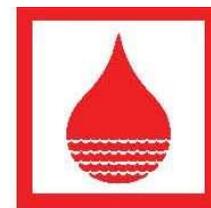


## FY 2015 NWPG Water Quality Measure Definitions

Measure Code: WQ-SP10.N11



**Measure Language:** Number of waterbodies identified in 2002 as not attaining water quality standards where standards are now fully attained. (cumulative)

**Type of Measure:** Target measure; cumulative measure

**Measure Contact:** Christopher Zabawa, EPA Office of Wetlands, Oceans, and Watersheds

[zabawa.christopher@epa.gov](mailto:zabawa.christopher@epa.gov) | (202) 566-1222

### Measure Definition

#### Terms and phrases:

- *Waterbody* means a water body (or "segment") as identified in state-submitted section 303(d) lists and section 305(b) reports also referred to as the Integrated Report, for the 2002 reporting cycle. See EPA's guidance for such reporting under "303(d) Listing of Impaired Waters Guidance" at <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm>.
- *Attaining water quality standards* means that the water body is no longer impaired for any of the causes identified in 2002, as reflected in subsequent Integrated Reports.
- *Impairment* refers to a "cause of impairment" in state-reported data, stored in ATTAINS (Assessment Total Maximum Daily Load (TMDL) Tracking and Implementation System) or its predecessors NTTS (National TMDL Tracking System) or NAD (National Assessment Database). Any water body listed as impaired in these data bases must have an impairment cause entered.

**Methodology for computation of results:** This measure counts waterbodies (segments). Two impairments removed on the same water body (assuming there were no other impairments on that waterbody) would count as one waterbody for Measure WQ-SP10.N11. (They would count as two impairments removed, however, under measure WQ-SP11; see definition of WQ-SP11.)

This measure is designed to demonstrate cumulative successes of the surface water program in achieving water quality standards in waters formerly assessed as not meeting water quality standards. It holds constant the fixed base of waters known to be impaired in the 2002 reporting cycle and focuses on the cumulative number of those impaired waters that now meet water quality standards. The measure is calculated by comparing the fixed baseline of state- or EPA-listed waters in the 2002 reporting cycle to the current list of impaired waters submitted in state Integrated Reports due on April 1 of every even numbered year (e.g., 2010, 2012, 2014). Waters that are meeting water quality standards in the reporting year for the impairments listed in 2002 will be counted toward meeting this measure in that year. If a water body is impaired by multiple causes, it

cannot be counted as meeting this measure until all water quality standards are met, except as noted for mercury.

If a waterbody in the 2002 universe is subsequently re-segmented, it cannot be counted under SP-10 unless all the new segments meet the requirements for counting.

A waterbody in the universe may be counted under this measure when it attains water quality standards for all impairments identified in the 2002 reporting cycle, as reflected in subsequent Integrated Reports. Impairments that are identified in later Integrated Reports are not considered for this measure. States have the additional option of reporting improvements of waters that are not part of the 2002 baseline. Although these improvements will not be counted towards what's being reported for this measure, they will be included in the narrative portion of the report to provide a complete picture of the work that is being done. Waterbodies where mercury is among multiple impairments may be counted toward this target when all impairments but mercury attain standards. Of waters counted under this measure, EPA will continue to identify and track separately those waters still needing restoration for mercury. For purposes of this measure, "mercury" includes all forms of mercury, including methyl mercury.

Waters that are delisted for the following reasons can be counted toward meeting this measure:

<b>Delisting Reason in ATTAINS</b>	<b>Can Removal of Impairment Cause Be Used For Reporting Under SP-10?</b>
Applicable WQS attained; due to restoration activities	YES
Applicable WQS attained; due to change in WQS	YES
Applicable WQS attained; according to new assessment method	YES
Applicable WQS attained; threatened water no longer threatened	YES
Applicable WQS attained; reason for recovery unspecified	YES
Applicable WQS attained; original basis for listing was incorrect	YES
Data and/or information lacking to determine water quality status; original basis for listing was incorrect	YES

Note that measure WQ-SP12.N11 uses a different methodology for determining which reasons can be counted. See definition for measure WQ-SP12.N11.

In Integrated Report terminology, to count toward this measure a waterbody must be placed in Categories 1 or 2 for all the Impairments that were identified in the 2002 reporting cycle as not attaining standards. If any 2002 Impairments belong in Categories 4 or 5, the water cannot be

counted. The waterbody also cannot be counted if it is moved to Category 3 for the 2002 Impairment(s). Impairments first identified after the 2002 reporting cycle are not considered in counting waterbodies under this measure; however, as noted above, states have the additional option of reporting on other restored waters that are not part of the baseline. This measure may be met and the waterbody counted even if the waterbody becomes listed again in a later reporting cycle.

EPA's goal is to use the ATTAINS data system as the system of record for documenting assessment decisions for this measure. Until this happens, reporting for this measure will be based on each region's evaluation of state data from all available sources. In a continuing effort to improve the ability of the ATTAINS data system to track measures using the 2002 baseline waters, EPA is working with the states and regions to evaluate alternative approaches for reporting progress for future cycles that will enable better tracking of progress using the ATTAINS data system.

**Units:** Waterbodies (see above)

**Universe:** The universe consists of an estimated 39,503 waterbodies identified by states or EPA as not meeting water quality standards in 2002. Thus, 2002 is the baseline year for this measure. This universe is sometimes referred to as the "fixed base" or "WQ-SP10.N11 baseline." The universe includes all waters in categories 5, 4a, 4b, and 4c in 2002. Of these waters, 1,703 are impaired by multiple pollutants including mercury, and 6,501 are impaired by mercury alone (see discussion of mercury in Methodology above). Impairments identified after 2002 are not considered in counting waters under this measure; however, states have the option of reporting for inclusion in the narrative as discussed above.

**Baseline:** The baseline for this measure was zero water bodies in the baseline year of 2002.

Note that this measure is related to former Measure L in the FY 2003–2008 EPA Strategic Plan: "Percentage of waterbodies identified in 2000 as not attaining standards where water quality standards are fully attained (cumulative)." Measure L was reported in FY 2007 and earlier. The primary difference between the two measures is that Measure WQ-SP10.N11 uses a 2002 baseline year rather than the Measure L baseline year of 2000. In addition, WQ-SP10.N11 includes other refinements such as including category 4 waters in the baseline. EPA estimates that 1,980 waters reported under measure L would not count under the new version, and therefore can be added to WQ-SP10.N11 results if a combined total is desired. This combined total is used in calculating the efficiency measure for the PART review of the Water Pollution Control Grants program.

---

Measure Code: WQ-SP11

**Measure Language:** Remove the specific causes of waterbody impairment identified by states in 2002. (cumulative)

**Type of Measure:** Target measure; cumulative measure

**Measure Contact:** Christopher Zabawa, EPA Office of Wetlands, Oceans, and Watersheds

[zabawa.christopher@epa.gov](mailto:zabawa.christopher@epa.gov) | (202) 566-1222

### Measure Definition

#### Terms and phrases:

- *Specific cause of waterbody impairment* refers to an "impairment cause" in state- reported data, stored in ATTAINS (Assessment Total Maximum Daily Load (TMDL) Tracking and Implementation System) or its predecessors NTTS (National TMDL Tracking System) and NAD (National Assessment Database). Any waterbody listed as impaired in these data bases must have an impairment cause entered.
- Water body listed as *impaired* means a water body (or "segment") as identified in state- submitted section 303(d) lists and section 305(b) reports also referred to as the Integrated Report. for the 2002 reporting cycle. See EPA's guidance for such reporting under "303(d) Listing of Impaired Waters Guidance" at <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm>
- *Removal of an impairment cause* means that the original specific impairment cause listed by the state or EPA in 2002 is no longer impairing the water body, as reflected in subsequent Integrated Reports.

**Methodology for computation of results:** This measure counts impairment causes. This measure is closely related to measure SP-10, except that it counts impairments rather than water bodies. Two impairments removed on the same water body would count as two under this measure. See the definition for measure WQ-SP10.N11.

This measure is designed to demonstrate cumulative incremental successes of the surface water program in achieving water quality standards in waters formerly assessed as not meeting water quality standards. It holds constant the fixed base of waters and impairment causes known to be impaired in the 2002 reporting cycle and focuses on the cumulative number of those impairments where the water quality now meets water quality standards associated with those impairments. The measure is calculated by comparing the fixed baseline of impairments in state- or EPA-listed waters in the 2002 reporting cycle to the current list of impaired segments submitted in state Integrated Reports due on April 1 of every even numbered year (e.g., 2010, 2012, 2014).

An impairment in the universe may be counted under this measure when water quality associated with that impairment attains water quality standards as reflected in subsequent Integrated Reports. Impairments that were not identified in the 2002 reporting cycle but are identified in later lists are not considered for this measure. States have the additional option of reporting on impairments attaining water quality standards that are not part of the 2002 baseline. Although these attainments

will not be counted towards what is being reported for this measure, they will be included in the narrative portion of the report to provide a complete picture of the work that is being done.

If a water body with an impairment in the 2002 universe is subsequently re-segmented, the impairment cannot be counted under WQ-SP11 unless the impairment has been removed throughout the originally-listed water body (i.e., in each of the new segments).

Impairments that are delisted for the following reasons can be counted towards meeting this measure:

Delisting Reason in ATTAINS	Can Removal of Impairment Cause Be Used For Reporting Under SP-11?
Applicable WQS attained; due to restoration activities	YES
Applicable WQS attained; due to change in WQS	YES
Applicable WQS attained; according to new assessment method	YES
Applicable WQS attained; threatened water no longer threatened	YES
Applicable WQS attained; reason for recovery unspecified	YES
Applicable WQS attained; original basis for listing was incorrect	YES
Data and/or information lacking to determine water quality status; original basis for listing was incorrect	YES

Note that Measure WQ-SP12.N11 uses a different methodology for determining which reasons can be counted.

EPA's goal is to use the ATTAINS data system as the system of record for documenting assessment decisions and tracking TMDL information. Until this happens, reporting for this measure will be based on each region's evaluation of state data from all available sources. EPA is working with the states and regions to evaluate alternative approaches for reporting progress for future cycles that will enable for better tracking of progress using the ATTAINS data system.

**Units:** Impairment causes for a waterbody (see above)

**Universe:** The universe consists of an estimated 69,677 waterbody impairments, as identified by states or EPA in the 2002 reporting cycle. Thus, 2002 is the baseline year for this measure. This universe is sometime referred to as the "fixed base" or "WQ-SP11 baseline."

**Baseline:** The baseline for this measure was zero impairment causes in the baseline year of 2002.

---

Measure Code: WQ-SP12.N11

**Measure Language:** Improve water quality conditions in impaired watersheds nationwide using the watershed approach. (cumulative)

**Type of Measure:** Target measure; cumulative measure

**Measure Contacts:** Carol Peterson, EPA Office of Wetlands, Oceans, and Watersheds

[peterson.carol@epa.gov](mailto:peterson.carol@epa.gov) | (202) 566-1304

### Measure Definition

#### Terms and phrases:

- *Watershed* means (a) a watershed or hydrologic unit at the scale of 12-digit hydrologic unit codes, or HUC-12, as determined by the draft or final Watershed Boundary Dataset (WBD), or (b) a regionally defined hydrologic unit of appropriate scale. Option (b) is provided since some waters, such as coastal and estuary waters, fall outside the WBD, and may or may not be hydrologically definable at a scale comparable to inland HUC-12s. Although watersheds or hydrologic units at the 12-digit scale are technically termed "sub-watersheds" by USGS, the Strategic Plan will use the term "watershed" for simplicity.
- An *impaired watershed* is a watershed containing one or more impaired water bodies.
- *Impaired water bodies* are those identified by states and EPA in the baseline for measure WQ-SP10.N11.
- *Watershed approach* is a coordinating process for focusing on priority water resource problems that:
  - Is focused on hydrologically defined areas,
  - Involves key stakeholders,
  - Uses an iterative planning or adaptive management process to address priority water resource goals, and
  - Uses an integrated set of tools and programs.

Functionally, the watershed approach is a problem-solving tool for protecting water quality and aquatic resources. It recognizes that factors affecting the health of our nation's waters should be understood within their watershed context. It includes assessment of relevant watershed processes and socioeconomic factors, identification of priority issues and most promising corrective actions, involvement by affected parties throughout the process, and implementation at the required scale. See EPA's website at <http://water.epa.gov/type/watersheds/approach.cfm> for more information. Also, see Demonstrating Use of the Watershed Approach below.

The watershed approach can be applied at any appropriate scale, including scales smaller or larger than the HUC-12 watersheds described above. Thus, for this measure, one watershed effort could result in improvements in one or in many HUC-12 watersheds, depending on its scale. For consistency, however, all successes under this measure will be reported as numbers of HUC-12 watersheds.

- Improved means either that:
  - One or more of the waterbody/impairment causes identified in 2002 are removed, as reflected in EPA-approved state assessments, for at least 40% of the impaired water bodies or impaired stream miles/lake acres in the watershed (see Option 1 below); OR
  - There is significant watershed-wide improvement, as demonstrated by valid scientific information, in one or more water quality parameters or related indicators associated with the impairments (see Options 2a and 2b below).
- Watersheds of focus are watersheds in which regions and states will be focusing application of the watershed approach to attain this measure. Regions and states have identified an estimated 4,767 watersheds of focus. Regions and states will maintain lists of the watersheds of focus. The watersheds of focus include watersheds that may be amenable to water quality improvement in the near term (five years), as well as watersheds where improvement may take much longer. In many cases, the time frame cannot be predicted without more information gathered for watershed planning. EPA envisions flexibility in identifying the watersheds of focus over time. EPA and the states may add, change, or remove watersheds they are focusing on as new information becomes available or as resources are reallocated. The measure thus envisions "living" lists of watersheds.

**Methodology for computation of results:** The methodology for Measure WQ-SP12.N11 is described in [Guidance for Reporting Watershed Improvement under Measure SP-12 - FY 2009 \(PDF\)](#). (16 pp, 183K, [About PDF](#))

This methodology provides information needed for states and EPA to implement the measure. For a watershed to be counted under WQ-SP12.N11, the state and region must demonstrate that the watershed approach was applied, and that water quality improved. Either Option 1, Option 2a, or Option 2b described below may be used for demonstrating water quality improvement.

Supporting information must be provided using the appropriate template contained in the above methodology. A separate template is available for each reporting option below (1, 2a, or 2b).

An individual watershed may be counted only once under this measure. That is, a watershed may be counted only when it initially meets the definition. Subsequent actions, such as having additional impairment causes removed or additional water quality parameters showing watershed-wide improvement, would not enable the watershed to be counted again in a subsequent reporting period.

Under some circumstances, water quality improvements may result in the same watershed being eligible for reporting under both measure WQ-SP12.N11 and measure WQ-10 (nonpoint source waters restored). Consult the detailed definitions for both measures to determine whether a particular watershed is eligible. See additional discussion in the methodology.

**Units:** Watersheds at 12-digit HUC scale (see Terms and Phrases above).

**Universe:** Watersheds of focus (see Terms and Phrases above).

**Baseline:** 0 watersheds in FY 2002

---

Measure Code: WQ-SP13.N11

**Measure Language:** Ensure that the condition of the nation's lakes does not degrade (i.e., there is no statistically significant increase in the percent of lakes rated "poor" and no statistically significant decrease in the streams rated "good").

**Type of Measure:** Indicator measure

**Measure Contact:** Susan Holdsworth, EPA Office of Wetlands, Oceans, and Watersheds

[holdsworth.susan@epa.gov](mailto:holdsworth.susan@epa.gov) | (202) 566-1187

**Measure Definition** Critiques by the U.S. Government Accountability Office (GAO) and other independent organizations found that the Nation and the States do not have all the monitoring data to effectively manage their water programs and make scientifically-defensible statements about the condition of waters across the Nation and to track changes over time. States and EPA are working together to implement national surveys that report on the status and trends of the Nation's water. The data from these surveys are key to allowing the Agency to evaluate effectiveness of water quality protection and restoration efforts. This measure focuses on the condition of the Nation's lakes for which a baseline was established with NLA2007 for comparison to results of NLA2012

Terms and phrases:

- *Good, Fair, and Poor* are defined in the methodology for the wadeable streams survey. (See below.)
- Does not degrade is defined in the methodology below.

**Methodology for computation of results:** Targets and results will be reported nationally with a confidence interval of plus or minus 3.5%, and by EPA regions at plus or minus 10-15%. "Good," "Fair," or "Poor" are not related to water quality standards. They are determined by national assessment protocols, comparing conditions in sampled streams with conditions in reference waters

representing "least disturbed" conditions in the same general ecological area. The methodology for determining whether a water is in Good, Fair, and Poor condition is consistent with guidance for biological criteria and nutrient criteria published by EPA's Office of Science and Technology and described for purposes of the National Aquatic Resource Surveys at [www.epa.gov/aquaticsurveys](http://www.epa.gov/aquaticsurveys).

"Does not degrade" in this measure means that the following two conditions must be met in comparing results from two different surveys:

- There is no statistically significant increase in the national proportion of waters in the category of Poor compared to the earlier results, AND
- There is no statistically significant decrease in the national proportion of waters in the category of Good compared to the earlier results.

This means that for measure WQ-SP13.N11 to show success in 2015 compared to the baseline year of 2007 (see baseline below), the 2012 lakes survey will need to find not more than 22.3 percent of lakes are in Poor condition and not less than 55.8 percent of stream miles are in Good condition.

**Units:** Lakes is based on the number of lakes (expressed as a percentage)

**Universe:** Number of lakes that are 4 hectare or larger and at least 1 hectare deep is 50,000.

**Baseline:** The 2007 baseline reflects the results of the National Lakes Assessment, published in April 2010.

EPA and its collaborating partners are on a schedule to conduct similar assessments of other types of waterbodies (e.g., lakes, large rivers, and wetlands) in the future, with the goal of producing updated assessments for each type of waterbody every five years. These repeated studies will ensure that the public remains informed as to whether the collective efforts to protect and restore the nation's waters are meeting with success.

States/EPA established baseline conditions for lakes in 2010; measures for streams and lakes are included in the 2011–2015 EPA Strategic Plan. The Lakes Survey will be reported in FY 2015.

---

Measure Code: WQ-SP14a.N11

**Measure Language:** Improve water quality in Indian country at baseline monitoring stations in tribal waters (i.e., show improvement in one or more of seven key parameters: dissolved oxygen, pH, water temperature, total nitrogen, total phosphorus, pathogen indicators, and turbidity). (cumulative)

**Type of Measure:** Target measure; annually reported

**Measure Contact:** Susan Holdsworth, EPA Office of Wetlands, Oceans, and Watersheds

## Measure Definition

### Terms and Phrases:

- *Seven key parameters* means seven parameters identified in the EPA's Clean Water Act (CWA) Section 106 Program Guidance for Tribes: dissolved oxygen, pH, water temperature, total nitrogen, total phosphorus, pathogen indicators, and turbidity. For the purpose of this measure, trends can be reported on these parameters or any appropriate sub-components of these parameters. Reporting on the seven parameters would be in accordance with the degree of maturity of the Tribe's monitoring program, consistent with the following table derived from the Guidance.\*

For tribes conducting fundamental monitoring programs:

1. Dissolved oxygen
2. pH
3. Water temperature
4. Turbidity

For tribes conducting intermediate monitoring programs: above plus

5. Phosphorus
6. Total nitrogen

\* p. 4-11, *Guidance on Awards of Grants to Indian Tribes under Section 106 of the Clean Water Act*, U.S. EPA Office of Water, April 2006, available at [http://water.epa.gov/grants\\_funding/cwf/106tqg07.cfm](http://water.epa.gov/grants_funding/cwf/106tqg07.cfm). See also Federal Register Notice, Tribal Grant Guidance, April 26, 2006, 71 FR 24852. The table at p. 4-11 also includes two parameters for mature monitoring programs that are not included among the seven key parameters for this measure - Macroinvertebrates and Basic habitat information.

For tribes conducting mature monitoring programs: above plus

7. Pathogen indicators
- *Improved* means that (a) at least one of the seven key parameters or parameter sub-components (e.g. total Kjeldahl nitrogen, and orthophosphorus) shows an improvement in quality as described in the guidance below, and (b) there is no evidence of deteriorating trends in related parameters included in reporting for this measure. Further guidance for reporting improvement is provided below.

**Methodology for computation of results:** To meet the definition of "improved," a water body assessment must demonstrate a positive trend/change in at least one of the parameters or parameter subcomponent – dissolved oxygen, pH, water temperature, total nitrogen, total phosphorus, pathogen indicators, or turbidity – over at least two years. The baseline for the trend or change may be derived from monitoring conducted as far back as 1987. Monitoring must be conducted to show that the trend continues into or near the current reporting period, or the improvement is maintained during such period, allowing for averaging intervals and the time to assemble and analyze the data.

Sampling and analysis must be conducted in accordance with an EPA–approved quality assurance project plan or other appropriately developed Quality Assurance Project Plan (QAPP) (e.g., sampling conducted by a federal agency under their own approved QAPP).

Improvement at a station must be shown using one of the following three processes, as described in path "A", "B", or "C" below.

**PATH A**

Use statistical procedures to demonstrate that significant improvement has occurred with a 90 percent or greater level of confidence. Where data are limited, a level of confidence of 70 percent or greater may be applied. For purposes of this measure, "statistical procedures" are those procedures capable of showing statistically significant change in the water quality parameter(s) (e.g. seasonal Kendall trend test, Wilcoxon sign rank). Supporting documentation should describe the environmental significance of any reported changes in water quality.

**PATH B**

Provide at least two lines of evidence to demonstrate improvement. This approach is suggested in situations where there is not enough consistent data to support the rigorous statistical tests in "A" above. Evidence must include each of the following:

1. Evidence of an improving trend in one or more of the water quality parameters identified in the measure based on empirical data which may not be statistically significant (e.g. descriptive statistics) but nevertheless supports improvement.

AND

2. At least one of the following four lines of evidence: Evidence of an improving trend in water quality based on predictive/modeled data, with field level ground truthing. Evidence of relevant load reductions. Evidence of relevant nonpoint source or point source implementation, or other evidence of watershed implementation actions involving the monitoring waters.

**PATH C**

Report that a waterbody on which the station is located has been restored to attainment with water quality standards associated with one of the seven key parameters. If the Tribe has EPA-approved Tribal water quality standards, these must be used. If not, the Tribe should use one of the following sets of standards: Tribal standards adopted under Tribal law, draft Tribal standards, adjacent state standards, EPA's national recommended water quality criteria issued under section 304(a), or other scientific benchmarks determined by the Tribe. An assessment methodology documenting how the Tribe determines attainment with the appropriate standard is required under this option.

More than one path may be utilized to evaluate data at a station, but only one may be used for reporting an actual water quality improvement. Different paths may be used for different stations.

For all three paths above, there should be no evidence of deteriorating trends in related parameters included in reporting for this measure (dissolved oxygen, pH, water temperature, total nitrogen, total phosphorus, pathogen indicators, or turbidity).

For all three paths above, where data are available, the analysis should take account of differences in streamflow or other natural events that could produce false "trends."

Supporting documentation for stations where improvement has occurred includes:

- The station name/number and waterbody name.
- Whether method "A", "B", or "C" above was used to assess the data, with a brief explanation why.
- The results of the assessment. The assessment will present the summary data from "A", "B", or "C" above demonstrating improved water quality. The assessment must identify the specific parameters used to assess improvements, and must also describe the efforts made to locate and analyze any evidence of deteriorating trends in these or related parameters included in reporting for this measure.
- A brief narrative on why the water quality is thought to be improving, including what action(s) took place to account for the improvement, if known.

Acceptable documentation of improvements can be provided to the region in a variety of formats and can be provided by reference where readily accessible information/data exists.

In accordance with EPA's proposed Section 106 Tribal Grant Guidance, data used in the assessment must be provided to EPA in a format accessible for storage in EPA's data system.

Tribes must provide EPA a list of stations in the baseline. No further documentation is required, however, for stations where insufficient information exists to assess whether an improvement has occurred, or where no improvement has occurred.

EPA regions will review the submitted data and assessments, and enter the results in the Agency Commitment System.

**Units:** Baseline stations located in Indian country

**Universe and Baseline:** Baseline stations were selected from among stations located in Indian country that are planned for sampling at times during the FY 2006–2012 period. Stations selected were located on waters that have a potential for improvement in one or more of the seven key parameters. To facilitate the selection, tribes were asked to provide:

- a. The total number of monitoring stations identified by the tribe that are planned for sampling (for one or more of the seven key parameters) at times during the FY 2006 – 2012 period. Result: 105 tribes identified 1,661 stations.
- b. Of the monitoring stations in (a), how many will be located on waters that have a potential for improvement in one or more of the seven key parameters. "Potential for improvement" means that water quality is or has been depressed, and some restoration activities are underway or planned to improve water quality for those waters. Result: At least 353 stations were identified with depressed water quality. Of these, 185 were identified as having restoration activities underway.

Of the monitoring stations in (b), EPA identified a national target of 50 stations for reporting actual improved water quality as defined in this guidance by 2012.

The following table summarizes the baseline stations in 2005. The baseline is reviewed periodically and will be updated if needed.

Regions	No. of tribes with stations planned	No. stations planned (a)	No. stations with suspected depressed water quality	No. stations with suspected depressed water quality and restoration activities underway (b)	No. stations targeted for improvement by 2012 (c)
Region 1	2	160	Unknown, at least 14	14	4
Region 2	1	14	Unknown	Unknown	0
Region 4	2	37	8–9	2	1
Region 5	32	729	118	44	6
Region 6	8	68	35–41	1	1
Region 7	7	82	4	4	1
Region 8	19	100	Unknown, at least 10	10	10

Region 9	23	203	Unknown, at least 43	43	15
Region 10	11	268	79	67	15
<b>TOTALS</b>	<b>105</b>	<b>1,661</b>	<b>At least 311, not more than 761</b>	<b>185</b>	<b>53</b>

- a. The total number of monitoring stations identified by the tribe that are planned for sampling (for one or more of the seven key parameters) at times during the FY 2006–2012 period.
- b. Of the monitoring stations in (a), the number that will be located on waters that have a potential for improvement in one or more of the seven key parameters. "Potential for improvement" means that water quality is or has been depressed, and some activities have been, are, or will be underway to improve water quality for those waters.
- c. Of the monitoring stations in (b), the estimated number EPA will show as a Target for reporting actual improved water quality as defined in the measure by 2012.

The following factors affected the development of the data in the above table.

- Many tribes have not yet finalized a water quality monitoring strategy, or are revising their strategy. Therefore, the number of planned stations may be revised.
- Some regions were able to obtain information from all of their tribes; others were able to focus only on tribes with mature or intermediate water quality monitoring programs.
- The majority of stations in column (a) will likely not be able to detect improvements in water quality as defined in the measure for several reasons, including:
- Many stations are located at relatively undisturbed sites, where water quality is not known to be depressed relative to the seven key parameters.
- Some tribes have not developed water quality baselines for the stations that could identify problems.
- Some water quality problems (e.g., mercury contamination) are not addressed by the seven key parameters.
- Only a limited number of tribes have implementation funding (319, watershed grants, etc) or other restoration activities underway. Many of those that do are just getting started. As support for restoring additional tribal waters becomes available, tribes will be able to address more of the degraded waters.
- Although many tribal waters are currently in good shape, development, mining and other anthropogenic impacts are threatening to change this. It is very important for tribes to be able to continue their efforts to monitor these waters and to access funds to protect high water quality. A few tribes expressed concern about having waters head in the wrong direction. The work group strongly supports developing a water quality "maintenance" or "prevention" measure or measure component in the future.
- It is often difficult to predict continuity in tribal monitoring programs. Although a growing number of tribes have developed a routine monitoring program, there is often no guarantee of stability in the program due to changes in level of funding, changes in priority activities, or significant turnover in key trained staff.

- A significant portion of the monitoring conducted by many tribes is on waters just outside or near reservation boundaries. In some cases this is a matter of identifying sites with convenient access that can best characterize tribal waters. In other cases tribes are facing discharges or development pressures outside of tribal boundaries that affect or threaten waters upstream from the tribal area. At least some of the monitoring stations identified in the baseline for this measure are located to monitor those upstream activities. In some cases stations are established to monitor waters on nearby ceded lands.
  - It should be noted that the number of stations does not necessarily represent the number of water bodies monitored. The number of stations needed to characterize a water body may vary greatly.
- 

Measure Code: WQ-SP14b.N11

**Measure Language:** Identify monitoring stations on tribal lands that are showing no degradation in water quality (meaning the waters are meeting tribal water quality objectives). (cumulative)

**Type of Measure:** Indicator measure

**Measure Contact:** Susan Holdsworth, EPA Office of Wetlands, Oceans, and Watersheds

[Holdsworth.Susan@epa.gov](mailto:Holdsworth.Susan@epa.gov) | (202) 566-1187

### Measure Definition

The objective of the measure is to pilot the identification and tracking of tribal monitoring locations in Indian Country that meet water quality benchmark criteria and show no degradation from the criteria over a period of at least two years.

### Terms and phrases:

- *No degradation*, for the purpose of this measure, means that all of the core indicators or indicator sub-components (e.g. ammonia-N as a sub-component for a total Nitrogen core indicator) that are appropriate for assessing the objectives of a tribe's monitoring program meet and continue to meet benchmark water quality criteria over a period of at least two years. This term, "no degradation," and its definition are not related to the term "antidegradation" found in EPA's regulation at 40 CFR Part 131, and nothing in this document alters the existing regulatory requirements regarding antidegradation.
- *Benchmark water quality criteria*: For tribes eligible to be treated in a manner similar to a state (TAS) with EPA-approved water quality standards, the EPA-approved criteria are the benchmark criteria. In all other situations, the tribe may choose benchmark criteria – such as draft tribal standards, tribal standards adopted under tribal law, EPA recommended criteria, or neighboring state water quality standards. Benchmark criteria should be documented

within a tribe's Clean Water Act (CWA) sections 106 and 319 QAPP that has been approved by EPA. Benchmark criteria must be at least as protective as EPA's CWA section 304(a) national recommended water quality criteria, where appropriate and when the national recommended criteria exist for the core indicators being monitored. These national recommended water quality criteria may be found on EPA's website:

<http://water.epa.gov/scitech/swguidance/stardards/current/>.

- *Core indicators* might include, but are not limited to, any of the seven indicators identified in EPA's CWA Section 106 Program Guidance for Tribes. These parameters were intentionally identified in the Guidance due to their applicability in interpreting water quality. Other parameters not on this list, which are being monitored for comparison with applicable water quality criteria and related tribal water quality objectives, are relevant as well.
  1. Dissolved oxygen
  2. pH
  3. Water temperature
  4. Turbidity
  5. Phosphorus
  6. Total nitrogen
  7. Pathogen indicators

### **Methodology for computation of results**

Monitoring and analysis must be conducted to show that monitoring locations are meeting benchmark criteria and/or water quality standards and demonstrating no degradation over a period of two years into the current reporting period, allowing for averaging intervals and the time to assemble and analyze the data. For example, to be reportable for FY 2012, no degradation would need to be maintained into (or near) FY 2012.

Given natural conditions, varying sampling frequencies, or other factors, a station may exhibit a downward trend in water quality, and still be counted for this measure as long as the station continues to meet benchmark criteria. This consideration is consistent with the measure's definition of 'no degradation.'

A station may be counted for this measure only if all associated tribal objectives set forth within the tribe's QAPP, monitoring strategy, and/or assessment reports, for that particular station, are meeting associated benchmark criteria.

Monitoring stations reported for the first time must have monitoring data and analysis providing evidence of no degradation over a period of two years previous to reporting. From that point forward, monitoring data and analysis must provide evidence that there continues to be no degradation however, constant, yearly monitoring does not have to occur. It is at the tribe's and EPA's discretion to determine how often a site must be monitored and assessed to ensure evidence of no degradation.

Sampling, analysis and assessment methods must be conducted in accordance with an EPA–approved quality assurance project plan or other appropriately developed QAPP (e.g., sampling conducted by a federal agency under their own approved QAPP).

No degradation at a station must be shown using one of the following two processes, as described in path "A" or "B" below.

**PATH A**

Use statistical procedures to demonstrate that no degradation has occurred, as defined above, with a 90 percent or greater level of confidence. Where data are limited, a level of confidence of 70 percent or greater may be applied. For purposes of this measure, “statistical procedures” are those procedures capable of showing statistically significant maintenance in the water quality indicator(s) (e.g. seasonal Kendall trend test, Wilcoxon sign rank).

**PATH B**

Demonstrate no degradation, as defined above, in comparison to benchmark criteria chosen by the tribe. This approach is suggested in situations where there is not enough consistent data to support the rigorous statistical tests in "A" above. Evidence must include no degradation in the applicable waterbody use(s) and/or applicable water quality standard<sup>1</sup>(s), which means continued attainment of benchmark water quality criteria, which may or may not be statistically significant (e.g. descriptive statistics) but nevertheless supports no degradation.

<sup>1</sup>Applicable water quality standards refer to those water quality standards established under Section 303 of the Clean Water Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation.

More than one path may be utilized to evaluate data at a station, but only one may be used for reporting no degradation of water quality. Different paths may be used for different stations. For both paths above, where data are available, the analysis should take into account differences in streamflow or other natural events that could produce false "trends."

Supporting documentation for stations where no degradation has occurred includes:

- The station name/number, waterbody name, water body type (e.g., lake, stream, river), hydrologic unit eight digit code, monitoring Location latitude, monitoring Location longitude, monitoring Location horizontal collection method (e.g., whether GPS used), monitoring Location Horizontal Coordinate Reference system (e.g., NAD 83), and Monitoring Location Source Map scale, (these same data fields are used for EPA WQX submissions).
- Whether method "A" or "B" above was used to assess the data, with a brief explanation why.
- The results of the assessment. The assessment will present the summary data from "A" or "B" above demonstrating no degradation of water quality. The assessment must identify the specific indicators used to assess no degradation, and must also describe the efforts made to

locate and analyze any evidence of no degradation in these or related indicators included in reporting for this measure.

- A brief narrative on why the water quality is thought to have no degradation, including what action(s) took place to account for the no degradation, if known.

Acceptable documentation of no degradation can be provided to the region in a variety of formats and can be provided by reference where readily accessible information/data exists.

In accordance with EPA's Section 106 Tribal Grant Guidance, data used in the assessment must be provided to EPA in a format accessible for storage in EPA's data system, the STORET Warehouse. A standard template has been made available through EPA regional offices as tribes have begun to implement this reporting requirement. EPA plans to continue to make additional templates available as tools for data submission to EPA evolve. Please access the following website for more information: <http://www.epa.gov/storet/wqx/index.html>

**Units:** Monitoring locations.

**Universe:** The total number of monitoring stations on tribal lands that have been identified by tribes as planned for sampling at times during the FY 2009–2015 period.

**Baseline:** not available

---

Measure Code: WQ-24.N11

**Measure Language:** Number of American Indian and Alaska Native homes provided access to basic sanitation in coordination with other federal agencies.

**Type of Measure:** Target measure; annually reported

**Measure Contact:** Kellie Kubena, EPA Office of Wastewater Management

[kubena.kellie@epa.gov](mailto:kubena.kellie@epa.gov) | (202) 566 0448

Matthew Richardson, EPA Office of Wastewater Management

[richardson.matthew@epa.gov](mailto:richardson.matthew@epa.gov) | (202) 564–2947

### Measure Definition

#### Terms and phrases:

- *Homes* are the houses on American Indian lands and within Alaskan Native Villages

- *Access* is the reduction in the wastewater sanitation deficiency level of a tribal home from a 4 or 5 to a 3 or less. The sanitation deficiency levels definitions are described in Appendix E of the "Indian Health Service Sanitation Deficiency System Guide for Reporting Sanitation Deficiencies for Indian Homes and Communities," working draft, May 2003 and may be found online at: <http://www.dsfc.ihs.gov/Documents/SDSWorkingDraft2003.pdf>.
- *Sanitation Deficiency* is an identified need for new or upgraded wastewater sanitation facilities for existing homes of on American Indian lands or Alaska Native Villages

**Methodology for computation of results:** The EPA Office of Water, Office of Wastewater Management (OWM) will use the actual number of homes reported in the Indian Health Service's (IHS) Sanitation Deficiency System (SDS) that lack safe wastewater sanitation services to show progress towards this measure. OWM will obtain this value from IHS in order to calculate annual performance. Housing information is collected annually, typically in November, in order to capture progress over the previous construction season.

**Units:** Homes on tribal lands and in Alaskan native villages.

**Universe:** Estimated total number of homes on tribal lands, which is dynamic given that additional homes are constructed. The program uses a baseline based on the total number of homes on tribal lands in 2009.

**Baseline:** The number of American Indian and Alaska Native Village homes provided access to safe wastewater sanitation services between 2003 and 2009.



---

Measure Code: WQ-01 (a)

**Measure Language:** Number of numeric water quality standards for total nitrogen and for total phosphorus adopted by States and Territories and approved by EPA, or promulgated by EPA, for all waters within the State or Territory for each of the following waterbody types: lakes/reservoirs, rivers/streams, and estuaries (cumulative, out of a universe of 280).

**Type of Measure:** Target measure; cumulative measure

**Measure Contact:** Gregory Stapleton, EPA Office of Science and Technology

[stapleton.gregory@epa.gov](mailto:stapleton.gregory@epa.gov) | (202) 566-1028

### Measure Definition

#### Terms and phrases:

- Numeric standards for total nitrogen and total phosphorus – numeric water quality criteria for total nitrogen (TN) and total phosphorus (TP) incorporated into water quality standards for the protection of Clean Water Act section 101(a)(2) goal uses ( protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water). Such criteria are for eutrophication endpoints. Criteria for other endpoints, such as ammonia, nitrate, or elemental phosphorus toxicity, would not count. The "total" forms of nitrogen and phosphorus are generally preferable from a scientific standpoint because they account for both organic and inorganic forms. Other forms of nitrogen or phosphorus would be counted only if justified scientifically.

Numeric translators for TN and TP will be counted in this measure if they are binding upon section 303(d) assessments, TMDLs, and NPDES permits, and have been adopted as water quality standards and approved by EPA under section 303(c) for WQ-01a. Response variables, such as chlorophyll-a, clarity, SAV acreage, or dissolved oxygen, are not considered translators for this purpose.

- Waterbody type means one of the following three types of U.S. water bodies:
  - Lakes and reservoirs (excluding the Great Lakes)
  - Rivers and streams
  - Estuaries

Note: The majority of states and territories have all three of these waterbody types, but some states do not. See Universe below.

- *For all waters* – To be counted under this measure, water quality criteria values would need to be established for all waters of the waterbody type (see below). The values for each pollutant could be uniform for all such waters, or could vary as appropriate (e.g., for different subtypes, different watersheds, different seasonal periods), but would count as only one criterion for the purpose of this measure. In other words, states could use site-specific criteria to help meet this measure as long as all waters of the waterbody type are covered by some combination of site-specific and non-site-specific criteria.
- *Adopted and approved* by EPA (in WQ-01a) means that the state or territory has adopted the criteria through its rulemaking process and submitted them to EPA for review, and that EPA has approved them under section 303(c).
- *Promulgated* by EPA (in WQ-01a) means that EPA has issued a final rule promulgating the criteria as federal water quality standards under section 303(c)(4).
- All criteria counted under WQ-01a should be included, since they have progressed to final adoption and EPA approval, or have been promulgated by EPA.

EPA expects that the state or territory would establish milestones for the completion of each of the following key steps:

1. Planning for criteria development
2. Collection of information and data
3. Analysis of information and data
4. Adoption of criteria into the state's or territory's water quality standards

Such milestones would need to be established for developing TN and TP criteria for each of the waterbody types within the state or territory. If planning showed that criteria development should proceed separately for TN and TP, and for each waterbody type, then a state or territory with all three waterbody types could theoretically have 30 milestones. In practice, this number could be higher or lower, depending on whether work could be combined across TN and TP and waterbody types, or whether additional waterbody subtypes were established.

For each milestone established, EPA expects the state or territory to provide EPA the following on a regular basis, but not less than annually:

1. A *target* date, consistent with internal planning,
2. A *completion* date when the milestone is met, and
3. A written *explanation* for changes in target dates from previous plans, or any delays in achieving them.

If a state or territory does not plan to develop TN or TP criteria for a particular waterbody type, an explicit, explained declaration of their intentions not to develop the criteria would serve as milestone information.

EPA notes that many states have already established nutrient criteria development plans, including many that have been mutually agreed-upon with EPA. Such plans could be of assistance in providing the kinds of information needed to satisfy this measure.

EPA anticipates that a full set of the above information, shared regularly between the state or territory and EPA, will greatly facilitate the management and oversight of nutrient criteria development, including the annual planning and performance cycle under section 106 and performance partnership agreements. EPA also anticipates using this information to help populate an EPA web site to keep the public informed about the status of these important efforts.

**Methodology for computation of results:**

For WQ-01a: The results for a state or territory will be computed by adding the number of numeric nutrient criteria for each of the two or three waterbody types in the state or territory that have been approved or promulgated. For example, if a state with all three waterbody types has TP and TN for all lakes and reservoirs, and TP for all rivers and streams, and none for estuaries, the state would be credited with 3 criteria out of a maximum (universe) of 6.

**Units:** Numeric water quality standards

**Universe:** The total standards for two criteria – TN and TP – for each of the 140 state/territorial waterbody types represented in the 56 states and territories. There are 55 states/territories with rivers and streams, 55 states/territories with lakes and reservoirs, and 30 states/territories with estuaries.

**Baseline:** The number of numeric TN and TP standards had been adopted by states and territories, and approved by EPA as of December 2008.

---

Measure Code: WQ-02

**Measure Language:** Number of tribes that have water quality standards approved by EPA. (cumulative)

**Type of Measure:** Target measure; cumulative measure

**Measure Contact:** Gregory Stapleton, EPA Office of Science and Technology

[stapleton.gregory@epa.gov](mailto:stapleton.gregory@epa.gov) | (202) 566-1028

**Measure Definition**

**Terms and phrases:** *Tribe* means a federally recognized Indian tribe that meets certain conditions (see methodology below). The water quality standards program refers to a tribe that meets the first condition below as an "authorized tribe."

**Methodology for computation of results:** A tribe will be counted as having EPA-approved water quality standards (WQS) if all three of the following criteria have been met:

- a. The tribe has been authorized to administer its own water quality standards program (i.e., EPA has found it eligible for treatment in the same manner as a state, TAS); and
- b. The tribe has adopted and submitted an initial set of water quality standards to EPA; and,
- c. EPA has approved the initial standards.

Additionally, tribes having EPA-promulgated federal standards will count under this measure.

**Units:** Tribes

**Universe:** All federally recognized tribes who have applied to become eligible for "treatment in the same manner as a state" (TAS) to administer the water quality standards program (as of the end of the preceding fiscal year).

**Baseline:** The baseline comprises the 25 TAS-eligible tribes that had adopted EPA-approved water quality standards by September 30, 2005, plus one tribe (Colville Reservation) for which EPA promulgated federal water quality standards in 1989.

---

Measure Code: WQ-03 (a,b)

**Measure Language:** (WQ-03a): Number, and national percent, of states and territories that within the preceding three year period, submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other sources not considered in the previous standards.

(WQ-03b): Number, and national percent, of tribes that within the preceding three year period, submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other sources not considered in the previous standards. NOTE: WQ-03a is a PART annual output measure for the Water Pollution Control Grants (Section 106) program.

WQ-3a and WQ-3b are reported separately in the EPA Annual Commitment System (ACS).

**Type of Measure:** Target measure; annually reported

**Measure Contact:** Gregory Stapleton, EPA Office of Science and Technology

## Measure Definition

### Terms and phrases:

- *Acceptable* to EPA means that EPA has approved the new or revised criteria for that state, territory, or tribe as of September 30, 2015.
- *Three year period* means May 1, 2012, through April 30, 2015, to allow at least 5 months for EPA-approval.
- *New scientific information* from EPA includes, but is not limited to, draft or final water quality criteria documents, and updated information posted on <http://water.epa.gov/scitech/swguidance/waterquality/standards/criteria/>. It could also include revised criteria implementation guidance, and scientific information provided by EPA regions or other EPA Offices to assist state, territorial, or tribal adoption of statewide or local criteria.

**Methodology for computation of results:** Reporting of results for this measure will be generated from the Water Quality Standards (WQS) Actions Tracking Application (WATA) and submitted to the Annual Commitment System after confirmation with Regional WQS Coordinators. Regions will identify in WATA any submissions or submission parts that include one or more new water quality criteria or revised criteria acceptable to EPA that reflect new scientific information not considered in the previous criteria. Adoption and EPA approval of initial tribal standards that include water quality criteria will enable an authorized tribe to be counted under this measure.

The WATA system will be used to identify all submissions received from May 1, 2012, through April 30, 2015 that meet the above criteria and can therefore be reported as meeting the measure.

If a state, territory, or tribe has not adopted any such criteria, the entity can nevertheless be counted under this measure if:

- a. EPA has not issued any new or revised water quality criteria applicable to that entity's waters, including revisions to the published table of EPA recommended criteria at <http://water.epa.gov/scitech/swguidance/waterquality/standards/criteria/> that would trigger this measure. For toxic pollutants, "applicable to that state's water" includes pollutants that are reasonably expected to interfere with designated uses; OR
- b. The entity completed a defensible scientific review of the new scientific information EPA has issued and has determined that no changes are needed to their existing water quality criteria. This would be counted for FY 2015 if the associated public review and comment occurred between October 1, 2012, and September 30, 2015; OR
- c. For an authorized tribe, EPA approved the tribe's initial water quality standards (including water quality criteria) between October 1, 2012, and September 30, 2015.

Note the overlap in time periods: a state that made such a submittal, in, say, July 2013, could get counted in FY 2013, 2014, and 2015 . Conversely, a state that last submitted such criteria, say, in November 2011, would get counted in FY 2014 but not in FY 2015.

Note that the measure allows EPA from 5 to 41 months to approve the criteria, depending on the date of submission during the three-year period specified above.

**Units:** States and territories (WQ-3a) or tribes (WQ-3b)

**Universe:** WQ-03a: 50 states, the District of Columbia, and territories of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands (56 entities). WQ-03b: This universe is the number of authorized tribes with EPA-approved water quality standards at the end of FY 2014, excluding any tribes whose standards are completely promulgated by EPA (currently only the Confederated Tribes of the Colville Reservation).

**Baseline:** WQ-03a: States and territories that submitted new or revised WQ criteria acceptable to EPA for the first year reporting under this definition (FY 2005). WQ-03b: Tribes that submitted new or revised WQ criteria acceptable to EPA for the first year reporting under this definition (FY 2005).

---

Measure Code: WQ-04a

**Measure Language:** Percentage of submissions of new or revised water quality standards from states and territories that are approved by EPA.

**Type of Measure:** Indicator measure; annually reported

**Measure Contact:** Gregory Stapleton, EPA Office of Science and Technology

[stapleton.gregory@epa.gov](mailto:stapleton.gregory@epa.gov) | (202) 566-1028

## Measure Definition

### Terms and phrases:

- *Submission* means a single package of new or revised water quality standards duly transmitted to EPA in accordance with 40 CFR parts 131 or 132. Typically the submission would be the set of documents transmitted by one letter from a state, territorial, or tribal official, including a certification from the Attorney General or equivalent. A submission can include triennial reviews, statewide WQS revisions, use attainability analyses or site-specific criteria for individual waters, general policies, anti-degradation policies or procedures, and variances. In short, anything duly submitted to EPA pursuant to 131.20 that EPA must act review and approve or disapprove.

- *Partial approvals receive fractional credit* means that partial approvals count proportionally. The proportion is determined by the number of provisions approved compared to the total number of provisions in a submission. For example, a submission would receive a credit of 0.85 submission if the region approved 17 of the 20 provisions in the submission. EPA uses a default of 0.50 submission for a partial approval if the number of provisions in a submission cannot be readily estimated.

**Methodology for computation of results:** The purpose of this measure is to provide insight into the "approvability" of state submissions. A disapproval or a "no action" does not count toward meeting this measure.

As described under Universe below, the basis for the percentage calculation is the number of new or revised submissions during May 1, 2014, through April 30, 2015. The percentage approved is calculated as the number of submissions (or fractions thereof) that EPA has approved by September 30, 2015, divided by the universe of submissions for FY 2015. Note that this measure allows from 5 to 17 months for an approval to occur, depending on the date of submission.

This measure will be computed using information in the WQS Actions Tracking Application (WATA) system.

Reporting of results for this measure will be generated from WATA and submitted to the Annual Commitment System after confirmation with Regional WQS Coordinators.

**Units:** WQS submissions from states and territories (expressed as a percentage)

**Universe:** The universe changes annually based on the number of submissions EPA receives from states and territories. The WATA system will count the number of such submissions or fractions of submissions that EPA approved through September 30.

**Baseline:** For states and territories, the baseline was 85.6% for the first year reporting under this definition (FY 2007).

---

Measure Code: WQ-06 (a,b)

**Measure Language:** (WQ-06a): Number of tribes that currently receive funding under Section 106 of the Clean Water Act that have developed and begun implementing monitoring strategies that are appropriate to their water quality program consistent with EPA Guidance.

(WQ-06b): Number of tribes that are providing water quality data in a format accessible for storage in EPA's data system.

**Type of Measure:** Target measure; cumulative measure

**Measure Contact:** Susan Holdsworth, EPA Office of Wetlands, Oceans, and Watersheds

[holdsworth.susan@epa.gov](mailto:holdsworth.susan@epa.gov) | (202) 566-1187

**Measure Definition:** In October 2006, EPA issued *Final Guidance on Awards of Grants to Indian Tribes under Section 106 of the Clean Water Act* that requires tribes to develop monitoring strategies appropriate to their capabilities and needs, and provide reports on water quality to EPA. The tribal guidance outlines reporting requirements and data expectations for all tribal programs receiving section 106 funds. These requirements will help tribes to collect critical data and information for effective management of their water quality programs. The requirements will also help EPA measure environmental results of the section 106 Tribal Program and comply with the Government Performance and Results Act (GPRA) and other federal requirements.

**Terms and phrases:**

WQ-06a is a cumulative measure that counts tribes that have developed, submitted to the region, and begun implementing water monitoring strategies that are consistent with the EPA 106 Tribal Guidance. Regions should count all tribes that have submitted and begun implementing (may include planning implementation) strategies, even those that have not yet been accepted by the region. These strategies are developed in partnership with regional staff and deemed appropriate for the level (fundamental, intermediate or advanced) of any particular tribe as considered by the regional office.

WQ-06b is a cumulative measure that counts tribes that are providing surface water data electronically in a format that is compatible with the STORET/WQX system. Per the Tribal 106 Guidance, data should be provided for the range of parameters appropriate for the tribe's level of monitoring. Tribes may use any of the available methods for submitting data to STORET: 1) using a copy of their local STORET submitted to EPA\*; 2) using the Water Quality Exchange (WQX); 3) using EPA's template to submit data via either National WebSIM regionally hosted WebSIM, or the new WQX submission tool; or 4) providing data in the EPA template to their respective EPA region.

\*As of September 2009, local STORET and WebSIM will no longer be supported as ways to submit data to STORET. Tribes are encouraged to transition to using WQX to submit data or the WQX Web tool. For more information, please visit <http://www.epa.gov/storet>.

**Methodology for computation of results:** Regional monitoring and tribal 106 coordinators work with tribes to make determinations on progress as annual workplans for use of monitoring funds are developed. A standard template has been made available through EPA regional offices as tribes have begun to implement this reporting requirement. EPA plans to continue to make additional templates available as tools for data submission to EPA evolve.

**Units:** Tribes

**Universe:** The total number of tribes eligible to receive Clean Water Act Section 106 funds. This number could change as new tribes become eligible.

**Baseline:** The FY 2005 baseline for WQ-06a is 0 tribes and for WQ-06b is 3 tribes.

---

Measure Code: WQ-09 (a,b,c)

**Measure Language:** (WQ-09a): Estimated annual reduction in million pounds of nitrogen from nonpoint sources to waterbodies (Section 319 funded projects only).

(WQ-09b): Estimated annual reduction in million pounds of phosphorus from nonpoint sources to waterbodies (Section 319 funded projects only).

(WQ-09c): Estimated annual reduction in tons of sediment from nonpoint sources to waterbodies (Section 319 funded projects only).

**Type of Measure:** Target measure; annually reported

**Measure Contact:** Meghan Klasic, EPA Office of Wetlands, Oceans, and Watersheds

[klasic.meghan@epa.gov](mailto:klasic.meghan@epa.gov) | (202) 564-8221

### Measure Definition

**Terms and phrases:** Nonpoint sources are diffuse pollution sources (i.e. without a single point of origin or not introduced into a receiving stream from a specific outlet). The pollutants are generally carried off the land by storm water. Common non-point sources are agriculture, forestry, urban, mining, construction, dams, channels, land disposal, saltwater intrusion, and city streets.

Under [Clean Water Act Section 319\(h\)](#), EPA awards grants for implementation of state NPS management programs. State grant recipients are required to report annually to EPA their progress in meeting milestones, including implementation of NPS pollution control practices and associated reductions of NPS pollutant loadings to waterbodies.

**Methodology for computation of results:** EPA collects this information in its [Grants Reporting and Tracking System](#) (GRTS) for Section 319-funded on-the-ground implementation projects where one or more of these three pollutants (nitrogen, phosphorus, or sediment) are addressed by the project. States are not required to enter this information into GRTS until the best management practices (BMPs) have actually been implemented. Therefore, load reduction data entered into GRTS in a particular year usually reflects the results of projects funded by one or more prior grant appropriations. Results are reported in GRTS by mid-February for the previous year of implementation work. The numbers represent new load reduction estimates that were achieved by

any active non-point source (NPS) project that implemented new BMPs. Load reductions for each new BMP are only counted for the first year of implementation rather than for the service life of each particular BMP (reductions are not cumulative). Load estimates may be calculated using EPA-supported STEPL or Region 5 models, or any other model which can sufficiently estimate load reductions (specific models used to calculate estimated load reductions must also be reported in GRTS). The Office of Wetlands, Oceans, and Watersheds (OWOW) provides one national number for each of the three pollutants based on the data entered by states in GRTS. No regional breakdown of load reductions is provided.

**Units:** Millions of pounds of nitrogen (WQ-09a) and phosphorus (WQ-09b) and tons of sediment (WQ-09c)

**Universe:** n/a – not historically available for nonpoint sources 2009

**Baseline:** The reduction (pounds and tons) at a point in time

---

Measure Code: WQ-10

**Measure Language:** Number of waterbodies identified by States (in 2000 or subsequent years) as being primarily nonpoint source (NPS)-impaired that are partially or fully restored. (cumulative)

**Type of Measure:** Target measure; cumulative measure

**Measure Contact:** Meghan Klasic, EPA Office of Wetlands, Oceans, and Watersheds

[klasic.meghan@epa.gov](mailto:klasic.meghan@epa.gov) | (202) 564-8221

## Measure Definition

### Terms and phrases:

- By *fully restored*, EPA means that all designated uses are now being met.
- By *partially restored*, EPA means either of the following two conditions are being met:
  - a. A waterbody that has a use that is initially impaired by more than one pollutant, but after restoration efforts meets the criteria for one or more (but not all) of those pollutants, or
  - b. A waterbody that initially has more than one use that is less than fully supported, but after restoration efforts one or more (but not all) of those uses becomes fully supported.

**Methodology for computation of results:** Since the main referent for this measure will be State 303(d) or Integrated Reports, States which did not submit 2000 303(d) lists may substitute the 1998 list for their base year. "Waterbodies" therefore refer to 303(d)-listed segments or category 4 or 5 waters on the Integrated Report. **The measure includes all primarily NPS-impaired waterbodies that a state fully**

**or partially restores, regardless of funding source.** Waters listed **after** 1998/2000 which are then de-listed from the 303(d) list (for some or all pollutants) or which move from categories 4 (which includes waters impaired by "pollution") or 5 to category 1 or 2 may also be counted against this measure. In other words, although 1998/2000 is the base year, the 303(d) lists for those years need not be the only referent lists.

On an ad hoc basis, EPA may approve counting a waterbody against this measure that has been partially or fully restored, but not yet removed from the 303(d) list. This will only occur if the water has actually been restored (i.e. meeting water quality standards); EPA will not count cases where the State merely believes the water will be restored by the time of their next 303(d) listing.

**Please note that a waterbody cannot be counted simply because it has been de-listed from a state 303(d) list, or moves from categories 4 or 5 to 1 or 2, for reasons other than actual restoration** (e.g., it is determined that it was inappropriately listed in the first place, it has a TMDL done for it, etc.).

There may be times when a waterbody does not actually change categories, but a use has been restored. Take the following situation: a waterbody is listed under both categories 2 and 5 in one reporting year, and then under these same categories the next reporting year, even though one of the water's uses has gone from not supported to fully supported. For example, if a waterbody has three uses, and in the first reporting year has one use fully supported and two uses not supported, it might be listed under both categories 2 and 5. If in the next reporting year, one of the two uses that was previously not supported becomes fully supported, then the waterbody would still be listed under categories 2 and 5 – but a use will have been restored (i.e. the waterbody meets the criterion for "partially restored" designation). If a use has actually been restored, then this waterbody may be counted against this measure, regardless of whether or not the categorization of the waterbody stays static.

In addition, a waterbody will not be counted towards this measure if no specific management activities have been taken (by any party) within the watershed to improve water quality. Furthermore, a waterbody cannot be counted twice under this measure (e.g. movement from impaired to partially restored, then from partially restored to fully restored). Any given waterbody may only be counted once under this measure. For a waterbody to be counted as "partially or fully restored," it must be described by a story on EPA's NPS Success Story Website (<http://www.epa.gov/owow/nps/Success319/>). On the Success Stories website, the heading "Stories about partially or fully restored water bodies" is the section that refers to this measure. Without such a story, the water will not be counted against this measure.

Success stories submitted for states or tribes should be 2 pages or less (approximately 1,000 words) and include the following elements:

- Title
- Waterbody Improved/Removed Status (was the waterbody removed from the 303(d) list)
- Problem
- Project Highlights (description of restoration efforts that led to delisting)

- Results (monitoring data or a narrative description of improvements, consistent with state 303(d) listing and delisting methodologies)
- Partners and funding
- Photos and/or Table/graph/chart showing water quality data (where applicable and available)
- GRTS project number(s) (where applicable)
- Year waterbody listed or de-listed (or proposed to be de-listed) from 303(d) list
- Contact information

For detailed information in developing Success Stories (including information on the above elements), refer to the [Format and Content for Section 319 Success Stories](#) guidance document, (11 pp, 285K, [About PDF](#)) In addition to using this guidance document as a reference, States may also submit the [Success Story Builder](#) tool (2.9MB) to assist in the development of their success story narrative. The tool contains all information necessary to construct a complete document.

A story may include more than one waterbody, where appropriate.

As for determining whether or not a waterbody is "primarily" NPS-impaired, this will be left to the best professional judgment of the States. EPA does not expect that the State should do a detailed analysis when making a judgment on whether a given waterbody is "primarily" NPS-impaired, when a precise determination would be exceedingly difficult (such as, for example, when a single listed water moves through both permitted MS4 areas as well as through non-permitted areas).

**WQ-SP12.N11 measure connection:** Under some circumstances, a WQ-10 waterbody may be included within a 12 digit watershed for reporting under WQ-SP12.N11 (watershed improvement). Consult the detailed definitions for both measures to determine whether a particular waterbody is eligible under both measures.

**Units:** Waterbodies (partially and fully restored)

**Universe:** There is no universe of NPS-impaired waterbodies for this measure. Although the base year began with the 2000 303(d) list or Integrated Report, the universe of NPS-impaired waterbody segments shifts with each new 303(d) list or Integrated Report, since this measure allows inclusion of listed segments beyond the 2000 impairment lists.

**Baseline:** The base year (FY 2005) in which the first Success Stories were posted to the website.

Measure Code: WQ-11

**Measure Language:** Number, and national percent, of follow-up actions that are completed by assessed NPDES (National Pollutant Discharge Elimination System) programs. (cumulative)

**Type of Measure:** Indicator measure; cumulative measure

**Measure Contact:** Jackie Clark, EPA Office of Wastewater Management

[clark.jackie@epa.gov](mailto:clark.jackie@epa.gov) | (202) 564-6582

**Measure Definition:** Assessed NPDES programs include 46 authorized states, 4 unauthorized states (MA, NH, NM, ID), 1 authorized territory (VI), 3 unauthorized territories (DC, PR, Pacific Island Territories), and 10 regions (total of 64 programs) assessed through the Permitting for Environmental Results (PER) program and Permit Quality Reviews (PQRs).

**Terms and phrases:**

- *Follow-up actions* – Otherwise referred to by EPA as "action items." OWM tracks the status and completion dates of all action items in a separate database. OWM coordinates with regions at mid-year and end-of-year to update status and provides the region's Annual Commitment System (ACS) contact with the number of cumulative completed action items since 2004. The regions are responsible for putting this number into ACS.
- *National Pollutant Discharge Elimination System (NPDES)* – A provision of the Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a state, or, where delegated, a tribal government on an Indian reservation.

**Methodology for computation of results:** The results are calculated by adding the total number of new action items completed by the end of the fiscal year to the cumulative number of action items completed to date.

**Units:** Action items

**Universe:** All follow-up actions for which a schedule has been established to date. The universe increases as additional action items are identified by the regions and through OWM program review.

**Baseline:** The number of action items that were completed at a point in time (FY 2005).

---

Measure Code: WQ-12 (a,b)

**Measure Language:** (WQ-12a): Percent of non-tribal facilities covered by NPDES permits that are considered current.

(WQ-12b): Percent of tribal facilities covered by NPDES permits that are considered current.

**Type of Measure:** Target measure; cumulative measure

**Measure Contact:** Jackie Clark, EPA Office of Wastewater Management

## Measure Definition

**Terms and phrases:** *National Pollutant Discharge Elimination System (NPDES)* – A provision of the Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a state, or, where authorized, a tribal government on an Indian reservation.

The Clean Water Act specifies that NPDES permits may not be issued for longer than five year terms. Permittees that wish to continue discharging beyond the five-year term must submit an application for permit renewal. If the permitting authority receives a complete application, but does not reissue the permit prior to the expiration date, the existing permit is generally "administratively continued." A "backlogged" permit is an active permit that has been expired for more than 180 days (including those administratively continued permits) or an application for a new permit that has not yet been issued 365 days after receipt of the application, where information is available. A permit is considered current if it has not reached its expiration date or has not been expired more than 180 days.

**Methodology for computation of results:** Results are determined by calculating the percent of facilities that are covered by permits considered current (i.e., not "backlogged") out of the universe of facilities covered by NPDES individual and non-stormwater general permits.

**Units:** Facilities (WQ-12a non-tribal, WQ-12b tribal)

**Universe:** The number of facilities covered under all major individual, non-stormwater minor individual, and non-stormwater general NPDES permits.

**Baseline:** The national percent of facilities covered under all major individual, non-stormwater minor individual, and non-stormwater general NPDES permits that were considered current at a point in time (FY 2005).

---

Measure Code: WQ-13 (a,b,c,d)

**Measure Language:** (WQ-13a): Number of MS4s covered under either an individual or general permit.

(WQ-13b): Number of facilities covered under either an individual or general industrial storm water permit.

(WQ-13c): Number of sites covered under either an individual or general construction storm water site permit.

(WQ-13d): Number of facilities covered under either an individual or general CAFO permit.

**Type of Measure:** Indicator measures; cumulative measures

**Measure Contact:** Jackie Clark, EPA Office of Wastewater Management

[clark.jackie@epa.gov](mailto:clark.jackie@epa.gov) | (202) 564-6582

### Measure Definition

#### Terms and phrases:

- An *MS4* is a conveyance or system of conveyances that is: owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.; designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.); not a combined sewer; and not part of a Publicly Owned Treatment Works (sewage treatment plant).
- *Concentrated Animal Feeding Operations (CAFOs)* are point sources, as defined by the CWA [Section 502(14)]. To be considered a CAFO, a facility must first be defined as an Animal Feeding Operation (AFO). AFOs are agricultural operations where animals are kept and raised in confined situations.

The largest AFOs are defined as CAFOs based solely on the number of animals confined; smaller AFOs can be defined as CAFOs based both on size and type of discharge.

**Methodology for computation of results:** For measure (a), report the actual number of MS4s covered under an existing MS4 permit. For measure (b) report the number of dischargers covered under an industrial stormwater permit, and (c), report the number of construction site operators obtaining coverage under a construction stormwater permits. For measure (d) report all CAFOs covered by an NPDES permit.

- WQ-13a: The number of MS4s of all sizes covered under an existing MS4 individual or general permit at the close of the reporting period. Each co-permittee should be counted individually.
- WQ-13b: The number of facilities covered under an industrial stormwater permit at the close of the reporting period.
- WQ-13c: The number of construction sites obtaining authorization to be covered under a construction stormwater general permit during the reporting period.
- WQ-13d: The number of facilities covered under a CAFO permit at the close of the reporting period.

**Units:** (WQ-13a) MS-4s; (WQ-13b,c,d) facilities

**Universe:** WQ-13a,b,c: n/a. WQ-13d: The total number of facilities covered under either stormwater or CAFO NPDES permits.

**Baseline:** WQ-13a,b,c: The known number of facilities in FY 2007. WQ-13d: The known number of facilities covered under either stormwater or CAFO NPDES permits at that time.

---

Measure Code: WQ-14 (a,b)

**Measure Language:** (WQ-14a): Number, and national percent, of Significant Industrial Users (SIUs) that are discharging to POTWs with Pretreatment Programs that have control mechanisms in place that implement applicable pretreatment standards and requirements.

(WQ-14b): Number, and national percent, of Categorical Industrial Users (CIUs) that are discharging to POTWs without Pretreatment Programs that have control mechanisms in place that implement applicable pretreatment standards and requirements.

**Type of Measure:** WQ-14a – Target measure; WQ-14b – Indicator measure; both cumulative measures

**Measure Contact:** Jackie Clark, EPA Office of Wastewater Management

[clark.jackie@epa.gov](mailto:clark.jackie@epa.gov) | (202) 564-6582

## Measure Definition

### Terms and phrases:

- *Categorical Industrial Users (CIUs)* – An industrial user subject to National Categorical Pretreatment Standards.
- *Control Mechanisms* – Permit, order, or similar means to regulate the contribution to the POTW by each Industrial User and to ensure compliance with applicable Pretreatment Standards and requirements.
- *POTWs with Pretreatment Programs* – 40 CFR 403.8(a). Certain POTWs receiving from Industrial Users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards are required to establish POTW Pretreatment Programs to address their issues.
- *POTWs without Pretreatment Programs* – Any POTW not required to develop a pretreatment program.
- *Pretreatment Requirements* – 40 CFR 403.3(t). Any substantive or procedural requirement related to Pretreatment, other than a National Pretreatment Standard, imposed on an Industrial User.
- *Pretreatment Standards* – 40 CFR 403.3(l). Any regulation containing pollutant discharge limits promulgated by EPA in accordance with section 307 (b) and (c) of the Act, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to § 403.5.

- *Significant Industrial Users (SIUs)* – 40 CFR 403.3(v)(1)(i)&(ii). All Industrial Users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

#### **Methodology for computation of results:**

For WQ-14a, the region reports the number of SIUs that are discharging to POTWs with pretreatment programs that have control mechanisms in place in the main data field of the EPA Annual Commitment System (ACS). In the comments section of ACS, the regions should also report the universe of SIUs and the percent of SIUs that are discharging to POTWs with pretreatment programs that have control mechanisms in place. The results are calculated by dividing the number of SIUs that have control mechanisms by the universe of SIUs to determine the percent of SIUs that are discharging to POTWs with pretreatment programs that have control mechanisms in place. For targets and commitments, states and regions will commit to both a number and a percentage, but will be held to the percentage commitment.

For WQ-14b, the region reports the number of CIUs that are discharging to POTWs without Pretreatment Programs and have control mechanisms in place. In the comments section of ACS, the regions should also report the universe of CIUs discharging to POTWs without Pretreatment Programs and the percent of CIUs that are discharging to POTWs without Pretreatment Programs that have control mechanisms in place. The results are calculated by dividing the number of CIUs that have control mechanisms by the universe of CIUs to determine the percent of CIUs that are discharging to POTWs without pretreatment programs that have control mechanisms in place.

Where EPA is the Approval Authority and the state does not have CIU permitting authority, a control mechanism may consist of notification to CIUs of reporting requirements and tracking by EPA.

**Units:** SIUs (WQ-14a; CIUs (WQ-14b)

**Universe:** The universe represents the total number of SIUs and CIUs at the beginning of the most current fiscal year.

**Baseline:** The number and percentage of SIUs and CIUs with control mechanisms in place at a point in time (FY 2007).

**Measure Language:** Fund utilization rate (cumulative loan agreement dollars to the cumulative funds available for projects) for the Clean Water State Revolving Fund (CWSRF).

**Type of Measure:** Target Measure; cumulative measure

**Measure Contact:** Mark Mylin, EPA Office of Wastewater Management

[mylin.mark@epa.gov](mailto:mylin.mark@epa.gov) | (202) 564-0607

### Measure Definition

#### Terms and phrases:

- *Loan agreements* are the dollar amount of loans provided by the State Clean Water State Revolving Fund (CWSRF) to eligible borrowers.
- *Funds available* for projects are the dollar amount of monies in the CWSRF over time that are available to fund projects. Such monies include federal capitalization grants, state matching contributions, bond proceeds, loan repayments, and interest earnings.

**Methodology for computation of results:** The measure is calculated by dividing cumulative loan agreement dollars into the cumulative funds available for projects.

**Units:** Dollars (expressed as a percentage)

**Universe:** The universe is the total cumulative amount of funds available for projects since the program's inception in 1988. Data are collected annually from all 51 state CWSRF programs (50 states and Puerto Rico).

**Baseline:** The fund utilization rate using data collected annually from all 51 state CWSRF programs (50 states and Puerto Rico) in FY 2005.

---

Measure Code: WQ-19 (a,b)

**Measure Language:** (WQ-19a): Number and national percent of high priority state NPDES permits that are issued in the fiscal year.

(WQ-19b): Number and national percent of high priority state and EPA (including tribal) NPDES permits that are issued in the fiscal year.

**Type of Measure:** Target measure; annually reported

**Measure Contact:** Jackie Clark, EPA Office of Wastewater Management

## Measure Definition

**Terms and phrases:** *National Pollutant Discharge Elimination System (NPDES)* – A provision of the Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a state, or, where authorized, a tribal government on an Indian reservation.

Each year, state and regional authorities are provided with a list of permits eligible for selection as priority permits. This "candidate list" is comprised of all permits expired for greater than two years. From this candidate list, states and regions are asked to select at least 20% as "priority permits," meaning that those permits are a high priority for issuance based on programmatic and environmental criteria. States and regions then commit to issuing a certain number of these permits during the fiscal year. Permits that are expired as of the beginning of the fiscal year and those permits that will expire during the subject fiscal year can also be added to the list of priority permits after 20% of the permits expired greater than two years have been selected.

**Methodology for computation of results:** Results are determined by dividing the number of priority permits issued during the subject fiscal year by the number of permits selected as priority for the subject fiscal year. For example, if out of 100 candidates, 20 permits were selected as priority and a state or region commits to issuing 16 of those 20 during the fiscal year, if 18 are issued, results will be calculated as  $18/20=90\%$ , not  $18/16=112.5\%$ .

**Units:** Permits

**Universe:** The universe will be calculated just prior to the start of the fiscal year when candidate permit lists are developed and states and regions select priority permits. The candidate lists are created close to the start of the fiscal year in order to have a more accurate list of permits expired greater than two years, taking into account as much of the prior year's permit issuance as possible.

**Baseline:** n/a

---

Measure Code: WQ-22a

**Measure Language:** Number of regions that have completed the development of a Healthy Watersheds Initiative (HWI) Strategy and have reached an agreement with at least one state to implement its portion of the region's HWI Strategy.

**Type of Measure:** Indicator measure; cumulative measure

**Measure Contact:** Laura Gabanski, EPA Office of Wetlands, Oceans and Watersheds

## Measure Definition

### Terms and phrases:

- The *Healthy Watersheds (Initiative) Program* is a new initiative that began in 2009. Its goal is that states identify and protect healthy watersheds across the state using a strategic approach that includes holistic, systems integrated assessments comprised of water chemistry, biology, habitat, landscape condition, hydrology, and fluvial geomorphology ([www.epa.gov/healthywatersheds](http://www.epa.gov/healthywatersheds)). The details of the Healthy Watersheds approach including assessments and protection measures is included in the document entitled *Identifying and Protecting Healthy Watersheds: Concepts, Assessments, and Management Approaches* ([http://water.epa.gov/polwaste/nps/watershed/hw\\_techdocument.cfm](http://water.epa.gov/polwaste/nps/watershed/hw_techdocument.cfm)). All 10 EPA regions have a Healthy Watersheds Coordinator.
- A *Regional Healthy Watersheds Strategy* shall include the following information:
  - Defined goals and guiding principles
  - Actions to meet the goals (e.g., Task, Purpose, Who, When)
  - Staff and resources to meet the goals
  - Upper management support and endorsement (Regional HWI Strategy transmittal memo to Measure Contact)
  - Summary of status of state HWI programs
  - List of a minimum of 6 actions states could take to implement a Healthy Watersheds program

**Methodology for computation of results:** Regions are expected to enter their data into ACS. HWI Strategies are due to the Measure Contact by August 15, 2015 to determine if the Strategies meet the minimum information outlined under Terms and phrases. The Measure Contact will inform the regions by September 5, 2015 if the Strategy meets the minimum information and the regions can then enter 1 into the ACS. If the Strategy does not meet the minimum information, the regions will be able to re-submit a strategy by September 28, 2015.

**Units:** Regions

**Universe:** 10 Regional HWI Strategies, 1 for each of 10 regions

**Baseline:** FY 2010; baseline is 0 regions with the initiative beginning in 2009.

---

Measure Code: WQ-23

**Measure Language:** Percent of serviceable rural Alaska homes with access to drinking water supply and wastewater disposal

**Type of Measure:** Target measure; annually reported

**Measure Contact:** Matthew Richardson, Office of Wastewater Management

[richardson.matthew@epa.gov](mailto:richardson.matthew@epa.gov) | (202) 564-2947

Dennis Wagner, EPA Alaska Operations Office

[wagner.dennisx@epa.gov](mailto:wagner.dennisx@epa.gov) | (202) 564-0691

## Measure Definition

### Terms and phrases:

- *Homes* are the houses within Alaskan Native Villages
- *Serviceable* means homes that can be provided with drinking water and/or wastewater service that meets public health standards. Homes that cannot be serviced are those homes such as: seasonal homes, structurally unsound or are cost prohibitive to serve. It is estimated that approximately 6% of the total homes in rural Alaska are not serviceable.
- *Access* means the reduction in the sanitation deficiency level of a tribal home from a 4 or 5 to a 3 or less. The sanitation deficiency levels definitions are described in Appendix E of the "Indian Health Service Sanitation Deficiency System Guide for Reporting Sanitation Deficiencies for Indian Homes and Communities," working draft, May 2003 and may be found online at: <http://www.dsfc.ihs.gov/Documents/SDSWorkingDraft2003.pdf>
- *Sanitation deficiency* is an identified need for new or upgraded sanitation facilities for existing homes of American Indians or Alaska Natives

**Methodology for computation of results:** Housing information is collected annually, typically in March, in order to capture progress over the previous construction season. For example, housing information collected in March 2011 reflects progress through 2010. Analysis and data reviews are conducted in roughly April of each year, and the results available in approximately in May of each year.

The housing information is based on annual housing surveys that include homes served and also homes that have been funded to be served. This allows for the program to account for the progress made through granted funds before the homes are actually served. The annual housing survey also allows for the program to track the construction of new homes that are not served in rural Alaska.

**Units:** Serviceable rural Alaska homes

**Universe:** Dynamic since new homes are constructed

**Baseline:** Serviceable rural Alaska homes at a point in time (FY 2010)

---

Measure Code: WQ-25 (a,b)

**Measure Language:** (WQ-25a) Number of urban water projects initiated addressing water quality issues in the community.

(WQ-25b) Number of urban water projects completed addressing water quality issues in the community. (cumulative)

**Type of Measure:** Target measures; annual measure (WQ-25a); cumulative measure (WQ-25b)

**Measure Contact:** Surabhi Shah, EPA Office of Water

[shah.surabhi@epa.gov](mailto:shah.surabhi@epa.gov) | (202) 564-3833

### Measure Definition

**Terms and phrases:** Please note, the definitions below are pending further discussion with stakeholders.

- *Project initiation* refers to the point in time when an award of the grant or cooperative agreement was made.
- *Project completion* refers to the point in time when an approval of the project's final report was made.
- *Urban Waters Small Grants* focus on research, studies, training, and demonstration projects that will advance the restoration of urban waters by improving water quality through activities that also support community revitalization and local priorities.

### Methodology for computation of results

**Units:** Urban water projects

**Universe:** n/a

**Baseline:** The number of projects initiated or completed at a point in time (FY 2012 for WQ-25a and FY 2013 for WQ-25b)

---

Measure Code: WQ-26

**Measure Language:** Number of states and territories implementing nutrient reduction strategies by (1) setting priorities on a watershed or state-wide basis, (2) establishing nutrient reduction targets, and (3) continuing to make progress (and provide performance milestone information to EPA) on

adoption of numeric nutrient criteria for at least one class of waters by no later than 2016.  
(cumulative)

**Type of Measure:** Target measure, annually reported

**Measure Contact:** Katharine Dowell, EPA Office of Wetlands, Oceans and Watersheds

[dowell.katharine@epa.gov](mailto:dowell.katharine@epa.gov), (202) 564-1515

**Overview:** The purpose of this measure is to track certain key actions that states can take to address nitrogen and phosphorus pollution in the nation's waters. It uses concepts articulated in an EPA policy memorandum issued by Acting Assistant Administrator Nancy K. Stoner on March 16, 2011, entitled *Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions*. This memorandum is available at <http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/doing.cfm>.

The memorandum identifies eight Recommended Elements of a State Framework for Managing Nitrogen and Phosphorus Pollution:

1. Prioritize watersheds on a statewide basis for nitrogen and phosphorus loading reductions.
2. Set watershed load reduction goals based upon best available information.
3. Ensure effectiveness of point source permits in targeted/priority sub-watersheds.
4. Agricultural areas.
5. Storm water and septic systems.
6. Accountability and verification measures.
7. Annual public reporting of implementation activities and biannual reporting of load reductions and environmental impacts associated with each management activity in targeted watersheds.
8. Develop work plan and schedule for numeric criteria development.

This measure focuses on identifying strong state and territorial progress toward achieving elements #1, #2, and #8. EPA may modify the measure in future years to address additional elements. To encourage and recognize incremental accomplishments toward this measure, partial success will be calculated based on adequately addressing one or more of the three elements as described in the Measure Definition sections below.

A region may grant a state credit for framework elements based upon knowledge of the states' programs even without the state having developed a particular, written nutrient control strategy. Regions can consider each state's efforts holistically in determining whether the state's actions met the "spirit" of a particular element even if the state's efforts may not meet the "letter" of the Framework memo. For this reason, we recommend that regions coordinate WQ-26 reporting across programs to obtain a holistic picture of state actions.

*Alternate path:* States can get automatic full credit (1.0) under an "alternative path" if they already have N & P criteria in place statewide. The primary way most states would receive credit under the measure is described in parts 1, 2, and 3 below. In addition, a state that has focused on developing numeric criteria for both N and P for all their waters may receive full credit for WQ-26 through an alternative path. Specifically, if a state is receiving maximum credit under measure WQ-1a for having adopted EPA-approved numeric criteria for both N and P for all waters of all three waterbody types (rivers/streams, lakes/reservoirs, estuaries/coastal) that exist in the state, it can automatically receive full credit under WQ-26. For full credit in this alternative path, numeric criteria are needed for both N and P unless the state provides a strong technical and scientific justification, considering both local and downstream effects, that one or the other is not needed.

For the purposes of this measure definition, the term "state" means either a state or a territory. Examples provided throughout the definition text are illustrative but not meant to be prescriptive in dictating state approaches.

### **Measure Definition (Part 1) – Priority Setting (1/3 credit)**

A state may receive 1/3 credit under the measure as a whole by setting priorities on a watershed or source-sector basis. States may also include a combination of watershed and sector approaches in prioritizations. To receive such credit, a state should set priorities reflecting each of the three following considerations:

- **Systematic and Data-Driven:** Prioritization of sub-watersheds (or water bodies) or source sectors should reflect a systematic evaluation based on available data concerning N and P loadings, high-risk receiving water problems, public and private drinking water supply impacts, or other environmental factors. States may receive credit by either (a) identifying which watersheds in the state are of highest priority, or (b) identifying which key source sectors or sub-sectors are of highest priority (e.g., identifying which sectors could contribute the most near-term loading reductions, such as POTWs, industrial or municipal stormwater, fertilizer usage, urban or rural BMPs, etc.). States are also encouraged to utilize an adaptive approach to priority setting; i.e., as new information is available, priorities may shift. Examples: Use the USGS SPARROW model to identify major watersheds or sectors that individually or collectively account for a substantial portion of loads (e.g. 80 percent) delivered to waters in a state or directly delivered to multi-jurisdictional waters. Or use the Recovery Potential Screening Tool ([www.epa.gov/recoverypotential/](http://www.epa.gov/recoverypotential/)) to screen potential nutrient load reductions.
- **Appropriate scale:** For setting watershed priorities, the state should use the scale (HUC-12, HUC-8, etc.) that is most appropriate for watershed management purposes. Example: Within each major HUC-8 watershed that has been identified as accounting for a substantial portion of the load, identify targeted/priority sub-watersheds on a HUC-12 or similar scale where subsequent activities under the Framework will be focused. For setting priorities among source sectors, the state should use an appropriate level of source detail (e.g., sector or sub-sector) for watershed management purposes.

- **Inclusive:** The state should include all state waters and water body types for which it has data available, and/or all source sectors within the state for which it has data, in its priority-setting analysis. Example: Use SPARROW to estimate N & P loadings delivered to rivers, streams, lakes, reservoirs, etc. in each major watershed and/or from each source sector across the state.

Even if the state has not formally "set priorities on a watershed or state-wide basis" in advance, they may be granted credit under this part as follows: (a) A region may grant a state credit for setting nutrient priorities if the state commits to establishing TMDLs and/or permit WQBELs for TN and TP in the near future (e.g., by 2016) that -- together with TMDLs and permits already issued-- will address a substantial portion (e.g., 80 percent) of estimated nutrient loadings or otherwise address the important nutrient problem areas in the state. (b) Alternatively, regions (with case-by-case consultation with EPA headquarters) may grant a state credit for setting priorities for other specific nutrient load reduction actions in the near future (e.g., by 2016) via watershed plans addressing framework elements #4 (agriculture) or #5 (stormwater/ septic). The prioritized actions, together with actions already taken, must address a substantial portion (e.g., 80 percent) of estimated nutrient loadings or otherwise address the important problem areas in the state.

The EPA encourages states to involve the public in their priority-setting approaches, or to make the priorities available to the public.

#### **Measure Definition (Part 2) -- Setting Nutrient Reduction Targets (1 /3 credit)**

A state may receive 1 /3 credit under the measure as a whole by (1) developing a methodology to evaluate the nitrogen and phosphorus loadings from all sectors in each targeted /priority sub-watershed or source sector, and (2) establishing numeric goals for loading reductions for each targeted/priority sub-watershed or targeted source sector that will likely be needed to meet water quality goals. States may opt to submit a schedule of load reduction targets with interim goals.

Load reduction goals for priority watersheds or sectors should be based upon best available physical, chemical, biological, and treatment/control information from local, state, and federal monitoring, guidance, and assistance activities including implementation of agriculture conservation practices, source water assessment evaluations, watershed planning activities, water quality assessment activities, Total Maximum Daily Loads (TMDL) implementation, and National Pollutant Discharge Elimination System (NPDES) permitting reviews. For the protection of watersheds that are not impaired, instead of setting load reduction needed to meet water quality goals, the states may determine an alternative baseline for setting load reduction goals.

Load reduction goals may be set using, e.g., any of the 3 considerations below:

- Pounds TP and/or pounds TN
- Percentage of downstream pour point goal or of targeted sector estimated loadings
- WQS-based calculation based on flow/volume

Alternatively, even if a state has not formally set numeric reduction goals "for each priority watershed/sector" a region may grant a state credit for "establishing nutrient reduction targets" if it has already issued TMDLs and/or permit WQBELs for TN and TP that address a substantial portion (e.g., 80 percent) of nutrient loadings or the important nutrient problem areas in the state.

### **Measure Definition (Part 3) -- Developing Nutrient Criteria (1/3 credit)**

A state may receive 1/3 credit under the measure as a whole by continuing to make progress (and provide performance milestone information to EPA) on adoption of numeric nutrient criteria for at least one class of waters by no later than 2016. Specifically, the state must (a) provide EPA a *full set of performance milestone information* for actions the regions believes are important at the present time for adopting numeric nutrient criteria its rivers/streams, lakes/reservoirs, and estuaries/coastal waters, and (b) an appropriate subset of the milestone information must confirm continuing credible progress toward adopting numeric **TN and TP criteria** for at least one class of waters by no later than 2016.

For (b) above, if a state is not planning to develop numeric TN and TP criteria for at least one class of waters by 2016, it may as an alternative receive 1/6 credit for the measure as a whole if an appropriate subset of its milestone information confirms continuing credible progress toward adopting numeric criteria for at least one class of waters by 2016 for only TN, only TP, or only response variables, such as chlorophyll-a.

*Full set of performance milestone information:* (This definition is adapted from former measure WQ-1c, which was in place for only FY 2011 and 2012) EPA expects, as part of the process for administering section 106 grants or performance partnership agreements, that states and territories will establish internal milestones for developing, proposing, and adopting numeric nutrient criteria for their waters.

EPA expects that the state or territory would establish milestones for the completion of each of the following key activities:

1. Planning for criteria development
2. Collection of information and data
3. Analysis of information and data
4. Proposal of criteria
5. Adoption of criteria into the state's or territory's water quality standards (related to measure WQ-1 a)

These five milestones would need to be established for developing numeric nutrient criteria for each of the waterbody types within the state or territory where numeric nutrient criteria have not yet been adopted and approved for all waters. Separate milestones should be developed for each criteria and each waterbody type unless the work is being combined. For example, if planning showed that criteria development should proceed separately for TN and TP, with different approaches for each of the three waterbody types, then a state or territory with three waterbody types could theoretically

have 30 separate milestones (5 milestones x 3 waterbody types x 2 pollutants). In practice, this number could be higher or lower, depending on whether work could be combined across criteria and waterbody types, or whether additional waterbody subtypes were established.

To be complete, the milestone information for each activity must include:

1. A target date, consistent with internal planning,
2. A completion date when the milestone is met, and
3. A written explanation for changes in target dates from previous plans, or any delays in achieving them.

Milestone information for a waterbody type and pollutant is not required if the state has already completed activity 5 above (i.e., the criteria have been adopted and have received EPA approval)

To receive credit, a state must provide EPA the milestone information on a regular basis, but not less than annually, or the region must otherwise have reasonable assurance each year that previously established milestones are being implemented. EPA may use this information to help populate the EPA website entitled "State Development of Numeric Criteria for Nitrogen and Phosphorus Pollution" at <http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/progress.cfm>.

The following are examples of how a state could receive 1/3 credit for the measure under Part 3:

- a. State A provides EPA all milestone dates (see activities under *full set of milestone information*) for adopting numeric N and P criteria its rivers/streams, lakes/reservoirs, and estuaries/coastal waters. The milestones show the state will develop P criteria for **all** its lakes/reservoirs by 2016 and the state explains why N criteria are not needed for those waters. Milestone dates are beyond 2016 for the other two water types.
- b. State B has adopted, and EPA has approved, numeric criteria for N and P for *all waters* in *all three* of the waterbody types rivers/streams, lakes/reservoirs, and estuaries/coastal.
- c. State C provides milestone information similar to State A. However, State C splits the rivers/streams water type into two subtypes (e.g., wadeable streams, rivers and non-wadeable streams). State C provides milestone information for both of the rivers/streams subtypes.
- d. Last year, State D provided complete milestone information that included adopting N and P criteria for all its lakes/reservoirs in 2016. However, this year's milestone information shows later completion dates for activities compared to last year's dates. The state adequately explains why the dates were adjusted.

The intent of part 3 is not only to encourage states to make near-term progress in adopting numeric nutrient criteria, but also to be transparent about their criteria development efforts. Regularly sharing the above milestone information will help reduce uncertainty and help strengthen partnerships with EPA and communication with stakeholders.

## **Methodology for Computation of Results**

Regions will evaluate state progress in meeting each of the three parts of this measure, based on state demonstrations of their achievements, or on regional staff knowledge of state efforts to date.

To receive *full* credit for this measure, a state must receive credit for meeting **all three parts of the measure described above**. If a state cannot meet all three parts, it may receive *partial* credit of 1/3 or 2/3 by meeting only one or two parts of the measure respectively.

The following examples illustrate a few ways the full or partial credit may be earned.

- (Example of full credit) The state adopts SPARROW results to identify ranks or tiers of watersheds within the state as a means of prioritizing and publishes the approach in its nutrient framework. The state adopts reduction targets derived from SPARROW at pour points closest to State boundaries. Numeric criteria for all waters within all three water body types are approved by EPA.
- (Example of 2/3 credit) The state adopts a unique system it has developed for ranking watersheds as its prioritization approach and publishes it in its nutrient framework. Following assessment of all waters for TP and TN, the state tallies all nutrient TMDL reduction targets within its borders for its reduction target. The state is starting to collect criteria-related data but its criteria development milestones do not show any numeric nutrient criteria adoptions until 2017 or later.
- (Example of no credit) The state lists three watersheds for targeting nutrient reduction, but does not provide a systematic rationale and does not relate them to the remaining watersheds in the state. The state nutrient reduction target is based only on local (and not downstream) reductions that the state believes are attainable. The state has no numeric nutrient criteria in place and no milestones for developing such criteria.

## Reporting

Regions will report results in ACS in terms of "state equivalents," calculated by summing the full and partial credits for the states in the region. The regions will identify the individual state credits using the Comments feature of ACS. The following is an example for a region with six states:

State	If the Region gives credit in FY 2013 for...	The State contributes the following to the regional total in ACS...	Which is reported in ACS as... (state-equivalents)
State AA	(nothing)		
State BB	Part 1	1/3 credit, or 0.33	
State CC	Part 3 (chl-a, not N/P)	1/6 credit, or 0.17	
State DD	Parts 1, 2	2/3 credit, or 0.67	
State EE	Parts 1, 2, 3	Full credit, or 1.00	
State FF	(nothing)		
<b>Regional Entry in ACS Numeric Field</b>			<b>2.17</b>

Regional Entry in ACS Comment Field		AA–no credit, BB–part 1, CC–part 3 (chl–a), DD– parts 1&2, EE–all 3 parts, FF–no credit
----------------------------------------	--	--------------------------------------------------------------------------------------------------

In some cases, states may have completed or made significant progress on one or more other elements of the Nutrient Framework that are not being tracked in this measure -- namely, elements #3, #4, #5, #6, or #7. In these cases, regions may wish to note these accomplishments in the Comment section of ACS or in separate reporting to the Office of Water. This information could be useful background in helping EPA design a potential new measure covering these Framework elements in a future year.

**Units:** State and territory equivalents.

**Universe:** 56 (the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Northern Mariana Islands)

**Baseline:** starts at 0 (FY 2012)

Measure Code: WQ-27 (under development)

**Measure Language:** Extent of priority areas identified by each state that are addressed by EPA–approved TMDLs or alternative restoration approaches for impaired waters that will achieve water quality standards. These areas may also include protection approaches for unimpaired waters to maintain water quality standards.

The CWA 303(d) TMDL and Listing Program is currently completing a pilot project with one dozen states and regions to test and refine how the key and complementary measures (WQ–27 and WQ–28) are calculated. We anticipate that this process will conclude by mid–July, 2014. At that time, EPA will reconvene with ACWA to discuss improvements that will be made to the computational guidance as a result of the pilot, and seek State feedback. Should you have any questions as your state begins to discuss these measures for FY 2015, please contact Shera Reems at [reems.shera@epa.gov](mailto:reems.shera@epa.gov).

Measure Code: WQ-28 (under development)

**Measure Language:** State–wide extent of activities leading to completed TMDLs or alternative restoration approaches for impaired waters, or protection approaches for unimpaired waters. The CWA 303(d) TMDL and Listing Program is currently completing a pilot project with one dozen states and regions to test and refine how the key and complementary measures (WQ–27 and WQ–28) are

calculated. We anticipate that this process will conclude by mid-July, 2014. At that time, EPA will reconvene with ACWA to discuss improvements that will be made to the computational guidance as a result of the pilot, and seek State feedback. Should you have any questions as your state begins to discuss these measures for FY 2015, please contact Shera Reems at [reems.shera@epa.gov](mailto:reems.shera@epa.gov).