



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF WATER

March 21, 2011

MEMORANDUM

SUBJECT: Information Concerning 2012 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions

FROM: Denise Keehner, Director /s/
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TO: Water Division Directors, Regions 1 – 10
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Ron Hammerschmidt, Director, Environmental Sciences Division, Region 7
Joyce Kelly, Director, Office of Environmental Assessment, Region 10

I am pleased to provide you with information to assist in the preparation and review of the 2012 Integrated Reports (IR), in accordance with the Clean Water Act Sections 303(d), 305(b), and 314. This memorandum focuses on: 1) timeliness of State IR submissions and EPA approval; 2) Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS) data clarifications; 3) availability of recent EPA guidance on Ocean Acidification; and 4) EPA's intent to develop future guidance on how States can address antidegradation policies and procedures in their Section 303(d) programs. Over the coming months, EPA plans to evaluate options for an electronic consolidation of existing IR guidance documents in order to facilitate State consideration of existing EPA guidance and expectations. In addition, EPA plans to work with the States and Regions in the coming months to identify any issues that may necessitate further clarification such that the next IR memo can be provided to States well in advance of the 2014 reporting cycle.

This memorandum is not regulation and does not impose legally binding requirements on EPA or States. This guidance reiterates and clarifies previous guidance. EPA recommends that States prepare their 2012 IRs consistent with previous IR guidance including EPA's 2006 IR Guidance, which is supplemented by EPA's 2008 and 2010 IR memos and this memorandum.

I would like to thank the States, interstate commissions, and Regions for bringing these important issues to our attention and providing input on the information in this enclosure. I appreciate your continued hard work and dedication in developing the IRs so that EPA can report to the public the status of the nation's waters. If you have any questions or comments concerning this memorandum, please contact me or have your staff contact Shera Reems at 202-566-1264 or reems.shera@epa.gov.

Enclosure

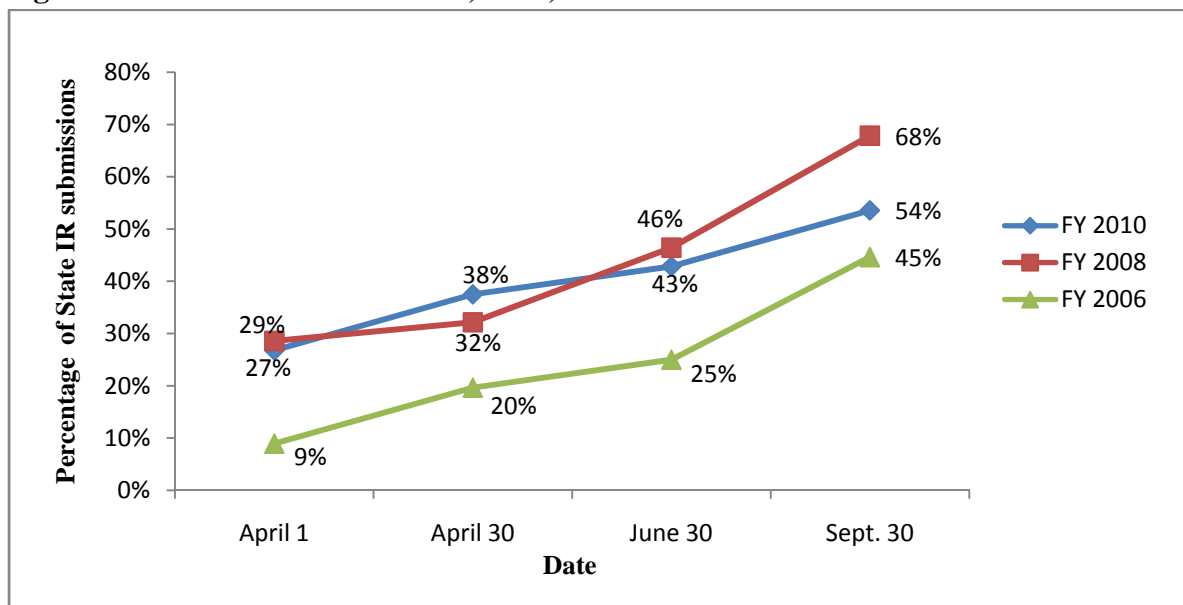
cc: Regional Section 303(d) Coordinators
Regional Monitoring Coordinators
Regional Water Quality Standards Coordinators
Alexandra Dunn, Association of State and Interstate Water Pollution Control
Administrators

INFORMATION CONCERNING 2012 CLEAN WATER ACT SECTIONS 303(d), 305(b), AND 314 INTEGRATED REPORTING AND LISTING DECISIONS

1. *Timeliness of State Integrated Report (IR) submissions and EPA approval*

EPA's goal for the 2012 IR cycle is to achieve 100 percent on-time IR submittals (all 56 States and Territories by April 1, 2012) and EPA action on the States' Section 303(d) lists (within 30 days of the submission). While EPA and States made progress from the 2006 to the 2008 reporting cycle, this progress did not continue with the 2010 reporting cycle. For the 2008 reporting cycle, 38 States submitted their IRs by the end of the fiscal year compared to 30 for the 2010 reporting cycle (see Figure 1). Also, EPA action on States' Section 303(d) lists fell short of the progress made in the 2008 reporting cycle. For the 2010 reporting cycle, EPA has taken an average of 95 days to approve a State's Section 303(d) list compared to 65 days in the 2008 reporting cycle. Of the 30 lists submitted to EPA by the end of FY 2010, EPA had only taken action on 19 lists by the end of the calendar year. Timely submittal of IRs and EPA review and approval of States' Section 303(d) lists is central to meet EPA and State responsibilities under the Clean Water Act (CWA) and to evaluate EPA and State success in accomplishing our strategic plan goals to restore and maintain the nation's waters.

Figure 1: Timeliness of State 2006, 2008, and 2010 IR Submissions



EPA recognizes that in the current economic climate, State budgets and staff have been adversely impacted. At the same time, both EPA and the States need to continue best efforts to provide timely information on the status of the nation's waters and lists of impaired waters. In the *Information Concerning 2008 Clean Water Act Sections 303(d)*,

305(b), and 314 Integrated Reporting and Listing Decisions

(<http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm#reporting>), EPA outlined several best practices used by States and Regions to help facilitate improved timeliness of submission and review of water quality reports and lists of impaired waters. We recommend that States and Regions refer back to these best practices and identify areas in which it is feasible for improvements to be made.

Recognizing that one of the factors affecting the timely submission and review of IR data is the lead time necessary to develop the submission, EPA intends to work with the States to issue relevant IR clarifications or guidance in the fall, a year and one half preceding the April 1 deadline (e.g., issue EPA 2014 IR clarification memorandum in the fall of 2012).

2. *Assessment and Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS)*

Integrated Reporting data include State water quality assessment decisions (attribute data) and geospatial data representing the geographic locations of those assessed waters. This information is needed in order to provide the public with a better understanding of the status of the nation's waters. EPA's ATTAINS database (<http://www.epa.gov/waters/ir>) is the repository for State IR attribute data and the Reach Address Database (<http://www.epa.gov/waters/data/downloads.html>) contains State IR geospatial data. ATTAINS includes state-reported information on support of designated uses in assessed waters, identified causes and sources of impairment, identified impaired waters, and TMDL status. ATTAINS displays tables and charts summarizing these data for the nation, for individual states and waters, and for each of the EPA Regions. It provides a water quality "story," showing which waters have been assessed, which are impaired, and which have completed plans (e.g., TMDLs) to help restore them. ATTAINS provides water quality findings reported by the states since 2002. The mapping interface in ATTAINS allows the user to "drill down" and identify if permitted facilities or water quality monitoring data are near the area of interest.

EPA compiles State-submitted IR data to develop and publish the National Water Quality Inventory Report to Congress (CWA Section 305(b)); determine States' variable portion of the Section 106 grant allocation formula; inform water quality decisions; and conduct national analyses with various stakeholders to help restore the nation's waters.

A. *Clarification of EPA's expectation for the scope of waters to be included in a State's Integrated Report Data Submission for inclusion in ATTAINS*

EPA expects that States will continue to submit their IR data to EPA in a manner that provides a full refresh of the water quality attainment status of all assessed waters and documents the availability of data and information for each water. States that report in this manner will facilitate improved water quality assessment tracking from one reporting cycle to the next and increased transparency of the status of the nation's waters. As a practical matter, EPA understands that a State's IR data submission may only reflect more up-to-date information on those waters assessed in the targeted areas for the reporting cycle and that information for those waters in the non-targeted areas, while included in the IR data submission, may remain largely unchanged from the previous reporting cycle. For example, for the 2010 reporting cycle for a theoretical State, assessment units A, B, and C were assessed as "attaining water quality standards." For the 2012 reporting cycle for this theoretical State, assessment units X, Y, Z, and A were assessed as "attaining water quality standards" and assessment units B and C were not assessed. Under this scenario, the theoretical State's 2012 IR data submission would show assessment units A, B, C, X, Y, and Z as "attaining water quality standards."

B. *Clarification of EPA's expectation for Section 305(b) "off-year" updates*

Integrated Reports satisfy the reporting requirements under CWA Sections 303(d), 305(b), and 314 to submit biennial reports related to water quality. At this time, any "off-year" annual updates to Section 305(b) data submitted to EPA headquarters for entry into the ATTAINS database will not be reflected in ATTAINS web reports, until the full, two year updates to Section 305(b) data are received as stand-alone submissions or as part of an IR.

CWA Section 205(j) requires States to determine the nature, extent, and causes of water quality problems in various areas of the State and interstate region, and report on these annually (CWA §205(j)(1)(C)), 40 C.F.R. 130.6(c)). CWA regulations provide that in the years in which it is prepared, the Section 305(b) report satisfies the requirement for the annual water quality report under Section 205(j) (40 C.F.R. 130.8(d)). Furthermore, in years when the Section 305(b) report is not required, the State may satisfy the annual Section 205(j) report requirement by certifying that the most recently submitted Section 305(b) report is current or by supplying newer information for those sections that require an update of the most recently submitted Section 305(b) report (40 CFR 130.8(d)). For example, State X's 2012 IR or Section 305(b) submission could fulfill the "off-year" update in 2013 if certification is documented by a letter, or by a condition in the Section 106 work plan, or by a Performance Partnership Grant that indicates: "In accordance with the *Information Concerning 2012 Clean Water Act Sections 303(d), 305(b), and 314*

Integrated Reporting and Listing Decisions, the [Insert State and Department] certifies that the 2012 IR [or Section 305(b) submission] is current and satisfies the Section 205(j) report requirement.”

To satisfy the conditions of the Section 106(e)(1) annual update requirement, States may submit annual water quality updates via the Water Quality Exchange (WQX) to the STORage and RETrieval (STORET) national warehouse. For more information about WQX, please visit <http://www.exchangenetwork.net/exchanges/water/wqx.htm>.

For additional information, please see the Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act available at http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG_index.cfm#documents.

C. *Information update on using and reporting Statewide Statistical Survey Data in ATTAINS, and the National Water Quality Inventory Report to Congress*

Under the CWA Section 106 Monitoring Initiative, EPA and States work together to increase the effectiveness of State monitoring programs through enhancements including, among many State priorities, implementation of State-wide statistical surveys. Meeting the range of CWA monitoring and assessment needs requires the application of both State-wide statistical surveys and site-specific targeted monitoring. State inclusion of statistical survey designs to increase the percent of waters assessed under CWA Section 305(b) continues to grow. The number of States that conduct State-wide statistical surveys as a component of their State monitoring program increased from 30 to 45 between January 2008 and March 2011.

For the 2012 reporting cycle, EPA requests that States report their State-wide statistical survey findings. To report State-wide statistical survey results, we ask States to use the spreadsheet found in Appendix 1. This information will be made available in the ATTAINS database and Web site and will be incorporated into the national tally of assessment findings reported by States and summarized in the National Water Quality Inventory Report to Congress prepared under CWA Section 305(b). To see how the State-wide statistical survey results will be presented in ATTAINS along with the targeted attainment decisions, please visit http://www.epa.gov/waters/ir/draft_statistical_survey.html.

D. *Information on the data systems EPA will support for tracking assessment decisions for inclusion in ATTAINS*

EPA has the responsibility to report on the status of the nation's waters, share this information with the public and other interested parties, and prepare a biennial National Water Quality Inventory Report to Congress. Data management of water quality assessment decisions is key to analyzing and sharing data across water programs and measuring progress in EPA's Strategic Plan.

To ensure the timely submission of IR data, States should ensure consistency between their Section 303(d) and Section 305(b) assessment decisions and associated reports and electronic data submitted to EPA for review and approval. EPA Regions and States should work together during the review of the IR to ensure that any corrections to the report are also made to the associated electronic data. EPA expects that the associated electronic data, including geospatial data, should be provided by States with their final IR submission.

EPA recognizes that States need flexibility in the tools that they use to collect and report IR data. As such, for the 2012 reporting cycle, EPA will continue to support the existing tools, EPA Assessment Database (ADB), and State compatible assessment databases. Additionally, EPA will support the Exchange Network (EN) Office of Water Integrated Reporting (OWIR) data flow. As mentioned in the previous section, beginning with the 2012 reporting cycle, States that conduct State-wide statistical surveys should report this information along with their IR using the template provided in Appendix 1. For information on these tools, please visit the following Web sites or appendices:

- EPA Assessment Database: <http://www.epa.gov/waters/adb/>
- ADB Compatible Template: Appendix 2
- EN OWIR data flow (IR attribute data):
<http://www.exchangenetwork.net/exchanges/water/owir.htm>
- State-wide statistical survey results template: Appendix 1

EPA recommends that States use the Hydrography Event Management (HEM) Tool, based in ArcGIS 9.x, for managing assessed and impaired water events. EPA will continue to support geodatabase or shapefile geospatial data formats, or files sent via the EN utilizing the NHDEvent data flow. For States that are interested in using the EN for submitting their geospatial data and that are also using the HEM Tool to manage their geospatial events locally, there is a tool called "HEM to NHDEvent XML Conversion Tool" (HEM2XML) that converts geospatial events into the EN NHDEvent format. For more information on these tools, please visit the following Web sites:

- EN NHDEvent dataflow (IR geospatial data):
<http://www.exchangenetwork.net/exchanges/water/NHDEvent.htm>
- HEM2XML tool:
<http://www.epa.gov/waters/tools/HEM2XML/HEM2XML.html>

EPA recognizes that the creation and maintenance of the geospatial data at the current level of precision can be resource intensive. Therefore, EPA is exploring alternatives to streamline the process for collecting, processing, and displaying geospatial data. EPA welcomes innovative ideas for streamlining geospatial data processing. For the 2012 reporting cycle, EPA proposes to work with States interested in piloting the submission of latitude/longitude coordinates for its assessed and impaired waters. The goal of this effort is to determine if this latitude/longitude approach will ease the State burden in delivering location data for assessed and impaired waters where geodatabases or shapefiles are not available, and still allow for the level of analysis conducted by EPA and other stakeholders. EPA will work with States interested in piloting the latitude/longitude approach to determine the type of data that needs to be collected by States and submitted to EPA, such as latitude and longitude coordinates and Federal Geographic Data Committee (FGDC) compliant metadata, extent of the assessment unit, and a unique identifier that links the location to the attribute data. Interested States should contact their Regional IR representative and Wendy Reid at reid.wendy@epa.gov by May 1, 2011.

E. Information on ATTAINS improvements for the 2014 reporting cycle and information on the data standard

EPA has received considerable feedback from States on the need to improve the IR reporting process, reduce the reporting burden, reduce the data review and process time, and better enable data sharing via the Exchange Network. EPA therefore plans to initiate a process to improve IR reporting for the 2014 reporting cycle. In preparation, EPA will work with States to discuss plans and identify solutions for creating a data standard and improving the tools used for submitting, reviewing, and displaying IR data. EPA will engage both program and IT staff to participate and shape the future direction of the IR reporting process.

3. Ocean Acidification Memorandum

On November 15, 2010, EPA issued a Memorandum to assist the States and Regions in preparing and reviewing IRs related to ocean acidification (OA) impacts under CWA Sections 303(d), 305(b), and 314. This Memorandum recognizes the seriousness of aquatic life impacts associated with OA and describes how States can move forward, **where OA information exists**, to address OA during the 2012 reporting cycle. This

Memorandum reaffirms that States should list waters not meeting water quality standards, including marine pH water quality criteria, and should also solicit existing and readily available information on OA using the current Section 303(d) listing program framework. **This Memorandum does not elevate in priority the assessment and listing of waters for OA, but simply recognizes that waters should be listed for OA when data are available.** EPA recognizes that information is largely absent or limited for OA parameters and impacts at this point in time, and therefore, listings for OA may be absent or limited in many States.

EPA will provide additional guidance to the States when future OA research efforts provide the basis for improved monitoring and assessment methods, including approaches being developed under other Federal efforts. This future guidance may be in the form of stand-alone IR guidance, or as part of future EPA biennial IR updates. EPA encourages States to focus their efforts on OA vulnerable waters (e.g., waters with coral reefs, marine fisheries, and shellfish resources) that are already listed for other pollutants (e.g., nutrients) in order to promote ecological restoration. For more information, the Memorandum is available at http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/oa_memo_nov2010.cfm.

4. Antidegradation and Listing Guidance

Antidegradation is an integral component of a State water quality standard (i.e., designated uses; criteria to meet those uses; and antidegradation policies) that focuses on maintaining and protecting the chemical, physical, and biological integrity of the nation's waters, consistent with the CWA and its implementing regulations. CWA Section 303(d) and EPA's implementing regulations require States to identify waters not meeting any applicable water quality standard (CWA §303(d)(1)(A), 40 C.F.R. 130.7(b)(3)). EPA's listing regulations specify that "applicable water quality standards" refer to criteria, designated uses, and **antidegradation requirements** (40 CFR 130.7(b)(3)).

Most State water quality assessments have focused on whether numeric and narrative water quality criteria are being attained, and typically, these assessments capture where waters are most in need of restoration. However, by also considering whether waters are meeting antidegradation requirements, it may be possible to identify waters that are not meeting the antidegradation portion of water quality standards. By assessing waters in this manner, there is a greater opportunity to protect human health and wildlife values, achieve healthy watersheds, and fulfill in a more cost-effective manner the CWA's primary objective to restore and maintain the nation's waters.

EPA intends to work with States and other stakeholders to develop guidance on how best to assess and identify waters to determine whether State antidegradation requirements

have been attained. This future guidance may be in the form of stand-alone IR guidance, or as part of future EPA biennial IR updates. States with a particular interest in this issue should contact EPA's Rosaura Conde at conde.rosaura@epa.gov.