



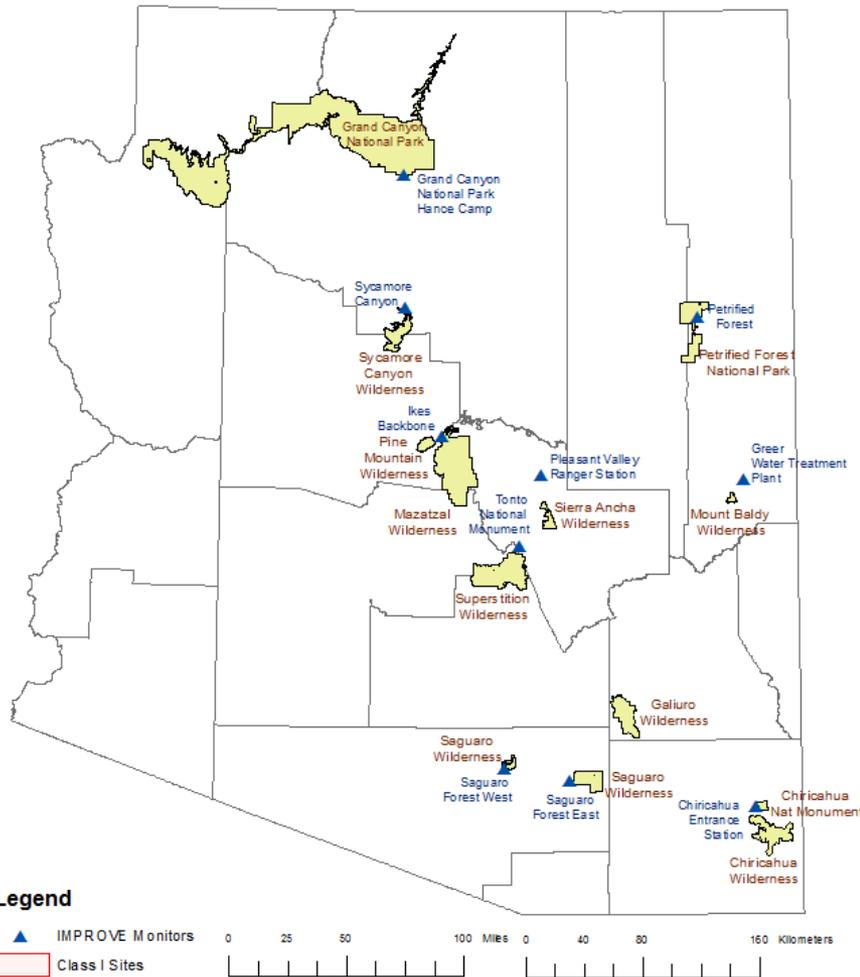
# 2021 Arizona Regional Haze SIP Kickoff Meeting

October 2<sup>nd</sup>, 2018



# Arizona Class I Areas

## Regional Haze Class I Areas and IMPROVE Monitors



- 10 IMPROVE monitors are operated in Arizona that provide data for the 12 mandatory Class I federal areas.

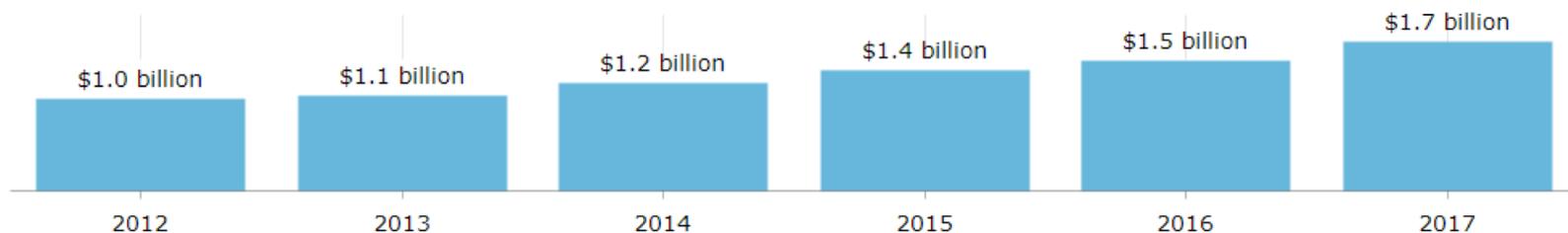
Area Name	Acreage
Chiricahua National Monument Wilderness	9,440
Chiricahua Wilderness Area	18,000
Galiuro Wilderness Area	52,717
Grand Canyon NP	1,176,913
Mazatzal Wilderness Area	205,137
Mount Baldy Wilderness Area	6,975
Petrified Forest NP	93,493
Pine Mountain Wilderness Area	20,061
Saguaro Wilderness Area	71,400
Sierra Ancha Wilderness Area	20,850
Superstition Wilderness Area	124,117
Sycamore Canyon Wilderness Area	47,757

## ■ Grand Canyon National Park –

- 6,254,238 visitors
- \$666,912,800 revenue for local communities
- 9,423 local jobs supported by tourism
- cumulative benefit of \$938,010,800.

Area	Visits	Jobs	Economic Output
Chiricahua NM	63,132	52	\$3,813,600
Grand Canyon NP	6,254,238	9,423	\$938,010,800
Petrified Forest NP	627,756	525	\$43,524,800
Saguaro NP	964,759	866	\$88,682,500
<b>Sub-Total</b>	<b>7,909,885</b>	<b>10,866</b>	<b>\$1,074,031,700</b>
Other AZ NPs	5,858,664	6,347	\$628,668,300
<b>Total</b>	<b>13,768,549</b>	<b>17,213</b>	<b>\$1,702,700,000</b>

Total Economic Output Contributed to the Arizona Economy



# Regional Haze – History

**1990**

Regional Haze Program  
Established by Congress

**1996**

GCVC Issues  
Recommendations  
To USEPA

**1998**

Upset Western Governors  
Provide Guidance to Implement  
Commission Findings  
&  
Senate Oversight Hearings Held

**1991**

Grand Canyon Visibility  
Commission Established  
by USEPA

**1997**

USEPA proposed regional  
haze regulations ignoring  
Commission Findings

**1999**

USEPA Revised Regulation  
308 - Any State  
&  
309 - Optional For  
Commission States

# Regional Haze – History

**2004**

Arizona, New Mexico, Utah,  
And Oregon First to Submit  
Plans

**2011**

AZ Replaces 308 Plan with 309  
Due to Feasibility Concerns

**2012**

USEPA Partially Disapproves  
AZ Plan and Issues FIP for Several  
AZ Facilities  
(USEPA FIP Estimated to Cost  
AZ Facilities over \$500 Million  
In Visibility Controls)

**2009**

USEPA Publishes Finding  
That 34 States Failed to  
Submit Plans by Deadline  
&  
Three States, including AZ,  
Failed to Submit Required  
Elements of Plans

**2011**

Earth Justice Sues USEPA  
For Failing to Act  
&  
Settlement with NGO  
Requires EPA to Act or FIP

**2017**

AZ Loses Final Law Suites  
on FIPs

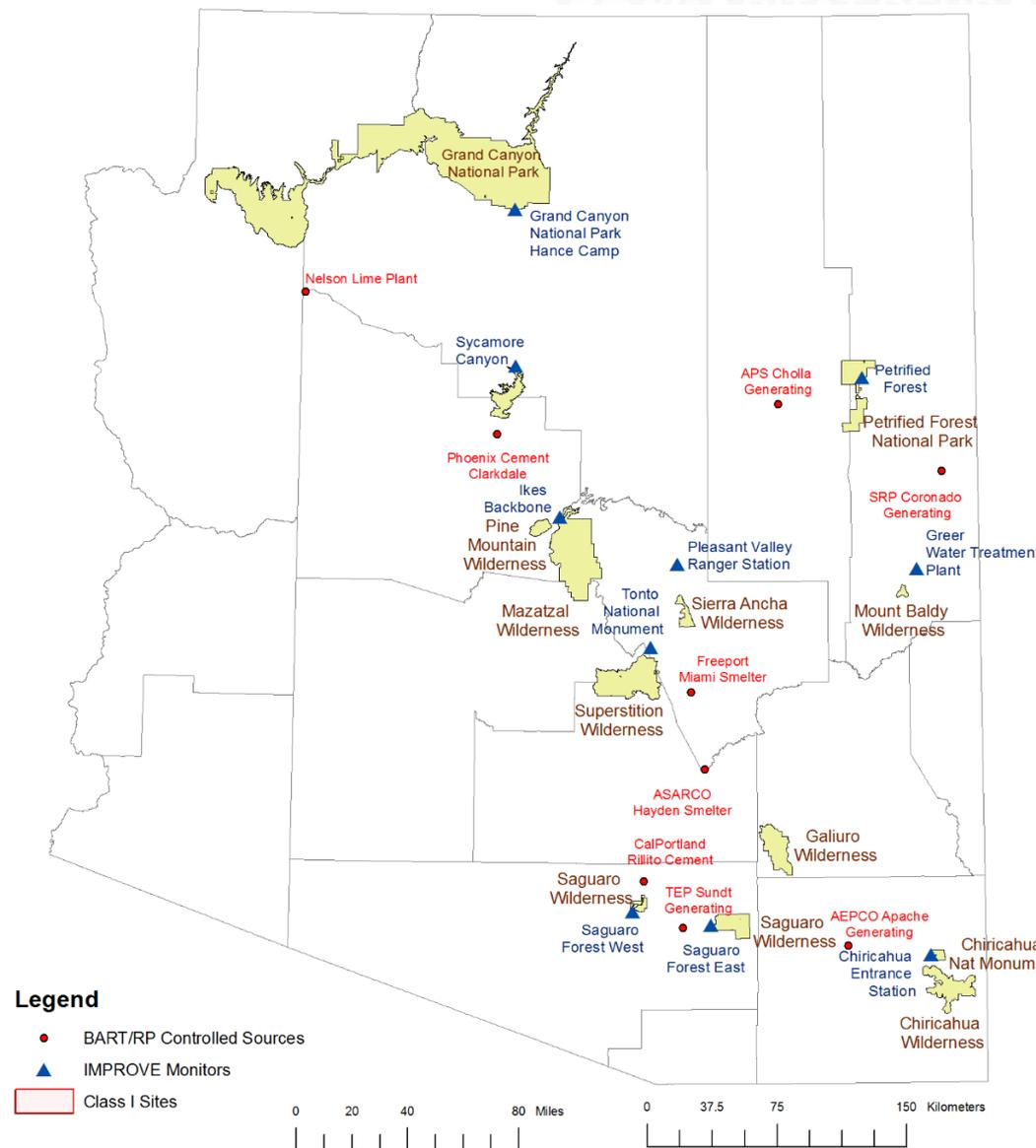
# Previous Planning Period Results

## ■ BART Controlled Sources

- Apache Generating Station
- Cholla Power Plant
- Coronado Generating Station
- Hayden Smelter
- Miami Smelter
- Nelson Lime Plant Kiln
- Sundt Generating Station

## ■ Reasonable Progress Controlled Sources

- CalPortland Cement Rillito Plant
- Phoenix Cement Clarkdale Plant



# Regional Haze SIP Revision Process

Monitor Data  
Analysis

Visibility improvement progress evaluation

Emission  
Inventory

Base year – 2014 & Projected Year - 2028

Air Quality  
Modeling

Source apportionment, Control analysis, & Monitor  
projected improvement

Control Measure  
Analysis

Best Available Retrofit Technology & 4-factor analysis

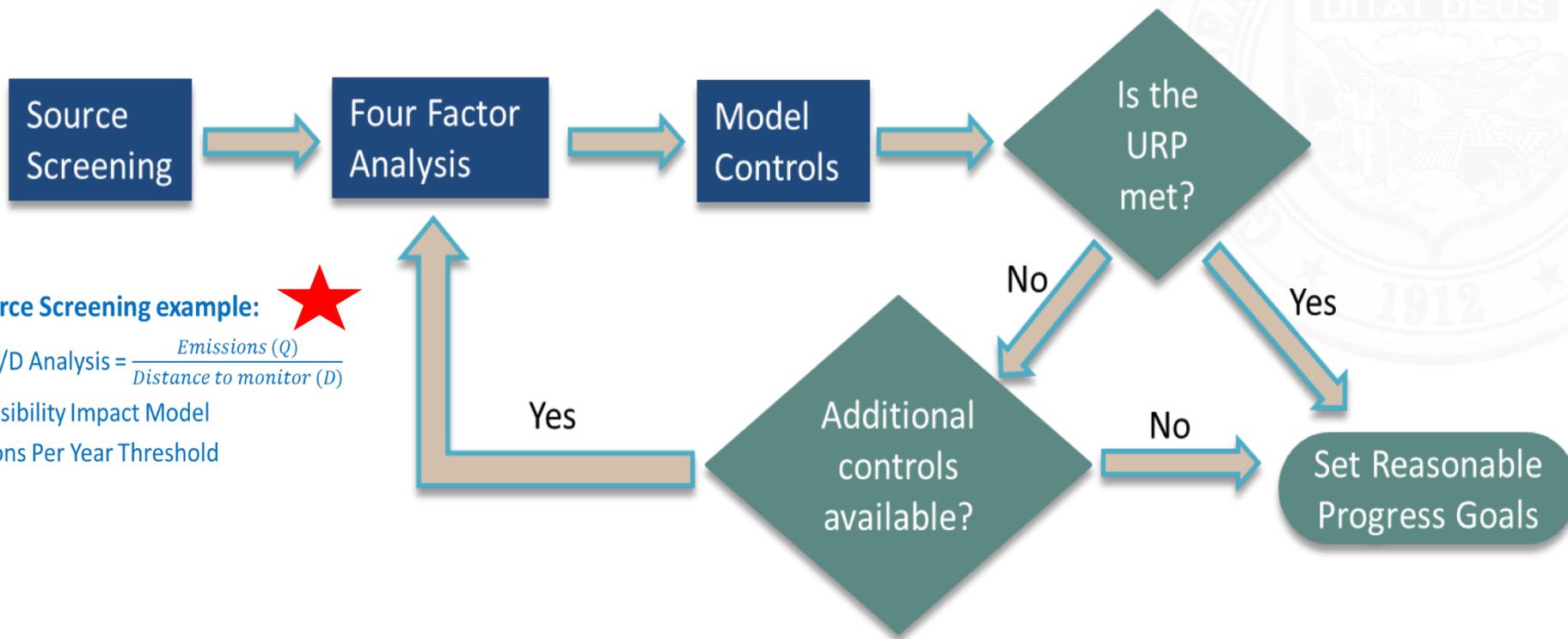
Consultation &  
Coordination

Regulated Community, General Public, Federal Land  
Managers, & Surrounding States

Plan & Rule  
Development

Due to EPA by July 31, 2021

# Regional Haze – 2<sup>nd</sup> Planning Period (Present)



## Source Screening example: ★

1. Q/D Analysis =  $\frac{\text{Emissions } (Q)}{\text{Distance to monitor } (D)}$
2. Visibility Impact Model
3. Tons Per Year Threshold

## Regional Haze 4 factors: ★

1. Costs of compliance ★
2. Time necessary for compliance
3. Energy and non-air quality environmental impacts
4. Remaining useful life of the source

# Stakeholder Feedback Tentative Timeline

Planning Task	Start Date	End Date	Tentative Stakeholder Feedback Deadline	Stakeholder Input
Projected 2028 Emission Inventory	Sept – 2018	Feb – 2019	Q1 - 2019	Projected emissions and facility information
2028 On-the-Books Air Quality Modeling	Jan – 2019	Apr – 2019	Q1 – 2019	Facility specific modeling parameters
Reasonable Progress Source Screening	Oct – 2018	Feb – 2019	Q1 – 2019	ADEQ project update
Control Measure Analysis / Emission Reduction Quantification	Oct – 2018	Dec – 2019	Q3 – 2019	Technologically and economically feasible controls
2028 Control Scenarios Air Quality Modeling & Visibility Projections	May – 2019	Mar – 2020	Q4 – 2019	Controlled facility specific modeling parameters
Public Comment Period	Mar – 2021	May – 2021	May – 2021	General Stakeholder feedback

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## EPA Reform Roadmap

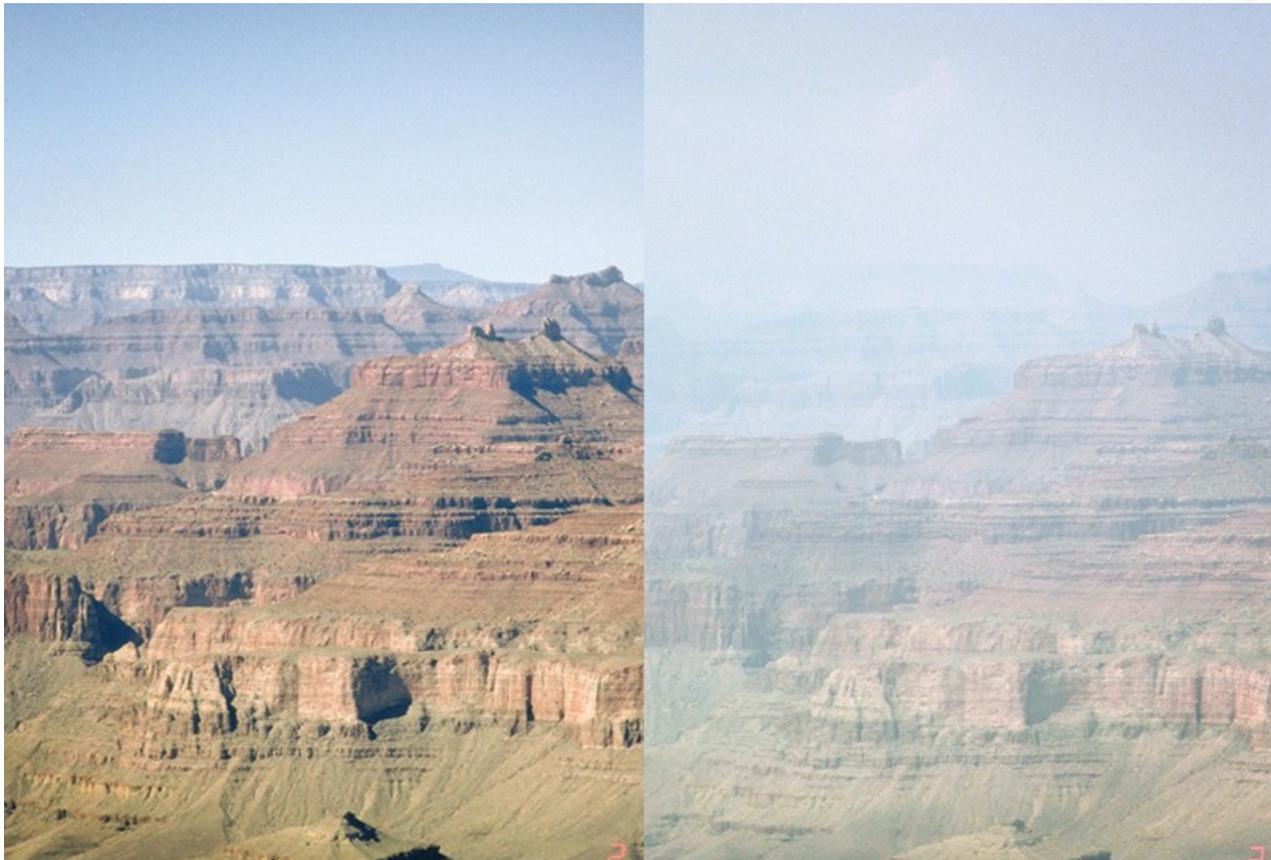
Fall 2018 – Finalized tracking metric

Spring 2019 – Finalized guidance & natural visibility

Summer 2019 – Revised visibility modeling

???? – Revised Rule

# Thank you



Questions? Please contact:

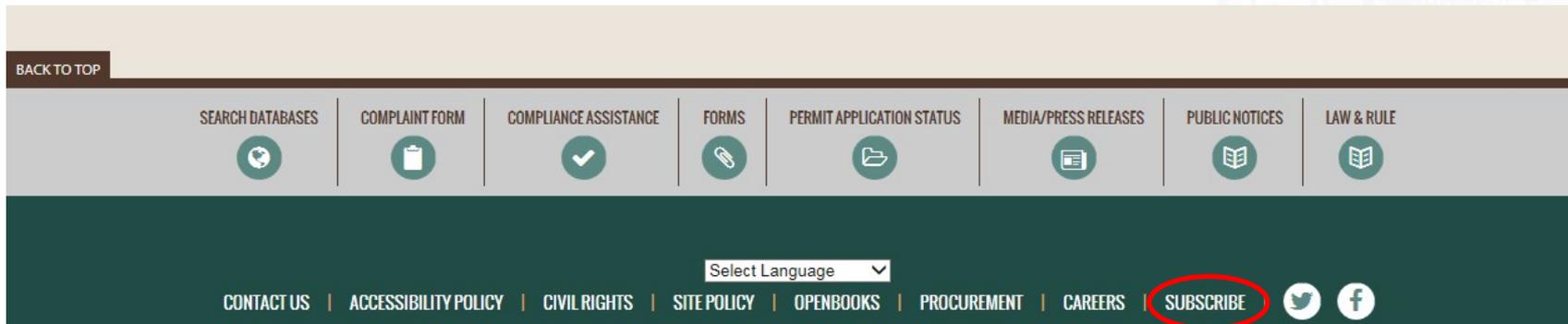
Ryan Templeton - (602) 771-4230 – [rct@azdeq.gov](mailto:rct@azdeq.gov) or

Elias Toon – (602) 771-4665 - [Toon.Elias@azdeq.gov](mailto:Toon.Elias@azdeq.gov)

# 10 Principles of the Arizona Clean Power Plan

1. Achieve meaningful emissions reductions
2. Maintain grid reliability, with portfolio diversity
3. Maintain the affordability of electricity
4. Recognize and respect the roles and authorities of all branches of government
5. Respect current investments and try not to create stranded investments
6. Ensure that costs are equitably distributed
7. Create incentives for all consumers to positively change AND maintain their electricity usage behaviors
8. Take credit for existing programs that have resulted in measurable emissions reductions
9. Phase-in the impacts of the Clean Power Plan over time to allow more precise and thoughtful implementation of its requirements
10. Work with other States or Tribes to make mutually beneficial emissions reductions

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**SAVE** **CANCEL**



- State Implementation Plan 
- Agricultural Best Management Practices 
- Air Quality State Implementation Plans 
- Annual Emission Inventory Questionnaire 
- New Source Review 
- Ozone 
- Particulate Matter 
- Regional Haze** 
- Startup, Shutdown and Malfunction
- Sulfur Dioxide (SO2) 
- West Pinal County PM10 Nonattainment Area 
- Yuma 