Appendix A: NTAA Tribal Air Quality Budget Analysis

Funding and Resources

The EPA provides approximately $12.4 million in funding to Indian Tribes under the Clean Air Act Sections 103 and 105 for air quality programs (see *Table 2* below). *It's important to note that the current budget for FY22 has not been released from the Biden Administration as of the publishing of this report.* Indian Tribes have limited revenue sources. Many either do not have an air quality program or rely solely on EPA funds, which are crucial to Indian Tribes' ability to operate and maintain air quality programs on Tribal lands. As more and more Tribes seek to establish air quality programs, this funding level becomes even less sufficient. While this year's funding for air quality programs reflects the first increase in the last five years, there are also more federally recognized Tribes than in the past, and air quality programs have seen an overall reduction since 2012. The NTAA has consistently supported increased funding for Tribal air quality programs, specifically to:

- Restore funding to at least the highest historical funding levels
- Provide funding for Tribes seeking to establish an air program of their own
- Create new funding streams targeted at addressing critical needs such as indoor air quality, and climate change mitigation and adaptation
- Provide new funding to keep pace with increased new source permitting activity
- Provide funding to replace and repair aging air monitoring infrastructure

Tribes that are initiating new air programs, and nearly all the Tribes/Native Villages in Alaska, rely solely on the Indian Environmental General Assistance Program (GAP) funding, which has also been relatively stagnant over the last 10 years. To cover all their environmental programs with GAP funding forces tough choices for Tribal governments as to which of the worst challenges will be addressed. NTAA strongly supports an increase in GAP base funding. This Budget Analysis informs the audience of additional details on funding required to adequately operate Tribal air quality programs.

State and Tribal Assistance Grant (STAG) Allocations for Fiscal Years 2012-2021

Region	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	$.657	$.614	$.623	$.622	$.594	$.576	$.566	$.554	$.621	$.642
2	$.440	$.424	$.425	$.418	$.403	$.394	$.389	$.380	$.368	$.368
3									$.077	$.085
4	$.331	$.312	$.317	$.313	$.316	$.327	$.328	$.322	$.317	$.321
5	$1.264	$1.146	$1.179	$1.226	$1.229	$1.233	$1.284	$1.294	$1.282	$1.340
6	$1.305	$1.174	$1.176	$1.181	$1.141	$1.137	$1.109	$1.075	$1.172	$1.237
7	$.465	$.434	$.500	$.525	$.535	$.535	$.575	$.605	$.563	$.549
8	$2.110	$2.002	$2.096	$2.070	$2.001	$1.976	$1.889	$1.834	$1.889	$2.011
9	$3.260	$2.934	$2.975	$2.885	$2.967	$2.917	$2.869	$2.844	$2.879	$2.942
10*	$2.657	$2.421	$2.467	$2.444	$2.464	$2.450	$2.468	$2.442	$2.599	$2.859

Total	**$12.5**	**$11.5**	**$11.8**	**$11.7**	**$11.7**	**$11.5**	**$11.5**	**$11.4**	**$11.8**	**$12.4**

All amounts are in millions of dollars. * Includes Alaska

Table 3 State and Tribal Assistance Grant Allocations for Fiscal Years 2012-2021

As an EPA Partnership organization, NTAA also encourages and facilitates partnerships between Tribes, the EPA, and other air quality entities, including state and local governments. Funding and technical resources from the EPA – especially for monitoring, analysis, co-regulation, and IAQ testing and remediation – are critical to supporting these efforts.

Permit Categories on Reservations

The Clean Air Act establishes emissions-related permitting programs, the pre-construction permit programs under Title I of the Act, and the operating permit program under Title V of the Act. EPA delegates their implementation to local air agencies. Tribes may implement their permit programs once approved by EPA either under the Tribal New Source Review rule or under the part 71 rule for Title V sources (Federal Implementation Plan) or by taking delegation of one or both Federal Implementation Plans (FIPs). Where a Tribe does not implement these programs, EPA issues the permits to the sources as appropriate. Some important terms related to permitting includes:

NSR – New Source Review – NSR is a Clean Air Act program (aka, the "preconstruction air permitting program") that requires industrial facilities to install modern pollution control equipment when they are built or when making a change that increases emissions significantly. The program requires owners or operators to obtain permits before they begin construction.

Tribal New Source Review Rule – The Tribal NSR rule is a Federal Implementation Plan (FIP – a plan that is developed by the EPA to federally implement CAA requirements) that establishes the nonattainment NSR and minor NSR permitting programs in Indian country where no EPA-approved Tribal program exists. There are 2 parts – the minor NSR rule and the nonattainment major NSR rule. The permitting authority (either EPA or a Tribe that takes delegation from EPA) reviews the permit application and either grants or denies the permit after a public comment period.

PSD – Prevention of Significant Deterioration – Applicable to new and modified major sources in attainment areas, this program applies to regulated pollutants: NAAQS, GHGs, and others (sulfuric acid mist, hydrogen sulfide) but does not include air toxics (mercury, cadmium, benzene, etc.). The PSD program has specific requirements, such as to install Best Available Control Technology (BACT); perform air quality analysis to assess impacts on air quality; perform Class I area analysis to assess impacts on national parks/wilderness areas and Tribal Class I areas; perform additional impacts analysis; and allow for public involvement. This program can also be delegated to the Tribes or implemented through an EPA approved Tribal Program. NTAA published a white paper on PSD in 2022 that can be found on NTAA's website.

***FARR* – Federal Air Rules for Reservations** (applicable in Region 10 only) – A set of air quality regulations that apply to Indian Reservations in Idaho, Oregon, and Washington.

Title V – Permits issued to major sources by states (Part 70), Tribes (Part 71), or EPA (Part 71). These operating permits include all the applicable CAA requirements that apply to a major source and are designed to improve compliance by clarifying what sources must do to control air pollution.

Major Source – Facilities that emit or have the potential to emit pollutants in amounts equal to or greater than the corresponding major source threshold levels. These levels vary by pollutant and/or source category. Major sources must comply with specific emission limits which are generally more stringent in nonattainment areas and if the pollutant is a criteria pollutant or an air toxic.

Minor Source – Facilities that have the potential to emit pollutants in amounts less than the corresponding major source thresholds.

Synthetic Minor Source – Facilities that have the potential to emit pollutants at or above the major source threshold level, but voluntarily accept enforceable limits to keep emissions below the major source thresholds and avoid the major NSR requirements.

Nonattainment Area – Areas of the country not meeting air quality standards (NAAQS).

Attainment Area – Areas of the country that have air quality as good as or better than the air quality standards for a given pollutant.

HAP – Hazardous Air Pollutant - pollutants (toxic air pollutants or air toxics) that are known to cause cancer and other serious health impacts. There are approximately 187 toxic air pollutants.

TAS – Treatment as a State
The Tribal Authority Rule authorizes EPA to treat eligible federally recognized Indian Tribes in the same manner as a state for implementing and managing certain environmental programs.

TAS Eligibility – A Tribe must meet certain criteria to be eligible for TAS. The Tribe must be federally recognized; have a governing body; have appropriate authority to regulate air quality (includes exterior boundaries of the reservation); and be capable of carrying out the functions of the program.

Administrative TAS – Examples include 105 grants, 107 designations, 126/505 notifications, 319 monitoring, permit review, redesignations, etc.

Regulatory TAS – Examples include Tribal Implementation Plan (TIP), delegation of a FIP, regional haze, or permit program, etc. *Note: TAS is not required for all programs, e.g., program development, monitoring, and identifying areas of concern for Tribal communities.*

Appendix B: Data Tables of Tribal Air Quality Programs and Grants

Tribal Air Quality Monitoring Programs and Projects

Tribes significantly contribute to air quality protection, exercising Tribal sovereignty through air quality program activities. At the request of the NTAA, EPA's Office of Air and Radiation provided a set of data summarizing Tribal air activities from 2012-2021. A broad national summary of Tribal air quality programs can be found below, followed by regional summaries, with additional explanations of terms used in Appendix C.

The following data is used by the EPA to create budgets that influence CAA grant funding available to Tribes. The presentation of this data is illustrated in a simplified layout that is both easier to understand and more useful to readers. This simplified layout serves the important purpose of highlighting recent declines of funding and stagnation of Tribal air quality programs.

The data set was provided to the NTAA by EPA's OAR Tribal System (OTS) database.

National Summary of Tribal Air Quality Programs

Table 4 National Summary of Tribal Air Quality Programs

National Summary of Tribal Air Quality Programs											
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
STAG Funding (in millions)	$12.49	$11.46	$11.76	$11.68	$11.65	$11.55	$11.48	$11.35	$11.77	$12.35	$12.35
Tribes Operating Air Monitors	81	83	84	83	85	83	85	86	88	85	86
Tribes w/ Completed EIs	74	73	84	86	84	80	78	73	62	74	80
Tribes w/ Non-Regulatory TAS	34	38	45	46	48	49	52	53	60	61	61
Tribes w/ Regulatory TAS	7	8	8	8	10	10	10	10	11	10	10
Major Sources on Reservations*	167	159	863	1626	1900	2991	342	367	368	400	372
Tribal Non-Attainment Areas**	201	156	156	202	167	166	166	198	199	113	113
Tribes with 105 Grants	25	25	32	34	35	39	40	40	47	47	51
Tribes with 103 Grants	84	84	96	77	78	75	82	78	74	80	66

***The values shown in this table reflect annual totals for all regions. The steep rise of Major Sources on Reservations in 2014-2017 is due to the introduction of new major source registration rules, which were applied to previously identified sources. This jump in major sources was caused by increased regulation, not by new pollutant sources. 2018-2021 totals are reflective only of actual permitted sources in Indian country.

****The decrease in Tribal Non-Attainment Areas in 2021 reflects a realignment of reporting protocols for Region 9 to ensure consistency with other Regions, not an actual change in the number of non-attainment areas.

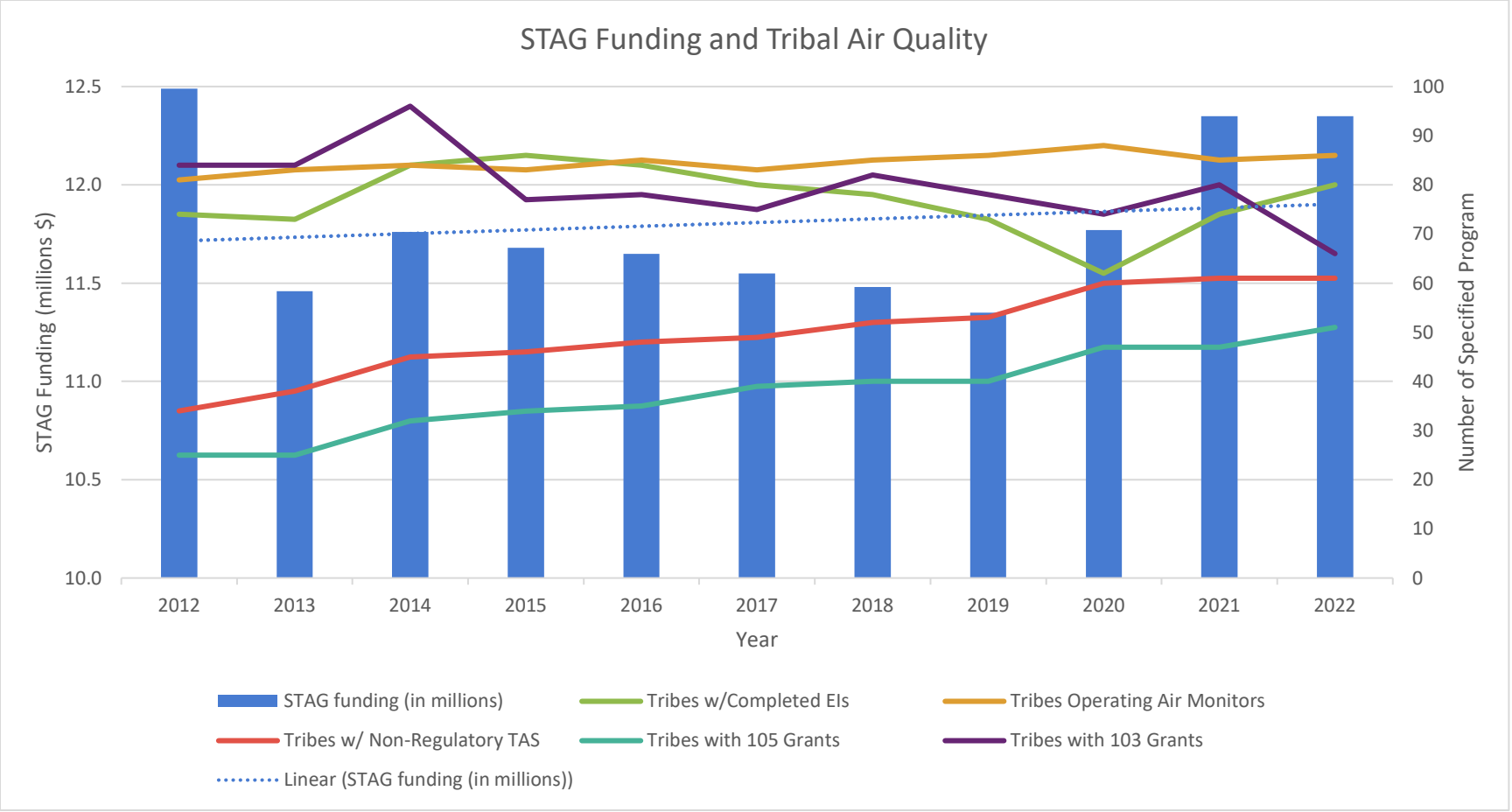

Table 5 STAG Funding and Tribal Air Quality Programs

STAG funding increased in 2021 and remained the same in 2022. However, this does not account for either inflation and/or the Cost-of-Living Adjustment.

Regional Summaries of Tribal Air Quality Programs

Table 6 Regional Summaries of Tribal Air Quality Programs

Region 1 - Summary of Tribal Air Quality Programs											
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
STAG Funding (in thousands)	$657	$614	$623	$622	$594	$576	$566	$554	$621	$642	$664
Tribes Operating Air Monitors	4	5	5	5	5	5	5	5	5	5	5
Tribes w/ Completed EIs	1	1	1	1	1	1	1	1	0	0	0
Tribes w/ Non-Regulatory TAS	1	2	2	2	2	2	2	2	4	3	4
Tribes w/ Regulatory TAS	2	2	2	2	2	2	2	2	2	2	2
Major Sources on Reservations	2	2	2	2	2	2	2	2	2	2	2
Tribal Non-Attainment Areas	5	5	5	5	3	3	3	3	5	3	3
Tribes with 105 Grants				2	2	2	2	2	4	3	4
Tribes with 103 Grants	8	8	8	4	4	4	5	5	4	3	2

Region 2 - Summary of Tribal Air Quality Programs											
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
STAG Funding (in thousands)	$440	$424	$425	$418	$403	$394	$389	$380	$368	$368	$363
Tribes Operating Air Monitors	1	1	1	1	1	1	1	1	1	1	1
Tribes w/ Completed EIs	0	1	1	1	1	1	1	0	0	0	0
Tribes w/ Non-Regulatory TAS	1	1	1	1	1	1	1	1	1	1	1
Tribes w/ Regulatory TAS	1	1	1	1	1	1	1	1	1	1	1
Major Sources on Reservations	1	1	1	1	1	1	1	1	1	1	1
Tribal Non-Attainment Areas	5	4	4	4	1	1	1	1	1	1	1
Tribes with 105 Grants				1	1	1	1	1	1	1	1
Tribes with 103 Grants	2	2	2	0	2	1	1	1	1	1	1

Region 3 - Summary of Tribal Air Quality Programs			
	2020	2021	2022
STAG Funding (in thousands)	$77	$85	$84
Tribes Operating Air Monitors	0	0	0
Tribes w/ Completed EIs	0	0	0
Tribes w/ Non-Regulatory TAS	0	0	0
Tribes w/ Regulatory TAS	0	0	0
Major Sources on Reservations	0	0	0
Tribal Non-Attainment Areas	0	0	0
Tribes with 105 Grants	0	0	0
Tribes with 103 Grants	0	0	0

Region 4 - Summary of Tribal Air Quality Programs											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
STAG Funding (in thousands)	$331	$312	$317	$313	$316	$327	$328	$322	$317	$321	$315
Tribes Operating Air Monitors	1	2	2	3	3	4	4	3	3	3	3
Tribes w/ Completed EIs	1	1	2	2	2	2	2	2	3	3	3
Tribes w/ Non-Regulatory TAS	1	1	1	1	1	1	1	1	1	1	1
Tribes w/ Regulatory TAS	0	0	0	0	0	0	0	0	0	0	0
Major Sources on Reservations	0	0	0	0	0	0	0	0	0	0	0
Tribal Non-Attainment Areas	1	0	0	0	0	0	0	0	0	0	0
Tribes with 105 Grants				1	1	1	1	1	1	1	1
Tribes with 103 Grants	2	2	3	3	3	4	4	3	3	3	3

Region 5 - Summary of Tribal Air Quality Programs											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
STAG Funding (in millions)	$1.26	$1.15	$1.18	$1.23	$1.23	$1.23	$1.28	$1.29	$1.28	$1.34	$1.32
Tribes Operating Air Monitors	11	11	12	12	12	14	14	14	14	16	16
Tribes w/ Completed EIs	14	14	15	16	18	19	20	20	10	11	11
Tribes w/ Non-Regulatory TAS	4	4	5	5	5	6	7	7	8	8	8
Tribes w/ Regulatory TAS	0	0	0	0	0	0	0	0	0	0	0
Major Sources on Reservations	13	15	15	15	15	16	17	17	19	19	19
Tribal Non-Attainment Areas	5	5	5	5	4	4	4	4	4	4	4
Tribes with 105 Grants				5	5	5	7	7	8	8	8
Tribes with 103 Grants	15	15	19	11	12	10	10	9	8	8	8

Region 6 - Summary of Tribal Air Quality Programs											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
STAG Funding (in millions)	$1.31	$1.17	$1.18	$1.18	$1.14	$1.14	$1.11	$1.07	$1.17	$1.24	$1.25
Tribes Operating Air Monitors	5	5	4	4	5	5	7	7	6	4	3
Tribes w/ Completed EIs	8	8	14	15	11	12	9	5	10	7	8
Tribes w/ Non-Regulatory TAS	2	2	3	3	4	4	5	6	7	8	7
Tribes w/ Regulatory TAS	0	0	0	0	0	0	0	0	0	0	0
Major Sources on Reservations	6	6	6	6	11	10	9	9	13	13	10
Tribal Non-Attainment Areas	0	0	0	0	0	0	0	0	1	1	1
Tribes with 105 Grants				0	0	1	1	1	3	4	5
Tribes with 103 Grants	9	9	9	10	7	8	15	12	11	11	10

Region 7 - Summary of Tribal Air Quality Programs											
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
STAG Funding (in thousands)	$465	$434	$500	$525	$535	$535	$575	$605	$563	$549	$536
Tribes Operating Air Monitors	4	4	5	4	4	4	5	6	4	4	4
Tribes w/ Completed EIs	6	6	6	6	6	6	6	6	4	4	5
Tribes w/ Non-Regulatory TAS	0	1	2	2	2	2	2	2	2	2	2
Tribes w/ Regulatory TAS	0	0	0	0	0	0	0	0	0	0	0
Major Sources on Reservations	4	4	4	4	4	4	4	4	4	4	4
Tribal Non-Attainment Areas	0	0	0	0	0	0	0	0	0	0	0
Tribes with 105 Grants				1	0	1	2	2	1	1	1
Tribes with 103 Grants	4	4	7	7	7	7	5	6	6	6	5

Region 8 - Summary of Tribal Air Quality Programs											
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
STAG Funding (in millions)	$2.11	$2.00	$2.10	$2.07	$2.00	$1.98	$1.89	$1.83	$1.89	$2.01	$1.99
Tribes Operating Air Monitors	10	10	10	10	10	10	9	9	11	11	13
Tribes w/ Completed EIs	18	13	14	14	14	8	8	8	4	4	4
Tribes w/ Non-Regulatory TAS	7	7	9	9	9	9	9	9	10	11	10
Tribes w/ Regulatory TAS	1	1	1	1	1	1	1	1	2	3	2
Major Sources on Reservations*	86	89/706‡	702	1451	1719	2806	261	289	268	300	274
Tribal Non-Attainment Areas	3	3	3	3	3	3	3	4	2	3	3
Tribes with 105 Grants				7	6	8	8	8	8	8	8
Tribes with 103 Grants	11	11	11	14	14	13	13	13	16	18	11

*The steep rise of Major Sources on Reservations in 2014-2017 is due to the introduction of new major source registration rules, which were applied to previously identified sources. This includes newly identified oil and gas sources required to be registered for PSD permits. 2018 totals are reflective only of actual permitted sources in Indian country.
ǂIn 2013, Region 8 reported this data using both old and new rules.

Region 9 - Summary of Tribal Air Quality Programs											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
STAG Funding (in millions)	$3.26	$2.93	$2.97	$2.89	$2.97	$2.92	$2.87	$2.84	$2.88	$2.94	$2.91
Tribes Operating Air Monitors	29	29	29	29	30	29	27	28	30	27	27
Tribes w/ Completed EIs	17	19	21	21	24	24	24	24	10	10	11
Tribes w/ Non-Regulatory TAS	7	7	9	10	11	11	12	12	12	12	14
Tribes w/ Regulatory TAS	2	2	2	2	4	4	4	4	5	3	4
Major Sources on Reservations	21	21	21	21	22	22	22	18	25	24	23
Tribal Non-Attainment Areas	170	137	137	183	154	154	154	185	185	100*	100
Tribes with 105 Grants				4	7	7	5	6	7	7	8
Tribes with 103 Grants	23	23	23	26	26	25	25	24	20	24	11

* The decrease in Tribal Non-Attainment Areas in 2021 for Region 9 reflects a realignment of reporting protocols for the Region 9 to ensure consistency with other Regions, not an actual change in the number of non-attainment areas.

Region 10 - Summary of Tribal Air Quality Programs											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
STAG Funding (in millions)	$2.66	$2.42	$2.47	$2.44	$2.46	$2.45	$2.47	$2.44	$2.60	$2.86	$2.90
Tribes Operating Air Monitors	16	16	16	15	15	13	13	13	14	14	14
Tribes w/ Completed EIs	9	10	10	10	7	7	7	7	21	35	38
Tribes w/ Non-Regulatory TAS	11	13	13	13	13	13	13	13	15	15	14
Tribes w/ Regulatory TAS	1	2	2	2	2	2	2	2	1	1	1

Major Sources on Reservations*	34	110	112	126	126	130	26	27	36	37	39
Tribal Non-Attainment Areas	12	2	2	2	1	1	1	1	1	1	0
Tribes with 105 Grants				13	13	13	13	12	14	14	15
Tribes with 103 Grants	10	10	14	2	3	3	4	5	5	6	6

***The steep rise of Major Sources on Reservations in 2014-2017 is due to the introduction of new major source registration rules, which were applied to previously identified sources. 2018 totals are reflective only of actual permitted sources in Indian country.

Tribal Diesel Emissions Reduction Act (DERA)

EPA's Tribal DERA program awards grants to federally recognized Tribes, inter-Tribal consortium, and Alaska Native Villages for projects that reduce emissions from diesel engines. Through 2020, the Tribal DERA program required a high-cost share commitment, which was a barrier for most Tribes. In 2020, the NTAA wrote to the EPA with recommendations on ways to improve the Tribal DERA program so that Tribes could better utilize the funds. The EPA responded, in part, by removing the required cost share for the anticipated 2022 DERA RFP. The graph below provides the total amounts awarded from EPA, the total amounts of cost share borne by the Tribes, and the total number of awards for each year since the program began in 2009 through 2020.

Table 7 Tribal DERA Grant Awards

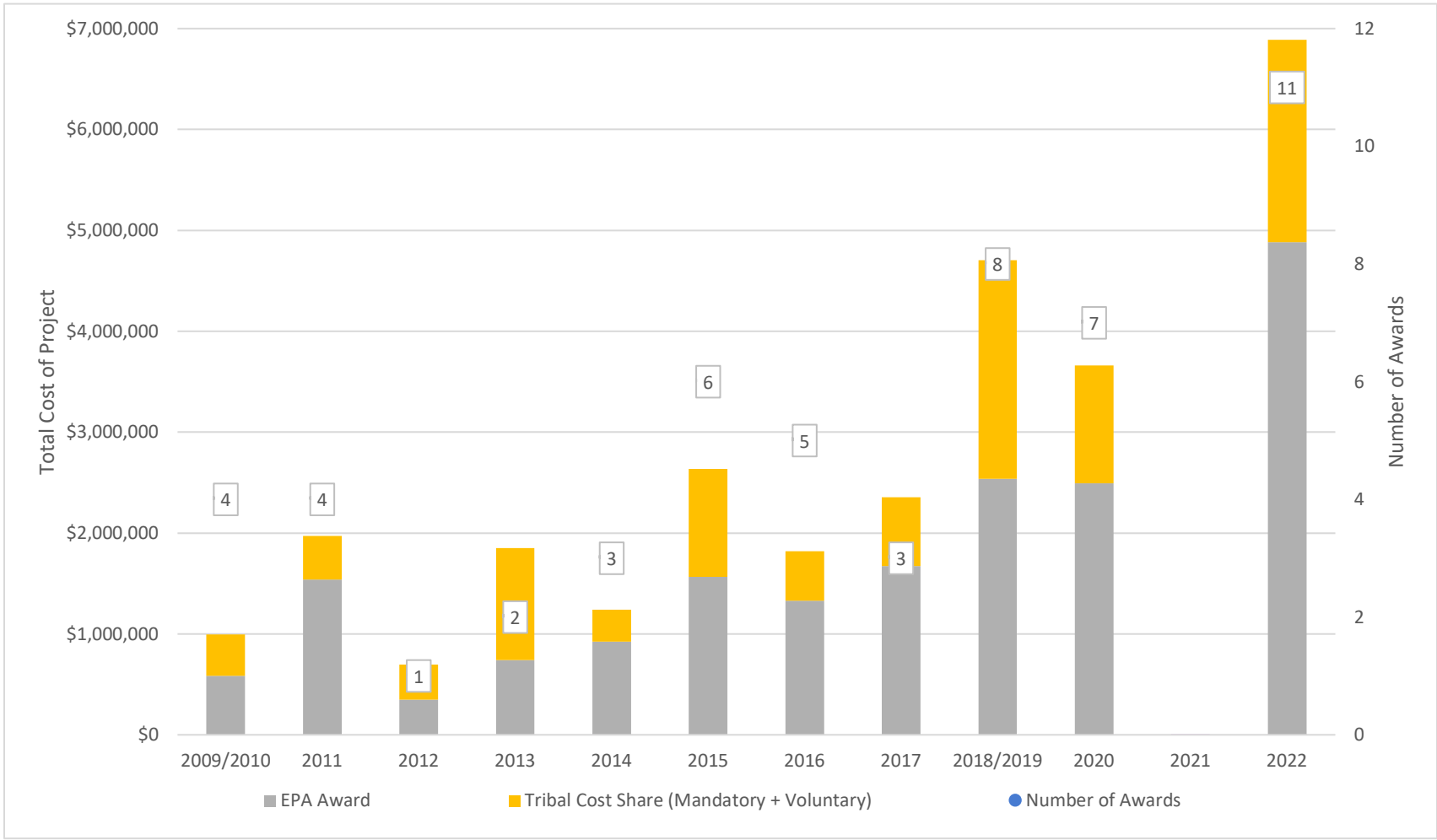

Figure 8 Note: for FY21, the mandatory cost share requirement was removed.

2022 STAR References

[i] *FY 2022 Interior Budget in Brief, Bureau of Indian Affairs*

[ii] Survey question #28 asked those Tribes who do currently receive CAA 103 or 105 air quality grants to estimate their total estimated annual grant amount (the sum of their current funding plus their unmet funding needs). A total of 89 survey respondents answered this question, selecting from a value range. Respondent count for each range: $25k-$49k (n=6), $50k - $74k (n=6), $75k - $99k (n=17), $100k - $124k (n=16), $125k - $149k (n=13), $150k - $174k (n=4), $175k - $199k (n=8), $200k - $224k (n=4), $225k - $249k (n=3), $250k - $274k (n=1), $275k - $299k (n=1), $300k or greater (n=10). The mid-point value in each range was used, then multiplied by the number of respondents in that range. As example, 6 respondents indicated a total grant need of $25,000 - $49,000. The mid-point value in this range, $37,499.50, was multiplied by 6 (number of respondents in this value range), for a total of $224,997.00 This formula was then applied to all of the value ranges, for a combined total of $12,937,461.

[iii] Survey question #26 asked those Tribes who do not receive CAA 103 or 105 air quality grants to estimate their estimated annual grant amount. A total of 76 survey respondents answered this question, selecting from a value range. Respondent count for each range: $25k-$49k (n=4), $50k - $74k (n=13), $75k - $99k (n=14), $100k - $124k (n=18), $125k - $149k (n=11), $150k - $174k (n=5), $175k - $199k (n=5), $200k - $224k (n=0), $225k - $249k (n=3), $250k - $274k (n=0), $275k - $299k (n=0), $300k or greater (n=3). The mid-point value in each range was used, then multiplied by the number of respondents in that range. As example, 4 respondents indicated a total grant need of $25,000 - $49,000. The mid-point value in this range, $37,499.50, was multiplied by 4 (number of respondents in this value range), for a total of $149,998.00. This formula was then applied to all of the value ranges, for a combined total of $9,087,464.

[iv] 2021 Tribal Air Resources Journal: Accomplishments, Obstacles, Successes and Setbacks of EPA Region 5 Tribes Pertaining to Air Quality. https://aarst.org/wp-content/uploads/2021/12/Tribal-Air-Resources-Journal-for-R5-Tribes-13th-Edition-2021.pdf. 2021 Edition, Volume XIII.

[v] USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018

[vi] Fann, N., T. Brennan, P. Dolwick, J.L. Gamble, V. Ilacqua, L. Kolb, C.G. Nolte, T.L. Spero, and L. Ziska, 2016: Ch. 3: Air Quality Impacts. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. U.S. Global Change Research Program, Washington, DC, 69–98. http://dx.doi.org/10.10.7930/J0GQ6VP6

[vii] U.S. Environmental Protection Agency. (2009) USEPA's Endangerment Finding. Retrieved from https://www.epa.gov/sites/production/files/2016-08/documents/federal_register-epa-hq-oar-2009-0171-dec.15-09.pdf.

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