

**KATHERINE C. FILIPPINO**

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Hampton Roads Planning District Commission  
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**EDUCATION:**

2008 Old Dominion University, Ph.D. Oceanography  
2002 Old Dominion University, M.S. Oceanography  
1999 University of Delaware, B.S. Chemistry

**PROFESSIONAL POSITIONS:**

**Senior water resources planner** (October 2016 – Present) *Hampton Roads Planning District Commission, Chesapeake, Virginia*

- Monitors Chesapeake Bay Program (CBP) developments and Total Maximum Daily Load (TMDL) implementation for Hampton Roads localities, including 11 Phase I and II MS4s;
- At-large member of the CBP's Water Quality Goal Implementation Team, former Chair of Land Use Workgroup, Vice Chair of Urban Stormwater Workgroup, Water Quality GIT representative for the Beyond 2025 Committee;
- Participates in CBP's Modeling Workgroup, Watershed Technical Workgroup, Local Government Engagement Initiative, Climate Resilience Workgroup, and Local Government Advisory Committee;
- Works with the Virginia Department of Environmental Quality (DEQ) on contracts, permits, reporting requirements, and regulatory actions related to stormwater, local and Chesapeake Bay TMDLs, and emerging water-related issues;
- Advises and consults with other Virginia PDCs, Virginia Municipal Stormwater Association (VAMSA), and the Metropolitan Washington Council of Governments (COG) on planning, stormwater, and Bay TMDL related topics;
- Conducts research, delivers presentations, and prepares professional studies, reports, and planning documents related to water regulations and initiatives;
- Manages the Regional Water Quality Monitoring Program in coordination with the Hampton Roads Sanitation District (HRSD) and U.S. Geological Survey (USGS);
- Project Manager for multiple grant projects related to design and construction of BMPs and research on hazardous flood-prone areas in the region;
- Assists in coordinating monthly Regional Environmental Committee (REC) and Stormwater Workgroup meetings.

**Research Assistant Professor** (March 2014 – September 2016) *Department of Ocean, Earth, and Atmospheric Sciences, Old Dominion University, Norfolk, Virginia*

- Coordinated large-scale water quality research efforts and field projects in estuarine waters; prepared successful grant proposals; managed technicians and students; maintained budgets;
- Coordinated studies among research scientists, wastewater engineers (HRSD), non-profit environmental groups, regulatory agencies (VA DEQ, VA VDH), and municipalities to bridge the gap between research and applied science;
- Evaluated the initiation, development, and succession of potentially harmful algae blooms impacted by meteorological events;
- Supported and engaged in long-term monitoring to benefit restoration activities, climate change and sea-level rise initiatives, and best management practices using a variety of water quality instrumentation;

- Instructed students in a capstone field studies course for Ocean and Earth Science (OES) majors;
- Program coordinator and mentor for summer research experience for undergraduates (REU) program. Recruited, hired, mentored, and implemented a summer program with enrichment activities for undergraduate students from universities nationwide;
- Managed large data sets and visualization tools using Matlab, Excel, SigmaPlot, and ArcGIS.

**Research Professional** (February 2011 – February 2014)

*Department of Ocean, Earth, and Atmospheric Sciences, Old Dominion University, Norfolk, Virginia*

- Assessed numerical Chlorophyll *a* criteria in the James River by evaluating stormwater-related nutrient pulses in local waterways;
- Assessed environmental factors promoting algal blooms in the Lower James River estuary;
- Developed strategies for nitrogen and phosphorus removal for tertiary treatment of wastewater effluent through the optimization of natural polymers and algae;
- Applied for and received state and federal grant funding;
- Mentored staff, students, and fellow researchers to develop complimentary research efforts within the laboratory research group.

**Post-doctoral Researcher** (November 2008 – February 2011) *Old Dominion University, Norfolk, Virginia*

- Developed new protocols and techniques in the laboratory and in the field to streamline sampling efforts;
- Prepared and performed chemical analyses (nitrogen, phosphorous, biomass, etc.) on water samples using EPA (or similar) standard techniques and methodologies;
- Maintained analytical instrumentation: Nutrient auto analyzer (Astoria Pacific), HPLC (Shimadzu), flow cytometer (Beckton Dickinson), fluorometer (Turner), coulometer;
- Examined the extent of bioavailable nitrogen to receiving waters from treated wastewater effluent;
- Prepared data, developed presentations and peer reviewed publications on research findings to present to government agencies, non-profit organizations, fellow scientists, and the general public.

**PROFESSIONAL DEVELOPMENT:**

- American Society for Testing and Materials, E64 Member, 2020 – Present
- Virginia Natural Resources Leadership Institute – Graduate, 2019
- York River and Small Coastal Basins Roundtable, Member – 2019 – Present
- Water Environment Federation, Member, 2018 – Present
- Virginia Water Environment Association, Member, 2018 – Present
- Elizabeth River Eastern Branch Implementation Team, 2017 - Present
- ODU Resiliency Collaborative Steering Committee, 2016
- Elizabeth River Watershed Action Team member – Water Quality work group, 2015 - Present
- State of the Lafayette River, 2014 - Present
- Harmful Algal Bloom task force, 2013 – Present
- NOAA Chesapeake Bay Sentinel Site Advisory panel, 2013 – 2014
- Science Advisory Panel – James River Chl *a* criteria study, 2012 – 2016