



## TABLE OF CONTENTS

Introduction	1
Advisory Committee: Formation and Process Development	3
Advisory Committee Activities	7
Shared Vision Statement	9
Priority Water Resources Challenges List	10
Prioritized Strategies to Address the Challenge Areas	13
Ensure Sustainable Water Uses and Supplies	14
Protect and Improve Water Quality	16
Protect Ecological Health	19
Manage Human Land Use for Sustainability	21
Support Plan Implementation	24
Invited Panel Discussions at Advisory Committee Meetings	25
Plan Organization and Presentation	27
Draft Plan Review	28
Commission Briefings	31
Conclusion	31
<i>Tables</i>	
Table 1: Advisory Committee Meetings	7
Table 2: Results of Vision Statement Idea-Writing Exercise	11
Table 3: Water Use and Supply Challenge Area Recommendations from Advisory Committee Small Group Exercise	15
Table 4: Water Quality Challenge Area Recommendations from Advisory Committee Small Group Exercise	18

Table 5: Human Land Use Challenge Area Recommendations from Advisory Committee Small Group Exercise	23
Table 6: Summary of AC Member Responses to Reflection Questions at Final AC Meeting	33

*Appendices* 35

Note: Appendices to this report are marked with the prefix “AC” to distinguish them from appendices to the comprehensive plan.

Appendix AC-1: Member Interviews Report

Appendix AC-2: Advisory Committee Meeting Summaries

Appendix AC-3: Shared Vision Statement Slides

Appendix AC-4: Member Interviews Report: Water Uses and Supply Challenge Area

Appendix AC-5: Water Use and Supply Challenge Area Slides

Appendix AC-6: Water Quality Challenge Area Slides

Appendix AC-7: Member Interviews Report: Ecological Health Challenge Area

Appendix AC-8: Ecological Health Challenge Area Slides

Appendix AC-9: Ecological Health Recommendations Poll Results

Appendix AC-10: Sustainable Land Use Challenge Area Slides

Appendix AC-11: Plan Implementation Challenge Area Handout

Appendix AC-12: Federal Agency Panel Slides and Handout

Appendix AC-13: Water-Energy Planning Nexus Panel Slides

Appendix AC-14: ICPRB Commission Briefing Slides

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## INTRODUCTION

When the Interstate Commission on the Potomac River Basin (ICPRB) set out to develop a Potomac Basin Comprehensive Water Resources Plan, the Commission created a participatory process to inform plan development. ICPRB sought stakeholder engagement because it offers multiple benefits to water resources planning and builds a foundation for successful plan implementation. Input from stakeholders provides a source of guidance in plan development toward shared priorities and workable strategies. Stakeholder discussions are a valuable opportunity to mitigate potential conflicts during plan development instead of during plan implementation. Stakeholder involvement helps to create a broad sense of ownership in a plan and build commitments that will be needed for plan implementation and future plan revisions and adaptation.

ICPRB established an Advisory Committee (AC) as a primary channel for stakeholder input into the development of the plan. The AC provided for in-depth engagement by stakeholders in plan development and review. The AC delivered important inputs to the planning process, including:

- Shared vision for basin-wide water resource management
- Identification and prioritization of water issues to address in the plan
- Technical review of water issues
- Identification of strategies to address water issues
- Review of draft plan and related materials

The AC provided the ICPRB with the capacity to write a plan that reflects a broad range of stakeholder perspectives. Moreover, through its work, the AC developed into an engaged group of stakeholders that can advocate for plan implementation.

To structure and coordinate the work of the AC, ICPRB engaged the services of facilitators from Policy Works LLC. The facilitators, Kristin Rowles and Mark Masters, brought expertise and experience in environmental planning processes that helped to guide the AC through an engaging and constructive stakeholder participation process. The facilitators offered an approach and knowledge base focused on water resources planning. They guided the AC in completing its tasks and designed a process to provide the following outcomes:

- Participation by all members through a variety of types of interactions
- Shared understanding by members of complex technical materials
- Work products that could be used as direct inputs in the planning process
- Productive meetings that make the best use of members' time

- Constructive and proactive efforts to address potential conflicts
- Identification of common ground
- A forum for open dialogue in an atmosphere of trust

This report documents the Advisory Committee's work to support the development of the Potomac Basin Comprehensive Water Resources Plan. It describes the activities of the AC, summarizes AC inputs to the planning process, and compiles the major outputs of the AC's work in one document. It is intended to serve as a reference and support document for the comprehensive plan and to document the contributions of this committed group of stakeholders.

While the AC was the primary instrument for stakeholder engagement in development of the comprehensive plan, it was not the only way that ICPRB sought stakeholder input. The following additional opportunities for stakeholder involvement were provided by ICPRB in the development of the comprehensive plan:

- Communication via a mailing list of over 200 stakeholders including updates on the planning process and requests for specific input and document reviews
- Public review of the draft comprehensive plan
- Workshop with George Mason University students to discuss the comprehensive plan
- Regular opportunities for public comment at AC meetings
- Regular information updates through public communication outlets including the comprehensive plan website and the ICPRB [Facebook](#) and [Twitter](#) accounts

Stakeholder involvement in plan development was extensive and provided a grounding in real world conditions and workable solutions. Meaningful engagement with stakeholders provided ICPRB with a foundation for an effective and implementable comprehensive water resources plan. The Advisory Committee members committed substantial personal and organizational resources to this outcome, and their efforts will have an impact through improved understanding and management of water resources in the Potomac River basin.

## **ADVISORY COMMITTEE: FORMATION AND PROCESS DEVELOPMENT**

The AC membership was recruited by ICPRB with input from its Commissioners. Members were selected to represent a broad range of perspectives in the Potomac River basin, including water resource management, water and wastewater utilities, local government, agriculture, environmental organizations, recreational and commercial fisheries, and academic research. The members were also selected to represent the full geographic range of the basin from the headwaters to the river's mouth at the Chesapeake Bay and across the jurisdictions of the river's watershed, including Pennsylvania, West Virginia, Virginia, Maryland, and the District of Columbia. A list of the AC members is provided in the box.

Members were invited to participate in the Advisory Committee in the spring and summer of 2016. At that time, the Policy Works LLC facilitators worked with ICPRB staff to outline a process to structure the meetings and activities of the AC during the period of plan development. The facilitators developed a process plan to describe the sequencing, schedule, objectives, milestones, and deliverables for the AC's work. Over the planning period, the process plan served as a guide for AC activities. It was adapted, as needed, to meet the needs of the planning process as it proceeded. The most substantial change was the addition of a meeting at the end of the process to provide for full review of the draft plan by the AC in the spring of 2018.

Before any AC meetings were held, the facilitators conducted individual telephone interviews with the AC members. The focus of the interviews was to become acquainted with members' backgrounds and perspectives and understand their expectations for the process. The interviews were an opportunity for the facilitators to initiate relationships with the AC members. The facilitators interviewed 19 of the 22 original members of the AC at this stage in the process. Each interview took approximately 30 to 60 minutes and followed an interview guide that was developed by the facilitators with input from ICPRB staff. The interviews were focused on the following topics:

- Role of the AC in the comprehensive plan process
- AC meeting logistics
- Priority interests in Potomac River basin water resources management

## ADVISORY COMMITTEE MEMBERS

Hedrick Belin, Potomac Conservancy  
Charles Bennett, Knouse Foods Cooperative, Inc.  
Willem H. Brakel, Department of Environmental Science, American University  
Patrick Campbell, West Virginia Department of Environmental Protection  
Tolessa Deksissa, University of the District of Columbia  
Tom Devilbiss, Carroll County, Maryland  
Martin Gary, Potomac River Fisheries Commission  
John Grace, Maryland Department of the Environment  
Mark Guise, Gettysburg Municipal Authority  
Nancy Hausrath, City of Hagerstown, Maryland  
Tom Hilton, Washington Suburban Sanitary Commission  
Sara Jordan, Virginia Department of Environmental Quality  
Rhonda Manning, Pennsylvania Department of Environmental Protection  
Adam McClain, Adams County Conservation District, Pennsylvania  
Lori Mohr, Pennsylvania Department of Environmental Protection  
Mishelle Noble, Fairfax Water  
John Odenkirk, Virginia Department of Game and Inland Fisheries  
Jennifer Orr, Pennsylvania Department of Environmental Protection  
Mark Peterson, Loudoun Water  
Dusty Rood, Rodgers Consulting, Inc.  
Donald Schwartz, Bedford County, Pennsylvania Planning Commission  
Ed Snyder, Shepherd University, West Virginia  
Roland Steiner, Washington Suburban Sanitary Commission  
Mark Symborski, Maryland – National Capital Park and Planning Commission  
John Wirts, West Virginia Department of Environmental Protection

*The basin-wide comprehensive plan is dedicated to Herb Sachs, an ICPRB Commissioner who was a champion for the development of the comprehensive plan and who served on the Advisory Committee. In his career and his retirement years, he was a devoted to bringing people together to protect our shared water*

Most of the interviewees had a previous relationship with ICPRB and were familiar with the upcoming effort to develop a comprehensive plan. The interviews were an opportunity to review the plans for the AC meetings, discuss scheduling constraints, and go over communication preferences. Based on input from the interviews, the schedule was set for the first six (of seven) AC meetings from September 2016 to November 2017. (The seventh meeting was added to the schedule later in the process.)

The interviewees also provided input that guided planning for AC discussions, in its initial meetings, of what the comprehensive plan should address. In the interviews, AC members emphasized the following topics as their priority water resource issues:

- Water quantity, supply, and availability
- Water quality
- Source water protection

While no issues were identified by the interviewees as low priority, the following issues were generally discussed as a lower priority for the comprehensive plan than the above issues:

- Climate change
- Natural landscape
- Ecological health
- Floods and drought
- Science and education

Several interviewees commented that they believed some issues were already addressed by other programs and should not be a focus of this planning effort (e.g., water quality regulation, flooding, public education). The interviews were not used as a basis to eliminate any issues from AC discussion but offered preliminary input for the prioritization of issues for the planning process.

In the interviews, several AC members offered general suggestions for the planning process, including the following:

- Engage all stakeholders in the process.
- The process should make more of an effort to engage and address concerns of upstream communities and small utilities.
- The plan should clearly define its purpose and why it is different and important.

- The planning process could help to raise the profile of ICPRB.
- Plans are often a large mass of information that has been reported elsewhere. Don't re-hash what is already out there.
- Look at the Susquehanna River Basin Commission's comprehensive plan as an example for this plan.
- Be sure to focus on plan implementation and be sure it is realistic.
- We should understand that the plan is not the solution, it's the beginning.
- The planning process should be a "safe space" for stakeholders to voice concerns.
- Spoon-feed information and start the conversation.
- The plan might be more of a needs analysis than a plan. It will be something that we can bring before people who can get things done.

The facilitators documented the interviews with notes and a summary report, which were shared with ICPRB staff. The summary report is included as Appendix AC-1 to this report. The interviews provided the facilitators and ICPRB with input that guided planning for several activities that the AC completed together in its initial meetings. This input also was a source of ideas for what the shared vision statement should include, and it provided preliminary ideas on prioritization of issues for the comprehensive plan to address. It also supported the development of the planning process by providing a sense of the expectations of the AC members for the plan and the process.

Before the AC process began, ICPRB staff drafted several introductory chapters for the comprehensive plan in 2015. These chapters summarized technical materials on conditions in the watershed and described on-going water resource management. (These chapters were updated for the 2018 draft plan.) Many of the AC members reviewed the draft chapters before joining the AC, and their involvement in that review provided a useful starting point for the interview discussions. The draft chapters also provided a basis for technical presentations and discussions in the AC process.



## ADVISORY COMMITTEE ACTIVITIES

The AC process was structured around a series of seven meetings between September 2016 and March 2018 (see Table 1). Five of the meetings were held in person at the ICPRB office in Rockville, and two were conducted as conference calls. At the meetings, the AC heard technical presentations, interacted with expert panels, reviewed plan components, worked in small groups, and discussed topics as a full group.

**TABLE 1: ADVISORY COMMITTEE MEETINGS**

MEETING DATE	AGENDA TOPICS
<b>September 26, 2016</b>	<ul style="list-style-type: none"> <li>• Overview of ICPRB, Potomac River basin, and Comprehensive Plan</li> <li>• Advisory Committee Operations</li> <li>• Shared Vision Statement</li> <li>• Water Resources Challenges List</li> </ul>
<b>December 1, 2016 (conference call)</b>	<ul style="list-style-type: none"> <li>• Shared Vision Statement</li> <li>• Water Resources Challenges List</li> <li>• Technical Work Plan for Comprehensive Plan Development</li> </ul>
<b>March 2, 2017</b>	<ul style="list-style-type: none"> <li>• ICPRB Progress Report</li> <li>• Draft Table of Contents for Comprehensive Plan</li> <li>• Federal Agency Involvement Panel</li> <li>• Water-Energy Planning Nexus Panel</li> </ul>
<b>May 23, 2017</b>	<ul style="list-style-type: none"> <li>• Review of Technical Information and Development and Prioritization of Recommendations for Water Quality Challenge Area and Water Use and Supply Challenge Area</li> </ul>
<b>September 8, 2017 (conference call)</b>	<ul style="list-style-type: none"> <li>• Draft Plan Section Review</li> <li>• Review of Technical Information and Development and Prioritization of Recommendations for Ecological Health Challenge Area</li> </ul>
<b>November 8, 2017</b>	<ul style="list-style-type: none"> <li>• Comprehensive Plan Format and Presentation</li> <li>• Draft Plan Section Review</li> <li>• Review of Technical Information and Development and Prioritization of Recommendations for Human Land Use Challenge Area</li> <li>• Discussion of Implementation Challenge Area</li> </ul>
<b>March 1, 2018</b>	<ul style="list-style-type: none"> <li>• Draft Plan Review</li> </ul>

Between meetings, the facilitation team conducted one-on-one telephone interviews with AC members at multiple points in the process to gather stakeholder input and inform the development of constructive meeting agendas. Outside of meetings, the AC members were asked to review technical materials and drafts of plan sections and to respond to follow-up questions targeted toward gathering additional input on important questions that were discussed in the meetings.

Before each meeting, the facilitators worked with the ICPRB staff to develop an agenda and a facilitator guide and to plan technical presentations. The facilitators made use of group process tools and polling tools to structure group work toward meeting objectives and to provide multiple paths for participation by members. As needed, the facilitators conducted interviews with AC members to inform planning for upcoming meeting discussions.

After meetings, the facilitators developed detailed meeting summaries to document the process. The AC meeting summaries describe technical materials reviewed, decisions made, and perspectives expressed at each meeting. Meeting summaries were circulated for review by AC members and revised based on their input to ensure that that meeting documentation provided a true narrative for the process. Meeting documentation creates a narrative that is an important parallel process to committee meetings. It supports stakeholders in developing a shared understanding of what they have accomplished. In this project, the documentation was designed to also be a source of input for the development of the comprehensive water resources plan. The meeting summaries are available as Appendix AC-2 to this report.

For decision-making, the facilitators sought consensus where possible, but did not delay the process when consensus was not achievable within the time allotted at a meeting. Meeting summaries were prepared to capture prevailing and dissenting views when disagreement occurred.

The work of the AC had several outputs that were used by ICPRB staff in developing the comprehensive plan. These outputs included:

- Shared vision statement
- List of water resource challenge areas to address in the comprehensive plan
- Prioritized strategies to address the challenge areas
- Recommendations for format and presentation of the comprehensive plan
- Review comments on the draft comprehensive plan

The following sections of this report document each of these outputs and the committee's work to develop those outputs. Additional sections of the report are included to document other work of the committee that did not directly result in the above outputs.

## SHARED VISION STATEMENT

The AC developed a shared vision statement for the comprehensive plan at its first two meetings. The shared vision statement is presented in the box. To develop this statement, the AC members started by considering several vision statements from other water resource

### SHARED VISION STATEMENT

This plan provides a roadmap to achieving our shared vision that the Potomac River basin will serve as a national model for water resource management that fulfills human and ecological needs for current and future generations. The plan will be based on the best available science and data and focus on sustainable water resources management that provides the water quantity and quality needed for the protection and enhancement of public health, the environment, all sectors of the economy, and quality of life in the basin. The ICPRB will serve as the catalyst for the plan's implementation through an adaptive process in collaboration with partner agencies, institutions, organizations, and the public.

management plans. These included statements from the Susquehanna River Basin Comprehensive Plan, the Georgia State Water Plan, the Long-Term Vision for the Future of Water Supply in Kansas, and the Minnesota Water Plan. They also considered the vision statement of the ICPRB Strategic Plan and the scoping paper for the comprehensive plan. These statements gave the AC members ideas about wording, tone, and style to consider to their shared vision statement. These statements can be viewed in Appendix AC-3, which is the set of slides from the Shared Vision Statement discussion from the September 26, 2015, AC Meeting.

Next, the AC considered a series of images submitted by the members at the request of the facilitators in advance of the meeting. The request asked the following:

*In preparation for the vision statement discussion at the September 26th meeting, I have a request. Please send me a photo or other type of image that reflects something that you would consider a desired future condition for the Potomac basin -- an image that shows something that you value in the watershed and would like to see there in the future. This request is purposefully broad and open-ended to allow for a diverse response. The objective is to gather*

*a different type of input about what you and your fellow committee members value in the watershed. The images will complement our discussion, which otherwise will be largely focused on text. The images you send do not need to be artistic. Simple images will serve the purpose.*

The submitted images can be viewed in the slides in Appendix AC-3. After considering the images, the AC broke into small groups for an idea-writing exercise to answer questions about desired future conditions for the basin and the role of the Comprehensive Plan and the ICPRB in fulfilling that vision. The idea-writing exercise allowed the small groups to work through writing and talking to identify common ideas for the plan's vision statement. The results of that exercise are presented in Table 2.

The facilitators and ICPRB staff used these results to draft a vision statement for the AC to consider at its second meeting on December 1, 2016 (teleconference). The draft statement was circulated to AC members for review and comments before the meeting, and the statement was revised based on those comments before the meeting. At the meeting, the full committee discussed and agreed upon a few wording changes and approved the statement by consensus. The statement was then presented to and adopted by the ICPRB Commission at its December 2016 meeting.

#### PRIORITY WATER RESOURCES CHALLENGES LIST

At its first two meetings, the AC developed a priority water resources challenges list to provide input on the issues that the comprehensive plan should address. This list is summarized in the box. The list organized the work of the AC on the comprehensive plan and provided guidance for the development of the comprehensive plan outline.

In advance of its September 26, 2016, meeting, the AC members received a preliminary or "strawman" list of water resources challenges that had been developed by ICPRB staff and the facilitators based on stakeholder input from a survey (distributed to an e-mail list of interested stakeholders) and modified based on input from AC members during the initial one-on-one interviews conducted by the facilitators (see above). At the meeting, the AC reviewed the list, considered additions to the list, and discussed the scope and framing of the challenges for the list. Then, the AC completed a prioritization exercise in which each member selected their top priorities. The AC reviewed and discussed the results of the prioritization exercise and offered input for the re-organizing and re-stating of the challenges. They also reviewed items that did not receive high priority ratings in the exercise and offered comments and suggestions for how and whether these items should be included.

**TABLE 2: RESULTS OF VISION STATEMENT IDEA-WRITING EXERCISE**

DESIRED FUTURE CONDITIONS OF BASIN (IN FIFTY YEARS)	ROLE OF THE PLAN	ROLE OF ICPRB
<ul style="list-style-type: none"> <li>• Sustainable quantity of water</li> <li>• Improved quality</li> <li>• Affordable, desirable, economically prosperous</li> <li>• Cultural connection to waters (fishing, kayaking, watermen, etc.)</li> <li>• Public awareness of presence and values, how we affect it, and individual’s role</li> <li>• An environmentally, economically, and socially sustainable watershed</li> <li>• Providing water in adequate quantity and quality to support humans, living organisms, and ecosystems</li> <li>• Availability of recreational opportunities</li> <li>• Source of adequate (quantity and quality) water</li> <li>• Improved health of aquatic ecosystems</li> <li>• Comprehensively managed to balance multiple water resource needs, including industry, agriculture, water quality/quantity for a growing population, recreation</li> <li>• A model for sustainable resources supporting potable and recreational uses of diverse viable populations of naturally occurring plants, animals, etc.</li> <li>• Sustainable water use, ecosystems, water quality, and recreation</li> </ul>	<ul style="list-style-type: none"> <li>• Identify challenges, unified shared vision, recommended solutions to share resources</li> <li>• Develop a collaborative mechanism for integrating participation by all agencies</li> <li>• Provide an adaptive framework for determining basin-wide goals and how to achieve them</li> <li>• Concisely describe needs</li> <li>• Provide means for updates and adaptive management, including communication and education</li> <li>• Consistent standards</li> <li>• Roadmap to achieve vision</li> <li>• Clear recommendations to achieve vision: implementation, funding, coordination (cross-jurisdictional)</li> </ul>	<ul style="list-style-type: none"> <li>• Leader in research, education, facilitating coordination in implementation</li> <li>• Develop milestones, goals, metrics, etc. that can be used to determine if progress has been made/achieved</li> <li>• Partner with agencies, entities, and resources to adaptively manage the plan</li> <li>• Communicate plan to all stakeholders</li> <li>• Coordinate and facilitate prioritized aspects of plan</li> <li>• Lead agency, catalyst, and facilitator for plan execution</li> </ul>

In its discussion, the AC offered many comments on the planning process in general. The discussion emphasized the need for a plan to be implementable and the importance of education and public awareness to support plan implementation. Other plans that have been developed in the region were discussed, and in follow-up, a Potomac basin plan from 1967 was circulated to the AC members.

Before the second AC meeting in December 2016, a subcommittee of AC members worked with the facilitators and ICPRB staff to revise the challenges list. The subcommittee work led to the addition of an introduction to the list to address the intent and scope of the comprehensive plan:

Development of a Potomac basin-wide comprehensive plan, led by ICPRB, provides a unique opportunity for basin stakeholders to evaluate water resources challenges and discuss potential solutions at a scale that crosses political boundaries. As ICPRB is a non-regulatory entity, this is a voluntary plan. Full implementation will require buy-in and action of basin agencies and stakeholders, underscoring the critical role that stakeholders have in the plan's development and successful implementation.

The introduction also addressed how the list was developed and how the list would be used by the AC in its efforts to support plan development. Further, it suggested that the challenges list be used to organize the sections of the

## PRIORITY WATER RESOURCE CHALLENGES LIST

- *Ensure Sustainable Water Uses and Supplies*

The diverse users of the basin's water resources have clean, reliable, and resilient water resources for current and future generations.
- *Protect and Improve Water Quality*

The waters of the basin achieve or exceed water quality standards established by the states in accordance with the Clean Water Act. New and emerging threats are proactively addressed.
- *Protect Ecological Health*

The propagation and growth of balanced, desirable populations of aquatic life is ensured.
- *Manage Human Land Use for Sustainability*

Human land use in the basin supports sustainable water resource management.
- *Support Plan Implementation*

The basin-wide comprehensive plan is supported by a strong foundation for integrated, comprehensive, and coordinated approaches for sustainable water resources

comprehensive plan. The list included examples of specific challenges under each major challenge area.

The subcommittee's list was circulated to AC members prior to the second AC meeting, and further revisions were made based on comments received. The revised list was presented at the second AC meeting in December 2016, and after further consideration and discussion, the AC approved the list by consensus at that meeting.

## PRIORITIZED STRATEGIES TO ADDRESS THE CHALLENGE AREAS

Over the course of its fourth through sixth meetings (May 2016 through December 2017), the AC developed sets of priority strategies for the comprehensive plan to address four of the five identified challenge areas: *Ensure Sustainable Water Uses and Supplies*, *Protect and Improve Water Quality*, *Protect Ecological Health*, and *Manage Human Land Use for Sustainability*. The fifth challenge area, *Support Plan Implementation*, was addressed in discussions throughout the full series of AC meetings, and the approach to this challenge area was discussed the sixth AC meeting (December 2017).

The development of recommendations for priority strategies by the AC followed this general approach:

- Pre-meeting interviews by the facilitators with selected AC members to identify information sources and suggested strategies (as needed)
- Compilation of a preliminary set of suggested strategies by ICPRB staff and facilitators
- AC review of technical materials and initial suggested strategies related to the challenge area
- Small group work by AC members to articulate priority strategies
- Full AC discussion of priority strategies
- Prioritization of strategies by AC members
- Drafting of comprehensive plan section for challenge area by ICPRB staff
- Review of comprehensive plan sections by AC
- Revision of draft sections by ICPRB staff based on AC comments received

This approach was adapted for each challenge area to adjust to meeting conditions and schedules and based on the content for each challenge area. For example, in the teleconference meeting focused on the Ecological Health challenge area (September 2017),

small group work was not possible. However, the process was adapted to the phone-based meeting with pre-meeting interviews and the use of a web-based polling tool during the meeting. The following is a summary of the priority strategy development work by the AC for each of the challenge areas. The results of this work were used by the ICPRB staff in selecting strategies to include in the comprehensive plan.

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#### ENSURE SUSTAINABLE WATER USES AND SUPPLIES

To prepare for the discussion of this challenge area, the facilitators conducted one-on-one telephone interviews with 17 AC members. An interviews summary report was shared with ICPRB staff and with the AC members to inform discussion of this challenge area (Appendix AC-4). The interviews were focused on identifying concerns, discussing what the plan should address, and considering recommended strategies for this challenge area. The following were the primary areas of concern:

- Source water protection
- Instream flows for aquatic species/fisheries
- Water availability
- Drought planning
- Groundwater management

In the discussion of what the plan should address in this challenge area, the following three topics were the most frequently suggested by AC members in the interviews:

- Interstate planning and coordination on drought
- Data collection and monitoring
- Interstate water allocation and coordination

In the interviews, AC members suggested a broad range of possible strategies for this challenge area. These were used to develop a preliminary list for consideration at the May 2016 AC meeting. The interviews summary report includes the full list of suggested strategies (Appendix AC-4).

Before the meeting, AC members received a copy of the slides that reviewed technical background materials for this challenge area. The slides are included as Appendix AC-5. These slides were presented and discussed by the AC at the May 2016 meeting (see Appendix AC-2 for the meeting summary). After the technical review, the AC members worked in small groups to consider and articulate strategies for this challenge area. Next, the full AC discussed the



suggested strategies, and then, each AC member selected their priority strategies by marking those strategies (posted on flip charts) with stickers. The results of the small group work and prioritization exercise are shown in Table 3.

**TABLE 3: WATER USE AND SUPPLY CHALLENGE AREA RECOMMENDATIONS FROM AC SMALL GROUP EXERCISE**

GROUP	RECOMMENDATIONS	NUMBER OF STICKERS
A	1) Coordinate consistent/standard evaluation methods for water use	0
	2) Report on basin-wide water use, projected demand, and consumptive demand	7
	3) Plan should include a description of potential changes in flow due to climate change at priority locations in the basin	2
B	1) Examine the efficacy of existing agreements (Low Flow Allocation Agreement and Water Supply Coordination Agreement) to determine if they need to be updated	2
	2) Examine alternate water supply options (both operational and structural) basin-wide including localized areas of water stress	1
	3) Evaluate competing water uses including water supply, recreation, industry, etc. as they relate to ecological flows	1
	4) Protection of groundwater from contamination and overuse (study, advise, etc.)	1
	5) Also assess data, roles, implementation, resources, etc.	1
C	1) Recognize lack of understanding on water uses that fall below state water thresholds and need for additional studies/data	6
	2) Use same metrics/model across basin to estimate future impacts of climate change	2
	3) Recognize limitations on controlling unregulated consumptive uses (particularly in drought conditions)	1
D	1) Develop an inventory of roles, responsibilities, areas of authority and how effectively being carried out	5
	2) ICRPB to convene water use and supply experts (on an on-going basis) to share data, assess completeness and gaps, and provide recommendations and priorities	2
	3) To develop water use and supply recommendations: <ul style="list-style-type: none"> <li>• What are the goals for the basin?</li> <li>• What do the data tell us about progress toward those goals?</li> <li>• Are the current efforts enough to attain those goals?</li> <li>• If not, what is missing or need to be enhanced to meet the goals?</li> <li>• Develop specific plan recommendations based on above.</li> </ul>	1

ICPRB staff used this input to develop the draft plan section for this challenge area. For this challenge area, the AC had two in-meeting opportunities to review iterative drafts of this plan section at its September and November 2017 meetings. In those discussions, AC members provided suggestions for revisions to the plan section. The most substantial comments focused on the description of the process of recommendations development, how the plan sets the tone of recommendations, and whether and how to address strategies that were discussed by the AC and considered important, but which did not receive as high priority ratings and did not appear in the draft plan section. The AC members also acknowledged that they thought their input was reflected in the draft plan section. With input from the AC review comments and discussion, ICPRB staff included the following recommendations for this challenge area in the draft plan:

- Report on basin-wide water uses, projected demands, and consumptive demands
- Conduct additional studies on water uses that fall below state water reporting thresholds
- Develop an inventory of roles, responsibilities, and areas of authority and discuss how effectively current programs and activities are being carried out
- Pursue a range of complementary actions that would contribute to a more sustainable and resilient water supply (with reference to a list of additional strategies in subsequent explanatory text)

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## PROTECT AND IMPROVE WATER QUALITY

The initial one-on-one interviews with AC members included questions focused on water quality concerns, and the interviews summary report (Appendix AC-1) from those initial interviews provided a starting point for the discussion of this challenge area. The interview discussions were focused on what water quality concerns the plan should address, and the following is a summary of responses:

- Need to assess impacts of existing programs and identify gaps and determine whether there are better ways to attain water quality goals
- Need to share information (water quality data, preferably geospatial data)
- Identification of priorities for water quality investments in the basin
- Enhancement of coordination across state lines on water quality planning, prioritization, and implementation

- Avoidance of duplicating existing efforts
- Continued role of ICPRB as a reliable source of science-based information on water quality

Before the meeting, AC members received a copy of the slides that reviewed technical background materials for this challenge area. The slides are included as Appendix AC-6. These slides were presented and discussed by the AC at the May 2016 meeting (see Appendix AC-2 for meeting summary). In discussion of this challenge area, the AC members expressed several concerns about water quality, with an emphasis on the need for greater information sharing for water quality data and improved coordination at the basin-wide scale of water quality management. The discussion of this challenge area also focused on an interest among some AC members for more clearly articulated goals in the plan.

After the technical review, the AC members worked in small groups to consider and articulate strategies for this challenge area. Next, the full AC discussed the suggested strategies, and then, each AC member selected their priority strategies by marking those strategies (posted on flip charts) with stickers. The results of the small group work and prioritization exercise are shown in Table 4.

ICPRB staff used this input to develop the draft plan section for this challenge area. The AC reviewed a draft of this plan section at its November 2017 meeting. In its discussion focused on review of the plan section, AC members provided comments and suggestions addressing the following:

- Making the section as self-contained as possible
- Acknowledging the role of federal agencies in water quality programs in the basin
- Adding information on BMP effectiveness
- Including agricultural and forestry agencies in the roles and responsibilities subsection

**TABLE 4: WATER QUALITY CHALLENGE AREA RECOMMENDATIONS FROM AC SMALL GROUP EXERCISE**

GROUP	RECOMMENDATIONS	NUMBER OF STICKERS
<b>A</b>	1) Identify common water quality goals for the Potomac River main stem	4
	2) Identify beneficial goals to prioritize	0
	3) Establish potential roles and actions by entity that would best work toward goal (ex., ICPRB coordinate streamlining of BMP permit process across basin)	4
<b>B</b>	1) Develop an inventory of roles, responsibilities, areas of authority and how effectively being carried out	9
	2) ICPRB to convene water quality experts (on an on-going basis) to share data, assess completeness and gaps, and provide recommendations and priorities	3
	3) ICPRB to evaluate and comment on major infrastructure (proposed) projected with potential basin-wide water quality impacts	2
<b>C</b>	1) Plan would provide a linkage to a source for available information	5
	2) Recommendation to evaluate TMDL implementation	0
	3) Identification of influences outside of EPA (Clean Water Act) (e.g., NOAA)	0
<b>D</b>	1) Establish data frameworks that show progress/no progress over time; ex. ICPRB – shared data framework to coordinate multiple jurisdiction data	6
	2) Monitoring and providing data on interstate waters	0
	3) Address areas of uncertainty to assist states in resource management	0

With input from the AC review comments and discussion, ICPRB staff included the following recommendations for this challenge area in the draft plan:

- Promote water quality information sharing
- Educate citizens and professionals about water quality in the Potomac basin
- Develop an inventory of roles, responsibilities, and areas of authority and discuss how effectively current programs and activities are being carried out
- Pursue a range of complementary actions that would contribute to protecting and improving water quality

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## PROTECT ECOLOGICAL HEALTH

To prepare for the discussion of this challenge area, the facilitators conducted one-on-one telephone interviews with six AC members, who were identified with strong interest in this challenge area. An interviews summary report is available as Appendix AC-7. The interviews were focused on identifying concerns, discussing what the plan should address, considering recommended strategies for this challenge area, and asking for feedback on the AC process, in general. The following were offered by the interviewees as concerns in this challenge area:

- Need to prioritize ecological health protection efforts
- Need to identify high priority habitats
- Protection of large and connected tracts of forest
- Overallocation of water and impacts on stream flows
- Intersex fish observations
- Fish kills (especially in Shenandoah)
- Emerging contaminants
- Excess filamentous algal growth
- Livestock impacts on streams
- Lack of protections for high quality waters
- Invasive aquatic species
- Management of Jennings Randolph for instream flows/aquatic habitat
- Nonpoint source pollution control
- Shift in policy and program implementation toward greater quantity and less quality
- Ecological issues as contentious/sources of conflict
- Ecological issues as a barrier to water supply reservoirs

In the interviews, the overlap of this challenge area with other challenge areas was discussed. Protection of ecological health is closely tied to the management of water quantity, water quality, and land use. AC members suggested a broad range of possible strategies for this challenge area. These were used by ICPRB staff to develop a preliminary list for consideration at the September 2016 AC meeting. The interviews summary report includes the full list of suggested strategies (Appendix AC-7).

Before the meeting, AC members received a copy of the slides that reviewed technical background materials for this challenge area. The slides are included as Appendix AC-8. These slides were presented and discussed by the AC during the September 2016 meeting (see Appendix AC-2 for meeting summary). Because this meeting was a teleconference, small group work was not possible. Alternatively, the facilitators used a polling tool to guide the discussion of strategies for this challenge area. First, the AC members considered a list of preliminary strategy recommendations, which are included in the last two slides in Appendix AC-8. Each AC member marked initial priorities among these strategies using the polling tool. The results of the poll indicated the following as receiving the top priority ratings (in order of priority):

1. Share data and analysis results across jurisdictions
2. Encourage use of comparable sampling analysis methods
3. Coordinate across jurisdictions to protect ecological value
4. Compile biological monitoring data in basin-wide databases and maps
5. Define water quality and quantity protections that improve ecological value
6. Develop tools to identify habitats and waters with high ecological value

Next, the AC members were given a chance to offer additional strategies to consider using an open-ended poll question, and responses included the following:

- Add a section detailing successes to date
- Use broader categories to capture multiple recommendations
- Identify causes of negatively impacted benthic macroinvertebrate communities to stressor identification section
- Identify causes of harmful algal blooms
- Consider being more specific about actual metrics and tools to be used in assessing ecological health
- Support and coordinate programs to identify, protect, conserve, restore, enhance and connect natural areas, especially along waterways

In discussion, members again emphasized the inter-relationship of this challenge area with other challenge areas.

After the meeting, members were sent a revised list of strategies to consider for prioritization. The revised list incorporated the new suggestions from AC members. The results indicated the following as top priorities for the AC members:

1. Share across jurisdictions -- data, analysis results, and information on successful restoration approaches
2. Coordinate across jurisdictions to protect ecological value
3. Support and coordinate programs that identify, protect, conserve, restore, enhance, and connect natural areas, especially along waterways
4. Improve coordination between multiple, diverse restoration efforts to maximize recovery potential of aquatic habitats and biological communities
5. Protect water quality and flow regimes that sustain biological diversity and health
6. Update master plans and government regulations to ensure ecological protections
7. Encourage use of comparable sampling and analysis methods

Full results of the follow-up poll are included as Appendix AC-9. With input from the AC review comments and discussion, ICPRB staff included the following recommendations for this challenge area in the draft plan:

- Share across jurisdictions data, analysis results, and information on successful restoration approaches
- Coordinate across jurisdictions plans and programs that protect ecological value
- Support and coordinate programs that identify, protect, conserve, restore, enhance, and connect natural areas, especially along waterways
- Pursue a range of complementary actions that would contribute to protecting ecological health

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MANAGE HUMAN LAND USE FOR SUSTAINABILITY

For this challenge area, advance interviews with AC members were not conducted. Before the meeting, AC members received a copy of the slides that reviewed technical background materials for this challenge area. The slides are included as Appendix AC-10. These slides were presented and discussed by the AC during the November 2016 meeting (see Appendix AC-2 for meeting summary). The slides emphasized the overlap of this challenge area with the other challenge area and explored inter-relationships including the impacts of human land use on water quality and quantity and ecological health. The slides included a preliminary set of recommended strategies for the AC to discuss. This set was compiled from input requested

through two other channels for stakeholder input: the e-mail distribution list for the comprehensive plan process and the George Mason University GMU student workshop.

After reviewing the technical materials, the AC members worked in small groups to consider and articulate strategies for this challenge area. Next, the full AC discussed the suggested strategies, and then, each AC member selected their priority strategies by marking those strategies (posted on flip charts) with stickers. The results of the small group work and prioritization exercise are shown in Table 5. AC discussion of the strategies for this challenge area included the following suggestions from members:

- Include examples of good local land use programs to highlight best practices
- Address barriers to the flow of relevant information to local jurisdictions and decision makers to support them in improving land use management
- Emphasize the benefits of good land use management to tailor the message to the audience
- Determine the best message and best messenger for communication based on the audience (decision makers)
- Evaluate local and regional regulations basin-wide
- Include a discussion of ecosystem services in this section of the plan

With the input from the AC review comments and discussion, ICPRB staff included the following recommendations for this challenge area in the draft plan:

- Research timely land use related information for decision-making
- Effectively disseminate scientific data and information compiled by ongoing research
- Develop an inventory of roles, responsibilities, and areas of authority and discuss how effectively current programs and activities are being carried out
- Pursue a range of complementary actions that would contribute to managing human land use for sustainability



**TABLE 5: HUMAN LAND USE CHALLENGE AREA RECOMMENDATIONS FROM AC SMALL GROUP EXERCISE**

GROUP	RECOMMENDATIONS	NUMBER OF STICKERS
A	1) For urban areas, ICPRB will share with the COGs water quality studies that will help local governments understand future development implications for water.	4
	2) For rural areas, ICPRB will compile a list of best practices from like local governments.	0
B	1) Research most effective locations for stormwater management.	1
	2) Identify and/or develop creative use of zoning, water/sewer service provisions, insurance, preservation, and buffers to achieve goals	1
C	1) Identify gaps across jurisdictional boundaries	0
	2) ICPRB should encourage and support a watershed approach for mitigation and restoration	5
	3) Identify and promote creative, effective use of local, regulatory, programmatic, and financial tools	7
	4) Promote and increase riparian buffer protection and tracking buffers in GIS	5
D	1) Compile scientific data and information on the relationships between: land use, natural resources, development, impervious cover, stormwater management, water quality, water supply, ecological health, ecosystem services, green infrastructure, human health, economic health, and success stories where these have been well-balanced.	7
	2) Effectively disseminate scientific data and information compiled by on-going research.	7
Example Recommendations (from slide presentation)	<i>Research</i>	
	1) Study correlation of drinking water treatment costs and water quality, as well as correlation to conserved lands. (E.g. WRF Forestry Project)	0
	2) Identify and/or develop creative use of zoning regulation, water/sewer service provisions, and insurance rules to achieve goals	1
	<i>Communication</i>	
	1) Assist with BMPs –prioritization and promotion of most effective; improve implementation through enhanced communication and coordination	1
	2) Encourage multi-jurisdictional synergy/cooperation	0
	<i>Education</i>	
	1) Guidance on getting “bang for your buck” out of preservation/conservation areas; improve ecosystem services in protected areas	5
	2) Onsite infiltration and reuse of stormwater	0
	3) Improved protection of riparian buffers (note similarity to C(4) above)	1

## SUPPORT PLAN IMPLEMENTATION

This challenge area is unique in its focus on implementation of the plan itself. Throughout the AC process, members emphasized the importance of making the plan implementable. They did not want the plan to “sit on the shelf” and saw the need for coordination, funding, commitment, and public education and outreach to facilitate plan implementation. They also emphasized the need to make the plan easily accessible to a range of possible users – in terms of its format, style, and delivery. The following are selected comments on implementation from AC members, from their meetings and interviews:

- Be sure to focus on plan implementation and be sure it is realistic.
- Implementation will be key to the success of the plan.
- Implementation will depend on the availability of funding.
- AC members can become advocates for implementation if they support the outcomes of the process.
- Improve coordination with federal agencies in the basin and encourage them to support implementation of the comprehensive plan.
- Include detailed implementation steps and milestones in the plan. Be as specific as possible.
- Implementation of a voluntary plan is challenging, but consensus recommendations from groups like the AC can be helpful in prompting local or state jurisdictions to act.
- Review other watershed plans to consider what happened with their recommendations and what lessons can be learned, especially with regard to implementation.

Addressing implementation issues in the comprehensive plan is clearly of central importance to AC members. At the sixth meeting of the AC in December 2017, ICPRB staff presented a table that summarized how implementation issues would be addressed in the comprehensive plan (Appendix AC-11). Implementation issues that will be addressed include agency coordination, public awareness, data collection and sharing, assessment, and research. The consideration of implementation issues also included some water resource management challenges that are particularly cross-cutting among the various challenge areas in the plan, including climate change planning, integration of water and energy sector planning, and preparation for water resource emergencies. Implementation challenges will be addressed in the following sections in the comprehensive plan:

- Roles and Responsibility
- Plan Integration
- Communication Plan
- Milestones
- Measures of Success
- Basin Description
- Water-Energy Nexus
- Synthesis

In its discussions at the December 2017 meeting, the AC members were generally supportive of how this challenge area would be addressed in the plan.

#### INVITED PANEL DISCUSSIONS AT AC MEETINGS

The AC hosted two panel discussions to address topics of importance to AC members for plan development:

- Federal Agency Involvement in Plan Development
- Water-Energy Planning Nexus

The federal agency panel was focused on opportunities for federal participation and involvement in the development of the comprehensive plan. Three panelists presented to the AC:

- Nicholas DiPasquale, Director, Chesapeake Bay Program Office
- Anna Compton, Study Director, Chesapeake Bay Comprehensive Water Resources Restoration Plan, U.S. Army Corps of Engineers, Baltimore District
- Ed Ambrogio, Deputy Associate Director, Office of State and Watershed Partnerships, Water Protection Division, U.S. Environmental Protection Agency, Region 3

Summaries of their presentations are included in the meeting summary for the March 2016 AC meeting (Appendix AC-2) and copies of their slides and handouts are available as Appendix AC-12. After their presentations, AC members had an opportunity for discussion with the panelists. The discussion focused on data sharing, funding uncertainties, climate forecasts, and minority engagement in water resources programs. Coordination with federal agencies is of foremost

importance in the Potomac River basin, where many federal programs directly affect water resources management.

In collaboration with ICPRB, the U.S. Army Corps of Engineers requested input from federal agencies to facilitate coordination with federal programs in the comprehensive plan. The results of that investigation are presented in Appendix D of the main comprehensive plan document. The appendix includes a description of the purpose and background, tables of results, conclusions, recommendations for ICPRB, and a description of federal agency missions in the basin.

The panel discussion on the water-energy planning nexus focused on the inter-relationships between water and energy resources. The panelists included:

- Zachary Clement - Water-Energy Tech Team, Office of Energy Policy and Systems Analysis, U.S. Department of Energy
- Susan Gray - Deputy Director, Power Plant Research Program, Maryland Department of Natural Resources

Slides from their presentations are included as Appendix AC-13. Their presentations addressed how water is used in energy sourcing, production, distribution, and use. The presentations were followed by a discussion with the AC members. The following is a summary of the discussion:

- Fish impingement is being addressed at an energy production facilitation in Morgantown.
- Several AC members noted concerns about coal ash management, and Ms. Gray explained how it is handled at the NRG Morgantown STAR facility.
- Power generation technology choices are market-driven. Generally, new fossil fuel facilities use gas instead of coal, and closed loop cooling is also becoming more common in new facilities than once-through cooling.
- Renewable energy generation in Maryland is incentivized to offset cost of installation and operation.
- There was some discussion regarding the reliability of Maryland's power supply given that it is a net importer of electricity. The panelists noted that reliance on a larger network can improve reliability, but concern was noted that complex systems might be more vulnerable to disruption.
- An AC member commented that 68% of withdrawals (11% of consumptive use) from the Potomac River are related to power generation.

As a part of this discussion, an AC member asked that the comprehensive plan address water-energy nexus concerns, including: consumptive water use, acid mine drainage, waste heat, coal ash management, storage of nitrogen from air scrubbers, hydroelectric dam impacts, fracking and potential contamination concerns, transportation risks with fuel sources, and energy requirements for water and wastewater treatment. The water-energy nexus is addressed in Section 3.7.4 of the comprehensive plan.

## PLAN ORGANIZATION AND PRESENTATION

At multiple points in the planning process, the AC provided input on the organization and presentation of the comprehensive plan:

- Comments in initial one-on-one interviews
- Review of draft table of contents at March 2016 meeting
- Review of draft plan sections at September 2017, December 2017, and March 2018 meetings
- Dedicated discussion of plan format and presentation at December 2017 meeting

The following is a compiled list of suggestions on plan presentation from the AC members:

- Make the plan interactive. Consider alternative ways to present the plan that take advantage of dynamic web-based tools to facilitate searching and linking of information instead of a print document.
- Keep recommendations simple and concise, especially when targeting local governments as actors.
- Develop a communications plan to support roll-out when the comprehensive plan is complete.
- Be concise. This will be important to reach the audience and support understanding and implementation.
- Include lots of photos.
- Make the sections of the plan as self-contained as possible so that individual sections can be used without referencing the full plan.
- Present data geo-spatially in the plan.

- Make the conclusions and “take-home” messages easily accessible in each section.
- Provide access to tools or applications developed to support the final plan to complement implementation (e.g., GIS tools, data).
- Include links to external resources that provide additional detail/information.
- Add a history of planning in the Potomac River basin with an emphasis on lessons learned.

The AC discussed the audience for the plan on multiple occasions. It was noted by some members that the primary audience for the plan is similar to the set of people who are on the e-mail distribution list. However, others asked that the plan be accessible to a more general audience and not a purely scientific document. It was noted that there will be a need for tools to reach various audiences and the language, style, and presentation of these different tools will vary based on their intended audiences.

## DRAFT PLAN REVIEW

The first draft of the full comprehensive plan was issued by ICRPB staff for review to the Advisory Committee and Commissioners in mid-February 2018. An iterative process was planned to provide for multiple rounds of review and revision. The following is the review process timeline for the comprehensive plan:

February 15	Draft 1 sent to AC and Commissioners
March 1	AC Meeting
March 15	Comments due
March 21	Draft 2 issued to State Agencies
April 21	Comments due
May 15	Draft 3 sent to commissioners
June 5	Commission Meeting – Final Discussion and Approval

***To be followed by final edits and plan roll-out***

The first review round was the primary review round for the AC, but they received later drafts, and their review comments were welcome in later review rounds as well.

When the AC members received the draft of the comprehensive plan for review in mid-February, 2018, they had reviewed draft sections of the plan at previous points in the planning process, but this was their first opportunity to review the draft plan as a full document. The AC was given a month to review and submit comments on the draft plan (by mid-March). During the review period, the final meeting of the AC was held, and that meeting was focused on plan review.

The meeting was structured to provide time for focused discussion of specific areas of the plan (e.g., challenges areas, milestones, measures of success) as well as general comments on the plan (e.g., tone, approach, presentation).

A primary area of focus in the discussion was on the tone of the document and whether its recommendations and scope were ambitious enough to attain the plan's vision and goals. The following points were made by AC members during this discussion:

- The plan can influence but not require.
- We cannot incorporate mandates in the plan, but we can encourage adoption of beneficial management actions by pointing out what is needed and what benefits these actions will provide.
- We should not over-emphasize the voluntary nature of the plan (e.g., see first sentence of Executive Summary).
- In some places, a bit of "language tweaking" may help to make the recommendations a bit stronger, but we still need to be careful with the tone.
- The plan is focused on comprehensive issues, not specific issues, and the recommendations address issues at a comprehensive level.
- We do not need a document that helps to feed "hysteria." If the plan comes across as too much of an advocacy document, it will lose its impact.

While there was some disagreement among the group over how "ambitious" the plan's recommendations should be, the discussion helped to elucidate common ground on issues of tone and provided guidance that suggested small changes to make recommendations slightly more assertive, while maintaining a focus on balanced and comprehensive approach.

Small group work was used for discussions of the plan's recommendations, milestones, measures of success, and synthesis sections. Each small group worked through a discussion of each section in the plan, and then the full AC reconvened to review the discussion outcomes. The small group work provided a list of specific suggestions for plan revisions in each of the challenge area sections of the plan and for the milestones, measures of success, and synthesis sections. The focus of these suggestions varied from how to present information more clearly, what to add to background discussion material, additional issues to address (e.g., road salts), and text in need of clarification. It was suggested that the plan add a call-out box (or boxes) that addresses "Things I Can Do to Make a Difference" for various types of actors and actions (individuals, local governments, etc.). It was also suggested that a key messages call-out box be provided at the beginning of plan sections to highlight important and recurring themes in the plan. For the synthesis section, several suggestions were made about how to better explain

how the topics in this section relate to the rest of the plan sections, recommendations, milestones, and measures of success. The small group discussions addressed a number of other specific topics, and the full list of suggestions from those discussions is provided in the meeting summary for the March 1 AC meeting (see Appendix AC-2).

In full group discussion, the AC considered the following topics during the meeting:

- How to describe and evaluate the complex regulatory framework in which the plan is situated
  - Add a diagram or table that shows the federal/state/local entities tied to the regulations or programs that they address. This might be too complicated to do because of the various levels and degrees of implementation. Look for examples of charts/diagrams from other plans that address the regulatory framework.
  - At the five-year comprehensive plan review, it may be a good time to evaluate existing regulatory tools. This type of review can support adaptive management in the plan.
- What are appropriate metrics for success of this plan
  - The metrics in the plan are not very quantitative, but the plan is “young.” At this stage, the types of metrics that are listed might be the most appropriate. The recommendations are focused on collecting better information, and more concrete actions will be added based on that information.
  - Do we want to set ourselves up for evaluation of the comprehensive plan based on a specific quantitative metric(s)? This is a voluntary plan, and we have no control over implementation by others.
  - How much accountability can we expect only five years after completion of the first comprehensive plan in 40+ years? Accountability measures will come later.
- Whether the plan is implementable
  - The plan is implementable given the general nature of the recommendations. The more specificity included in the plan, the harder it will become to implement the plan.
- How to make the plan’s recommendations more far-reaching and concrete



- The group acknowledged that the plan is very centered on ICPRB, and where possible, more ties should be added to address other potential actors, but the group acknowledged the challenges of doing so in a voluntary plan.
- Examples of actions can help to make recommendations more concrete.
- How the plan is presented (cover, executive summary, title)
  - Provide photos of negative as well as positive conditions in the basin.
  - The title of the plan is great (“One Basin, One Future”).

The AC discussions from this meeting provided a broad range of comments on the draft plan that will be used in the first round of plan revisions. Several AC members also submitted written comments on the draft plan. The primary target audience for the second round of review is state agencies, and some AC members may help to coordinate and promote plan review with their state agency contacts. It is expected that AC members will continue to review and submit comments on later drafts of the plan. [TO BE UPDATED TO REFLECT ADDITIONAL REVIEW BY AC MEMBERS]

## COMMISSION BRIEFINGS

The work of the AC was presented to the ICPRB Commissioners at two Commission meetings: August 2017 and December 2017. The presentations were made by Heidi Moltz (ICPRB) and Kristin Rowles (Policy Works LLC). Slides from those presentations are available as Appendix AC-14. The briefings covered the work of the AC to date in the planning process and collected input from the Commissioners to support plan development. The Commissioners offered appreciation to the AC for its work, reviewed a draft plan section and offered suggestions for plan presentation. The Commissioners discussed how recommendations in the plan should address actors beyond ICPRB without being overly prescriptive. They also emphasized the need for background information in the plan to support the recommendations. At the August 2017 meeting, the Commissioners created an *ad hoc* committee to follow draft plan development.

## CONCLUSION

The AC process was designed to provide a channel for meaningful engagement with stakeholders in the development of the Potomac Basin Comprehensive Water Resources Plan. The AC provided a forum for a broad range of voices to be heard on equal footing and in a setting where ideas could be explored and tested collaboratively. The process required a high level of commitment from AC members to support plan development, and the planning process was greatly enhanced through their engagement. Participation levels were consistently high at

meetings throughout the process by AC members, and their dedication reflects how highly they perceived the importance and value of this effort.

The AC members grappled with issues that were specific to the water resource challenge areas in their work, but they also were very interested in big-picture issues of how this plan fits into the context of the region and water resource planning in general. They questioned the very basis for developing this plan, which will join many other plans that address similar issues, but in doing so, they helped to hone the focus and content of this plan to make it more useful and likely to be implemented. They also emphasized the need for a basin-wide focus in planning and management in the Potomac basin through an approach that includes water users and stakeholders from the headwaters to the coast, instead of a plan that focuses primarily on the large urban regions in the basin.

The AC members highly value ICPRB as a reliable source and clearinghouse of information and as an organization that can play a leading role in advancing science and data collection in the basin. They also see ICPRB as a convener that can bring together interests and agencies across jurisdictional boundaries and levels of government. By bringing together different actors in the basin, the ICPRB can support knowledge transfer and help build partnerships that advance our understanding and improve our management of the basin's water resources. As a result, the comprehensive plan has a strong focus on recommendations that address the central role that ICPRB plays as a scientific source and coordinator and as a convener of collaborative partnerships.

In the final meeting of the AC in March 2018, many of the members commented on their general satisfaction with how the draft plan was developing. They revisited concerns from early in the process about the scope of the plan, the audience for the plan, and the challenges of a voluntary plan. Although they offered many suggestions for improving the draft plan, they were supportive of how the draft plan addresses their concerns. They also recognized that the planning process will necessarily evolve over time, and the plan is appropriate the current conditions in the basin and the as a first plan of its kind for the basin in over fifty years. They recognized that as a "young" plan, it emphasizes information needs, and over time, as these needs are addressed, they expect the action-orientation of the plan will become more concrete.

The AC members have a steadfast focus on the importance of plan implementation, and they sought to ensure that the plan would be implementable throughout their work together. At the final AC meeting, several members commented that they think the plan is generally implementable. They noted that as a comprehensive plan, the plan is necessarily broad in focus, and a broad focus will help to facilitate implementation. They noted that specificity in the recommendations would make implementation more challenging for the first iteration of a

voluntary and cross-jurisdictional plan. While they have wrestled as a group with what successful implementation of the plan will look like and how to measure implementation, they ended their work together with an acknowledgment that the plan is oriented toward actions that are appropriate for a plan of this type and that with continued review and revision of the plan, as envisioned in the plan itself, it can support implementation of more concrete actions over time.

At the final meeting of the AC, the members were asked to respond, in writing, to two questions that asked them to reflect on their experience as an AC member:

1. Now that you have worked through this planning process, what do you think is most important to improving water resource management in the Potomac River Basin?
2. Why were you committed to being a part of this planning process?

A summary of the responses to these questions are listed in Table 6 below. In general, the responses illustrate the members’ emphasis on cooperation, coordination, outreach, and education as key tools for improving improve water resource management in the basin. Moreover, their responses reflect the high level of commitment – professional and personal -- of the members to sustainability and water resource protection in the Potomac River Basin.

**TABLE 6: SUMMARY OF AC MEMBER RESPONSES TO REFLECTION QUESTIONS AT FINAL AC MEETING**

<i>Best Ways to Improve Water Resource Management in the Basin</i>	<i>Motivations for AC Members</i>
<ul style="list-style-type: none"> <li>• Public awareness and outreach</li> <li>• Comprehensive and cooperative approach that involves all stakeholders</li> <li>• Funding commitment</li> <li>• Implementation of existing policies, programs, and regulations and strategic enhancements of those programs through adaptive management</li> <li>• Interjurisdictional coordination and consistency in approaches</li> </ul>	<ul style="list-style-type: none"> <li>• To contribute to water resource protection and sustainability</li> <li>• To support the many people that rely on this resource</li> <li>• To learn from others</li> <li>• To protect a resource of national significance for future generations</li> <li>• To give back to ICPRB</li> <li>• To do something that is larger than what I can do through my individual efforts</li> <li>• This is my home</li> </ul>

The outcome of the AC process is a group of highly committed and engaged stakeholders that can be expected to be highly interested and supportive during plan implementation. The members have noted the need for a roll-out campaign for the plan to support stakeholder awareness of the plan. They have also emphasized the need for continued planning and adaptive management to ensure that the plan is a living document that is kept up to date as conditions change and new information becomes available. The development of the AC members as a committed group that will support implementation is an outcome of the ICPRB's investment in the AC process, and it is a valuable resource that can be expected to provide a strong basis for regional water resource coordination and management, particularly if engagement is maintained through communication and continued opportunities for input at appropriate points during implementation. The efforts and contributions of the AC members are commendable and have supported the development of a plan that reflects broad stakeholder input and outlines a clear path to successful implementation. Through their work, coordination in water resource management and toward sustainable outcomes for the Potomac River Basin have already been enhanced even before the comprehensive plan is complete.

## APPENDICES

*Note: Appendices to this report are marked with the prefix “AC” to distinguish them from appendices to the comprehensive plan.*

- Appendix AC-1: Member Interviews Report
  - Appendix AC-2: Advisory Committee Meeting Summaries
  - Appendix AC-3: Shared Vision Statement Slides
  - Appendix AC-4: Member Interviews Report: Water Uses and Supply Challenge Area
  - Appendix AC-5: Water Use and Supply Challenge Area Slides
  - Appendix AC-6: Water Quality Challenge Area Slides
  - Appendix AC-7: Member Interviews Report: Ecological Health Challenge Area
  - Appendix AC-8: Ecological Health Challenge Area Slides
  - Appendix AC-9: Ecological Health Recommendations Poll Results
  - Appendix AC-10: Sustainable Land Use Challenge Area Slides
  - Appendix AC-11: Plan Implementation Challenge Area Handout
  - Appendix AC-12: Federal Agency Panel Slides and Handout
  - Appendix AC-13: Water-Energy Planning Nexus Panel Slides
  - Appendix AC-14: ICPRB Commission Briefing Slides
-