

# The Rural Water Gap:

A Retrospective Equity Analysis of USDA Rural Development's Water and Environmental Programs



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# Executive Summary

Millions of people in the U.S. live without access to safe water and sanitation. The burden of this crisis falls disproportionately on rural communities and communities of color due to historical disinvestment and regulatory failures, among other structural challenges. Federal investments are crucial to ensuring everyone has reliable access to water and sanitation, but some communities face disproportionate obstacles accessing funding.

This report analyzes U.S. Department of Agriculture Rural Development (USDA RD) investments in water and wastewater infrastructure, because USDA RD is a core element of the federal government's strategy to eliminate the racialized rural water gap. Between 2010 and 2021, USDA RD released \$3.4 billion dollars in grants and \$6.2 billion in loans for water projects. Of the 6,664 projects analyzed during this time period, we found that 15% of awards funded projects in majority Black, Indigenous, and People of Color (BIPOC) communities.

While some USDA RD benefits reach rural communities of color, more funding is needed to address persistent water inequities. USDA RD has an opportunity, and responsibility, to better serve BIPOC communities. Doing so will require new approaches and resources; USDA RD staff and technical assistance contractors must be supported and resourced to achieve this. Overall, local community-based organizations that work in and with communities of color should also be better supported by USDA to improve racial equity outcomes.

This preliminary report analyzes the USDA RD Rural Utilities Service Water and Environmental Programs (WEP) funding portfolio as an important mechanism by which drinking water and wastewater infrastructure projects get funded. The report both analyzes existing WEP funding and offers recommendations for USDA to conduct its own analyses.

Based on our analysis, we make the following recommendations:

1. As part of the Farm Bill reauthorization process, USDA should conduct a robust racial equity analysis of its WEP investments in projects, grantmaking staff, and technical assistance providers to ensure funding is serving BIPOC communities, and make the results publicly available as soon as possible.
2. USDA should continue to build trusting and collaborative relationships with environmental justice and community-based organizations to inform USDA RD priorities and better meet rural communities' and Tribal Nations' needs.
3. USDA should proactively, publicly, and transparently identify communities that may need assistance accessing safe water and improved sanitation, including prioritization of communities of color historically underfunded by USDA programs.
4. Through the Farm Bill, Congress should increase crucial investments, especially grants, in BIPOC rural communities.

We encourage USDA RD and stakeholders to conduct a thorough racial equity analysis of all RD water infrastructure funding to better evaluate benefits to BIPOC communities. The analysis should be done this year considering the whole-of-government Justice40 Initiative, the Infrastructure Investment and Jobs Act, and other pending funding, such as the FY2023 Farm Bill. By doing so, USDA can seize this moment to leverage its investments to meet President Biden's vision for equity and justice in all communities.



# Introduction

Funding for rural water and wastewater projects is essential to closing the water access gap. Millions of U.S. residents live without basic access to safe drinking water and sanitation.<sup>1</sup> Black, Indigenous, and People of Color (BIPOC) communities are disproportionately impacted by challenges accessing safe water.<sup>2</sup> Black and Latinx households are almost twice as likely to lack complete plumbing as white households, and Native American households are 19 times more likely than white households to lack indoor plumbing.<sup>3</sup> Millions of rural residents lack access to safe water because they are served by public water systems with health-based violations of federal drinking water standards.<sup>4</sup> These racialized water and wastewater disparities exist and persist due to historic disinvestment, regulatory failures, and a range of structural factors.<sup>5</sup> Yet communities with larger populations of color were less likely to receive funding from key federal programs intended for investing in water infrastructure.<sup>6</sup>

USDA Rural Development (USDA RD) is the only federal agency with an explicit mandate to target assistance to rural communities. USDA RD Rural Utilities Service supports new and improved infrastructure projects in rural communities through several funding mechanisms. The USDA RD Water and Environmental Programs (WEP) is the primary federal program area funding rural drinking water and wastewater facilities in small communities. The Farm Bill, which is up for reauthorization every five years, can affect annual appropriations for certain WEPs. In 2021, Congress provided USDA RD with \$1 billion specifically for small, rural water and wastewater critical infrastructure,<sup>7</sup> representing an opportunity to further improve water access in underserved areas throughout the country.

This study analyzes WEP funding awards from FY2010 to FY2021 to learn which communities have recently benefited from USDA RD investments in drinking water and wastewater projects. We use spatial and sociodemographic analyses to assess and categorize WEP award recipients. The goal of this study is to investigate the extent to which majority-BIPOC communities are represented among WEP awardees and thereby inform improvements in the equitable distribution of USDA RD funding and programming.



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# Findings

## 15% of USDA WEP Projects Are Located in Majority-BIPOC Communities

Of the 6,664 USDA WEP projects analyzed, 15% (n = 1,014 projects) are located in majority-BIPOC communities,\* while 85% (n = 5,650) are located in communities where the majority of residents identify as non-Hispanic white.† Although award amounts vary across WEP programs, this trend holds for the amount of funding allocated: 15% of the \$9.4 billion in grant and loan funding released from FY2010-FY2021 went to projects located in majority-BIPOC communities (Table 1).

We analyzed community sociodemographic characteristics for 99.2% of the 6,719 USDA WEP prime awards from FY2010-FY2021, using two techniques: geocoding and direct census spatial analysis. We assessed 49.3% of projects (n = 3,313) using direct census spatial analysis techniques, and 49.9% (n = 3,351 projects) using geocoding techniques. Less than one percent of projects (n = 55 projects) were not analyzed because the information recorded in the database did not correspond to a named census spatial geography and was not possible to geocode. The community sociodemographic trends analyzed are consistent across both techniques (see Appendix B), and analysis details are included below under Methods.

**Table 1. Funding Distribution by Community Sociodemographics (FY 2010-2021)**

Project Location Sociodemographics	Project Count <sup>††</sup>	Summed Funding (Grants and Loans)
Majority-BIPOC communities	1,014 (15%)	\$1.4 billion (15%)
Majority non-Hispanic white communities	5,650 (85%)	\$8.0 billion (85%)
TOTAL	6,664	\$9.4 billion

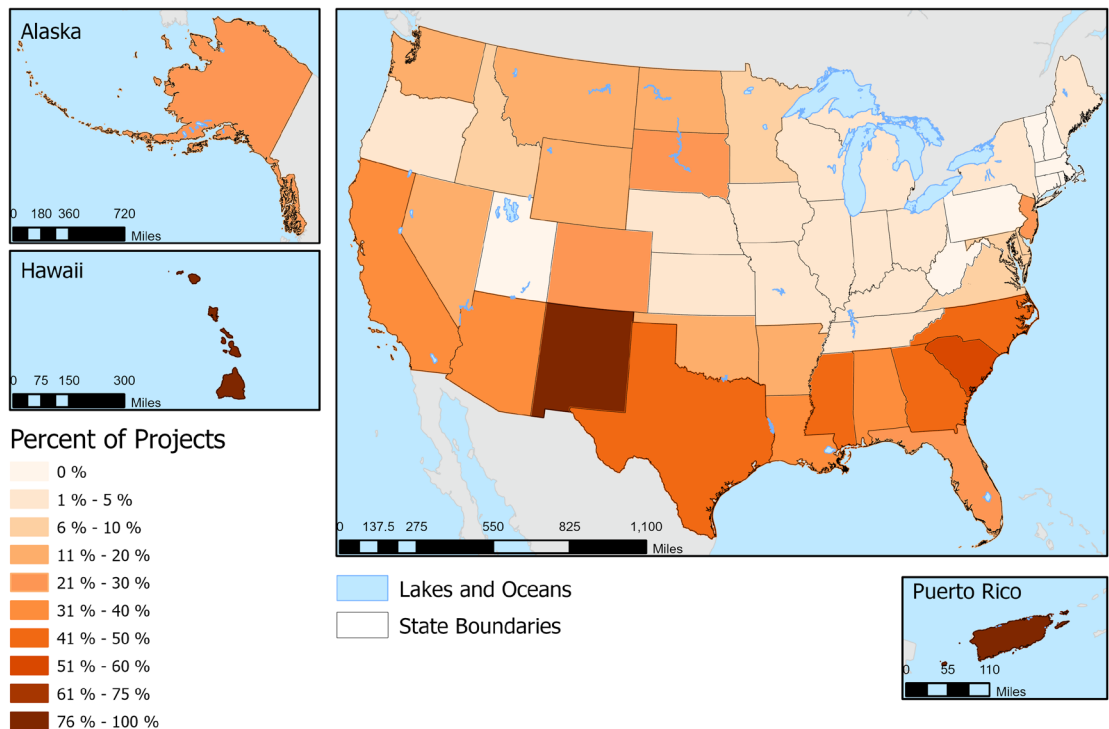
††Note: The Project Count totals include 386 USDA WEP projects listed in the Awards dataset with \$0 funding amounts.

This funding ratio by community sociodemographics is consistent across five of the seven grant and loan programs analyzed (Appendix A, Table A1). However, for one of the Water and Waste Disposal Loans and Grants program (10.770 Section 306C, n = 155 awards totaling \$264 million), majority-BIPOC communities were awarded five times more funding than majority-white communities (Appendix A, Table A1). Notably, this program seeks to fund projects that primarily benefit members of Federally recognized Tribes or colonias with eligible applicants that include utilities that serve these areas, in addition to other small rural communities (Appendix A, Table A5).<sup>8</sup> In contrast, the award recipients of WEP's Grant Program to Establish a Fund for Financing Water and Wastewater Projects (Section 10.864, n = 12 awards totaling \$4 million) are all located in majority-white communities.

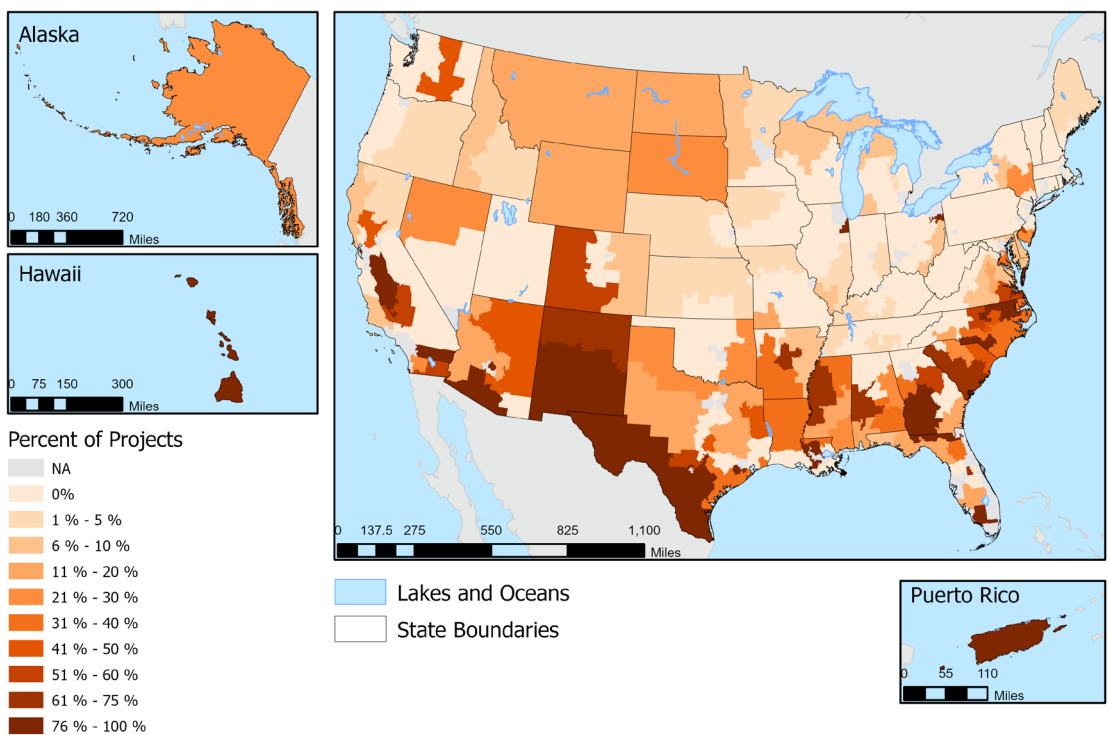
The level of funding and number of projects that serve majority-BIPOC communities varies by state (Figure 1). Rural areas in the southern United States show a higher percentage of WEP-funded projects located in majority-BIPOC communities. This is especially true in places like Hawaii and Puerto Rico where 100% of

\*We define majority-BIPOC communities as geographies where >50% of the individuals in the population reported their race in the 2015-2019 American Community Survey (ACS) as something other than "white only" and/or reported their ethnicity as "Hispanic or Latino."

†We define majority non-Hispanic white communities as geographies where >50% of the individuals in the population reported their race in the 2015-2019 ACS as "white only" and did not report their ethnicity as "Hispanic or Latino."



**Fig. 1.** Percentage of USDA Water and Environmental Programs (WEP) FY2010-FY2021 project recipients located in majority Black, Indigenous, and People of Color communities, by State, District, or Territory.



**Fig. 2.** Percentage of USDA Water and Environmental Programs (WEP) FY2010-FY2021 project recipients located in majority Black, Indigenous, and People of Color communities, by Congressional District.



project recipients are located in majority-BIPOC communities. New Mexico (81%), South Carolina (60%), and Georgia (48%) are the states with the next highest percentage of WEP projects awarded to recipients in majority-BIPOC communities (see Appendix A, Table A3 for state percentages). The level of funding and number of projects that serve majority-BIPOC communities varies by Congressional District as well, and indicates variation within states (Figure 2; Appendix A, Table A4).

## Technical Assistance and Training Grant Funding Should Specify Beneficiaries

In addition to the WEP programs described and analyzed above, USDA RD WEP funds and administers a Technical Assistance and Training (TAT) Grant Program. Our analysis of TAT grants indicates that some TAT awards benefit majority-BIPOC communities. For example, the Inter Tribal Council of Arizona, Inc., was awarded \$3.6 million in TAT grant funding over four years, and the Native American Water Association was awarded \$0.75 million in TAT grant funding over four years, presumably to provide TAT to Tribal communities in each case. One noteworthy new 2021 TAT award may reflect the USDA's broader commitments to environmental justice.<sup>9</sup> The University of South Alabama, as a member of the Consortium for Alabama Rural Water and Wastewater Management (CARWW),<sup>10</sup> was awarded a \$4.8-million grant for innovative rural wastewater treatment solutions focused on communities in Alabama's rural Black Belt. In this region, septic systems are prone to failure and many households completely lack access to sanitation.<sup>11, 12</sup>

Notably, over the time period analyzed, USDA RD regularly partnered with the National Rural Water Association (NRWA) and the Rural Community Assistance Partnership (RCAP) for technical assistance and training. Together these TAT providers have received more than 77% of the \$115 million awarded by the TAT Grant Program since 2013. Based in Oklahoma and serving small and rural communities across the country, the National Rural Water Association has received \$63.1 million in TAT grants since 2014. The Rural Community Assistance Partnership, which is a national network based out of Washington, D.C., serving small tribal and rural communities in all 50 states plus territories, has received the second highest amount of TAT Grant Program funding, with eight awards for a total of \$24.3 million in grants (see Appendix A, Table A2, for TAT awards by year). While TAT Grant Program recipient organizations now internally track the community sociodemographics of those they support, this information is not readily available from the USDA. Publicly reporting which communities have benefited from NRWA and RCAP assistance through technical assistance and training grants, as well as the Circuit Rider Program, is important to ensuring racial equity goals are being met.



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# Recommendations

Based on the findings of this report and our experience working with small, rural communities of color, we respectfully offer the following recommendations to USDA.

- 1. As part of the FY2023 Farm Bill authorization process, USDA should conduct a robust equity analysis of all its WEP investments and make the results publicly available as soon as possible.**
  - a. Determine what percentage of current and historical WEP investments benefit BIPOC communities, including the beneficiaries of technical assistance contracts, and make this data publicly available for comparison with the demographics of rural areas from the 2020 Census. Provide administrative resources as needed to make necessary reporting changes.
  - b. Analyze what percentage of its investment/grant making staff and current technical assistance non-profit contractors identify as BIPOC. Provide administrative resources as needed to make necessary reporting changes.
  - c. Work in partnership with the USDA Equity Commission to determine what additional data is necessary to support this analysis, track progress, and ensure systems support ongoing data collection.
- 2. USDA should build and deepen relationships with environmental justice and community-based organizations to inform USDA RD priorities and better meet rural communities' and Tribal Nations' needs.**
  - a. Create a listserv to ensure regular communication with community-based and environmental justice organizations as well as Tribal Nations.
  - b. Regularly convene community-based environmental justice organizations and Tribal Nations to inform USDA RD priorities and approaches. Work with community-based environmental justice organizations to encourage and support them to take on technical assistance (TA) roles, particularly related to community outreach and engagement, as has successfully begun occurring in Alaska, Arizona, and California. Streamline reporting requirements and ensure sufficient administrative budget is available in funding to facilitate new actors participating in TA roles.
  - c. Invest in a program to provide ongoing capacity building training and support to USDA Rural Development Offices, USDA contractors, and non-profit technical assistance providers to strengthen their ability to engage and build trust with communities of color through their funding programs.
- 3. USDA should proactively and publicly identify communities that may need assistance in closing the rural water and wastewater gap.**
  - a. Similar to California's "Human Right to Water" list, work with the USEPA to create a national "rural water access" list of rural communities, including unincorporated communities, colonias, and Tribal entities, that are either confirmed to or likely at risk of not having access to safe water, as well as those communities with inadequate access to wastewater services. Use local knowledge from state USDA offices and technical assistance providers to support this effort.



- b. In partnership with USEPA and the Indian Health Service, publish a regular needs assessment that estimates the amount of funding needed to provide safe, affordable, and resilient water to communities on the national “rural water access” list.
- c. Work in partnership with USEPA and the Indian Health Service to leverage federal funding, including 2021 Infrastructure Investment and Jobs Act funding, to facilitate service connections for domestic well owners that live near public water systems.
- d. As reparations for BIPOC communities’ historical challenges accessing water infrastructure investments,<sup>13</sup> USDA should prioritize grants or zero-interest loans for BIPOC, low-income, rural communities.

**4. Congress should make crucial investments in rural BIPOC communities through the FY2023 Farm Bill.**

- a. Increase funding available to rural BIPOC communities, particularly for programs like the Water and Waste Disposal Loans and Grants program (10.770 Section 306C) with explicit eligibility criteria that would include majority-BIPOC communities, and leverage the outreach and eligibility guidelines used in 10.770 Section 306C in other WEP funding programs.
- b. Provide mandatory funding for the water and wastewater backlog of eligible projects, including funding for lead, per- and polyfluoroalkyl substances (PFAS), and drought emergencies.
- c. To enable integrated rural investments in BIPOC communities, continue expanding the Rural Partnerships Program to provide flexible capacity building for rural economic and business development.
- d. Enable flexible in-kind match requirements and remove grant caps for the following programs: Special Evaluation Assistance for Rural Communities and Households (SEARCH), Water and Waste Disposal Predevelopment Planning Grants (PPG), and Community Facilities Technical Assistance and Training Program.

More broadly, based on the results of USDA’s funding equity analysis, USDA should institute new procedures and practices to ensure greater funding reaches communities of color. By implementing these projects, USDA can hold itself accountable to the whole-of-government Justice40 goals.



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# Methods

We combine federal award data for USDA RD's Water and Environmental Programs (WEP) with US Census Bureau data to analyze WEP awardees' community sociodemographic characteristics. This approach builds on previous equity analyses of USEPA's Drinking Water State Revolving Fund for water systems and the Clean Water State Revolving fund for municipalities.<sup>14</sup>

## USDA WEP Project Data

We analyze the publicly available Rural Utilities Service's WEP prime award listings from the Bureau of the Fiscal Service for all available years\* (i.e., FY2008-FY2021).<sup>15</sup> We exclude USDA RD programs outside the scope of this analysis, such as electricity and telecommunications programs, to focus on seven different WEP grant and loan programs:

1. Special Evaluation Assistance for Rural Communities and Households (SEARCH)
2. Water And Waste Disposal Systems for Rural Communities
3. Solid Waste Management Grants
4. Emergency Community Water Assistance Grants
5. Water And Waste Disposal Loans and Grants (Section 306C)
6. Household Water Well System Grant Program, and
7. Grant Program to Establish a Fund for Financing Water And Wastewater Projects.

From the 6,785 prime awards in these seven programs, 66 prime awards that listed negative loan or grant funding amounts were removed from analysis.

WEP Technical Assistance and Training (TAT) grants were also analyzed but are not included in the project- and infrastructure-based findings because the grant recipient's location may not correspond to the community that benefits directly from the funding.

## Spatial Analysis of Project Awardees

We use project recipient names and addresses to determine which communities received WEP funding using two methods. First, we cleaned project recipient names and directly matched them to census-designated spatial geographies, including counties, cities, towns, and villages. Of the 6,719 project awards analyzed, 49.3% (n = 3,313) were matched to a census geography (i.e., a county, city, town, village).<sup>16</sup> Second, 49.9% of projects (n = 3,351) were analyzed using geocoding techniques. Specifically, we used the Google Geocoding API to obtain an estimated latitude/longitude coordinate for each project based on the recipient's name and address. We estimated the project's community by identifying the census block group within which the latitude/longitude coordinate is located. For projects analyzed using this geocoding technique, we have less certainty that the census block group accurately reflects the awards' beneficiary population. Less than one percent of projects (n = 55 projects) were not analyzed because the information recorded in the database did not correspond to a named census spatial geography and was not matched via geocoding techniques.

\*We also exclude 9 projects that were listed from 2008-2009 because they had negative dollar values associated.

Next, we analyzed community sociodemographics for the 99.2% of projects that were located using either census or geocoding techniques. We obtained population and race/ethnicity data from the US Census Bureau's 2015-2019 5-year American Community Survey (ACS). We defined majority-BIPOC communities as those geographies in which >50% of the individuals in the population reported their race in the 2015-2019 American Community Survey as something other than "white only" and/or reported their ethnicity as "Hispanic or Latino." All data were analyzed in R version 3.5.2.

## Limitations and Future Research

Addressing several data limitations would enable a more robust equity analysis of USDA WEP funding. First, including spatial information about project recipients would improve community sociodemographic estimates both for the 55 projects excluded due to inadequate spatial information and for the 49.9% of projects analyzed using geocoding techniques, which contain greater uncertainty about the project location. For example, while projects may have benefited multiple census block groups, our method identifies only the census block group within which the geocoded project location falls. To control for uncertainty in the project location estimates, we performed a sensitivity analysis of our results that excluded the 3.1% of WEP award recipients for whom the API returned more than one possible location coordinate (Appendix B). Even with these results excluded, our overall results for both the percentage of projects and the level of funding remained similar to those reported in Table 1. Second, as mentioned previously, obtaining data on which communities benefit from TAT grants would enable an equity analysis of this vital grant program. Finally, we recommend that USDA RD undertake further investigation to assess whether the communities that have received WEP funding are representative of the communities that both apply and are eligible for WEP funding. The lack of program-specific eligibility datasets forecloses analyses of how historic WEP funding patterns meet the need for funding in majority-BIPOC communities.

Future research can and should build on this analysis. First, a detailed review of individual projects would improve our certainty that the funding analyzed was targeted specifically to water and wastewater projects. While all programs analyzed here include water and wastewater grants, some projects not focused on water may have been included. For example, the Water and Waste Disposal Loans And Grants (Section 306C) and the Solid Waste Management Grant (10.762) include solid waste disposal projects, many but not all of which protect source water quality. Second, future research could analyze community sociodemographics in more detail, building on the approach used here, which uses a 50% threshold to define communities as majority non-Hispanic white or majority-BIPOC. Third, in this initial study we use the 2015-2019 ACS 5-year estimates to analyze all grants. Future equity analyses could utilize ACS 5-year estimates from the specific project funding year.

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Community Water Center staff initially conceived of this study, provided study advice, and co-authored this report.

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# Appendix A: Additional Tables

**Table A1.** Funding Distribution by Community Sociodemographics (FY2010-FY2021)

USDA Rural Utilities Service WEP Funding Assistance Analyzed (Catalog of Federal Domestic Assistance Listing Reference)	Summed Funding (Grants and Loans)	
	Majority-BIPOC Communities	Majority Non-Hispanic White Communities
10.759: Part 1774 Special Evaluation Assistance for Rural Communities and Households (SEARCH)	\$ 1,541,796	\$ 8,699,750
10.760: Water and Waste Disposal Systems for Rural Communities	\$ 1,168,466,740	\$ 7,898,281,413
10.762: Solid Waste Management Grants	\$ 1,920,522	\$ 15,956,383
10.763: Emergency Community Water Assistance Grants	\$ 11,603,275	\$ 49,401,688
10.770: Water and Waste Disposal Loans and Grants (Section 306C)	\$ 220,418,362	\$ 43,880,926
10.862: Household Water Well System Grant Program	\$ 1,191,512	\$ 5,101,489
10.864: Grant Program to Establish a Fund for Financing Water and Wastewater Projects	\$ 0	\$ 4,000,000
<b>TOTAL:</b>	<b>\$1,405,142,206</b>	<b>\$8,025,321,648</b>

**Table A2. Technical Assistance and Training (TAT) Grants (10.761) Awards (FY2013-FY2021)**

State	Recipient	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
<b>WWD PILOT PROGRAM – TECHNICAL ASSISTANCE GRANT</b>											
Alabama	South Alabama, University of									\$4.849M	\$4,849,909
<b>WWD TECHNICAL ASSISTANCE 2017 DISASTERS GRANTS</b>											
DC	Rural Community Assistance Partnership, Inc.						\$500,000				\$500,000
Oklahoma	National Rural Water Association						\$500,000				\$500,000
<b>WWD TECHNICAL ASSISTANCE &amp; TRAINING GRANTS</b>											
Alaska	Alaska Forum on the Environment, Inc			\$63,809	\$98,728	\$95,000	\$133,625	\$180,000	\$140,000	\$163,000	\$874,163
Alaska	Alaska Native Tribal Health Consortium	\$238,681				\$100,000	\$177,882	\$249,537	\$202,000		\$729,419
Alaska	Dena' Nena' Henash					\$100,000	\$150,943	\$205,346	\$168,000		\$624,289
Alaska	Kawerak, Inc.							\$129,246			\$129,246
Alaska	Maniilaq Association				\$75,235		\$114,876				\$190,111
Alaska	Norton Sound Health Corporation								\$190,000		\$190,000
Alaska	Yukon River Inter-Tribal Watershed Council			\$120,295		\$75,000	\$178,542	\$350,000	\$273,000		\$996,837
Alaska	Yukon-Kuskokwim Health Corporation			\$117,130	\$117,824	\$100,000	\$56,958				\$391,912
Alaska	Zender Env. Health & Research Group Co			\$99,916		\$98,788	\$285,347	\$276,450	\$208,000		\$968,501
Arizona	Inter Tribal Council Of Arizona, Inc.					\$600,000	\$1,076,368	\$1,000,000	\$923,000		\$3,599,368
Arizona	Painted Desert Demonstration Projects, Inc.					\$75,000	\$120,066	\$157,330	\$131,000		\$483,396
Arkansas	Winrock Int'l Institute For Agricultural Dev.				\$179,721		\$190,107				\$369,829
California	Environmental Justice Coalition For Water						\$218,240				\$218,240
California	Oct Water Quality Academy			\$99,965		\$99,996	\$477,020	\$155,742	\$536,000		\$1,368,723
California	Walking Shield American Indian Society Inc						\$100,000	\$100,000			\$200,000
Colorado	American Water Works Association					\$289,193	\$585,952	\$1,981,037			\$2,856,182
Colorado	Engineers Without Borders – USA, Inc.			\$169,253	\$162,544	\$181,669	\$286,627	\$483,719	\$408,792		\$1,692,604
DC	Rural Community Assistance Partnership, Inc.						\$5,055,133	\$10.0M	\$8.385M	\$820,000	\$24,271,133
Hawaii	Kumano I Ke Ala O Makaweli						\$504,448				\$504,448
Kentucky	Eastern Kentucky Pride Foundation, Inc.			\$74,935		\$50,000		\$100,000			\$224,935
Maine	N. Maine Development Commission, Inc			\$82,144					\$80,000		\$162,144
Nevada	Native American Water Association					\$100,000	\$233,400	\$240,400	\$191,000		\$764,800
New York	Syracuse University					\$100,000	\$181,336	\$171,950	\$143,000		\$596,286
Oklahoma	National Rural Water Association		\$547,516	\$863,070	\$53,493	\$10.5M	\$17.9M	\$13.7 M	\$17.082M	\$2.951M	\$63,649,905
Tennessee	United South & Eastern Tribes, Inc					\$100,000	\$177,742	\$214,045			\$491,787
Utah	Solid Waste Training Institute						\$150,890				\$150,890
Virgin Islands	Coral Bay Community Council					\$73,573		\$136,942			\$210,515
Wash.	Pacific NW Pollution Prevention Resource Ctr						\$106,618	\$170,000	\$398,000		\$674,618
Wash.	S. Central Washington Resource Conservation & Development	\$70,365									\$70,365
W. Virginia	West Virginia University Research Corp.					\$250,000	\$452,799	\$526,551	\$422,000		\$1,651,350
	<b>TOTAL</b>	<b>\$309,046</b>	<b>\$547,516</b>	<b>\$1,690,517</b>	<b>\$687,546</b>	<b>\$12,984,828</b>	<b>\$29,926,498</b>	<b>\$30,583,933</b>	<b>\$29,880,792</b>	<b>\$8,783,909</b>	<b>\$115,155,905</b>

**Table A3.** Percentage of WEP Projects Located in Majority-BIPOC Communities, by State, District, or Territory

State	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Alabama	35.8	64.2
Alaska	22.0	78.0
Arizona	39.4	60.6
Arkansas	15.8	84.2
California	30.2	69.8
Colorado	25.6	74.4
Connecticut	0.0	100.0
Delaware	9.4	90.6
DC	0.0	100.0
Florida	29.2	70.8
Georgia	48.2	51.8
Hawaii	100.0	0.0
Idaho	7.4	92.7
Illinois	1.7	98.3
Indiana	0.7	99.3
Iowa	0.4	99.7
Kansas	1.6	98.4
Pennsylvania	0.0	100.0
Kansas	1.6	98.4
Kentucky	1.0	99.0
Louisiana	33.0	67.0
Maine	1.9	98.1
Maryland	6.9	93.1
Mass.	0.0	100.0
Michigan	3.2	96.8
Minnesota	5.7	94.3
Mississippi	41.9	58.1

State	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Missouri	2.5	97.5
Montana	14.7	85.3
Nebraska	1.5	98.5
Nevada	12.8	87.2
New Hampshire	0.0	100.0
New Jersey	29.3	70.7
New Mexico	80.9	19.1
New York	2.6	97.4
N. Carolina	42.1	57.9
N. Dakota	15.6	84.4
Ohio	3.5	96.6
Oklahoma	10.7	89.3
Oregon	1.9	98.2
Pennsylvania	0.0	100.0
Puerto Rico	100.0	0.0
Rhode Island	0.0	100.0
S. Carolina	59.5	40.5
S. Dakota	22.7	77.3
Tennessee	1.3	98.7
Texas	47.0	53.0
Utah	0.0	100.0
Vermont	0.0	100.0
Virginia	7.3	92.7
Washington	15.4	84.6
West Virginia	0.0	100.0
Wisconsin	2.5	97.5
Wyoming	14.0	86.0



**Table A4.** Percentage of WEP projects located in majority-BIPOC communities, by Congressional District

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Alabama	1	5	22	27	18.5	81.5
Alabama	2	18	32	50	36.0	64.0
Alabama	3	5	18	23	21.7	78.3
Alabama	4	0	16	16	0.0	100.0
Alabama	5	0	5	5	0.0	100.0
Alabama	6	0	1	1	0.0	100.0
Alabama	7	30	10	40	75.0	25.0
Alaska	0	40	142	182	22.0	78.0
Arizona	1	20	20	40	50.0	50.0
Arizona	2	0	5	5	0.0	100.0
Arizona	3	13	0	13	100.0	0.0
Arizona	4	6	33	39	15.4	84.6
Arizona	5	NA	NA	NA	NA	NA
Arizona	6	2	0	2	100.0	0.0
Arizona	7	0	4	4	0.0	100.0
Arizona	8	NA	NA	NA	NA	NA
Arizona	9	0	1	1	0.0	100.0
Arkansas	1	7	64	71	9.9	90.1
Arkansas	2	3	1	4	75.0	25.0
Arkansas	3	0	28	28	0.0	100.0
Arkansas	4	12	24	36	33.3	66.7
California	1	1	29	30	3.3	96.7
California	2	2	18	20	10.0	90.0
California	3	9	9	18	50.0	50.0
California	4	0	22	22	0.0	100.0
California	5	0	4	4	0.0	100.0
California	6	0	5	5	0.0	100.0
California	7	NA	NA	NA	NA	NA
California	8	0	4	4	0.0	100.0
California	9	0	1	1	0.0	100.0
California	10	1	0	1	100.0	0.0
California	11	NA	NA	NA	NA	NA
California	12	NA	NA	NA	NA	NA
California	13	1	0	1	100.0	0.0
California	14	NA	NA	NA	NA	NA
California	15	NA	NA	NA	NA	NA
California	16	3	0	3	100.0	0.0
California	17	NA	NA	NA	NA	NA

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
California	18	0	2	2	0.0	100.0
California	19	NA	NA	NA	NA	NA
California	20	0	2	2	0.0	100.0
California	21	10	0	10	100.0	0.0
California	22	8	0	8	100.0	0.0
California	23	3	2	5	60.0	40.0
California	24	1	9	10	10.0	90.0
California	25	0	3	3	0.0	100.0
California	26	NA	NA	NA	NA	NA
California	27	NA	NA	NA	NA	NA
California	28	NA	NA	NA	NA	NA
California	29	NA	NA	NA	NA	NA
California	30	NA	NA	NA	NA	NA
California	31	NA	NA	NA	NA	NA
California	32	NA	NA	NA	NA	NA
California	33	NA	NA	NA	NA	NA
California	34	NA	NA	NA	NA	NA
California	35	NA	NA	NA	NA	NA
California	36	5	1	6	83.3	16.7
California	37	NA	NA	NA	NA	NA
California	38	NA	NA	NA	NA	NA
California	39	NA	NA	NA	NA	NA
California	40	NA	NA	NA	NA	NA
California	41	NA	NA	NA	NA	NA
California	42	NA	NA	NA	NA	NA
California	43	NA	NA	NA	NA	NA
California	44	NA	NA	NA	NA	NA
California	45	NA	NA	NA	NA	NA
California	46	NA	NA	NA	NA	NA
California	47	NA	NA	NA	NA	NA
California	48	NA	NA	NA	NA	NA
California	49	NA	NA	NA	NA	NA
California	50	1	3	4	25.0	75.0
California	51	6	4	10	60.0	40.0
California	52	NA	NA	NA	NA	NA
California	53	NA	NA	NA	NA	NA
Colorado	1	0	1	1	0.0	100.0
Colorado	2	0	11	11	0.0	100.0
Colorado	3	19	17	36	52.8	47.2
Colorado	4	3	28	31	9.7	90.3

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Colorado	5	0	3	3	0.0	100.0
Colorado	6	0	4	4	0.0	100.0
Colorado	7	NA	NA	NA	NA	NA
Connecticut	1	NA	NA	NA	NA	NA
Connecticut	2	0	14	14	0.0	100.0
Connecticut	3	NA	NA	NA	NA	NA
Connecticut	4	NA	NA	NA	NA	NA
Connecticut	5	0	6	6	0.0	100.0
Delaware	0	3	29	32	9.4	90.6
Dist. of Columbia	98	0	4	4	0.0	100.0
Florida	1	1	13	14	7.1	92.9
Florida	2	3	18	21	14.3	85.7
Florida	3	2	3	5	40.0	60.0
Florida	4	NA	NA	NA	NA	NA
Florida	5	3	0	3	100.0	0.0
Florida	6	NA	NA	NA	NA	NA
Florida	7	0	1	1	0.0	100.0
Florida	8	NA	NA	NA	NA	NA
Florida	9	0	3	3	0.0	100.0
Florida	10	5	2	7	71.4	28.6
Florida	11	0	2	2	0.0	100.0
Florida	12	NA	NA	NA	NA	NA
Florida	13	NA	NA	NA	NA	NA
Florida	14	NA	NA	NA	NA	NA
Florida	15	NA	NA	NA	NA	NA
Florida	16	NA	NA	NA	NA	NA
Florida	17	1	4	5	20.0	80.0
Florida	18	NA	NA	NA	NA	NA
Florida	19	NA	NA	NA	NA	NA
Florida	20	NA	NA	NA	NA	NA
Florida	21	NA	NA	NA	NA	NA
Florida	22	NA	NA	NA	NA	NA
Florida	23	NA	NA	NA	NA	NA
Florida	24	NA	NA	NA	NA	NA
Florida	25	4	0	4	100.0	0.0
Florida	26	NA	NA	NA	NA	NA
Florida	27	NA	NA	NA	NA	NA
Georgia	1	2	9	11	18.2	81.8
Georgia	2	11	1	12	91.7	8.3
Georgia	3	3	5	8	37.5	62.5

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Georgia	4	NA	NA	NA	NA	NA
Georgia	5	NA	NA	NA	NA	NA
Georgia	6	NA	NA	NA	NA	NA
Georgia	7	0	2	2	0.0	100.0
Georgia	8	14	3	17	82.4	17.7
Georgia	9	0	8	8	0.0	100.0
Georgia	10	10	8	18	55.6	44.4
Georgia	11	NA	NA	NA	NA	NA
Georgia	12	0	2	2	0.0	100.0
Georgia	13	NA	NA	NA	NA	NA
Georgia	14	0	5	5	0.0	100.0
Hawaii	1	4	0	4	100.0	0.0
Hawaii	2	4	0	4	100.0	0.0
Idaho	1	8	83	91	8.8	91.2
Idaho	2	2	43	45	4.4	95.6
Illinois	1	NA	NA	NA	NA	NA
Illinois	2	1	0	1	100.0	0.0
Illinois	3	NA	NA	NA	NA	NA
Illinois	4	NA	NA	NA	NA	NA
Illinois	5	NA	NA	NA	NA	NA
Illinois	6	NA	NA	NA	NA	NA
Illinois	7	NA	NA	NA	NA	NA
Illinois	8	NA	NA	NA	NA	NA
Illinois	9	NA	NA	NA	NA	NA
Illinois	10	NA	NA	NA	NA	NA
Illinois	11	NA	NA	NA	NA	NA
Illinois	12	3	35	38	7.9	92.1
Illinois	13	0	51	51	0.0	100.0
Illinois	14	NA	NA	NA	NA	NA
Illinois	15	1	100	101	1.0	99.0
Illinois	16	0	23	23	0.0	100.0
Illinois	17	0	31	31	0.0	100.0
Illinois	18	0	42	42	0.0	100.0
Indiana	1	0	2	2	0.0	100.0
Indiana	2	0	10	10	0.0	100.0
Indiana	3	0	13	13	0.0	100.0
Indiana	4	0	16	16	0.0	100.0
Indiana	5	0	13	13	0.0	100.0
Indiana	6	1	35	36	2.8	97.2
Indiana	7	NA	NA	NA	NA	NA



State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Indiana	8	0	45	45	0.0	100.0
Indiana	9	0	13	13	0.0	100.0
Iowa	1	0	39	39	0.0	100.0
Iowa	2	0	45	45	0.0	100.0
Iowa	3	0	95	95	0.0	100.0
Iowa	4	1	109	110	0.9	99.1
Kansas	1	1	85	86	1.2	98.8
Kansas	2	2	71	73	2.7	97.3
Kansas	3	0	1	1	0.0	100.0
Kansas	4	0	28	28	0.0	100.0
Kentucky	1	2	59	61	3.3	96.7
Kentucky	2	0	51	51	0.0	100.0
Kentucky	3	NA	NA	NA	NA	NA
Kentucky	4	0	16	16	0.0	100.0
Kentucky	5	0	62	62	0.0	100.0
Kentucky	6	0	14	14	0.0	100.0
Louisiana	1	0	2	2	0.0	100.0
Louisiana	2	NA	NA	NA	NA	NA
Louisiana	3	0	7	7	0.0	100.0
Louisiana	4	11	20	31	35.5	64.5
Louisiana	5	19	43	62	30.7	69.4
Louisiana	6	6	1	7	85.7	14.3
Maine	1	0	25	25	0.0	100.0
Maine	2	2	79	81	2.5	97.5
Maryland	1	5	57	62	8.1	91.9
Maryland	2	NA	NA	NA	NA	NA
Maryland	3	NA	NA	NA	NA	NA
Maryland	4	NA	NA	NA	NA	NA
Maryland	5	2	3	5	40.0	60.0
Maryland	6	0	31	31	0.0	100.0
Maryland	7	NA	NA	NA	NA	NA
Maryland	8	0	3	3	0.0	100.0
Massachusetts	1	0	10	10	0.0	100.0
Massachusetts	2	0	22	22	0.0	100.0
Massachusetts	3	0	9	9	0.0	100.0
Massachusetts	4	NA	NA	NA	NA	NA
Massachusetts	5	NA	NA	NA	NA	NA
Massachusetts	6	0	2	2	0.0	100.0
Massachusetts	7	0	3	3	0.0	100.0
Massachusetts	8	0	1	1	0.0	100.0

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Massachusetts	9	0	7	7	0.0	100.0
Michigan	1	6	86	92	6.5	93.5
Michigan	2	0	26	26	0.0	100.0
Michigan	3	0	10	10	0.0	100.0
Michigan	4	0	44	44	0.0	100.0
Michigan	5	1	31	32	3.1	96.9
Michigan	6	2	26	28	7.1	92.9
Michigan	7	0	18	18	0.0	100.0
Michigan	8	0	6	6	0.0	100.0
Michigan	9	NA	NA	NA	NA	NA
Michigan	10	0	22	22	0.0	100.0
Michigan	11	NA	NA	NA	NA	NA
Michigan	12	NA	NA	NA	NA	NA
Michigan	13	NA	NA	NA	NA	NA
Michigan	14	NA	NA	NA	NA	NA
Minnesota	1	0	16	16	0.0	100.0
Minnesota	2	0	3	3	0.0	100.0
Minnesota	3	NA	NA	NA	NA	NA
Minnesota	4	NA	NA	NA	NA	NA
Minnesota	5	NA	NA	NA	NA	NA
Minnesota	6	NA	NA	NA	NA	NA
Minnesota	7	10	108	118	8.5	91.5
Minnesota	8	1	55	56	1.8	98.2
Mississippi	1	13	30	43	30.2	69.8
Mississippi	2	31	12	43	72.1	27.9
Mississippi	3	4	19	23	17.4	82.6
Mississippi	4	4	11	15	26.7	73.3
Missouri	1	NA	NA	NA	NA	NA
Missouri	2	NA	NA	NA	NA	NA
Missouri	3	0	16	16	0.0	100.0
Missouri	4	0	23	23	0.0	100.0
Missouri	5	0	1	1	0.0	100.0
Missouri	6	2	56	58	3.5	96.6
Missouri	7	3	22	25	12.0	88.0
Missouri	8	0	79	79	0.0	100.0
Montana	0	24	139	163	14.7	85.3
Nebraska	1	0	23	23	0.0	100.0
Nebraska	2	NA	NA	NA	NA	NA
Nebraska	3	2	109	111	1.8	98.2
Nevada	1	NA	NA	NA	NA	NA

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Nevada	2	5	17	22	22.7	77.3
Nevada	3	NA	NA	NA	NA	NA
Nevada	4	0	17	17	0.0	100.0
New Hampshire	1	0	15	15	0.0	100.0
New Hampshire	2	0	49	49	0.0	100.0
New Jersey	1	11	8	19	57.9	42.1
New Jersey	2	6	19	25	24.0	76.0
New Jersey	3	0	1	1	0.0	100.0
New Jersey	4	0	4	4	0.0	100.0
New Jersey	5	0	3	3	0.0	100.0
New Jersey	6	0	1	1	0.0	100.0
New Jersey	7	0	5	5	0.0	100.0
New Jersey	8	NA	NA	NA	NA	NA
New Jersey	9	NA	NA	NA	NA	NA
New Jersey	10	NA	NA	NA	NA	NA
New Jersey	11	NA	NA	NA	NA	NA
New Jersey	12	NA	NA	NA	NA	NA
New Mexico	1	3	0	3	100.0	0.0
New Mexico	2	66	14	80	82.5	17.5
New Mexico	3	20	7	27	74.1	25.9
New York	1	NA	NA	NA	NA	NA
New York	2	NA	NA	NA	NA	NA
New York	3	NA	NA	NA	NA	NA
New York	4	NA	NA	NA	NA	NA
New York	5	NA	NA	NA	NA	NA
New York	6	NA	NA	NA	NA	NA
New York	7	NA	NA	NA	NA	NA
New York	8	NA	NA	NA	NA	NA
New York	9	NA	NA	NA	NA	NA
New York	10	NA	NA	NA	NA	NA
New York	11	NA	NA	NA	NA	NA
New York	12	NA	NA	NA	NA	NA
New York	13	NA	NA	NA	NA	NA
New York	14	NA	NA	NA	NA	NA
New York	15	NA	NA	NA	NA	NA
New York	16	NA	NA	NA	NA	NA
New York	17	NA	NA	NA	NA	NA
New York	18	0	1	1	0.0	100.0
New York	19	6	14	20	30.0	70.0
New York	20	0	1	1	0.0	100.0

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
New York	21	0	85	85	0.0	100.0
New York	22	4	40	44	9.1	90.9
New York	23	0	71	71	0.0	100.0
New York	24	0	58	58	0.0	100.0
New York	25	0	2	2	0.0	100.0
New York	26	NA	NA	NA	NA	NA
New York	27	0	98	98	0.0	100.0
North Carolina	1	33	5	38	86.8	13.2
North Carolina	2	6	8	14	42.9	57.1
North Carolina	3	10	16	26	38.5	61.5
North Carolina	4	3	0	3	100.0	0.0
North Carolina	5	0	10	10	0.0	100.0
North Carolina	6	4	3	7	57.1	42.9
North Carolina	7	9	17	26	34.6	65.4
North Carolina	8	8	13	21	38.1	61.9
North Carolina	9	7	1	8	87.5	12.5
North Carolina	10	3	22	25	12.0	88.0
North Carolina	11	0	12	12	0.0	100.0
North Carolina	12	0	1	1	0.0	100.0
North Carolina	13	0	6	6	0.0	100.0
North Dakota	0	17	92	109	15.6	84.4
Ohio	1	NA	NA	NA	NA	NA
Ohio	2	0	4	4	0.0	100.0
Ohio	3	NA	NA	NA	NA	NA
Ohio	4	0	11	11	0.0	100.0
Ohio	5	0	12	12	0.0	100.0
Ohio	6	3	40	43	7.0	93.0
Ohio	7	0	7	7	0.0	100.0
Ohio	8	0	10	10	0.0	100.0
Ohio	9	NA	NA	NA	NA	NA
Ohio	10	NA	NA	NA	NA	NA
Ohio	11	NA	NA	NA	NA	NA
Ohio	12	0	3	3	0.0	100.0
Ohio	13	1	0	1	100.0	0.0
Ohio	14	NA	NA	NA	NA	NA
Ohio	15	0	24	24	0.0	100.0
Ohio	16	0	1	1	0.0	100.0
Oklahoma	1	0	2	2	0.0	100.0
Oklahoma	2	11	42	53	20.8	79.3

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Oklahoma	3	0	38	38	0.0	100.0
Oklahoma	4	0	10	10	0.0	100.0
Oklahoma	5	NA	NA	NA	NA	NA
Oregon	1	0	5	5	0.0	100.0
Oregon	2	1	25	26	3.9	96.2
Oregon	3	NA	NA	NA	NA	NA
Oregon	4	0	17	17	0.0	100.0
Oregon	5	0	6	6	0.0	100.0
Pennsylvania	1	NA	NA	NA	NA	NA
Pennsylvania	2	NA	NA	NA	NA	NA
Pennsylvania	3	NA	NA	NA	NA	NA
Pennsylvania	4	0	2	2	0.0	100.0
Pennsylvania	5	0	10	10	0.0	100.0
Pennsylvania	6	0	2	2	0.0	100.0
Pennsylvania	7	0	1	1	0.0	100.0
Pennsylvania	8	0	7	7	0.0	100.0
Pennsylvania	9	0	7	7	0.0	100.0
Pennsylvania	10	0	10	10	0.0	100.0
Pennsylvania	11	0	5	5	0.0	100.0
Pennsylvania	12	0	6	6	0.0	100.0
Pennsylvania	13	0	2	2	0.0	100.0
Pennsylvania	14	0	16	16	0.0	100.0
Pennsylvania	15	0	13	13	0.0	100.0
Pennsylvania	16	0	8	8	0.0	100.0
Pennsylvania	17	0	5	5	0.0	100.0
Pennsylvania	18	NA	NA	NA	NA	NA
Puerto Rico	98	42	0	42	100.0	0.0
Rhode Island	1	0	21	21	0.0	100.0
Rhode Island	2	0	2	2	0.0	100.0
South Carolina	1	2	1	3	66.7	33.3
South Carolina	2	6	2	8	75.0	25.0
South Carolina	3	24	13	37	64.9	35.1
South Carolina	4	0	4	4	0.0	100.0
South Carolina	5	3	8	11	27.3	72.7
South Carolina	6	28	10	38	73.7	26.3
South Carolina	7	9	11	20	45.0	55.0
South Dakota	0	29	99	128	22.7	77.3
Tennessee	1	0	18	18	0.0	100.0
Tennessee	2	0	10	10	0.0	100.0
Tennessee	3	0	20	20	0.0	100.0



State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Tennessee	4	1	25	26	3.9	96.2
Tennessee	5	0	5	5	0.0	100.0
Tennessee	6	0	22	22	0.0	100.0
Tennessee	7	0	27	27	0.0	100.0
Tennessee	8	1	27	28	3.6	96.4
Tennessee	9	NA	NA	NA	NA	NA
Texas	1	7	10	17	41.2	58.8
Texas	2	NA	NA	NA	NA	NA
Texas	3	NA	NA	NA	NA	NA
Texas	4	2	12	14	14.3	85.7
Texas	5	2	10	12	16.7	83.3
Texas	6	0	5	5	0.0	100.0
Texas	7	NA	NA	NA	NA	NA
Texas	8	3	13	16	18.8	81.3
Texas	9	NA	NA	NA	NA	NA
Texas	10	0	4	4	0.0	100.0
Texas	11	3	18	21	14.3	85.7
Texas	12	NA	NA	NA	NA	NA
Texas	13	2	6	8	25.0	75.0
Texas	14	1	2	3	33.3	66.7
Texas	15	16	0	16	100.0	0.0
Texas	16	4	0	4	100.0	0.0
Texas	17	1	7	8	12.5	87.5
Texas	18	NA	NA	NA	NA	NA
Texas	19	5	23	28	17.9	82.1
Texas	20	NA	NA	NA	NA	NA
Texas	21	4	3	7	57.1	42.9
Texas	22	1	0	1	100.0	0.0
Texas	23	24	1	25	96.0	4.0
Texas	24	NA	NA	NA	NA	NA
Texas	25	0	6	6	0.0	100.0
Texas	26	0	1	1	0.0	100.0
Texas	27	3	6	9	33.3	66.7
Texas	28	21	1	22	95.5	4.6
Texas	29	NA	NA	NA	NA	NA
Texas	30	NA	NA	NA	NA	NA
Texas	31	1	1	2	50.0	50.0
Texas	32	NA	NA	NA	NA	NA
Texas	33	NA	NA	NA	NA	NA
Texas	34	15	0	15	100.0	0.0

State	Congressional District	Number of Projects in Majority-BIPOC Communities	Number of Projects in Majority Non-Hispanic White Communities	Total Number of Projects	Percentage of Projects in Majority-BIPOC Communities	Percentage of Projects in Majority Non-Hispanic White Communities
Texas	35	1	0	1	100.0	0.0
Texas	36	0	2	2	0.0	100.0
Utah	1	0	26	26	0.0	100.0
Utah	2	0	52	52	0.0	100.0
Utah	3	0	12	12	0.0	100.0
Utah	4	0	14	14	0.0	100.0
Vermont	0	0	84	84	0.0	100.0
Virginia	1	2	23	25	8.0	92.0
Virginia	2	1	0	1	100.0	0.0
Virginia	3	1	0	1	100.0	0.0
Virginia	4	3	2	5	60.0	40.0
Virginia	5	2	19	21	9.5	90.5
Virginia	6	0	21	21	0.0	100.0
Virginia	7	1	5	6	16.7	83.3
Virginia	8	NA	NA	NA	NA	NA
Virginia	9	0	56	56	0.0	100.0
Virginia	10	0	1	1	0.0	100.0
Virginia	11	NA	NA	NA	NA	NA
Washington	1	0	3	3	0.0	100.0
Washington	2	0	16	16	0.0	100.0
Washington	3	0	14	14	0.0	100.0
Washington	4	20	26	46	43.5	56.5
Washington	5	0	20	20	0.0	100.0
Washington	6	0	8	8	0.0	100.0
Washington	7	NA	NA	NA	NA	NA
Washington	8	0	17	17	0.0	100.0
Washington	9	0	2	2	0.0	100.0
Washington	10	0	4	4	0.0	100.0
West Virginia	1	0	48	48	0.0	100.0
West Virginia	2	0	42	42	0.0	100.0
West Virginia	3	0	59	59	0.0	100.0
Wisconsin	1	0	4	4	0.0	100.0
Wisconsin	2	0	22	22	0.0	100.0
Wisconsin	3	0	58	58	0.0	100.0
Wisconsin	4	NA	NA	NA	NA	NA
Wisconsin	5	0	11	11	0.0	100.0
Wisconsin	6	0	17	17	0.0	100.0
Wisconsin	7	5	55	60	8.3	91.7
Wisconsin	8	0	27	27	0.0	100.0
Wyoming	0	7	43	50	14.0	86.0

**Table A5. USDA Water and Environmental Programs Eligibility Comparison**

Program Name <sup>i</sup>	Eligible Applicants	Eligible Areas	Other Criteria	Program URL
<p><b>10.759: Part 1774 Special Evaluation Assistance for Rural Communities And Households (SEARCH)</b> Supports very small, financially distressed rural communities with predevelopment feasibility studies, design and technical assistance on proposed WWD projects.</p>	<ul style="list-style-type: none"> <li>Most state and local governmental entities (e.g. municipalities, counties, other political subdivisions of a State)</li> <li>Nonprofits</li> <li>Federally recognized tribes</li> </ul>	<p>Areas to be served must be rural (&lt;2,500 people) and financially distressed: median household income (MHI) below the poverty line or less than 80% of the statewide non-metropolitan MHI (SNMHI)</p>	<p>Predevelopment planning costs must be related to a proposed project that meets certain requirements</p>	<p><a href="#">URL</a></p>
<p><b>10.760: WATER AND WASTE DISPOSAL (WWD) SYSTEMS FOR RURAL COMMUNITIES (SECTION 306)<sup>ii</sup></b> <b>Types of assistance:</b></p> <ul style="list-style-type: none"> <li>Direct Loans</li> <li>Guaranteed/Insured Loans<sup>iii</sup></li> <li>Project Grants</li> </ul> <p><b>Activities:</b></p> <ul style="list-style-type: none"> <li>Clean and reliable domestic water</li> <li>Sanitary sewage disposal</li> <li>Sanitary solid waste disposal</li> <li>Stormwater collection, transmission, disposal</li> <li>Includes pre-development planning grants for WWD and rural Alaskan Villages</li> </ul>	<ul style="list-style-type: none"> <li>Most state and local governmental entities</li> <li>Indian tribes on Federal and State reservations</li> <li>Federally recognized Tribes</li> <li>Private nonprofits</li> </ul>	<ul style="list-style-type: none"> <li>Rural areas and towns with</li> <li>≤ 10,000 populations except for Guaranteed Loans<sup>iii</sup></li> <li>Tribal lands in rural areas</li> <li>Colonias</li> </ul>	<p>Evidence of legal and organizational capacity, economic feasibility and financial responsibility relative to the activity for which assistance is requested; facilities receiving federal financing must be used for a public purpose</p>	<p><a href="#">URL</a></p>
<p><b>Water &amp; Waste Disposal (WWD) Predevelopment Planning Grants</b> Support eligible low-income communities plan and develop applications for proposed USDA Rural Development water or waste disposal projects. (Analyzed under CFDA number 10.760)</p>	<ul style="list-style-type: none"> <li>Most state and local governments</li> <li>Nonprofit organizations</li> <li>Federally-recognized Tribes</li> </ul>	<ul style="list-style-type: none"> <li>Rural areas or towns with</li> <li>≤ 10,000 population</li> <li>Tribal lands in rural areas</li> <li>Colonias</li> <li>MHI below poverty line or &lt; 80% of the SNMHI</li> </ul>	<p>Applicant or 3rd-party must contribute 25% of the project cost</p>	<p><a href="#">URL</a></p>
<p><b>Water systems for rural and Native villages in Alaska (SECTION 306D)</b> Rural Alaskan Village Grant (RAVG) Program USDA established a separate regulation for making grants to rural or Native Alaskan Village effective Sept. 1, 2015, remains under CFDA 10.760 per URL. (Analyzed under CFDA number 10.760)</p>	<ul style="list-style-type: none"> <li>Native villages in Alaska (AK) as defined in the Alaska Native Claims Settlement Act</li> <li>AK Native Tribal Health Consortium on behalf of recipient</li> <li>State of Alaska for the benefit of a rural Alaskan village or hub e.g. AK Dept. of Environmental Conservation</li> </ul>	<ul style="list-style-type: none"> <li>Rural areas and towns with ≤ 10,000 population</li> <li>MHI of less than 110% of the SNMHI</li> <li>Must be used to remedy a dire sanitation condition.</li> </ul>	<p>State of Alaska or local contributions must provide at least 25% of the project costs</p>	<p><a href="#">URL</a></p>

Program Name <sup>i</sup>	Eligible Applicants	Eligible Areas	Other Criteria	Program URL
<p><b>10.762: SOLID WASTE MANAGEMENT GRANTS</b> Reduces or eliminates pollution of water resources by providing funding for organizations that provide technical assistance or training to improve the planning and management of solid waste sites.</p>	<ul style="list-style-type: none"> <li>Public bodies</li> <li>Nonprofits</li> <li>Federally recognized tribes</li> <li>Academic institutions</li> </ul>	<ul style="list-style-type: none"> <li>Rural areas and towns with ≤ 10,000 population</li> </ul> <p>Special consideration if:</p> <ul style="list-style-type: none"> <li>Area with &lt; 5,500 or &lt; 2,500 people</li> <li>Lower-income</li> </ul>	<p>Applicants must have “legal authority and capacity to provide technical assistance or training”</p>	<p><a href="#">URL</a></p>
<p><b>10.763: EMERGENCY COMMUNITY WATER ASSISTANCE GRANTS (SECTION 306A)</b> These programs are for repairing or reimbursing rural utilities after disasters; applicants should rely on FEMA during disasters. <i>A Federal disaster declaration is not required.</i></p>	<ul style="list-style-type: none"> <li>Most state and local governmental entities</li> <li>Certain public entities and nonprofit corporations in rural areas</li> <li>Tribes on federal and state reservations and other federally recognized tribal groups</li> </ul>	<ul style="list-style-type: none"> <li>Rural areas or towns with &lt; 10,000 population</li> <li>Tribal lands in rural areas</li> <li>Colonias</li> </ul>	<p>Must show a major decline in quantity or quality of water occurred within two years of application date</p>	<p><a href="#">URL</a></p>
<p><b>10.770: WATER AND WASTE DISPOSAL (WWD) LOANS AND GRANTS (SECTION 306C)</b> Assigned to the program is 10.770, <i>Water and Waste Facility Loans and Grants to Alleviate Health Risks</i>, and designed to fund projects that primarily benefit members of Federally recognized Tribes or colonias located in small, rural communities.</p>	<ul style="list-style-type: none"> <li>State and local governmental entities serving eligible areas</li> <li>Nonprofit organizations</li> <li>Utility districts serving colonias</li> <li>Federally recognized Tribes</li> </ul>	<ul style="list-style-type: none"> <li>Federally recognized tribal lands or 50% of the users in project area are members of a Federally Recognized Tribe</li> <li>Areas recognized as colonias before October 1, 1989</li> <li>Rural areas and towns with ≤ 10,000 population</li> </ul>	<p>Residents of the area to be served must face significant health risks due to a lack of access to, or use of adequate, affordable water or waste disposal.</p>	<p><a href="#">URL</a></p>
<p><b>Individual Water &amp; Wastewater Grants (Colonias) (SECTION 306C)</b> Facilitates the use of community water and/or waste disposal systems by the residents of colonias along the U.S./Mexico border by funding connection of service lines to a residence, pay utility hook-up fees, install plumbing and related fixture etc. <i>(Analyzed under CFDA number 10.770).</i></p>	<ul style="list-style-type: none"> <li>Own and occupy a dwelling located in a colonia and have evidence of ownership.</li> <li>Have taxable income below the most recent poverty income guidelines established by the U.S. Department of Health and Human Services</li> </ul>	<ul style="list-style-type: none"> <li>Only available in Arizona, California, New Mexico, and Texas</li> <li>Located in a rural area and is identified as a community (designated in writing by the state or county it is located in)</li> <li>Determined to be a colonia on the basis of objective criteria including lack of: potable water supply, adequate sewage systems, decent, safe and sanitary housing, or have inadequate roads and drainage</li> </ul>	<ul style="list-style-type: none"> <li>Maximum grant for water is \$3,500</li> <li>Maximum grant for sewer is \$4,000</li> <li>Lifetime assistance not to exceed \$5,000</li> </ul>	<p><a href="#">URL</a></p>

Program Name <sup>i</sup>	Eligible Applicants	Eligible Areas	Other Criteria	Program URL
<p><b>10.862: Household Water Well System (HWWS) Grant Program / Rural Decentralized Water Systems (DWS) Grant Program</b></p> <p>Formerly referred to as HWWS program, the DWS program supports eligible applications to extent loans and sub-grants that fund construction, refurbishing, or servicing of individually-owned household water well and septic system up to the point of entry with limited exception.</p>	<p>For a qualified nonprofit or tribe [501(c)(3) status] to create a revolving loan fund for eligible individuals in eligible areas.</p> <p>Eligible individuals are owner-occupied households that make less than 60%<sup>iv</sup> of the statewide non-metropolitan household income (SNMHI)</p>	<ul style="list-style-type: none"> <li>• Rural areas or towns with ≤ 50,000 population</li> <li>• Tribal lands in rural areas</li> <li>• Colonias</li> </ul>	<p>The non-profit applicant must contribute at least 10% in matching funds to capitalize the loan fund.</p>	<p><a href="#">URL</a></p>
<p><b>10.864: Grant Program to Establish a Fund For Financing Water And Wastewater Projects (Revolving Fund Program)</b></p> <p>Revolving loan fund to provide financing to extend and improve WWD systems in rural areas via pre-development costs for water and wastewater treatment projects and short-term small capital improvement projects.</p>	<ul style="list-style-type: none"> <li>• State and local governmental entities</li> <li>• Nonprofits</li> <li>• Indian tribes on federal and state reservations and other federally recognized Indian tribes</li> </ul>	<ul style="list-style-type: none"> <li>• Rural areas or towns with ≤ 10,000 population</li> <li>• Tribal lands in rural areas</li> <li>• Colonias</li> </ul>	<p>The non-profit applicant must contribute at least 20% in matching funds to capitalize the revolving loan fund.</p>	<p><a href="#">URL</a></p>

i Program names and numbers are assigned based on the Catalog of Federal Domestic Assistance (CDFA) listing, with some exception due to legislative changes.

ii Section 306 of the Consolidated Farm and Rural Development Act (the Con Act) governs many of these programs and many have distinct CFDA agency and program numbers e.g. 306A (emergency and imminent grants); 306C (loans and grants to alleviate health risks), for example.

iii The Agriculture Improvement Act of 2018 (the 2018 Farm Bill) amended the definition of rural for determining eligibility for *guaranteed loans* to populations of ≤ 50,000 for two programs, including the Water and Waste Disposal program (increased from ≤ 10,000); the threshold for population eligibility for grant and direct loans was not changed. The USDA prioritizes guaranteed loan applications for eligible areas with ≤ 10,000 people.

iv USDA's implementation of the 2018 Farm Bill revised the income eligibility language from 100% of the SNMHI to 60% of SNMHI ([Federal Register](#), 2020).



# Appendix B. Sensitivity Analyses

## Sensitivity Analyses

Because the Google Geocoding API returned more than one possible location coordinate for a subset of project awardees, we conducted a sensitivity analysis to assess the impact of locational uncertainties in the geocoded data. Results were similar to those reported in Table 1 when excluding  $n = 211$  geocodes (i.e., 3.1% of the overall sample of 6,719 USDA WEP prime awards) that matched to more than one latitude/longitude coordinate. When excluding geocodes that matched to more than one latitude/longitude coordinate, 15.2% of projects ( $n = 979$  projects) and \$1.36 billion in funding went to majority-BIPOC communities. 84.8% of projects ( $n = 5,474$  projects) and \$7.85 billion in funding went to majority non-Hispanic white communities.