

Pima County Department of Environmental Quality (PDEQ)

Scott DiBiase

February 26, 2024



PDEQ Organization



Air Quality

Permitting
Monitoring



Water & Waste

Public Water Systems
Onsite Disposal Systems
Waste Haulers & RCRA
Aquatic Facilities
Stormwater



Solid Waste

Landfills/Transfer Stations,
Tire collection/recycling
Wildcat dumping



Climate, Environmental Justice

**Climate Pollution Reduction
Grant (CPRG)**
**Priority Climate Action Plan
(PCAP)**
Low-Cost Monitoring at schools
(ARPA Grant)



Outreach

Schools
Community Events
Lawnmower program



Planning/Rulemaking

Fees
Permitting Rules (NSR)
Future Nonattainment

3 Most Pressing Air Quality Issues

Climate/Environmental
Justice

Ozone

Staffing/Budget

Climate\Environmental Justice

Climate Pollution Reduction Grant (CPRG)

- **Priority Climate Action Plan (PCAP)** for region in final stages (due to EPA 3/1/24)

Coalition application for CPRG implementation funds due to EPA 4/1/24

- Coalition includes Pima County, City of Tucson, South Tucson, Oro Valley and Tohono O’odham Nation

Environmental Justice

- ARPA grant – 20 low-cost sensors to be sited at schools in disadvantaged communities

CPRG Surveys

- Results available:
www.pima.gov/ClimatePlan
- Open to the public
Nov 16 – Dec 31, 2023
2,000+ responses
- Most respondents were
 - Older, white, homeowners
 - Online survey lacked input from young, lower income Disadvantaged Communities (LIDAC), renters
 - Covered by CBO outreach



CPRG Online Survey Results

- Already being impacted by:

- **Excessive heat**
- Higher energy costs
- Drought



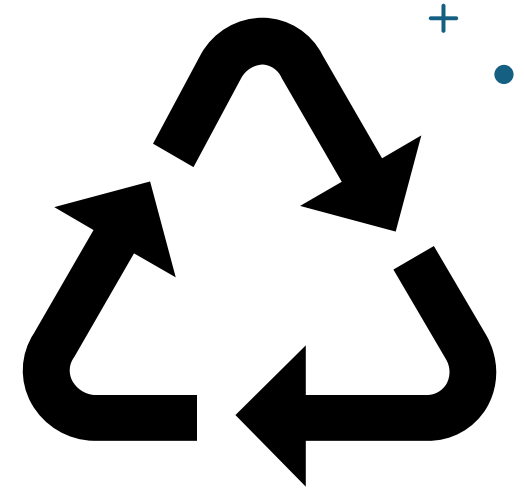
- Concerned with:

- **Water accessibility** (82% very concerned)
- Drought (78% very concerned)
- Excessive heat (71% very concerned)



CPRG Online Survey Results (continued)

- Actions already taken
 - Reduce waste by reusing/recycling (82%)
 - Energy efficient appliances (74%)
 - Energy efficient A/C units (62%)
- Ways to assist enabling people to further reduce GHG contributions
 - Affordable green landscaping (shade trees), cooler surface/replace asphalt (65%)
 - **Access to free or affordable upgrades for home (64%)**
 - **Free/affordable energy audit of home (54%)**





Reaching Low-Income & Disadvantaged Communities (LIDAC)

- Subrecipient grants to Community Based Organizations (CBOs)
- 5 CBOs selected
 - City of Tucson
 - YWCA Southern Arizona
 - Iskashitaa Refugee Network
 - Direct Center for Independence
 - Ironwood Tree Experience

LIDAC Outreach



- **City of Tucson, Our Climate Future**

- **Diverse demographic**
 - Low-medium income levels
 - Lower educational attainment
 - Low homeownership
 - Primarily Black, Indigenous, People of Color
 - BOS Districts 2, 3, and 4
- Surveys
- Five listening sessions
- Door-to-door interactions
- 13 community ambassadors
- Incentives for participation: gift cards, childcare, food
- Reach: ~255

- **Findings:**

- Residents **connected climate issues with other daily quality of life factors**
- Want to improve recycling practices
- **Desire training re: energy efficiency for apartment managers, landlords**
- Keen interest in growing their own food
- **Excessive heat makes traveling, outdoor work a concern**

- **Lessons learned:**

- Need **more resources focused on renters rather than homeowners**
- Next survey: two tracks of questioning, one for renters one for homeowners

LIDAC Outreach



- **Direct Center for Independence, Inclusive Voices**

- Demographic:
 - **Individuals with disabilities**
 - **Senior citizens**
 - BOS Districts: 1, 2, 3, 4, and 5
- Phone calls, emails, social media
- Community events
- One-on-one interactions
- Newsletter article
- Focus group
- Customized survey
- Incentives for participation: gift cards
- Reach: ~5,600

- **Findings:**

- Top concerning issues:
 - Excessive heat
 - Drought
 - Wildfires, Poor air quality
 - Higher energy costs
 - Water and food security and accessibility
 - **Hot surfaces affecting wheels on wheelchairs (tree canopy)**

- **What people are doing:**

- Use ceiling fans
- Trees shade home
- Reuse/recycle to reduce waste
- Limit driving
- Use clothesline to dry clothes

LIDAC Outreach



- **Ironwood Tree Experience, Youth for Green, Clean Communities**
 - Demographic:
 - Youth – diverse from Title I-A schools
 - Adults
 - Tucson, Sahuarita, Green Valley, Oro Valley
 - BOS Districts 1, 2, 3, 4, and 5
 - Community events
 - Teacher professional development session
 - CPRG and customized survey
 - Focus groups
 - One-on-one interviews
 - Accessed past related project findings
 - Shared survey info at other programs
 - Email, social media
 - Incentives for participation: gift cards, bags, metal straws, bamboo cutlery, etc.
 - Reach: ~2,500

- **Findings/concerns:**
 - Climate change is intimidating, affects mental health – **eco anxiety**
 - Excessive heat
 - High energy costs
 - Water health
 - **Respondents care about the people and environment where they live**

LIDAC Outreach



• Iskashitaa Refugee Network

- Demographic:
 - Current/former refugees, asylum seekers, resident immigrants
 - Different ethnic groups
 - Mostly renters, low-income
- Customized survey
- In-person interviews
- Refugee and partner events
- Emails, newsletter
- Weekly social, art, educational programs
- Incentives to participants: gift cards
- Zip codes: 85705, 06, 09, 10, 11, 12, 13, 14, 16, 19, 30, 41, 45, 46, 50, 56, 57, 86710
- Reach: 106

• Findings/concerns:

- Participants use energy-saving habits (turn off lights, AC/heater vs. windows)
 - Many do not associate energy-saving behavior with lower electric bill
- Excessive heat, prohibits walking to store
- High energy and water bills
- Health concerns – allergies
- Less access to tree canopy
- Need more environmental info
- Want access to community gardens, composting sites
- Need jobs w/ low barriers of entry (solar tech, landscaping, urban ag, etc.)

LIDAC Outreach



- **YWCA Southern Arizona**

- Demographic:
 - Low-income
 - Latino/Latina, Spanish-speaking
 - Youth, seniors
 - Businesses
 - BOS District 2/South Tucson
- Workshops, open house
- Zoom meetings
- Emails
- Sustainability Fair
- Door-to-door interactions
- Flyers at local businesses
- Incentives to participants: gift cards
- Reach: ~800

- **Findings/concerns:**

- Increasing heat
 - **Want more info on climate and safety from county and city**
 - Create infrastructure to get messaging out (consistent supervisor newsletters, more outreach and education)
 - Want better jobs around climate impacts and solutions (don't like the jobs listed on our survey)
 - Have swamp coolers, want a way to afford air conditioning
- **Suggestion:** Use the *House of Neighborly Service* as a resilience center for South Tucson

Interest Group Input



Recommend:

- 1) Municipal fleet electrification
- 2) Expanding EV Infrastructure



Recommend:

- 1) Adopt low-to-zero & green building codes & practices that prioritize new construction & affordable housing
- 2) Expand funding for voluntary industrial decarbonization demonstration projects
- 3) Improve outreach & opportunities for energy efficiency retrofits & appliance electrification projects
- 4) Municipal EV adoption
- 5) Reduce Vehicle Miles Traveled (VMT)



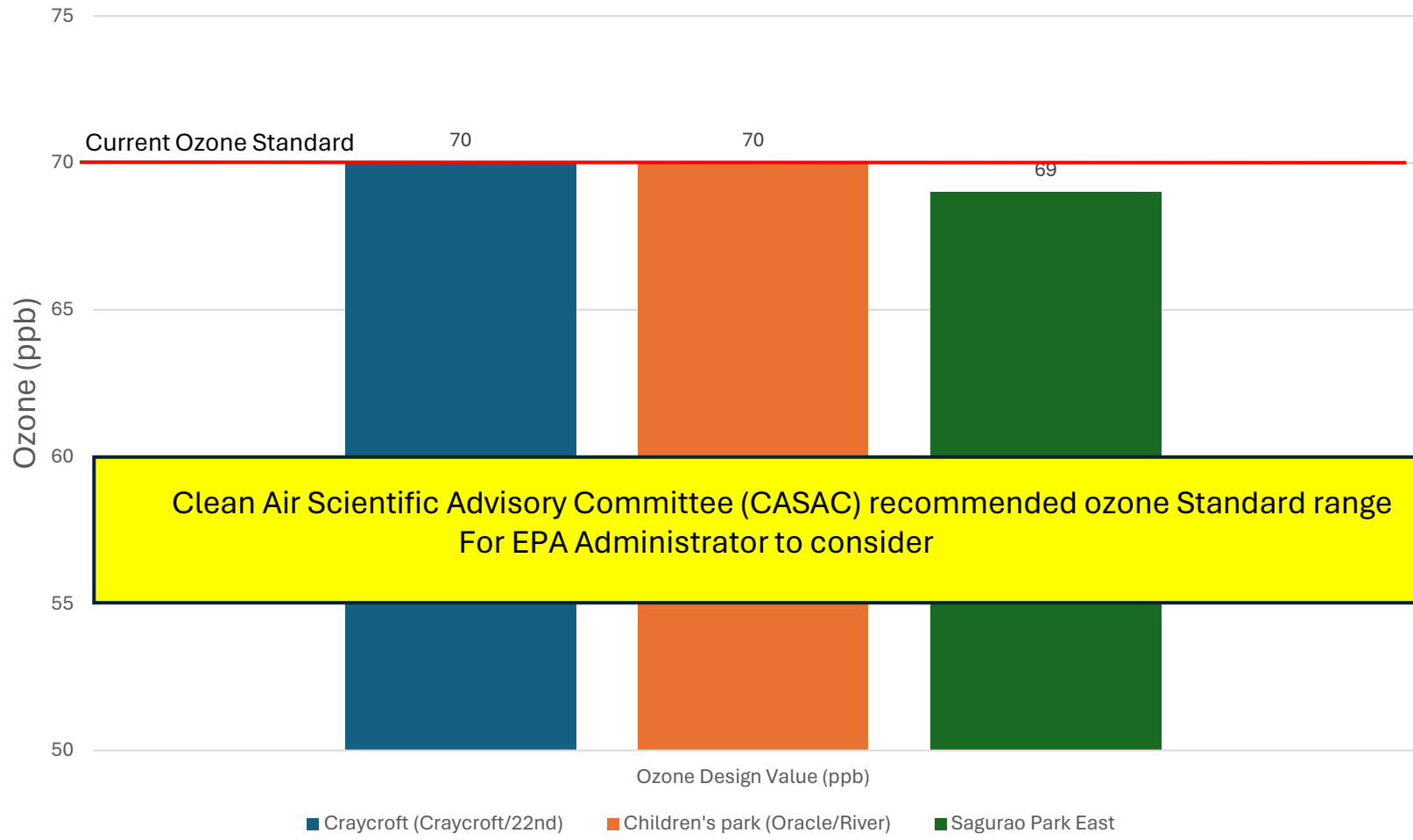
Recommend:

- 1) Municipal EV adoption
- 2) Coordinate & accelerate EV charging infrastructure
- 3) Expand PDEQ Cut Down Pollution Program
- 4) Conduct comprehensive retrofits for local govts, schools, and non-profit buildings for energy efficiency
- 5) Incentivize small business electrification

PCAP projects

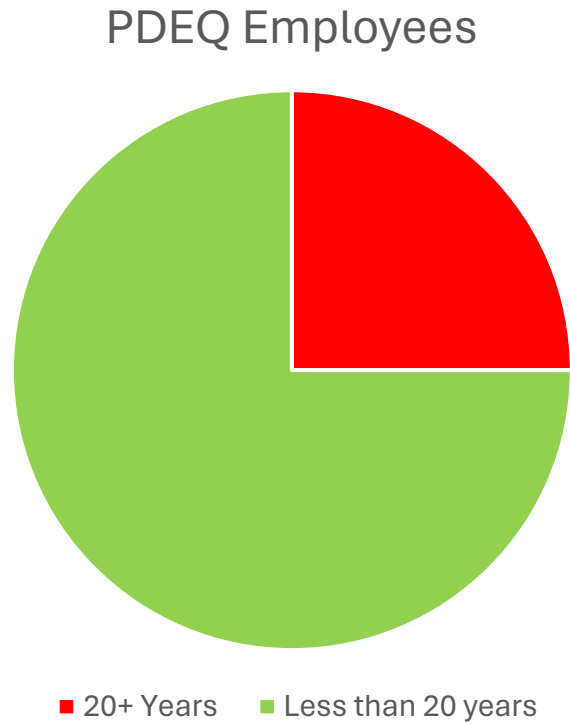
- Organic waste and recycling
- Wastewater Improvements
 - AI – reduce electricity usage
 - NOx capture pilot project
 - Biosolids (on-site solar, battery storage, collection of waste heat, significant reduction in biosolid generation and related hauling costs)
- Fleet Electrification
 - Infrastructure
- Facilities
 - Energy efficiencies
 - Weatherization
 - Solar
- Water movement improvements
 - Well pump energy efficiencies
- Electrification – handheld landscaping tools

Ozone in Pima County



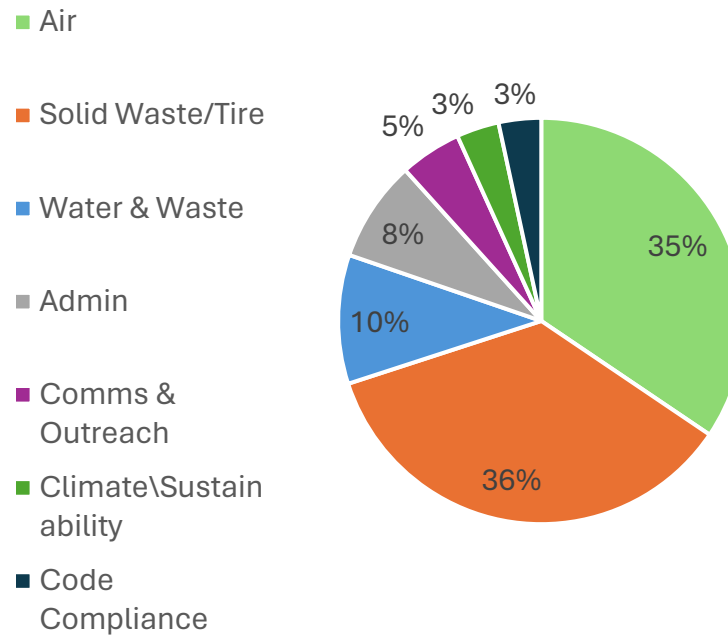
PDEQ Staffing/Budget

Retiring/Aging Workforce

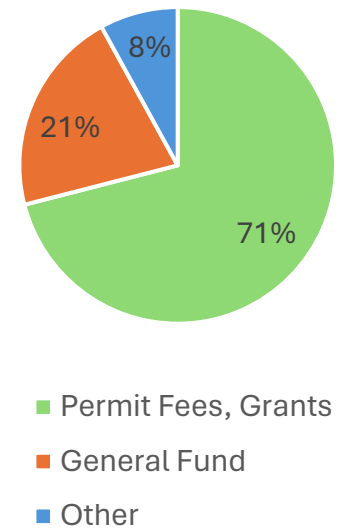


Budget

Expenses By Program



Funding





Thank you

Scott DiBiase, PDEQ

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EPAZ Presentation

February 26-27, 2024



PINAL COUNTY

Pinal County Air Quality Control District

Anu Jain, Director

Pinal County Air Quality Update

- **Nonattainment Issues:**
- West Pinal serious PM₁₀ nonattainment – 1987 24-hr PM₁₀
- Phoenix-Mesa moderate ozone nonattainment – 2015 8-hr ozone
- PM_{2.5} nonattainment?

Pinal County Air Quality Update

- ▶ **West Pinal Serious PM₁₀ Nonattainment Area (1,325 square miles)**
 - ▶ West Pinal reclassified as serious nonattainment area effective – 7/24/20
 - ▶ Attainment date for serious nonattainment area – 12/31/22
 - ▶ EPA determined West Pinal failed to attain the PM₁₀ standard - 7/21/23
 - ▶ Submittal of 2023 5% Plan (annual reductions in PM₁₀/Precursors) – 12/31/23
 - ▶ 70 control measures were identified
 - ▶ 18/20 implemented as AgBMPs – effective 11/26/21
 - ▶ 43/50 implemented for construction sites fugitive dust in West Pinal nonattainment areas – effective 6/1/23
 - ▶ 17.4% projected PM₁₀ reduction for the year 2026 from the 2017 base year emissions
 - ▶ Demonstration of attainment through BACM/5% reduction plan – 12/31/26

Pinal County Air Quality Update

- ▶ Pinal ozone nonattainment area (300 square miles)
 - ▶ Phoenix-Mesa Metropolitan area classified as moderate nonattainment effective – 8/27/15
 - ▶ Moderate area attainment deadline – 8/3/24
 - ▶ EPA published a finding of failure to submit (FFTS) a SIP – effective 11/17/23
 - ▶ Reclassification to serious non-attainment?
 - ▶ Offset sanctions (2:1), highway funding sanctions, FIP?
 - ▶ Different timeframes for the above sanctions from the effective date of FFTS
 - ▶ Voluntary bump up to serious nonattainment may stop the sanctions
 - ▶ Collaboration with other regulatory agencies to come up with VOC and NOX RACT measures
 - ▶ 15% reduction in VOCs for the entire 2015 nonattainment area
 - ▶ Permitting threshold to qualify as a major source drops down to 50 tpy for VOCs and NOX from 100 tpy
 - ▶ Offsets required for NOX and VOCs for every ton above the 50 tpy
 - ▶ PCAQCD would need to expand the current 2008 8-hr ozone RACT measures for gas stations and surface coating operations to 2015 8-hr ozone expanded boundary

Pinal County Air Quality Update

- ▶ EPA strengthen the primary PM_{2.5} annual health-based standard from a level of 12µg/m³ to 9 µg/m³ – 2/7/24
- ▶ Initial area designations for the 2024 revised PM_{2.5} standard to be announced by EPA
- ▶ Out of 3 PM_{2.5} monitors, only Hidden Valley monitor would exceed the revised standard.
- ▶ Agencies to identify factors using five factor analysis in developing their recommendations for area designations.
 - ▶ Air quality data-design values, urban increment
 - ▶ Emissions: 2022 emissions modeling platform
 - ▶ Meteorology
 - ▶ Geography/topography
 - ▶ Jurisdictional boundaries
- ▶ ADEQ would be the agency to submit final area designations to EPA

Pinal County Air Quality Update

➤ Rulemaking

Adopted

- ▶ West Pinal Fugitive Dust Rules (BACM/MSM) – Construction, general fugitive dust
 - ▶ Board adopted January 25, 2023; went into effect June 1, 2023

Planned

- ▶ Ozone RACT for the expanded 2015 8-hr ozone nonattainment area
- ▶ 2023 Emissions Inventory for the expanded portion and projected emissions estimates for 2026 for 2015 8-hr ozone nonattainment area.
- ▶ New Source Review (NSR)

Pinal County Air Quality Update

➤ Permitting

- ▶ The economic growth continues

- ▶ LG Solutions (2 facilities)

- ▶ Proctor & Gamble

- ▶ Chemical manufacturing for semiconductor industries

➤ Ongoing Internal Project

- ▶ Transition/upgrade to IMPACT

Contact Information

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PINAL COUNTY

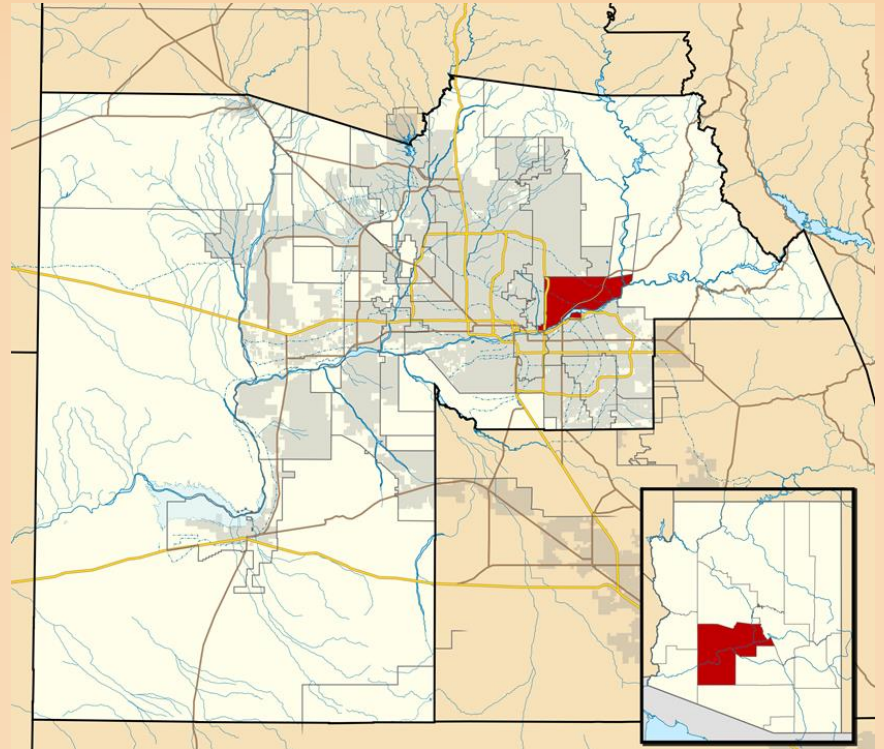
Salt River Pima-Maricopa Indian Community (SRPMIC)



Community Development Department (CDD)

Environmental Protection
and Natural Resources
Division

Air Quality Program (AQP)



Brief History of the AQP

- I. Completed first Emission Inventory in 1998
- II. Established Air Monitoring four Sites in 2002
- III. Gained Treatment as a State (TAS) recognition in 2008
- IV. First Technical Systems Audit (TSA) in October 2012



Air Monitoring Sites

Senior Center

- PM10
- PM2.5



Red Mountain

- Ozone
- Met.



High School

- Ozone
- PM10
- Met.



Lehi

- Ozone
- PM10
- Met.



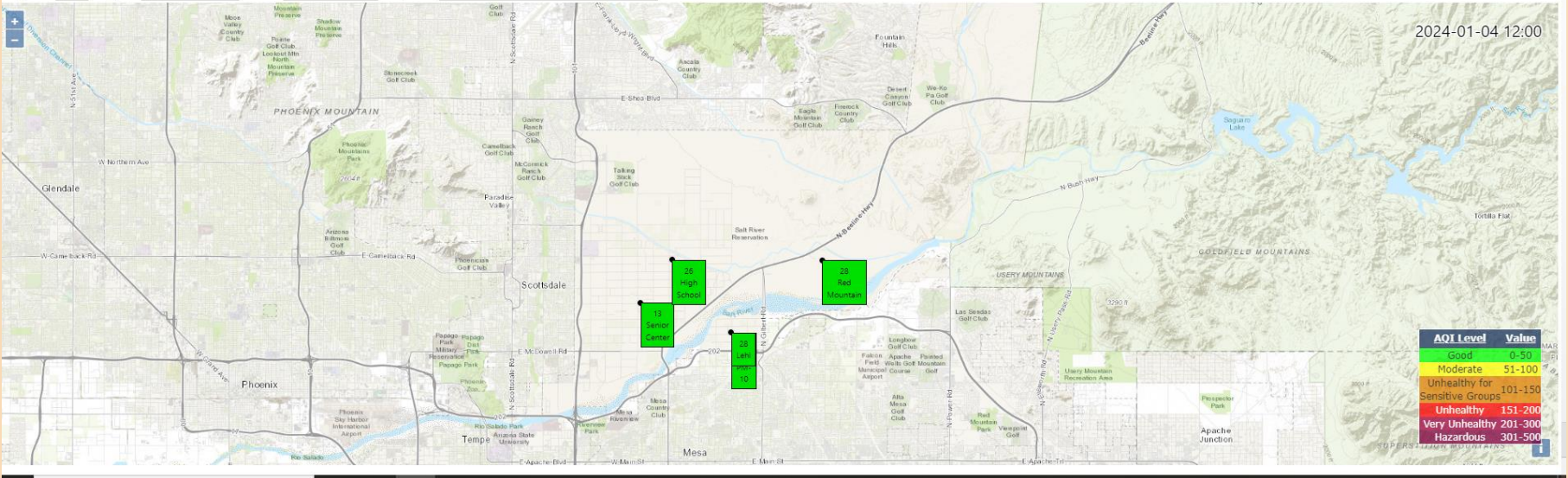
SRPMIC Air Pollution Interactive Map

<https://srp.agilaire.com/airvision/>

SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY AIR QUALITY



Regions: All Layers: AQI Sites: Reports:



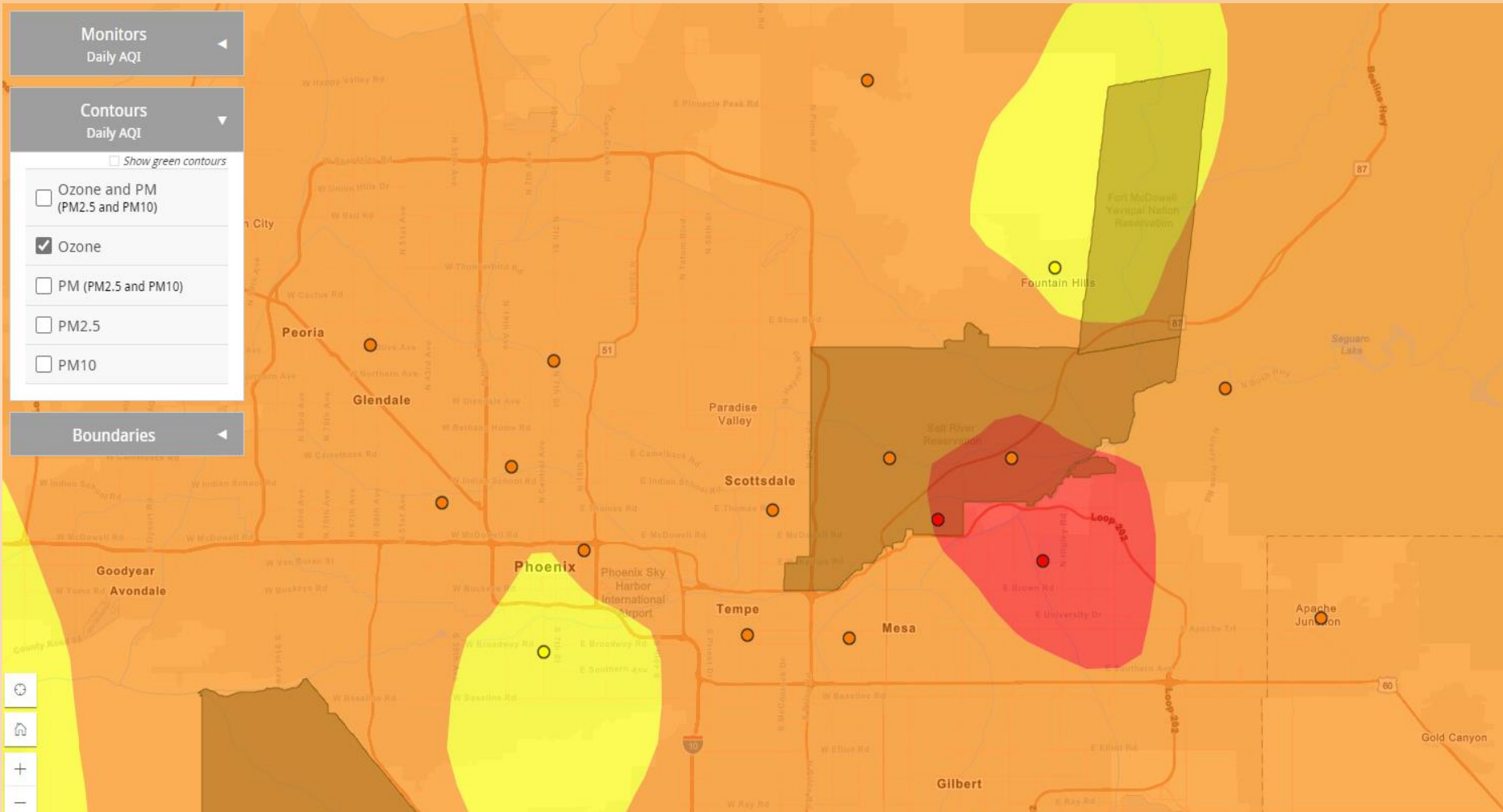
Program Challenges

- Recruiting and retaining qualified staff
- Training
 - Finding needed Classes
 - Continually Training New Staff
- Get Community buy-in
- Ozone Attainment

2022 Violations of the 8-hr. Ozone NAAQS

Site	2020 4 th High (ppm)	2021 4 th High (ppm)	2022 4 th High (ppm)	3-Yr Avg. of 4 th High (ppm)
SC	0.080	0.077	0.075#	0.077
RM	0.080	0.078	0.075	0.077
LE	0.079	0.076	0.079	0.078
HS	0.078	0.074	0.077	0.076

May 17, 2023



Questions ?

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Air Quality Program

www.srpmic-nsn.gov/government/epnr/aqhome/

Thank You!

