

Ensuring  
Accountability in  
Chesapeake Bay  
Restoration:

# Metrics for the Phase I Watershed Implementation Plans

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## About the Center for Progressive Reform

Founded in 2002, the Center for Progressive Reform (CPR) is a 501(c)(3) nonprofit research and educational organization comprising a network of scholars across the nation dedicated to protecting health, safety, and the environment through analysis and commentary. CPR believes that sensible safeguards in these areas serve important shared values, including doing the best we can to prevent harm to people and the environment, distributing environmental harms and benefits fairly, and protecting the earth for future generations. CPR rejects the view that the economic efficiency of private markets should be the only value used to guide government action. Rather, CPR supports thoughtful government action and reform to advance the well-being of human life and the environment. Additionally, CPR believes that people play a crucial role in ensuring both private and public sector decisions that result in improved protection of consumers, public health and safety, and the environment. Accordingly, CPR supports ready public access to the courts, enhanced public participation, and improved public access to information. CPR is grateful to the Keith Campbell Foundation for funding these metrics, as well as to the Deer Creek Foundation, the Bauman Foundation, the Public Welfare Foundation, and the Open Society Institute for their generous support of its work in general.

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In the past 15 months, the combination of President Obama's Chesapeake Bay Protection and Restoration Executive Order and the EPA's Bay-wide Total Maximum Daily Load (TMDL) process has established a framework for ensuring accountability and success in Bay restoration efforts. These promising developments follow the failure of the Bay states and the EPA to deliver on two rounds of voluntary agreements to reduce nutrient loadings. Under the new accountability framework, restoration efforts will now be supported by a system of mandatory limits on pollution loadings in waterways that are currently unfit for uses such as fish and wildlife habitat, shellfish harvesting, swimming, drinking, or recreation.

No aspect of this new framework is more important than the Bay states' and District of Columbia's Watershed Implementation Plans (WIPs), which demonstrate how they will meet the applicable TMDLs. While the soundness of states' WIPs depends on a broad array of technical, financial, and administrative factors, the bottom line expectation is that states write clear, objective, and transparent plans so that all watershed partners achieve their TMDL pollution reductions and ultimately restore the Chesapeake Bay. These WIPs will also enable the public to vigorously monitor the progress in meeting those commitments.

The Center for Progressive Reform (CPR) has developed a set of metrics to evaluate each state's WIP by assigning letter grades that evaluate (1) the transparency of information in the WIPs in providing key information about their pollution control programs and (2) the strength of the programs in making actual pollution reductions. The WIPs provide an unprecedented opportunity to objectively measure progress toward restoring the Bay on a state-by-state basis, and the assigned grades will provide the public with a clear and understandable tool for monitoring each state's commitment to restoration.

With the EPA's assistance and approval, the Bay states are expected to submit WIPs in three phases. Phase I WIPs, which will be available for public comment on September 24, 2010, are the most general of the three WIP phases. The main purpose of the Phase I WIPs is to provide information for the EPA to consider as it establishes the final wasteload allocations for point sources and load allocations for nonpoint sources within each of the individual 92 tributary segments. Collectively, these allocations will form the finalized Bay-wide TMDL. The Phase I WIPs will also provide a significant opportunity for Bay jurisdictions to compile baseline information that will be useful in monitoring progress toward achieving the TMDL.

Phase II WIPs will include greater detail on smaller geographic levels about pollution load allocations. They are due on November 1, 2011. Phase III WIPs will cover the period between 2017 and 2025, during which time states are expected to implement all controls needed to meet the individual tributary segment TMDLs and thus the Bay-wide TMDL. They are due on November 1, 2017.

To date, the EPA has provided a handful of guidance documents to assist the states with developing their Phase I WIPs. The key documents that detail specific information for the WIPs are:

- Letter to Chesapeake Bay Program Principals' Staff Committee Outlining EPA's Expectations for Watershed Implementation Plans, dated November 4, 2009;<sup>1</sup> and

- A Guide for EPA’s Evaluation of Phase I Watershed Implementation Plans, dated April 2, 2010.<sup>2</sup>

## Grading Methodology and Panel of Scholars

CPR developed these metrics with the ultimate purpose of determining whether or not the Phase I WIPs indicate that a Bay state will meet its commitments. The metrics have a maximum point total for each of two major categories:

1. **Transparency of Information**, or the extent to which the WIP provides “building blocks” of information that make it possible for the public to monitor the state’s performance; and
2. **Strength of Program**, or an assessment of the likelihood that state programs, described in the first category, will achieve the required TMDL reductions when fully implemented

In addition, states may be awarded up to four additional points based on the professional judgment of the grading panel. For example, an extra point may be rewarded for a state’s nutrient management program that stands out for stringency or effectiveness or for innovative regulatory authorities to manage pollution.

Grading Key			
Transparency of Information		Strength of Program	
45 Possible Points	Grade	64 Possible Points	Grade
40-45	A	57-64	A
34-39	B	49-56	B
28-33	C	41-48	C
22-27	D	33-40	D
≤ 21	F	≤ 32	F

A three-member panel of CPR Member Scholars will evaluate and grade the WIPs. These scholars are leading experts in the Clean Water Act and environmental law and include:

- **William L. Andreen**, the Edgar L. Clarkson Professor of Law, University of Alabama School of Law;
- **Robert L. Glicksman**, the J.B. and Maurice C. Shapiro Professor of Environmental Law, George Washington University Law School, and Board Member, Center for Progressive Reform; and
- **Rena I. Steinzor**, Professor of Law, University of Maryland School of Law, and President, Center for Progressive Reform.

Shana Jones, the Executive Director of CPR, and Yee Huang, a CPR Policy Analyst, will assist the scholars in the grading process.

According to the most recent EPA TMDL timeline, Phase I WIPs and the draft Bay-wide TMDL will be published for a 45-day public comment period beginning on September 24, 2010, and ending on November 8, 2010. The final Phase I WIPs are due on November 29, 2010, and the EPA will finalize the Bay-wide TMDL on December 31, 2010. CPR will issue grades on the WIPs by the end of October 2010.

<b>National Pollution Discharge Elimination System (NPDES) Permitting Program</b>					
<b>Transparency of Information</b>			<b>Strength of Program</b>		
	Point Value	Points Earned		Point Value per sector	Points Earned
Does the WIP disclose the number of facilities within the Bay watershed that are required to have NPDES permits and the number of facilities that have up-to-date NPDES permits in the following sectors:			For each sector, is the state's NPDES permitting program effective at issuing up-to-date permits for all facilities that require them?		
1. Municipal wastewater facilities (with major and minor sources listed separately);	1	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>90% of NPDES permits are up-to-date</li> <li>80% of NPDES permits are up-to-date</li> <li>70% of NPDES permits are up-to-date</li> <li>60% of NPDES permits are up-to-date</li> </ul>	4	<input type="checkbox"/>
2. Industrial wastewater facilities (with major and minor sources listed separately);	1	<input type="checkbox"/>		3	
3. Concentrated animal feeding operations;	1	<input type="checkbox"/>		2	
4. Municipal stormwater within MS4 areas (with major and minor sources listed separately);	1	<input type="checkbox"/>		1	
5. Industrial stormwater; and	1	<input type="checkbox"/>			
6. Construction outside MS4 areas?	1	<input type="checkbox"/>			
Does the WIP contain a schedule with deadlines or other specific quantitative commitments (e.g. x number of permits/month) to reissue and update expired or expiring permits to be consistent with the Bay-wide TMDL and the applicable tributary segment TMDL?	1	<input type="checkbox"/>	When will the state have all permits updated and rewritten to include the Bay-wide TMDL and individual tributary segment TMDLs?		
			<ul style="list-style-type: none"> <li>by 2016</li> <li>by 2018</li> <li>by 2020</li> <li>by 2022</li> </ul>	4	<input type="checkbox"/>
				3	
				2	
				1	
Does the WIP disclose the estimated funding and personnel gap between existing and needed resources to ensure the NPDES permitting program is consistent with the Bay-wide TMDL and individual tributary segment TMDLs?	1	<input type="checkbox"/>			
Does the WIP explain how the state will fill the funding gap and provide a timeline for acquiring the additional funding?	1	<input type="checkbox"/>			
<b>Total Points</b>	<b>9</b>	<input type="checkbox"/>	<b>Total Points</b>	<b>28</b>	<input type="checkbox"/>

Enforcement of NPDES Permits					
Transparency of Information			Strength of Program		
Does the WIP disclose basic enforcement data, including:	Point Value	Points Earned	Does this enforcement information describe an effective, deterrence-based enforcement program for compliance with National Pollution Discharge Elimination System permits?	Point Value	Points Earned
1. The number of physical, on-site inspections conducted by the state authority in the relevant watersheds during the last year for					
a. Municipal wastewater facilities (with major sources listed separately);	1	<input type="checkbox"/>	1. The percentage of inspections is greater than or equal to EPA's guidance		
b. Industrial wastewater facilities (with major sources listed separately);	1	<input type="checkbox"/>	a. Municipal wastewater facilities—50% annually;	1	<input type="checkbox"/>
c. Concentrated animal feeding operations;	1	<input type="checkbox"/>	b. Industrial wastewater facilities—50% annually;	1	<input type="checkbox"/>
d. Municipal stormwater within MS4 areas (with major sources listed separately);	1	<input type="checkbox"/>	c. Concentrated animal feeding operations—20% annually;	1	<input type="checkbox"/>
e. Industrial stormwater; and	1	<input type="checkbox"/>	d. Municipal stormwater within MS4 areas—20% annually;	1	<input type="checkbox"/>
f. Construction outside MS4 areas?	1	<input type="checkbox"/>	e. Industrial stormwater—10% annually; and	1	<input type="checkbox"/>
2. The total number of violations, the number of civil and administrative penalty actions, and the amount of civil and administrative penalties collected in the relevant watersheds during the last year?	3	<input type="checkbox"/>	f. Construction outside MS4 areas—10% annually. <sup>1</sup>	1	<input type="checkbox"/>
3. If local authorities have received delegated authority to conduct local enforcement actions, a narrative description of their enforcement activities (including inspections) for the relevant tributary segments and in the Bay watershed?	1	<input type="checkbox"/>	2. The level of enforcement resources includes an inspector-to-permit ratio of 1:400 or less	1	<input type="checkbox"/>
4. Enforcement resources for the relevant tributary segments and in the Bay watershed, including personnel and funding?	1	<input type="checkbox"/>	3. Less than 15% of major facilities are in significant non-compliance <sup>2</sup>	1	<input type="checkbox"/>
5. Data on major facilities in the relevant tributary segments and in the Bay watershed that are in significant non-compliance?	1	<input type="checkbox"/>			
Does the WIP disclose the estimated funding and personnel gap between existing and needed resources to ensure an effective enforcement program that will lead to compliance with the Bay-wide TMDL and individual tributary segment TMDLs?	1	<input type="checkbox"/>			
Does the WIP explain how the state will fill the funding gap and provide a timeline for acquiring the additional funding?	1	<input type="checkbox"/>			
<b>Total Points</b>	<b>14</b>	<input type="checkbox"/>	<b>Total Points</b>	<b>8</b>	<input type="checkbox"/>

## Monitoring and Verification for Non-Point Sources (NPS)

Transparency of Information			Strength of Program		
Question	Point Value	Points Earned	Question	Point Value	Points Earned
Does the WIP include specific procedures and resources for assuring participation and compliance with actions to reduce pollution, including implementing best management practices and meeting nutrient management plan requirements, from nonpoint sources in the relevant watersheds?	1	<input type="checkbox"/>	Do the procedures and resources available to encourage participation by NPS provide assurance that pollution from these sources will in fact be reduced?  Evaluate the quality of these procedures: <ul style="list-style-type: none"> <li>• The procedures are mandatory, binding, and enforceable</li> <li>• The procedures are mostly mandatory, binding, and enforceable, with some voluntary procedures</li> <li>• The procedures are mostly voluntary with some mandatory procedures</li> <li>• The procedures are only voluntary</li> </ul>	4  3  2 1	<input type="checkbox"/>
Does the WIP specifically allocate funds for monitoring and verification activities in the relevant watersheds?	1	<input type="checkbox"/>	How does the funding compare to other states? <ul style="list-style-type: none"> <li>• For the state with the highest funding per acre</li> <li>• For the state with the second highest funding per acre</li> <li>• For the state with the third highest funding per acre</li> <li>• For the state with the fourth highest funding per acre</li> </ul>	4 3 2 1	<input type="checkbox"/>
Does the WIP disclose the estimated funding gap between existing and needed resources for effective monitoring and verification activities?	1	<input type="checkbox"/>			
Does the WIP explain how the state will fill the funding gap and provide a timeline for acquiring the additional funding?	1	<input type="checkbox"/>			
<b>Total Points</b>	<b>4</b>	<input type="checkbox"/>	<b>Total Points</b>	<b>8</b>	<input type="checkbox"/>

Contingencies					
Transparency of Information			Strength of Program		
Does the WIP contain specific plans for the implementation of contingencies regarding the achievement of the TMDLs for each of the 92 tributary segments in the event that any of the following occurs:	Point Value	Points Earned	Are the contingencies sufficiently stringent to motivate implementation of primary controls?	Point Value	Points Earned
1. delays in the adoption of new or revised legislation, regulations, local ordinances, or permit issuance and renewal;	1	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>For <b>coordination</b>, or pairing of specific failures to specific contingencies</li> <li>For <b>timeliness</b>, or planned implementation of contingency within 6 months of determining failure of primary control measure</li> <li>For <b>specificity</b>, or the ability to point to data showing that contingency measure will reduce pollution</li> <li>For <b>stringency</b>, or the authorities or other mandatory requirements that compel implementation of the contingencies</li> </ul>	1	<input type="checkbox"/>
2. non-compliance with state or local laws, regulations, and permit requirements;	1	<input type="checkbox"/>		1	<input type="checkbox"/>
3. inadequate participation rates in voluntary, incentive-based programs; or	1	<input type="checkbox"/>		1	<input type="checkbox"/>
4. adverse changes in land use or development rates?	1	<input type="checkbox"/>		1	<input type="checkbox"/>
Does the WIP include deadlines or a timeline for initiating the implementation of contingencies once failure of primary control measures is determined?	1	<input type="checkbox"/>	Is the timing for initiating the implementation of contingencies reasonable? <ul style="list-style-type: none"> <li>Within 30 days of determining failure of primary control measure</li> <li>Within 60 days of determining failure of primary control measure</li> <li>Within 120 days of determining failure of primary control measure</li> <li>Within 180 days of determining failure of primary control measure</li> </ul>	4	<input type="checkbox"/>
Does the WIP explain how the state will acquire the funding needed to implement contingencies and provide a timeline for acquiring the funding?	1	<input type="checkbox"/>		3	
				2	
				1	
<b>Total Points</b>	<b>6</b>	<input type="checkbox"/>	<b>Total Points</b>	<b>8</b>	<input type="checkbox"/>

## Concentrated Animal Feeding Operations

Transparency of Information			Strength of Program		
	Point Value	Points Earned		Point Value	Points Earned
Does the WIP disclose the number, category, and location of each farm or other agricultural operation that contributes nitrogen, phosphorus, or sediment to the Chesapeake Bay through unregulated non-point source run-off?	1	<input type="checkbox"/>			
Does the WIP disclose whether or not the Bay state's NPDES CAFO permitting program is current with federal regulations, and if not when the program will be updated?	1	<input type="checkbox"/>	When will the state's NPDES CAFO program be updated? <ul style="list-style-type: none"> <li>• If the program is up-to-date</li> <li>• By December 2010</li> <li>• By December 2011</li> <li>• By December 2012</li> </ul>	4	<input type="checkbox"/>
Does the WIP disclose the estimated funding and personnel gap between existing and needed resources to update and maintain an effective CAFO NPDES permitting program that is consistent with the Bay-wide TMDL and individual tributary segment TMDLs?	1	<input type="checkbox"/>		3	
Does the WIP explain how the state will fill the funding gap and provide a timeline for acquiring the additional funding?	1	<input type="checkbox"/>		2	
				1	
<b>Total Points</b>	<b>4</b>	<input type="checkbox"/>	<b>Total Points</b>	<b>4</b>	<input type="checkbox"/>

Stormwater					
Transparency of Information			Strength of Program		
Question	Point Value	Points Earned	Question	Point Value	Points Earned
Does the WIP include copies of stormwater permittees' most recent self-reported disclosures?	1	<input type="checkbox"/>	Do the local authorities' enforcement efforts amount to an effective deterrence-based enforcement program? <ul style="list-style-type: none"> <li>• For regular <b>inspection frequency</b></li> <li>• For <b>assessment of penalties</b></li> <li>• For <b>enforcement authority</b>, meaning the local authority has enforcement authority roughly equivalent to the state authority</li> <li>• For <b>permit coverage rate</b> of greater than 80% of all sites that are required to have permits</li> </ul>		
Does the WIP disclose, with specificity, how the state or a delegated local authority verifies that such dischargers are meeting permit requirement?	1	<input type="checkbox"/>		1	<input type="checkbox"/>
				1	<input type="checkbox"/>
Does the WIP disclose the estimated funding and personnel gap between existing and needed resources to ensure an effective stormwater NPDES permitting program that is consistent with the Bay-wide TMDL and individual tributary segment TMDLs?	1	<input type="checkbox"/>		1	<input type="checkbox"/>
Does the WIP explain how the state will fill the funding gap and provide a timeline for acquiring the additional funding?	1	<input type="checkbox"/>		1	<input type="checkbox"/>
<b>Total Points</b>	<b>4</b>	<input type="checkbox"/>	<b>Total Points</b>	<b>4</b>	<input type="checkbox"/>

Air Deposition					
Transparency of Information			Strength of Program		
Does the WIP identify all of the sources that contribute to the air deposition of nutrients in the Chesapeake watershed and the relevant loadings attributed to each?	Point Value 1	Points Earned <input type="checkbox"/>		Point Value	Points Earned
Does the WIP disclose, with specificity, what air pollution control authorities a state will use to reduce the air deposition of nutrients from permitted and non-permitted sources?	1	<input type="checkbox"/>	Is the state able to control nutrient deposition from air sources within its jurisdiction? <ul style="list-style-type: none"> <li>• If the state cites specific mandatory air pollution control measures that are enforceable</li> <li>• If the state identifies specific legal authority to enforce air pollution controls</li> <li>• If the state has meaningful penalties for violations</li> </ul>	2	<input type="checkbox"/>
Does the WIP disclose the estimated funding and personnel gap between existing and needed resources to ensure an effective air pollution control program that contributes to the state's compliance with the Bay-wide TMDL and individual tributary segment TMDLs?	1	<input type="checkbox"/>		1	<input type="checkbox"/>
Does the WIP explain how the state will fill the funding gap and provide a timeline for acquiring the additional funding?	1	<input type="checkbox"/>		1	<input type="checkbox"/>
<b>Total Points</b>	<b>4</b>	<input type="checkbox"/>		<b>Total Points</b>	<b>4</b>

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## End Notes

- <sup>1</sup> Memorandum on Clean Water Act National Pollutant Discharge Elimination System Compliance Monitoring Strategy for the Core Program and Wet Weather Sources (Oct. 17, 2007), available at <http://www.epa.gov/compliance/resources/policies/monitoring/cwa/npdescms.pdf>.
- <sup>2</sup> U.S. EPA, Office of Water, “FY 2011 National Water Program Guidance, Appendix A: FY 2011 National Water Program Guidance Measures Summary Appendix” (April 2010), available at [http://www.epa.gov/ocfo/npmguidance/owater/2011/nwp\\_program\\_guidance\\_appendix\\_a\\_508.pdf](http://www.epa.gov/ocfo/npmguidance/owater/2011/nwp_program_guidance_appendix_a_508.pdf).

## About the WIP Grading Panel



**William L. Andreen** is the Edgar L. Clarkson Professor of Law at the University of Alabama School of Law. He is a nationally and internationally recognized expert in the Clean Water Act and water and water management law. Professor Andreen was a Fulbright Senior Scholar and a Visiting Fellow at the Australian National University's National Europe Centre and has served in an advisory capacity for numerous organizations, including the National Environment Management Council of Tanzania; the Environmental Law Section of the American Association of Law Schools, and the Environmental Law Commission of the World Conservation Union. He has published widely on the Clean Water Act, state water laws, and other water pollution law.



**Robert L. Glicksman** is the Treasurer of the Center for Progressive Reform and the J.B. and Maurice C. Shapiro Professor of Environmental Law at the George Washington University School of Law. He is a nationally and internationally recognized expert on environmental, natural resources, and administrative law issues. Professor Glicksman previously taught at the University of Kansas School of Law, where he was the Robert W. Wagstaff Distinguished Professor of Law. He is the author of two casebooks on environmental, natural resources, and administrative law; and dozens of articles and book chapters on these topics. Professor Glicksman's recent research on Clean Water Act enforcement includes three law review articles and an upcoming book on enforcement of the Clean Water Act nationwide.



**Rena Steinzor** is the President of the Center for Progressive Reform and a Professor of Law at the University of Maryland School of Law. Professor Steinzor has written extensively on efforts to reinvent environmental regulation in the United States and the use and misuse of science in environmental policy making. Among her publications include a book titled *Mother Earth and Uncle Sam: How Pollution and Hollow Government Hurt Our Kids* and a wide range of articles on administrative, constitutional, and environmental law. Professor Steinzor was staff council to the U.S. House of Representatives' Energy and Commerce Committee's subcommittee with primary jurisdictions over federal laws regulating hazardous substances and was the partner in charge of the environmental law practice at Spiegel and McDiarmid.

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