Information Collection Request for the 2020 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA)

PART A OF THE SUPPORTING STATEMENT

Prepared for:

U.S. Environmental Protection Agency Office of Ground Water and Drinking Water Drinking Water Protection Division

Table of Contents

PART	A OF TH	HE SUPPORTING STATEMENT	1			
A.1	IDENT A.1.a A.1.b	TFICATION OF THE INFORMATION COLLECTION Title of the Information Collection Request	1			
A.2	NEED FOR AND USE OF THE COLLECTION					
11,2	A.2.a	Authority and Need for the Collection				
	A.2.b	Use and Users of the Information				
A.3		UPLICATION, CONSULTATIONS AND OTHER COLLECTION CRITERIA				
	A.3.a A.3.b	Non-duplicationPublic Notice Required Prior to ICR Submission to OMB				
	A.3.c	Consultations				
	A.3.d	Effects of Less Frequent Collection.				
	A.3.e	General Guidelines				
	A.3.f	Confidentiality Questions				
	A.3.g	Sensitive Questions				
	A.4.a	Respondents/NAICS Codes				
	A.4.b	Information Requested				
A.5	INFOR	INFORMATION COLLECTED: AGENCY ACTIVITIES, COLLECTION METHODOLOGY				
11.0		NFORMATION MANAGEMENT				
	A.5.a	Agency Activities				
	A.5.b	Collection Methodology and Management				
	A.5.c	Small Entity Flexibility	25			
	A.5.d	Collection Schedule	26			
A.6	ESTIM	ESTIMATING THE BURDEN AND COST OF THE COLLECTION				
	A.6.a	Respondent Burden	27			
	A.6.b	Respondent Costs	51			
	A.6.c	Agency Burden and Cost	54			
	A.6.d	Estimating Respondent Universe and Total Burden and Costs				
	A.6.e	Bottom Line Burden Hours and Costs				
	A.6.f	Reasons for Change in Burden				
	A.6.g	Burden Statement	66			

List of Appendices

Appendix A – Public Notice Required Prior to ICR Submission to OMB (See Separate Document)

Appendix B – Data Collection Instrument and Lists of Codes (See Separate Document)

Appendix C – Comments and Response to Comments Received on the 2020 DWINSA Peer Review (See Separate Document)

Appendix D – Comments and Response to Comments Received on the First Federal Register Notice (See Separate Document)

ICR for 2020 DWINSA July 2020

List of Tables

Exhibit A-1-1 2020 State and Native American DWINSA and Additional Question Recipients4
Exhibit A-5-1 Collection Schedule28
Exhibit A-6-1 Estimated Average Unit Burden for Systems Serving More Than 50,000 Persons33
Exhibit A-6-2 Estimated Average Unit Burden for Systems Serving 3,301 to 50,000 Persons36
Exhibit A-6-3 Estimated Unit Burden for Small CWSs37
Exhibit A-6-4 Estimated Average Unit Burden for NPNCWSs Serving More Than 10,000 Persons39
Exhibit A-6-5 Estimated Average Unit Burden for NPNCWSs Serving 10,000 or Fewer Persons40
Exhibit A-6-6 Estimated Average Unit Burden for Systems Serving 3,301-100,000 Persons in Partial Participation States41
Exhibit A-6-7 Estimated Unit Burden for American Indian and Alaska Native Village Water Systems42
Exhibit A-6-8 State Unit Burden for Up-Front Activities
Exhibit A-6-9 State Unit Burden for Systems Serving More Than 50,000 Persons45
Exhibit A-6-10 Estimated State Average Unit Burden for Systems Serving 3,301 to 50,000 Persons48
Exhibit A-6-11 State Unit Burden for Small Systems48
Exhibit A-6-12 Navajo Nation Unit Burden for Systems50
Exhibit A-6-13 Estimated State Average Unit Burden for NPNCWSs Serving More Than 10,000 Persons
Exhibit A-6-14 State Unit Burden for NPNCWSs52
Exhibit A-6-15 Partial Participation State Unit Burden for CWSs Serving 3,301-100,000 Persons53
Exhibit A-6-16 Total Burden and Cost to Fully Participating Community Water Systems and American Indian and Alaska Native Village Systems (2018\$)54
Exhibit A-6-17 Total Burden and Cost to NPNCWSs (2018\$)55

ICR for 2020 DWINSA July 2020

Exhibit A-6-18 Total Burden and Cost to Medium Water Systems in Partial Participation States (2018)	3\$)
	55
Exhibit A-6-19 Total Burden and Cost to States and the Navajo Nation (2018\$)	57
Exhibit A-6-20 Burden/Cost to EPA and IHS (Excluding Contractor Activities) (2019\$)	59
Exhibit A-6-21 Burden/Cost of Contractor Activities (2018\$)	60
Exhibit A-6-22 Bottom Line Respondent Burden (2018\$)	62
Exhibit A-6-23 Burden Hours and Costs for Respondents per Year (2018\$)	62
Exhibit A-6-24 Bottom Line Burden Hours and Costs for EPA (including EPA's contractor)	63
Exhibit A-6-25 Disaggregated Burden by Affected Information Collection (IC) Entities	64
Exhibit A-6-26 Change in Respondent Burden from 2015 to 2020 DWINSA	68
Exhibit B-2-1 State Sample Sizes	80

ICR for 2020 DWINSA July 2020

PART A OF THE SUPPORTING STATEMENT

A.1 IDENTIFICATION OF THE INFORMATION COLLECTION

A.1.a Title of the Information Collection Request

The title of this information collection request (ICR) is *Information Collection Request for the 2020 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA)*. The Office of Management and Budget (OMB) control number for this ICR is 2616.01; EPA ICR No. 2040-NEW.

A.1.b Short Characterization

The Environmental Protection Agency (EPA) will conduct an assessment to estimate the capital investment needs of drinking water systems eligible to receive Drinking Water State Revolving Fund (DWSRF) monies. The nationwide assessment will be conducted by the Drinking Water Protection Division (DWPD) of EPA's Office of Ground Water and Drinking Water (OGWDW). The data collection is authorized by Sections 1452(h) and 1452(i)(4) of the Safe Drinking Water Act (SDWA), as amended by America's Water Infrastructure Act (AWIA) of 2018 and will be used to estimate the capital investment cost of providing safe drinking water to consumers over a 20-year period. The data from the report will also be used to allot DWSRF monies among states, territories, EPA Regions (for direct implementation programs), and the Navajo Nation. The 2020 DWINSA will be the seventh such effort.

In determining an appropriate survey approach, EPA strives to achieve an acceptable level of statistical precision and avoid measurement errors while minimizing the burden placed on the states, territories, the Navajo Nation, water systems, and the Agency in conducting the survey effort. The two sources of potential inaccuracy in the survey results are "measurement error," which arises when determining the need for each individual infrastructure investment, and "sampling error," which occurs when estimating the needs of all water systems from a representative sample of those systems. EPA strives to reduce measurement error by relying on information from and judgment of those individuals most familiar with and directly responsible for the infrastructure, the owners and operators of water systems, and by assuring that their estimates of investment needs are within the context of the industry's best engineering practices. EPA addresses the sampling error by identifying and specifying statistical precision targets for the survey and determining the necessary sample and sub-sample sizes to achieve those targets.

The 2020 DWINSA will consist of two primary data collection components:

- The State DWINSA, which will collect the 20-year need for systems that are in all 50 states, the
 U.S. territories (Guam, U.S. Virgin Islands, Northern Mariana Islands, and American Samoa),
 Puerto Rico, and the District of Columbia.
- The Native American DWINSA, which will collect the 20-year need for American Indian and Alaska Native Village water systems.

All states and the Navajo Nation have committed to help EPA administer the 2020 DWINSA, with at least a minimum set of activities. For this document, the term "states" refers to all 50 states, the U.S. territories (Guam, U.S. Virgin Islands, Northern Mariana Islands, and American Samoa), Puerto Rico, and the District of Columbia. Fourteen states are expected not to participate in the statistical portion of the 2020 State DWINSA (i.e., they will not collect 20-year need data from systems serving 3,301 to 100,000 persons) because these states estimate that they would have less than 1 percent of the total need and all states automatically receive at least 1 percent of the total DWSRF allotment. These states are referred to as "partial participation" states. The needs of the fully participating states will be used to estimate the needs for systems serving 3,301 to 100,000 persons in the partial participation states.

The method of data collection and statistical precision are the same for the State DWINSA and the Native American DWINSA. However, to account for differences between the universe of state and Native American systems, the stratification of systems for the two surveys will differ.

- For the 2020 State DWINSA, EPA will conduct a census of all CWSs serving populations more than 100,000 and of all not for profit noncommunity water systems (NPNCWSs) serving populations more than 10,000. EPA understands that these larger NPNCWS are complex systems (such as airports) relative to smaller NPNCWSs (such as schools) and proposes to sample them with certainty to address the complexity. NPNCWSs in states were last surveyed in the 1999 State DWINSA. For CWSs serving populations of 3,301 to 100,000, EPA proposes to use a modified panel approach to the statistical survey that will reassess the needs of most of the CWSs that participated in the 2015 State DWINSA. The modified panel approach, which is also referred to as the modified approach, was used for the 2015 State DWINSA and the same approach will be applied for the 2020 State DWINSA. The approach will involve dropping a random selection of 25 percent of the systems serving 3,301 to 100,000 persons that participated in the 2015 State DWINSA and then drawing a random sample to replace those systems in the survey for the 2020 State DWINSA. EPA will also select a national sample of 606 CWSs serving 3,300 or fewer persons and 100 NPNCWS serving 10,000 or fewer persons at which to conduct site visits for data collection. The national sample of 606 systems will include 600 systems in the states and Puerto Rico and 2 small systems each in American Samoa, the U.S. Virgin Islands, and the Northern Mariana Islands (Guam does not have any CWSs serving 3,300 and fewer persons).
- For the 2020 Native American DWINSA, EPA will conduct separate surveys for American Indian and for Alaska Native Village water systems. EPA will conduct a census of all CWSs and NPNCWSs serving more than 3,300 persons and will select random national samples of American Indian and Alaska Native Village CWSs and NPNCWSs serving 3,300 or fewer persons. Similar to the 2020 State DWINSA, EPA will use a modified panel approach that will reassess the needs of most of the American Indian and Alaska Native Village systems that participated in the 2011 Native American DWINSA. This approach will be used for the first time on a Native American DWINSA and will involve dropping a random selection of 25 percent of the systems serving 3,300 or fewer persons that participated in the 2011 Native American DWINSA and then drawing a random sample to replace those systems in the survey for the 2020 Native American DWINSA. EPA Regions and the Navajo Nation will use data provided by the Indian Health Service (IHS) from their Sanitary Deficiency System (SDS) to identify potential needs and EPA Regions and the Navajo Nation will collect additional information from all systems selected for the 2020 Native American DWINSA through phone calls or on-site assessment.

Three categories of questions will be added for the 2020 DWINSA that were not in previous surveys:

1. Lead Service Line (LSL) questions. This will be a national survey that will be statistically significant at the state level or national level, depending on the survey methodology described in Sections B.1.c for the 2020 State DWINSA and 2020 Native American DWINSA. LSL questions are mandated by AWIA Section 2015(e)(2). Section 2015(e)(2) states that the DWINSA must "include an assessment of costs to replace all lead service lines (as defined in section 1459B(a) (4)) of all eligible public water systems in the United States, and such assessment shall describe separately the costs associated with replacing the portions of such lead service lines that are owned by an eligible public water system and the costs associated with replacing any remaining portions of such lead service lines, to the extent practicable." The LSL questions will be included in the data collection instrument for all systems in the 2020 State DWINSA, a sample of CWSs

- serving 3,301 to 100,000 persons in partial participation states, and the systems participating in the 2020 Native American DWINSA.
- 2. Operator Workforce (OpW) questions. This will be a national survey. Water operator workforce questions will gather important information on current and anticipated drinking water treatment and distribution system operator staffing concerns. Anecdotal information suggests a significant workforce shortage exists now and will worsen. The inclusion of workforce-related questions in the 2020 Suvey is a key action item of the American Water Sector Workforce Initiative to derive quantitative information necessary for collaborative planning and action, as urged by the U.S. Congress in AWIA's enactment, among Federal, state and local governments as well as educational institutions and community-based organizations. Reports in 2018 from both the Government Accountability Office (GAO)^[1] and the Brookings Institution^[2] showed that almost a quarter of the water workforce is aged 55 or older, with higher proportions of older workers in certain occupations such as water operators and mechanics. The Brookings report also showed that only 10 percent of the water workforce is under 24 years old, indicating that we may expect shortages as the older generation reaches retirement age. Utility leaders across the country are echoing this concern. The OpW questions will be included in the data collection instrument sent for all systems in the 2020 State DWINSA, a sample of CWSs serving 3,301 to 100,000 persons in partial participation states, and the systems participating in the 2020 Native American DWINSA.
- 3. Iron and Steel (I&S) questions. This will be a national survey. The I&S questions will provide further information on materials used for specific types of infrastructure that are often, but not always, comprised of iron or steel and thus subject to American Iron and Steel (AIS) requirements under the SDWA section 1452(a)(4). EPA will use construction material information from the I&S questions and project-specific information to estimate the 20-year demand for iron and steel represented by DWINSA projects. The responses to these questions and the data from the DWINSA will aid EPA in management and oversight of the AIS requirements as directed by Congress. The types of infrastructure for which materials information is requested include raw water transmission, finished water transmission, distribution mains, elevated finished water storage, and ground-level finished water storage. The I&S questions will be asked of all systems in fully participating states of the 2020 State DWINSA and of the small and NPNCWS in the 2020 State DWINSA. The questions will also be asked of the large systems in partial participation states but not be asked of systems serving 3,301-100,000 persons in partial participation states because they will not be reporting the 20-year infrastructure needs upon which analysis of the I&S question responses are based. The questions will also not be asked of American Indian or Alaska Native Village systems because the AIS provisions do not apply to those systems.

Systems selected in the 2020 State DWINSA and 2020 Native American DWINSA will receive the same data collection instrument to report their 20-year infrastructure needs. The data collection instrument consists of a project table in which the water systems (or the survey site visitors) list all the capital improvement projects for the survey period of January 1, 2020, through December 31, 2039. The data collection instrument is in a Microsoft Excel format. EPA is proposing minor changes from the previous four DWINSAs through the addition of the LSL, OpW, and I&S questions.

^{[1][1]} GAO, January 2018: https://www.gao.gov/assets/690/689621.pdf

 $^{{\ }^{[2][2]}\} Brookings\ Institution, June\ 2018:\ https://www.brookings.edu/wp-content/uploads/2018/06/Brookings-Metro-Renewing-the-Water-Workforce-June-2018.pdf$

The effort for the 2020 DWINSA will involve 3,969 respondents (3,912 water systems, 56 states, and the Navajo Nation), requiring 43,531 hours at a total cost to the respondents of \$2,204,057. Section A.6, *Estimating the Burden and Cost of the Collection*, provides a detailed description of the unit burden and costs for this collection. The average water system burden per response is 5.36 hours and the average burden for a primacy agency response is 396.07 hours per primacy agency.¹

Exhibit A-1-1 presents the 2020 DWINSA and LSL, I&S, and OpW question recipients by type of system and population served.

¹ See Exhibit A-6-25.

Exhibit A-1-1 2020 State and Native American DWINSA and Additional Question Recipients

2020 State DWINSA								
NPNC	WS	CWS						
10,000 or fewer	>10,000	3,300 or fewer	3,301 - 100,	000 >100,000				
100 water systems (site visits); sur DWINSA survey LSL, and LSL, I&S, and OpW; National Street, survey Street, survey and LSL, I&S, and OpW;	Conque	Random sample 606 water systems (site visits); DWINSA survey and LSL, I&S, and OpW National-level estimates	Panel approa DWINSA survey an LSL, I&S, a OpW State-leve estimates	DWINSA d survey and LSL, I&S, and OpW State-level				
	Census; DWINSA survey and LSL, I&S, and OpW; National-level estimates		Random sam No DWINS survey, ju LSL and Op Compiled DWINSA estimates, r state-leve estimates, ba on response similar size systems in fr participatin states	SA st oW; d DWINSA survey and LSL, I&S, and OpW; State-level estimates				
20	020 Native Ameri	can DWINSA						
		CWS & N	PNCWS					
	3,300 or fewer		>3,300					
n and Alaska Native ystems	Panel approach; DWINSA survey and LSL and OpW;		Census; DWINSA survey and LSL and OpW; National-level estimates					
	Random sample 100 water systems (site visits); DWINSA survey and LSL, I&S, and OpW; National-level estimates	Random sample 100 water systems (site visits); DWINSA survey and LSL, I&S, and OpW; National-level estimates 2020 Native Ameri and Alaska Native ystems NPNCWS Census; DWINSA survey and LSL, I&S, and OpW; National-level estimates 2020 Native Ameri DWINSA LSL and	Random sample 100 water systems (site visits); DWINSA survey and LSL, I&S, and OpW; National-level estimates DWINSA survey and LSL, I&S, and OpW; National-level estimates Stimates Stimates	NPNCWS 3,300 or fewer 3,301 - 100, Panel approximates Panel ap				

Note: LSL = Lead Service Line questions; OpW = Operator Workforce questions; I&S = Iron and Steel questions

A.2 NEED FOR AND USE OF THE COLLECTION

A.2.a Authority and Need for the Collection

EPA is conducting this DWINSA pursuant to its authority under Sections 1452(h) and 1452(i)(4) of the SDWA. Section 1452(h) requires that "[t]he Administrator shall conduct an assessment of water system capital improvement needs of all eligible public water systems in the United States and submit a report to the Congress containing the results of such assessment within 180 days after the date of the enactment of the SDWA Amendments of 1996 and every 4 years thereafter." Section 1452(i)(4) requires that "[t]he Administrator, in consultation with the Director of the Indian Health Service and Indian Tribes, shall, in accordance with a schedule that is consistent with the needs surveys conducted pursuant to subsection (h), prepare surveys and assess the needs of drinking water treatment facilities to serve Indian Tribes, including an evaluation of the public water systems that pose the most significant threats to public health."

A.2.b Use and Users of the Information

The results of the DWINSA will be used as a basis for allocation of DWSRF funds among states and contributes to the allocation of DWSRF monies to EPA Regions and Tribes with primacy enforcement authority for American Indian and Alaska Native Village water systems. In addition, many water systems have empirical data on the cost of compliance with SDWA regulations. A national assessment improves the Agency's ability to gauge long-term capital costs of SDWA regulations.

EPA will collect two types of system-specific information:

- 1. System inventory and characteristics data (i.e., name and address of the system, contact person, population served, total design capacity, number of connections, type of source water, whether the water system is privately or publicly owned, whether the water system purchases/sells water from/to another water system, lead service line [LSL] information, current and anticipated operator workforce concerns [OpW], and construction materials used for pipe and storage infrastructure [I&S]).
- 2. Information on capital improvement projects (e.g., types of need, reasons for need, capacity, cost [if available]).

The specific uses of each data type vary. EPA will use system inventory and characteristics data to characterize CWSs and NPNCWSs nationwide and, in some cases, to model costs for individual water systems' capital improvement projects. EPA will use all data collected to estimate state and national capital improvement needs. EPA will use the LSL responses to comply with AWIA Section 2015(e)(2) and the OpW responses to identify water system staffing concerns. EPA will use the I&S data and other type of need information to estimate the 20-year demand for iron and steel represented by the reported projects to aid in the management and oversight of the AIS requirements.

Respondents will identify capital improvement needs on a project-by-project basis and identify the reason for the project on the data collection instrument. EPA will collect information on the proposed infrastructure to be installed, replaced, rehabilitated, upgraded, or expanded. EPA will use the information to assess project allowability for inclusion in the DWINSA, which is determined by DWSRF funding allowability and DWINSA policies.

Respondents will also identify either a documented cost estimate for the project or will provide adequate information so that EPA can model the cost of the project. The information needed to model the cost will depend on the type of need. For example, EPA may collect information on the size and number of meters or the diameter and length of transmission or distribution lines. For the 2015 DWINSA, approximately 11 percent of the projects reported had documented costs; the costs for the remaining 89 percent of projects were modeled.

A.3 NONDUPLICATION, CONSULTATIONS AND OTHER COLLECTION CRITERIA

The following sections verify that this information collection satisfies the OMB's non-duplication and consultation guidelines and does not duplicate another collection.

A.3.a Non-duplication

To the best of EPA's knowledge, up-to-date state-by-state and Native American water system information on water systems' capital needs is not available from any other source. Some of the data collection efforts EPA considered include the following:

- Safe Drinking Water Information System (SDWIS). Inventory data and information on system characteristics have been collected by states and EPA Regions and entered into the SDWIS. For systems selected for the 2020 DWINSA, EPA will pre-populate the SDWIS system characteristics data (i.e., name and address of the system, contact person, address, population served, total design capacity, number of connections, type of source water, whether the system is privately or publicly owned, and whether the system purchases/sells water from/to another water system) on the data collection instrument and ask the respondents to provide information only if the SDWIS data are inaccurate or missing. SDWIS does not contain information on water system capital improvement needs.
- Community Water System Survey (CWSS). EPA completed a statistical survey in 2006 that focused on the operating and financial characteristics of CWSs. The CWSS is addressed in the ICR for the National Survey of the Financial and Operating Characteristics of Community Water Suppliers. The CWSS had a different objective than the DWINSA. The CWSS was designed to characterize operating and financial aspects of CWSs. In contrast, the DWINSA will be used to develop national estimates of capital improvement needs. In addition, the CWSS's targeted precision was on a national basis, whereas the DWINSA will provide state-level estimates for fully participating states.
- Economic Analyses (EAs) for National Primary Drinking Water Regulations. The Agency has developed EAs for its National Primary Drinking Water Regulations. These documents estimate the costs of complying with proposed and final regulations. EAs do not typically include an estimate for capital projects needed to maintain compliance with existing regulations. Therefore, the EAs are not an adequate substitute for the DWINSA. In addition, the estimates included in the EAs are provided as nationwide estimates. As discussed above, EPA is conducting the DWINSA because the Agency needs state-level estimates of infrastructure capital need to develop the allocation formula for the DWSRF. Also, EAs may not, depending on when they were developed, reflect currently available contaminant occurrence data or current or emerging treatment technology costs.
- **State Needs Surveys.** Several states have conducted needs surveys of their own drinking water systems. The state results cannot be extrapolated to the nation as a whole because the state surveys do not use consistent methodologies and do not account for national variations in system characteristics and needs.
- **1995, 1999, 2003, 2007, 2011 and 2015 DWINSAs.** Under the SDWA, EPA must conduct the DWINSA every four years. The approach for the 2020 DWINSA includes substantial new data from the field to ensure up-to-date information on changes in the relative level of infrastructure needs at the state level as well as change in the total national need.
- COVID CWA SDWA Emergency ICR Survey. In October, 2020, EPA requested an emergency information collection request (ICR) under the Clean Water Act (CWA) and SDWA to rapidly obtain information from drinking water and wastewater systems to identify coronavirus disease (COVID-19) related obstacles and to ensure the water sector is prepared as the pandemic continues. As a result of COVID-19, the water sector is facing potential supply chain, workforce, financial, analytical support and cybersecurity impacts that could adversely affect a utility's ability to maintain operations and compliance with SDWA and CWA requirements. The data will be used to assess whether water sector utilities have sufficient resources to continue their operations and provide safe drinking water and wastewater treatment during the COVID-19 pandemic. Ensuring that drinking water and wastewater services are fully operational is critical to combating COVID-19 and protecting Americans from other public health risks. The information

collected will ensure that EPA and other key decision makers from the local to the federal level have an accurate understanding of operational and financial challenges and enable us to better tailor technical assistance that could be valuable to the water sector over the coming months. The COVID-19 Water Sector Survey is specific to issues the water sector experienced to date and from present day through December 2020. In contrast, the OpW questions proposed for the DWINSA focus on the drinking water operations workforce over the next 5-year and 10-year periods. Information is focused on the number of operators and contracted operators and the relative level of concern for adequate staffing, recruitment, and retention. Information is also gathered on reasons for anticipated recruitment and retention challenges. This data collection provides an opportunity to gather critical information that could then be used to pre-emptively address workforce shortages.

A.3.b Public Notice Required Prior to ICR Submission to OMB

To comply with the 1995 Amendments to the Paperwork Reduction Act (PRA), EPA solicited public comment on this ICR for a 60-day period before it was submitted to OMB. Specifically, EPA published a notice in the *Federal Register* (FR) (85 FR 6542, February 5, 2020) requesting comment on the estimated respondent burden and other aspects of this ICR (EPA ICR No. 2616.01). This notice is included in Appendix A. Three organizations submitted comments. The American Water Works Association provided a set of six comments, the Academy of Nutrition and Dietetics provided nine comments, and the National Groundwater Association provided eighteen comments. Before submission to OMB, EPA considered all comments received and determined if any adjustments were needed to the burden and cost calculations or to the supporting statement for this ICR. Comments received and EPA's responses are included in Appendix D. An additional *Federal Register* notice was published when this ICR was submitted to OMB. The public comment period for this additional notice was 30 days. The National Ground Water Association responded to the additional *Federal Register* notice by submitting a recommended list of specific information to be collected from small water systems.

A.3.c Consultations

In June 2019, EPA assembled a workgroup that consisted of EPA Headquarters, EPA Regions, the Navajo Nation and state representatives to discuss the approach for the 2020 DWINSA. The purpose of the workgroup was to gather information on state and regional concerns, discuss lessons learned during the 2015 DWINSA, and discuss the proposed additional questions for the 2020 DWINSA. The information gathered from the workgroup contributed to the development of the methodology for the 2020 DWINSA and the content of the LSL, I&S, and OpW questions.

For the 2007 DWINSA, the data collection instrument and some policies were modified substantially. Consequently, in 2007, EPA conducted a pre-test of the data collection instrument (see B.3 for more information on the pre-test) and a formal peer review of the 2007 DWINSA statistical methodology and policies. Based on comments received from the peer review and the pre-test, EPA made modifications to the data collection instrument, statistical procedures, and survey polices.

The data collection instrument was further modified for the 2011 DWINSA by the addition of optional questions to gather information on "green" and climate readiness infrastructure projects. EPA conducted a limited peer review focused on these new questions. The peer review included experts familiar with the operations of drinking water systems and "green" and climate readiness issues. Based on comments received from the peer review, EPA developed an addendum to the 2011 survey instructions that provided additional explanation about why EPA was interested in collecting information on "green" and climate readiness infrastructure projects as well as providing examples of what might constitute "green" and

climate readiness. Based on the limited number of states that submitted projects with "green" or climate readiness attributes indicated, EPA concluded these attributes were likely underreported in 2011.

For the 2015 DWINSA, the "green" and climate readiness questions were removed from the data collection instrument. The other significant modification for the 2015 data collection methodology was the use of a modified panel approach for the State DWINSA (the Native American DWINSA was not implemented as part of the 2015 effort). This approach used a longitudinal study method for the survey with a 25 percent refresh of the sample (by state and by strata) of systems serving 3,301 to 100,000 persons (this approach is described in more detail in Section B.2). EPA conducted a peer review of the applicability of this modified panel approach and the details of the approach. EPA considered comments from the peer review and made changes to the approach to incorporate the suggestions.

EPA will use this same panel approach for the 2020 State DWINSA, and no changes will be made to this approach that require additional peer review. To retain consistency between the State and Native American DWINSAs, EPA will also use the panel approach for the American Indian and Alaska Native Village surveys that comprise the Native American DWINSA (this approach is described in more detail in Section B.2 – Note separate B.2 sections are provided for the State and Native American DWINSA). EPA will not conduct a peer review on the applicability of this approach to the Native American DWINSA because the issues considered during the peer review for the 2015 State DWINSA apply to both surveys.

Additional questions will be added to the 2020 DWINSA data collection instrument. The additional questions will gather information on iron and steel (I&S) infrastructure, certified operator workforce (OpW) issues, and lead service lines (LSLs). Responses to the I&S questions will not affect EPA policy, therefore, no peer review was conducted for those questions. EPA conducted a peer review of the applicability of the OpW and LSL questions. The peer review was conducted by subject matter experts who are equipped to evaluate whether the questions are clear and phrased correctly, and whether they can reasonably be answered by survey respondents. The peer reviewers also evaluated the questions to determine whether they are likely to gather the information intended by EPA. A summary of the comments and EPA responses to the comments received on the 2020 DWINSA Peer Review are included in Appendix C. EPA made changes to the questions and background information and instructions based on the results of the peer review. The changes primarily clarify the questions and the instructions to the survey respondents for completing the questions.

In accordance with "EPA's Policy on Consultation and Coordination with Indian Tribes," a formal consultation was initiated on September 6, 2019, with federally-recognized Indian tribes to obtain input on the proposed design and approach for the 2020 Native American DWINSA policies and methodologies. An informational webinar was held on September 25, 2019, for interested tribal representatives. The formal consultation was concluded on November 28, 2019, after receiving and responding to various requests for clarifications and confirmations of the need to include tribal systems in the 2020 DWINSA.

A.3.d Effects of Less Frequent Collection

The 2020 DWINSA is a single collection and does not involve periodic reporting or recordkeeping.

A.3.e General Guidelines

The 2020 DWINSA does not violate any guidelines for information collection activities specified by OMB. Specifically, the 2020 DWINSA respondents are not required to:

- Report information to EPA more often than quarterly.
- Retain records for more than three years.

- Complete the data collection instrument in fewer than 30 days.
- Maintain or provide information in a format other than that in which it is customarily maintained.
- Submit proprietary, trade secret, or other confidential information.
- Submit more than one original and two copies of any document.

The information collection:

- Is a statistical assessment designed to produce data that can be generalized to the universe of the study (see Section B.2 Note separate B.2 sections are provided for the State and Native American DWINSA).
- Does not provide remuneration to participants.
- Will transcribe information collected into an automated format.
- Is designed with small entities particularly in mind (see Section A.5.c).
- Does not concern grants or grantees.
- Is voluntary.

A.3.f Confidentiality Questions

This information collection does not require the respondent to disclose any confidential information. Respondents are not obliged to respond to this strictly voluntary information collection. Further, respondents could eliminate any confidential business information from their reply.

A.3.g Sensitive Questions

The 2020 DWINSA does not ask sensitive questions.

A.4 THE RESPONDENTS AND THE INFORMATION REQUESTED

A.4.a Respondents/NAICS Codes

NAICS Codes

The respondents for the 2020 DWINSA are CWSs and NPNCWSs, state agencies that include drinking water programs, and tribal authorities. CWSs and NPNCWSs are public water systems. According to 40 CFR Part 141.2, a CWS is a "public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents" and a NCWS is a "public water system that is not a community water system." The North American Industry Classification System (NAICS) code for a public water system is 221310 (Water Supply and Irrigation Systems). Ancillary systems (i.e., those that supplement the function of other establishments like factories, power plants, mobile home parks, etc.) cannot be categorized in a single NAICS code. For ancillary systems, the NAICS code is that of the primary establishment or industry. For government establishments providing public administration of American Indian and Alaska Native Village affairs, the NAICS code is 921190 (Other General Government Support). State agencies that include drinking water programs are classified as NAICS code 924110 (Administration of Air and Water Resources and Solid Waste Management Programs) or 926130 (Regulation and Administration of Communications, Electric, Gas and Other Utilities).

Respondents

For the 2020 State DWINSA, EPA will gather information from large (serving more than 100,000 persons) and medium (serving 3,301 to 100,000 persons) CWSs, as well as a limited number of small water systems (serving 3,300 or fewer persons) and NPNCWSs. For the purposes of this document, EPA has approximated sample sizes for 2020 based on the near-final inventory.

Because of their variability and significant contribution to the overall drinking water capital investment need, water systems serving more than 100,000 persons will be sampled with certainty for the State DWINSA. The burden estimates assume that EPA will survey approximately 708 water systems that serve more than 100,000 persons.

There are 9,244 CWSs that serve populations of 3,301 to 100,000. Surveying all of these water systems would impose a large burden on respondents, EPA, and states. Therefore, EPA will select a statistically representative sample of water systems serving populations of 3,301 to 100,000. As described in State DWINSA Section B.2, a modified panel approach will be used to select water systems to be sampled. This approach will result in a re-sampling of 75 percent or more of the water systems that were sampled for the 2015 State DWINSA. Based on the sampling conducted in 2015, the burden estimates assume that EPA will survey approximately 1,829 water systems that serve 3,301 to 100,000 persons. In addition, EPA will administer the LSL and OpW questions to 352 water systems that serve 3,301 to 100,000 persons in partial participation states.

There are 38,534 small CWSs.² Surveying all of these systems would impose a large burden on respondents, EPA, and states. Therefore, EPA will select a statistically representative sample of 606 systems serving 3,300 or fewer persons. The survey instrument for these systems will be completed by EPA site visitors. Part B of the supporting statement describes the sampling methodology.

The survey will sample with certainty approximately 13 NPNCWSs that serve more than 10,000 persons. There are approximately 26,953 NPNCWSs that serve 10,000 or fewer persons. Surveying all these smaller NPNCWSs would impose a large burden on respondents, EPA, and states. Therefore, EPA will select a statistically representative sample of 100 systems. This approach for the smaller NPNCWSs is consistent with that applied to the 1999 DWINSA, which is the last time EPA surveyed state NPNCWSs. The survey instrument for these systems will be completed by EPA site visitors. Part B of the supporting statement describes the sampling methodology.

For the 2020 Native American DWINSA, EPA will collect information from all 113 American Indian and Alaska Native Village water systems serving more than 3,300 persons. There are approximately 964 CWSs and NPNCWSs that serve American Indian or Alaska Native Village populations and serve 3,300 or fewer persons. EPA will select statistically representative samples of American Indian and of Alaska Native Village water systems serving populations of 3,300 or fewer persons. These samples will result in approximately 191 water system being selected for this portion of the survey. As described in Native American DWINSA Section B.2, a modified panel approach will be used to select water systems to be sampled. This approach will result in a re-sampling of 75 percent or more of the water systems that were sampled in 2011. A total of 304 water systems will be selected as part of the 2020 Native American DWINSA. Part B of the supporting statement describes the sampling methodology.

For purposes of this burden statement, EPA is assuming that 56 states (50 states plus the District of Columbia, Puerto Rico, Northern Mariana Islands, American Samoa, Guam and the U.S. Virgin Islands) and the Navajo Nation will be called upon to provide support and information for the 3,912 systems for the 2020 DWINSA.

A.4.b Information Requested

As previously discussed, EPA will collect two types of information from systems:

² The DWSRF defines small systems as those with populations of 10,000 or fewer, a different threshold than that listed in the typical drinking water regulation (i.e., systems serving 3,300 or fewer persons). In the final Report to Congress resulting from this survey, the results will be presented in different formats to accommodate various definitions of a small system.

- 1. System inventory and characteristics, lead service lines (LSLs), current and anticipated operator workforce concerns (OpW), and iron and steel (I&S) construction materials used for pipe and storage infrastructure).
- 2. Information on capital improvement projects (e.g., types of need, reasons for need, capacity, and cost [if available]).

EPA anticipates that respondents will provide varying levels of information by system size category. Based on experience from the previous six DWINSAs, EPA generally expects larger systems (e.g., those systems serving more than 50,000 persons) to have a well-developed understanding of their capital needs and the costs for meeting them. Almost all of these systems will have detailed Capital Improvement Plans (CIPs). Most of these systems will be capable of providing accurate information on cost. Most medium-sized systems (e.g., those systems serving 3,301 to 50,000 persons) can provide reliable data on their needs and some can provide cost estimates for meeting their needs. The information that respondents will be asked to provide is generally maintained and reported as a function of the management and operation of the water system.

For the 2020 State DWINSA, EPA will collect data from CWSs serving 3,300 or fewer persons and NPNCWSs serving 10,000 or fewer persons through site visits. EPA will use the same data collection instrument used for the large and medium systems for the site visits. Contractor personnel will complete the instrument during the site visit. EPA anticipates that most system operators will make themselves available to accompany contractor personnel. The operators may be asked very basic questions about the physical condition, capacity, and configuration of their system and for their responses to the LSL, I&S, and OpW questions.

EPA's regional personnel and the Navajo Nation personnel will complete the data collection instrument for the water systems in the 2020 Native American DWINSA. EPA anticipates they will use the information from the IHS SDS and any additional information collected from the respondent. Respondents will be expected to answer very basic questions about the physical condition, capacity, and configuration of their system and capital improvement needs and their responses to the LSL and OpW questions.

A.4.b.i Data Items

2020 State DWINSA – CWSs Serving More Than 3,300 Persons and NPNCWSs Serving More Than 10.000 Persons

The data collection instrument asks respondents to verify or correct system characteristic information (i.e., name and address of the system, contact person, address, population served, total design capacity, number of connections, type of source water, whether the water system is privately or publicly owned, and whether the water system purchases/sells water from/to another water system). It is customary business practice for the water system to maintain this information. The respondent will either indicate that the information is correct as provided or enter the correct information in the space provided. States verify this information in advance of the data collection instrument being sent to the water systems. Based on previous assessments, EPA anticipates that very few water systems will need to correct the information provided.

In addition, the respondent is asked to provide information associated with specific types of capital improvement projects:

source;

- treatment;
- finished or treated water storage and pumping;
- transmission and distribution; and
- backflow prevention devices/assemblies, service lines, valves, water meters and other (projects not associated with one of the specified project types).

For each capital improvement project, the respondent is asked to:

- Briefly describe the needed capital improvement project (e.g., "routine distribution system replacement," "filtration plant upgrade," "high service pump replacement," "corrosion control treatment," "storage tank rehabilitation"). Information is collected on a project-specific basis because it is most commonly available to respondents in that form and because documentation, when available, is usually developed on a project-specific basis.
- Provide the codes that best describe the project's type of need and reason (see Appendix B for Lists of Codes).
- Indicate if the project is to install new infrastructure to meet current population demands, replace old infrastructure, expand or upgrade existing infrastructure (such as increasing the capacity of treatment plants to meet current population demand), or rehabilitate existing infrastructure.
- Indicate if the project is needed now to protect public health or is not needed now but will be necessary to continue providing safe drinking water within the next 20 years.
- Provide design capacity when applicable i.e., millions of gallons per day (MGD) for treatment
 and pumping; millions of gallons (MG) for storage; the diameter and number of feet of
 distribution or transmission lines; and the diameter and number of backflow prevention
 devices/assemblies, lead service lines, valves, and water meters. EPA will use these parameters to
 model project costs.
- If available, provide the capital cost estimate and year and month (if known) of the estimate. EPA will use this information to include the cost of the project in the 2020 DWINSA. The year and month are important because they will allow EPA to account for differences in the value of money over different years and to convert all costs to a common year. This information will also be used to update the 2020 DWINSA cost models.
- Provide an estimate of the total length of pipe in the water system. This information will only be required for water systems that submit pipe projects but do not have independent documentation of need for these projects (i.e., planning document that was developed for purposes that are independent of the DWINSA, sanitary survey or leak detection study results, or break records). It is expected that not all systems will need to provide this inventory information because they will submit pipe projects that are supported by independent documentation.
- Indicate the type of documentation using EPA's Lists of Codes that documents why the project is needed and, if an existing cost estimate (developed for other purposes independent of the DWINSA) is provided, indicate the documentation that provides the cost. NOTE: EPA discourages systems or states from developing new cost estimates solely for the purposes of the 2020 DWINSA. For needs identified without independent cost estimates, the Agency instead will rely on extrapolations from cost models that are based on extensive independently-documented cost estimates. The use of the Lists of Codes will:

- Help verify that adequate documentation of the need has been submitted.
- Help determine if the project is an allowable need.
- Help gauge cost-reasonableness.

The data collection instrument will also contain two or more of the LSL, I&S, and OpW categories of questions, depending on the system being surveyed (see Exhibit A-1-1). As previously discussed, the LSL questions will gather information about the water system's lead service lines, as mandated by the America's Water Infrastructure Act of 2018 Section 2015(e)(2). The I&S questions will gather construction material information on specific types of need to estimate the 20-year demand for iron and steel represented by DWINSA projects, which will aid EPA in management of the AIS requirements under the SDWA section 1452(a)(4). The types of need for which construction material information is requested include raw water transmission, finished water transmission, distribution mains, elevated finished water storage, and ground-level finished water storage. The OpW questions will gather information on current and anticipated drinking water treatment and distribution system operator staffing concerns.

The data collection instrument contains worksheets where respondents can record information about the water system's existing infrastructure inventory as well as the age and condition of the infrastructure. This information will not be entered into the DWINSA data system. The worksheets are only provided as a helpful tool for a respondent to inventory all of a water system's assets and identify infrastructure needs that might be associated with those assets.

For respondents to the 2020 State DWINSA that did not participate in the 2015 State DWINSA, the states will provide a data collection instrument with the water system characteristics information. The respondent will be asked to populate this document with a list of all the system's planned capital improvement projects that would meet the allowable criteria for the DWINSA for the survey period of January 1, 2020, through December 31, 2039. The system must provide documentation for each project. The state will collaborate with the systems to ensure that all projects meet policy requirements established for the 2020 DWINSA, are properly coded, include cost modeling parameters if a documented cost is not provided, and have the necessary documentation of need to support including the project in the DWINSA.

For respondents to the 2020 State DWINSA that reported projects in the 2015 State DWINSA, states will provide them with a system-specific data collection instrument that includes on the project table a list of the projects used as the response to the 2015 State DWINSA. EPA will provide the 2015 project list to each state for each water system included in the 2015 and 2020 DWINSAs. The respondent will be asked to update the list by updating any old information (e.g., cost estimate) and deleting projects that have been completed or are no longer needed. The respondent will also add any new projects that were not included in the 2015 State DWINSA. All projects must meet documentation and policy requirements established for the 2020 State DWINSA.

The respondent's representative is also asked to provide his or her name, title, address, phone number, and e-mail address. This information is requested in case EPA or the state must contact the respondent for clarification or explanation of any response.

The respondent is asked to attach documentation for all needs and costs reported in the 2020 State DWINSA or to refer to applicable documentation previously submitted to EPA for the 2015 State DWINSA. Systems are encouraged to provide inventory data on their systems. Only where noted above will the inventory data be required.

The data collection instrument and Lists of Codes are attached as Appendix B.

2020 State DWISNA - CWSs Serving 3,300 or Fewer Persons and NPNCWSs Serving 10,000 or Fewer Persons

As discussed above, EPA will collect data from CWSs serving 3,300 or fewer persons and NPNCWSs serving 10,000 or fewer persons through site visits. EPA will use the large and medium system data collection instrument for the site visits. Contractor personnel will complete the instrument during the site visit. EPA anticipates that most system operators will make themselves available to accompany contractor personnel. The operators may be asked very basic questions about the physical condition, capacity and configuration of their system and their responses to the LSL, I&S, and OpW questions.

The data collection instrument and Lists of Codes are attached as Appendix B.

2020 Native American DWINSA – American Indian and Alaska Native Village Water Systems

As discussed above, EPA regional offices and the Navajo Nation will use available information from the IHS SDS. EPA regional and the Navajo Nation personnel will complete the data collection instrument for the water systems using the information from the IHS SDS and any additional information collected from the respondent. Respondents will be expected to answer basic questions about the physical condition, capacity, and configuration of their system and capital improvement needs and their responses to the LSL and OpW questions.

The data collection instrument and Lists of Codes are attached as Appendix B. All systems will receive the same Lists of Codes.

A.4.b.ii Respondent Activities

2020 State DWINSA – CWSs Serving More Than 3,300 Persons and NPNCWSs Serving More Than 10,000 Persons

To complete the data collection instrument, the following activities are anticipated for CWSs serving more than 3,300 persons and NPNCWSs serving more than 10,000 persons:

- Participate in an informational telephone call. Respondents will receive a call from the state to
 inform respondents about the upcoming DWINSA, describe the purpose of the DWINSA and
 explain how respondents will receive and submit the data collection instrument. The state will
 also describe the information that will be requested and the timetable for completing and
 returning the data collection instrument.
- **Read the cover letter.** Respondents will review the cover letter and instructions accompanying the data collection instrument. This information will reiterate the details conveyed during the informational phone call.
- **Collect and copy supporting documentation.** Respondents will locate the necessary supporting documentation in system files and copy it or obtain electronic copies.
- **Call for technical assistance.** Respondents will call their state contacts for technical assistance, if necessary.
- **Complete the data collection instrument.** Respondents will discuss current needs with the state and complete the data collection instrument, including an estimate of the total amount of pipe in the system if any pipe project is submitted without independent documentation of need (e.g., a planning document). The data collection instrument will be in an electronic format and will be transmitted to respondents and returned to states via email. Supporting documentation can also be

submitted electronically, or other arrangements can be made with the state to provide these documents.

• **Respond to call back from the state about the status of 2020 DWINSA**. Respondents who do not provide information to the states in a timely manner will be contacted by the state to provide a brief report on the status of the 2020 DWINSA response.

2020 State DWINSA – CWSs Serving 3,300 or Fewer Persons and NPNCWSs Serving 10,000 or Fewer Persons

The 2020 State DWINSA methodology has been designed to minimize the burden on smaller CWSs and NPNCWSs. EPA's experience with the previous DWINSAs has shown that small CWSs serving 3,300 or fewer persons and NPNCWSs serving 10,000 or fewer persons lack the resources and technical ability to complete the data collection instrument. A national sample of these systems will be included in the 2020 DWINSA and their 20-year infrastructure needs will be assessed by site visits. Information gained during the site visit supports assessment of the condition and adequacy of the systems' components through discussion with water system representatives and visual evaluation of the infrastructure. The site visitors then use their best professional judgement and available system-specific records to identify the 20-year needs for the system. These systems' role will be limited to answering basic questions during a phone call and accompanying the 2020 DWINSA team during the site visit. They will:

- Participate in an informational/scheduling telephone call from EPA. Respondents will receive a call from EPA/EPA contractor to inform respondents about the upcoming DWINSA, describe the purpose of the DWINSA, explain by whom the data collection instrument will be prepared and submitted, and to schedule the site visit. EPA/EPA contractor will also describe the information that will be requested and the timetable for the site visit.
- Answer simple questions posed by the 2020 DWINSA team. Respondents will be expected to
 answer very basic questions about the physical condition, capacity, and configuration of their
 system and their responses to the LSL, I&S, and OpW questions.

2020 Native American DWINSA – American Indian and Alaska Native Village Water Systems

The 2020 Native American DWINSA methodology has been designed to minimize the burden on American Indian and Alaska Native Village water systems. Because most American Indian and Alaska Native Village systems serve 3,300 or fewer persons, EPA has the same appreciation for their lack of resources and technical ability to complete the data collection instrument as is assumed for small CWSs and NPNCWSs in the state DWINSA. As a result, instead of sending a data collection instrument to the water systems, EPA Regions and the Navajo Nation will collect data and complete the data collection instrument with input from the water systems. The system's role will be limited to answering basic questions during a phone call and providing any available documentation to EPA regional offices or the Navajo Nation. They will:

Participate in an informational telephone call from the EPA regional office or the Navajo
Nation. Respondents will receive a call that informs the respondents about the upcoming
DWINSA, describes the purpose of the DWINSA, and explains by whom the data collection
instrument will be prepared and submitted. EPA or the Navajo Nation will also describe the
information that will be requested and the timetable for completing the data collection instrument.

- Answer basic questions posed by the EPA regional office or the Navajo Nation. Respondents will be expected to answer very basic questions about the physical condition, capacity, and configuration of their system and their responses to the LSL and OpW questions.
- Collect and copy supporting documentation. Respondents will locate the necessary supporting
 documentation in system files and copy it or obtain an electronic copy. Respondents can submit
 documentation electronically, or other arrangements can be made with the EPA Region or Navajo
 Nation to provide these documents.

2020 State DWINSA - State Activities

For this burden estimate, EPA assumes all states will participate in certain "up-front activities" where the measure of the activity burden is on an "hours per state" basis and the combined burden on all states is calculated by multiplying by the 56 states.

The burden of additional state activities is measured on an "hours per system" basis and the combined burden on all states is calculated by multiplying the number of systems being sampled in the survey. The hours per system burden differs between systems serving 50,000 or more persons and systems serving 3,301 to 50,000 persons. The combined additional burden on all states from surveying the larger systems is calculated by multiplying the hours per system burden of these systems by 1,006—the total number of the larger systems (that serve 50,000 or more persons) being sampled in the survey. The combined additional burden on all states from surveying the smaller systems (serving 3,301 to 50,000 persons) is calculated by multiplying the hours per system burden of these systems by 1,531—the total number of these smaller systems being sampled in the survey. The combined additional burden on all states from surveying larger NPNCWSs (serving more than 10,000 persons) is calculated by multiplying the hours per system burden of these systems by the total number of these systems (13).

The hours per system burden for site visits differ between small CWS serving 3,300 or fewer persons and NPNCWSs serving 10,000 or fewer persons. The combined additional burden on all states from surveying CWS serving 3,300 or fewer persons is calculated by multiplying the hours per system burden by the total number of these systems (606). The burden on all states from surveying NPNCWSs serving 10,000 or fewer persons is calculated by multiplying the hours per system burden by the total number of these systems (100). In addition, this ICR assumes all systems serving 3,301 to 100,000 persons in partial participation states will receive the LSL and OpW questions but not the DWINSA 20-year infrastructure need project table. The combined additional burden on all partial participation states for these systems is calculated by multiplying the per system burden of the LSL and OpW questions by the total number of these systems (352).

The total burden on all states is calculated by adding the combined burden based on "hours per state" with the combined burden based on hours per system for all systems to be surveyed.

State Up-Front Activities

This first activity category includes the states' "up-front activities" for helping EPA prepare for the 2020 State DWINSA.

Participate in training and other pre-survey efforts. This activity includes
participating in training sessions offered by EPA and becoming familiar with the survey
design and policies. In addition, it includes activities such as reviewing the draft data
collection instrument.

- Help EPA verify SDWIS data. There are several important variables for which SDWIS data must be verified. Critical inventory data for the water systems being surveyed will need to be reviewed. Such data include the public water system identification number (PWSID), system name, address, telephone numbers (if any), primary source, population served, number of service connections, whether the water system is publicly or privately owned, and whether the water system purchases/sells water from/to another water system. To help with this verification activity, EPA will provide the information that must be reviewed in electronic form.
- Perform miscellaneous administrative activities. States will perform various
 administrative duties prior to the 2020 State DWINSA (e.g., establishing system files). In
 addition, state management will explain the 2020 State DWINSA to staff and allocate
 resources.

<u>State Data Collection Activities for CWSs Serving More Than 3,300 Persons and NPNCWSs</u> <u>Serving More than 10,000 Persons in Fully Participating States</u>

Fully participating states will conduct the following activities for CWSs serving more than 3,300 persons and for NPNCWSs serving more than 10,000 persons during the data collection phase of the 2020 State DWINSA:

- E-mail survey package to water systems. States will provide each system in the 2020
 State DWINSA with a survey package, which will be delivered via e-mail.
- Telephone systems to ensure participation and provide instructions. To improve response rates, states will telephone the water systems early in the process to ensure that they have received the survey package and understand how to complete the data collection instrument.
- Provide technical assistance. States will provide technical assistance to systems by answering their questions about the data collection instrument and how needs should be represented.
- Call systems that do not return the data collection instrument by a certain date. To
 improve response rates, states will telephone systems that have not returned their
 assessment by a specific date to encourage participation.
- Review completed data collection instruments and documentation. The data collection instrument will be returned directly to the state. State personnel will have the opportunity to review the information on the data collection instrument, as well as any accompanying documentation. The state's review will help ensure that all projects meet policy requirements established for the 2020 DWINSA. The state's review will provide the first quality assurance/quality control check.
- Discuss results with EPA. After the state reviews the submission and documentation, the state forwards the data to EPA for review and data entry. EPA performs a second quality assurance/quality control check to ensure all data are documented and allowable. Any issues regarding the project descriptions or adequacy of the documentation of the data will be resolved by EPA and the state. States are provided access to view the data system and are able to verify that the data have been entered into the data system.

<u>State Data Collection Activities for CWSs Serving 3,300 or Fewer Persons and NPNCWSs</u> <u>Serving 10,000 or Fewer Persons</u>

States will conduct the following activities for small CWSs and NPNCWSs serving 10,000 or fewer persons during the data collection phase of the 2020 State DWINSA:

Brief contractor conducting site visits. States will brief site teams on water systems
that they will visit. Some states may choose to alert the system of the upcoming site
visit or attend the site visit with the contractor.

<u>State Data Collection Activities for CWSs Serving 3,301 to 100,000 Persons in Partial Participation States</u>

Partial Participation states will conduct the following activities for CWSs serving 3,301 to 100,000 persons during the data collection phase of the 2020 DWINSA:

- Send an informational email to the system. States will develop and send an
 informational email to each system to explain the LSL and OpW data collection.
- E-mail the data collection instrument to systems. States will provide each system
 with a data collection instrument containing only the LSL and OpW questions, which
 will be delivered via e-mail.
- Phone call to collect LSL and OpW Data. States will telephone the system to
 discuss the LSL and OpW responses from individual systems and will then submit
 the responses to EPA.

2020 Native American DWINSA – Navajo Nation Activities

The Navajo Nation has primary enforcement authority for water systems within its tribal organization. The Navajo Nation has committed to help EPA administer the 2020 Native American DWINSA, with at least the minimum of activities for its water systems that are selected in the 2020 Native American DWINSA. EPA regional offices will provide support for all other American Indian and Alaska Native Village water systems. Their activities are discussed in A.5.

Navajo Nation Up-Front Activities

This first activity category includes the Navajo Nation "up-front activities" for helping EPA prepare for the 2020 Native American DWINSA.

- Participate in training and other pre-mailout efforts. This activity includes
 participating in training sessions offered by EPA and becoming familiar with the survey
 design and policies. In addition, it includes activities such as reviewing the draft data
 collection instrument.
- Help EPA verify SDWIS data. There are several important variables for which SDWIS data must be verified. Critical inventory data for the statistical sample will need to be reviewed. Such data include PWSID, system name, address, telephone numbers (if any), primary source, population served, number of service connections, whether the facility is a NPNCWSs, and whether the system is a consecutive system. To help with this verification activity, EPA will provide the information that must be reviewed in electronic form.

Perform miscellaneous administrative activities. The Navajo Nation will perform various administrative duties prior to the 2020 Native American DWINSA (e.g., establishing system files). In addition, Navajo Nation management will explain the 2020 Native American DWINSA to staff and allocate resources.

Navajo Nation Data Collection Activities

The Navajo Nation will conduct the following activities for their water systems during the data collection phase:

- Telephone systems to ensure participation. The Navajo Nation will contact the water system operators of systems selected in the 2020 Native American DWINSA to ensure participation and to schedule time to discuss the systems' 20-year infrastructure need and review the completed data collection instrument.
- Review the IHS SDS projects. The Navajo Nation will review the list of projects extracted from the IHS SDS and incorporate appropriate projects onto the 2020 DWINSA data collection instrument.
- Discuss 20-year need and survey questions. The Navajo Nation will contact the water system and discuss projects that have been identified, ask basic questions about the physical design and condition of the plant, system configuration, and capital infrastructure needs, and request additional documentation from the water system. The Navajo Nation will also discuss the LSL and OpW questions with the water system.
- Complete the data collection instrument. Based on the data collected from IHS and the
 water system, the Navajo Nation will complete the data collection instrument and submit
 it to EPA. An estimate of the total amount of pipe in the system must be provided if any
 pipe project is submitted without independent documentation of need (e.g., a planning
 document).
- Discuss results with EPA. After the data collection instrument is submitted, EPA will
 perform a quality control/quality assurance check to ensure all data are documented and
 allowable. Any differences of opinion regarding the documentation of the data will be
 resolved by EPA and the Navajo Nation.

A.5 INFORMATION COLLECTED: AGENCY ACTIVITIES, COLLECTION METHODOLOGY AND INFORMATION MANAGEMENT

A.5.a Agency Activities

A.5.a.i EPA and Contractor Activities

Many of EPA activities described here will be conducted by contractors with EPA's oversight/technical direction. For example, EPA will oversee contractor acceptance of survey submissions and subsequent data analysis. For purposes of describing Agency activities related to the 2020 DWINSA, contractor effort is not distinguished from the EPA effort. Separate estimates for contractor burden and cost are provided in Section A.6.c. In addition, 2020 State DWINSA Section B.1.c describes the contractor's role.

Up-Front Activities

The following pre-assessment activities will be conducted:

- **Revise the data collection instrument.** EPA is revising the data collection instrument based on lessons learned during the previous DWINSAs and state input from a June 2019 Workgroup meeting and to incorporate questions about LSL, I&S, and OpW. This task will include developing materials for water system use and for state use in supporting water systems.
- Train state and Navajo Nation participants. To ensure that participating state and Navajo
 Nation officials understand every aspect of the 2020 DWINSA, EPA will conduct six regional
 training sessions at locations across the country. An additional five state-specific training sessions
 are anticipated based on requests for such training that have been received by EPA. The training
 will help ensure consistent responses across the country, high response rates, and efficient use of
 staff.
- Select 2020 DWINSA respondents. EPA will also update inventory numbers for water systems based on the information provided from the state and the Navajo Nation reviews. The Agency will select the systems that will be included in the 2020 State DWINSA and the American Indian and Alaska Native Village surveys for the 2020 Native American DWINSA. Section B.2.c. describes the precision targets in more detail.
- **Update data system.** EPA will update the data system used for the 2015 DWINSA to store and analyze data for the 2020 DWINSA. The updates will include modifications to capture responses to the LSL, OpW, and I&S questions. The data system will produce the necessary statistical reports for EPA, Congress, states, and the Navajo Nation. The data system will also allow the EPA Region, state, and Navajo Nation offices to have view-only access to the data.
- Send data collection instruments. This will include prepopulating an electronic data collection instrument with water system inventory information and a list of projects reported in the 2015 State DWINSA (for systems that participated in the 2015 State DWINSA) and reported in the 2011 Native American DWINSA (for American Indian and Alaska Native Village systems that participated in the 2011 Native American DWINSA). This will also include sending the survey packages via e-mail to the states, EPA Regions, and the Navajo Nation. Survey packages will include the prepopulated data collection instrument for each water system selected in the 2020 DWINSA, Lists of Codes for the survey, instructions, and a cover letter from EPA.

Data Collection Activities

EPA will conduct the following activities during the data collection phase of the 2020 DWINSA:

- **Provide technical assistance.** The Agency will provide technical assistance to water systems, states, and the Navajo Nation to promote consistent responses across the country.
- **Review completed data collection instruments.** EPA will review the completed data collection instruments to ensure that all data are documented and allowable.
- **Maintain the data.** EPA will enter DWINSA data into the data system and perform quality assurance/quality control checks of data entry.
- Communicate results of review to the state. EPA will communicate the results of each survey submittal review to the states and the Navajo Nation via a website that shows the updated project table and comment codes indicating the changes made. EPA regional staff will also be able to view the data for states in their respective Regions.

A.5.a.ii EPA Regional Activities for the 2020 Native American DWINSA

EPA regional offices will help EPA Headquarters administer the 2020 Native American DWINSA with at least the minimum of activities. Support will be provided for all American Indian (except for those water systems under the primacy of the Navajo Nation) and Alaska Native Village water systems.

EPA Regional Office's Up-Front Activities

This first activity category includes EPA regional offices "up-front activities" for helping EPA prepare for the 2020 Native American DWINSA.

- Participate in training and other pre-mailout efforts. This activity includes participating in
 training sessions offered by EPA and becoming familiar with the survey design and policies. In
 addition, it includes activities such as reviewing the draft data collection instrument.
- Help EPA verify SDWIS data. There are several important variables for which SDWIS data
 must be verified. Critical inventory data for the statistical sample will need to be reviewed. Such
 data include PWSID, system name, address, telephone numbers (if any), primary source,
 population served, number of service connections, whether the facility is a NPNCWSs, and
 whether the system is a consecutive system. To help with this verification activity, EPA will
 provide the information that must be reviewed in electronic form.
- **Perform miscellaneous administrative activities.** EPA regional offices will perform various administrative duties prior to the 2020 Native American DWINSA (e.g., establishing system files). In addition, EPA regional management will explain the 2020 Native American DWINSA to staff and allocate resources.

EPA Regional Office's Data Collection Activities

EPA regional offices will conduct the following activities for the American Indian water systems (except those water systems under the primacy of the Navajo Nation) and Alaska Native Village water systems during the data collection phase:

• **Telephone systems to ensure participation.** EPA regional offices will contact the water system operators or managers of systems selected in the 2020 Native American DWINSA to ensure

participation, schedule time to discuss the systems 20-year need, and review the completed data collection instrument.

- Review the IHS SDS projects. EPA regional offices will review the list of projects extracted from the IHS SDS and incorporate appropriate projects on to the 2020 DWINSA data collection instrument.
- **Discuss 20-year need and survey questions.** EPA regional offices will contact the water systems and discuss projects that have been identified, ask basic questions about the physical design and condition of the plant, system configuration, and capital needs, and request additional documentation from the water system. EPA regional offices will also discuss the LSL and OpW questions with the water system.
- **Complete the data collection instrument.** Based on all the data collected from IHS SDS and the water system, EPA regional offices will complete the data collection instrument and submit it to EPA. An estimate of total amount of pipe in the system must be provided if any pipe project is submitted without independent documentation of need (e.g., a planning document).
- **Discuss results with EPA.** After the data collection instrument is submitted, EPA will perform a quality control/quality assurance check to ensure all data are documented and allowable. Any differences of opinion regarding the documentation of the data will be resolved by EPA Headquarters and EPA regional offices.

A.5.b Collection Methodology and Management

This section discusses the steps that EPA has taken to ensure that the information being collected will be accurate, reliable, and retrievable. This methodology was developed using experience gained in conducting the previous DWINSAs. EPA has incorporated into this methodology comments and advice from EPA staff involved with those assessments.

Development of Data Collection Instrument

Appendix B contains the data collection instrument. EPA has developed the 2020 DWINSA approach and the data collection instrument with the assistance of a workgroup. As is explained in Section A.3.c, the workgroup includes EPA Headquarters, EPA Regions, the Navajo Nation and state representatives. The 2020 DWINSA approach and many of the refinements to the data collection instrument were based on experience in conducting the 1995, 1999, 2003, 2007, 2011, and 2015 DWINSAs.

EPA is adding new questions on LSLs, I&S, and OpW to the data collection instrument. AWIA amended the SDWA to require the DWINSA to collect information on the cost of lead service line replacements. EPA is also interested in understanding the 20-year demand for iron and steel represented by Needs Survey projects as an aid to management of the AIS requirements for DWSRF funding. EPA also wants to gauge the extent to which the availability of an adequate water treatment and distribution system operator workforce is a concern for utilities.

The format and content of the data collection instrument will otherwise remain largely unchanged from the 2015 DWINSA. Section B.2.d for the 2020 State DWINSA describes the steps taken to ensure that the data collection instrument will be an effective tool for retrieving the information EPA needs to meet the 2020 DWINSA objectives.

Methodology for 2020 State DWINSA – CWSs Serving More Than 3,300 Persons and NPNCWSs Serving More than 10.000 Persons

Most CWSs serving more than 100,000 persons have CIPs or similar documents that summarize their projects. Therefore, these systems are generally able to provide accurate information on their needs and, for some projects, accurate estimates on the associated cost. A data collection instrument will be sent to states for every CWS that serves more than 100,000 persons. Clarifying information for completing the data collection instrument will be available from EPA.

The experience of states that participated in the previous DWINSAs indicates that most CWSs serving 3,301 to 100,000 persons and NPNCWSs serving more than 10,000 persons could provide reliable data on their needs and a large portion of these systems could provide at least some cost estimates for meeting those needs.

Also, water systems that participated in the 2015 State DWINSA and selected to participate in the 2020 State DWINSA will receive a pre-populated project table in the data collection instrument that lists the projects included in the 2015 State DWINSA. These water systems will be able to update the information on the list and add new projects to the data collection instrument. NPNCWSs did not participate in the 2015 State DWINSA and thus will not receive a copy of previous submissions. States will provide technical support to the water systems participating in the 2020 State DWINSA. EPA will also offer technical support to state and water system personnel.

EPA will send the electronic data collection instrument via email to the states to forward onto the water systems. Water systems will return the completed electronic data collection instrument and supporting documentation to the state via email. The state will review the water system submission and then forward the data collection instrument and supporting documentation to EPA via email for review and data entry. Supporting documentation can also be submitted electronically to EPA using a secure shared SharePoint site if the documents are too large for email transmittal. EPA will perform a second quality assurance/quality control check to ensure that all infrastructure projects are properly coded, documented, and allowable. EPA will enter the data into the data system. Projects or cost estimates that are not documented will be identified in the data system as lacking documentation. If the system or state does not provide documentation, the project or cost estimate will be deleted from the 2020 State DWINSA. EPA will offer technical support to state personnel to assist with the completion of each of these steps.

For projects that do not have cost estimates, EPA will model the costs if the appropriate modeling parameters are provided.

Methodology for 2020 State DWINSA – CWSs Serving 3,300 or Fewer Persons and NPNCWSs Serving 10,000 or Fewer Persons

Based on state experience with past needs surveys; the small system data collection efforts of the 1995, 1999, and 2007 State DWINSAs, and other experience with small CWSs and NPNCWSs serving 10,000 or fewer persons, EPA knows it is unlikely that these systems can reliably complete the data collection instrument. Therefore, EPA will collect data from these systems through site visits. To ensure consistency, the site visits will be conducted by an EPA contractor accompanied by state or EPA's regional personnel, if they wish to participate. To help reduce costs, systems will be clustered together by county or clusters of counties. The statistical sample for small CWSs will require that all states have at least one cluster of six small CWSs. EPA will select a random sample of NPNCWSs serving 10,000 or fewer persons within the clusters or counties with small systems that are selected to be surveyed.

Methodology for American Indian and Alaska Native Village Water Systems

EPA regional offices and the Navajo Nation will use EPA, IHS, and tribal resources to establish an estimate of need for the American Indian and Alaska Native Village water systems. To ensure that all appropriate systems are addressed, EPA regional offices and the Navajo Nation will review the inventory data in SDWIS and provide any updates or changes to EPA Headquarters. EPA regional offices and the Navajo Nation will collect information on the projects needed by the selected systems over the 20-year period captured by the DWINSA and complete the data collection instrument. Appendix B contains the data collection instrument.

The data collection instruments will then be forwarded to EPA for review and data entry. EPA will perform a quality control/quality assurance check to ensure that all data are documented and allowable. EPA will enter the data into the data system. If EPA regional office or the Navajo Nation chooses, it may verify that the data have been entered into the data system. Projects or cost estimates that are not documented will be identified in the data system as lacking documentation. If the system, EPA regional office, or the Navajo Nation does not provide documentation, the project or cost estimate will be deleted from the 2020 Native American DWINSA.

For projects that do not have a cost, if the appropriate cost modeling parameters are provided, the costs for the Native American DWINSA projects will be assigned using the models developed for the overall 2020 State DWINSA.

Data Quality

It is important that the results of the DWINSA be as uniform as possible across the country. Toward this end, EPA will take the following steps:

- EPA will establish a uniform set of assumptions or criteria for state, EPA Regions, the Navajo Nation, and EPA Headquarters and contractor staff to evaluate data provided by systems.
- EPA will provide training to all those involved in the DWINSA to ensure that the assumptions and procedures are clear and understood.
- EPA will provide quality control reviews of each data collection instrument submitted to ensure compliance with DWINSA policies and accuracy of data.

Among the most important steps in quality assurance is training. EPA will provide training sessions for states, the Navajo Nation, and EPA Regions involved in the 2020 DWINSA. The training sessions will be designed to enable a thorough and efficient review of completed data collection instruments and to be prepared for questions from systems on the projects to be included in the survey response and related project documentation. The training will emphasize the following elements:

- Identifying the infrastructure improvements associated with source, treatment, transmission, distribution, and storage.
- Understanding policies and documentation requirements.
- Completing the 2020 DWINSA data collection instrument.

EPA will provide state, Navajo Nation, and EPA Region personnel who were unable to attend training sessions access to training materials. In addition to the training sessions, EPA will provide technical support to state, EPA Region, and water system personnel. It is anticipated that this support will primarily consist of providing information to EPA Regions, the Navajo Nation, and states, which will then provide

technical support to the systems. However, technical support will be available to systems in states that have chosen not to provide their own technical assistance.

Data quality will be assured by implementing the following mechanisms throughout the gathering and processing phases of the information collection:

- Adequate documentation. EPA has requested documentation of infrastructure needs and costs, when cost documentation is available, to ensure the accuracy and reliability of the data.
 Acceptable forms of documentation of needs and costs are included on List 4 of the Lists of Codes. EPA will not accept needs or costs without adequate documentation. EPA will emphasize to respondents that they are not expected to develop cost estimates for the purposes of the 2020 DWINSA. The costs of projects without a cost estimate will be modeled by EPA if the appropriate modeling parameters are provided.
- **Provide an estimate of the total length of pipe in the water system.** This information will only be required for water systems that submit projects for rehabilitation or replacement of pipe that are not independently documented (e.g., planning document or sanitary survey). It is expected that not all systems will need to provide this information.
- **Receipt control.** The primary objective of the receipt control system will be to ensure that completed forms submitted by respondents (or forwarded by states, the Navajo Nation, or EPA Regions) are logged in promptly and given proper chain of custody. A second objective is to provide states, the Navajo Nation, and EPA Regions with the data needed to monitor cumulative survey receipts by date to identify potential problems with the response rate. Inadequate response rate problems could necessitate action to prompt survey completion and submittal. See Section B.2.c.ii for EPA's method for improving the response rate. States, the Navajo Nation, and EPA Regions that receive data collection instruments from respondents will be trained in receipt control.
- Data review by states, EPA Regions, and the Navajo Nation. EPA will rely on the states, EPA regional offices, and the Navajo Nation to help ensure data quality. Fourteen states are expected not to participate in the statistical portion of the 2020 State DWINSA (i.e., collecting data from systems serving 3,301 to 100,000 persons). However, all states that have systems serving more than 100,000 persons are expected to participate in the census portion of the survey. EPA will ask the Association of State Drinking Water Administrators (ASDWA) to communicate with the state drinking water program administrators to encourage their participation. EPA believes that state review is important in ensuring nationally consistent results because the states have more frequent communications with systems and possess a better understanding of each particular system's needs. Therefore, state personnel will have the opportunity to review the information on the form, as well as any accompanying documentation. When necessary, the states will contact the water system to ask for clarifying information.
- Survey review and data entry. EPA will screen the submitted electronic data collection instruments for completeness and review projects to ensure that they are allowable and adequately documented based on survey policies. To reduce the review time for water systems that participated in the 2015 State DWINSA, EPA will compare the responses of the 2020 State DWINSA with those of the 2015 State DWINSA and conduct a thorough review of the projects flagged as requiring a complete review. Projects that are needed in each 20-year survey period and that remain unchanged from the 2015 survey will not require a complete review unless that project is impacted by another project that is added or changed. Reviewers will also assign comment codes to projects to describe any changes made to the data. Data from the data

collection instruments will be entered into the database only after they have passed the initial screening. As data are entered, an automatic data entry program will provide reasonable bounds checking and data verification. The program will signal if an entry is out of the allowable range or is an invalid entry for that data field. All such signals will be investigated and resolved.

- **Data systems.** EPA will use an updated Web-based data system from the 2007, 2011, and 2015 DWINSAs for the 2020 DWINSA. The Web-based system includes a data entry interface that allows the Agency and its contractor to input data and allows states and EPA Regions to access, download, verify, and suggest modifications to their data (www.dwneeds.epa.gov). EPA will use a commercial "off the shelf" program, Microsoft Access, to manage the information. The data system will provide the following functions:
 - Data entry through the contractor interface or batch upload.
 - Data verification through bounds checking.
 - A password-protected data modification documentation interface.
 - Data access for states, the Navajo Nation and EPA Regions for review and verification of their data.
 - Predefined summary and statistical reports.
- Cost reasonableness ranges. EPA will develop "cost reasonableness ranges" based on type of
 need and design capacity to help verify the accuracy of the data and identify projects for further
 review.

Public Access to Data

The Agency's policy is to make the fullest possible disclosure of information without unjustifiable expense or unnecessary delay to the requester. Once the final Report to Congress has been submitted, the public will be given access to assessment data in accordance with EPA's policies and procedures for Freedom of Information Act (FOIA) requests. However, as a matter of policy, EPA will not disclose the identity of any respondent to the 2020 DWINSA. EPA will develop standard report formats for providing data to the public.

A.5.c Small Entity Flexibility

In designing the 2020 DWINSA methodology, EPA has taken small systems' relatively limited technical capabilities and financial resources into consideration. EPA's experience with the previous DWINSAs has shown that small CWSs and NPNCWSs serving 10,000 or fewer persons lack the resources and technical ability to complete the data collection instruments. Small CWSs and NPNCWSs serving 10,000 or fewer persons and regulated by the states will be included in the 2020 DWINSA and assessed by site visitors.

EPA will conduct a census of all American Indian and Alaska Native Village systems serving more than 3,300 and will select a random sample of American Indian and Alaska Native Village systems serving 3,300 or fewer persons. Past experiences with the DWINSA has shown that many of these systems cannot complete the data collection instrument. Instead of mailing a data collection instrument to the water systems, EPA Regions and the Navajo Nation will collect data and complete the data collection instrument with input from the water systems.

EPA anticipates that almost all of the systems serving 3,300 or fewer persons will not be able to provide information on all needs and capital costs. For projects without a documented cost, EPA will model a cost if the appropriate cost modeling parameter is provided.

A.5.d Collection Schedule

The current schedule assumes EPA would receive OMB approval for data collection by September 2020. The schedule will be adjusted based on the final approval date. EPA will send data collection instruments to states, the Navajo Nation, and EPA Regions as soon as possible after OMB approval. All systems serving more than 3,300 persons participating in the 2020 State DWINSA will be asked to complete and return the data collection instruments to their state within 1 month of receipt.

To facilitate efficient data entry by EPA, the Agency will ask to receive one-third of the systems' responses within two months after data collection begins. Data for two-thirds of the systems will be due within three months and all data will be due within five months. Exhibit A-5-1 summarizes the major collection milestones.

Exhibit A-5-1 Collection Schedule

Task	Date	
EPA Tentatively Selects Systems to be Included in DWINSA Samples	October 2019	
Training Sessions for States, the Navajo Nation and EPA Regions	September - December 2019	
Information Collection Request Released for 60-day Public Review	February 2020	
Information Collection Request Submitted to OMB	June 2020	
Electronic Delivery of Data Collection Instruments to States, the Navajo Nation and EPA Regions	September 2020	
Date by which Systems Are to Return the Data Collection Instrument to States, the Navajo Nation, and EPA Regions	October 2020	
1/3 of Sent Data Collection Instruments Returned to EPA	November 2020	
2/3 of Sent Data Collection Instruments Returned to EPA	December 2020	
All Sent Data Collection Instruments Returned to EPA	February 2021	
No New Projects Will Be Accepted by EPA	March 2021	
No New Information on Submitted Projects Will Be Accepted by EPA	May 2021	
All Information in the Data System Finalized	November 2021	
Report to Congress	May 2022	

A.6 ESTIMATING THE BURDEN AND COST OF THE COLLECTION

A.6.a Respondent Burden

The "Respondents by Water System Size" box includes estimated numbers of water systems that will participate in the 2020 DWINSA. The estimates are presented by system size and whether they also participated in the 2015 State DWINSA or 2011 Native American DWINSA. For the purpose of estimating the maximum burden hours, EPA assumes a 100 percent

Respondents by Water System Size

- CWSs serving more than 50,000 persons = 1,006
 - o 708 serving more than 100,000 persons and participated in the 2015 State DWINSA.
 - o 224 serving 50,001-100,000 persons in Fully Participating States and participated in the 2015 State DWINSA.
- o 74 serving 50,001-100,000 persons in Full 2020 Participating States and did not participate in the 2015 State DWINSA.
- Systems serving 3,301-50,000 persons in Fully

ICR for 2020 DWINSA

response rate from the sample of systems. The response rate in previous DWINSAs has always exceeded 90 percent.

Approximately 3,912 systems will participate in the 2020 State and Native American DWINSAs. The estimated total includes: 708 CWSs serving more than 100,000 persons; 298 CWSs serving 50,001 to 100,000 persons (224 that participated in the 2015 DWINSA and 74 that did not); 1,531 CWSs serving 3,301 to 50,000 persons (1,531 that participated in the 2015 DWINSA and 383 that did not) in fully participating states; 606 small CWSs serving 3,300 or fewer persons; 13 NPNCWSs serving more than 10,000 persons; and 100 NPNCWS serving 10,000 or fewer persons. Also included are 113 American Indian and Alaska Native Village systems serving more than 3,300 persons and 191 American Indian and Alaska Native Village systems serving 3,300 or fewer persons (a total of 304 American Indian and Alaska Native Village systems of which 228 systems participated in the 2011 Native American DWINSA and 76 that did not). In addition, the total of 3,912 systems includes 323 CWSs serving 3,301 to 50,000 persons and 29 CWSs serving 50,001 to 100,000 persons in partial participation states that will receive only the questions for LSL and OpW.

For burden estimates for water systems it is important to note that many of the systems participating in the 2020 State DWINSA were also sampled in the previous 2015 State DWINSA. As described in detail in Section B.2, EPA will use a modified panel approach to select water systems to be sampled. This approach will result in a re-sampling of 75 percent of the CWSs serving 3,301 to 100,000 persons that were sampled for the 2015 State DWINSA. Approximately 25 percent of CWSs serving 3,301 to 100,000 persons sampled for the 2020 State DWINSA did not participate in the 2015 State DWINSA. Because EPA will conduct a census of all CWSs serving more than 100,000 persons, the total percentage of CWSs sampled for the 2020 State DWINSA that were also sampled for the 2015 State DWINSA will be greater than 75 percent.

These re-sampled respondents will be able to verify and update their previously submitted data. It is anticipated this will reduce the burden that some entities will have to spend on portions of their survey. For these respondents, EPA provides separate burden estimates for the CWSs being re-sampled with a higher burden estimate for the CWSs being sampled in 2020 that were not sampled in 2015. EPA developed formulas to calculate the proportional share of the burden estimates for systems that did and did not participate in the 2015 State DWINSA to calculate the total burden estimates

EPA will also use a panel approach for sampling American Indian and Alaska Native Village systems, as described in detail in Section B.2. All American Indian and Alaska Native Village systems serving more than 3,300 persons will be sampled by census. Approximately 75 percent of American Indian and Alaska Native Village systems serving fewer than 3,300 persons that were sampled in the 2020 Native American DWINSA were also sampled in the 2011 Native American DWINSA. Similar to the State DWINSA, it is anticipated that the 75 percent of American Indian and Alaska Native Village respondents that participated in the 2011 Native American DWINSA will need less time to respond to portions of their 2020 survey than the 25 percent that did not participate in the 2011 Native American DWINSA. EPA developed formulas to calculate the proportional share of the burden estimates for systems that did and did not participate in the 2011 Native American DWINSA to calculate the total burden estimates.

A.6.a.i Burden to Water Systems

The total annual water system burden for the 2020 DWINSA is estimated to be 5,239 hours (a total of 20,955 hours over the full 4-year project effort). Exhibit A-6-16, A-6-17, and A-6-18 show the breakdown of the total burden hours for CWSs and NPNCWSs by system size in the 2020 DWINSA. The basis for the burden estimates is detailed below.

ICR for 2020 DWINSA 29 July 2020

The respondent burden for the systems serving more than 50,000 persons consists of systems' burden for completing the data collection instrument. EPA estimates that the total unit burden is 7.58 hours per system. Exhibit A-6-1 shows the unit burden for 1,006 systems serving more than 50,000 persons.

As described above, 75 percent of CWSs serving 50,001 to 100,000 persons sampled for the 2020 State DWINSA were also sampled for the 2015 State DWINSA, and EPA conducted a census of CWSs serving populations more than 100,000 persons in the 2011 and 2015 State DWINSAs. To calculate the total percentage of CWSs serving more than 50,000 persons that will participate in both the 2015 and 2020 State DWINSAs, EPA uses the following formula:

$$(708 + (0.75 \times 298))/(708 + 298) = 0.93$$

In this formula, 708 is the total number of CWSs serving more than 100,000 persons that will participate in the 2020 State DWINSA, and 298 is the total number of CWSs serving 50,001 to 100,000 persons that will participate in the 2020 State DWINSA.

The percentage of CWSs serving more than 50,000 persons that will participate in the 2020 State DWINSA and did not participate in the 2015 State DWISNA is calculated using the following formula:

$$(0.25 \times 298)/(708 + 298) = 0.07$$

These two formulas are used below to calculate the total burden estimates.

• **Participate in informational phone call.** All systems will participate in an informational phone call with the state. On this call, the state will inform respondents about the upcoming DWINSA, describe the purpose of the DWINSA, and explain how respondents will receive and submit the data collection instrument. The state will also describe the information that will be requested and the timetable for completing and returning the data collection instrument. For systems that participated in the 2015 State DWINSA, each informational call should last about 15 minutes (0.25 hours).

EPA anticipates that systems that did not participate in the 2015 State DWINSA will need more time on the phone call to understand the process. Each informational call should last about 20 minutes (0.33 hours).

For all systems, explaining the addition of the LSL, OpW, and I&S questions should add about 10 minutes (0.17 hours) to the phone call. EPA expects that the majority of this time will be spent discussing LSL questions and that minimal time will be necessary to introduce the OpW and I&S questions.

Consequently, the average burden per system is as follows:

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[0.25 \times (708 + (0.75 \times 298))/(708 + 298)] + [0.33 \times (0.25 \times 298)/(708 + 298)] + 0.17 = 0.43 hrs/system.
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EPA anticipates that management staff will take the call at half of the systems and technical staff will take the call at the other half.

• **Read cover letter.** EPA anticipates systems that participated in the 2015 DWINSA will need less time to read the cover letter and data collection instructions because they will already be familiar with the process and will only need to become familiar with aspects of the survey that have

changed. EPA estimates that the burden for each of these systems is 45 minutes (0.75 hours) and breaks down as follows:

- A manager will receive the 2020 State DWINSA, read the cover letter and review the instructions and other materials. The estimated time for managers to perform these activities is 15 minutes (0.25 hours).
- Technical staff will read the cover letter and data collection instructions in detail. EPA estimates that the burden for this activity is 30 minutes (0.50 hours) per system.

EPA estimates that systems that did not participate in the 2015 DWINSA will need 1.5 hours to read these materials. This estimate breaks down as follows:

- A manager will receive the 2020 State DWINSA, read the cover letter and review the instructions and other materials. The estimated time for managers to perform this role is 30 minutes (0.50 hours).
- Technical staff will read the cover letter and data collection instructions in detail. EPA estimates that the burden for this activity is 1.0 hour per system.

Thus, the total unit burden is:

$$[0.75 \times (708 + (0.75 \times 298))/(708 + 298)] + [1.5 \times (0.25 \times 298)/(708 + 298)] = 0.81 \text{ hrs/system}$$

• Collect and copy supporting documentation. The time necessary to review system files and to collect and copy supporting documentation will vary greatly. EPA anticipates that systems that participated in the 2015 DWINSA will use much of the same documentation that was collected and submitted for the previous DWINSA with limited modifications or updates. Therefore, EPA estimates that the time for these systems to collect and copy supporting documentation will be reduced from previous years. EPA estimates that it will take 1.0 hour at 50 percent of the systems, 2.0 hours at 25 percent of the systems and 4.0 hours at 25 percent of the systems. Thus, the average time per system is as follows:

$$(1.0 \times 0.5) + (2.0 \times 0.25) + (4.0 \times 0.25) = 2.0 \text{ hrs/system}$$

For systems that did not participate in the 2015 DWINSA, EPA estimates that it will take 1.5 hours at 30 percent of the systems, 2.5 hours at 30 percent of the systems, 4 hours at 30 percent of the systems and 16 hours at 10 percent of the systems. Thus, the average time per system is as follows:

$$(1.5 \times 0.30) + (2.5 \times 0.30) + (4 \times 0.30) + (16 \times 0.10) = 4 \text{ hrs/system}$$

The total average time per system is:

$$[2.0 \times (708 + (0.75 \times 298))/(708 + 298)] + [4 \times (0.25 \times 298)/(708 + 298)] = 2.15 \text{ hrs/system}$$

Half of this time will be spent by technical staff and half will be spent by clerical staff.

• Call for technical assistance. Many systems will call states for technical assistance. In developing the burden estimate for this activity, EPA assumes that the number of requests for assistance will equal 100 percent of the number of systems. (This estimate considers the likelihood that some systems will call more than once, while some will not call at all.) EPA also assumes that each call will be placed by technical staff.

EPA anticipates that systems that participated in the 2015 State DWINSA will need less technical assistance than those that did not participate in the 2015 State DWINSA. Therefore, EPA estimates that all questions from systems that participated in the 2015 State DWINSA will be readily answerable and the state will not need to conduct any additional research and will be able to answer the question during the initial call. That initial call is estimated to average 15 minutes (0.25 hours).

EPA estimates that the burden for systems that did not participate in the 2015 State DWINSA break down as follows:

- About 50 percent of the questions will be readily answerable, and the state will not need
 to conduct any additional research and will be able to answer the question during the
 initial call that will average 15 minutes (0.25 hours).
- About 50 percent of the questions will need the state to perform research and call the system back. In this case, EPA estimates that the total burden for the two calls is 25 minutes (0.42 hours).

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[(0.25 \times 0.50) + (0.42 \times 0.50)] = 0.34 \text{ hrs/system}
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The total average burden per system is:

$$[0.25 \times (708 + (0.75 \times 298))/(708 + 298)] + [0.34 \times (0.25 \times 298)/(708 + 298)] = 0.26 \text{ hrs/system}$$

• **Complete data collection instrument.** The burden to systems to complete the data collection instrument will vary depending on whether the system participated in the 2015 State DWINSA. The 2015 State DWINSA participants will have a relatively low burden because EPA expects that a large portion of the information in the 2015 State DWINSA will carry over to the 2020 State DWINSA. Thus, with the exception of the new LSL, I&S, and OpW questions, 2015 State DWINSA participants will only update their needs and documentation rather than identify all their needs anew.

With the exception of the new LSL, I&S, and OpW questions, EPA estimates that technical staff at systems that participated in the 2015 State DWINSA will need 2.0 hours to update the 2015 survey and complete the project table of the data collection instrument. EPA estimates that technical staff at systems that did not participate in the 2015 State DWINSA will take 3.0 hours to complete the project table of the data collection instrument. This estimate is consistent with EPA's experience with the previous DWINSAs. The total time burden for technical staff is estimated to be:

$$[2 \times (708 + (0.75 \times 298))/(708 + 298)] + [3 \times (0.25 \times 298)/(708 + 298)] = 2.07 \text{ hrs/system}$$

All systems will receive the LSL, I&S, and OpW questions for the first time. Management is expected to take 23 minutes (0.38 hours) to answer the LSL questions, and a total of 10 minutes to answer the I&S questions and the OpW questions (5 minutes each, 0.17 hours total). In addition, EPA anticipates that each system will need an additional 20-minute (0.33 hours) phone call with the state to further discuss the LSL questions. EPA estimates that one-third of the systems will need yet another call with the state to clear up any remaining questions regarding the LSL information. This additional call to a third of systems will take 15 minutes (0.25 hours). The 20-minute phone call and additional call to a third of systems adds up to a total of 25 minutes (0.42 hours) of management time.

Management is expected to take 18 minutes (0.30 hours) to review the completed data collection instrument for accuracy and submit the data collection instrument and supporting documentation electronically. Thus, the total time burden for management is estimated to be:

$$(0.3 + 0.38 + 0.17 + 0.42) = 1.27$$
 hrs/system.

Clerical staff is anticipated to take 18 minutes (0.3 hours) to provide support to the technical staff at water systems that participated in the 2015 State DWINSA and 1.0 hour at water systems that did not participate in the 2015 State DWINSA. The total time burden for clerical staff is estimated to be:

$$[0.3 \times (708 + (0.75 \times 298))/(708 + 298)] + [1 \times (0.25 \times 298)/(708 + 298)] = 0.35 \text{ hrs/system}$$

Thus, the total unit burden to systems that participated in the 2015 State DWINSA is approximately:

$$2 + 0.30 + 0.38 + 0.17 + 0.33 + [(0.33) \times 0.25] + 0.3 = 3.56 \text{ hrs/system}$$

The total unit burden to systems that did not participate in the 2015 State DWINSA is approximately:

$$3 + 0.30 + 0.38 + 0.17 + 0.33 + [(0.33) \times 0.25] + 1 = 5.26 \text{ hrs/system}$$

The total average burden per system is as follows:

$$[3.56 \times (708 + (0.75 \times 298))/(708 + 298)] + [5.26 \times (0.25 \times 298)/(708 + 298)] = 3.69 \text{ hrs/system}$$

• Respond to call back from state about status of 2020 State DWINSA. For this burden estimate, EPA assumes each system will spend time responding to the state call(s) to request a status update on completing the data collection instrument. EPA assumes that the average total time spent by each system on responding to the state call(s) is 15 minutes (0.25 hours) per system. This does not include discussing technical questions, which is accounted for above. Rather, it includes time needed for the system to provide the state with a brief report on the status of the 2020 State DWINSA response.

Exhibit A-6-1 Estimated Average Unit Burden for Systems Serving More Than 50,000 Persons

A		Estimated Bur	den (hours)	
Activity	Management	Technical	Clerical	Total
Participate in informational phone call	0.21	0.21		0.43
Read cover letter/data collection instructions	0.27	0.54		0.81
Collect supporting documentation		1.07	1.07	2.15
Call for technical assistance		0.26		0.26
Complete data collection instrument	1.27	2.07	0.35	3.69
Respond to call back from state		0.25		0.25
TOTAL	1.75	4.41	1.43	7.58

Note: Numbers may not add due to rounding.

2020 State DWINSA – CWSs Serving 3,301 – 50,000 Persons

Exhibit A-6-2 shows the unit burden for 1,531 systems serving 3,301 to 50,000 persons. EPA estimates that each of these systems will take a total of 6.23 hours to respond to the 2020 State DWINSA.

• **Participate in informational phone call.** All systems will participate in an informational phone call with the state. On this call, the state will inform respondents about the upcoming DWINSA, describe the purpose of the DWINSA, and explain how respondents will receive and submit the data collection instrument. The state will also describe the information that will be requested and the timetable for completing and returning the data collection instrument. For systems that participated in the 2015 State DWINSA, each informational call should last about 15 minutes (0.25 hours).

EPA anticipates that systems that did not participate in the 2015 State DWINSA will need more time on the phone call to understand the process. Each informational call should last about 20 minutes (0.33 hours).

For all systems, explaining the addition of the LSL, OpW, and I&S question should add about 10 minutes (0.17 hours) to the phone call. EPA expects that the majority of this time will be spent discussing LSL questions and that minimal time will be necessary to introduce the OpW and I&S questions. This will be split between management and technical staff, since each will take half of the calls.

Consequently, the average burden per system is as follows:

$$[(0.25 \times 0.75) + (0.33 \times 0.25)] + 0.17 = 0.44 \text{ hrs/system}$$

EPA anticipates that management staff will take the call at half of the systems and technical staff will take the call at the other half.

• **Read cover letter.** EPA anticipates that systems that participated in the 2015 State DWINSA will need less time to read the cover letter and data collection instructions because they will already be familiar with the process and will only need to become familiar with aspects of the survey that

have changed. EPA estimates that the burden for each of these systems is 45 minutes (0.75 hours) and breaks down as follows:

- A manager will receive the 2020 State DWINSA, read the cover letter and review the instructions and other materials. The estimated time for managers to review these items is 15 minutes (0.25 hours).
- Technical staff will read the cover letter and data collection instructions in detail. EPA estimates that the burden for this activity is 30 minutes (0.50 hours) per system.

EPA estimates that systems that did not participate in the 2015 State DWINSA will need 1.5 hours to read these materials. This estimate breaks down as follows:

- A manager will receive the 2020 State DWINSA, read the cover letter and review the instructions and other materials. The estimated time for managers to review the cover letter is 30 minutes (0.50 hours).
- Technical staff will read the cover letter and data collection instructions in detail. EPA estimates that the burden for this activity is 1.0 hour per system.

Thus, the total unit burden is:

$$[(0.75 \times 0.75) + (1.5 \times 0.25)] = 0.94 \text{ hrs/system}$$

• Collect and copy supporting documentation. The time necessary to review system files and to collect and copy supporting documentation will vary greatly. For instance, systems serving 3,301 to 50,000 persons typically have less documentation than larger systems. Furthermore, EPA anticipates that systems that participated in the 2015 State DWINSA will use much of the same documentation that was collected and prepared for the previous DWINSA with limited modifications or updates. Therefore, EPA estimates that the time for these systems to collect and copy supporting documentation will be reduced from previous years. EPA estimates that it will take approximately 45 minutes (0.75 hours) at 40 percent of these systems, 1.5 hours at 40 percent of these systems, and 3.0 hours at 20 percent of these systems. Thus, the average time per system that participated in the 2015 State DWINSA is as follows:

$$[(0.75 \times 0.40) + (1.5 \times 0.40) + (3 \times 0.20)] = 1.5 \text{ hrs/system}$$

For systems that did not participate in the 2015 State DWINSA, EPA estimates that it will take 1.0 hour at 50 percent of the systems, 2.0 hours at 25 percent of the systems, and 4.0 hours at 25 percent of the systems. Thus, the average time per system is as follows:

$$[(1.0 \times 0.5) + (2.0 \times 0.25) + (4.0 \times 0.25)] = 2.0 \text{ hrs/system}$$

The total average time per system is:

$$[(1.5 \times 0.75) + (2.0 \times 0.25)] = 1.63 \text{ hrs/system}$$

Half of this time will be spent by technical staff and half will be spent by clerical staff.

• **Call for technical assistance.** Many systems will call states for technical assistance. In developing the burden estimate for this activity, EPA assumes that the number of requests for assistance will equal 150 percent of the number of systems. (This estimate accounts for the fact

that some systems will call more than once, while some will not call at all.) EPA also assumes that each call will be placed by technical staff.

EPA anticipates that systems that participated in the 2015 State DWINSA will need less technical assistance than those that did not participate in the 2015 State DWINSA. Therefore, EPA estimates that all questions from systems that participated in the 2015 State DWINSA will be readily answerable and the state will not need to conduct any additional research and will be able to answer the question during the initial call. That initial call is estimated to average 15 minutes (0.25 hours).

EPA estimates that the burden for systems that did not participate in the 2015 State DWINSA breaks down as follows:

- About 50 percent of the questions will be readily answerable and the state will not need to conduct any additional research and will be able to answer the question during the initial call that will average 15 minutes (0.25 hours).
- About 50 percent of the questions will need the state to perform research and call the system back. In this case, EPA estimates that the total burden for the two calls is 25 minutes (0.42 hours).

$$[(0.25 \times 0.50) + (0.42 \times 0.50)] = 0.34 \text{ hrs/system}$$

The total average burden per system is:

$$1.50 \times [(0.25 \times 0.75) + (0.34 \times 0.25)] = 0.41 \text{ hrs/system}$$

• **Complete data collection instrument.** The burden to systems to complete the data collection instrument will vary depending on whether the system participated in the 2015 State DWINSA. The 2015 State DWINSA participants will have a relatively low burden because EPA expects that a large portion of the information in the 2015 State DWINSA will carry over to the 2020 State DWINSA. Consequently, 2015 State DWINSA participants will only update their needs and documentation rather than identify all their needs anew.

EPA estimates that technical staff at systems that participated in the 2015 State DWINSA will need 1.0 hour to update the 2015 survey and complete the project table of the data collection instrument. Technical staff at systems that did not participate in the 2015 State DWINSA are expected to take 2.0 hours to complete the data collection instrument. This estimate is consistent with EPA experience with the previous DWINSAs. Thus, the total time burden for technical staff is estimated to be:

$$(1 \times 0.75) + (2 \times 0.25) = 1.25$$

EPA estimates that management staff at systems that participated in the 2015 State DWINSA will need 18 minutes (0.30 hours) to review the completed data collection instrument for accuracy and submit the data collection instrument and supporting documentation electronically. Management staff at systems that did not participate in the 2015 State DWINSA are expected to take 28 minutes (0.47 hours) to review the completed data collection instrument for accuracy and submit the data collection instrument and supporting documentation electronically.

All systems will receive the LSL, I&S, and OpW questions for the first time. Management is expected to take 23 minutes (0.38 hours) to answer the LSL questions, and a total of 10 minutes to answer the I&S questions and the OpW questions (5 minutes each, 0.17 hours total). In

addition, EPA anticipates that each system will need an additional 20-minute (0.33 hours) phone call with the state to further discuss the LSL questions. EPA estimates that one-third of the systems will need yet another call with the state to clear up any remaining questions regarding the LSL information. This additional call to a third of systems will take 15 minutes (0.25 hours). Thus, the total time burden for management is estimated to be:

$$[(0.3 \times 0.75) + (0.47 \times 0.25)] + [0.38 + 0.17 + 0.33 + (0.33 \times 0.25)] = 1.31 \text{ hrs.}$$

Thus, the total unit burden to systems that participated in the 2015 State DWINSA is approximately:

$$1 + 0.30 + 0.38 + 0.17 + 0.33 + [0.33 \times 0.25] = 2.26 \text{ hrs/system}$$

The total unit burden to systems that did not participate in the 2015 State DWINSA is approximately:

$$2 + 0.47 + 0.38 + 0.17 + 0.33 + [0.33 \times 0.25] = 3.43 \text{ hrs/system}$$

The total average burden per system is as follows:

$$(2.26 \times 0.75) + (3.43 \times 0.25) = 2.55 \text{ hrs/system}$$

• **Respond to call back from state about status of 2020 State DWINSA**. For this burden estimate, EPA assumes each system will spend time responding to the state call(s) to request a status update on completing the survey's data collection instrument. EPA assumes that the average total time spent by each system on responding to the state call(s) is 15 minutes (0.25 hours) per system. This does not include discussing technical questions, which is accounted for above. Rather, it includes time necessary to provide the state with a brief report on the status of the 2020 State DWINSA response.

Exhibit A-6-2 Estimated Average Unit Burden for Systems Serving 3,301 to 50,000 Persons

A asimisa.		Estimated Bur	den (hours)	
Activity	Management	Technical	Clerical	Total
Participate in informational phone call	0.22	0.22		0.44
Read cover letter/data collection instructions	0.31	0.63		0.94
Collect supporting documentation		0.81	0.81	1.63
Call for technical assistance		0.41		0.41
Complete data collection instrument	1.31	1.25		2.55
Respond to call back from state		0.25		0.25
TOTAL	1.84	3.57	0.81	6.23

Note: Numbers may not add due to rounding.

2020 State DWINSA – CWSs Serving 3,300 or Fewer Persons

Exhibit A-6-3 shows the unit burden for systems serving fewer than 3,300 persons. EPA will conduct site visits at 606 small CWSs. Because EPA is conducting site visits to these CWSs, the burden imposed on

the systems is small. EPA estimates that the unit burden to small CWSs averages 3.59 hours per system. Exhibit A-6-3 summarizes the burden for each activity.

- **Participate in informational/scheduling telephone call.** On this call, EPA/EPA contractors will inform respondents about the upcoming DWINSA, describe the purpose of the DWINSA, and explain by whom the data collection instrument will be prepared and submitted. EPA will also describe the information that will be requested and the timetable for the site visit. This telephone call should take approximately 15 minutes (0.25 hours). Most small CWSs are staffed by one technical person; therefore, the entire burden falls with the technical labor category.
- Accompany survey team/answer questions. EPA does not expect that small CWS personnel will accompany the survey team for the entire site visit; however, EPA anticipates that system staff will make themselves available to answer very basic questions about the system configuration. EPA estimates that the burden to assist the survey team is 2 hours for half of the small CWSs selected and 4 hours for the remaining 303 systems. Additionally, EPA estimates that the LSL questions will take 10 minutes (0.17 hours) to complete, and the I&S questions and OpW questions will each take 5 minutes (0.083 hours each) to complete.

The total average burden per system is as follows:

$$[(2 \times 0.5) + (4 \times 0.5)] + (0.17 + 0.083 + 0.083) = 3.34 \text{ hrs/system}$$

Exhibit A-6-3 Estimated Unit Burden for Small CWSs

Activity	Estimated Burden (hours)			
	Managemen t	Technical	Clerical	Total
Participate in informational phone call		0.25		0.25
Accompany data collection team/answer questions		3.34		3.34
TOTAL	0	3.59	0	3.59

2020 State DWINSA – NPNCWSs Serving More than 10,000 Persons

The respondent burden for NPNCWSs serving more than 10,000 persons consists of systems' burden for completing the data collection instrument. Due to the complexity of these systems, data will not be collected by site visitors but will be collected by the systems with technical support from the states in which the systems are located. EPA estimates that the total unit burden is 8.03 hours per system. Exhibit A-6-4 shows the unit burden for 13 NPNCWSs serving more than 10,000 persons.

• Participate in informational phone call. Respondents will receive a call from the state to inform respondents about the upcoming DWINSA, describe the purpose of the DWINSA, and explain how respondents will receive and submit the data collection instrument. The state will also describe the information that will be requested and the timetable for completing and returning the data collection instrument. EPA anticipates that each informational call will last about 30 minutes (0.5 hours). Of this time, 10 minutes is attributed to explaining the LSL, OpW, and I&S

questions. EPA expects that the majority of this time will be spent discussing LSL questions and that minimal time will be necessary to introduce and explain the OpW and I&S questions.

EPA anticipates that management staff will take the call at half of the systems and technical staff will take the call at the other half.

- **Read cover letter.** EPA estimates that systems will need 1.5 hours to read these materials. This estimate breaks down as follows:
 - A manager will receive the 2020 State DWINSA, read the cover letter and review the instructions and other materials. The estimated time for managers to perform this role is 30 minutes (0.50 hours).
 - Technical staff will read the cover letter and data collection instructions in detail. EPA estimates that the burden for this activity is 1.0 hour per system.

Thus, the total unit burden is 1.5 hours per system.

Collect and copy supporting documentation. EPA estimates that it will take 1.0 hour at 50 percent of the systems, 2.0 hours at 25 percent of the systems and 4.0 hours at 25 percent of the systems. Thus, the average time per system is as follows:

$$[(1.0 \times 0.5) + (2.0 \times 0.25) + (4.0 \times 0.25)] = 2.0 \text{ hrs/system}$$

Half of this time will be spent by technical staff and half will be spent by clerical staff.

• Call for technical assistance. Many systems will call states for technical assistance. In developing the burden estimate for this activity, EPA assumes that the number of requests for assistance will equal 100 percent of the number of systems. (This estimate considers the likelihood that some systems will call more than once, while some will not call at all.) EPA also assumes that each call will be placed by technical staff.

EPA estimates that the burden for systems break down as follows:

- About 50 percent of the questions will be readily answerable, and the state will not need to conduct any additional research and will be able to answer the question during the initial call that will average 15 minutes (0.25 hours).
- About 50 percent of the questions will need the state to perform research and call the system back. In this case, EPA estimates that the total burden for the 2 calls is 25 minutes (0.42 hours).

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[(0.25 \times 0.50) + (0.42 \times 0.50)] = 0.34 \text{ hrs/system}
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• Complete data collection instrument. EPA expects that technical staff at NPNCWSs serving more than 10,000 persons will need approximately the same amount of time to complete the data collection instrument as technical staff at CWSs serving 3,301 to 50,000 persons that were not surveyed for the 2015 DWINSA. Thus, EPA estimates that technical staff will take 2.0 hours to complete the data collection instrument. This estimate is consistent with EPA experience with the previous DWINSAs for CWSs of this size. In addition, management is expected to take 28 minutes (0.47 hours) to review the completed data collection instrument for accuracy and submit the data collection instrument and supporting documentation electronically. Management is also expected to take 23 minutes (0.38 hours) to answer the LSL questions, and a total of 10 minutes

to answer the I&S questions and the OpW questions (5 minutes each, 0.17 hours total). In addition, EPA anticipates that each system will need an additional 20-minute (0.33 hours) phone call with the state to further discuss the LSL information. EPA estimates that one-third of the systems will need yet another call with the state to clear up any remaining questions regarding the questions. This additional call to a third of systems will take 15 minutes (0.25 hours). Thus, the total time burden for management is estimated to be:

$$(0.47 + 0.38 + 0.17) + [0.33 + (0.33 \times 0.25)] = 1.43$$
 hrs per system.

The total average burden per system is as follows:

1.43 + 2.00 = 3.43 hrs/system

• **Respond to call back from state about status of 2020 State DWINSA**. For this burden estimate, EPA assumes each system will spend time responding to the state call(s) to request a status update on completing the survey's data collection instrument. EPA assumes that the average total time spent by each system on responding to the state call(s) is 15 minutes (0.25 hours) per system. This does not include discussing technical questions, which is accounted for above. Rather, it includes time necessary for the system to provide the state with a brief report on the status of the 2020 State DWINSA response.

Exhibit A-6-4 Estimated Average Unit Burden for NPNCWSs Serving More Than 10,000 Persons

A		Estimated Bur	den (hours)	
Activity	Management	Technical	Clerical	Total
Participate in informational phone call	0.25	0.25		0.50
Read cover letter/data collection instructions	0.50	1.00		1.50
Collect supporting documentation		1.00	1.00	2.00
Call for technical assistance		0.34		0.34
Complete data collection instrument	1.43	2.00		3.43
Respond to call back from state		0.25		0.25
TOTAL	2.19	4.84	1.00	8.03

Note: Numbers may not add due to rounding.

2020 State DWINSA – NPNCWSs Serving 10,000 or Fewer Persons

EPA will conduct site visits at 100 NPNCWSs serving 10,000 or fewer persons. Because EPA is conducting site visits to these NPNCWSs, the burden imposed on the systems is small. EPA estimates that the unit burden to these NPNCWSs averages 2.0 hours per system. NPNCWSs were last surveyed for the 1999 DWINSA. At that time, EPA estimated that all NPNCWS staff would spend much less time accompanying the survey team during the site visit. Since the 1999 DWINSA, EPA has developed better interview methods to more completely capture the 20-year infrastructure needs. Therefore, the burden estimate for small CWSs was increased for the 2007 survey. EPA will apply the same survey methods and, therefore, burden to small CWSs and small NPNCWSs in this 2020 State DWINSA. Exhibit A-6-5 summarizes the burden for each activity.

- Participate in informational/scheduling telephone call. On this call, EPA/EPA contractors will inform respondents about the upcoming DWINSA, describe the purpose of the DWINSA, and explain by whom the data collection instrument will be prepared and submitted. EPA will also describe the information that will be requested and the schedule for the site visit. This telephone call should take approximately 15 minutes (0.25 hours). Most NPNCWSs are staffed by one technical person; therefore, the entire burden falls with the technical labor category.
- Accompany survey team/answer questions. EPA does not expect that NPNCWSs personnel will accompany the survey team for the entire site visit; however, EPA anticipates that system staff will make themselves available to answer very basic questions about the system configuration. EPA also anticipates that there will be fewer questions to ask NPNCWS staff when compared to small CWS staff because NPNCWSs typically have less water system infrastructure and have less documentation of need. EPA estimates that the burden to assist the survey team is 1.0 hour for half of the NPNCWSs selected and 2.0 hours for the remaining 50 percent of the systems. Additionally, EPA estimates that the LSL questions will take 5 minutes (0.083 hours) to complete. This burden is lower than that estimated for small CWSs because NPNCWSs typically have far fewer service lines. Smaller NPNCWSs may have as few as 1 service line, whereas small CWSs can have as many as 1,000 service lines. Thus, EPA estimates that these NPNCWSs will need less time to respond to the LSL questions relative to small CWSs. EPA estimates that the I&S questions and OpW questions will each take 5 minutes (0.083 hours each) to complete, which is the same as the estimate for small CWSs in this ICR.

The total average burden per system to accompany the survey team and answer questions is as follows:

 $[(1 \times 0.5) + (2 \times 0.5)] + (0.083 + 0.083 + 0.083) = 1.75 \text{ hrs/system}$

Exhibit A-6-5 Estimated Average Unit Burden for NPNCWSs Serving 10,000 or Fewer Persons

Activity	Estimated Burden (hours)			
	Managemen t	Technical	Clerical	Total
Participate in informational phone call	0	0.25	0	0.25
Accompany data collection team/answer questions	0	1.75	0	1.75
TOTAL	0	2.00	0	2.00

2020 State DWINSA - CWSs Serving 3,301 - 100,000 Persons in Partial Participation States

EPA will administer the LSL and OpW questions to 352 medium systems serving 3,301 to 100,000 persons in partial participation states. EPA estimates that the unit burden to these systems will be 1.05 hours. Exhibit A-6-6 shows the unit burden for systems serving 3,301-100,000 persons in partial participation states. I&S questions will not be asked of these systems because they do not report the 20-year infrastructure needs for which the I&S questions will be used.

- **Participate in informational call.** All systems will participate in an informational phone call with the state. On this call, the state will inform respondents about the upcoming DWINSA and their selection to provide information on LSL and OpW supplemental questions but not on 20-year infrastructure needs. The state will also explain how responses to the questions will be collected by follow-up phone call and will schedule the data collection call. Each informational phone call should take management staff about 10 minutes (0.17 hours).
- Phone call to complete data collection for LSL and OpW questions. All systems will answer brief questions over the phone. The time estimated for technical staff to walk through the questions with the state is about 43 minutes (0.72 hours) for the LSL questions and 5 minutes (0.083 hours) for the OpW questions. In addition, EPA anticipates that the state may need to conduct an additional call with one-third of the systems to clear up any remaining questions related to the LSL information. This additional call to a third of systems will take 15 minutes (0.25 hours). Thus, the total average burden per system is as follows:

 $[0.72 + 0.083] + [0.33 \times 0.25] = 0.88 \text{ hrs/system}$

Exhibit A-6-6 Estimated Average Unit Burden for Systems Serving 3,301-100,000 Persons in Partial Participation States

Activity	Estimated Burden (hours)			
	Managemen t	Technical	Clerical	Total
Participate in informational call	0.17	0	0	0.17
Phone call with state to answer questions	0.88	0	0	0.88
TOTAL	1.05	0	0	1.05

Note: Numbers may not add due to rounding.

2020 Native American DWINSA – American Indian and Alaska Native Village Water Systems

To minimize the burden on American Indian and Alaska Native Village water systems, EPA regional and the Navajo Nation personnel will complete the data collection instrument for the water system using their knowledge of the system, information from the IHS SDS, and any additional information collected from the system. Because EPA Region and the Navajo Nation are collecting the information and completing the data collection instrument, the burden imposed on the systems is small. In addition, 75 percent of the American Indian and Alaska Native Village Water Systems participating in the 2020 Native American DWINSA also participated in the 2011 Native American DWINSA, and EPA estimates a lower burden estimate for these systems when answering basic questions posed by the EPA regional office or the Navajo Nation. EPA estimates that the unit burden to these systems averages 3.13 hours per system. Exhibit A-6-7 summarizes the burden for each activity.

Participate in an informational telephone call from EPA Regional Office or the Navajo
Nation. Respondents will receive a call that informs the respondents about the upcoming
DWINSA and describes the purpose of the DWINSA. EPA or the Navajo Nation will also
describe the information that will be requested, by whom the data collection instrument will be
completed and submitted, and the timetable for completing the data collection instrument. The

telephone call should take approximately 15 minutes (0.25 hours). Most American Indian and Alaska Native Village water systems are staffed by one technical person; therefore, the entire burden falls with the technical labor category.

• Answer basic questions posed by EPA Regional Office or the Navajo Nation. Respondents will be expected to answer very basic questions about the physical design and condition of the plant, system configuration, and infrastructure needs. EPA estimates that the burden to assist EPA regional office or the Navajo Nation is 2.0 hours for systems that completed the survey in 2011 and 2.5 hours for the systems that are new to the 2020 survey. Additionally, all systems will be administered new questions for the 2020 Native American DWINSA. These include the LSL and OpW questions; the I&S questions do not apply to the Native American DWINSA. It is assumed that the system burden for the American Indian and Alaska Native Village systems and the Navajo Nation will be 10 minutes (0.17 hours) to answer the LSL questions and 5 minutes (0.083 hours) to answer the OpW question. Thus, the average burden per system is as follows:

$$[(2 \times 0.75) + (2.5 \times 0.25) + (0.083 + 0.17)] = 2.38 \text{ hrs/system}$$

• Collect and copy supporting documentation. Respondents will locate the necessary supporting documentation in system files, copy it or obtain an electronic copy, and provide it to the EPA region or Navajo Nation electronically. It is anticipated that these systems will have little onsite documentation and that EPA regional or the Navajo Nation personnel will develop the documentation; therefore, the burden to the system is relatively small. EPA estimates that 25 percent of the systems will not have any documentation, 50 percent will need 30 minutes (0.50 hours), and 25 percent will need 1.0 hour. Thus, the average time per system is as follows:

$$[(0.0 \times 0.25) + (0.5 \times 0.50) + (1.0 \times 0.25)] = 0.5 \text{ hrs/system}$$

Exhibit A-6-7 Estimated Unit Burden for American Indian and Alaska Native Village Water Systems

A	Estimated Burden (hours)			
Activity	Management	Technical	Clerical	Total
Participate in informational phone call	0	0.25	0	0.25
Answer questions posed by EPA regional or the Navajo Nation personnel	0	2.38	0	2.38
Collect and copy supporting documentation	0	0.5	0	0.5
TOTAL	0	3.13	0	3.13

A.6.a.ii Burden to Primacy Agencies

As previously discussed, all states and the Navajo Nation have committed to help EPA administer the 2020 DWINSA with at least the minimum of activities. The majority of states expected to opt out of the statistical portion of the survey have systems serving more than 100,000 persons that will receive the 20-year infrastructure need survey and the LSL, I&S, and OpW questions. In addition, the LSL and OpW questions will be sent to medium systems in these partially participating states, so these medium systems will be selected as part of the statistical sample. Therefore, the partial participation states would participate in the data collection phase of the 2020 DWINSA.

Up-Front Burden

This activity category includes the "fixed burden" for states to help EPA prepare for the 2020 DWINSA. The total burden for these activities is 110 hours per primacy agency, plus 0.2 hours per system assessed. Exhibit A-6-8 summarizes this burden.

- **Participate in training and other pre-survey efforts.** The burden for this activity is estimated at 80 hours per primacy agency.
- **Help EPA verify SDWIS data.** Based on past experience, EPA estimates that verifying SDWIS data for systems in the sample will need approximately 12 minutes (0.2 hours) per system.
- **Perform miscellaneous administrative activities.** The burden for these activities should be 30 hours per state.

Exhibit A-6-8 State	Unit Burden for	Up-Front	Activities

Activity	Estimated Burden
Participate in training and other pre-survey activities	80 hours/state
Help EPA verify SDWIS data	0.2 hours/system
Perform miscellaneous administrative activities	30 hours/state
TOTAL	110 hours/state, plus 0.2 hours/system

State Burden for CWSs Serving More Than 50,000 Persons

This section estimates the state burden for helping EPA conduct the 2020 State DWINSA for systems serving more than 50,000 persons by providing technical assistance where needed, working with systems to identify their needs in 2020, calling systems that do not return the data collection instrument on time, reviewing the completed data collection instrument and documentation, and discussing the results with EPA. Although most of these systems will be able to answer the questions on the data collection instrument, states will provide them with clarifying information as necessary. The state burden for activities associated with the systems serving more than 50,000 persons is summarized in Exhibit A-6-9, which follows the activity descriptions.

• **Telephone systems to ensure participation and provide instructions.** EPA estimates that this preliminary phone call will take about 15 minutes (0.25 hours) per system that participated in the 2015 DWINSA and about 20 minutes (0.33 hours) per system that did not participate in the 2015 DWINSA. The state will also take an additional 10 minutes (0.17 hours) to discuss the LSL, OpW, and I&S questions with all systems. EPA expects that the majority of this time will be spent discussing LSL questions and that minimal time will be necessary to introduce the OpW and I&S questions. Thus, the average burden to states for each system is as follows:

 $[0.25 \times (708 + (0.75 \times 298))/(708 + 298)] + [0.33 \times (0.25 \times 298)/(708 + 298)] + 0.17 = 0.43$ hrs/system

• **E-mail survey package to systems.** Each state will send the survey packet (provided by EPA) to systems via e-mail. EPA estimates that states will spend a total of 30 minutes drafting text for two e-mails: one to systems that participated in the 2015 DWINSA and one to systems that did not participate in the 2015 DWINSA. This amounts to approximately 0.03 minutes (0.0005 hours)

per system (0.5 hours / 1,006 systems). EPA anticipates that states will spend approximately 5 minutes (0.083 hours) compiling each e-mail, including addressing the e-mail to the correct recipient and attaching the correct files. EPA also estimates that approximately 10 percent of these e-mails will be returned to the states and states will need an additional 5 minutes (0.083 hours) to locate the correct recipient and resend the e-mail. Thus, the average burden to states for each system is as follows:

 $[0.0005 + 0.083 + (0.10 \times 0.083)] = 0.09 \text{ hrs/system}$

• **Provide technical assistance.** In developing a burden estimate for this analysis, EPA assumes that the number of requests for technical assistance will equal 100 percent of the number of systems. (This estimate considers that some systems will call more than once while some will not call at all.)

EPA anticipates that systems that participated in the 2015 State DWINSA will need less technical assistance than those that did not participate in the 2015 State DWINSA. Therefore, EPA estimates that all questions from these systems will be readily answerable, requiring only 15 minutes (0.25 hours) to answer.

EPA estimates that the burden to assist systems that did not participate in the 2015 State DWINSA is 30 minutes (0.5 hours) and breaks down as follows:

- Of those that do need technical assistance, about 50 percent of their questions will be readily answerable, requiring only 15 minutes (0.25 hours) to answer.
- About 25 percent of their questions will entail limited research and follow-up, requiring 30 minutes (0.50 hours) to answer, including time to call EPA with questions.
- About 25 percent of their questions will need the state to perform some research and will need 1.0 hour to answer.

Therefore, the state burden for providing technical assistance is estimated as:

 $[0.25 \times (708 + (0.75 \times 298))/(708 + 298)] + [0.5 \times (0.25 \times 298)/(708 + 298)] = 0.27 \text{ hrs/system}$

- Call back systems that do not provide information for the data collection instrument by a certain date. EPA assumes that the number of these "reminder" calls will equal 100 percent of the systems. This assumes that most (but not all) will need at least one reminder call and a few will need two or three. The average time for these calls is 20 minutes (0.33 hours) per system. This estimate includes the time to find the contact information and call the system as well as time to talk to the technical staff. This does not include answering technical questions, which is accounted for above. Rather, it includes locating the correct contact person and obtaining a brief report on the status of the 2020 State DWINSA response.
- Review completed data collection instruments and documentation. The data collection
 instrument will be returned directly to the state for review. For some systems, the documentation
 is expected to be quite voluminous and reviewing it will be the most burdensome part of the 2020
 State DWINSA. The time necessary for this review is difficult to estimate. States may generate
 their own documentation for the 2020 State DWINSA and, if they add distribution or
 transmission projects, are required to ensure that the total pipe inventory section on the 2020
 State DWINSA is completed.

For the 2020 State DWINSA, the burden to states to review the data collection instrument for each system will vary depending on whether the system participated in the 2015 State DWINSA. Based on discussions with the states concerning their level of effort in previous assessments and based on the estimates for systems to complete the survey in previous assessments, EPA estimates that, on average, states will take 3.5 hours to review the submission for each system that participated in the 2015 State DWINSA. This estimate is consistent with EPA's finding in the 2015 State DWINSA that states needed less time to review a data collection instrument completed by a system that had participated in the 2011 State DWINSA compared to the time needed to review a newly developed data collection instrument.

For systems that did not participate in the 2015 State DWINSA, EPA estimates that a total of 5.0 hours will be necessary for the state to review each data collection instrument.

Thus, the average burden to states for each system is as follows:

$$[3.5 \times (708 + (0.75 \times 298))/(708 + 298)] + [5 \times (0.25 \times 298)/(708 + 298)] = 3.61 \text{ hrs/system}$$

- **Discuss results with EPA.** To estimate the state burden for resolving questions on the completed data collection instruments, EPA made the following assumptions:
 - EPA will have questions for the state on 50 percent of the completed data collection instruments. Some of these questions will actually apply to all systems.
 - Each question will take the state 1.0 hour to resolve.

Thus, the average burden to states for each system is as follows:

 $[0.5 \times 1] = 0.50 \text{ hrs/system}$

• **Discuss the LSL questions with systems.** EPA anticipates that systems will need additional support from EPA to complete the LSL questions. The state will have a 20-minute (0.33 hours) follow up call with all systems to further discuss the LSL questions. EPA estimates that one-third of the systems will need yet another call with the state to clear up any remaining questions regarding the LSL information. This additional call to a third of systems will take 15 minutes (0.25 hours). Thus, the average burden to states for these additional phone calls is as follows:

 $0.33 + (0.25 \times 0.33) = 0.41 \text{ hrs/system}$

Exhibit A-6-9 State Unit Burden for Systems Serving More Than 50,000 Persons

Activity	Estimated Burden (hours per system)
Call to ensure participation	0.43
E-mail surveys to systems	0.09
Provide Technical Assistance	0.27
Call back systems that do not return the data collection instrument by a certain date	0.33
Review completed assessment forms and documentation	3.61
Discuss results with EPA	0.50
Additional Call(s) to systems to discuss the LSL information	0.41
TOTAL	5.65

Note:

Numbers may not add due to rounding.

State Burden for CWSs Serving 3,301 – 50,000 Persons

This section estimates the state burden for helping EPA conduct the 2020 State DWINSA for systems serving 3,301 to 50,000 persons by telephoning systems to ensure participation, calling back systems that did not return the data collection instrument on time, reviewing the completed data collection instrument and the accompanying documentation, and discussing the results with EPA. The state burden for activities associated with systems serving 3,301 to 50,000 persons is summarized in Exhibit A-6-10, which follows the activity descriptions.

• **Telephone systems to ensure participation.** EPA estimates that this preliminary phone call will take about 15 minutes (0.25 hours) per system that participated in the 2015 State DWINSA and about 20 minutes (0.33 hours) per system that did not participate in the 2015 State DWINSA. The state will also take an additional 10 minutes (0.17 hours) to discuss the LSL, OpW, and I&S questions with all systems. EPA expects that the majority of this time will be spent discussing LSL questions and that minimal time will be necessary to introduce the OpW and I&S questions. Thus, the average burden to states for each system is as follows:

$$[(0.25 \times 0.75) + (0.33 \times 0.25)] + 0.17 = 0.44 \text{ hrs/system}$$

• **E-mail survey package to systems.** Each state will send the survey packet (provided by EPA) to systems via e-mail. EPA estimates that states will spend a total of 30 minutes drafting text for two e-mails: one to systems that participated in the 2015 State DWINSA and one to systems that did not participate in the 2015 State DWINSA. This amounts to approximately 0.02 minutes (0.00033 hours) per system (0.5 hours / 1,531 systems). EPA anticipates that states will spend approximately 5 minutes (0.083 hours) compiling each e-mail, including addressing the e-mail to the correct recipient and attaching the correct files. EPA also estimates that approximately 10 percent of these e-mails will be returned to the states and states will need an additional 5 minutes (0.083 hours) to locate the correct recipient and resend the e-mail. Thus, the average burden to states for each system is as follows:

 $[0.00033 + 0.083 + (0.10 \times 0.083)] = 0.09 \text{ hrs/system}$

• **Provide technical assistance.** In developing a burden estimate for this analysis, EPA assumes that the number of requests for technical assistance will equal 150 percent of the number of systems. (This estimate accounts for the fact that some systems will call more than once while some will not call at all.)

EPA anticipates that systems that participated in the 2015 State DWINSA will need less technical assistance than those that did not participate in the 2015 State DWINSA. Therefore, EPA estimates that all questions from these systems will be readily answerable, requiring only 15 minutes (0.25 hours) to answer.

EPA estimates that the burden to assist systems that did not participate in the 2015 State DWINSA is 30 minutes (0.5 hours) and breaks down as follows:

- Of those that do need technical assistance, about 50 percent of their questions will be readily answerable, requiring only 15 minutes (0.25 hours) to answer.
- About 25 percent of their questions will entail limited research and follow-up, requiring 30 minutes (0.50 hours) to answer, including time to call EPA with questions.
- About 25 percent of their questions will need the state to perform some research and will need 1.0 hour to answer.

Therefore, the state burden for providing technical assistance is estimated as:

$$1.5 \times [(0.25 \times 0.75) + (0.5 \times 0.25)] = 0.47 \text{ hrs/system}$$

• Call back systems that do not return the data collection instrument by a certain date. It is assumed that the number of these "reminder" calls will equal 150 percent of the systems. This assumes that most (but not all) will need at least one reminder call and some will need two or possibly three. The average time for these calls is 20 minutes (0.33 hours) per system. This does not include answering technical questions, which is accounted for above. Rather, it includes locating the correct contact person and obtaining a brief report on the status of the 2020 State DWINSA response. Thus, the average burden per system is as follows:

$$[1.5 \times 0.33] = 0.50 \text{ hrs/system}$$

• Review completed data collection instruments and documentation. The data collection instrument will be returned directly to the state for review. For some systems, the documentation is expected to be quite voluminous and reviewing it will be the most burdensome part of the 2020 State DWINSA. The time necessary for this review is difficult to estimate. States may generate their own documentation for the 2020 State DWINSA and, if they add distribution or transmission projects, are required to ensure that the total pipe inventory section on the 2020 State DWINSA is completed.

For the 2020 State DWINSA, the burden to states to review the data collection instrument for each system will vary depending on whether or not the system participated in the 2015 State DWINSA. Based on discussions with the states concerning their level of effort in previous assessments and based on the estimates for systems to complete the survey in previous assessments, EPA estimates that, on average, states will take 3.0 hours to review the submission for each system that participated in the 2015 State DWINSA. This estimate is consistent with EPA's finding in the 2015 State DWINSA that states needed less time to review a data collection instrument completed by a system that had participated in the 2011 State DWINSA compared to the time needed to review a newly developed data collection instrument.

For systems that did not participate in the 2015 State DWINSA, EPA estimates that a total of 4.25 hours will be needed for the state to review each data collection instrument.

Thus, the average burden to states for each system is as follows:

$$[(3 \times 0.75) + (4.25 \times 0.25)] = 3.31 \text{ hrs/system}$$

• **Discuss the LSL questions with systems.** EPA anticipates that systems will need additional support from EPA to complete the LSL questions. The state will have a 20-minute (0.33 hours) follow-up call with all systems to further discuss the LSL questions. EPA estimates that one-third of the systems will need yet another call with the state to clear up any remaining questions regarding the LSL information. This additional call to a third of systems will take 15 minutes (0.25 hours). Thus, the average burden to states for these additional phone calls is as follows:

$$0.33 + (0.25 \times 0.33) = 0.41 \text{ hrs/system}$$

- **Discuss results with EPA.** To estimate the state burden for resolving questions on completed data collection instruments, EPA made the following assumptions:
 - EPA will have questions for the state on 50 percent of the completed data collection instruments. Some of these questions will actually apply to all systems.
 - Each question will take the state one hour to resolve.

Thus, the average burden to states for each system is as follows:

$$[0.5 \times 1] = 0.50 \text{ hrs/system}$$

Exhibit A-6-10 Estimated State Average Unit Burden for Systems Serving 3,301 to 50,000 Persons

Activity	Estimated Burden (hours per system)
Telephone systems to ensure participation	0.44
E-mail surveys to systems	0.09
Provide technical assistance	0.47
Call back systems that do not return the data collection instrument by a certain date	0.50
Review completed data collection instruments and documentation	3.31
Discuss the LSL questions with systems	0.41
Discuss results with EPA	0.50
TOTAL	5.73

Note:

Numbers may not add due to rounding.

State Burden for CWSs Serving 3,300 or Fewer Persons

This section estimates state burden for briefing EPA contractor on systems that will be visited. The state burden for small CWSs is summarized in Exhibit A-6-11, which follows the activity descriptions.

- **Participate in informational/scheduling telephone call.** The telephone call to discuss and schedule the site visit with the system should take approximately 15 minutes (0.25 hours).
- **Brief contractor conducting site visits.** States should take about 30 minutes (0.50 hours) per system to brief the contractor on individual systems. States may choose to accompany the site visitor on the site visit, but it is not necessary.

Exhibit A-6-11 State Unit Burden for Small Systems

Activity	Estimated Burden (hours per system)
Participate in informational phone call	0.25
Brief contractor conducting site visits	0.50
TOTAL	0.75

Navajo Nation Burden

This section estimates the burden for the Navajo Nation to conduct the 2020 Native American DWINSA for systems under their primacy. Activities include telephoning systems to ensure participation, gathering information about the systems' 20-year need, completing the data collection instrument for the system, and discussing the results with EPA. The Navajo Nation's burden for activities associated with the water systems is summarized in Exhibit A-6-12, which follows the activity descriptions.

- **Contact selected water systems.** The Navajo Nation will contact sampled systems to explain the 2020 Native American DWINSA and to schedule a time for a longer discussion about the water systems 20-year need. The telephone call should take approximately 15 minutes (0.25 hours).
- **Gather Information from IHS and water systems.** To minimize the burden on American Indian water systems, the Navajo Nation personnel will complete the data collection instrument for selected water systems under their primacy. EPA estimates that the Navajo Nation will use information from the IHS SDS, any information they have on file regarding infrastructure improvements, and additional information they collect from the water system. EPA estimates that the burden to obtain information for systems that participated in the 2011 survey is 1.0 hour, while systems that are new to the 2020 survey are expected to take about 2.0 hours. Thus, the average burden per system is as follows:

$$[(1 \times 0.75) + (2 \times 0.25)] = 1.25 \text{ hrs /system}$$

• Complete the data collection. The Navajo Nation will complete the data collection instrument based on the information they collected from IHS and the water system. It is anticipated that these systems will have little onsite documentation and that the Navajo Nation personnel will develop the documentation of need for the system. The amount of time necessary for this activity will vary according to whether the system participated in the 2011 Native American DWINSA. EPA anticipates that the Navajo Nation will need 2.0 hours to complete the data collection for systems that participated in the 2011 Native American DWINSA and will need 4.0 hours for the systems that did not participate in the 2011 Native American DWINSA. Additionally, the new LSL and OpW questions in the 2020 survey will add 10 minutes (0.17 hours) and 5 minutes (0.083 hours), respectively. The I&S questions do not apply to the Native American DWINSA. Thus, the average burden per system is as follows:

$$[(2 \times 0.75) + (4 \times 0.25)] + (0.17 + 0.083) = 2.75 \text{ hrs/system}$$

- **Discuss results with EPA.** To estimate the Navajo Nation burden for resolving questions on completed data collection instruments, EPA made the following assumptions:
 - EPA will have questions on 50 percent of the completed data collection instruments.
 Some of these questions will actually apply to all systems.
 - Each question will take Navajo Nation 1.0 hour to resolve.

Therefore, the burden per system is 0.5×1 hour $[0.50 \times 1.0] = 0.50$ hrs/system

Exhibit A-6-12 Navajo Nation Unit Burden for Systems

Activity	Estimated Burden (hours per system)		
Participate in informational phone call	0.25		
Gather information on projects from IHS and water system	1.25		
Complete data collection instrument	2.75		
Discuss results with EPA	0.50		
TOTAL	4.75		

State Burden for NPNCWSs Serving More Than 10,000 Persons

This section estimates the state burden for helping EPA conduct the 2020 State DWINSA for NPNCWSs serving more than 10,000 persons by telephoning systems to ensure participation, calling back systems that did not return the data collection instrument on time, reviewing the completed data collection instrument and the accompanying documentation, and discussing the results with EPA. The state burden for activities associated with NPNCWSs serving more than 10,000 persons is summarized in Exhibit A-6-13, which follows the activity descriptions.

• **Telephone systems to ensure participation.** EPA estimates that this preliminary phone call will take about 30 minutes (0.5 hours) per system which includes 10 minutes (0.17 hours) to discuss the LSL, OpW, and I&S questions with all systems. EPA expects that the majority of this time will be spent discussing LSL questions and that minimal time will be necessary to introduce the OpW and I&S questions. Thus, the average burden to states for each system is as follows:

0.33 + 0.17 = 0.5 hrs/system

• **E-mail survey package to systems.** Each state will send the survey packet (provided by EPA) to systems via e-mail. EPA estimates that states will use the same email they drafted for CWSs that did not participate in the 2015 DWINSA and modify it as needed to apply to the NPNCWSs. EPA estimates that the state will spend about 5 minutes revising the email. This amounts to approximately 0.38 minutes (0.006 hours) per system (0.083 / 13). EPA anticipates that states will spend approximately 5 minutes (0.083 hours) compiling each e-mail, including addressing the e-mail to the correct recipient and attaching the correct files. EPA also estimates that approximately 10 percent of these e-mails will be returned to the states and states will need an additional 5 minutes (0.083 hours) to locate the correct recipient and resend the e-mail. Thus, the average burden to states for each system is as follows:

 $[0.006 + 0.083 + (0.10 \times 0.083)] = 0.10 \text{ hrs/system}$

Provide technical assistance. EPA estimates that the burden to assist NPNCWSs is 30 minutes (0.5 hours) and breaks down as follows:

- Of those that do need technical assistance, about 50 percent of their questions will be readily answerable, requiring only 15 minutes (0.25 hours) to answer.
- About 25 percent of their questions will entail limited research and follow-up, requiring 30 minutes (0.50 hours) to answer, including time to call EPA with questions.

 About 25 percent of their questions will need the state to perform some research and will need 1.0 hour to answer.

In developing a burden estimate for this analysis, EPA assumes that the number of requests for technical assistance will equal 150 percent of the number of systems. (This estimate accounts for the fact that some systems will call more than once while some will not call at all.) Thus, EPA estimates that the burden to assist larger NPNCWSs is:

$$1.5 \times [(0.5 \times 0.25) + (0.25 \times 0.5) + (0.25 \times 1)] = 0.75 \text{ hrs/system}$$

• Call back systems that do not return the data collection instrument by a certain date. It is assumed that the number of these "reminder" calls will equal 150 percent of the systems. This assumes that most (but not all) will need at least one reminder call and some will need two or possibly three. The average time for these calls is 20 minutes (0.33 hours) per system. This does not include answering technical questions, which is accounted for above. Rather, it includes locating the correct contact person and obtaining a brief report on the status of the 2020 State DWINSA response. Thus, the average burden to states to call back each system is:

$$[1.5 \times 0.33] = 0.50 \text{ hrs/system}$$

Review completed data collection instruments and documentation. The data collection
instrument will be returned directly to the state for review. For some systems, the documentation
is expected to be quite voluminous and reviewing it will be the most burdensome part of the 2020
State DWINSA. The time necessary for this review is difficult to estimate. States may generate
their own documentation for the 2020 State DWINSA and, if they add distribution or
transmission projects, are required to ensure that the total pipe inventory section on the 2020
State DWINSA is completed.

EPA estimates that a total of 4.25 hours will be needed for the state to review each data collection instrument.

• **Discuss the LSL questions with systems.** EPA anticipates that systems will need additional support from EPA to complete the LSL questions. The state will have a 20-minute (0.33 hours) follow up call with all systems to further discuss the LSL questions. EPA estimates that one-third of the systems will need yet another call with the state to clear up any remaining questions regarding the LSL information. This additional call to a third of systems will take 15 minutes (0.25 hours). Thus, the average burden to states for these additional phone calls is as follows:

$$0.33 + (0.25 \times 0.33) = 0.41 \text{ hrs/system}$$

- **Discuss results with EPA.** To estimate the state burden for resolving questions on completed data collection instruments, EPA made the following assumptions:
 - EPA will have questions for the state on 50 percent of the completed data collection instruments. Some of these questions will actually apply to all systems.
 - Each question will take the state 1.0 hour to resolve.

Thus, the average burden to states for each system is as follows:

$$[0.5 \text{ x 1}] = 0.50 \text{ hrs/system}$$

Exhibit A-6-13 Estimated State Average Unit Burden for NPNCWSs Serving More Than 10,000 Persons

Activity	Estimated Burden (hours per system)
Telephone systems to ensure participation	0.50
E-mail surveys to systems	0.10
Provide technical assistance	0.75
Call back systems that do not return the data collection instrument by a certain date	0.50
Review completed data collection instruments and documentation	4.25
Discuss the LSL questions with systems	0.41
Discuss results with EPA	0.50
TOTAL	7.02

Note:

Numbers may not add due to rounding.

State Burden for NPNCWSs Serving 10,000 and Fewer Persons

This section estimates state burden for briefing EPA contractor on systems that will be visited. The state burden for NPNCWSs is summarized in Exhibit A-6-14, which follows the activity descriptions.

- **Participate in informational/scheduling telephone call.** The telephone call to discuss and schedule the site visit with the system should take approximately 15 minutes (0.25 hours).
- **Brief contractor conducting site visits.** States should take about 30 minutes (0.50 hours) per system to brief the contractor on individual systems. States may choose to accompany the site visitor on the site visit, but it is not necessary.

Exhibit A-6-14 State Unit Burden for NPNCWSs

	Estimated Burden
Activity	(hours per system)
Participate in informational telephone call	0.25
Brief contractor conducting site visits	0.50
TOTAL	0.75

State Burden for CWSs Serving 3,301-100,000 Persons in Partial Participation States

This section estimates state burden for partial participation states collecting data for the LSL and OpW questions. The partial participation state burden for CWSs serving 3,301 – 100,000 is summarized in Exhibit A-6-15, which follows the activity descriptions.

• **Informational phone call.** The state will call all systems to discuss the questions. Each phone call should take about 10 minutes (0.17 hours).

• **E-mail the data collection instrument to systems.** Each state will send the data collection instrument containing only the LSL and OpW questions (provided by EPA) to systems via e-mail. EPA anticipates that states will spend approximately 5 minutes (0.083 hours) compiling each e-mail, including addressing the e-mail to the correct recipient and attaching the correct files. EPA also estimates that approximately 10 percent of these e-mails will be returned to the states and states will need an additional minutes (0.083 hours) to locate the correct recipient and resend the e-mail. Thus, the average burden to states to send the data collection instrument is:

 $0.083 + (0.083 \times 0.1) = 0.09 \text{ hrs/system}$

• **Phone call to collect LSL and OpW Data.** States should take about 43 minutes (0.72 hours) per system to collect LSL data and 5 minutes (0.083 hours) per system to collect OpW data. EPA estimates that one-third of the systems will need yet another call with the state to clear up any remaining questions regarding the LSL information. This additional call to a third of systems will take 15 minutes (0.25 hours). Thus, the average burden to states to answer these questions is as follows:

 $(0.72 + 0.083) + (0.25 \times 0.33) = 0.89 \text{ hrs/system}$

Exhibit A-6-15 Partial Participation State Unit Burden for CWSs Serving 3,301-100,000 Persons

	Estimated Burden
Activity	(hours per system)
Informational phone call	0.17
E-mail the data collection instrument to systems	0.09
Phone call to collect LSL and OpW data from the system	0.89
TOTAL	1.15

Note:

Numbers may not add due to rounding.

A.6.b Respondent Costs

A.6.b.i Costs to CWSs

Exhibit A-6-16 summarizes the burden and costs to CWSs and American Indian and Alaska Native Village systems in fully participating states. Total costs to these systems are estimated at **\$830,972**, which consists solely of labor costs. There are no operation and maintenance (O&M) costs or capital costs associated with the collection.

CWS and NPNCWS labor costs are based on the number of burden hours multiplied by the average hourly wage rate, including overhead. The average hourly wage rate is the rate taken from a 2003 EPA document titled <u>Labor Costs for National Drinking Water Rules</u>. The quoted rate was \$26.05 in 2003 dollars for systems serving 50,000 or fewer persons and \$31.26 in 2003 dollars for systems serving more than 50,000 persons. This rate has been inflated to 2018 dollars using the Employment Cost Index. The inflated rate is \$38.11 for systems serving 50,000 or fewer persons and \$45.73 for systems serving more than 50,000 persons.

Exhibit A-6-16 Total Burden and Cost to Fully Participating Community Water Systems and American Indian and Alaska Native Village Systems (2018\$)

D 1 .	Avera	ge Unit Bur	den (hour	Total	Total	Hourly	Total	
Respondent	Management	Technical	Clerical	Subtotal	Responses	Hours	Rate	Cost
Systems Serving More Than 50,000 Persons	1.75	4.41	1.43	7.58	1,006	7,625	\$45.73	\$348,713
Systems Serving 3,301 – 50,000 Persons	1.84	3.57	0.81	6.23	1,531	9,530	\$38.11	\$363,207
Systems Serving 3,300 or Fewer Persons	0	3.59	0	3.59	606	2,173	\$38.11	\$82,813
AI and ANV Systems	0	3.13	0	3.13	304	951	\$38.11	\$36,239
TOTAL	n/a	n/a	n/a	5.88	3,447	20,280	\$40.97	\$830,972

Note:

The average burden per system response is 5.88 hours (20,280/3,447).

Numbers may not add due to rounding.

Total hourly rate of \$40.97 reflects the overall average hourly rate (\$830,972/20,280).

A.6.b.ii. Costs to NPNCWSs

Exhibit A-6-17 summarizes the burden and costs to NPNCWSs. Total costs are estimated at **\$11,600**, which consists solely of labor costs. See Section A.6.b.i. for a description of the hourly rate. There are no operation and maintenance (O&M) costs or capital costs associated with the collection.

Exhibit A-6-17 Total Burden and Cost to NPNCWSs (2018\$)

D	Avera	ge Unit Bur	den (hour	s)	Total	Total	Hourly	Total
Respondent	Management	Technical	Clerical	Subtotal	Responses	Hours	Rate	Cost
State NPNCWSs Serving 10,000 and Fewer Persons	0	2.00	0	2.00	100	200	\$38.11	\$7,622
State NPNCWSs Serving More Than 10,000 Persons	2.19	4.84	1.00	8.03	13	104	\$38.11	\$3,978
TOTAL	n/a	n/a	n/a	2.69	113	304	\$38.11	\$11,600

Note: The average burden per system response is 2.69 hours (304/113).

Numbers may not add due to rounding.

A.6.b.iii. Cost to Medium Water Systems in Partial Participation States

Exhibit A-6-18 summarizes the burden and costs to systems serving 3,301-100,000 persons in partial participation states. Total costs are estimated at \$14,375, which consists solely of labor costs. There are no operation and maintenance (O&M) costs or capital costs associated with the collection.

Exhibit A-6-18 Total Burden and Cost to Medium Water Systems in Partial Participation States (2018\$)

ъ .	Avera	ge Unit Bur	den (hour	rs)	Total	Total	Hourly	Total
Respondent	Management	Technical	Clerical	Subtotal	Responses	Hours	Rate	Cost
Systems Serving 50,001-100,000 Persons	1.05	0	0	1.05	29	31	\$45.73	\$1,418
Systems Serving 3,301 – 50,000 Persons	1.05	0	0	1.05	323	340	\$38.11	\$12,957
TOTAL	n/a	n/a	n/a	1.05	352	371	\$38.75	\$14,375

Note: The average burden per system response is 1.05 hours (371/352).

Numbers may not add due to rounding.

Total hourly rate of \$38.75 reflects the overall average hourly rate (\$14,375/371).

A.6.b.iii. Cost to States and the Navajo Nation

Exhibit A-6-19 shows the total burden and costs to states and the Navajo Nation. The cost burden for EPA Regions is discussed in section A.6.c. Based on EPA's projection that all states and the Navajo Nation will participate in the DWINSA, the cost to states and the Navajo Nation is \$1,347,110. The labor costs are based on an average full time equivalent (FTE) cost of \$124,114 including overhead, which equates to approximately \$59.67 per hour.³ This rate has been inflated to year 2018 dollars using the Employment Cost Index and is based on the rates provided by the Association of State Drinking Water Administrators' 2011 Survey of State Drinking Water Programs. This survey provides the most recent estimate of state salaries and FTEs, which were used in EPA's 2011 State Resource Needs Model.

There are no O&M or capital costs for states under this ICR.

³ According to the *ICR Handbook*, an employee is paid an average of 2,080 hours in one year.

Exhibit A-6-19 Total Burden and Cost to States and the Navajo Nation (2018\$)

Activity	Number of States/ Systems	ntes/ Unit Burden		Hourly Rate	Total Cost
I.I. from	57	110 hours/state	6,270	\$59.67	\$374,131
Up-front	3,291	0.20 hours/system	658	\$59.67	\$39,263
State burden for systems serving more than 50,000 persons assessment	1,006	5.65 hours/system	5,684	\$59.67	\$339,164
State burden for systems serving 3,301 – 50,000 persons assessment	1,531	5.73 hours/system	8,773	\$59.67	\$523,485
Navajo Nation Systems	35	4.75 hours/system	166	\$59.67	\$9,905
State burden for systems serving 3,300 or fewer persons assessment	606	0.75 hours/system	455	\$59.67	\$27,150
State burden for NPNCWSs Serving 10,000 and Fewer persons	100	0.75 hours/system	75	\$59.67	\$4,475
State burden for NPNCWSs Serving More Than 10,000 persons	13	7.02 hours/system	91	\$59.67	\$5,430
State burden for systems serving 50,001 - 100,000 persons in partial participation states	29	1.15 hours/system	33	\$59.67	\$1,969
State burden for systems serving 3,301-50,000 persons in partial participation states	323	1.15 hours/system	371	\$59.67	\$22,138
TOTAL			22,576		\$1,347,110

Note: Numbers may not add due to rounding.

A.6.c Agency Burden and Cost

The Agency burden and cost reflects the burden and cost directly incurred by EPA Headquarters and EPA Regions and is summarized in Exhibit A-6-20. EPA will also bear the cost of contractor activities as detailed in Exhibit A-6-21. Both exhibits distribute burden/costs among Fiscal Years 2019, 2020, 2021, and 2022, reflecting that Agency and contractor activities will vary substantially over the 4-year project period.

EPA made the following assumptions in developing its estimate of Agency and contractor burden and cost⁴:

EPA Headquarters

- Over the 4-year project period, EPA Headquarters will expend a total of 2.8 FTEs (e.g., an average of 0.7 FTEs per year over the four years). Assuming 2,080 hours per year, this equates to 5,824 hours.
- The average salary and benefits (i.e., personnel compensation and benefits [PC&B]) of the FTEs is at the GS 13, Step 5 level of \$179,829. Assuming 2,080 hours per year, this equates to \$86.46 per hour.

EPA Regions

- Over the 4-year project period, EPA Regions will expend a total of 1.4 FTEs (i.e., an average of 0.35 FTE per year) providing support to the 2020 State DWINSA. Assuming 2,080 hours per year, this equates to 2,912 hours.
- Over the 4-year project period, EPA Regions will expend a total of 1.37 FTEs (i.e., an average of 0.34 FTE per year) providing support to the 2020 Native American DWINSA. Assuming 2,080 hours per year, this equates to 2,853 hours.
- The average salary and benefits (i.e., PC&B) of the 2.91 FTEs is at the GS 11, Step 5 level of \$123,896. Assuming 2,080 hours per year, this equates to \$59.57 per hour.

Indian Health Service

- Over the 4-year project period, IHS Headquarters will expend a total of 0.1 FTEs (e.g., an average of 0.03 FTEs per year over the 4 years). Assuming 2,080 hours per year, this equates to 208 hours.
- The average salary and benefits (i.e., PC&B) of the FTEs is at the GS 13, Step 5 level of \$179,829. Assuming 2,080 hours per year, this equates to \$86.46 per hour.

EPA Contractor(s)

- Over the 4-year project period, EPA contractor(s) will expend a total of 45,312 hours of direct labor.
- The EPA contractor(s) will provide this professional labor at a total hourly rate, including all applicable indirect costs, of \$93.84.

Based on these assumptions, EPA estimates that the total burden/cost to EPA (excluding EPA's contractor) and IHS for the DWINSA over the 4-year project period is 11,797 hours and \$864,946. Over the 4-year project period, the average annual hours would be 2,949 hours per year and \$216,237 per year. EPA estimates that the total burden/cost to EPA's contractor is 45,321 hours and \$4,252,877. Over the 4-year project period, the average annual contractor hours would be 11,330 and cost would be \$1,063,219.

⁴ Hourly rates are from U. S. Office of Personnel Management, 2019 General Schedule (GS) Locality Pay Tables (http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2019/general-schedule/) and overhead rates are from *Information Collection Request for Public Water Supply Program*, December 20, 1993.

Exhibits A-6-20 and A-6-21, however, provide greater detail on the estimated yearly expenditures for the actual 4-year project effort.

Exhibit A-6-20 Burden/Cost to EPA and IHS (Excluding Contractor Activities) (2019\$)

Fiscal	EPA :	Rates	_	EPA lquarters	EPA Regions		EPA Regions		IH	IS	То	tal
Year	HQ	Region	Hour s	Cost	Hours	Cost	Hours	Cost	Total Hours	Total Cost		
FY 2019	\$86.46	\$59.57	892	\$77,122	1,300	\$77,441	60	\$5,188	2,252	\$159,75 1		
FY 2020	\$86.46	\$59.57	2,020	\$174,649	2,509	\$149,461	64	\$5,533	4,593	\$329,64 3		
FY 2021	\$86.46	\$59.57	2,020	\$174,649	1,510	\$89,951	64	\$5,533	3,594	\$270,13 3		
FY 2022	\$86.46	\$59.57	892	\$77,122	446	\$26,568	20	\$1,729	1,358	\$105,41 9		
TOTA L	\$86.46	\$59.57	5,824	\$503,542	5,765	\$343,421	208	\$17,983	11,797	\$864,94 6		

Exhibit A-6-21 Burden/Cost of Contractor Activities (2018\$)

	Contractor Rate	FY	7 19	FY	20	FY	21	FY	22	Ţ	'otal
Activities		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
Planning	\$93.84	5,385	\$505,328	2,110	\$198,002	1,585	\$148,736	320	\$30,029	9,400	\$882,096
Survey Design	\$93.84	300	\$28,152	0	\$0	0	\$0	0	\$0	300	\$28,152
Peer Review	\$93.84	40	\$3,754	0	\$0	0	\$0	0	\$0	40	\$3,754
Modeling	\$93.84	0	\$0	165	\$15,484	1,183	\$111,013	570	\$53,489	1,918	\$179,985
Database Development	\$93.84	300	\$28,152	800	\$75,072	300	\$28,152	300	\$28,152	1,700	\$159,528
Survey Production	\$93.84	277	\$25,994	523	\$49,078	0	\$0	0	\$0	800	\$75,072
Data Analysis	\$93.84	0	\$0	8,000	\$750,720	1,717	\$161,123	0	\$0	9,717	\$911,843
Site Visits	\$93.84	0	\$0	14,749	\$1,384,001	0	\$0	0	\$0	14,749	\$1,384,001
Report Writing	\$93.84	0	\$0	208	\$19,519	1,459	\$136,913	700	\$65,688	2,367	\$222,119
Statistical Analysis	\$93.84	0	\$0	130	\$12,199	920	\$86,333	1,050	\$98,532	2,100	\$197,064
Tech Assistance	\$93.84	0	\$0	550	\$51,612	115	\$10,792	115	\$10,792	780	\$73,195
Training	\$93.84	518	\$48,609	932	\$87,459	0	\$0	0	\$0	1,450	\$136,068
Total		6,820	\$639,989	28,167	\$2,643,146	7,279	\$683,061	3,055	\$286,681	45,321	\$4,252,877

A.6.d Estimating Respondent Universe and Total Burden and Costs

Respondents for this ICR include CWSs, NPNCWSs, states, and the Navajo Nation. This ICR estimates that the number of water system respondents is 3,912 (including CWSs and NPNCWSs). In addition to the water system respondents, this ICR assumes 56 states (50 states plus the District of Columbia, Puerto Rico, Northern Mariana Islands, American Samoa, Guam and the U.S. Virgin Islands) and the Navajo Nation. Therefore, the total number of respondents is 3,969. The total costs and burden for these respondents are detailed in Exhibits A-6-22 and A-6-23.

A.6.e Bottom Line Burden Hours and Costs

Exhibit A-6-22 summarizes the bottom-line burden hours and costs for CWSs, NPNCWSs, states, and the Navajo Nation for this collection. The total respondent burden is 43,531 hours at a cost of \$2,204,057.

Exhibit A-6-22 Bottom Line Respondent Burden (201	.8\$)
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Respondent Type	Burden Hours	Total Cost
Water Systems	20,955	\$856,947
States and the Navajo Nation	22,576	\$1,347,110
TOTAL	43,531	\$2,204,057

Over the 3-year ICR period, the average annual burden for all respondents (i.e., states and systems combined) would be 14,510 hours and the average annual cost would be \$734,686 per year. While the survey effort is four years, the burden on respondents occurs across only two years. Therefore, an additional 3-year ICR will not be needed. Exhibit A-6-23 summarizes more specifically the estimated burden hours and costs for water systems, states, and the Navajo Nation for each year of the 4-year project period. It is estimated that the states and the Navajo Nation will conduct the up-front activities in 2019 and the data collection activities in 2020. It is estimated that the water systems will provide information to the states for the completion of the data collection instrument in 2020.

Exhibit A-6-23 Burden Hours and Costs for Respondents per Year (2018\$)

Respondent	Total Hour Burden (per year)				Total Cost (per year)			
Type	2019	2020	2021	2022	2019	2020	2021	2022
Water systems	0	20,955	0	0	\$0	\$856,947	\$0	\$0
States and the Navajo Nation	6,928	15,648	0	0	\$413,394	\$933,716	0	\$0
TOTAL	6,928	36,603	0	0	\$413,394	\$1,790,663	0	\$0
Average per Respondent	1.75	9.22	0	0	\$104	\$451	0	\$0

Exhibit A-6-24 summarizes the bottom-line burden hours and costs for EPA for this collection. The total burden for EPA (including EPA Regions and EPA's contractor) and IHS is 57,118 hours at a cost of \$5,117,823.

Exhibit A-6-24 Bottom Line Burden Hours and Costs for EPA (including EPA's contractor)

Respondent Type	Burden Hours	Total Costs		
EPA	11,589	\$846,963		
IHS	208	\$17,983		
Federal Government Subtotal	11,797	\$864,946		
Contractor	45,321	\$4,252,877		
TOTAL	57,118	\$5,117,823		

Note: Due to differences in the source data, EPA and IHS costs are represented in 2019 dollars, and the contractor costs are represented in 2018 dollars.

Exhibit A-6-25 shows the bottom-line hour and dollar burden estimate by the Information Collection (IC) Entities. IC Entities covered by this ICR include publicly owned CWSs, privately/investor owned CWSs, state owned CWSs, tribal owned CWSs and NPNCWSs, state government agencies, and tribal authorities (the Navajo Nation).

Exhibit A-6-25 Disaggregated Burden by Affected Information Collection (IC) Entities

		Total Number of IC Entities	Burden Per Response	Total Hour Burden	Hourly Rate	Total Cost	Cost Per Response
Water Systems Respo	ndents						
	Publicly Owned CWSs	868		6,579	\$45.73	\$300,878	\$347
	Private/Investor Owned CWSs	132	7.58	1,001		\$45,756	
Tribal Owned CWS Subtotal Publicly Owned CV Private/Investor Ov State Owned CWS Tribal Owned CWS Tribal Owned CWS Subtotal Publicly Owned CWS	State Owned CWSs	6		45		\$2,080	
	Tribal Owned CWSs & NPNCWSs	-		-		\$0	
	Subtotal	1,006		7,625		\$348,713	
	Publicly Owned CWSs	1,323		8,236	\$38.11	\$313,862	\$237
	Private/Investor Owned CWSs	189	6.23	1,177		\$44,838	
9	State Owned CWSs	19		118		\$4,508	
50,000 1 6130113	Tribal Owned CWSs & NPNCWSs	113	3.13	353		\$13,470	\$119
	Subtotal	1,644	6.01	9,884		\$376,677	\$229
Serving 3,300 or fewer Persons	Publicly Owned CWSs	249	3.59	893	\$38.11	\$34,027	\$137
	Private/Investor Owned CWSs	352		1,262		\$ 48,102	
	State Owned CWSs	5		18		\$ 683	
iewei i eisolis	Tribal Owned CWSs & NPNCWSs	191	3.13	597		\$22,769	\$119
	Note	\$105,581	\$132				
	Serving More Than 10,000 Persons	13	8.03	104	ФЭО 11	\$3,978	\$306
State NPNCWSs	Serving 10,000 Persons and Fewer	100	2.00	200	\$38.11	\$7,622	\$76
	Subtotal	113	2.69	304	\$38.11	\$11,600	\$103
	Serving 50,000-100,000	29	1.07	31	\$45.73	\$1,418	\$48
Partial Participation States	Serving 3,301-50,000	323	1.05	340	\$38.11	\$12,957	\$40
States	Subtotal	352	1.05	371	\$41.92	\$14,375	\$40.84
Total Water System I	Respondents						

	Total Number of IC Entities	Burden Per Response	Total Hour Burden	Hourly Rate	Total Cost	Cost Per Response
Publicly Owned CWSs	2,440	6.44	15,708		\$648,767	\$266
Private/Investor Owned CWSs	673	5.11	3,439		\$138,695	\$206
State Owned CWSs	30	6.06	182		\$7,270	\$242
Tribal Owned CWSs & NPNCWSs	304	3.13	951		\$36,239	\$119
Publicly Owned CWSs in Partial Participation States	352	1.05	371		\$14,375	\$41
State NPNCWSs	113	2.00	304		\$11,600	\$103
Subtotal	3,912	5.36	20,955	\$40.89	\$856,947	\$219
Total State Government Respondents	56	398.09	22,293	\$59.67	\$1,330,223	\$23,754
Total Tribal Authority Respondents	1	283.00	283	\$59.67	\$16,887	\$16,887
Subtotal Primacy Agency Respondents	57	396.07	22,576	\$59.67	\$1,347,110	\$23,634
Total Respondents	3,969	10.97	43,531	\$50.62	\$2,204,057	\$555

Note: Numbers may not add due to rounding.

1 Water systems respondents serving more than 50,000 persons includes systems in fully participating states and CWS serving more than 100,000 persons in partially participating states.

A.6.f Reasons for Change in Burden

This ICR does not modify an existing ICR. An ICR was prepared for the previous survey effort done in 2015 (OMB control number 2234.04; EPA ICR No. 2014-0274), which is outside of the 3-year window for modifying an existing ICR for a new effort. For purposes of this ICR, EPA has provided a comparison of burden of the proposed new effort to the estimates of the previous 2015 DWINSA ICR.

The estimated total public reporting burden over the entire 4-year project length of the 2015 DWINSA was **37,195** hours, although this burden occurs only during the first two years. The total public reporting burden for the 2020 DWINSA is estimated to be **43,531** hours (also occurs only during the first two years), an increase of 17 percent over the 2015 DWINSA. Some aspects of the 2020 DWINSA resulted in an estimated decrease in burden compared to the same data collection for the 2015 effort, and some aspects that are new to the 2020 DWINSA resulted in an increase compared to the 2015 DWINSA. Exhibit A-6-26 summarizes the difference in burden between the 2015 DWINSA, the 2020 DWINSA, and the addition of the LSL, OpW, and I&S questions. Specific differences between the 2015 and 2020 DWINSAs that resulted in changes in burden are as follows:

- The 2015 DWINSA focused on collecting data on 20-year infrastructure needs from medium and large systems through a State DWINSA. The 2015 DWINSA did not collect new data from small CWS, state NPNCWS, or American Indian or Alaska Native Village water systems. The 2015 DWINSA relied on data from the 2007 DWINSA for small CWS needs, from the 1999 DWINSA for the state NPNCWS needs, and from the 2011 DWINSA for the American Indian and Alaska Native Village needs. The 2020 DWINSA will collect 20-year infrastructure need data from all of those survey groups. This increased scope of the 2020 DWINSA efforts to collect infrastructure needs compared to the 2015 DWINSA added survey groups with corresponding increased burden.
- The approach to data collection and therefore the overall assumptions on the burdens associated with collecting 20-year infrastructure need information from each large, medium, and small CWS for the State DWINSA did not change relative to the most recent State DWINSA in which these water systems were last surveyed. However, the burden estimate for NPNCWSs has increased since the last time this type of system was surveyed in the 1999 State DWINSA. At that time, EPA estimated that NPNCWS staff would spend little time accompanying the survey team during the site visit. Subsequently, EPA developed more in-depth interview methods to improve capture of the 20-year infrastructure needs. Therefore, the burden estimate for small CWSs was increased for the 2007 survey. EPA will apply these newer survey methods to small NPNCWSs (serving 10,000 and fewer persons) for the first time in this 2020 State DWINSA. These changes to the survey methods were previously applied for small CWSs in the 2007 survey and, therefore, the same burden estimates will now apply to both small CWSs and small NPNCWSs. EPA will apply the same survey methods and, therefore, the same burden to CWS serving 10,000-50,000 persons and NPNCWS serving more than 10,000 persons.
- As described above, the assumed burdens for collecting 20-year infrastructure need information
 for each large, medium, and small CWS did not change relative to the most recent DWINSA in
 which these water systems were surveyed. However, the number of medium and large systems in
 the State DWINSA that will be surveyed for 20-year infrastructure needs decreased by 322
 systems from 2,859 systems estimated in the 2015 ICR to 2,537 systems estimated in this ICR for
 the 2020 DWINSA. This results in a lower burden estimate.
- The 2015 DWINSA focused on the 20-year infrastructure needs of the surveyed systems. The 2020 DWINSA includes three categories of new questions: LSL, OpW, and I&S. These new

- questions add burden to participating survey respondents, dependent on the category of the question and the type of respondent.
- For the first time, the 2015 State Survey used a modified statistical approach where a large majority of the medium systems sampled had been previously sampled in the earlier 2011 State Survey. The change resulted in a significant decrease in states' and systems' reported burden hours. The 2020 State DWINSA applies the same modified approach to the medium system survey as was applied for the 2015 DWINSA. The 2020 DWINSA also applies this approach for the first time to the 2020 Native American DWINSA. The 2015 DWINSA did not collect data on American Indian and Alaska Native Village Needs; however, the estimated burden associated with the 2020 Native American DWINSA is less than was reported in the 2011 DWINSA ICR.

Exhibit A-6-26 demonstrates that the increase in burden from the 2015 to the 2020 DWINSA attributable to the addition of new survey respondents (i.e., small water systems; NPNCWSs; and AI and ANV systems, including Navajo Nation water systems) is 17 percent (approximately 3,382 burden hours). That increase is partially offset by a decrease of 1,548 burden hours to ascertain infrastructure needs for fewer large and medium systems. The net result is an increase of 1,560 burden hours from the 2015 to the 2020 DWINSA for water system respondents to report infrastructure needs. Thus, the increase in burden for water systems overall is small relative to the additional data to be collected. The combined burden on primacy agencies for ascertaining water systems' infrastructure needs actually decreases from the 2015 to the 2020 DWINSA. Most of the increase in burden due to the expanded scope of the type of systems surveyed for infrastructure needs in the 2020 DWINSA is borne by EPA. EPA is responsible for collection of data from the small CWSs and NPNCWS for the State DWINSA, and by EPA Regions for all but the Navajo Nation systems in the Native American DWINSA (the Navajo Nation will collect data for their systems).

An increase of 3,573 burden hours from the 2015 to the 2020 DWINSA for water system respondents is attributable to the additional Lead Service Line, Operator Workforce, and Iron and Steel categories of questions. Most of this increase in burden is due to the Lead Service Line questions, which will be completed by all survey respondents. The Lead Service Line questions account for 2,978 hours (83 percent) of the 3,573 hours of increased burden for the three additional question categories. The Lead Service Line questions will gather information about the water systems' service lines, as mandated by the America's Water Infrastructure Act of 2018 Section 2015(e)(2). These 2,978 hours translate to an average of 0.76 burden hours per water system respondent to specifically address the Lead Service Line questions.

Exhibit A-6-26 Change in Respondent Burden from 2015 ICR Estimates to 2020 DWINSA ICR Estimates

Summary Charles	2015 DWINS A	2020 Infrastructure Needs Survey*	Hours fo	or Addition	nal Questions	Total Burden	% Increase in 2020 DWINSA Burden due to Additional Questions		
Survey Group			LSL	OpW and I&S	Subtotal (LSL, OpW, and I&S)	for 2020 DWINSA	LSL Only	OpW and I&S	LSL OpW, and I&S
	Α	В	C	D	$\mathbf{E} = \mathbf{C} + \mathbf{D}$	F = B + E	$\mathbf{G} = \mathbf{C} \setminus \mathbf{B}$	H = D / B	I = E / B
Medium and Large CWSs	15,822 ¹	14,274 ¹	2,802	450	3,253	17,527	19.6%	3.2%	22.8%
Small CWSs	0	1,969	103	101	204	2,173	5.2%	5.1%	10.3%
NPNCWSs	0	265	21	19	40	304	7.9%	7.1%	15.0%
AI and ANV	0	874	52	25	77	951	5.9%	2.9%	8.8%
Subtotal System Burden	15,822	17,382	2,978	595	3,573	20,955	17.1%	3.4%	20.6%
States	21,372	20,205	2,059	29	2,088	22,293	10.3%	0.1%	10.3%
Navajo Nation	0	274	6	3	9	283	3.2%	1.1%	3.2%
Subtotal Primacy Agency Burden	21,372	20,479	2,065	32	2,097	22,576	10.1%	0.2%	10.2%
Total Public Reporting Burden	37,194	37,861	5,043	627	5,670	43,531	13.3%	1.7%	15.0%

^{*} Infrastructure Needs Survey refers to the survey instrument for collection of the 20-year infrastructure needs, not including the additional LSL, I&S, or OpW questions.

¹ Medium and Large CWSs respondent burden for the 2015 DWINSA and for the 2020 DWINSA Infrastructure Needs Survey includes medium and large systems in fully participating states and CWS serving more than 100,000 persons in partially participating states.

A.6.g **Burden Statement**

The public reporting burden for collections included in this ICR is detailed above. The total public reporting burden over the 4-year project length of the 2020 DWINSA is estimated to be 43,531 hours, of which 20,955 hours are attributable to water systems. These estimates include time for gathering and submitting of information. Public reporting burden (i.e., combined primacy agency and system burden) for this collection of information is estimated to average 10.97 hours per response.⁵ Respondent burden for the water system alone is 5.36 hours per system response.⁶

Burden means the total time, effort or financial resources expended by persons to generate, maintain, retain, disclose or provide information to or for a federal agency. This includes the time needed to review instructions, adjust the existing ways to comply with any previously applicable instructions and requirements, train personnel to respond to the information collection request, search data sources, complete and review the collection of information and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a request for information collection unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. EPA-HQ-OW-2020-**0017**. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room was closed to public visitors on March 31, 2020, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. We encourage the public to submit comments via https://www.regulations.gov or email, as there is a temporary suspension of mail delivery to EPA, and no hand deliveries are currently accepted. For further information on the EPA Docket Center services and the current status, please visit us online at https://www.epa.gov/dockets. An electronic version of the public docket is available through regulations.gov. Use regulations.gov to submit or view public comments, access the index listing of the contents of the public docket, and access those documents in the public docket that are available electronically. Once in the system, select "search," then key in the docket ID number identified above. Also, you can send comments to the Director, Regulatory Support Division, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Please include the EPA Docket ID No. EPA-HQ-OW-2020-0017 and OMB control number 2040-NEW in any correspondence.

⁵ For this ICR, the number of responses is calculated at 3,969 (1,006 systems serving more than 50,000 persons, 1,531 systems serving 3,301 to 50,000 persons, 352 systems serving 3,301 to 100,000 persons in partial participation states, 606 systems serving fewer than 3,300 persons, 13 NPNCWS serving more than 10,000 persons, 100 NPNCWS serving 10,000 and fewer persons, 304 small and medium American Indian and Alaska Native Village systems, 56 states, and the Navajo Nation). The burden per response is calculated as the total respondent burden (43,531) divided by the number of responses (3,969).

⁶ See Exhibit A-6-25.