

## Summary of Public Comments on January 29, 2014 Draft Watershed Agreement and Chesapeake Bay Program Response

*The following is a summary, arranged by topic area, of comments received and CBP's subsequent decisions related to each topic. It reflects only topics that received public comment and does not reflect the entire Agreement. All public comments submitted between January 29 and March 17, 2013 were reviewed and considered by the partners in the development of the final Chesapeake Watershed Agreement. The red text is deleted language, and green text is new or revised language in the final draft. All names of organizations and individuals that commented during this time are listed at the end of this document. For a complete set of all comments received during this comment period, visit: <http://www.chesapeakebay.net/publications/title/21841>*

### Topics addressed include:

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| 1. Participation of partners & stakeholder involvement in management strategies | 12. Diversity of Representation                   |
| 2. Environmental Justice  | 13. Land Use, Impervious Surfaces                 |
| 3. Decision-making related to goals and outcomes                                | 14. Public Access                                 |
| 4. Oysters  | 15. Environmental Literacy                        |
| 5. Fresh Water Fisheries  | 16. Climate Change, Resiliency                    |
| 6. Menhaden   | 17. Conowingo Dam / Dam Sediment Pollution        |
| 7. Specific Sources of Pollution  | 18. Hydraulic Fracking                            |
| 8. Water Quality Standards Attainment   | 19. Trash   |
| 9. Toxic Contaminants   | 20. Facilitating Adaptive Management              |
| 10. Healthy Watersheds  | 21. Defining Metrics, Baselines, Dates, and Terms |
| 11. Citizen Stewardship   | 22. Funding, Financing, and Affordability         |

Agreement Topic	Comment Summary	Final Agreement Language showing edits from public draft where applicable	Decision / Rationale of How Comment Addressed
1. Participation	<p><b>Signatories' Participation</b></p> <ul style="list-style-type: none"> <li>Do not allow for jurisdictions to “opt in or out” of the various goals and outcomes in the new Bay Agreement.</li> <li>The “opt in, opt out,” including the statements, “each signatory may exercise its discretion to participate in the development and implementation of individual outcomes’ management strategies...” and “Signatories may decide to adjust their level of participation in the implementation of strategies as circumstances warrant,” convey a weak commitment of the partners to the restoration effort.</li> <li>As the draft Agreement stands, it lacks accountability, relieves signatories of the responsibility of committing to do the work, creates the potential for goals or outcomes for which no jurisdiction elects to implement a management strategy, and seems that none of the signatories commit to implement all or substantially all of the Agreement.</li> <li>The Agreement should specify roles and responsibilities of partners, and indicate whether each signatory intends to implement a management strategy. Management strategies should be drafted prior to signing the Agreement.</li> </ul> <p><b>Stakeholders' Participation</b></p> <ul style="list-style-type: none"> <li>We would appreciate more information on how non-signatory partners can become engaged in the development and implementation of management strategies. Locally-focused organizations throughout the watershed that are involved in management strategies related to healthy watersheds, public access,</li> </ul>	<p><b>Removed from page 4, paragraph 3:</b>  <del>Except for those outcomes required by law and related to the implementation of the Chesapeake Bay Total Maximum Daily Load (TMDL) under the water quality goal, each signatory may exercise its discretion to participate in the development and implementation of individual outcomes’ management strategies depending upon relevance, resources, priorities, or other factors. Partnerships with other agencies, organizations, and stakeholders will be identified as appropriate. Signatories may decide to adjust their level of participation in the implementation of strategies as circumstances warrant.</del></p> <p><b>Management Strategies, page 12, paragraph 1 &amp; 2:</b>  Participation in Management Strategies or participating in the achievement of Outcomes is expected to vary by signatory based on differing priorities across the watershed. This participation may include sharing knowledge, data or information, educating citizens or members, working on future legislation and developing or implementing programs or practices. Management Strategies, which are aimed at implementing outcomes, will identify participating signatories and other stakeholders, including local governments and nonprofit organizations and will be implemented in two-year periods.  The signatories and other partners shall thereafter update and/or modify such commitments every two years. Specific Management Strategies will be developed in consultation with stakeholders, organizations and other agencies, and will include a period for public input and review prior to final adoption. The Principals’ Staff Committee will report on adoption of management strategies at the next Executive Council meeting and</p>	<ul style="list-style-type: none"> <li>The Signatory Discretionary statement was removed.</li> <li>A paragraph was added to explain that signatories will participate at varying levels as resources and priorities allow. This follows how the program has successfully operated historically, with the notable addition of management strategies. These management strategies will provide greater transparency and accountability by giving the public specific information as to which jurisdiction is working toward which outcomes. This information was never explicitly released on a regular basis prior to this agreement. As such, the management strategies are an important addition to this agreement.</li> </ul>

	<p>environmental literacy, could have a tremendous impact on our collective progress.</p> <ul style="list-style-type: none"> <li>• We also hope that you and your team will engage members of our DMV Metro EJ Coalition and the University of Maryland School of Public Health in future discussions to help shape the implementation of the proposed elements of the Chesapeake Bay Agreement in a way that will address the concerns of low income, communities of color that are impacted by the Bay.</li> <li>• COG's members need to be involved with the designated Goal Implementation Team on any discussions regarding watersheds that have local implications - given the direct role and responsibility our local governments have in addressing local water quality.</li> </ul>	<p>report on implementation of management strategies every two years.</p> <p><b>Affirmation, page 13, paragraph 2:</b>  As Chesapeake Bay Program Partners, we acknowledge that this Agreement is voluntary and subject to the availability of appropriated funds. This Agreement is not a contract or an assistance agreement. We also understand that this Agreement does not pre-empt, supersede or override any other law or regulation applicable to each signatory.</p> <p><b>Management Strategies, page 12, paragraph 4:</b>  Stakeholder input will be incorporated into the development and reevaluation of each of the strategies. The Chesapeake Bay Program will make these strategies and reports on progress available to the public in a transparent manner on its websites and through public meetings of the appropriate Goal Implementation Teams and Management Board.</p> <p><b>Goals and Outcomes, page 4, paragraph 2:</b>  The Management Strategies further described in the next section of this Agreement articulate the actions necessary to achieve the Goals and Outcomes. This work will require effort from many, including all levels of government, academic institutions, non-governmental organizations, watershed groups, businesses and individual citizens. Local government will continue to play a unique and critical role in helping the Partnership realize this shared Vision for the Chesapeake Bay.</p>	<ul style="list-style-type: none"> <li>• A statement was added to the affirmation section to articulate that the agreement is voluntary, and it is not a contract or an assistance agreement.</li> <li>• The management strategies will be issued for public input prior to final adoption. Signatories and other stakeholders will indicate their expected level of participation for the first two years of the Agreement no later than when the drafts are issued for public input."</li> <li>• There will be an outreach initiative to involve stakeholder groups in developing and participating in the management strategies.</li> <li>• A Diversity Outcome has also been added under the Stewardship Goal (see page 8).</li> </ul>
<b>2. Environmental Justice</b>	<ul style="list-style-type: none"> <li>• Address urban blight as related to environmental justice issues.</li> <li>• Address funding issues for minority areas and promote engagement with diverse community leaders.</li> </ul>	<p><b>Principles, page 4:</b>  Promote environmental justice through the meaningful involvement and fair treatment of all people, regardless</p>	<ul style="list-style-type: none"> <li>• The Chesapeake Bay Program partners take environmental justice seriously, and feel that it should not be confined to one commitment, but rather a</li> </ul>

	<ul style="list-style-type: none"> <li>Commit to restoring waters within and outside of metropolitan areas equally.</li> </ul>	of race, color, national origin, or income, in the implementation of this Agreement.	principle under which we work. A new principle for environmental justice was added on page 4.
<b>3. Decision Making Related to Goals and Outcomes</b>	<ul style="list-style-type: none"> <li>The Executive Council should be the designated body empowered to approve of any changes to the goals and outcomes of the agreement.</li> <li>Previous Chesapeake Bay Agreements have not allowed the Principals' Staff Committee to make changes to the outcomes without approval by the Executive Council, and it is unclear what this change is solving.</li> </ul>	<b>Goals and Outcomes, page 5, paragraph 1:</b> As the signatories identify new opportunities and concerns, Goals or Outcomes may be adopted or modified. Any changes or additions to Goals will be approved by the Executive Council. The Principals' Staff Committee will approve changes or additions to Outcomes, although significant changes or additions will be raised to the Executive Council for approval. Proposed changes to Goals and Outcomes or the addition of new ones will be open for public input before being finalized. Final changes or additions will be available on the Chesapeake Bay Program's website.	<ul style="list-style-type: none"> <li>Changes to the overarching goals must be approved by the Executive Council.</li> <li>In an effort to adaptively manage, the Principals' Staff Committee will be empowered to make changes or additions to outcomes, rather than only the Executive Council which only meets annually.</li> <li>Significant changes to outcomes will be sent to the Executive Council.</li> </ul>
<b>4. Oysters</b>	<ul style="list-style-type: none"> <li>Increase the number of tributaries from 10 to 20 to match the Executive Order.</li> <li>Focus on protecting existing reefs, and large oyster sanctuaries rather than small dispersed reefs.</li> <li>Define the conditions when habitat and populations have been restored.</li> <li>The outcome is unobtainable – oysters cannot be fully restored in the Bay to what they once were due to navigation limitations.</li> </ul>	<b>Oyster Outcome:</b> Continually increase finfish and shellfish habitat and water quality benefits from restored oyster populations. Restore native oyster habitat and populations in 10 tributaries by 2025 and ensure their protection <del>to recover the benefits of fish habitat and water quality improvements that healthy oyster reefs provide.</del>	<ul style="list-style-type: none"> <li>Outcome expanded to include protection.</li> <li>In setting a target for 2025, jurisdictions considered the resources needed for restoration, and experience implementing restoration projects. This outcome is not the end of oyster restoration, but a target for the next 10 years.</li> <li>Tributaries considered for oyster restoration are carefully chosen, taking many factors into consideration, including the availability bottom that is suitable to support the growth and long-term success of oyster reefs.</li> <li>The designation of oyster sanctuaries and protection measures are at the discretion of each Bay jurisdiction. The science-driven process of selecting tributaries does, however, target tributaries with large areas suitable for oyster restoration rather than small, dispersed areas.</li> <li>Criteria established in the Oyster Metrics will determine restoration "success". This information will be included in the management strategies.</li> </ul>
<b>5. Fresh Water Fisheries</b>	<ul style="list-style-type: none"> <li>Freshwater tributary fisheries require a commitment to improve declining recreational fish populations.</li> <li>Dedicate needed resources to find the causes of the disease and declines in freshwater species in</li> </ul>	<b>Sustainable Fisheries Goal:</b> Protect, restore, and enhance finfish, shellfish and other living resources, their habitats and ecological relationships to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay.	<ul style="list-style-type: none"> <li>Given the breadth of the Sustainable Fisheries goal and Fish Habitat outcome, freshwater fisheries are included and recognized as an important and valuable aspect of sustainable fisheries in the Bay. The Sustainable Fisheries</li> </ul>

	Chesapeake tributaries, including the recreationally valuable smallmouth bass.	<b>Fish Habitat Outcome:</b> Continually improve effectiveness of fish habitat conservation and restoration efforts by identifying and characterizing critical spawning, nursery and forage areas within the Bay and tributaries for important fish and shellfish and use existing and new tools to integrate information and conduct assessments to inform restoration and conservation efforts.	goal and Fish Habitat outcome refer to the entire Bay watershed and its tributaries in addition to the tidal portion of the Bay. <ul style="list-style-type: none"> <li>See also: Toxic Contaminants Rationale, page 5.</li> </ul>
<b>6. Menhaden</b>	<ul style="list-style-type: none"> <li>Menhaden restoration is critical to provide a forage base for all game and food fish species, and for the reduction of single cell algae by these once abundant filter feeders that feed on phyto- and zoo-plankton.</li> <li>The wholesale destruction of menhaden is something that needs more action. It is a valuable part of the bay food chain.</li> <li>The Menhaden catch that is permitted is a travesty that Bay states should not condone by action or silence.</li> <li>It will be important to establish criteria by which species are included as forage, and such criteria must go beyond the highly abundant schooling species like menhaden and anchovy.</li> </ul>	<b>Forage Fish Outcome:</b> Continually improve the Partnership's capacity to understand the role of forage fish populations in the Chesapeake Bay. By 2016, develop a strategy for assessing the forage fish base available as food for predatory species in the Chesapeake Bay.	<ul style="list-style-type: none"> <li>The Fisheries Goal Implementation Team recognizes the important role of forage species, including menhaden, bay anchovy, silversides, gizzard shad, etc., as food for important predator species. The forage fish outcome aims to better understand these predator-prey relationships in the Bay and the availability of these forage species as food.</li> <li>The Atlantic States Marine Fisheries Commission manages menhaden. The information generated by the Fisheries Goal Implementation Team could further contribute to ASMFC's coast-wide management of Menhaden.</li> </ul>
<b>7. Specific Sources of Pollution</b>	<ul style="list-style-type: none"> <li>Each source sector should take responsibility for its pollution; otherwise the burden is shifted to taxpayers.</li> <li>Provide technological assistance to help farmers control pollution, and provide advice and monitoring for nutrient management plans.</li> <li>Hold farmers responsible for properly disposing of manure.</li> <li>The agreement should include an outcome related to reducing polluted runoff either within the "Water Quality" or "Land Conservation" goals.</li> <li>Install clean-out catch systems on storm water drains.</li> <li>There is no mention of atmospheric (air) deposition within this agreement. Since this is a large source of pollutants to the Bay, why is there no mention here or a stated goal?</li> </ul>	<b>Water Quality Introduction Paragraph:</b> Restoring the Bay's waters is critical to overall watershed restoration because clean water is the foundation for healthy fisheries, habitats and communities across the region. However excess amounts of nitrogen, phosphorus and sediment in the Bay and its tributaries have resulted caused many portions sections of the Bay to be being listed as "impaired" under the Clean Water Act. The Chesapeake Bay Total Maximum Daily Load (TMDL) is driving nutrient and sediment reductions as described in the Watershed Implementation Plans (WIPs), adopted by the states and the District of Columbia, and establishes the foundation for water quality improvements embodied in this Agreement. These plans set nutrient and sediment reduction targets for various sources – stormwater,	<ul style="list-style-type: none"> <li>The Jurisdictions' Watershed Implementation Plans, as part of the 2017 and 2025 outcomes, specifically address the practices and management actions being taken to reduce nutrient and sediment pollution from each source sector.</li> <li>Air deposition is currently being accounted for under the Bay Total Maximum Daily Load with the Environmental Protection Agency as the lead regulatory agency.</li> </ul>

	<ul style="list-style-type: none"> <li>Commit to greater regulation of wastewater treatment facilities, which disproportionately release pollution into urban and minority areas.</li> </ul>	<p>agriculture, air deposition, wastewater and septic systems. <del>Restoring these waters is critical to overall Bay watershed restoration because clean water is the foundation for healthy fisheries, habitats and communities across the region.</del></p>	
<b>8. Water Quality Standards Attainment</b>	<ul style="list-style-type: none"> <li>Include more definition either to the date that the outcomes are to be reached, or include the percent attainment of the goal – something that puts teeth into the percentage attainment.</li> </ul>	<p><b>Water Quality Standards Attainment and Monitoring Outcome:</b> Continually improve the capacity to monitor and assess the effects of management actions being undertaken to implement the Bay TMDL and improve water quality. Use the monitoring results to report annually to the public on progress made in attaining established Bay water quality standards and trends in reducing nutrients and sediment in the watershed.</p>	<ul style="list-style-type: none"> <li>The time that it will take for water quality standards attainment is dependent on things other than the management actions we take, including groundwater, lag times, weather, and other factors. Scientists continue to get better at predicting these lags and weather impacts, but at this point the percentage of attainment expected for any given year is not well predicted. However, it is important to track progress in the non-tidal rivers and streams as well as in the tidal waters. Therefore, a new Water Quality Standards Attainment Outcome was added on page 7.</li> </ul>
<b>9. Toxic Contaminants</b>	<ul style="list-style-type: none"> <li>Include a goal and outcomes to reduce loads of toxic chemicals, including PCBs, PAHs, and pesticides, and to study the effects of new and emerging contaminants, including endocrine disruptors.</li> <li>Re-instate the Toxic Contaminants Research Outcome and the Reduction Outcome.</li> <li>Address chemical contamination in some way, including pesticides and other synthetic agricultural and turf chemicals, and ice and snow road treatment chemicals.</li> <li>Not enough is known about toxic contaminants to include a reductions outcome at this time. Each state's local governments should handle toxics, but it should be omitted from the watershed agreement.</li> </ul>	<p><b>Introduction:</b> Toxic contaminants harm fish and wildlife in the Bay and its watershed and create risks to human health that limit the amount of fish that people can eat. Reducing the impacts of toxic contaminants is critical to improve the health of fish and wildlife, thereby improving their recreational value for citizens.</p> <p><b>Goal:</b> Ensure that the Bay and its rivers are free of effects of toxic contaminants on living resources and human health.</p> <p><b>Toxic Contaminants Research Outcome:</b> Continually increase our understanding of the impacts and mitigation options for toxic contaminants. Develop a research agenda and further characterize the occurrence, concentrations, sources and effects of mercury, PCBs and other contaminants of emerging and widespread concern. In addition, identify which best management practices might provide multiple benefits of reducing nutrient and</p>	<ul style="list-style-type: none"> <li>A new Toxic Contaminants Goal with two outcomes was added to focus on reducing the impacts of toxic contaminants on the health of fish and wildlife (page 8) because the issues are persisting and it is believed that increased coordination and collaboration among the partners could improve conditions in the Bay and watershed.</li> <li>The research outcome focuses on learning more about the impacts and potential mitigation of certain toxic contaminants in the Bay and watershed.</li> </ul>



		<p>sediment pollution as well as toxic contaminants in waterways.</p> <p><b>Toxic Contaminants Policy and Prevention Outcome:</b> Continually improve practices and controls that reduce and prevent the effects of toxic contaminants below levels that harm aquatic systems and humans. Build on existing programs to reduce the amount and effects of PCBs in the Bay and watershed. Use research findings to evaluate the implementation of additional policies, programs and practices for other contaminants that need to be further reduced or eliminated.</p>	<ul style="list-style-type: none"> <li>The Policy and Prevention Outcome calls for us to take this new information, and continue to improve practices and controls to reduce and prevent the effects of these contaminants. The latter outcome calls on the partners to build from toxic reduction programs ongoing in the jurisdictions to address the goal.</li> </ul>
<b>10. Healthy Watersheds</b>	<ul style="list-style-type: none"> <li>Include the protection of “good” quality waters in addition to “exceptional” quality waters.</li> </ul>	<p><b>Goal:</b> Sustain state-identified healthy waters and watersheds, recognized for their <del>exceptional</del> high quality and/or high ecological value.</p> <p><b>Outcome:</b> <del>By 2025,</del> 100 percent of state-identified currently healthy waters and watersheds remain healthy.</p>	<ul style="list-style-type: none"> <li>Some of the State-identified healthy waters and watersheds include places that are considered to be in “good” condition, so use of the term “high” is more appropriate than “exceptional.”</li> <li>Each state’s definition of healthy waters and watersheds will be clarified as management strategies are developed.</li> </ul>
<b>11. Citizen Stewardship</b>	<ul style="list-style-type: none"> <li>Work with Chesapeake Bay Program partners and other academic, local government and citizen organizations to develop a metric for evaluating progress in citizen stewardship.</li> <li>Promote and support initiatives that increase the number and diversity of local stewards who support and carry out the conservation and restoration activities necessary to achieve the goals and commitments of the agreement.</li> <li>Develop a behavior change index to regionally measure changes in the number of individuals engaged in stewardship behaviors.</li> </ul>	<p><b>Principles, page 4:</b> Engage <del>our</del> citizens to increase the number and diversity of people who support and carry out the conservation and restoration activities necessary to achieve the Goals and Outcomes of the Agreement.</p> <p><b>Introduction:</b> The long-term success of the Chesapeake Bay restoration effort will depend on local leadership -- and local action that depends primarily on a strong citizen stewardship. More than 600 local conservation and watershed organizations in our region are educating and empowering citizens to restore and protect their local streams and rivers. Tens of thousands of local citizen volunteers continue to donate their time and talent to our shared goals. Building a larger, broader, and more diverse</p>	<ul style="list-style-type: none"> <li>Citizen engagement language was already included in the agreement draft for public review in the Principles section on page 4.</li> <li>A Citizen Stewardship Goal with three outcomes and an introduction was added on page 9 that includes a focus on increasing citizen numbers, as well as diversity.</li> <li>Management strategies will include methods to measure outcome success, such as a behavior change index, which would be considered during management strategy development for the outcomes.</li> </ul>

		<p>constituency of stewards is vital to achieving many of the Goals and Outcomes outlined in this Agreement.</p> <p><b>Goal:</b> Increase the number and the diversity of local citizen stewards and local governments that actively support and carry out the conservation and restoration activities that achieve healthy local streams, rivers and a vibrant Chesapeake Bay.</p> <p><b>Citizen Stewardship Outcome:</b> Increase the number and diversity of trained and mobilized citizen volunteers with the knowledge and skills needed to enhance the health of their local watersheds.</p> <p><b>Local Leadership Outcome:</b> Continually increase the knowledge and capacity of local officials on issues related to water resources and in the implementation of economic and policy incentives that will support local conservation actions.</p>	<ul style="list-style-type: none"> <li>• A local leadership outcome was also included based on stakeholder input on the importance of better engaging local leaders.</li> <li>• Each of the management strategies developed for the outcomes in the Agreement will describe, where applicable, how locals will be engaged, where actions, tools or technical support are needed and what steps should be taken to facilitate greater local participation.</li> <li>• This local leadership outcome, however, is specifically focused on increasing the knowledge of local officials.</li> </ul>
<b>12. Diversity of Representation</b>	<ul style="list-style-type: none"> <li>• Expand efforts to recruit qualified minority owned non-profits and businesses, and local civic leaders for decision making agencies and boards.</li> <li>• The decision making involved in environmental policy and pollution source siting decisions continues to lack substantive input from diverse minority and low-income communities. Significant voluntary improvements in these communities are difficult to realize when these populations are not engaged.</li> <li>• Increase outreach and funding for education programs in under-represented communities</li> </ul>	<p><b>Diversity Outcome:</b> Identify minority stakeholder groups that are not currently represented in the leadership, decision-making and implementation of conservation and restoration activities and create meaningful opportunities and programs to recruit and engage them in the Partnership's efforts.</p>	<ul style="list-style-type: none"> <li>• Increasing diversity in the restoration and protection efforts is critically important to the success of our Program in an increasingly diverse watershed. More emphasis is needed to define and improve the diversity in the Program. Therefore, a Diversity Outcome was added under the Citizen Stewardship Goal on page 9.</li> </ul>



	<ul style="list-style-type: none"> <li>There needs to be an effort to get adults and people from all races, economic status, and backgrounds working on the Bay restoration.</li> </ul>		
<b>13. Land Use, Impervious Surfaces</b>	<ul style="list-style-type: none"> <li>Add a goal that addresses land use and development in the urban and suburban areas of the watershed - conservation will not work if we make poor choices in developing land that is not under conservation.</li> <li>A full evaluation of the impacts of increased and sprawling human growth and development needs to be addressed with a strong plan to address impacts.</li> <li>Implement policy options and potential incentive programs to support minimizing new impervious surfaces.</li> <li>Increase the goal for protected acres to 2.5 million from 2010 to match or exceed the Executive Order.</li> <li>Reduce the average farm and forest land conversion rate to 40% by 2025. The preservation of forest land and farm land is more cost-effective than retrofitting impervious surfaces in the future.</li> <li>Both outcomes should be redrafted to ensure states and localities get beyond the first step in addressing the role of land protection.</li> <li>Land Conservation outcomes must do more to increase the rate of restoring impervious land or replacing natural function of existing impervious surfaces through restoration of impervious or disturbed land cover and retrofitting land uses that impact water quality.</li> </ul>	<p><b>Introduction:</b> The landscapes around the Bay and its tributaries are ecologically, culturally, historically and recreationally valuable to the people and communities of the region. Stimulating, renewing and expanding commitments to conserve priority lands for use and enjoyment is an integral part of furthering the watershed's identity and spirit.</p> <p><b>Goal:</b> Conserve landscapes treasured by citizens in order to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value.</p> <p><b>Protected Lands Outcome:</b> By 2025, protect an additional two million acres of lands throughout the watershed currently identified as high-conservation priorities at the federal, state or local level, including 225,000 acres of wetlands and 695,000 acres of forest land of highest value for maintaining water quality. (2010 baseline year)</p> <p><b>Land Use Methods and Metrics Development Outcome:</b> Continually improve the knowledge of land conversion and the associated impacts throughout the watershed. By 2016, develop a Chesapeake Bay watershed-wide methodology and local-level metrics for characterizing the rate of farmland, forest, and wetland conversion, measuring the extent and rate of change in impervious surface coverage and quantifying the potential impacts of land conversion to water quality, healthy watersheds, and communities. Launch a public awareness campaign to share this</p>	<ul style="list-style-type: none"> <li>Land use change is a local issue with regional consequences. Land use can affect restoration and protection efforts if not understood, mitigated, or otherwise planned for.</li> <li>Two areas of focus for land use have been added to this agreement 1) to ensure that there are appropriate methods for understanding and tracking land use changes, and 2) to provide tools and support to local governments to ensure the capacity to plan for and mitigate land use change impacts.</li> <li>The Methods and Metrics Development Outcome was revised to focus on the development of a methodology for characterizing the rate and impacts of land conversion.</li> </ul>

		<p>information with local governments, elected officials, and stakeholders.</p> <p><b>Land Use Options Evaluation Outcome:</b> By the end of 2017, with the direct involvement of local governments or their representatives, evaluate policy options, incentives and planning tools that could assist local governments them in their efforts to continually improving their capacity to reduce the rate of conversion of agricultural lands, forests and wetlands as well as the rate of changing landscapes from more natural lands that soak up pollutants to those that are paved over, hardscaped or otherwise impervious. Strategies should be developed for supporting local governments' and others' efforts in reducing these rates by 2025 and beyond.</p>	<ul style="list-style-type: none"> <li>The Options and Evaluation Outcome was revised to focus on supporting local government efforts to reduce conversion of high-conservation priority lands.</li> </ul>
<b>14. Public Access</b>	<ul style="list-style-type: none"> <li>Access to recreational opportunities is determined by county and town authorities, and divisions within state government. This results in a system of uncoordinated fees, rules, hours and resources that leaves users confused and frustrated.</li> <li>Recognize and encourage partnerships that include the private sector, other institutions, and governmental agencies.</li> <li>Increase access sites for kayakers, anglers and swimmers in particular.</li> <li>New or expanded facilities create more pollution, and the cost to control it is an inevitable consequence.</li> </ul>	<p><b>Introduction:</b> Physical access to the Bay and its tributaries is very limited with real consequences for quality of life, local economies, and long-term conservation. Increasing public access to local waterways for fishing, swimming, boating, and other activities fosters a shared sense of responsibility and increased stewardship that supports Bay watershed restoration goals.</p> <p><b>Goal:</b> Expand public access to the Bay and its tributaries through existing and new local, state and federal parks, refuges, reserves, trails and partner sites.</p> <p><b>Public Access Site Development Outcome:</b> By 2025, add 300 new public-access sites, with a strong emphasis on providing opportunities for boating, swimming and fishing, where feasible. (2010 baseline year)</p>	<ul style="list-style-type: none"> <li>No changes were made to the goal or outcome.</li> <li>Concerns raised in public comments can be addressed through management strategy development.</li> </ul>
<b>15. Environmental Literacy</b>	<ul style="list-style-type: none"> <li>Incorporate a clear, distinct sustainable schools outcome to align with the Mid-Atlantic Elementary and Secondary Environmental Literacy Strategy.</li> </ul>	<p><b>Introduction:</b> The future well-being of the Chesapeake Bay watershed will soon rest in the hands of its youngest citizens—more than three million students in kindergarten</p>	

	<ul style="list-style-type: none"><li>State and local school systems should take a systemic approach to environmental education to ensure programs and opportunities ultimately reach every student and teacher in the watershed.</li><li>Expand the goal and outcomes to include measurable metrics.</li></ul>	<p>through 12th grade. Establishing strong, targeted environmental education programs now provides a vital foundation for these future watershed stewards.</p> <p><b>Goal:</b> Enable every students in the region to graduate with the knowledge and skills to use scientific evidence and citizenship skills to act responsibly to protect and restore their local watershed.</p> <p><b>Meaningful Watershed Educational Experience Student Outcome:</b> Continually increase the number of students' age-appropriate understanding of the watershed through participation in participating in teacher-supported, meaningful watershed educational experiences and rigorous, inquiry-based instruction, with a target of at least one meaningful watershed educational experience in elementary, middle and high school depending on available resources.</p> <p><b>School and School System Model Development Sustainable Schools Outcome:</b> Support and highlight models of sustainable schools and local education agencies that use system-wide approaches for environmental education. Continually increase the number of schools in the region that reduce the impact of their buildings and grounds on their local watershed, environment, and human health through best practices, including student-led protection and restoration projects.</p> <p><b>Environmental Literacy Planning Outcome:</b> Each participating Bay jurisdiction should develop a comprehensive and systemic approach to environmental literacy for all students in the region that includes policies, practices and voluntary</p>	<ul style="list-style-type: none"><li>The Environmental Literacy Outcomes were revised to reflect the need to continually increase student environmental literacy and provide flexibility to jurisdictions in how they achieve these outcomes.</li></ul>
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		<p>metrics that support the environmental literacy Goal and Outcomes of this agreement.</p> <p><del><b>Environmental Literacy Metrics Outcome:</b> By 2014, develop baseline metrics to establish and measure outcomes related to student participation in teacher-supported meaningful watershed educational experiences and related activities.</del></p>	<ul style="list-style-type: none"> <li>The Metrics Outcome was deleted as a stand-alone outcome, but metrics are addressed in the Planning Outcome.</li> </ul>
<b>16. Climate Change, Resiliency</b>	<ul style="list-style-type: none"> <li>Revise the term “changing environmental conditions” to be “climate change.”</li> <li>Commit to researching climate resiliency and adaptation, and evaluating the impacts and risks of climate change and sea level rise as related to the achievement of the other goals and outcomes. Commit to creating climate resiliency and adaptation strategies.</li> <li>The science available regarding climate change is not strong enough. Do not include it in the agreement.</li> </ul>	<p><b>Introduction:</b> Changing climatic and sea level conditions may alter the Bay ecosystem and human activities, requiring adjustment to policies, programs and projects to successfully achieve our restoration and protection goals for the Chesapeake Bay and its watershed. This challenge requires careful monitoring and assessment of these impacts and application of this knowledge to policies, programs and projects.</p> <p><b>Goal:</b> Increase the resiliency of the Chesapeake Bay watershed including its living resources, habitats, public infrastructure and communities to withstand adverse impacts from changing environmental and climate conditions.</p> <p><b>Monitoring and Assessment Outcome:</b> Continually monitor and assess the trends and likely impacts of changing climatic and sea level conditions on the Chesapeake Bay ecosystem, including the effectiveness of restoration and protection policies, programs and projects.</p> <p><b>Adaptation Outcome:</b> Continually pursue, design and construct restoration and protection projects to enhance the resiliency of Bay and aquatic ecosystems from the impacts of coastal erosion,</p>	<ul style="list-style-type: none"> <li>Changing climatic conditions and sea level conditions influence the restoration and protection efforts in many ways. Being agile in our management of these efforts to ensure that the watershed and the Bay are resilient to these changes will be important to achieving and maintaining the goals of this agreement. It is important to consider these changing conditions in each management strategy developed, and to ensure that we are monitoring and assessing the trends and impacts, and continue to adapt to those changes as they occur. Therefore, a new Climate Resiliency Goal was added with an introduction and two outcomes focused on monitoring, assessment, and adaptation.</li> </ul>

		coastal flooding, more intense and more frequent storms and sea level rise.	
<b>17. Conowingo Dam, Dam Sediment Pollution</b>	<ul style="list-style-type: none"> <li>The system of dams and reservoirs are silted in and no longer capturing sediment and pollution like they had when the dams were constructed. Focus on maintenance to increase dam sediment trapping capabilities.</li> <li>Require plans for addressing sediment that has built up behind dams in excess of ten feet high, and plans to minimize impacts on downstream areas. Add an appropriate outcome to identify a process and timeline for development of a plan and its implementation.</li> </ul>	Not included in agreement.	<ul style="list-style-type: none"> <li>The Chesapeake Bay Program felt that this issue is being adequately addressed through other means including the Army Corps of Engineers' Lower Susquehanna River Watershed Assessment study to be released later in 2014, the Federal Energy Regulatory Commission Conowingo Dam relicensing effort, enhanced lower Susquehanna River monitoring, research and modeling, and the Chesapeake Bay TMDL 2017 Midpoint Assessment.</li> </ul>
<b>18. Hydraulic Fracturing</b>	<ul style="list-style-type: none"> <li>Not addressing this growing source of nutrient and sediment pollution in the watershed is a glaring omission.</li> <li>Each jurisdiction should put a policy in place for offsetting the impacts of land use change associated with the shale gas industry.</li> <li>Conduct comprehensive environmental impact analyses for the fracking industry, including well-pads, roads, and pipeline impacts related to any increase in erosion and stormwater runoff of nutrients and sediment from drilling operations. Include projections of how the impacts will increase based on projected growth of the industry. Based on the assessment, develop guidance to ensure relevant states scientifically address options to reduce loadings and comply with obligations under the Chesapeake Bay TMDL.</li> </ul>	Not included in agreement	<ul style="list-style-type: none"> <li>The Chesapeake Bay Program felt that the individual jurisdictions are addressing this issue through their own regulations and policies as appropriate.</li> <li>The impacts of fracking on land use are being considered through Land Use Change Assessments as part of the 2017 TMDL Mid-Point Assessment.</li> </ul>
<b>19. Trash</b>	<ul style="list-style-type: none"> <li>Gross pollutants are missing from the water quality section. These include cigarette butts, plastic bottles, candy wrappers, leaves, Styrofoam cups, plates, clamshells etc.</li> <li>Prevent floating trash and leaf litter from reaching the watershed in storm water runoff. Address program to reduce litter in the agreement.</li> </ul>	Not included in agreement.	<ul style="list-style-type: none"> <li>The Chesapeake Bay Program determined that this issue should be considered as part of the management strategy for the Citizen Stewardship Goal and/or its outcomes. Maryland has two of the nation's three trash Total Maximum Daily Loads (TMDL). The Anacostia and its tributaries were listed as impaired by trash in 2006 and its TMDL went into place in 2010. Baltimore Harbor was</li> </ul>

	<ul style="list-style-type: none"> <li>Talking about trash pollution, and the solutions to preventing and removing it, can engage residents watershed-wide, preparing them to become more engaged in other facets of the restoration plan. Even citizens disconnected from local water bodies recognize the blight caused by litter blowing down the street, or stuck in trees. In the water, it is the most visible pollutant.</li> </ul>		listed as impaired since 2008 and its TMDL is now being finalized.
<b>20. Facilitating Adaptive Management</b>	<ul style="list-style-type: none"> <li>Every outcome should reflect the change that is desired in the system, the continual nature of work on the goals and outcomes.</li> </ul>	<b>See revised outcomes:</b> Oyster, Forage Fish, Fish Habitat, Wetlands, Black Duck, Stream Health, Fish Passage, SAV, Forest Buffer, Tree Canopy, Water Quality Standards Attainment, Toxic Contaminants Research, Toxic Contaminants Policy and Prevention, Local Leadership, Land Use Methods and Metrics, Land Use Options Evaluation, Student, Sustainable Schools, Climate Monitoring and Assessment, Climate Adaptation.	<ul style="list-style-type: none"> <li>Outcomes have been edited to incorporate such changes where feasible.</li> <li>Management strategies will be designed to facilitate adaptive management, and it continues to be a principle of the Chesapeake Bay Program partnership.</li> </ul>
<b>21. Defining Metrics, Baselines, Dates, and Terms</b>	<ul style="list-style-type: none"> <li>Define: restore, protect, support, highlight, “meaningful watershed experience,”</li> <li>Explain all baselines.</li> <li>Provide reasoning for all outcome target numbers.</li> </ul>	Refer to the 1-page Outcome Justification sheets for this information, found at <a href="http://www.chesapeakebay.net/publications/categories/category/outcome">http://www.chesapeakebay.net/publications/categories/category/outcome</a>	<ul style="list-style-type: none"> <li>Outcome Justification sheets have been released in tandem with the final agreement in response to the request for definitions and baselines.</li> <li>To access these, visit:  <a href="http://www.chesapeakebay.net/publications/categories/category/outcome">http://www.chesapeakebay.net/publications/categories/category/outcome</a> </li> </ul>
<b>22. Funding, Financing, and Affordability</b>	<ul style="list-style-type: none"> <li>Provide and facilitate more financial assistance at the local level.</li> <li>Address concepts of affordability within the agreement.</li> <li>Create a Financial Advisory Committee to provide recommendations on funding decisions for increased financial efficiency.</li> </ul>	<b>Preamble, page 3, paragraph 2:</b> This Chesapeake Bay Watershed Agreement acknowledges that the Partnership cannot address every issue at once and that progress must be made in a strategic manner, focusing on efforts that will achieve the most cost-effective results.  <b>Local Leadership Outcome:</b> Continually increase the knowledge and capacity of local officials on issues related to water resources and in the implementation of economic and policy incentives that will support local conservation actions.	<ul style="list-style-type: none"> <li>Local governments will be engaged in management strategy development and implementation to facilitate addressing local financial concerns.</li> <li>A Local Leadership Outcome has been added under the Stewardship Goal (see page 8).</li> <li>The concept of a Financial Advisory Committee will be brought to the Chesapeake Bay Program’s Management Board at a future meeting.</li> </ul>



**This summary reflects comments received from:**

**Organizations**

Allegheny Highlands Alliance	Environmental Finance Center, UMD	Rock Creek Conservancy
Alliance for the Chesapeake Bay	Friends of the Rappahannock	Sierra Club
American Rivers	HRSD	Sierra Club, Pennsylvania Chapter
Anacostia Watershed Citizens Advisory Committee	James River Association	Southern Environmental Law Center
Anacostia Watershed Society	Lower Susquehanna Riverkeeper	State Water Quality Advisory Committee
Ann’s Backyard Forest	MAMWA	Stewards of the Lower Susquehanna, Inc.
Audubon Maryland-DC	Maryland Conservation Council	Stormwater Workgroup, Choose Clean Water Coalition
Beyond Pesticides	Maryland Environmental Health Network	Susquehanna Greenway Partnership
Binghamton-Johnson City Join Sewage Board	Maryland Pesticide Network	The Nature Conservancy
Cecil Land Use Association	Maryland State Builders Association	Trash Free Maryland Alliance
Center for Progressive Reform	Metropolitan Washington Council of Governments	Trout Unlimited
Chesapeake Bay Foundation	Midshore Riverkeeper Conservancy	Upper Susquehanna Coalition
Chesapeake Bay Trust	National Parks Conservation Association	VAMWA
Chesapeake Conservancy	National Water Quality Trading Alliance	Virginia Agribusiness Council
Choose Clean Water Coalition	National Wildlife Federation	Virginia Association of Soil & Water Conservation Districts
City of Chesapeake, Virginia	Natural Resources Defense Council	Virginia Conservation Network
Clean Chesapeake Coalition	Otsego County Soil and Water Conservation District	Virginia Grain Producers Association
Clean Water Action	Penn Future	Virginia League of Conservation Voters
Coalition for Smarter Growth	PennAg	We Act
Coastal Conservation Association, Maryland	Pennsylvania Campaign for Clean Water	West Virginia Rivers Coalition
Conservation Pennsylvania	Pennsylvania Farm Bureau	Wetlands Watch
Eastern Shore Land Conservancy	Potomac Conservancy	
Elizabeth River Project	Potomac Riverkeeper	

Individuals

Gerald W. Winegrad	Shari Glenn	John P. Sarbanes	Theresa Hebron	Debbie Slack	Charlotte Brewer
Wayne T. Gilchrest	Colleen Calimer	Catherine Adams	Diana Henderson	Raymond Smith	Robin Broder
Joseph D. Tydings	Cathy Zumbrun	Eleanor M. Amidon	William Hosp	Sheryl Smith	Alan Bromborsky
Tom Horton	David Hawxhurst	Nils Bahringer	Tom Hurt	Maya White Sparks	Kirsten Burger
Gerrit-Jan Knaap	Nadine Feiler	Duane Benton	James Jeffrey	Marilyn South	John Cabala
Robert. A. Bachman	Macon Chandler	John Blandin	Gene Karpinski	Judith Steel	Vicki Carter
Barbara Samorajczyk	James Donoghue	Sam Bleicher	Joyce T. Kerns	Michael Testerman	Beverly Chemai
Diana L. Muller	Alex Hirtle	Jim Boomer	Fred Lavy	Stephen Vandivere	Angela Christman
Ellen Moyer	Terry Gunther	Henry Broadus	David Leithauser	Patricia VonOhlen	Bruce Collette, Ph.D.
Fred Kelly	Jonathan Freedlander	R. Brown	Gwynn Litchfield	Evelyn Waring	Mimi Cooper
Frederick Tutman	Robin Broder	Steven Bruckner	Lois Lommel	Christa Watters	G. Countryman-Mills
Kurt Riegel	Jeanne McCann	Jeffrey Bussells	Selma Lynch	Sandra Wilson	Rockville, MD
Kathy Phillips	Matt Logan	Steven Carter-Lovejoy	Ann Mallek	Deborah Wooten	Catherine Cummings
Ray Sullivan	Lee Sudduth	Loralee Clark	Donna Malvin	Melinda Allanson	Michael C. Davie
Michael R Helfrich	Nichole Lewis	Virginia Cowles	Marjorie Merkey	Donna Almquist	Daren Davis
Timothy D. Junkin	Ralph Heimlich	Mary Crutchfield	Derek Meyer	Sholey Argani	Randy Davis
Robert Gallagher	Alyce Ortuzar	Natalie DeBoer	Allen Muchnick	Katherine Babiak	Lawrie Deering
Josh Tulkin	Paul Slunt	Paul DiMarco	Joel Mulder	Kristopher Baptiste	Daniel Dewberry
Suzanne Pogell	David E. Cadell	Karen Fedorov	Bernard Nagelvoort	Dave Bard	Helena Doerr
Russell B. Stevenson	Jeffrey Dawson	Lareta Finger	George Paine	Ellen E. Barfield	Russell Donnelly
Delegate C. Richard	Marcello DelVecchio	Frederick Fisher	Kristin Peckman	Kathleen Bartolomeo	Patti Doyen
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Jeff Kelble	Tatiana Marquez	Emily Francis	Gray Puryear	Kathleen Bentley	Wayne Dusa
Joanna Diamond	Irv Sheffey	Megan Gallagher	Peter Richardson	Ruth Berlin	Elizabeth Elkins
Brian Oates	Richard Slagle	Joseph Glombiak	Sue Ridd	Bonnie Bick	Ross Feldner
Greg Kolarik	Meredith Dash	Amy Gould	Edward Savage	Judy Billage	Vicki Ferguson
Sandra Martin	Ridgway Hall	Laura Greenleaf	Ken Seely	Catherine Bisnett	Harvey Fernbach
Bonita Mochan	Rupert Rossetti	Kathy Harris	Judith Shematek	Ryan Bradley	Stuart Fields

Mary Aloyse Firestone	Jeanne McCann	Rita Sellers	Anne Bastian	William DuSold	Genevieve Jacobs
Barb France	Mary McCoy	Benna Sherman	David Bauer	Toril Oien Eller	Stephanie Joyner
Timothy Furst	Kitty Mcilroy	Rusty Simpson	Henry Berkowitz	Diane Elliot	Mary Keane
Margaret Gallagher	Douglas McNeill	Claudia Smith	Janice Bernard	Donna Farrington	Ellen Kent
Robert Gammon	Julia Miller	Clive Smith	Silvia Bertano	Jim Fary	Justine King
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Jonathan Goller	Robert K. Musil	Lawrence Tagrin	Judith Brown	Doris Fiorentino	Ruth Labelle
Tierney Grinavic	Christopher Nelson	Danielle Tarr	Marney Bruce	Bobbie Flowers	Judith Layman
Deborah Grossman	Jean Newcomb	Dorothy L. Tartaglia	Paul Burke	Beverly Foster	Cheryl Lee
Tatiana Hamboyan Harrison	Pam Orr	Michael Uhl	Leslie Calambro	Ellen Frieder	Lena Lewis
Molly Hauck	Alice Parks	Jennifer Vaccaro	Denise Cameron	Jeffrey Freilich	Edna Litten
Michael Helfrich	Heather Phipps	Donald Watson	Benita Campbell	Kimberly Frey	Elaine Livingston
Zohara Hieronimus	Bobbi Ponce-Barger	J.B. Van Wely	Edward Carey	Barbara Gabrielsen	Ronald and Mary Lockwood
Matthew Humphrey	Steven Porter	Rob White	Beth Carr	Cheryl Gale	Catherine Lowry
Michael Ichniowski	Rebecca Poston	Frank Wilsey	Martin Cervantez	Margaret Gallagher	Jeff Lowry
A. John Janos Jr.	Heidi Pringle	Virginia Woolridge	Cindy Chuplis	Valerie Gilbert	Lyn Lowry
Rheta Johnson	Cynthia Privitera	David Yanosik	Joan Clement	Art Glick	Kathleen Luisa
Stephanie Joyner	Bonnie Raindrop	Mark Alexander	Edith Coleman	Sonia Goldstein	K. M.
Patricia Kessler	Jacob R. Raitt	Joseph Alfano	Laura Costas	Mary Graf	Keef M.
Jennifer Kirschnick	Carol Reinsberg	Lisa Allarde	Vanessa Cullen	Robert Gunther	Brian Madison
Brad Klipner	Gail Rice	Shannon Angarita	Priscilla Delaney	Molly Hauck	Cinzia Mattiace
Jeff Komisarof	Ira Rifkim	Maryanne Appel	Barbar D'Emilio	Jill Herbers	Robin Mayerat
Elizabeth Koopman	Erin Riggin	Aimee Arceo	Harold Denenberg	Catherine Higgins-Bisnett	James McBride
George Kramer	Rebecca Ruggles	Sholey Argani	Jeanene Denlinger	Grace Holden	Sally McDermott
Elinore Krell	Patti Ruocco	Daniel Aunkst	Erica Denner	Leon Holzman	Mary Ann McFarland
Lisa Kuder	John Sackett	Frank Ayers	Mike Dobles	Debra Hoven	Rebecca Meador
Tony Langbehn	Carol Schreter	Kenneth Babineau	Helena Doerr	Lucy Howard	Bill Meng
M. Langelan	Christopher Schutz	Sidne Baglini	Carl Doll	Kim Hutchinson	Susan Messerschmitt
Cheryl Lee	Kurt Schwarz	Gerritt and Elizabeth Baker-Smith	Judith Dove	Sharon Intilli	Emily Metz
John Martin	Martha Scott		Wayne Dusa	Irena Jankunas	Jude Misurelli

Charity Moschopoulos	Andrew Serafin	Rosalind Zitner	Allen Straughan	Joseph Valentine	Joy Lorien
Elizabeth Mostov	Richard Shannahan	Kenn Pattison	Jim	Frank DiGialleonardo	Sacoby Wilson
Debra Myers	Charles Shelton	Mary Boehm	Robert Cox	Harry L. Hoch	Lisa Arrasmith
Jamie Munera	Debbie Slack	Joe Davis	Marc Miller	Hans de Bruijin	Wesley Foltz
Karen Murphy	Tyler Smart	Steven Smith	Jim Crable	Leslie Wilcox	Wayne Eubanks
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Dianora Niccolini	David L. Stermer, Sr.	Tom Coleman	Kristin G. Cook	Laurie Long	Elizabeth Johns
Shelley Ottenbrite	Shirley Strang	Matt Shultz	Outi Denny	Bicky Redman	Deirdre Payne
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John Papandera	Jane Sunshine	Sara Painter	Frances Alderson	D Doyle	Bonnie Dixon
Don Patterson	James Sylver	K	Gene Mazzilli	Mike Lofton	Abigail Adelman
Austin Paulnack	Wayne Teel	James Blair	John Mathwin	Douglas Backmann	Nitin Agarwal
Elsa Peterson	Autumn Thomas	David Graybill	Philip Anderson	Wilmer Stoneman	R. Agarwal
Eric Plaisance	Elizabeth Tobier	Tim Elder	John Schofield	Bernice O'Brien	Ravindra Agarwal
Nicholas Prychodko	Patricia Toolan	Jerry O'Connor	Ron Lukens	Jim Baird	Mary Aist
Linda Reens	Richard Tregidgo	Monty Hawkins	Bubby Powley	David L. Konick	Asadullah Akhund
Wanda Remington	Cassandra Treppeda	Rita Varley	Bill Ferris	Hal Hunter	John Akwei
Nidia Rocha	Ellen Van Horn	Michael Keene	Laura	Anthony Lavato	Charles Alexander
Abi Rome	Betty J. Van Wicklen	Melissa Bailey	Mary Picardi	Sandra S. Cartwright-Brown	Nancy Allgaier
Patricia Rossi	Eva-Maria von Bronk	Gregory Moser	Lee Meadows	Nic H.	Kathy Allison
Joe Sanders	Louise Wallace	A. Jay Peikin	Gina Navarro	Theresa M Winter	Anne Ambler
Vin Santaiti	Julie Warren	Chris Taneyhill	Bob Parkinson	Holly Glenn	Melora Anderson
Rosemarie Sawdon	Nicole Weber	Dennis S.	Rebecca Kolberg	Carmen Skarlupka	Steve Anderson
Lois Sayers	Linda Weinberg	Justin Weiser	Stuart Stainman	K Christie	Diance Andrulonis
Vivian Schatz	Eleanor Weisman	Margie Taneyhill	Claire Sargo	Rick Kohler	Andres Antuna
Ian Schlakman	Mike Weyand	Ice trout	Dave Briglio	Chad	Sholey Argani
E.S. Schloss	Barbara White	Carolyn Kulesza	Tyler Wakefield	Hank McComas	Fredrick Ateto
JoAnn Schneider	Kimberly Wiley	Samuel Owings	Chris Walker	Jack Chesson	Dominic Austin
Judy Scriptunas	Corinne Williamson	David Conlon	John B. Reeves	Terri Freeborn	Gillian Austin
Kimberly Seger	Barbara Yoffee	Severn Savage	Patrick Torborg	Laura Booth	Elizabeth Awuah

John Bahen	Joseph Blair	Timothy Bushman	Kristin Cook	Sloan Denton	Rebecca Ellis
Badia Baker	Madeleine Blake	Donald Byrne	Lillian Cooperman	Hilde Depauw	Susan El-Zaatari
Katherine Baker	Erik Bloom	Glenn Byrne	Carol Corcoran	Matt Dernoga	Marcelle Empey
Marilyn Baker	Susan Blount	Wes Cairns	Linda Cornwell	Wesley Derr	Norma Enstrom
JR Ball	Bryan Boeskin	C.Callaghan	Joan Coughlin	Angela Desmond	Cynthia Erville
William Ballweber	Katherine Boeskin	Jennifer Campbell	Sandrine Coulon	Schooner DeYoung	Geynell Eskite
Richard Bank	Deborah Boggs	Dominic Cappella	Ken Court	Dessie Diamond	Dagmar Fabian
Susan Bannister	Margaret Boles	Krista Cappelletti	Mary Jean Coyne	Mary Jane Di Martino	Cheryl Fahlman
Clifford Barr	Marcia Bookoff	Jackie Carey	James Crawford	Sylvia Diss	Cynthia Farringer
James Barrett	Leanah Bouvier	Lawrence Carmona	Dane Crook	Prakaash Divecha	Carol Fegan
Jeanette Bartelt	Zack Bowser	Roy Ann Carney	Ronald Crump	Helena Doerr	Elliott and Adele Fein
William Bartlett	Sharon Bowyer	Ruth Carr	Ruth Crump	Beth Doherty	Suzanne Feldman
Kathleen Bartolomeo	Megan Braganca	Carol Casey	Denise Curry	Russel Donnelly	Daniel Fewster
Cathy Martin	Thomas Bragg	Rebecca Ce	Laura Cutler	Sigrid Dorf	Barbara Giligenzi
Anne Bastian	Pamela Brandau	Giordanoa Checchi	Kim Cutler	Gloria Dosch	Molly Finch
Natalie Batovskey	Patricia Brech	Beverly Chemai	Jaipal Dadlani	Kenneth Douglas	Barbara Fink
Ivano Battistella	Timothy Breen	David Cherry	Nancy Ann da Kay	Judith Dove	Harry Fink
Craig Beach	Ann Brennan-Zelenka	Carolyn Chester	Arianne Dalton	Lucy Duff	Stuart Fishelman
Linda Beam	Richard Bewster	Shirley Christie	Gale Dashiell	William Duncan	Hillary Fisher
Willa Beam	Gerald Brown	Carolyn Clapp	Barbara Davidson	Stephen Durkin	Karen Fisher
Debra Bean	Marcia Brown	Charles Clarke	Gail Davidson	William Dusold	Shalom Fisher
Froydis Beckerman	Nelson Brown	Joan Clement	Lynn Davidson	Madina Dzhikaeva	Judy Folus
Gerald Beemer	Morita Bruce	Jessica Coats	Allan Davis	Betsy Eastham	Carol Fordonski
Christel Bel	Janet Bruns	Eileen Coffee	Daren Davis	Arthur Eaton	Calvin Foster Jr.
Agnieszka Beletsky	Michael Bucci	Geraldine Cohen	Nancy Davis	Carolyn Ebel	Vicky Foxworth
Jennie Bell	Judy Bucci	George Compton	Sharon Davlin	Franziska Eber	Barbara France
Michael Benedict	Carol Bullard-Bates	B. Connelley	Richard A. Day Jr.	Christopher Ecker	Ann Frankowski
Rich Bianchi	Brenda Bunting	F. Conlon	Carol Dean	Scott Eden	Michael Freedman
Bonnie Bick	Lilian Burch	Georgia Conroy	Theresa Delcimmuto	Margie Ehart	Melissa Frequin
Barbara Bien	Carol Burdick	Berry Considine	Alysa Delgado	Norma Eagles	Emily Friedman
Catharine Billey	Mary Burton	Paul Converse	Edward Demers	Julie Elfin	Jennifer Frock
Michael Berla	Donna Buscemi	Elaine Cook	Kelley Dempsey	Linda Elliott	Kevin Frohlich

Gabrielle Fry	Joan Gugerty	Maria Hill	Stephanie Joyner	Hillary Kruh	Nicole Lust
Amanda Fuhrmann	Kay Guinane	Kelvin Hobson	Lewis Junior	Lisa Kuder	Janice Ma
Marsha Fuller	Ann Gumula	Sharon Hoot	Jessica Justice	Krista Kurth	Robert Macluskie
Dawn Galindo	Gosha Gurvich	Barbara Horne	Ronald Kaltenbaugh	Gila Landman	Simon Magaziner
Karen Gallagher	Diane Gutterman	Laurie Hortie	Robyn Kanter	E. Anthony Langbehn	Lynn Maher
Robert Gammon	Mary Haber	Donald Howard	Janet Karasinski	Melissa Langrehr	John Mahoney
Donald Gangloff	Carol Hagar	Ken Howard	Sondra Katz	David Larrabee	Dohne Malkin
Xavier Garcia	Elliott Haines III	Tara Huber	Doug Kelley	Dina Lassow	Sophia Maravell
Sharon Garlena	Ellen Halbert	John Hudson	Karen Kerber	Francis Lattanzi	Catherine Marcoux
Elizabeth Gelfeld	Adnan Hameed	Mary Humphrey	Susan Kern	Kenneth Laureys	Mandy Marcuccilli-Strop
Moira Gentry-Moore	Jinet Hamlin	David Hurley	John Kester	David LaVallee	Albert J. Martin
Gaciela Gerber	Kevin Harper	Carol Hutton	Geoffrey Kidd	Raymond Laverghetta	John Martin
Romola Ghulamali	Marietta Harris	Victoria Iannantuono	Maurice Kindle	Marguerite Lavine	Rachel Martin
K. Gibbs	Tatiana Hamboyan Harrison	L. Iannuzzi	Beatrice Kingsbury	Meya Law	Jennifer Martucci
Ariana Giles	Thomas Hasler	Laurel Imlay	Gongsan Kim	Harry Lelffmann	George Maslar
Carol Gillingham	Molly Hauck	Linda Immler	Amanda Kistler	Valerie Leonard	Edamire Mattei
Sarah Glacken	Mary Juanita Hayes	Andrew Ireland	Debbie Kleinmann	Gary Lepore	Bernard Matus
Ruth Goldbloom	Jerry Hazelwood	Yvonne Irvin	Kim Klump	Susan Levine	William Maynard
Robert Gole	Rachel Healy	Edward Joell	Brad Knopf	Ava Lewis	John McCannon
David Gonzalet	Colin Hebert	Julia Jackson	Harry Knox	Beverly Lewis	Charles McCaslin
Gustavo Gonzalez	Joanne Heckman	Sheena Jacob	Sue Mi Ko	Dudley Lindsley	Claire McCullough
Vanessa Gonzalez-Green	Phyllis Heffner	Maile Jacobson	Arlene Koby	Richard Lipman	Tim McDougall
Jim Gordon	Raymond Heil	Susan Jacobson	Elizabeth Koopman	Lynn Liptak	Daniel McDonald
Jennie Gosche	Gail Helinski	Anthony James	Jane Kostenko	Taina Litwak	Georgia McDonald
Barbara Gottlieb	Michael Heller	Edward Jarman	Ildiko Kovach	Pamela Livermore	Christine McElroy
Naomi Gottlieb-Miller	Doris Henderson	Maria Jaunakais	Talia Kowitt	James Llewellyn	Edgar McFadden
Debbie Gousha	Matthew Henry	Rebecca Jessop	George Kramer	Sandra Llewellyn	Thomas McGonigle
Paul Grabenstein	Ronald L. Henry	Patty Johnson	Terry Krebs	Mark Long	Eric McKenzie
Dori Grasso	William C. Henry	Spiros Johnson	Kristin Kreit	Ed Lough	Anna McNaught
Joan Green	Frances Hickey	Allison Jones	Kevin Kriescher	John Lowe	Douglas McNeill
Anne Greene	Alex Hicks	Gregory Jones	Anu Krishnamoorthy	Diane Lowe	Ellen McNeirney
Rebecca Gregory	Catherine Higgins-Bisnett	Dale Jordan	Joy Kroeger-Mappes	Arvin Lubetkin	Gayl Meier



Tatiana Mendez	Linda Nelson	Lorraine Pearsall	E. Ann Reindollar	Leigh Sands	Alma Sharp
Patricia Mensing	Robert Nelson	Cass Peluso	Carol Reinsberg	Albert Sanguillen	Carrie Shaw
Nicholas Metheny	Stephen Nelson	Kathy Penn	Dave Renaud	Mark Santangelo	Shannon Shea
Nancy Meyer	Eugenia Newberg	Jessica Peraza	Jessica Reynolds	Ellen Scaruffi	Steve Sheffield
Chris Miller	Chris Nicholson	Ronald Perkins	Donna Rice	Michael Scepaniak	Mary Beth Sheridan
Jane I. Miller Fuller	Simone Nicholson	Sarah Peters	Bishopcephas Richardson	Ke Schaffer	Omar Siddique
Kathryn Miller	Mark Nigro	Eugene Peterson	Carol Richardson	Virginia Schaible	Jaime Sigaran
Laurie Miller	Maria Novitskaya	Roger Peterson	Ktr Richmond	Pamela Schaming	Thamnu Sihsobhon
Maxine Miller	Frances Nyce	Michael Phelps	Carolyn Ricketts	Nancy Scherer	Linda Silversmith
Hope Millington	Marie P. O'Brien	James Phillips	Barbara Risacher	Patricia Schermerhorn	Michele Shipp
Amanda Milster	Helen O'Connell	Lynne Phillips	David Riston	Holly Schisler	Mary Silva
Sunil Misra	Paul O'Hearn	Paula Phillips	Edgar Rivas	Ronald Schlesinger	Jane Skillman
Kenneth Mitchell	David O'Leary	Nancy Pirtle-Connelly	Janet Rivas	Martha Schley	Betsy Slack
Jacqueline Mitchell	Patricia O'Leary	Marie Plante	Minerva Rivera	Janet Schlosser	Leigh Slater
Corrinne Mohnasky	Mary Olson	Andrea Plautz	Therese Robbins	Ted Schmeckpeper	Clive Smith
C. Albert Morey	Bernadette Onyenaka	April Plummer	Joseph Roberts	Christine Schmitthenner	David Smith
Carla Morris	Heather O'Regan	Sam Poikail	Howard Robinson	Ron Schorb	Linda Smith
Maryellen Morris	Jacki O'Reilly	Eugene Pometto	Carolyn Roeder	Anna Schrad	Ruth Smith
Carlene Moscatt	Alan Oresky	Robert Posner	Patricia Rodriguez	Jody Schulman	Sebastian Smoot
J. Moss	Nick Orrick	Dana Powers	Gayle B. Rosenberry	Joette Schulman	Joan Snyder
Debby Mount	Jacek Orzechowski	Heather Whitney Price	Benjamin Roth	Shana Schwartzberg	Michael Sodos
Kathy Mulhern	Todd Osborn	Stephen Price	Rita Rotunno	Brayton	Phillip Sokolove
Meghan Mulkerin	Carlos Osorio	Catherine Pringle	M. Roxbury	Veron Ica Schweyen	Lawrence Somer
Dixie Mullineaux	Louis Ostrach	Heidi Pringle	Larry Rubinstein	Martha Scott	David Somerville
Ronald Mutchnik	Connie Otto	Carol Purcell	Alan Rudan	Douglas Sedon	Robert Sorey
Charles Myers	Julie Parcels	Tim Pyne	Lisa Ruthman	Jim Seewagen	Marian Soriano
Jeffrey Myers	Stanton Paris	Gale Quist	Kathryn Ruud	May Ruth Seidel	Jeffrey Spendelow
Rosalie Nabors	Kay Parnes	Jennifer Range	Luisa Saffiotti	Lynne Sendejo	Nancy Stafford
Hikari Nakamoto	Sarah Parr	Laura Rankin	Linda Safley	Wayne Shankel	Merry Stinson
Curtis Neiderer	Christina Parry	Linda Redding	Maxwell Sanborn	Rhona Shanker	Renee Stockdale-Homic
E. Neiman	Barbara Patalics	Jane Redmond	Felicidad Sanchez	Richard Shannahan	Mark Stolorow
Christopher Nelson	David Pearl	Sue Reeb	Jessica Sanderson	Leo Shapiro	David Storm

Wayne Straight  
Janice Strange  
Patricia Strawbridge  
Kathleen Stumpf  
Anne Sturm  
Sirina Sucklal  
Clarence Sutton  
Diane Swanson  
Art Sweeny  
Mark Sweeny  
David Tagliente  
Dorothy Tartaglia  
Cynthia Taylor  
Louise Taylor  
Merideth Taylor  
Stephen Taylor  
Sallie Temple

Carla Tevelow  
Elizabeth Tevelow  
Algar Thagne  
Tom Thayer  
Gene Theroux  
Nathan P. Thomas, Sr.  
Crystal Thompson  
Dana Thompson  
Julie Thompson  
Herbert Thomson  
Alexander Thuronyi  
Jessalyn Timson  
Marta Tomic  
Ferold Torchenot  
Janis Totham-Davies  
Teresa Trucksess  
Christina Tseng

Dawn Turner  
Morris Turner  
Catherine Uruburo  
Holly Utz  
James Vance  
Liz Vanden Heuvel  
J. B. Van Wely  
Patricia Vargas  
Lisa Vaughan  
Nicole Veltre  
Daniel Vice  
Irene Villapol  
Bridgette Vitilio  
Art Wagner  
Brian Waidler  
Beverly Waidler  
Tracey Waite

Douglas Waldrop  
Theresa Waldspurger  
Susan Walker  
Barbara Wall  
Jacqueline Walsh  
Helene Waranch  
Sean Ward  
Elke Wardlaw  
William Watkins  
Andy Watson  
Jacqueline Wayland  
Nancy Webb  
Hal Weinstock  
Stanley Weitzman  
Marilyn Weitzman  
Stephanie Welp  
John Welton

Virginia Whalen  
Gerald White  
Katherine White  
Robbie White  
Jemima Wiafe  
Darin Wight  
Frank Wilsey  
Molly Wilson  
Steve Wilson  
Leslie Winston  
Kurt Wittstadt  
Alan Wojtalik  
Nikki Wojtalik  
Jay Wolf Schlossberg-Cohen  
Debbie Wolfe  
Mary Wolfe  
Stacey Wolfe

Kathleen Wolfrey  
Robert Woods  
Ellis Woodward  
Glen Worrell  
Theresa Worrell  
Sydney Wright  
Wynette Yao  
Chris Yoder  
Richard Young  
Phil Young  
William Young  
Michael Younkins  
Thad Zajdowicz  
Miyako Zeng  
Wayne Zink  
Katherine Zywan