

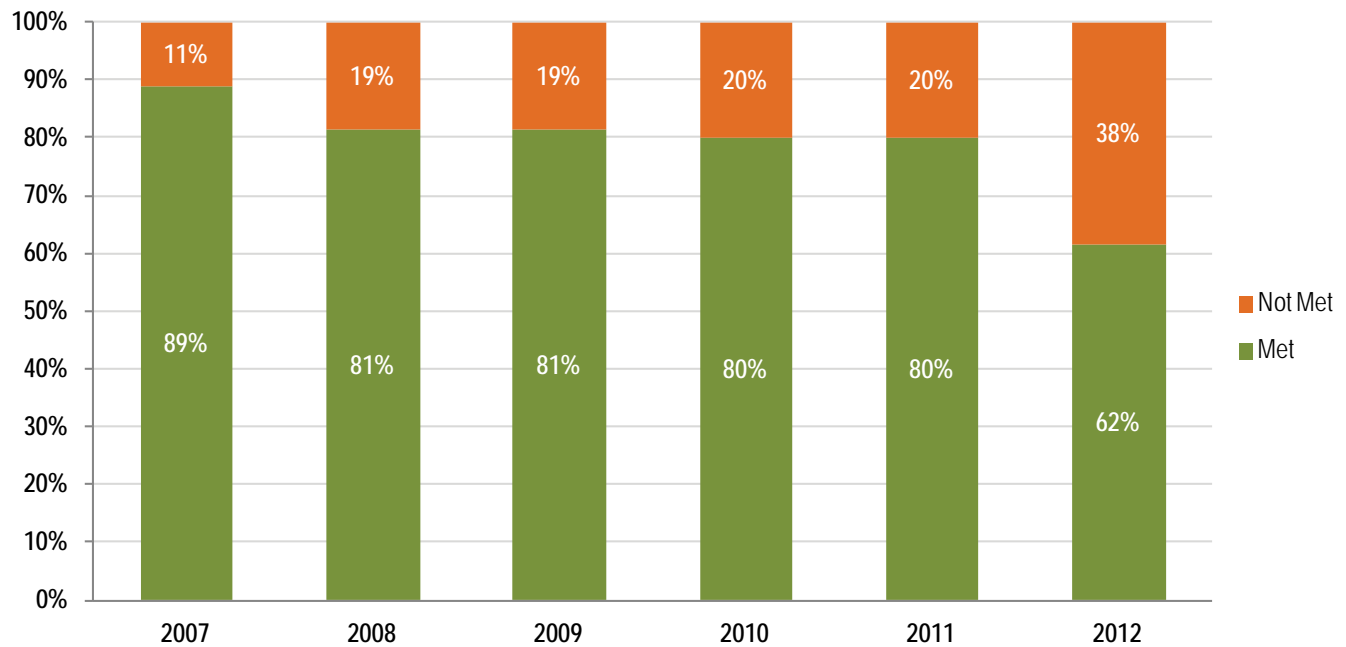
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## Subobjective: Water Safe to Drink

Sixty-two percent (62%) (8 of 13) of all drinking water measures met their commitments in FY 2012. Thirty-eight percent (38%) (five of 13) of measures did not meet their commitments. EPA has maintained an average of 78% of commitments met and reported on all measures over the past six years under the Water Safe to Drink subobjective (Figure 1).

Figure 1: Drinking Water Subobjective Six-Year Trend



FY 2012 ACS Code	Abbreviated Measure Description	Results and Commitment Status						Appendix Page Number (D-0)/ Figure Number
		2007	2008	2009	2010	2011	2012	
<b>Subobjective 2.1.1 Water Safe to Drink</b>								
SDW-211	Percent population served by CWSs	92%	92%	92%	91%	93%	95%	D-1/Fig. 2
SDW-SP1.N11	Percent CWSs meeting safe standards		89%	89%	90%	91%	91%	D-1
SDW-SP2	Percent "person months" with CWSs safe standards	97%	97%	97%	97%	97%	98%	D-2/Fig.4
SDW-SP3.N11	Percent population served by CWSs Indian country	87%	83%	81%	87%	81%	84%	D-2/Fig.92*
SDW-SP4a	Percent CWSs and source water protection	33%	32%	35%	37%	40%	43%	D-3/Fig.8
SDW-SP4b	Percent Population and source water protection		48%	54%	58%	55%	56%	D-3
SDW-SP5	Number tribal households lacking safe drinking water	36,575	34,855	43,437	34,187	32,900		D-4
SDW-18.N11	Number Indian & Alaska Native homes provided safe drinking water					97,311	104,266	D-4/Fig.96*
SDW-01a	Percent CWSs with sanitary survey	92%	87%	88%	87%	92%	89%	D-5/Fig.6
SDW-01b	Number Tribal CWSs with sanitary survey	54	47	63	63	74	82	D-5
SDW-03	Percent Lead/Copper Rule data in SDWIS-FED	80%	87%			87%		D-6
SDW-04	DWSRF fund utilization rate	88%	90%	92%	91%	90%	91%	D-6/Fig.10
SDW-05	Number DWSRF projects initiated (cumulative)	3,526	4,082	4,576	5,236	6,237	6,781	D-7
SDW-07	Percent Class I, II, or III wells with mechanical integrity						85%	D-7
SDW-08	Number High Priority Class V wells closed/permitted (cumulative)						25,225	D-8
SDW-11	Percent DWSRF projects awarded to small PWS					71%	71%	D-8
SDW-12	Percent DWSRF dollars to small PWS					38%	37%	D-9
SDW-13	Percent DWSRF loans to disadvantaged communities					31%	32%	D-9
SDW-14	Number/Percent CWS serving < 500 people					43,728	44,860	D-10
SDW-15	Number/Percent small CWS w/health-based violations					1,337	1,230	D-10/Fig.12
SDW-16	Ave. Time small CWS returned to compliance (days)					167	130	D-11
SDW-17	Number/Percent schools/childcare meet safe standards					7,114	6,991	D-11
SDW-19a	Volume of CO <sub>2</sub> sequestered through injection						40,380	D-12
SDW-19b	Number of permit decisions that result in CO <sub>2</sub> sequestered through injection						0	D-12

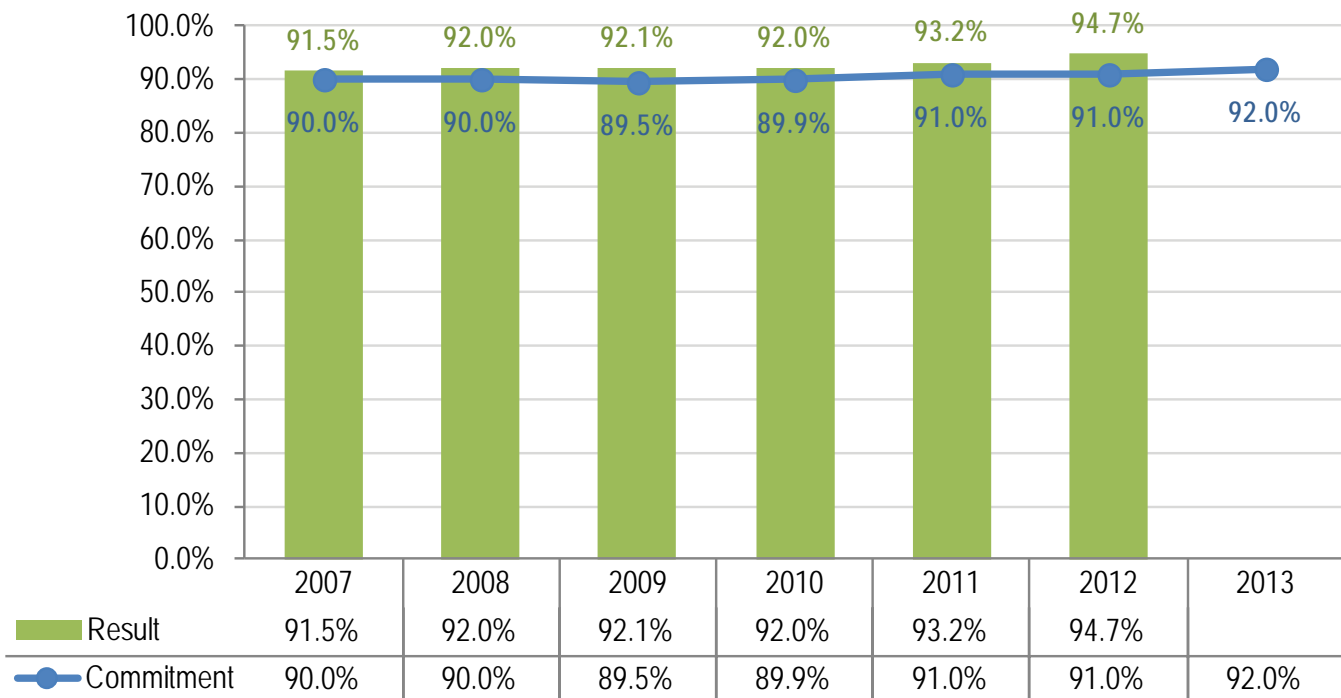
\*Notes: Figures for these measures can be found in the End of Year Report chapter, "American Indian Drinking Water and Water Quality FY 2012 Performance." CWS=community water system; SDWIS= Safe Drinking Water Information System; SDWIS-FED=Safe Drinking Water Information System/Federal; DWSRF=Drinking Water State Revolving Fund.

## FY 2012 Performance Highlights and Management Challenges

**Compliance with Drinking Water Standards:** The overall objective of EPA's national drinking water program is to protect public health by ensuring that public water systems (PWSs) deliver safe drinking water to their customers. The drinking water program measures compliance with drinking water standards in three ways: 1) the percent of the population served by community water systems<sup>1</sup> (CWSs) that meet drinking water standards, 2) the percent of CWSs meeting standards, and 3) the length of time a given population is served by a water system that is in violation of drinking water standards. EPA, states, and CWSs work together to increase the percentage of the population served by CWSs that meet all health-based standards.

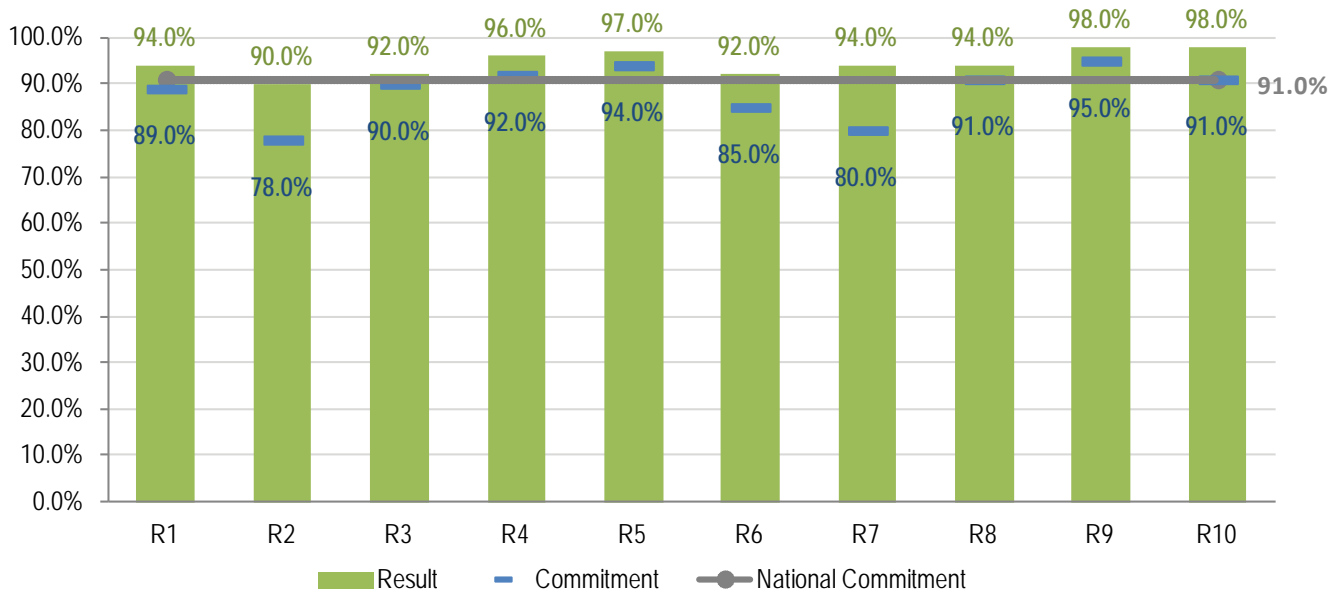
Despite a growing population and an increasing demand for safe drinking water, EPA met its FY 2012 commitment (91%) by providing 94.7% of the population that was served by CWSs with drinking water that met all applicable health-based drinking water standards (Subobjective 2.1.1) (Figure 2). All 10 EPA regional offices met their FY 2012 commitments (Figure 3). Although regions use the national target of the population served by CWSs receiving safe drinking water as a point of reference, regional commitments to this outcome goal might vary based on differing conditions in each EPA region.

**Figure 2: Percent Population with Drinking Water Meeting Standards by Fiscal Year (SDW-211)**



<sup>1</sup> A CWS is a public water system that provides water to the same population year-round. As of January 2012, there were 52,079 CWSs.

**Figure 3: Percent Population with Drinking Water Meeting Standards (SDW-211) by Region for FY 2012**



EPA met its commitment for the percent of CWSs meeting all applicable health-based standards (91% versus 90%) (SP-1). The success of this measure reflects the work by states and tribes to ensure that systems are in compliance with standards. Nine of 10 regions achieved their commitment for this measure, with six regions setting commitments above the national level

EPA also measures the percent of “person months”<sup>2</sup> during which CWSs provide drinking water that meets all applicable health-based drinking water standards. The purpose of this measure is to capture the length of time a given population is served by a water system that is in violation of drinking water standards. In FY 2012, almost 98% of the population was served by CWSs over a 12-month period that was in compliance with drinking water standards (SP-2) (Figure 4). All EPA regions met their commitments for this goal (Figure 5). The measure continues to be successful, exceeding the goal of 95% as well as the previous year’s performance for each of the last five years.

<sup>2</sup>“Person-months” for each CWS is calculated as the number of months in the most recent four-quarter period in which health-based violations overlap, multiplied by the retail population served.

Figure 4: "Person Months" with CWSs Meeting Safe Standards by Fiscal Year (SDW-SP2)

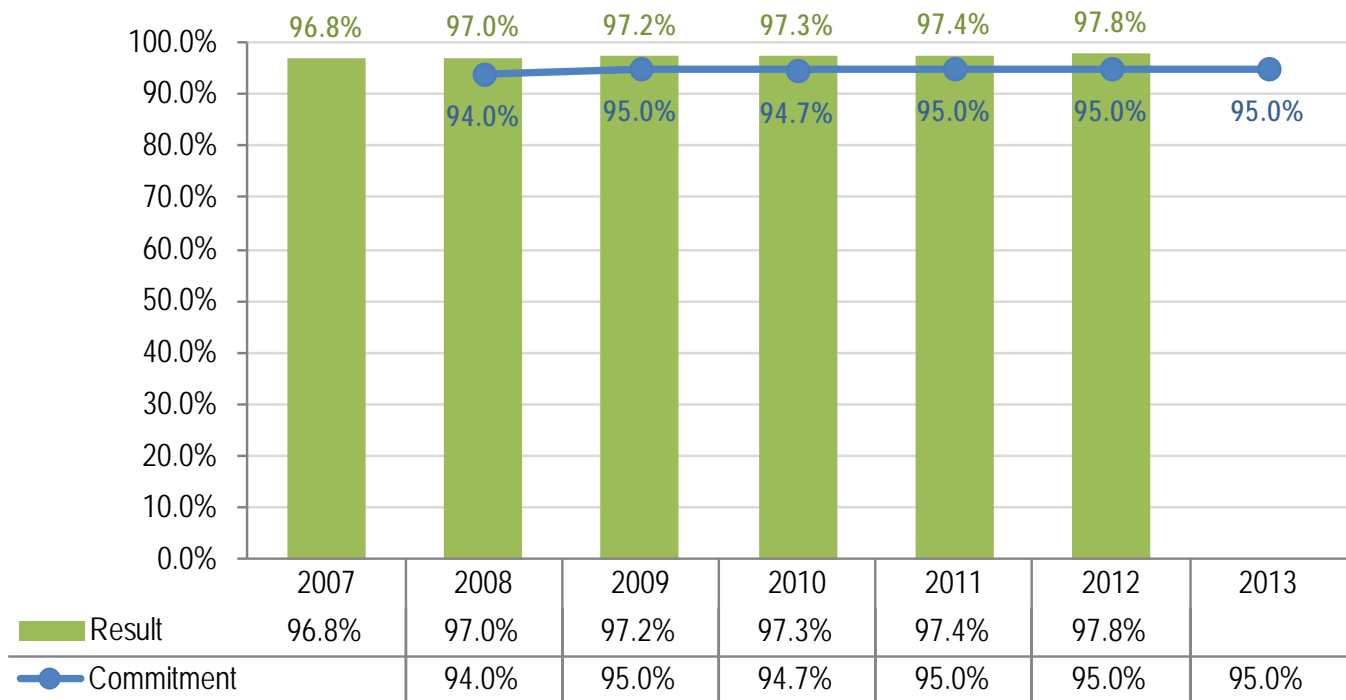
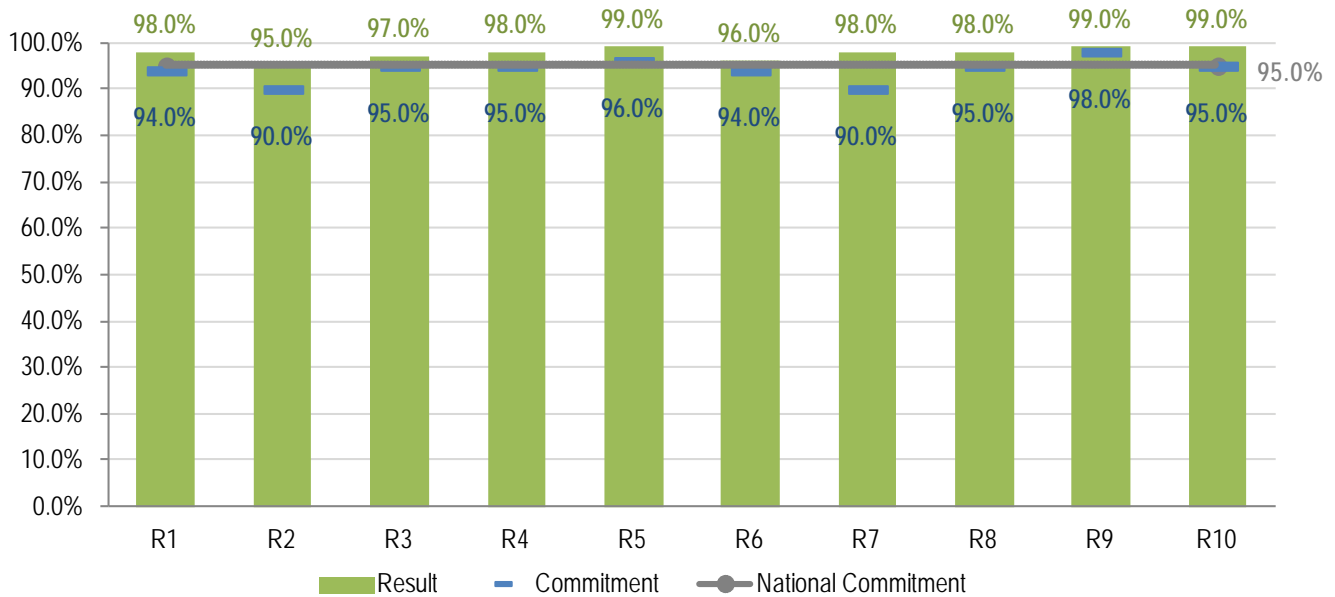


Figure 5: "Person Months" with CWSs Meeting Safe Standards (SDW-SP2) by Region for FY 2012



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According to EPA regulations,<sup>3</sup> CWSs are required to undergo a sanitary survey within three years of their last survey (five years for outstanding performers). Sanitary surveys are onsite reviews of the water sources, facilities, equipment, operation, and maintenance of PWSs. EPA estimates that in 2012, 89% of community systems underwent a survey (SDW-1a) The Agency fell short of its commitment of 95%. (Figure 6). Seven of 10 regions met their targets (Figure 7).

Figure 6: CWSs with Sanitary Surveys by Fiscal Year (SDW-01a)

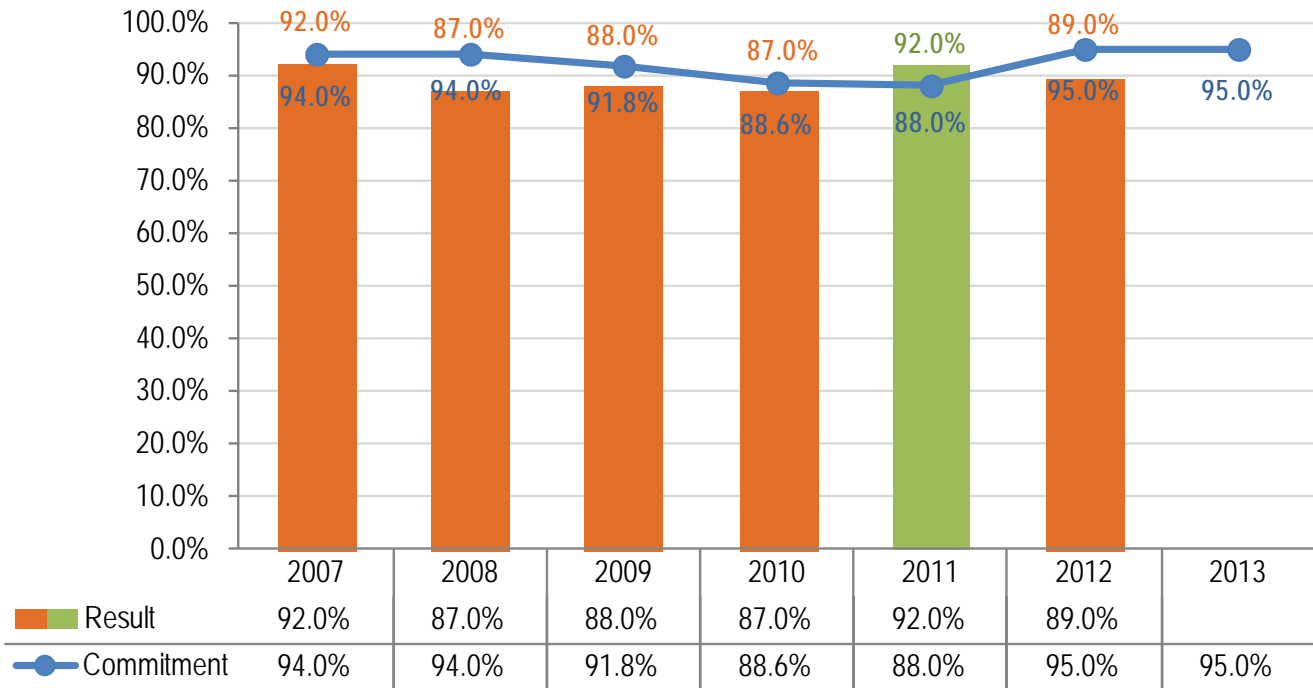
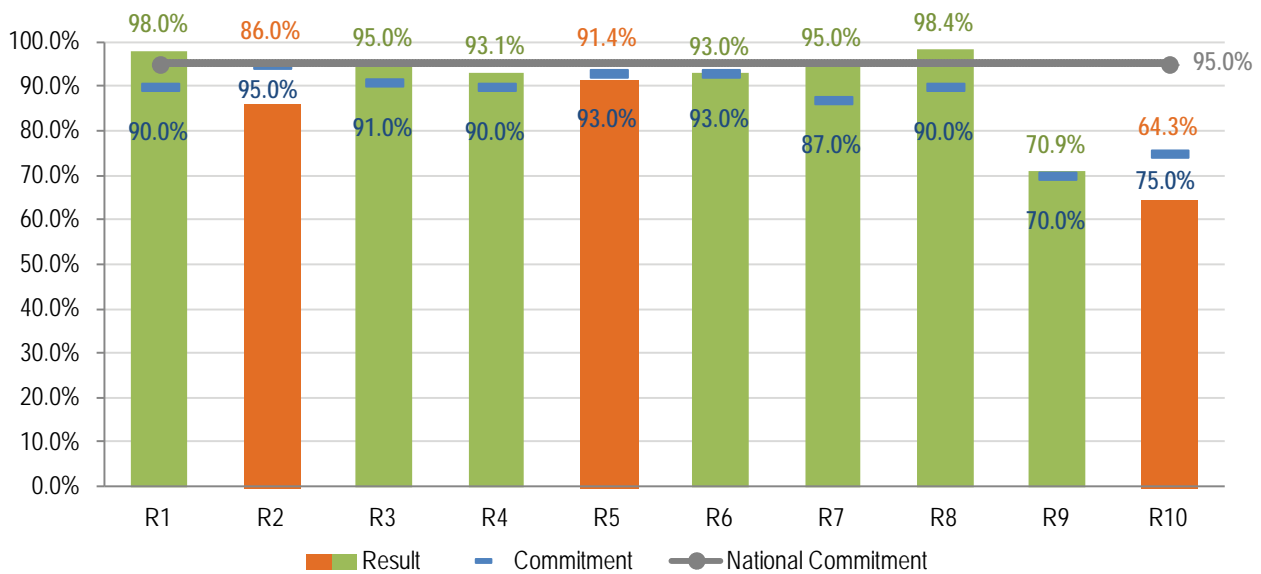


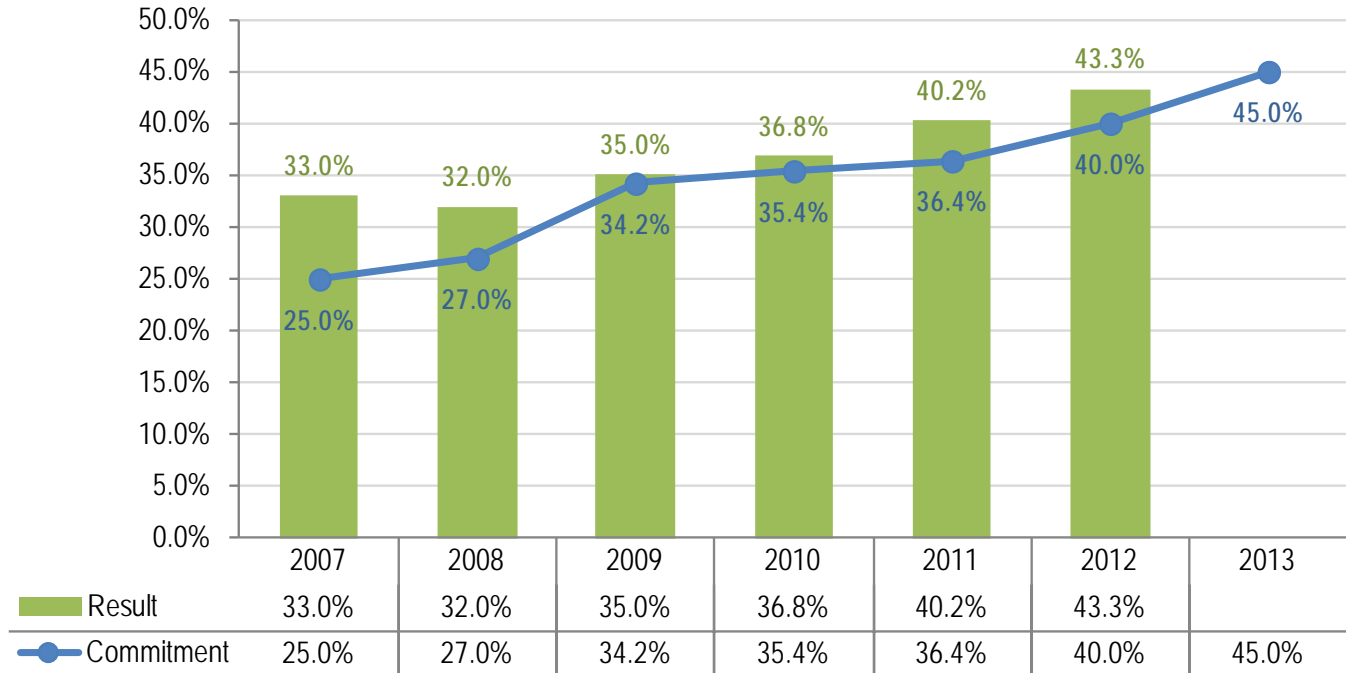
Figure 7: CWSs with Sanitary Surveys (SDW-01a) by Region for FY 2012



<sup>3</sup> Interim Enhanced and Long-Term 1 Surface Water Treatment Rules.

**Source Water Protection:** CWSs minimized the risk<sup>4</sup> to public health for more than 43% of the nation's source water areas (both surface and ground water) (SP-4a) (Figure 8). This was above the FY 2012 commitment of 40%. EPA met its commitment for this measure for the sixth year in a row and has made significant progress against the FY 2005 baseline of 20%. Eight of 10 regions met their commitment in FY 2012 (Figure 9). When looked at on a population basis, 55.9% of the population was served by CWSs where risk to public health is minimized through source water protection (SDW-SP-4b). Although the program failed to meet its annual commitment of 57%, the Agency considers this goal to be a stretch and feels confident that the performance measure is moving in the right direction.

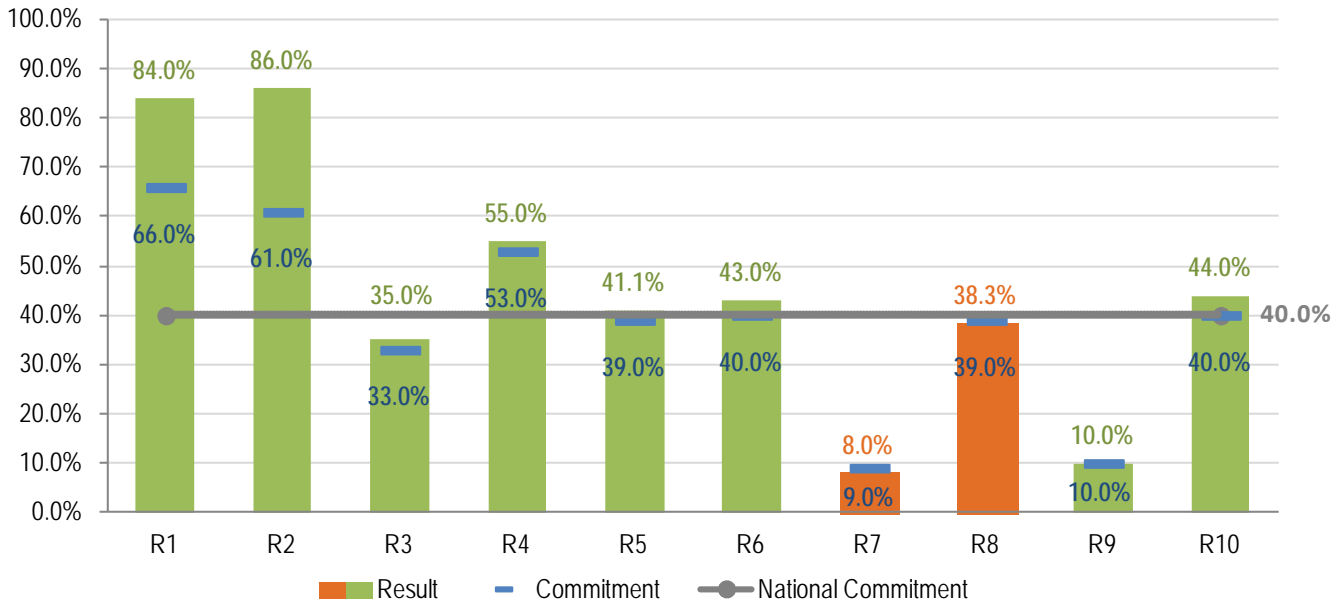
**Figure 8: CWSs and Source Water Protection by Fiscal Year (SDW-SP4a)**



<sup>4</sup> "Minimized risk" is achieved by the substantial implementation, as determined by the state, of source water protection actions in a source water protection strategy.



Figure 9: CWSs and Water Protection (SDW-SP4a) by Region for FY 2012



**Water System Financing:** Financing is a key component of the national drinking water program. The Drinking Water State Revolving Fund (DWSRF), in place since 1997, provides low-interest loans to communities for building and upgrading drinking water facilities. The SRF fund utilization rate—the dollar amount of loan agreements per funds available for projects—is a valuable way to measure states’ effectiveness in obligating grant funds for drinking water projects. EPA met its FY 2012 goal by establishing loan agreements for 90.7% of the cumulative amount of funds available (commitment of 89%). EPA has met its commitments for this measure for six consecutive years (SDW-4) (Figure 10). Six of 10 regions met their commitments in FY 2012, with a range from 82.3% to 103% of funds obligated (Figure 11). More than 6,690 SRF projects have initiated operations to date, up from 6,076 in FY 2011 (SDW-5).

Figure 10: Fund Utilization Rate for the DWSRF by Fiscal Year (SDW-04)

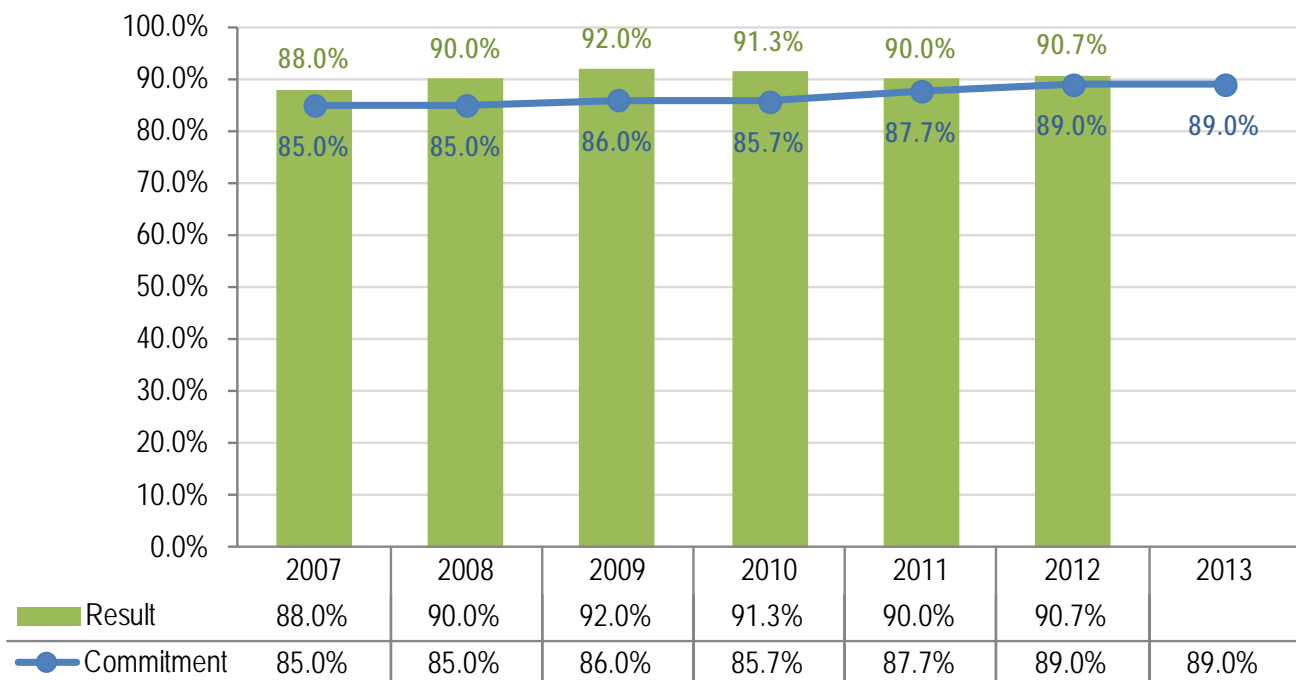
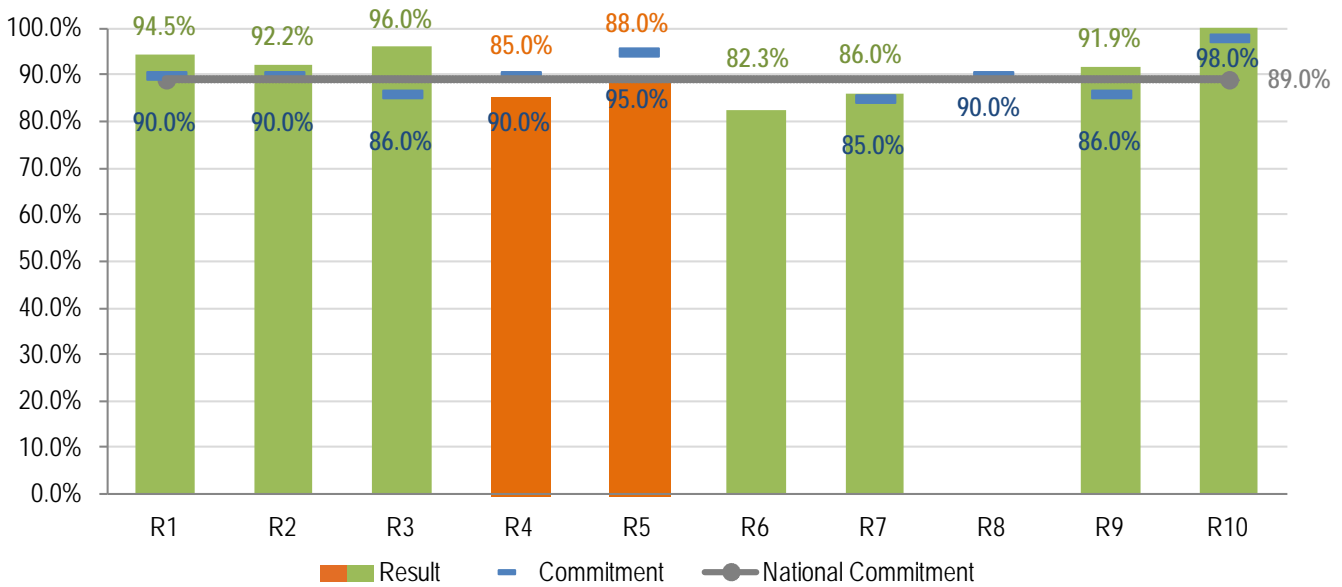


Figure 11: Fund Utilization Rate for the DWSRF by Fiscal Year (SDW-04)



**Underground Injection Control:** EPA works with states to monitor the injection of fluids—both hazardous and nonhazardous—to prevent contamination of underground sources of drinking water. One way to prevent contamination is for states to maintain the mechanical integrity of underground injection wells. EPA fell short of meeting its FY 2012 commitment (90%), with 85% of Class I, II, and III wells (SDW-7) that lost mechanical integrity returning to compliance within 180 days. As a newly reported measure, EPA will analyze the performance results and work to improve the measure targets. As the measure evolves and more data is available to develop a performance trend, the program will revisit the target and adjust it as appropriate.

EPA also works with states to monitor the number and percentage of high-priority Class V wells identified in ground water-based CWS source water areas that are closed or permitted. High-priority Class V wells include motor vehicle waste disposal wells, cesspools, industrial wells, and other wells so designated by the state or regional program. More than 25,000 high-priority Class V wells were closed or permitted in 2012 (SDW-8). This was above the 2012 commitment of 22,650 wells.

**Supporting Small CWSs:** Small CWSs face many challenges in providing safe drinking water and in meeting the requirements of the Safe Drinking Water Act (SDWA). Some of these challenges include lack of adequate revenue, aging infrastructure, and difficulty understanding existing or new regulatory requirements. As a result, small systems may experience frequent or long-term compliance challenges in providing safe water to their communities. In FY 2012, EPA continued its efforts to enhance small system capacity through a comprehensive small system strategy. <http://water.epa.gov/type/drink/pws/smallsystems/basicinformation.cfm>

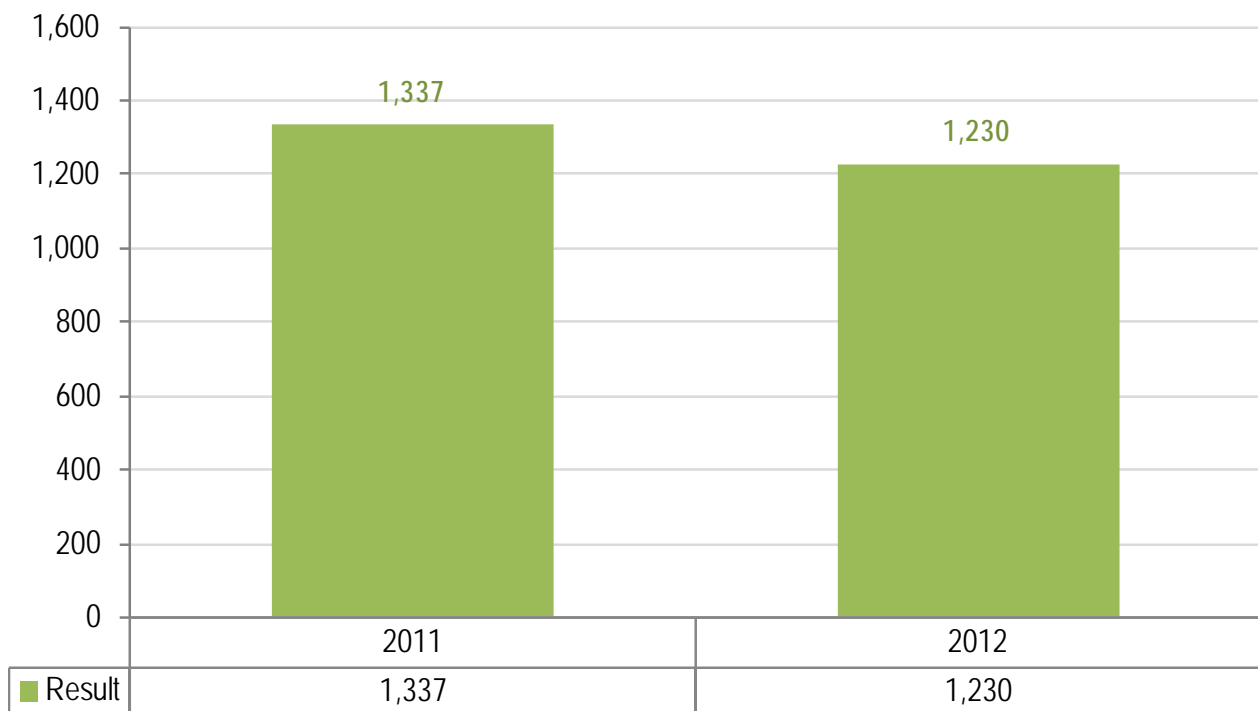
To support implementation of the strategy, the Agency developed a suite of new indicators in FY 2011 to track small CWSs serving fewer than 10,000 people. These indicators correspond to the three major components of the small system strategy: existing and new small water system inventory; state DWSRF projects targeting small systems; and small system noncompliance and capacity to quickly return to compliance with health-based standards. Schools and daycare centers are a critical subset of small systems for which EPA continues to provide special emphasis to ensure that children receive water that is safe to drink.

The results in Table 1 provide a snapshot of key indicators regarding the level of support provided by the DWSRF program to small systems and the violation rate of small systems with regard to health-based drinking water standards. Seventy-one

percent (71%) of the projects funded by the DWSRF went to small PWSs serving fewer than 10,000 people. This was almost identical to the FY 2009 baseline of 72%. Thirty-eight percent (38%) of the DWSRF funds awarded as of FY 2012 went to small PWSs. This was slightly below the FY 2009 baseline of 44%. Thirty-two percent (32%) of DWSRF loans went to disadvantaged communities.

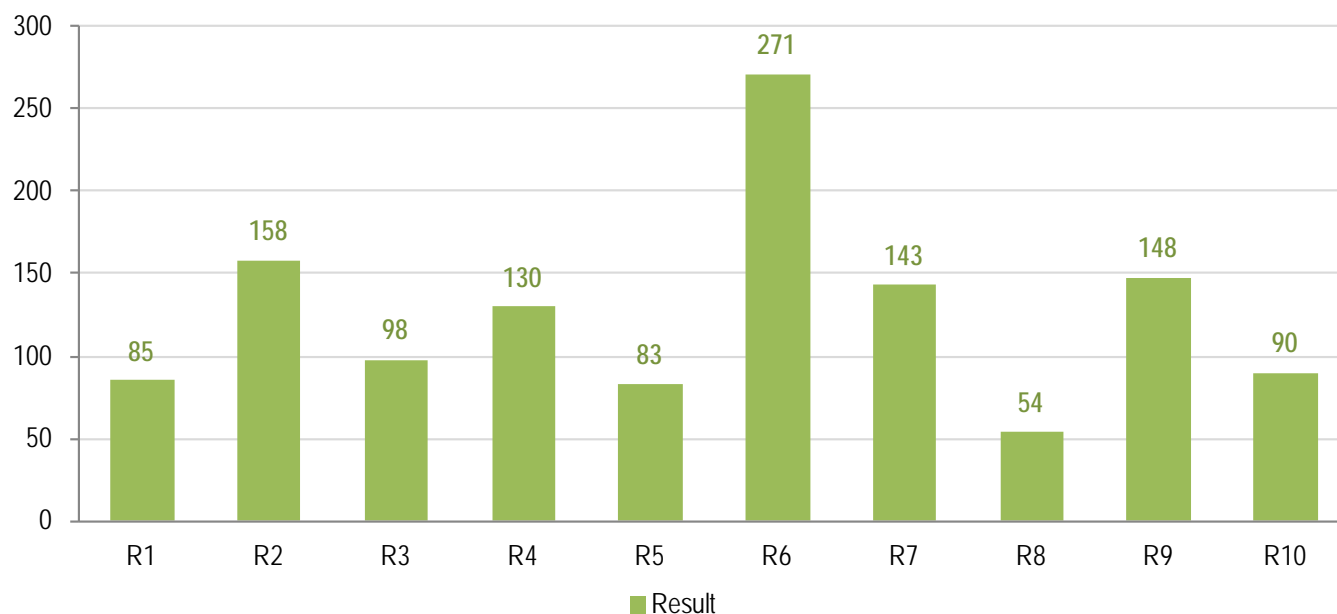
Two percent (2%) (1,230) of small systems had repeat health-based violations<sup>5</sup> in FY 2012, with an average of 130 days spent in violation before returning to compliance. This was an increase over the FY 2009 baseline of 99 days in violation but an improvement over the FY 2011 result of 167 days (Figures 12 and 13). Ninety-three percent (6,991) of schools and childcare centers met all health-based drinking water standards in FY 2012.

**Figure 12: Small CWS and NTNCWS with Repeat Health-Based Violations by Fiscal Year (SDW-15)**



<sup>5</sup> Repeat violations are defined as repeats of the same combination of violation code (e.g., 21–Total Coliform Rule maximum contaminant level) and contaminant type (e.g., Total Coliform Rule) occurring at a particular system more than once in a fiscal year.

**Figure 13: Number of Small Public Water Systems with Repeat Health Based Violations (SDW-15)**



**Table 1: FY 2012 Indicators of Small Public Water Systems**

FY 11 ACS Code	Abbreviated Measure Description	FY 2012 Result	FY 2009 Baseline	Universe
SDW-11	DWSRF projects awarded to small PWS	71%	72%	698
SDW-12	% DWSRF dollars to small PWS	37%	44%	\$1,522.3 million
SDW-13	% DWSRF loans to disadvantaged communities	32%	31%	698
SDW-14	#/% CWS serving <500 people	44,860 CWS (650 new)	44,673 <sup>6</sup>	70,377 CWS and NTNCWS <500
		64%	65%	
SDW-15	#/% small CWS with health-based violations	1230 CWS	1,904 <sup>7</sup>	66,165 CWS and NTNCWS <10,000
		2%	3%	
SDW-16	Average time small CWS returned to compliance	130 days	99 <sup>8</sup>	66,165 CWS and NTNCWS <10,000
			88	
SDW-17	#/% schools/childcare meet safe standards <sup>9</sup>	6,991	7,260	7,703
		93%	94%	

<sup>6</sup> CWSs and nontransient, noncommunity water systems (NTNCWS) serving a population less than 500.

<sup>7</sup> CWSs and NTNCWS serving a population less than 10,000 with repeated health-based violations.

<sup>8</sup> CWSs and NTNCWS serving a population less than 10,000 with acute health-based violations.

<sup>9</sup> Schools are defined as CWS or NTNCWS with a primary service area equal to SC (school) or DC (daycare). Puerto Rico systems were not included. California systems were based on a list of school systems provided by California.