# INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN

## **Advisory Committee**

### for the Comprehensive Water Resources Plan

# Priority Water Resources Challenges for the Comprehensive Water Resources Management 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.

ICPRB prepared draft introductory sections of the plan over the past year including identification of a wide range of water resources challenges facing the basin. The issues were discussed and initial prioritization efforts were undertaken at the first comprehensive plan advisory committee meeting in September 2016. Based on the results of that discussion and based on feedback from a sub-set of advisory committee members tasked with additional review of the challenges, five broad challenge categories have been identified. Pending comments from the advisory committee and other stakeholders, each of these categories is expected to become a section in the plan document. In the plan section associated with each category, specific interstate and/or basin-wide issues will be discussed and practical recommendations to basin stakeholders will be identified. The extent to which any particular category and/or issue will be discussed in the plan depends upon available information and resources.

The five categories of water resources challenges are listed below. For each category, a statement is provided that describes the category in relation to the overall vision of the plan. Examples of specific challenges in each category are also provided.

#### 1. 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.

Example challenges:

- Improving information about water demands and resource capacities
- Addressing concerns including declining groundwater levels (Coastal Plain, fractured bedrock) and increasing consumptive use
- Protecting source waters
- Preventing and responding to spills
- Improving, updating, and expanding water resources management infrastructure
- Conserving and re-using water
- Providing for instream uses, including recreation, fisheries, and aquatic habitat
- Enhancing resilience in water supply

#### 2. Protect and Improve Water Quality

The waters of the basin achieve or exceed water quality standards established under the Clean Water Act. New and emerging threats are proactively addressed.

Example challenges:

- Managing water quality threats including nutrients, sediment, toxics, metals, pesticides, temperature, and pathogens
- Addressing new potential water quality threats including emerging contaminants (e.g., endocrine disruptors) and hydraulic fracturing
- Improving pollution control for sources including road salt, mine drainage, and septic systems

### 3. Protect Ecological Health

The propagation and growth of balanced, desirable populations of aquatic life is ensured.

Improved ecological health is expected to be an outcome of the strategies that address the challenges in other categories. Water resources challenges of interstate or basin-wide significance related to ecological health not covered in other sections will be discussed in this section of the plan.

Example challenges:

- Protecting water quality and flow regimes that sustain biological diversity and health
- Restoring and protecting wetlands and large continuous tracts of forest
- Conserving and protecting high quality aquatic habitats
- Promoting native species and reducing invasive species

#### 4. Manage Human Land Use for Sustainability

Human land use in the basin supports sustainable water resource management.

Land use is primarily managed at the local level in the Potomac basin. As a result, implementation of land use related recommendations may be most effective at the local level. The focus of this section of the plan will continue to be on issues of interstate and/or basin-wide significance.

Example challenges:

- Managing stormwater and impervious surfaces to protect water quality, support natural flows, and control flood risks
- Promoting the planning, creation, and protection of riparian buffers and other interconnected green infrastructure elements throughout the basin
- Preserving agricultural lands
- Protecting groundwater recharge areas
- Discouraging development on steep slopes and floodplains
- Promoting best management practices in forestry and agriculture
- Focusing development in areas with existing transportation, water, and wastewater infrastructure and services
- Managing for land subsidence and sea-level rise

#### 5. Support Plan Implementation

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

Example challenges:

- Improving coordination among agencies that manage water resources in the basin
- Planning for climate change impacts on water resources management (increasing severity of weather events, rising sea level, changing precipitation and evapotranspiration regimes, impacts on water cycle)
- Integrating water and energy sector planning and management to address interdependencies
- Preparing for emergencies through planning and coordination to minimize the adverse impacts of droughts, floods, and spills
- Raising public awareness of the basin's water resources and their management
- Collecting and sharing data needed to support water resource management
- Developing appropriate metrics to assess implementation progress
- Supporting research to address existing and emerging concerns
- Using existing education institutions in the basin to support the exchange of information, research, education, and support for sustainable water resources management
- Identifying funding sources and cost-sharing mechanisms for implementation of the plan recommendations
- Focusing on broad basin-wide and regional challenges without overlooking localized concerns
- Demonstrating plan alignment with existing plans and policies in the basin