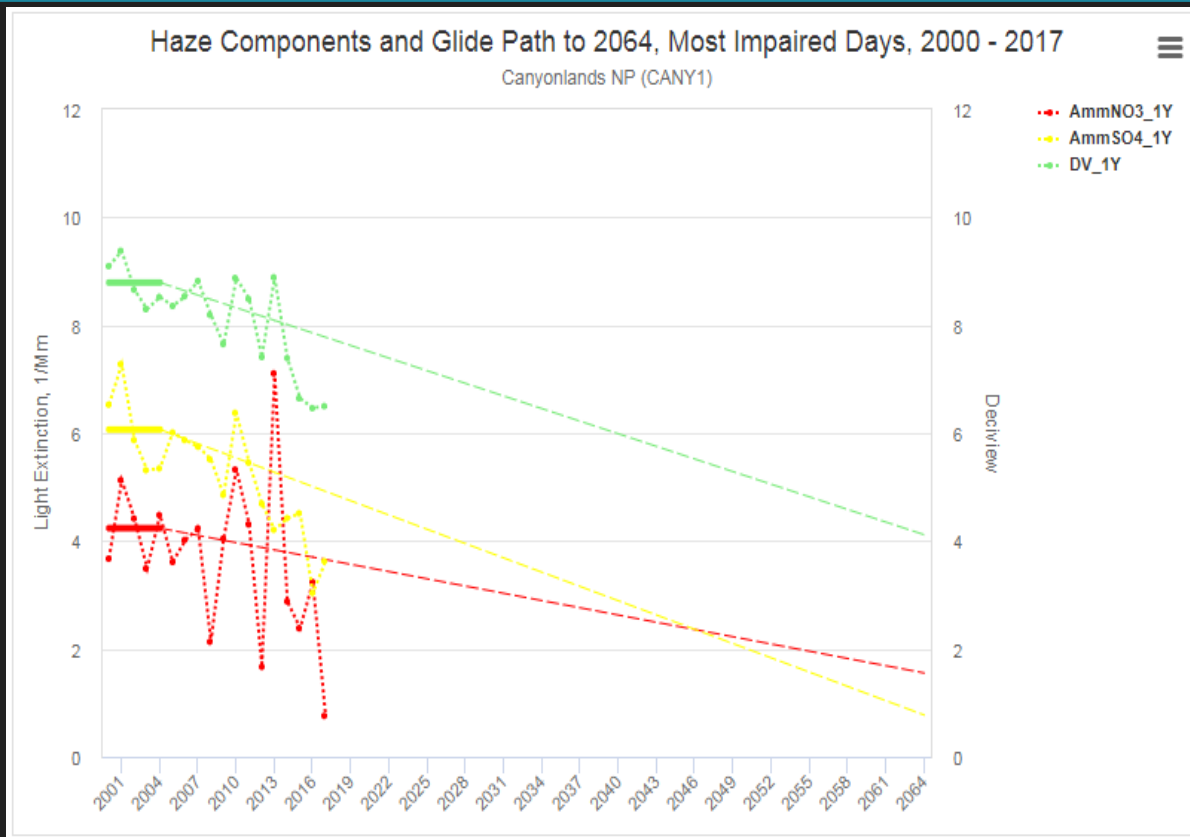
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REGIONAL HAZE OVERVIEW



Regional Haze Timeline

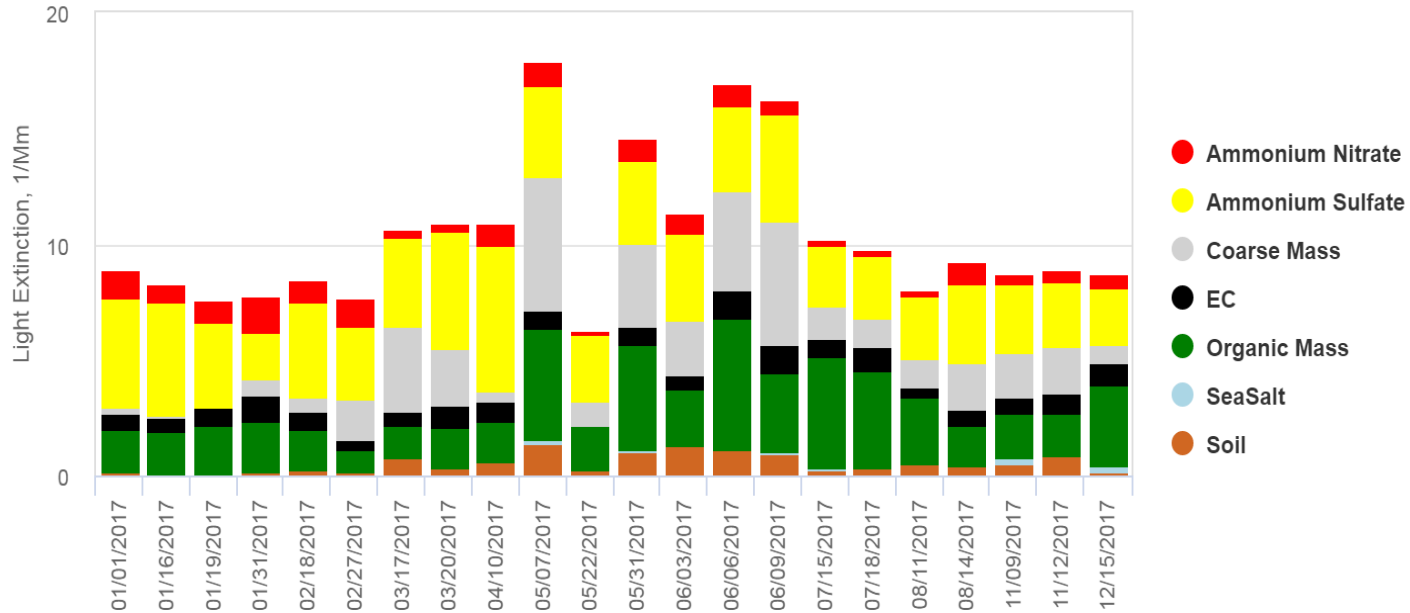


Progress Toward Visibility Goals (Glide Path)



Daily Total Haze, 2017 (Most Impaired Days)

Canyonlands NP (CANY1)



IMPROVE Monitor ID: CANY1, UT; Class I Areas: Canyonlands National Park, Arches National Park

Highcharts.com

Contributions to Haze on Most Impaired Days



Agencies Scroll All/None

- State National Park Service
- National Forest Service
- Fish & Wildlife Service
- Division of Air Quality
- Bureau of Land Management
- Bureau of Indian Affairs
- Air Sciences Inc.

Date Filter

Specified Date

[Enable/Disable](#)

Year All/None

2020 2019 2018 2017 2016

2015

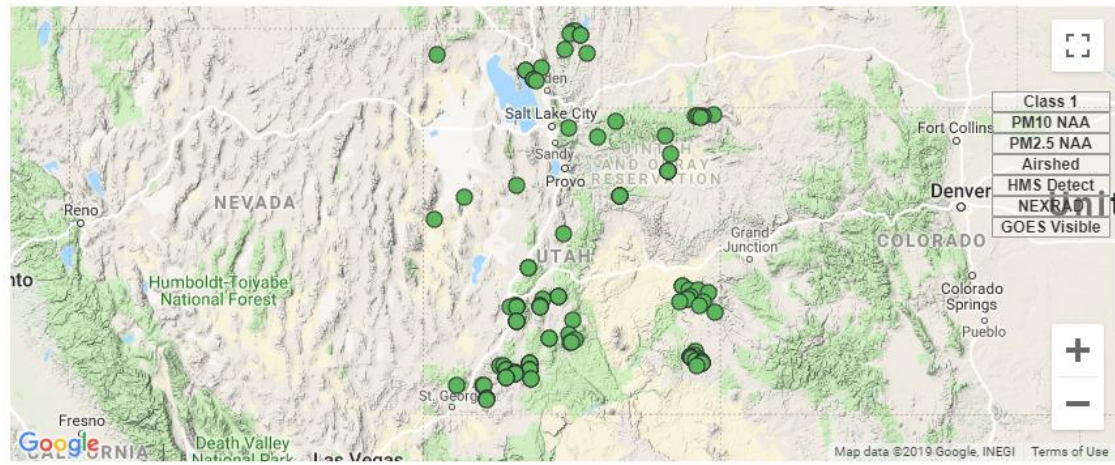
Statuses All/None

- Under Review Revision Requested
- Pending Approval Approved
- Disapproved

Toolbar

[Approve Selection](#)

[Disapprove Selection](#)



Search table

Burn Project	Start Date	End Date	Submitted	Agency	Last Reviewed	Reviewed By	Status	Submitted By
ZIP1301	2019-02-05	2019-02-11	2019-02-04 10:24:36	National Park Service	2019-02-04 10:26:05	Paul Corrigan ADMIN	Approved	Paul Corrigan ADMIN
ZIP1301	2019-04-19	2019-04-25	2019-04-09 10:23:15	National Park Service	2019-04-09 15:04:17	Paul Corrigan ADMIN	Approved	Greg Bartin
ZIP1301	2019-05-03	2019-05-10	2019-05-01 10:23:20	National Park Service	2019-05-01 16:35:48	Paul Corrigan ADMIN	Approved	Greg Bartin

Enhanced Smoke Management Program

