

# EPA Periodic Retrospective Review of Existing Regulations

## Reducing Reporting Burden under Clean Water Act Sections 303(d) and 305(b)

Final Report  
February 2013

Watershed and Monitoring Branches  
Office of Wetlands, Oceans, and Watersheds  
U.S. Environmental Protection Agency

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## EXECUTIVE SUMMARY

Under CWA Section 303(d) States are required to submit to EPA from time to time a list of impaired and threatened waters still needing a Total Maximum Daily Load(s). The supporting regulation (40 CFR 130.7) requires States to submit this information to EPA on April 1 of every even numbered year. Under CWA Section 305(b) and its supporting regulation (40 CFR 130.8) States are required to report to EPA on the status of the Nation's waters on April 1 of every even numbered year. Over the past several years, EPA and the States have worked on several efforts to identify ways to reduce State reporting burden under CWA Sections 303(d) and 305(b). The information provided in this report reflects the effort undertaken pursuant to Executive Order 13563, "Improving Regulations and Regulatory Review".

The primary driver for this effort was a request by a number of States for EPA to evaluate whether a change in the length of the reporting cycle from two years to four or five years would reduce State burden. EPA commenced a series of meetings with State partners that first identified key steps in the IR process, followed by discussions focused on those steps involving the highest level of effort on States. These steps included: 1) State review and use of available data to make assessment decisions, 2) State preparation of data and associated geospatial information and entry into an assessment database, 3) State preparation and submission of final 303(d) lists and 305(b) reports to EPA, and other relevant documentation, 4) State preparation or refinement of its assessment and listing methodology, and 5) State response to public comments. During each discussion, EPA requested State input on a series of questions, including how a change in the length of the reporting cycle would help or not help alleviate State burden. At the conclusion of these meetings, while a few States indicated that EPA should lengthen the reporting cycle, the majority of States recommended that EPA not change the length of the reporting cycle. Reasons for not lengthening the reporting cycle included: 1) an increase in data to be reviewed to make an assessment determination; 2) a decrease in staff familiarity with the Integrated Reporting (IR) process; 3) significant public interest in impaired waters; 4) new or emerging data that are critical to warrant more immediate action; 5) an adverse effect on getting information to other programs such as the National Pollution Discharge Elimination System Permit Program and Total Maximum Daily Load Program; 6) sends adverse message that this work does not need to be done any longer; and 7) a change in federal statutes or regulations may result in decreased funding. States also noted that in some instances a change in the length of the reporting cycle was not relevant or would not make a difference in terms of workload (e.g., responding to public comments and preparing or refining the assessment and listing methodology). As a result of this joint EPA and State effort, EPA does not intend to change the length of the reporting cycle, specifically for 303(d) lists; however, EPA will develop a plan to implement key recommendations outlined in this report, as well as identify opportunities within the existing framework to streamline the 305(b) reports.

EPA would also like to ensure that States are aware that we have not lost sight of the linkages between several initiatives currently underway, which many States have helped shape. These initiatives include: 1) the New Long-Term Vision for Assessment, Restoration, and Protection

under the Clean Water Act Section 303(d) Program; 2) the EPA internal review of its role in 303(d) list reviews; 3) the Integrated Reporting Georeferencing Pilot; and 4) a preliminary ATTAINS data analysis to quantify the change in 303(d) lists and 305(b) reports. Further details on these efforts are included in the report.

EPA appreciates the time and effort that the Association of Clean Water Administrators (ACWA) and the State representatives put into this effort. EPA looks forward to ensuring that reporting under CWA Sections 303(d) and 305(b) is accomplished efficiently while not compromising our obligations to provide the public with scientifically sound, accurate, and timely information on the status of the Nation's waters.

## **ACKNOWLEDGEMENTS**

EPA appreciates the time and effort that the Association of Clean Water Administrators (ACWA) and the State representatives put into this effort. In particular, we would like to thank ACWA for their assistance in reaching out to and coordinating with the States. Thank you to the following ACWA, State representatives, and EPA representatives for either participating in the discussions and/or providing feedback on a series of questions to help focus the discussions on the aspects of the 303(d) and 305(b) process that result in the most significant State burden.

### **Association of Clean Water Administrators (ACWA) Representatives**

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EPA Region 10 – Jill Gable

## TABLES

Table 1: Integrated Report steps identified by the States, including the associated level of effort and priority ranking

## ACRONYMS

ADB	Assessment Database
ACWA	Association of Clean Water Administrators
ATTAINS	Assessment and Total Maximum Daily Load (TMDL) Tracking and Implementation System
CWA	Clean Water Act
ECOS	The Environmental Council of the States
EPA	Environmental Protection Agency
IR	Integrated Reporting
NPDES	National Pollution Discharge Elimination System
OWOW	Office of Wetlands, Oceans, and Watersheds
TMDL	Total Maximum Daily Load

## I. INTRODUCTION

During Fiscal Year 2012 the Environmental Protection Agency (EPA) Office of Wetlands, Oceans, and Watersheds (OWOW), the Association of Clean Water Administrators (ACWA), and several State representatives engaged in a series of discussions to identify opportunities to reduce State burden under Clean Water Act (CWA) Sections 303(d) and 305(b). This effort was co-facilitated by the Watershed Branch and Monitoring Branch within OWOW. The discussions provided an opportunity to learn about the 2007 Burden Reduction Initiative and EPA's Rulemaking Process, as well as to share information on and identify and discuss the steps of the CWA Sections 303(d) and 305(b) biennial water quality reporting (now commonly referred to as the Integrated Report (IR)) process that some States have previously cited as involving a heavy workload. The specific driver behind this effort was to determine whether or not lengthening the reporting cycle would reduce State burden.

The State representatives for this effort consisted of managers and program staff that work in CWA Sections 303(d) and 305(b) programs. Many of these representatives have worked in these programs for 15 or more years and brought significant experience and perspective on the evolution of these programs over the past two decades.

This report provides background information on reporting requirements under CWA Sections 303(d) and 305(b), the 2007 Burden Reduction Initiative, and the 2011 Periodic Retrospective Review of Existing Regulations (Section II). Information on the scope of the effort and the process is discussed in Section III. A discussion of the results is provided in Section IV, which includes information on the IR steps identified as the highest burden and key findings for improvements. Recommendations are presented in Section V, which is followed by a discussion on linkages between several of the recommendations and other initiatives currently underway at EPA (Section VI). Appendices to the report include: public comments on the periodic retrospective review, barriers and efficiencies identified for the IR steps with a level of effort greater than 1 on a 5-point scale, summary of discussions on the top 5 IR steps, recommendations and best practices for States and EPA, and results and data from data analysis to better understand and quantify change from one reporting cycle to the next. The Draft Charter is included as an attachment.

## II. BACKGROUND

Under CWA Section 303(d) States are required to submit to EPA from time to time a list of impaired and threatened waters still needing a Total Maximum Daily Load(s). The supporting regulation (40 CFR 130.7) requires States to submit this information to EPA on April 1 of every even numbered year. Under CWA Section 305(b) and its supporting regulation (40 CFR 130.8) States are required to report to EPA on the status of the Nation's waters on April 1 of every even numbered year.

One of EPA's first actions to respond to State concerns regarding reporting frequency and burden removed the regulatory requirement for States to submit to EPA a list of impaired or threatened waters still needing a Total Maximum Daily Load(s) for the 2000 Reporting Cycle. This action was taken to allow for States to begin preparing for new listing requirements that would be forthcoming in the "2000 TMDL rule," which was later withdrawn (USEPA, 2000). In 2001, EPA recommended that States submit an Integrated Report to fulfill and streamline these reporting requirements under both CWA Sections 303(d) and 305(b) and reduce State burden. This recommendation began with the 2002 reporting cycle. For each subsequent reporting cycle, EPA has provided guidance to States to help answer questions regarding water quality reporting that have emerged over time.

Another major action took place in 2006 when EPA, in collaboration with The Environmental Council of the States (ECOS), launched a Burden Reduction Initiative aimed at addressing State concerns over various reporting requirements. One of the sixteen priority areas focused on State reporting requirements under CWA Sections 303(d) and 305(b). At that time, twenty-two States recommended that EPA lengthen the reporting cycle from 2 years to 4 or 5 years. States asserted several reasons for lengthening the reporting cycle, which included: changes in water quality do not occur quickly, little to no environmental benefit in reporting every two years, projects to improve water quality take many years to realize the benefits, and decreases in administrative work that appears to be of low value to Federal agencies.

In response, EPA and ACWA<sup>1</sup> developed a workgroup to discuss these concerns within the existing regulatory framework and determined that no one action would meet all State needs. And, because statutory and regulatory changes would be required to change the reporting cycle, the States and EPA agreed to pursue other alternatives within the existing regulatory framework to address State concerns of reporting to EPA on the status of the Nation's waters every two years. The workgroup identified thirteen options for reducing State workloads of which there were six priority options, which included EPA: 1) dedicate itself to preparing, populating, and managing the assessment database (ADB); 2) advance the Rotating Basin approach; 3) expand the use of Category 3, insufficient data to make a determination; 4) list impaired waters on a watershed basis rather than individual water quality limited segments; 5) liberalize the use of Category 4b, non-TMDL alternatives will achieve water quality attainment; and 6) extend the listing cycle from 2 to 4 or 5 years. See Attachment for the Draft Charter, which includes a full list of the options. To respond to these options put forward, EPA developed the Draft Handbook for Developing Watershed TMDLs (USEPA, 2008), provided further clarification on the use of Category 3 and the Rotating Basin Approach in the 2010 Integrated Report Memo (USEPA, 2009), provided additional information on the use of Category 4b (USEPA, 2006; Monschein and Reems, 2009), and provided clarification on ADB expectations and data management in the 2012 Integrated Report Memo (USEPA, 2011).

In 2011, the President issued Executive Order 13536, which requested Federal agencies to review existing regulations to identify regulations that should be modified, streamlined,

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<sup>1</sup> Previously known as Association of State and Interstate Water Pollution Control Administrators (ASIWPCA)

expanded, or repealed to improve the regulatory process. In response, EPA developed a "Preliminary Plan for Periodic Retrospective Reviews of Existing Regulations." As part of the first plan, EPA committed to forty regulatory reviews of which eleven are in the Office of Water, one of which was working with States and Regions to identify ways to reduce the burden on State governments when reporting on the quality of the Nation's waters--shorthanded as the "CWA 303(d)/305(b) reporting cycle" issue. Similar to the 2007 Burden Reduction Initiative, the comments EPA received on this effort centered on revisiting earlier determinations on lengthening the reporting cycle and doing a major update one reporting cycle followed by a minor update the next reporting cycle. See Appendix A for comments. For more information, please visit <http://www.epa.gov/lawsregs/rulemaking/retrospective/index.html>.

### III. PROCESS

In October 2011, with support from ACWA, EPA solicited States to identify representatives to participate in a series of phone calls to identify options to reduce State reporting burden. Initially, twenty-two States expressed interest representing nine EPA Regions. Following a request for State input on a series of questions, which will be discussed later in the report, an additional nine States joined, with all EPA Regions being represented.<sup>2</sup> In addition, ACWA, EPA Regions, and the EPA Watershed and Monitoring Branches identified representatives to participate. See Attachment for the Draft Charter

The States and Regions that expressed interest in this effort convened every two weeks from November 2011 to June 2012 (with a break towards the end of March to mid-April). The first two calls centered on confirming the objectives of the effort, and included a presentation on the EPA/ACWA Burden Reduction Initiative conducted in 2007 and an overview of EPA's rulemaking process. The next series of calls is discussed below.

#### **Phase I: Identify Key Integrated Reporting Process Steps**

In order to best identify and address opportunities to reduce State reporting burden, the participants developed a detailed list of all potential steps in the Integrated Reporting (IR) process. To prepare an IR for submission to EPA, there are several IR steps that EPA and States conduct. Some IR steps are required by either Federal statute or regulation, some by State statute or regulation, and some not required at all, but they are still conducted by at least some States as a part of their process.

Initially, the goal of Phase 1 was to develop an 'ideal' timeline that identified all the IR steps in the IR process and the time period in which they should occur to help guide States when developing their IRs. However, due to significant variations among States as to when a

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<sup>2</sup> Three additional States provided input during and following a call in October 2012 facilitated by EPA and ACWA, which was focused on updating the States on this effort and answering questions.

particular step is completed, the group took a step back and recognized that an ‘ideal timeline’ wouldn’t be meaningful, so Phase I focused on only identifying steps in the IR process. See Table 1.

## **Phase II: Rank Level of Effort**

After identifying all of the steps in the IR process in Phase I, EPA and the States developed a series of questions to obtain State and Region input on the level of effort associated with each IR step. States used a ranking scale from 1 to 5 with 1 being no or minimal effort to 5 being greater than 30% effort of the overall process. Other information requested included: estimated staff and cost, estimated number of days to complete step, barriers or inefficiencies, whether IR step was necessary and applicable, and other comments. To help guide the States and Regions in their responses, EPA provided a definition for each of the questions. Twenty States responded, in addition to one Region<sup>3</sup> on behalf of all Regions.

In order to identify those IR steps that result in the highest level of effort (i.e., burden), the mean value for each IR step was calculated. See Table 1.

## **Phase III: Discussions on Top 5 IR steps**

The EPA and the States then held a series of discussions focused on those steps that require the highest level of effort on States. The calls focused on why these IR steps account for the most significant effort, how a change in the length of the reporting cycle would or would not reduce the burden, and what other alternatives exist within the current framework to improve the process. To ensure consistency between each of these discussions, EPA used the following questions to guide each call:

- 1) What work do States conduct for the step being discussed?
- 2) Look at the basic principles. Are these steps required to meet either federal or state statute or regulations?
- 3) Have we identified all or the most important barriers and inefficiencies?<sup>4</sup>
- 4) How do we overcome these barriers and inefficiencies, what best practices can we adopt? Are there existing tools that we might consider?
- 5) What is in our control to fix and what can’t we fix?
- 6) How would a change in reporting cycle from 2 to 4 or 5 years help or not help alleviate the burden?
- 7) Suggestions (Recommendations) for moving forward?

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<sup>3</sup> The Regional responses were counted the same as the State responses, and they were included in the mean level of effort calculation.

<sup>4</sup> Additional information provided by States on the barriers and inefficiencies of the IR steps with a mean level of effort greater than 1 can be found in Appendix B.

## IV. RESULTS

### Phase I: Identify Key Integrated Reporting Process Steps

In total, the participants identified 26 IR steps that are conducted by either EPA or States, and 33 IR steps that are conducted by either EPA or States if EPA takes a partial approval/partial disapproval action on a State’s 303(d) list. For purposes of this report, the information is presented in terms of 26 IR steps because the additional IR steps identified as part of a partial approval/partial disapproval action are primarily EPA’s responsibility. See Table 1.

Table 1: Integrated Report steps identified by the EPA and State representatives, including the associated level of effort and priority ranking<sup>5</sup>

Integrated Report (IR) Steps No.	Integrated Report (IR) Steps Description	Level of Effort (Mean)	Priority Ranking
1	State assessment program provides input on 303(d) and 305(b) component for State monitoring plan	Not Ranked <sup>6</sup>	-
2	State staff in field collecting monitoring data	Not Ranked <sup>7</sup>	-
3	EPA prepares and releases IR Memo	1.13	20
4	State internal discussion on previous IR cycle	1.80	15
5	EPA and State discuss issues to address in upcoming IR cycle (e.g., water quality standards changes since last 303(d) list approval, assessment and listing methodology)	1.95	12
6	State preparation or refinement of its assessment and listing methodology	2.60	4
7	State prepares and conducts data solicitation	2.26	8
8	State review and use of available data to make assessment decisions	4.25	1
9	State prepares and submits delistings and waters proposed for 4b to EPA	2.28	7

<sup>5</sup> Rows highlighted in gray reflect the top 5 IR steps that the States identified as the most significant level of effort.

<sup>6</sup> States indicated that this step is relevant to the larger State monitoring programs, and they suggested that EPA not ask States to provide the associated level of effort. As such, these two steps are not included in the priority ranking.

<sup>7</sup> See footnote 6

Integrated Report (IR) Steps No.	Integrated Report (IR) Steps Description	Level of Effort (Mean)	Priority Ranking
10	State preparation of data and associated geospatial information and entry into an assessment database	2.90	2
11	State prepares draft 303(d) list and submits to EPA (include assessment and listing methodology)	2.32	6
12	EPA reviews draft 303(d) list and assessment and listing methodology and provides feedback to State	1.83	13
13	State conducts Tribal review of draft 303(d) list	1.08	21
14	State prepares and public notices draft 303(d) list	2.20	11
15	EPA prepares and submits letter to Fish & Wildlife Service and National Marine Fishery Service (only coastal States) seeking input on State 303(d) list	1.00	22
16	State response to public comments	2.35	5
17	State prepares information for commission and obtains commission approval on final 303(d) list	1.62	17
18	State preparation and submission of final 303(d) list and 305(b) report to EPA, and other relevant documentation	2.65	3
19	Region invites Tribal consultation in regards to EPA list decisions	1.13	19
20	EPA reviews and takes final approval action on 303(d) list (go to IR data prep step); <i>if EPA action partial approval/partial disapproval (PA/PD) additional steps (see information in next 7 rows in italics)</i> <sup>8</sup>	2.20	10
	<i>PA/PD - EPA collects all data, methodologies, and rationale for disapproval and proposed additions to the 303(d) list and generates administrative record of all information involved in the decision process</i>	2.33	

<sup>8</sup> The steps in Table 1 that begin with PA/PD were not counted as part of the IR steps because these relate to an EPA action of a partial approval/partial disapproval of a State's 303(d) list and only reflect input from 1 Region and 2 States. As such, these two steps are not included in the priority ranking.

<b>Integrated Report (IR) Steps No.</b>	<b>Integrated Report (IR) Steps Description</b>	<b>Level of Effort (Mean)</b>	<b>Priority Ranking</b>
	<i>PA/PD - EPA sends formal letter to State announcing decision</i>	1.33	
	<i>PA/PD - EPA seeks public comment on proposed action "small subset of waters" via the Federal Register, and places public notice in local papers</i>	1.33	
	<i>PA/PD - EPA 303(d) listing program coordinates with TMDL program so aware of process</i>	1.33	
	<i>PA/PD - EPA sends Tribal Consultation letters, and engages as appropriate</i>	1.33	
	<i>PA/PD - create website with decision documents so the public can view this information during the comment period</i>	1.33	
	<i>PA/PD - EPA responds to public comments and prepares and sends State letter notifying of final action on the State's 303(d) list</i>	1.67	
21	State finalizes IR data submission and sends to EPA (attribute and geospatial)	2.22	9
22	EPA contractors process IR attribute and GIS data	1.25	18
23	State and EPA review IR attribute data, address issues, and clear the data for release to the public in ATTAINS	1.76	16
24	State and EPA review IR GIS data, address issues, and clear the data for release to the public in the RAD	1.82	14
25	EPA prepares National Water Quality Inventory Report to Congress	1.00	23
26	OMB reviews and clears National Water Quality Inventory Report to Congress	1.00	24

## **Phase II: Rank the Level of Effort**

Based on the input received by States and Regions, *State review and use of available data to make assessment decisions* ranked the highest with a 4.25 mean level of effort, which was 1.35 points higher than the second highest step, *State preparation of data and associated geospatial information and entry into an assessment database (see also 9 - State finalizes IR data submission and sends to EPA (attribute and geospatial))* with a 2.90 mean level of effort. *State preparation and submission of final 303(d) lists and 305(b) reports to EPA, and other relevant*

*documentation, and State preparation or refinement of its assessment and listing methodology*, ranked third (2.65 mean level of effort) and fourth (2.60 mean level of effort) respectively. The IR step, *State response to public comments* ranked fifth with a 2.35 mean level of effort. It is important to note that six IR steps had a mean level of effort that ranged from 2.32 to 2.20, and 13 IR steps had a mean level of effort of less than 1.00. Based on this input, the majority of IR steps were identified as between 0% and 10% of the overall effort. As a result, this process helped EPA and States hone in on the IR steps where changes should be made to reduce State burden. See Table 1.

In addition, EPA also asked for input on identifying ‘low hanging fruit’ other than the top five IR steps that could be addressed easily to improve efficiency, but no additional IR steps were identified. Appendix B identifies from high to low the IR steps which had a mean score of greater than one.

Although EPA requested input on the estimated staff and cost and estimated number of days to complete each IR step, States did inform EPA at the outset that this information is not collected at this level of detail, and the information was based on best professional judgement when provided. After further review of the responses, EPA decided this information would not be summarized due to what the States had noted; however, it did provide important anecdotal information.

### **Phase III: Summary of Key Findings from Discussions on Top 5 IR steps**

A series of five calls took place in Phase III to discuss the IR steps that ranked in the top five. At the outset, States commented that it was difficult to talk about the IR steps in isolation because often the work conducted in one step was framed by what was done in another step of the IR process. A summary of each of the calls is provided in Appendix C. We recognized at the outset that the IR process is not a “one size fits all” approach.

The primary driver behind this effort was to work with States to determine whether or not a change in the length of the reporting cycle under Clean Water Act Sections 303(d) and 305(b) and supporting regulations at 40 CFR 130.7 and 130.8 would reduce State burden. Based on the input received, EPA should not consider lengthening the reporting cycle, specifically for 303(d) lists; however, EPA should consider opportunities within the existing framework to streamline the 305(b) reports. The key findings have been separated into those directed at States and those directed at EPA, and they are summarized below:

#### **Key Findings for States**

- Reporting under CWA Sections 303(d) and 305(b) starts with water quality standards. If the water quality standards in place are incorrect or not appropriate, State burden increases.
- Internal communication within and among water quality programs is important.
- Early and often communication with EPA is important.

- Streamline processes through the use of technology, such as when soliciting public comments, reviewing and assessing water quality data to make assessment determination.
- Avoid problems with finalizing the 303(d) list by documenting the response to comments on the assessment and listing methodology.
- States need opportunities to share best practices; use webinars to allow for States to share information (e.g., tools to automate the process to review monitoring data to make water quality determinations).
- It is important to develop delisting methodologies so it is clear between EPA and States what the criteria are to determine if a water should be removed from the 303(d) list.

#### Key Findings for EPA

- Reporting under CWA Sections 303(d) and 305(b) starts with water quality standards. If the water quality standards in place are incorrect or not appropriate, State burden increases.
- The assessment and listing methodology is a useful tool for States to communicate to the public; however, because EPA does not approve state methodologies, interpretation of State water quality standards can differ between States and EPA.
- For 303(d) what documentation is required for EPA's record of decision (i.e., better define 'other reasonable information'), and for 305(b), identify how other water quality programs support reporting to have the practical effect of "reducing the frequency." For example, under CWA Section 305(b) States are to report on the nature and extent of nonpoint source pollution. States as part of the 319 program develop and submit to EPA an annual report. Discuss whether or not this report would be sufficient to fulfill CWA Section 305(b) reporting.
- States' need to know what data elements (information) to submit to EPA electronically, and EPA needs to ensure consistency in look up tables that are different across systems.
- In the context of the rotating basin approach, clarify 'review of all existing and readily available data'.
- Need for greater consistency, while still allowing for flexibility, in 303(d) list reviews among Regions (e.g., provide a checklist).
- States need to know of any changes that will be made with data submissions early and help with any transition.
- Communication between EPA and States on 303(d) list reviews is important (e.g., why list approvals held up).
- 303(d) list reviews require staff with water quality knowledge.
- States need opportunities to share best practices; use webinars to allow for States to share information (e.g., tools to automate the process to review monitoring data to make water quality determinations).
- Water/pollutant combinations are being added to the 303(d) list when there is no means to address the problem through a traditional TMDL, permitting, or enforcement process (e.g., invasive species, PCBs, DDT, and mercury in fish tissue). As such, EPA

needs to recognize that the 303(d) list is not the only tool to utilize to improve water quality.

## V. RECOMMENDATIONS

In October 2012, EPA coordinated with ACWA to reach out to all States and to request that they identify the top five key findings (see previous section) that should be turned into recommendations in the final report. EPA also asked for State input on other recommendations not reflected in the key findings. Additional States provided input on a call facilitated by EPA and ACWA, which was designed to share the draft report with all States and respond to any questions. The comments from this call have also been incorporated into the summary below. For the State recommendations, EPA will coordinate with ACWA to determine next steps, and for the EPA recommendations, EPA will develop a plan to respond to these recommendations, and has indicated below where some of the recommendations are already being addressed by other initiatives currently underway (discussed in more detail in Section VI). The table in Appendix D includes recommendations for States and EPA, best practices for States and EPA, and additional comments submitted by States.

### Recommendations for States

- Share best practices; use webinars to allow for States to share information (e.g., tools to automate the process to review monitoring data to make water quality determinations).<sup>9</sup>
- Articulate delisting methodologies so it is clear between EPA and States what the criteria are to determine if a water should be removed from the 303(d) list.
- Use technology to streamline processes, such as when soliciting public comments, reviewing and assessing water quality data to make assessment determination.
- Ensure appropriate water quality standards are in place. Reporting under CWA Sections 303(d) and 305(b) starts with water quality standards. If the water quality standards in place are incorrect or not appropriate, State burden increases.

### Recommendations for EPA<sup>10</sup>

- Communicate reporting requirements, specifically, for 303(d), what documentation is required for EPA's record of decision (i.e., better define 'other reasonable information'), and for 305(b), identify how other water quality programs support reporting to have the practical effect of "reducing the frequency." For example, under CWA Section 305(b) States are to report on the nature and extent of nonpoint source pollution. States as

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<sup>9</sup> One State commented that the existing ACWA structure could help facilitate this type of information sharing among States.

<sup>10</sup> Additional State comments included: EPA's release of the Integrated Reporting Memo a year in advance of the reporting cycle is late for States to try and incorporate any relevant changes, and EPA should consider resetting the baseline for measures such as SP-10 and SP-11.

part of the 319 program develop and submit to EPA an annual report. Discuss whether or not this report would be sufficient to fulfill CWA Section 305(b) reporting.

- Recognize that water/pollutant combinations are being added to the 303(d) list when there is no means to address the problem through a traditional TMDL, permitting, or enforcement process (e.g., invasive species, PCBs, DDT, and mercury in fish tissue). As such, EPA needs to recognize that the 303(d) list is not the only tool to utilize to improve water quality.
- Clarify the data elements (information) State's should submit to EPA electronically, and ensure consistency in look up tables that are different across systems.
- Identify staff with water quality knowledge to review 303(d) lists.
- Allow for flexibility while moving towards consistency in 303(d) list reviews among Regions (e.g., provide a checklist).
- Explain how the assessment and listing methodology fits into the entire IR process. The assessment and listing methodology is a useful tool for States to communicate to the public; however, because EPA does not approve state methodologies, interpretation of State water quality standards can differ between States and EPA.
- Use webinars to allow for States to share information (e.g., tools to automate the process to review monitoring data to make water quality determinations).<sup>11</sup>
- Clarify 'review of all existing and readily available data' in context of rotating basin approach.
- Assist States to ensure that appropriate water quality standards are in place.

## VI. OTHER INITIATIVES

There are several other initiatives currently underway that may be relevant to the recommendations in this report. They include: 1) the New Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program; 2) the EPA internal review of its role in 303(d) list reviews; 3) the Integrated Reporting Georeferencing Pilot; and 4) a preliminary ATTAINS data analysis to quantify the change in 303(d) lists and 305(b) reports. Several of these initiatives start to address the recommendations put forth for both States and EPA.

**1) Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program:** The development of a new long-term vision is an important element of the program's evolution and will better prepare and align efforts under the program to address current and future challenges and opportunities with protecting and restoring water quality. As part of carrying out a new vision, EPA also initiated a parallel effort to reshape the program's Strategic Plan measures (i.e., WQ-08) in a manner that reflects the new vision and goals. Formally launched at ACWA's annual meeting in 2011, this effort is

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<sup>11</sup> One State commented that the existing ACWA structure could help facilitate this type of information sharing among States.

an exemplary model of partnership between the EPA and the States. EPA and the States will continue to work to identify and advance key actions to improve the effectiveness of this critical program and attain the goals of the CWA. An example of a relevant item to the Reducing Reporting Burden effort is the goal to advance alternatives to TMDLs where water quality impairments are caused by certain pollutants or pollution (see second recommendation for EPA).

**2) EPA internal review of its role in 303(d) list reviews:** In the fall of 2012, EPA initiated a series of discussions with EPA Section 303(d) program and legal staff to identify steps for EPA to take to move toward more timely and consistent 303(d) list reviews. Although these discussions are still underway, and will continue in 2013, early recommendations include: 1) clarify what information EPA expects States to submit for a complete IR package, and 2) identify what actions EPA should conduct prior to the State 303(d) list submission vs. during the 30 day review time period (see first, fifth, and sixth recommendations for EPA).

**3) Integrated Reporting Georeferencing Pilot:** Through the biennial CWA Sections 303(d) and 305(b) Integrated Report, the EPA compiles attribute and geospatial data submitted for state assessment units to track State water quality assessment and impairment decisions. The attribute data include the water quality standards assessment decisions made by States for designated use support, potential causes and sources contributing to impaired waters, and other information like assessment unit ID and the length or areal extent of the assessment unit. Geospatial data is a key component because it enables visualization of assessments and impairments on a mapped basis providing a mechanism to track progress in restoring impaired waters. Visualization of assessed and impaired waters facilitates improved communication among EPA, States, the public, and others. Presenting this information in geographic form enables a wide audience including federal and state agencies, researchers, environmental managers, social scientists and planners to relate assessment and impairment information to countless other geographic datasets. Geospatial data provide a basis to link assessment and impairment information with many other types of water program data, facilitate environmental decision making, and support national analyses of waterbody conditions. As geospatial data and technology have evolved, EPA continues to seek efficiencies and improvements in the georeferencing of state water quality assessment and impairment decisions at the federal level. As such, EPA initiated, in collaboration with States, the IR Georeferencing Pilot to identify efficiencies in creating, submitting, processing, and reviewing geospatial data that will maintain or improve geospatial data availability and usefulness. It is anticipated that this effort will be finalized by the summer of 2013 (see third recommendation for States, and third recommendation for EPA).

**4) Preliminary ATTAINS data analysis to quantify the change in 303(d) lists and 305(b) reports<sup>12</sup>:** To better understand and quantify the changes that occur from one reporting cycle to the next on a State's 303(d) list and 305(b) report, EPA conducted an analysis using thirteen States data from the 2008 and 2010 reporting cycle that are published in the ATTAINS database available at <http://www.epa.gov/waters/ir>. These States were selected because the data were of known quality. The analysis required that the data system was able to track a minimum of 90% of the assessments units and causes of impairment (303(d) specific) from the 2008 to 2010 reporting cycle for each State. Not all States submit integrated data to EPA, so the information provided below and in Appendix E is discussed from both the 303(d) and 305(b) perspective. For the thirteen States selected (Alaska, Georgia, Iowa, Idaho, Maine, Montana, Nebraska, New Jersey, New Mexico, New York, Rhode Island, South Dakota, and Texas), the percentage of 303(d) listed waters that were not accounted for ranged from 0% to 6.67%, and the percentage of 303(d) causes of impairment that were not accounted for ranged from 0% to 7.50%. For the 305(b) waters, the percentage not accounted for ranged from 0% to 8.87%. For this analysis, EPA contractors conducted a special query to obtain the data, which is available in Appendix E, along with more information on the results. The information related to causes of impairment and delisted and restored reasons was obtained from the publicly available Expert Query at <http://www.epa.gov/waters>.

This analysis found that for the States' 2010 305(b) reports<sup>13</sup>, 4% or 655 new waters were assessed and reported to EPA. For the other 96% or 14,605 waters, EPA does not have information to determine whether the assessment decision was based on old or new monitoring data for the 2010 reporting cycle. The resegmentation of assessment units accounted for a 1% change (or 171 waters) from the 2008 to 2010 reporting cycle.

For the States' 303(d) lists, 877 (17%) new waters were identified as impaired and placed on the States' 2010 303(d) lists. To determine the number of waters that were delisted or restored from 2008 to 2010, the 2008 reporting cycle data showed that States reported 5,109 waters as

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<sup>12</sup> It is important to keep in mind when reading through this that State assessment and listing programs vary significantly (e.g., water quality standards, assessment unit delineation, assessment unit determinations, and assessment and listing methodologies), which result in variations among State 303(d) lists and 305(b) reports. This analysis did not attempt to look at the variability across State assessment and listing programs, but rather looked at 'bean counts' (i.e., number of waters or number of causes of impairment) to understand how States' 303(d) lists and 305(b) reports change from one reporting cycle to the next. While more data points would have made this analysis more robust, this was not feasible due to a number of factors: 1) EPA recommended that States submit an Integrated Report beginning with the 2002 reporting cycle, yet the ATTAINS database and website, which was developed to support integrated report data, was not released until early 2008, 2) limited emphasis was placed on tracking a water from one reporting cycle to the next prior to the 2008 reporting cycle, 3) resegmentation of waters, 4) not all States submit integrated data to EPA (i.e., one data submission to fulfill both 303(d) and 305(b) reporting), 5) the information is presented as counts, and not extents (river and stream miles or lake acres).

<sup>13</sup> Although a State may report a water as assessed in the 305(b) report, EPA does not collect information to validate that the assessment actually occurred during the reporting cycle in which the information is being reported. Although States reported more than 15,000 waters as assessed, it is not clear if these decisions were based on older monitoring data or new monitoring data collected for the 2010 reporting cycle.

impaired and on the 303(d) list, of which 578 (11%) waters were delisted<sup>14</sup>, 250 (5%) waters were restored<sup>15</sup>, and 39 (.7%) waters were not reconciled<sup>16</sup> in the 2010 reporting cycle. Nationally, the rate of waters delisted and restored is comparable to the rate of new waters being added to the 303(d) list.

While this preliminary analysis did not provide any conclusive findings about the change in 303(d) lists and 305(b) reports, the information does show that nationally, the rate of waters delisted and restored is comparable to the rate of new waters being added to the 303(d) list. And, the information supports State comments that water quality change is slow.

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<sup>14</sup> Valid delisted reasons in ATTAINS include: Category 4a (TMDL), Category 4b (TMDL alternative), and Category 4c (pollution not a pollutant).

<sup>15</sup> Valid restored reasons in ATTAINS include: applicable water quality standards attained: 1) due to restoration activities, 2) due to a change in water quality standards, 3) according to new assessment method, 4) threatened water no longer threatened, 5) reason for recovery unspecified, 6) original basis for listing was incorrect; and 7) data and/or information lacking to determine water quality status; original basis for listing was incorrect.

<sup>16</sup> Not reconciled means that the water(s) were delisted or restored and not accounted for in the States 2010 data submission, so ATTAINS is not able to track these waters past the 2008 reporting cycle.

## REFERENCES

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## APPENDIX A

**Public Comments Received on Regulations that should be in the First Round of Review.** More information is available at <http://yosemite.epa.gov/opei/RuleGate.nsf/>

Comment	Submitter Organization
<p>The time between reporting cycles is too short – reduce burden of these biennial reports by requiring a major updated during one cycle and a minor update for the following 2 years. This way you collect more relevant water quality data for reporting.</p>	<p>Association of State and Interstate Water Pollution Control Administrators (ASIWPCA)</p>
<p>Amend Sections 305(b) and 314 of the Clean Water Act (CWA) that require states, territories and authorized tribes to provide biennial reports to EPA on the condition of waters within their boundaries to reporting every three to five years. Modify the 303(d) reporting cycle to three to five years to coincide with other reporting requirements. EPA developed the Integrated Reporting Memo for the 2010 reporting cycle, finalized on 05/05/2009. EPA’s website says it will “revisit the states burden reduction recommendations after the implementation of the 2010 Memo can be evaluated.”</p>	<p>The Environmental Council of States (ECOS)</p>
<p>EPA requires States to develop a new list of impaired waters every 2 years – this is too short to perform a full assessment. Impairment decisions are often based on inadequate or flawed information. States should have 5 years between listing cycles.</p>	<p>Federal Water Quality Coalition</p>

## APPENDIX B

The IR Steps that were identified as having a level of effort greater than 1 based on State input. The table includes additional information provided by States (i.e., barriers or inefficiencies and other comments).

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
<b>1</b>	<b>State review and use of available data to make assessment decisions</b>	<b>4.25</b>	<ul style="list-style-type: none"> <li>a) Resource limitations (funding and staff)</li> <li>b) EPA should obtain data from STORET to assess raw data to evaluate State decisions rather than asking for this data during the review process</li> <li>c) Outside data not in easy format to review, requires extra time to format</li> <li>d) Data evaluation not automated; programming support might help reduce effort</li> <li>e) Data in multiple databases and locations in varying formats, not easy to summarize data and identify violations of WQ criteria.</li> <li>f) State develops handwritten assessments for each assessed water, time intensive but useful for other programs such as TMDL</li> <li>g) Several automated analyses, and several data/standard analyses done by hand calculations</li> <li>h) QAPP requirements and maintaining consistency</li> </ul>	<ul style="list-style-type: none"> <li>a) Most time consuming, yet most important step, and co-occurs with preparing attribute and geospatial data</li> <li>b) Encompasses: data extraction and compilation; and data assessment</li> <li>c) Increased availability of more data from different sources results in the need to continually improve tools and processes to analyze and reconcile data</li> <li>d) Assessment decisions used for other program activities such as watershed prioritization, permitting, and assigning anti-degradation tiers</li> <li>e) Time spent also dependent</li> </ul>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
			throughout State i) Primarily manual site by site evaluation  j) Data quality  k) Interpretation of WQS; old data nothing correct	on complexity of the assessments
2	<b>State preparation of data and associated geospatial information and entry into an assessment database</b>	2.90	a) Resource limitations (staff for GIS work) b) Need more training and technical support resources to address issues with ADB software c) Time spent to develop queries to make ADB useful for State purposes d) Need to maintain flexibility for States in tools to transmit data to EPA because the ADB doesn't serve all State needs e) ADB needs overhaul f) Early cycles need to be benchmarked because cycle tracking problem with ADB g) Not able to update 305(b) layer simultaneously with ADB h) ADB RIT tool needs to be compatible with ArcSDE i) Data entry into ADB time consuming and usually	a) Fortunate to have GIS staff to assist in linking ADB and GIS b) GIS takes time c) Requires two steps, which require different staff and skill sets: entering assessment information into ADB, and preparing associated geospatial information d) Most time spent on correcting errors and reconciling new assessment unites with previous assessment units e) EPA systems not compatible with watershed-based listing structure; and e) geospatial

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
			<p>doesn't occur until after 303(d) list approval, which might take up to one year or more</p> <p>j) Meshing State and EPA assessment units</p> <p>k) Manual entry of information into ADB; ADB entry is time consuming but useful tool for recording and retrieving IR information</p> <p>l) Preparation of geospatial coverage was time consuming</p>	<p>information used for other programs</p> <p>f) LDEQ uses ADB to report IR information but ADB is not required by the IR; ADB is required by LDEQ's PPG agreement with Region 6; ADB a useful tool for tracking IR information but would appreciate a method for electronic entry of data and info.</p>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
3	State preparation and submission of final 303(d) lists and 305(b) reports to EPA, and other relevant documentation	2.65	<p>a) Goal that ADB and GIS information all that is needed to comprise IR; however, Region likes a hardcopy traditional 305(b) report and the Agency concurs; however, not much changes from one biennial cycle to the next</p> <p>b) Time required to obtain EPA approval could be reduced if EPA raised concerns early in the process through an informal, inter-agency review process</p> <p>c) 305(b) component of IR redundant of other reporting requirements</p> <p>d) Depending on other staff workloads, this process may be delayed (e.g., editors, administrator, and supervisor's)</p> <p>e) Requirement of April 1 deadline leads to incomplete submissions that require significant revisions after deadline or missing deadline; more efficient process draft 303(d) lists/IRs due on April 1 with the final list due October 1</p>	<p>a) Five year reporting cycle would allow for more time spent on the underlying assessment process</p> <p>b) As complexity of comments received on 303(d) increased, the time spent on the 303(d) list has increased, most of the time reported for this request based on 305(b) report</p> <p>c) Everything that goes into getting to this step can take up to 180 days</p>
4	State preparation or refinement of its assessment and listing	2.60	<p>a) Resource limitations (staff)</p> <p>b) Needs to occur far in advance of IR because assessments on-going</p>	<p>a) Methodology prepared as prepare different sections of report, so spread out</p> <p>b) Most time spent on</p>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
	methodology		<p>c) EPA's review of methods delays initiation and completion of current cycle; in several instances, EPA concerns on methods not raised until review of 303(d) list, which resulted in delays due to the completion of the assessment process; for 2010 reporting cycle, this step accounted for 35% of states time</p> <p>d) EPA staff turnover, and having to hold same discussions every two years barrier to efficiency</p> <p>e) Relaying the information and oversight of six regions to maintain consistency</p> <p>f) Reaching agreement on language accepted by State and EPA thinks representative of the WQS</p> <p>g) Discussions with EPA not completed in timely manner</p> <p>h) Disagreements between EPA and state on listing decisions</p>	<p>translators for narrative criteria</p> <p>c) Consistent methodology overtime beneficial and only changes if major WQS change</p> <p>d) Delay due to EPA approval of previous list, changes to methodology follows data solicitation</p> <p>e) Most time intensive step</p> <p>f) Refinement continuous process, depends on changes to monitoring programs and WQS</p> <p>g) Requires training of regions within State and State office; training only 3 days; however, how methodology applied runs through IR process</p> <p>h) EPA involvement necessary</p> <p>i) Assessments eased by using watersheds to list waters</p>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
5	State response to public comments	2.35	<p>a) Lengthy process, questions primarily related to why certain waters not included in draft 303(d) list without providing sufficient scientific data to support including the waters on the list</p> <p>b) Additional staff would make step more efficient</p> <p>c) 2010 reporting cycle, only EPA submitted comments, which were extensive. Resulted in significant time to respond to comments, which might have been avoided through an earlier informal, inter-agency review process.</p> <p>d) CO has intensive stakeholder process any steps related to listing methodology or the list results in a lot of work, which can't be addressed by this workgroup</p> <p>e) Complexity of comments; and coordination with the Region to respond</p> <p>f) Late submittal (after data solicitation period ends) of data or information for consideration</p>	<p>a) Five year reporting cycle would allow for more time spent on the underlying assessment process</p> <p>b) As complexity of comments received on 303(d) increased, the time spent on the 303(d) list has increased</p> <p>c) Variable and time spent dependent upon comments received</p> <p>d) Collaborates with Region to address any EPA concerns, and requires revisions to policies and procedures portion of the IR, GIS, and ADB updates, compiling attachments and technical editing</p>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
6	<p><b>State prepares draft 303(d) list and submits to EPA (include assessment and listing methodology)</b></p>	2.32	<p>a) Usually don't receive comments until end of the formal public comment period</p> <p>b) Limitations of the ADB</p> <p>c) Internal issues impact timeline, not EPA issue</p> <p>d) IR memo should articulate better the documentation required by EPA to support 303(d) list so consistent and predictable; specifically, information not found in the ADB; Also, articulate extent and format of 305(b) information required</p> <p>e) If other steps completed without problems, this step should go smoothly</p> <p>f) Because 303(d) list dependent on 305(b) list, it should not be required at the same time. Difficult to pull 303(d) list from ADB, no existing queries</p> <p>g) Having the same due dates results in difficulties with the public notice requirements on the 303(d) list. Altering the dates would make this process easier</p> <p>h) Dependent on public comments</p>	<p>a) Five year reporting cycle would allow for more time spent on the underlying assessment process</p> <p>b) Redundant to "State prepares and public notices draft 303(d) list"</p> <p>c) Some states don't use this step; EPA review concurrent with public) this has improved process tremendously</p>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
7	State prepares and conducts data solicitation	2.26	<ul style="list-style-type: none"> <li>a) Staff changes at organizations from which solicit data</li> <li>b) On-going process; requires significant time to validate data</li> <li>c) EPA's interpretation of readily available data often conflicts with the State's and results in additional effort to extract, compile, format, and assess data from outside entities that may be of questionable validity and may not affect the assessment outcome when considered with other data sources</li> <li>d) Formatting external data to meet internal db constraints</li> <li>e) Turnaround time for internal water quality data; validation of internal data; uncertainty in amount of external data will receive</li> <li>f) Resources (staff and funding)</li> <li>g) Incorporation of new data in existing assessment units</li> </ul>	<ul style="list-style-type: none"> <li>a) Time to prepare minimal, time dependent on who submits data</li> <li>b) Delay due to EPA approval of previous list, changes to methodology follows data solicitation</li> <li>c) Restricted by state credible data law</li> <li>d) Data used by other programs</li> <li>e) 60 days to conduct call for data; for outside data at least 7 staff involved in review; BURP season requires an additional 90 days for collection of WQ monitoring data.</li> <li>f) Typically more useful for TMDL development</li> </ul>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
8	State prepares and submits delisting and waters proposed for 4b to EPA	2.28	<p>a) Significant amount of time discussing with EPA details of delisting documentation</p> <p>b) Acceptable good cause rationale, in some instances becoming more rigorous</p> <p>c) On-going dialogue does avoid surprises</p> <p>d) IR memo should articulate documentation required to support delisting so consistent and predictable; specifically, any information not in ADB</p> <p>e) Bar much higher for 4b than a TMDL; barriers included that the information gathered was never good enough, so it became difficult to agree upon an endpoint; although this process will help inform future 4b justifications</p> <p>f) Confidence that water is truly compliant</p> <p>g) Excessive support documentation is required for 4b delisting</p>	<p>a) Getting delisting information organized takes time</p> <p>b) Step actually sub-task of prepare draft list and submit to EPA</p> <p>c) By submitting these early to EPA; quicker response from Region</p> <p>d) Prepares but does not submit to EPA in advance of public notice</p> <p>e) EPA participates in public rulemaking hearing process even though do not submit delisting officially in advance; Category 4b rationales are submitted to EPA in advance to get EPA acceptance of plan</p> <p>f) 4b tremendous amount of time, example where 4b justification took 3 to 4 years</p>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
9	State finalizes IR data submission and sends to EPA (attribute and geospatial)	2.22	<ul style="list-style-type: none"> <li>a) Step doesn't occur until EPA approves 303(d) list, which may take up to one year or more</li> <li>b) State working at High Res while EPA maintaining information at Medium Res NHD</li> <li>c) Insufficient GIS staff</li> <li>d) If information 'bulk' loaded into ADB no problems; however, when manual changes need to be made given 6 cycles worth of data and age of system can require a lot of time because system slow</li> <li>e) Process never clearly communicated to States; re-examine the business process (e.g., workflow); communicate to States and make it easy</li> <li>f) Only useful for EPA and not State because national system doesn't support the watershed listing structure</li> <li>g) IT availability to post final IR</li> <li>h) Formats</li> <li>i) Preparation of geospatial coverage was time consuming</li> </ul>	<ul style="list-style-type: none"> <li>a) Five year reporting cycle would allow for more time spent on the underlying assessment process</li> <li>b) Inefficient for State because EPA data systems not compatible with watershed-based listing structure</li> <li>c) GIS data is not required by IR or CWA but LDEQ provides information and review assistance to Region 6; GIS data is a requirement of LDEQ's PPG commitments</li> </ul>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
10	EPA reviews and takes final approval action on 303(d) list (go to IR data prep step)	2.20	<p>a) Length of time for EPA to approve 303(d) list, in some instances took over one year; reviews at EPA stack up and are not prioritized among other competing workload items.</p> <p>b) Although all documentation provided, EPA review still lengthy; much of the delay was a result of lack of coordination among the different programs conducting the review.</p> <p>c) If State and EPA complete the steps outlined in this effort in a timely fashion and communicate throughout process, this step should be minimal effort and approval documentation should be drafted by the time EPA receives the final submission</p> <p>d) If EPA takes a disapproval action, process could take a year or more and require more staff and time</p> <p>e) EPA's review and approval actions always extend well past 30-days required by CWA</p>	<p>a) Five year reporting cycle would allow for more time spent on the underlying assessment process</p> <p>b) Levels of review within EPA should be consolidated and coordinated to comments conveyed at the earliest opportunity, and not waiting until final review</p> <p>c) If threat of litigation, this step takes longer because more people involved</p> <p>d) EPA's review and approval actions always extend well past 30-days required by CWA</p>

Priority Ranking	Integrated Report (IR) Steps Description	Level of Effort (Mean)	State Input on Barriers or Inefficiencies (Free Form Text)	Additional State Input Comments
11	State prepares and public notices draft 303(d) list	2.20	<ul style="list-style-type: none"> <li>a) Internal processes (lists adopted in Statewide WQ Management Plan, which requires proposal to be published in State Register)</li> <li>b) Internal state policies and procedures result in barriers and inefficiencies</li> <li>c) Report preparation time consuming; if database that worked better with State listing structure were available report format could be more automated</li> <li>d) Dependent on other staff workloads (e.g., editors, administrators, and supervisors)</li> <li>e) Requests to extend comment period</li> </ul>	<ul style="list-style-type: none"> <li>a) Five year reporting cycle would allow for more time spent on the underlying assessment process</li> <li>b) Work to resolve EPA issues and concerns prior to formal proposal of draft list and public comment period; this will require EPA to considering beginning an informal review.</li> <li>c) Perfunctory - little interest</li> </ul>

## APPENDIX C

A series of five calls took place in Phase II to discuss the IR steps that ranked in the top five. At the outset, States commented that it was difficult to talk about the IR steps in isolation because often the work conducted in one step was framed by what was done in another step of the IR process. Below is a summary of each of the calls. The information is presented as a summary, yet reflects individual State input. Therefore, some information may not necessarily flow or may appear to be contradictory. We recognized at the outset that the IR process is not a “one size fits all” approach.

### A. State review and use of available data to makes assessment decisions

#### a. *What work do States conduct for this IR step?*

- Format the data; primarily 3<sup>rd</sup> party data requires most significant time
- QA/QC the data; require QAPP and in some instances that data be georeferenced
- Use the data solicitation to steer people to areas State is addressing
- Procedures to analyze data (e.g., spreadsheets, pivot tables); however, several States have set-up automated procedures

#### b. *Is this step required to meet either federal or state statutes or regulations?*

- Yes, 40 CFR 130.7(b)(5) – Each State shall assemble and evaluate all existing and readily available water quality-related data and information to develop the list required by 40 CFR 130.7(b)(1) and 40 CFR 130.7(b)(2).

#### c. *Have all or the most important barriers and inefficiencies been identified?*

- See Appendix B for the list of barriers and inefficiencies identified by States that responded to the survey.

Additional comments noted during the call included:

- Flexibility by EPA in review of data to allow State to inform data provider that the information will be used during the next 303(d) listing cycle to avoid holding up the current 303(d) list process if data is provided a few months prior to finalizing draft 303(d) list.
- Existing and readily available data definition should also factor in the quality and organization of the information.
- Some organizations wait until draft 303(d) list out for public comment, then they submit data to refute assessment decision.
- Assessment decisions made by other agencies might be delayed or if errors found in output may lead to delays in the process.
- State politics sometimes delays the 303(d) listing process; it depends on who complains and why. In some instances, the public waits to see the draft 303(d) list, and will then send in data to refute a decision.

**d. What best practices might be adopted to overcome the barriers and inefficiencies identified, and are there existing tools to consider?**

- Use a standing data solicitation, where the State would periodically harvest the data for specific need.
- Include data solicitation in assessment and listing methodology to inform public what data will be used.
- Hold webinars to share tools to automate assessments.
- Identify a technical lead for each pollutant/parameter to ensure consistent methods applied in analysis.
- Identify a State data liaison review the data for quality.
- Specify criteria that the data must meet to be considered credible to use for 303(d) listing decisions.

**e. What is in State control to fix, and what is not in State control to fix? Identified as not in State control to fix:**

- EPA review of draft 303(d) list.
- Obtaining data from other agencies that do assessments.
- Delay in getting statewide assessment data from the National Aquatic Resource Surveys.

**f. How would a change in reporting cycle from 2 to 4 years help or not help alleviate the burden?**

- Lengthening the cycle would result in twice as much data and staff would be less familiar with the process.
- Four years is too long to not report to the public, Congress, TMDL program and other programs such as permits.
- Significant water quality changes don't occur over a 2-year time period, so there shouldn't be this expectation.
- Public interested in impaired waters more so than longer term trends.
- Emerging data that are critical warrant a more immediate action than a longer reporting cycle would allow.
- Reporting takes resources and with small staff would recommend longer reporting period.
- Consider either triennial reporting cycle or continuous listing process.

**g. Recommendations (State input)**

- Share best practices to automate process to analyze data to make attainment decisions.
- EPA to clarify "all existing and readily available water quality related data and information," and in this context clarify use of rotating basin approach.

- Share best practices for conducting data solicitation (e.g., include in assessment and listing methodology).
- Improve turnaround time of National Aquatic Resource Surveys data.
- Consider continuous listing process.

**B. State preparation of data and associated geospatial information and entry into an assessment database (also related to State finalizes IR data submission and sends to EPA)**

As the discussion on this IR step progressed, States noted that most of the points being made were discussed during the previous call. The States mentioned that a lot of the work conducted for this IR step relies on the previous step discussed (*review and use of available data to make assessment decisions*). Because some of these IR steps are so interrelated often the work conducted for one IR step coincides with another IR step (e.g., as the assessment decisions are being made, the information is being georeferenced and entered into the States assessment database).

**a. What work do States conduct for this IR step?**

- Identify all existing and readily available data for the assessment period and summarize and compare to water quality standards.
- Georeference monitoring locations and water quality standards so assessment results can be available in geospatial mapping tool.
- Portion the data based on parameter and populate spreadsheets for technical staff to conduct technical assessment, and request internal staff to review the results. After internal review share results with tribal reservations prior to public review.
- Assign designated uses to all monitoring locations so know which water quality standard applies, then use GIS to pull this information together. May have more than one monitoring location in an assessment unit, so following individual monitoring site assessments compile to make overall determination for the assessment unit.
- Use of GIS has eliminated back and forth among programs and information slipping through the cracks. Able to provide TMDL program a list of georeferenced waters in Category 4a and 5 to check against their information.
- Wait for the TMDL program to finish sampling period before starting assessments, and discuss differences. Develop georeferenced information after list finalized otherwise constantly changing. Look at streams for which data available within last two years.
- Use five years of data that ended two years prior to the cycle working on (e.g., 2006 to 2010 data for the 2012 reporting cycle). For 303(d) listed waters, the water(s) remain on the list if the data drops off.
- Look at assessment decisions more holistically

**b. Is this step required to meet either federal or state statutes or regulations?**

- Submitting data electronically is not required by either federal or state statutes or regulations. The data component has been discussed in EPA's Integrated Reporting Guidance, with the most comprehensive information provided in the 2006 Integrated Report Guidance. For more information, visit [http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG\\_index.cfm](http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG_index.cfm)

**c. Have all or the most important barriers and inefficiencies been identified?**

- See Appendix B for the list of barriers and inefficiencies identified by States that responded to the survey.

Additional comments noted during the call included:

- EPA distributed ADB not efficient and has become slower over the years.
- Use internal database and just populate the EPA distributed ADB to send information to EPA.
- Issues with the TMDL ID, not necessarily available when needed to develop the 303(d) list
- Linkage between the ADB and NTTS and back into internal data system to obtain Category 4a delistings. Not a common cause look-up table between the two, which results in problems.
- Transition to the IR (5 categories) created a huge workload for States.
- EPA distributed ADB does not allow for lifecycle tracking of assessment unit/cause of impairment combinations when measures responsible for restorations and listings.

**d. What best practices might be adopted to overcome the barriers and inefficiencies identified, and are there existing tools to consider?**

- Develop one set of cause IDs.
- Ensure that the timing of any key changes not in the midst of getting next IR ready. Moving into a time when things are quieter.
- Implementing QA/QC between ADB and ATTAINS to ensure consistent.
- Automate obtaining TMDL IDs.
- Work closely with Regional staff entering TMDLs into NTTS.
- Using a tool, such as the Exchange Network might work for some States, but not necessarily all.

**e. What is in State control to fix, and what is not in State control to fix?  
Identified as not in State control to fix:**

- No control over what happens in TMDL and 303(d) Program based on organization of Agency.
- A challenge is when a water is in Category 5 for causes such as biology. You really can't develop a TMDL because you can't define a mass per unit load for biological indices, as an example. There are several causes that EPA is set on demanding, which drive a Category 5 listing. In the end, a significant amount

of resources are spent trying to identify the pollutant behind the indices or metric for the TMDL. States need to be given the flexibility to show, but not be forced down the TMDL path. Use the observed effects component of the ADB.

- Some States still place waters on the 303(d) list based on biological impairments.
- ADB allows the user to identify whether or not the cause was a pollutant or pollution.

**f. *How would a change in reporting cycle from 2 to 4 years help or not help alleviate the burden?***

- Would not necessarily alleviate the burden because during the off cycle, staff would be assigned to other work.
- End up with twice the amount of data and work that needs to be completed.
- Anything less than two years would send a message that this work does not need to be done any longer.
- So many things contingent on listing process that extending the reporting cycle would not necessarily be good.
- Benefit of staggered delivery of 303(d) list and 305(b) report.
- Would have an adverse effect on getting information to other programs, such as permits that rely on it.

**g. *Recommendations (State input)***

- Consolidate Cause Look up Table to have one.
- Improve coordination at State level among monitoring, listing, and TMDL programs.
- In context of “all existing and readily available data,” allow for state to work in meaningful and proactive manner with resources.
- Allow for flexibility in terms of geospatial and attribute data submissions. One size does not fit all.
- EPA needs to clarify ATTAINS requirements, specifically for States planning on moving to the Exchange Network.
- Improve the ADB functionality.
- Improve outreach to States on various tools, such as NTTS and Expert Query. Utilize webinars.
- Better QA/QC of information.

**C. State preparation and submission of final 303(d) lists and 305(b) reports to EPA, and other relevant documentation**

A significant amount of this discussion focused on recommendations, so this input has been captured under that section of the summary.

**a. *What work do States conduct for this IR step?***

- Iterative process and depends on Regional person conducting the review.

- There are too many conflicts between EPA and States over what is intended as a State planning tool.
- Note, several other comments fell under Recommendations so they are reflected under that section of the summary.

***b. Is this step required to meet either federal or state statutes or regulations?***

- Clean Water Act Sections 303(d) and 305(b) and supporting regulations 40 CFR 130.7 and 40 CFR 130.8.
- A few States noted that they have State laws that require identifying impaired waters and developing TMDLs.

***c. Have all or the most important barriers and inefficiencies been identified?***

- See Appendix B for the list of barriers and inefficiencies identified by States that responded to the survey.
- No additional barriers or inefficiencies identified.

***d. What best practices might be adopted to overcome the barriers and inefficiencies identified, and are there existing tools to consider?***

- For the 305(b) report, develop a template so minimal changes need to be made.
- Move to online only and not printed paper copy; however, in some instances EPA attorney's still needed a hard copy for the record, so information was downloaded to a CD.

***e. What is in State control to fix, and what is not in State control to fix?***

- Primarily focused on recommendations so captured under that section of the summary.

***f. How would a change in reporting cycle from 2 to 4 years help or not help alleviate the burden?***

- Would likely create a bigger burden because other programs depend on this information every two years, as well as outside agencies.
- Would reduce time spent on negotiations with EPA about what waters should and should not be on the 303(d) list.
- Change 305(b) to a longer reporting cycle, since it doesn't have an impact on other programs.
- A change in federal statutes or regulations could result in no money.
- Assessments are conducted every year, but it is the whole process that takes the time.
- Allow for continuous assessment as opposed to setting a specific time, allow for timing to be worked out between Region and State.

**g. Recommendations (State input)**

- Leverage the Barnum vs. EPA case to develop protocols or steps to provide Regions to layout the level of detail needed in order to approve a State's 303(d) list since the CWA requires a 30-day review by EPA.
- EPA needs to identify what is required and ensure consistency among Regions; however, too much consistency could result in more problems due to differences between East and West Coasts.
- Develop checklist to identify what information is necessary to support a delisting.
- Clarify 'good cause' information in 2006 Integrated Report Guidance.
- EPA needs to catch up to technology today; one area to build consistency.
- EPA's distributed ADB needs to be updated.
- EPA to provide comments early in process.
- Recommend draft IR due on April 1 and final due on October 1.

**D. State preparation or refinement of its assessment and listing methodology**

**a. What work do States conduct for this IR step?**

- Prepare the revisions that the State plans to propose since the previous listing policy and go through public review, and make necessary changes based on comments.
- Prepare responsiveness summary.
- Work with Tribes and EPA.
- Try to make assessment and listing methodology timeless, so the information doesn't need to change for each reporting cycle.
- Revisions to assessment and listing methodology when new things are learned or water quality standards change; however, some States review every reporting cycle, and make revisions based on major new EPA guidance, some States seek public comment while others don't.
- Changes initiated by the State.
- Include response to comments received on assessment and listing methodology with draft 303(d) list.
- Found that the 303(d) list and the assessment and listing methodology are not easily segregated because how the 303(d) list is developed is equally important.
- When public comment or data received where no assessment methodology exists will respond in comments that no methodology exists and will take under consideration in next reporting cycle. Some States however, will develop a methodology "on the fly" to address.
- Address disagreements between EPA and State when changes made to assessment and listing methodology after receiving public comments, which may result in either delistings or waters not being included on the 303(d) list.
- Address disagreements between EPA and State on interpretation of water quality standards.

**b. Is this step required to meet either federal or state statutes or regulations?**

- Supporting regulation 40 CFR 130.7 and 2006 Integrated Report Guidance, Section IV. Issues Concerning the Development and Use of an Assessment Methodology available at [http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG\\_index.cfm](http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG_index.cfm) discusses what constitutes an assessment methodology.

***Additional discussion focused on the following:***

- The assessment and listing methodology has been an evolution, and sometimes difficult to understand where exactly it fits in and how. It is useful as a policy and way to communicate to the public how assessing waters, but never gotten complete EPA buy-in.
- In some States, legislation outlines how assessments should be done and how to list waters.
- In some Regions, EPA pays attention to State assessment and listing methodologies where there are indicators for narrative criteria.
- Some States, when biological data indicates 303(d) listing, will place a water on a part of the 303(d) list called “TMDL deferred until a pollutant can be identified.”
- Some States have developed delisting methodologies so both EPA and State are clear on what is required to remove a water from the 303(d) list.

**c. Have all or the most important barriers and inefficiencies been identified?**

- See Appendix B for the list of barriers and inefficiencies identified by States that responded to the survey.
- No additional barriers or inefficiencies identified

**d. What best practices might be adopted to overcome the barriers and inefficiencies identified, and are there existing tools to consider?**

- Have approval or public comment and working with EPA Region outside of the IR submission and approval process, which will streamline the process and allow States to deal with issues related to the assessment and listing methodology before getting wrapped up in listings.
- Explore options for taking some comments received on assessment and listing methodology under consideration in next reporting cycle.
- Allow for flexibility in the State by including a note in assessment and listing methodology that says the State can make a decision outside of the listing methodology, but the State has to describe how and why done.

**e. What is in State control to fix, and what is not in State control to fix?**

- Road blocks faced with Regions where a State thinks the assessment and listing methodology is good, but once the 303(d) list is submitted things slow down.

- Problems stem from EPA’s lack of approval authority over the assessment and listing methodology.

**f. *How would a change in reporting cycle from 2 to 4 years help or not help alleviate the burden?***

- Question not relevant to this step in IR process.

**g. *Recommendations (State input)***

- Meet early and often with EPA.
- EPA to improve communication with States on issues and why list approvals being held up.
- EPA to better communicate how the assessment and listing methodology is incorporated into the overall process; how is this document being used by EPA.
- Ensure that EPA staff familiar with water quality and have this background.
- Prepare a checklist for EPA staff in this position.
- Hold meetings between EPA and States early and often, and hold separate assessment and listing methodology and listing discussions.
- States should consider developing delisting methodologies.
- Determine what might be handled during next reporting cycle in order to keep things moving.
- Ensure consistency in EPA regional counsel review; better define roles.
- States should prepare responsiveness summary to comments received on assessment and listing methodology; this helps avoid problems during 303(d) list finalization.

**E. State response to public comments**

Not a significant amount of time was spent discussing this step in the IR process because in general, this step is not a significant burden. Even though time might be necessary to prepare the responses, this step is a smaller piece of the overall process.

**a. *What work do States conduct for this IR step?***

- Identify one staff person to be point of contact to determine who within the State needs to respond to comments.
- Consolidate questions, where possible, and prepare one response.
- Develop online tool for public to submit comments, which is integrated with online assessment information tool, and allows the user to submit comment when looking at an assessment unit. Allows staff to see comments as coming in.
- In general, this step may take time, but not difficult. The number of comments hasn’t vastly increased.
- As public becoming more educated, in some instances, States are seeing more difficult questions.

- Some States are seeing letter writing campaigns and receiving same comment from more than 80 to 1,000 commenters, and the State will prepare one response.

**b. *Is this step required to meet either federal or state statutes or regulations?***

- 2006 Integrated Report Guidance, Section III. Recommended Organization of an Integrated Report available at [http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG\\_index.cfm](http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG_index.cfm) discusses public participation.
- One State noted in the State code public comment period required.

**c. *Have all or the most important barriers and inefficiencies been identified?***

- See Appendix B for the list of barriers and inefficiencies identified by States that responded to the survey.
- No additional barriers or inefficiencies identified.

**d. *What best practices might be adopted to overcome the barriers and inefficiencies identified, and are there existing tools to consider?***

- When State resources allow, use technology to obtain comments instead of email.
- Use the response to comments as opportunity to see if changes need to be made to the assessment and listing methodology process, or report so question won't be asked in future.
- Use a technical writer to do internal technical review of final report, which helps mitigate potential questions and misunderstandings.
- Develop good archive of response to comments to help when responding to future comments that may have already been addressed. Also, ensures consistency.
- Used SharePoint, which allowed multiple users access to review and respond to comments, which has avoided email traffic and using a shared drive which not all people can access.

**e. *What is in State control to fix, and what is not in State control to fix?***

- This step is part of the process. Never sure from one reporting cycle to the next what comments will receive, but compared to some other major federal actions, the comments received on the 303(d) are small in comparison.

**f. *How would a change in reporting cycle from 2 to 4 years help or not help alleviate the burden?***

- Change 305(b) to a longer reporting cycle, since it doesn't have an impact on other programs.
- A change wouldn't make a difference.

**g. Recommendations (State input)**

- As previously mentioned, this step is a smaller piece of the overall process. Under question d above, States identified several best practices that might be adopted by other States.

Time remained following the discussion on public comments, so additional comments received by States included:

- Recommend more consistency at Regional level (e.g., information necessary for delisting, Category 4b determinations).
- Better technology to help with work.
- Extend frequency of 305(b).
- Better align the variety of State reporting to EPA (e.g., triennial review of water quality standards, non-point source plans developed every five years, annual 319 reports); however, it was recognized that this might be a challenge.
- Water quality standards are a big driver and an issue with this process because if you have water quality standards or criteria that are inappropriate or not accurate this will contribute to State burden (e.g., indicator bacteria, arsenic).

## APPENDIX D

In October 2012, EPA coordinated with ACWA to reach out to all States and to request that they provide input on the key findings<sup>17</sup> (see Section IV) to help identify the priority recommendations (see Section V). This table reflects not only the recommendations for States and EPA, but also the best practices for States and EPA, and additional comments submitted by States. The table also includes additional State input on other recommendations not reflected in the initial discussions.

Recommendations for States	Comments
Share best practices; use webinars to allow for States to share information (e.g., tools to automate the process to review monitoring data to make water quality determinations).	<ul style="list-style-type: none"> <li>• When STORET modernized, EPA said it would replace the retrieval component of the legacy system, but the replacement never occurred. Yet, this is still the number one time burden for States. The data manipulation and summarization for the IR takes a huge amount of time (weeks/months), and with the old STORET it used to take a couple of hours or days. Related problem is EPA’s decentralization of STORET/WQX. Now States spend a huge amount of time reformatting data from 3<sup>rd</sup> party water quality monitors.</li> <li>• Existing ACWA structure could help facilitate</li> </ul>
Articulate delisting methodologies so it is clear between EPA and States what the criteria are to determine if a water should be removed from the 303(d) list.	<ul style="list-style-type: none"> <li>• Good idea but adds burden to States. Alternative would be for biennial listing guidance to state something such as “EPA understands that in the absence of a specific delisting methodology, the same burden of proof necessary to list a water applies to delisting. For example, if two years data at a certain frequency are required to make an impairment determination, then an equivalent two years of data indicating attainment are needed in order to de-list a site from Categories 4 or 5 (all parts).”</li> <li>• EPA needs to consider more flexibility when it comes to delisting waters that have been erroneously listed. In previous cycles, waters were listed based on best professional judgment and land use, and no monitoring, etc. With new methodologies, assessment methods, and improved technology, states should be able to delist waters when current data demonstrates that they are intermittent and the data used to list was not sufficient. We are doing a disservice to the public by keeping these waters on the 303(d) list, and States should be able to move these waters to Category 3 or a Subcategory 3</li> </ul>

<sup>17</sup> Several of the key findings were identified as best practices and not recommendations for States and EPA, so this table separates the recommendations and best practices for States and EPA.

<p>Use technology to streamline processes, such as when soliciting public comments, reviewing and assessing water quality data to make assessment determination.</p>	<ul style="list-style-type: none"> <li>• Most critical and should be a top priority for action</li> <li>• EPA is dealing with States all over the scale when it comes to technology, staff, and organization; however, it is the redundant work that is not efficient.</li> </ul> <p>Ideally, EPA has a “Cloud” database that the states can log into and upload data to. Then, states can create reports back to see that the data says what they meant it to say. Finally, the 305b requirement could come directly from this output, and no assessments would have to be sent to EPA because they would already be there.</p> <p>This would include the final assessment, NOT the raw data to make decisions. That is an entirely separate process, and in my opinion to complex and subjective to automate threw the ADB process; however, from the tone of some of the responses that is what some states might want.</p> <p>Another issue is keeping straight all the dates that apply to when the data was collected, when it was evaluated, what report cycle it is part of. So 2010 data is NOT part of the 2010 report. It is hard to keep straight sometimes.</p> <ul style="list-style-type: none"> <li>• Identify role technology might play in streamlining work</li> <li>• Noted in States’ control and EPA would have little influence until water quality standards are submitted for approval</li> </ul>
<p>Ensure appropriate water quality standards are in place. Reporting under CWA Sections 303(d) and 305(b) starts with water quality standards. If the water quality standards in place are incorrect or not appropriate, State burden increases.</p>	<ul style="list-style-type: none"> <li>• The continual lowering of water quality criteria, especially for toxics, results in huge amounts of time and money being spent on developing water quality assessments, listings, and TMDLs for primarily non-problems that we (society) couldn’t correct if we tried. State water quality criteria have been lowered to a point that in a sense all waters are impaired. The net result is that there is less or no focus on actual water quality problems. TMDLs have become paper exercises because there is no urgency to correct the minor or nonexistent water quality problem that TMDLs pretend to address.</li> <li>• Noted in States’ control and EPA would have little influence until water quality standards are submitted for approval</li> </ul>

Best Practices for States	Comments
Communicate early and often with EPA.	<ul style="list-style-type: none"> <li>• Communication goes both ways, so if encouraging States to reach out, EPA needs to be more responsive</li> <li>• Noted as a best practice</li> </ul>
Improve internal communication within and among water quality programs.	<ul style="list-style-type: none"> <li>• Noted as a best practice</li> </ul>
Document response to comments on assessment and listing methodology to avoid problems when finalizing the 303(d) list.	<ul style="list-style-type: none"> <li>• Noted in States' control and EPA would have little influence until water quality standards are submitted for approval</li> </ul>
Recommendations for EPA	Comments
Communicate reporting requirements, specifically, for 303(d), what documentation is required for EPA's record of decision (i.e., better define 'other reasonable information'), and for 305(b), identify how other water quality programs support reporting to have the practical effect of "reducing the frequency." For example, under CWA Section 305(b) States are to report on the nature and extent of nonpoint source pollution. States as part of the 319 program develop and submit to EPA an annual report. Discuss whether or not this report would be sufficient to fulfill CWA Section 305(b) reporting.	<ul style="list-style-type: none"> <li>• Helpful to avoid duplication</li> <li>• Expanding on this would be very helpful, especially for folks that are "newcomers" to the IR game (unlike us grizzled vets), to have EPA consolidate and publish all past IR guidance into a coherent publication. Perhaps, a revision/update to the July 2002 CALM First Edition guidance or a companion document that adds the Reporting elements to the assessment &amp; listing components addressed in CALM.</li> <li>• Checklists are very helpful (EPA bullet 6 reference) as are used by TMDL program folks in review/approval of TMDL submissions</li> <li>• Most critical and should be a top priority</li> </ul>
Recognize water/pollutant	<ul style="list-style-type: none"> <li>• The 303(d) list is specifically for TMDL development, so why put waters there that</li> </ul>

<p>combinations are being added to the 303(d) list when there is no means to address the problem through a traditional TMDL, permitting, or enforcement process (e.g., invasive species, PCBs, DDT, and mercury in fish tissue). As such, EPA needs to recognize that the 303(d) list is not the only tool to utilize to improve water quality.</p>	<p>cannot be fixed with a TMDL</p> <ul style="list-style-type: none"> <li>• Most critical and should be a top priority</li> </ul>
<p>Clarify ‘review of all existing and readily available data’ in context of rotating basin approach.</p>	<ul style="list-style-type: none"> <li>• Relates to “communicate reporting requirements” above</li> <li>• Most critical and should be a top priority</li> </ul>
<p>Clarify the data elements (information) State’s should submit to EPA electronically, and ensure consistency in look up tables that are different across systems.</p>	<ul style="list-style-type: none"> <li>• States should be afforded the ability to establish cause and source codes that are linked to EPA codes through a common translator table in ATTAINS</li> <li>• Should be addressed via Exchange Network project implementing the OWIR-ATT &amp; NHD Event XML/SGML data flows</li> <li>• Consistency between ADB &amp; NTTS (systems) referenced in my comment below. And, closer coordination for contractors and programs (in general)</li> <li>• In EPA’s control</li> </ul>
<p>Identify staff with water quality knowledge to review 303(d) lists.</p>	<ul style="list-style-type: none"> <li>• Work to develop a level of review/reviewer consistency would be helpful as we, with EPA, work on continuing to improve the clarity and usefulness of the IR. It seems that the ADB is underutilized by EPA which may stem from a lack of familiarity and reviewer consistency</li> <li>• States and EPA</li> <li>• Regions differ greatly in the amount of consultation with legal staff. Our support for this finding is based on the idea that experienced water quality staff should be the 303(d) list reviewers. Legal staff should be consulted only as needed. In at least one Region, legal staff seems to have the primary approval responsibilities, which doesn’t make sense and slows EPA’s decision process. So maybe in the final recommendations (if you get enough votes for this one) some language could be added to clarify, so Regions don’t just read this at face value and say,</li> </ul>

	<p>“Yeah, we already do that.”</p> <ul style="list-style-type: none"> <li>• In EPA’s control</li> </ul>
Allow for flexibility while moving towards consistency in 303(d) list reviews among Regions (e.g., provide a checklist).	<ul style="list-style-type: none"> <li>• EPA gets this “flexible but consistent” message a lot. We probably need to get pretty specific in order for them to understand what is being recommended.</li> <li>• In EPA’s control</li> </ul>
Explain how the assessment and listing methodology fits into the entire IR process. The assessment and listing methodology is a useful tool for States to communicate to the public; however, because EPA does not approve state methodologies, interpretation of State water quality standards can differ between States and EPA.	<ul style="list-style-type: none"> <li>• Important when considering states’ ability to interpret the way their standards are assessed and have the flexibility to do so as long as the approach is not obviously in contradiction with CWA requirements. It would be helpful to better define the states’ role of interpreting EPA approved states standards and whether the assessment and listing methodology is the appropriate place to address these issues.</li> <li>• This is a problematic area. We have experiences where waters met the same burden of proof as was originally listed for, yet were not allowed to be removed due to conflicting interpretation of how WQS were to be applied. More than explanation is merited. We should develop a method to fix this if it is a common problem.</li> <li>• In EPA’s control</li> </ul>
Assist States to ensure that appropriate water quality standards are in place.	<ul style="list-style-type: none"> <li>• Should also include “standards interpretations”</li> <li>• In EPA’s control</li> </ul>
<b>Best Practices for EPA</b>	<b>Comments</b>
Communicate early to States any changes that will be made with data submissions and coordinate on plan to assist with any transition.	<ul style="list-style-type: none"> <li>• There should be a cut-off point where no changes to requirements for that reporting cycle can be pushed down. Think the Q4 (Oct-Dec) of even numbered years so as to allow state programs about a year to adjust reporting systems to new requirements before the next report publication process begins (draft IR prep, public comment period, etc.).</li> <li>• Noted as a best practice</li> </ul>
Improve communication with States on 303(d) list reviews (e.g., why list approvals held up).	<ul style="list-style-type: none"> <li>• This is particularly salient given shifts in IR program staff both in the State and at the EPA Regional level for the 2012 IR and the lengthy review process some states go through following on-time submittals</li> <li>• Weekly is not too often to just inform State of the status</li> <li>• Noted as a best practice</li> </ul>

<p>Use webinars to allow for States to share information (e.g., tools to automate the process to review monitoring data to make water quality determinations).</p>	<ul style="list-style-type: none"> <li>• When STORET modernized, EPA said it would replace the retrieval component of the legacy system, but the replacement never occurred. Yet, this is still the number one time burden for States. The data manipulation and summarization for the IR takes a huge amount of time (weeks/months), and with the old STORET it used to take a couple of hours or days. Related problem is EPA's decentralization of STORET/WQX. Now States spend a huge amount of time reformatting data from 3<sup>rd</sup> party water quality monitors.</li> <li>• Existing ACWA structure could help facilitate</li> </ul>
<p><b>Other Suggestions for EPA to Consider</b></p>	<p><b>Comments</b></p>
<p>Length of Reporting Cycle</p>	<ul style="list-style-type: none"> <li>• Agree with not extending the length of the reporting cycle based on increased data review and decreased staff familiarity in the IR process that would come from an increase in reporting cycle time</li> <li>• The idea of continuous listing processes is interesting, but could get hairy to manage for EPA</li> </ul>
<p>EPA IR memo</p>	<ul style="list-style-type: none"> <li>• EPA's IR guidance schedule of (typically) an April release, is quite late to try to incorporate any relevant changes based on that and not push our whole process back to where meeting the next April's IR deadline isn't feasible. Essentially, a year from issuing Guidance to IR deadline isn't enough (if we were to fully wait until then to incorporate changes then move ahead with our assessment/listing process). EPA should consider shifting the release of EPA's Guidance earlier to give State's a better ability to respond to it by incorporating changes as necessary proactively in the process</li> </ul>
<p>EPA Strategic Measures</p>	<ul style="list-style-type: none"> <li>• Recommend future discussions on Water Quality Measures SP-10 and SP-11. Difficult to generate and would like feedback from other States as to how they generate these numbers.</li> <li>• Reset the IR/303(d) reporting baseline for measures from 2002 to 2008 or later (e.g., 2010, 2012).</li> </ul>

## APPENDIX E

To better understand and quantify the changes that occur from one reporting cycle to the next on a State's 303(d) list and 305(b) report, EPA conducted an analysis using thirteen States data from the 2008 to 2010 reporting cycle that are published in the ATAINS database available at <http://www.epa.gov/waters/ir>. The information provided below reflects the results of and the data used in the analysis

### Analysis Results for 303(d) Listed Impaired Waters and Causes of Impairment

To better understand State 303(d) lists, we first looked at the composition (i.e., were the States generally reporting waters as impaired under the same cause of impairment parent groups).<sup>18</sup> Looking at the parent groups, the composition of State 2008 and 2010 303(d) lists remained largely the same. Although within the parent groups, there were increases and decreases noted in the causes of impairment reported, which included: 1) an increase in dioxins (63), nutrients (44), organic enrichment/oxygen depletion (75); and 2) a decrease in cause unknown (80), mercury (107), metals (other than mercury), pathogens (76), pesticides (56), and sediment (149). The States in which most of the changes occurred in the causes of impairment reported included: Alaska (77% increase), Georgia (26% decrease), Maine (36% decrease), Nebraska (60% increase), and Texas (20% increase).

With the information available, we were also able to look at the percentage of waters delisted from and the percentage of waters added to the States' 2010 303(d) lists. The States in this analysis reported 5,097 waters as impaired and on the 303(d) list, with the number of 303(d) listed impaired waters ranging from 35 (Alaska) to 915 (Maine). Of the 5,097 waters, 4,220 were also reported on the States' 303(d) lists for the 2008 reporting cycle, which reflects the addition of 877 new waters to the States' 2010 303(d) lists, which ranged from 2 (Montana) to 160 (Texas) new waters added. Starting with the 2008 reporting cycle, the data shows that States reported 5,109 waters as impaired and on the 2008 303(d) lists, of which 578 waters were delisted<sup>19</sup>, 250 waters were restored<sup>20</sup>, and 39 waters were not reconciled<sup>21</sup> in the 2010 reporting cycle. Nationally, the rate of waters delisted and restored is comparable to the rate of new waters being added to the 303(d) list.

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<sup>18</sup> For purposes of reporting State 303(d) and 305(b) information to the public, EPA groups causes of impairment into 'parent groups', such as algal growth, nutrients, and pathogens. The detailed information reported by States is still available.

<sup>19</sup> Valid delisted reasons in ATAINS include: Category 4a (TMDL), Category 4b (TMDL alternative), and Category 4c (pollution not a pollutant).

<sup>20</sup> Valid restored reasons in ATAINS include: applicable water quality standards attained: 1) due to restoration activities, 2) due to a change in water quality standards, 3) according to new assessment method, 4) threatened water no longer threatened, 5) reason for recovery unspecified, 6) original basis for listing was incorrect; and 7) data and/or information lacking to determine water quality status; original basis for listing was incorrect.

<sup>21</sup> Not reconciled means that the water(s) were delisted or restored and not accounted for in the States 2010 data submission, so ATAINS is not able to track these waters past the 2008 reporting cycle.

In addition to new waters added to the State 303(d) lists for the 2010 reporting cycle, causes of impairment were also added in 27 of the cause of impairment parent groups. Pathogens ranked the highest with 366 new 303(d) listings followed by temperature (198), nutrients (194), cause unknown – impaired biota (188), pesticides (129), metals (other than mercury) (111), and PCBs (104). While all of the States in this analysis added new causes of impairment, the range was from 37 (Maine) to 479 (New Jersey), with the average being 155 new causes of impairment. In total, States reported 9,269 causes of impairment on the 2010 303(d) lists, which ranged from 71 (Alaska) to 2,112 (New Jersey).

A significant amount of change on a State 303(d) list occurs at the cause of impairment level. For the 2010 reporting cycle, 1070 causes of impairment were delisted. Ninety three percent or 1,000 were due to the development of a Total Maximum Daily Load (TMDL), followed by TMDL Alternatives (5% or 53), and pollution not a pollutant impairing the water (1% or 15). Approximately 68% or 679 of the TMDLs were developed for pollutants that fall into the following parent categories: pathogens (37% or 369), cause unknown – impaired biota (10% or 101), mercury (10% or 103), and sediment (11% or 106). Of the 681 causes of impairment restored, 84% or 571 of the water quality standards attainment were due to reason for recovery unspecified (32% or 219), original basis for listing was incorrect (27% or 187), and according to a new assessment method (24% or 166).

### **Analysis Results for 305(b) Assessed Waters**

To better understand State 305(b) reports, the data shows that for the 2010 reporting cycle, these States reported 15,260 waters as assessed<sup>22</sup>. The number of assessed waters by State ranged from 133 (Alaska) to 3,644 (Idaho). Of the 15,260 waters, 14,605 were also reported in the States' 305(b) reports for the 2008 reporting cycle, which reflects 655 or 4% new waters added to the States 2010 305(b) reports, which ranged from 0 (Montana) and 193 (Texas). Looking at the information starting with the 2008 reporting cycle, the data shows that 14,537 waters were reported as assessed in the 305(b) report, of which 14,472 waters were accounted for in the States' 2010 305(b) report and 65 waters were not reconciled, which means they were not accounted for in the States' 2010 data submission, and will not be tracked in ATTAINS beyond the 2008 reporting cycle.

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<sup>22</sup> Although a State may report a water as assessed in the 305(b) report, EPA does not collect information to validate that the assessment actually occurred during the reporting cycle in which the information is being reported. Although States reported more than 15,000 waters as assessed, it is not clear if these decisions were based on older monitoring data or new monitoring data collected for the 2010 reporting cycle.

## Data used for 303(d) and 305(b) analysis to quantify change

### 303(d) Data

<b>Reconciliation Information</b>	AK	GA	IA	ID	ME	MT	NE	NJ	NM	NY	RI	SD	TX
	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010
2008 Waters Cycle Tracked	23	128	396	774	100	591	147	656	166	454	118	122	567
2010 Waters Cycle Tracked to 2008	23	128	396	773	100	602	147	634	167	451	118	122	559
Waters Resegmented	0	0	0	2	0	25	0	52	2	4	0	0	38
New Waters Added	12	87	78	142	14	2	113	82	29	77	44	37	160
New Causes Added	46	93	109	207	37	63	264	479	80	113	100	101	318
2008 Causes Cycle Tracked <sup>23</sup>	25	141	485	1052	134	1597	194	1784	282	660	217	135	705
2010 Causes Cycle Tracked to 2008	25	134	485	1051	138	1624	194	1633	283	654	216	137	685
Causes	12	175	65	291	143	237	94	316	63	43	68	100	134

<sup>23</sup> When you add the sum of 2008 causes cycle tracked (7411), sum of causes delisted or restored (1741), and sum of not reconciled causes (253), you get 9,405, but would expect 9,351, which is the sum of 2008 causes. This discrepancy is the result of some States having causes that are both delisted/restored, and tracked to the next reporting cycle. The source of this discrepancy is not readily apparent, although some could be the result of resegmentation. For example, a water could have been resegmented into two smaller segments between the 2008 and 2010 reporting cycles, and one segment could have been delisted while the other segment was not.

Delisted or Restored <sup>24</sup>													
Causes Delisted	5	153	50	127	134	217	57	155	34	25	31	25	57
Causes Delisted 4a	5	153	31	123	109	217	43	154	34	20	31	25	55
Causes Delisted 4b	0	0	18	2	25	0	1	0	0	5	0	0	2
Causes Delisted 4c	0	0	1	2	0	0	11	1	0	0	0	0	0
Causes Delisted 4r	0	0	0	0	0	0	2	0	0	0	0	0	0
Causes Restored	7	22	15	164	9	20	37	171	29	18	37	75	77
Waters Delisted or Restored	5	153	39	159	104	74	30	63	21	32	23	41	84
Waters Delisted	3	135	33	85	99	72	16	39	7	23	18	10	38
Waters Restored	2	18	6	74	5	2	14	24	14	9	5	31	46
Not reconciled Waters	2	0	0	0	1	0	0	26	0	5	0	5	0
Not reconciled Causes	3	0	0	0	1	21	0	219	0	4	0	5	0
303(d) Listed Waters Information													
2008 Waters	30	281	435	933	205	665	177	745	187	491	141	168	651
2010 Waters	35	215	474	915	114	604	260	716	196	528	162	159	719
2008 Causes	40	309	550	1331	275	1849	287	2304	344	707	285	232	838
2010 Causes	71	227	594	1258	175	1687	458	2112	363	767	316	238	1003

<sup>24</sup> When you add the causes delisted (1070) and restored rows (681), you get 1,751; however, when you add the delisted/restored row across it totals 1741. This discrepancy is the result of NJ having 10 causes that were both delisted and restored.

### 305(b) Data

<b>Reconciliation Information</b>	AK	GA	IA	ID	ME	MT	NE	NJ	NM	NY	RI	SD	TX
	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010	2008-->2010
2008 Waters Cycle Tracked	113	1935	1103	3428	782	1022	545	886	490	1698	441	326	1703
2010 Waters Cycle Tracked	114	1966	1172	3559	789	1035	652	898	498	1453	487	315	1667
Waters Resegmented	0	11	0	1	3	16	0	46	5	0	1	1	87
New Waters Added	19	122	40	85	155	0	7	23	2	4	2	3	193
Not reconciled Waters	11	2	0	6	0	0	15	27	0	2	0	1	1
<b>305(b) Waters Information</b>													
2008 Assessed	124	1937	1103	3434	782	1022	560	913	490	1700	441	327	1704
2010 Assessed	133	2088	1212	3644	944	1035	659	921	500	1457	489	318	1860

### 303(d) and 305(b) Data Dictionary

<b>303(d) Data Dictionary</b>	
<b>Field Name</b>	<b>Definition</b>
2008 Waters Cycle Tracked	Total number of waters in the State's 2008 303(d) data submission that were tracked to the State's 2010 303(d) data submission
2010 Waters Cycle Tracked to 2008	Total number of waters in the State's 2010 303(d) data submission that were tracked back to the State's 2008 303(d) data submission
Waters Resegmented	Total number of waters in the State's 2010 303(d) data submission that were resegmented based on the reconciliation with the State's 2008 303(d) data submission
New Waters Added	Total number of waters in the State's 2010 303(d) data submission that were not in the 2008 data submission
New Causes	Total number of causes in the State's 2010 303(d) data submission that were not in the 2008 data submission

Added	
2008 Causes Cycle Tracked	Total number of causes in the State's 2008 303(d) data submission that were tracked to the State's 2010 303(d) data submission
2010 Causes Cycle Tracked to 2008	Total number of causes in the State's 2010 303(d) data submission that were tracked back to the State's 2008 303(d) data submission
Causes Delisted or Restored	Total number of causes in the State's 2008 303(d) data submission that were delisted or restored in the State's 2010 303(d) data submission
Causes Delisted	Total number of causes in the State's 2008 303(d) data submission that were delisted in the State's 2010 303(d) data submission
Causes Delisted 4a	Total number of causes delisted to Category 4a
Causes Delisted 4b	Total number of causes delisted to Category 4b
Causes Delisted 4c	Total number of causes delisted to Category 4c
Causes Delisted 4r	Total number of causes delisted to Category 4r
Causes Restored	Total number of causes in the State's 2008 303(d) data submission that were restored in the State's 2010 303(d) data submission
Waters Delisted or Restored	Total number of waters in the State's 2008 303(d) data submission that were delisted and in the State's 2010 data submission
Waters Delisted	Total number of waters in the State's 2008 303(d) data submission that were delisted in the State's 2010 303(d) data submission
Waters Restored	Total number of waters in the State's 2008 303(d) data submission that were restored in the State's 2010 303(d) data submission
Unreconciled Waters	Total number of waters in the State's 2008 303(d) data submission that were not accounted for in the State's 2010 data submission, and will not be able to track beyond the 2008 data submission
Unreconciled Causes	Total number of causes in the State's 2008 303(d) data submission that were not accounted for in the State's 2010 data submission, and will not be able to track beyond the 2008 data submission
<b>303(d) Listed Waters Information</b>	
2008 Waters	Total number of waters in the State's 2008 303(d) data submission
2010 Waters	Total number of waters in the State's 2010 303(d) data submission
2008 Causes	Total number of causes in the State's 2008 303(d) data submission
2010 Causes	Total number of causes in the State's 2010 303(d) data submission
<b>305(b) Data Dictionary</b>	
<b>Field Name</b>	<b>Definition</b>

2008 Waters Cycle Tracked	Total number of waters in the State's 2008 305(b) data submission that were tracked to the State's 2010 305(b) data submission
2010 Waters Cycle Tracked	Total number of waters in the State's 2010 305(b) data submission that were tracked back to the State's 2008 305(b) data submission
Waters Resegmented	Total number of waters in the State's 2010 305(b) data submission that were resegmented based on the reconciliation with the State's 2008 305(b) data submission
New Waters Added	Total number of waters in the State's 2010 305(b) data submission that were not in the 2008 data submission
Unreconciled Waters	Total number of waters in the State's 2008 305(b) data submission that were not accounted for in the State's 2010 data submission, and will not be able to track beyond the 2008 data submission
<b>305(b) Assessed Waters Information</b>	
2008 Assessed	Total number of assessed waters in the State's 2008 305(b) data submission
2010 Assessed	Total number of assessed waters in the State's 2010 305(b) data submission

## ATTACHMENT

### EPA Retrospective Regulatory Review

#### Reporting Requirements under Section 303(d) of the Clean Water Act (CWA): Reducing Reporting Burden

##### DRAFT Charter

**Purpose:** EPA developed a “Preliminary Plan for Periodic Retrospective Reviews of Existing Regulations” per Executive Order 13536, which requested federal agencies to periodically review existing regulations to determine if any regulations should be modified, streamlined, expanded, or repealed, to improve the regulatory process. As part of this first effort, EPA will explore ways to reduce the burden on state governments when reporting on the quality of the nation’s waters. For more information on this Plan, please visit <http://www.epa.gov/lawsregs/rulemaking/retrospective/index.html>.

**Background:** On April 1 of every even-numbered year, states report to EPA on the status of the nation’s waters to fulfill reporting requirements under Clean Water Act (CWA) Sections 303(d) and 305(b). The requirement for states to report on the condition of their waters every two years is statutory under CWA 305(b); however, the requirement to identify and report on impaired waters that need a Total Maximum Daily Load (TMDL) every two years is regulatory under 40 CFR 130.7 (Appendix A). States have raised concerns that reporting this information every two years is a significant administrative burden.

In 2006, EPA and the Environmental Council of States conducted a Burden Reduction Initiative (BRI) to address state concerns on reporting requirements. One of the priority areas looked at reducing reporting requirements under Sections 303(d) and 305(b), which was co-led by EPA and the Association of Clean Water Administrators (ACWA). As a result of this effort, EPA determined that, although the two-year reporting cycle would not be eliminated, the options identified and proposed were implemented as part of the Integrated Report biennial memo process aimed at reducing the reporting burden. See Appendix B for the list of options. In response, to the options proposed, EPA provided further clarification on the use of Category 3 and the Rotating Basin Approach in the 2010 Integrated Report Memo available at <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/final52009.cfm>, provided additional information on the use of Category 4b at the WEF TMDL 2009 meeting available at <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/planning.cfm>, and provided clarification on data management in the 2012 Integrated Report Memo available at [http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/ir\\_memo\\_2012.cfm](http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/ir_memo_2012.cfm).

**Participants:** This effort will be led by EPA. The participants shall consist of twenty-two state participants representing eighteen states, a representative from ACWA, two representatives

from the EPA Assessment and Watershed Protection Division (AWPD) including a data management representative, and five regional participants representing four EPA Regions.

**Process:** EPA seeks individual recommendations and advice from all participants on the following:

1. Review options identified as part of the Burden Reduction Initiative (BRI) in 2006/2007.
2. Determine if any of the BRI options identified were successfully applied by States.
3. Identify additional options (tested and untested) to reduce the reporting burden.
  - a. Electronic reporting only
4. Identify issues with EPA timely review and approval of 303(d) lists.
5. Determine the cost and time (level of effort) associated with a statutory and/or regulatory change, or other guidance alternatives within the current framework, and identify the long-term pros and cons that might result from any changes.

**Products:** EPA will develop a report by June 2012 that summarizes the findings.

**Audience:** The target audience to circulate the report to obtain comments includes:

1. EPA Headquarters and Regional 303(d) and 305(b) staff and management
2. State 303(d) and 305(b) staff and management
3. Association of Clean Water Administrators (ACWA)

**Milestones:** A key outcome of this effort is for EPA to develop a report by June 2012

Action	Date
Prepare Draft Charter	August 31, 2011
Discuss Draft Charter and Process with Senior Management	September, 2011
Develop Workgroup	September 30, 2011
Kick-off Effort	November, 2011
Conference Calls to Discuss Effort	November, 2011 to March, 2012
Prepare Draft Report	March 2012
Circulate Draft Report for Public Comment	April 2012
Finalize Report	June 2012

**Appendix A (Draft Charter)**

<b>Summary of State Reporting Requirements Under CWA Sections 303(d) and 305(b)</b>	
<b>Authority</b>	<b>State Reporting Requirement</b>
CWA Section 303(d); 40 CFR 130.7	<p>By April 1 of all even numbered years, states must submit to EPA the following information:</p> <ul style="list-style-type: none"> <li>• A list of water quality-limited (impaired and threatened) waters still requiring TMDL(s), pollutants causing the impairment and priority ranking for TMDL development (including waters targeted for TMDL development within the next two years).</li> <li>• A description of the methodology used to develop the list.</li> <li>• A description of the data and information used to identify waters, including a description of the existing and readily available data and information used.</li> <li>• A rationale for any decision to not use any existing and readily available data and information.</li> <li>• Any other reasonable information requested by EPA, such as demonstrating good cause for not including a water or waters on the list.</li> </ul>
CWA Section 305(b); 40 CFR 130.8	<p>By April 1 of all even numbered years, states must submit to EPA the following information:</p> <ul style="list-style-type: none"> <li>• A description of the water quality of all waters<sup>a</sup> in the state and the extent to which the quality of waters provides for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows recreational activities in and on the water.</li> <li>• An estimate of the extent to which CWA control programs have improved water quality or will improve water quality, and recommendations for future actions necessary and identifications of waters needing action.</li> <li>• An estimate of the environmental, economic and social costs and benefits needed to achieve the objectives of the CWA and an estimate of the date of such achievement.</li> <li>• A description of the nature and extent of nonpoint source pollution and recommendations of programs needed to control each category of nonpoint sources, including an estimate of implementation costs.</li> <li>• An assessment of the water quality of all publicly owned lakes, including the status and trends of such water quality as specified in section 314(a)(1) of the CWA.</li> </ul>

Note: <sup>a</sup> “Waters of the United States” as defined in 40 CFR 122.2.

## Appendix B (Draft Charter)

### Options to Reduce Workload in Preparing Integrated Reports Developed by the Burden Reduction Initiative Workgroup

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*The following six options were identified by the EPA-State Work Group as possible options that States may employ in preparation of future Integrated Reports in order to reduce the workload associated with those reports. They are not in priority order and additional options that were identified by the States are described after the initial six priority options.*

#### **1. EPA Dedication to Preparing, Populating and Managing the ADB**

Many States have found inputting data into EPA's Assessment Database (ADB) to be a large investment in time and staffing with little benefit accruing back to the State. EPA has promoted the use of ADB, in part, to easily respond to queries from OMB, Congress and other interests on the status of impaired waters across the nation. This option would declare that managing the ADB is the responsibility of EPA, not States. To that end, dedication of certain staff within each EPA Region Office to take the data generated from State IR assessments and populate the ADB would have three benefits. First, the workload on States to populate ADB is removed. Second, EPA assures development of a comprehensive database for their needs. Finally, through coordination between Region and State staffs, EPA Regions gain insight on each State's perspective and philosophy in developing 303(d) lists. Subsequent debates over the status of certain waters will center on substantive facts, rather than format and philosophical dogma.

#### **2. Rotating Basins**

Certain States embrace a methodology that centers 303(d) list preparation on selected basins rather than Statewide in a given listing cycle. Different basins then cycle to forefront with each subsequent cycle. While each State may have a different approach in using basin rotation in their 303(d) process, the notion of limiting data collection, use and analysis to a subset of State's waters has obvious benefits in workload reduction. This option provides a rationale to not use "all existing and readily available" data for a State.

#### **3. Expand the use of Category 3**

Originally, Category 3 was to house waters that had insufficient information to make an attainment status decision. As debates over the uncertain status of selected waters ensue between States and Regions, use of Category 3 can be made to place those waters and prevent tying up approval of the remainder of the 303(d) list. Placement of waters in this subcategory of Category 3 would be conditional with State commitments for time- and locale- critical monitoring to resolve the uncertainty within specific time periods. Such an option would safeguard against "losing sight" of those waters, yet allow the submission and approval much of the 303(d) list to proceed. Additionally, waters that are deemed "threatened" could be housed

in the subcategory and await additional information gathering to confirm or refute the impairment.

#### **4. List impaired waters on a watershed basis rather than individual water quality limited segments**

This option would reduce the size of the 303(d) list and alters the perspective of listing certain segments as being specifically impaired to a more accurate portrayal as contributors to water exiting a watershed, as monitored by data collected at the watershed outlet. Scale constraints would have to be exercised (HUC 8 listings would not be allowed, typical watersheds would be aggregates of HUC 12's up to a HUC 10). This option results in a more concise, geographically oriented listing that can be lifted off the 303(d) list and placed into a TMDL under development. A robust density of monitoring stations and an inventory of stream segments comprising each watershed would be necessary to make this option consistent with current EPA philosophy.

#### **5. Liberalize the use of Category 4B**

Category 4B was introduced to incorporate waters that were to be addressed by means other than the traditional Category 5/4A TMDL route. Originally, such waters were addressed by appropriate conditions on NPDES permits. The concept expanded to include waters being managed under watershed plans. The guidance regarding Category 4B has become more and more prescriptive since its introduction in 2002. We are now at a point where, in many cases, the burden of showing assurance that the 4B pathway will succeed is more cumbersome than simply developing a TMDL. This option places a time limit on 4B waters within the context of existing guidance that calls for TMDL development within 8-13 years of listing. In this option, a water placed in Category 4B would have 8 years to demonstrate the alternative approach promoted by the State or local watershed group has resulted in water quality improvement. At that 8-year milestone, if no water quality improvement can be seen, the water goes back to Category 5 and the State has to develop a TMDL for it within five years. The burden of proof shifts to the future rather than trying to prove 4B worthiness in the beginning. The workload savings come from proceeding with on-going watershed improvements instead of getting bogged down in an on-paper analysis of whether the promoted approach will work to attain water quality standards. States can safeguard themselves from the risk of over-promoting 4B by creating conditions for such waters to be eligible, such as the presence of an existing watershed group with implementation already underway.

#### **6. Extend the listing cycle to 4-5 years**

This is a long-term option that would require a change to regulations to lengthen the timing of submissions of 303(d) lists from biennial to four-to-five years. Unlike 305b, there is no two-year submission requirement in the CWA. This option does run counter to the original desire to develop IR's, but some of the current problems in list submission and approval and growing workloads in the States have been unintended consequences of melding 305b with 303(d). By this IR linkage, 303(d) lists are tied to the biennial cycle and the ADB and with requirements for

considering “all existing and readily available information”, the workload has grown substantially. This option would result in less frequent but more accurate 303(d) lists with likely greater visibility to the public.

*Other options considered by the Work Group, but of questionable utility. Further explanation or description of these options can be made at the meeting as the Task Forces see fit.*

## **7. Clarify the use of Categories 1 and 2**

Category 1 waters have all their uses fully supported; Category 2 waters have some but not all of their waters fully supported. The process to move waters from Categories 4A and 5 to Categories 1 and 2 appears data intensive and liable for considerable debate between the State and the Region on justifying such a move.

## **8. Freeze the 303d list for States under Court Decrees until 2012**

In order to allow States under Court Decrees and Settlements to establish TMDLs on schedule, freeze their 2006 303d lists as the list of impaired waters they need to work off of until 2012. Hence, these States would not have to prepare 2008 or 2010 303d lists and could concentrate on TMDL establishment. 305b reports would continue to be produced

## **9. Computer-assisted assessments**

Fund development of computer assisted assessments, so that:

1. All forms of monitoring data from all potential data sources are loaded into the state’s database;
2. Data is reviewed by the computer to determine whether it meets credible data requirements (flag data not meeting established criteria so it is not used in the assessment);
3. Data is reviewed by the computer to determine that detection limits were lower than standards (flag data with insufficient detection limits so it is not used in the assessment);
4. Data is compared to a variety of standards by a computer, showing:
  - a. Exceedances;
  - b. Standard(s) not being met;
  - c. Designated use(s) not being supported;
  - d. Number of samples collected for that standard (parameter, total/dis, etc);

## **10. Place responsibility for completing the national assessment of water quality on a federal agency, not the states.**

Revise CWA 305(b) so that EPA in partnership with other federal agencies are responsible for completing requirements of 305(b) and focus the states on identification of impairments and restoration of water quality.

**11. EPA provides support in the form of targeted funding (directed through 106 or supplements) or contracted services for information system/technology support for states**

This option would assist states to develop efficient data evaluation databases and computer programs to evaluate analytical data and compare to state standards to conduct the 303b/303d assessments.

**12. States may integrate the assessment reporting cycle and focus of report with state monitoring strategy.**

This will allow states to target data collection to needs identified in monitoring strategy, conduct monitoring to follow up to issues or needs identified in the assessment, assess new data, and use the assessment reporting to provide meaningful information to water quality protection and restoration efforts. EPA could provide necessary incentives through funding.

**13. Allow states the option to have a continuous listing process**

This option would allow states to continuously work on updating the Assessment with new data, and have a more efficient way for EPA to give approvals on those more frequent updates.