



Wes Moore, Governor
Aruna Miller, Lt. Governor
Josh Kurtz, Secretary
David Goshorn, Deputy Secretary

Maryland Department of Planning
301 West Preston Street
Suite 1101
Baltimore, MD 21201

Memo: DNR comments on draft Envision Havre de Grace Comprehensive Plan

To: Brooks Phelps
cc: Rita Pritchett

On behalf of the Department of Natural Resources, thank you for the opportunity to comment on the draft Envision Havre de Grace Comprehensive Plan. The draft document was distributed to appropriate contacts at the Maryland Department of Natural Resources and reviewed. DNR offers the following comments:

Chesapeake & Coastal Service:

Overall, Envision Harve de Grace recognizes the role that natural resources and healthy ecosystems play in the sustainability and vitality of the Town. The Town is situated in a unique location on Maryland's landscape to take advantage of being a waterfront town while also having to contend with the inherent risk of its geography.

The Town should consider in section 3-6 Revitalization Area 2: Waterfront

In addition to the water quality goals that are identified in the actions are there additional actions in regards to coastal resiliency that can be identified in this section especially on public lands. This would be a good intersection of achieving multiple goals of the Town to improve water quality; continue to improve this area as a Town amenity and to help reduce the impacts of tidal/and or stormwater flooding.

The Town should consider in section 8-23-Actions for Shoreline project adding an additional action:

Monitor living shorelines and step pool conveyance systems pre- and post-storm events, including events when the Conowingo Dam is opened, to document impacts and best practices for enhancing shoreline resilience to those impacts. For any shoreline work, whether gray or green in nature, consider impacts to existing natural resources and integrate adaptive management approaches.

Given Havre de Grace's location on the landscape and its vulnerability, we commend you for identifying Coastal and Urban Flooding as significant impacts that need to continue to be addressed throughout the life of this plan and impact the sustainability and vitality of the Town over the long term. In paragraph 2 of 8-25 for background information and context: do you have data either quantitative (through the National Weather Service) or qualitative (from Town staff/residents/Harford County EM) on the number of stormwater or tidal flood events you have on average in a year? Including that in the background may give more standing and rationale for why the Town needs to take the actions it has outlined. Also, paragraph 3 is dated and should be updated to reflect the current status of the project; and if complete, a reflection on where it has alleviated the early flooding seen in a high rain event. Consider moving the photos of coastal flooding in 8-27 to the coastal and urban flooding section to illustrate the impacts discussed and adding in additional photos or a map of the Lily Run project since it is discussed so prominently.

Resources for Climate Change: Update the 2018 UMCES Report to: Sea Level Rise Projections for Maryland 2023: <https://www.umces.edu/sea-level-rise-projections>

In Section 8-28, 8.29, 8-30 can the Scenarios slides be enlarged for readability? There is important information being conveyed but it is blurry even when zoomed in. In the text on 8-27 it is cited "City-owned pumping stations, both the major ones at Erie Street and Lafayette Street and the smaller ones serving waterfront residential areas, need to be evaluated for SLR vulnerability. The Town should consider identifying specifically the Erie and Lafayette pumping stations in action given their importance to public health and town viability. Consider adding an action related to CRS and how to continue to maintain or improve upon the current rating.

Shoreline Projects: Recommend monitoring living shorelines and step pool conveyance systems pre- and post-storm events, including events when the Conowingo Dam is opened, to document impacts and best practices for enhancing shoreline resilience to those impacts. For any shoreline work, whether gray or green in nature, consider impacts to existing natural resources and integrate adaptive management approaches.

Resource Assessment Service

The city of Havre de Grace is drained by portions Gasheys Creek and small tributaries to the lower Susquehanna River. Gasheys Creek is a major tributary to Swan Creek – a stream known to support habitat for the state threatened Chesapeake Logperch (*P. bimaculata*), herpetofauna of conservation concern, and anadromous fishes. Similarly, the shoreline areas of the lower Susquehanna River provide important habitat for species of conservation concern and significant beds of submerged aquatic vegetation.

Section 9 (Environmental Resources and Sensitive Areas) includes a list of action items. One item (Improve stormwater management and runoff water quality in Havre de Grace through innovative techniques, such as small bioretention facilities, storm drains, and grass filter strips), if implemented, should reduce impacts to aquatic habitats in old and new development areas. Although the importance of riparian buffers is well-described in the plan, there are no specific action items associated with tree planting or riparian buffer enhancement. Riparian buffers should be created or widened along streams that harbor important ecological and recreational resources to help protect and enhance the current habitat conditions. City planners should consider adopting a minimum 100ft buffer along each bank where possible and increasing buffer widths in areas with steep slopes along streams by 2 feet per 1% of slope (as prescribed by S. Wenger. A review of the scientific literature on riparian buffer width, extent, and vegetation. Office of Public Service and Outreach. Institute of Ecology. University of Georgia 1999). Long-term maintenance should be included in riparian reforestation plans to reduce impacts from invasive plant and animal species that could reduce tree survival and growth.

Additionally, city planners should seize opportunities to improve fish passage when replacing aging infrastructure at stream crossings. Bridge improvements or culvert replacements should be installed to accommodate high flow events and to minimize obstacles to the movement of both resident and migratory aquatic species.

Land Acquisition and Planning

This reader found the City of Havre de Grace's comprehensive plan to be in compliance with the Department's goals of conserving land, creating recreational opportunities and providing financial assistance to publicly accessible spaces. The plan includes a dedicated section on "Community Facilities" including a subsection for Parks, Recreation and Open Space (pg 12-1). The plan connects back to the Harford County Land Preservation, Parks and Recreation Plan (LPPRP) and highlights the importance for preserving open space. The plan includes the difficulties associated with this goal of land preservation because of associated costs and long-term planning, in addition to the ever-changing recreational needs a community may have. Additionally, the plan included a detailed map that showed parks and open space areas.

Fishing and Boating Services

Fisheries Ecosystem Assessment Division

Overall, the Comprehensive Plan (Plan) prominently features environmental quality and recognizes that the Town's development can impact fish habitat. Shore fishing and boat access are mentioned. Within its boundaries, we estimate that the Town is urban at 27-28% impervious surface. Expansion to rural land is limited by geography and natural (Susquehanna River) and unnatural boundaries (Vulcan quarry). Development will be largely confined to land already annexed. Protection of Susquehanna River as a water source is extremely important to the Town since it is its drinking water source. The river is also receiving water for treated sewage effluent and stormwater and managing these to be as clean as possible is emphasized in the Plan.

Fishing has played a role in the history of Havre de Grace and is part of its residents' heritage. Fishing can be an ingredient in quality of life and natural resource based economic development mentioned in the Plan visions. Our comments are designed to reinforce fishing and conservation of fish habitat.

The waters adjacent to the Town have key ingredients for a good urban fishery: access, adequate water quality, structure (piers, pilings, aquatic vegetation, rocks, etc.), and fish produced from nearby, productive spawning and nursery areas. Adjacent waters may be spawning and nursery habitat for gamefish previously mentioned plus Blueback Herring, Alewife, Gizzard Shad, and other forage species.

The launch ramps and marinas at Havre de Grace provide access to important, productive recreational fisheries in the tidal-fresh Susquehanna River, Susquehanna Flats, and other tidal waters of the northern portion of the Bay. A wide variety of gamefish are readily accessible after launching from the Havre de Grace (Largemouth Bass, Striped Bass, catfish, American Shad, Hickory Shad, Yellow Perch, White Perch, warm water panfish, and others). These ramps offer access to local and out-of-town anglers. Out-of-town anglers represent "tourists" (and potential income) that were not mentioned in that section of the plan. Fishing is a popular form of outdoor recreation and the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation estimated national expenditures on fishing in 2022 were 99.4 billion dollars - this is big business that Havre de Grace could take advantage of. Money is spent on fuel for boats and vehicles that tow them, food, hotels, restaurants, marina docking, bait, and tackle. Several charter fishing and guide businesses operate out of Havre de Grace.

The Town places high value on its waterfront that benefits fishing and fish habitat. Piers and a waterfront trail should provide access for shore bound anglers. Some of these are likely to be low-income anglers that depend on the fish they catch to supplement their diet. Some shore locations are free fishing areas. Fishing can provide low-cost entertainment.

The Plan does not mention commercial fishing, but a working waterfront may be attractive to tourists and provide locally sourced seafood. Watermen and their businesses based in Havre de Grace contribute to the local economy and tax base. There were 24 people within the Havre de Grace zip code with commercial licenses in 2023. According to the Cecil-Harford Watermen's Association, five watermen regularly fish and crab out of Havre de Grace. The top species they caught were Blue Crab, Channel Catfish, Blue Catfish, Yellow Perch, Striped Bass, White Perch, and Eel.

The Plan mentioned living shorelines to protect water quality. Sometimes projects such as living shorelines can cut off access for shore anglers. Access is a precious commodity in urban fisheries and should be considered in project planning. Structures in the water along the waterfront may be attractors for fish that enhance fishing. Consider ways to maintain water access when planning living shoreline projects.

Swan Creek is a non-tidal anadromous fish spawning stream and estuarine nursery that could be impacted by development within the Town boundaries. The watershed is at an estimated 10.2% impervious surface in 2023, indicating the watershed has transitioned from rural to suburban. As impervious surface increases above 10% and nears 15%, increasingly negative, irreversible ecological shifts occur resulting in decreased fisheries productivity and a watershed that becomes less responsive to conservation and restoration efforts. We recommend extra consideration for development impacting Swan Creek's watershed to conserve its remaining function as a spawning and nursery area. Conservation of undeveloped land should be a priority. Stormwater

management, while necessary, should not be relied on to maintain natural functions. At this level of development, we would not recommend restoration practices that require extensive reconstruction and re-engineering of the stream for the purpose of meeting nutrient and sediment TMDLs; these projects have not been demonstrated to aid conservation of stream organisms and fish. Conservative use of road salt or use of de-icing alternatives could be considered for this watershed; salt can be toxic to freshwater organisms and it can negatively impact anadromous fish eggs and larvae.

Freshwater Fisheries Division

The State of Maryland features numerous opportunities for outdoor recreation for both residents and non-residents. Among these, fishing and boating remain critical for livelihood, family activity, and mental health for many people. The waters accessed through Havre de Grace provide some of the most productive tidewater fishing habitat in the state for freshwater fisheries. The multimillion dollar fishery for largemouth bass, for example, has been a hallmark of the upper Chesapeake Bay and Havre de Grace area for decades. Other burgeoning fisheries have aimed sights toward invasive fishes, northern snakehead and blue catfish. With such charismatic and highly popular fisheries, Havre de Grace has become well-poised to capitalize on its location in the watershed and offer amenities to the fishing community that surrounding areas cannot. Specifically, Tydings Memorial Park offers multiple boat ramps, restrooms, food, a marina, and a free fishing pier. The launches have not only been used by boaters fishing for the state's most popular sportfish, largemouth bass, but also by bowfishers who target snakeheads and charter boat captains whose clients experience the idyllic beauty that the watershed provides.

Responsible watershed management practices that limit sedimentation and erosion from land, or limit construction in waterways, help to protect aquatic resources that include these fish. Largemouth bass reproduce during spring and utilize submerged aquatic vegetation in the upper Chesapeake Bay. As a result, permitted actions often limit construction projects during spring to minimize negative impacts to nesting and reproduction. Over twenty years of monitoring the upper Chesapeake Bay have demonstrated the important connection between submerged aquatic vegetation and the bass fishery. The comprehensive plan notes the value of the extensive shoreline habitats of Havre de Grace and the management of those habitats can directly affect water quality of the upper Chesapeake Bay. Actions taken to enhance these habitats and minimize negative impacts in the waterbody serves to bolster its beauty, sustain its aquatic resources, and expand the economic industry that benefits from these resources.

Largemouth bass, smallmouth bass, striped bass, and catfishes were top fishing targets in 2017 according to surveys conducted Havre de Grace and other locations in the upper Chesapeake Bay. On average, anglers spent approximately \$54 per trip, which would include boat launch fees, food from local establishments, and travel costs. As northern snakehead and blue catfish increased in abundance in the upper Chesapeake Bay, fishing for these species became more popular. Currently, charter boat captains may charge \$1200 per night to take clients who fish for these species. The clients may include local residents but also tourists who pay for food and lodging in areas such as Havre de Grace in order to harvest fishes not commonly harvested elsewhere in distant watersheds. For at least a decade, though, organized sportfishing dedicated to largemouth bass has often overshadowed many fisheries. The upper Chesapeake Bay was ranked number 24 of northeastern fisheries for bass by Bass Anglers Sportsman Society (BASS), the oldest, currently operating organization dedicated to competitive sportfishing for bass in the country. Economic surveys for larger bass fishing tournaments have estimated that large, three or four day tournaments lend over a million dollars to the local community. In the upper Chesapeake Bay in 2023, over 26,000 angler-hours were spent competitive sportfishing during nearly 100 tournament days. While only 13 tournament days were recorded at Tydings Memorial Park in 2023, it is one of three routinely used access points that host bass tournaments in the upper Chesapeake Bay. Havre de Grace also serves as a launching pad for statewide survey teams who monitor fisheries in the upper Chesapeake Bay. Researchers from state and federal agencies use the boat launches to access survey sites that spread from Swan Creek to Furnace Bay and Northeast River. Staff also conduct angler preference surveys at the fishing pier and nearby fishing locations to quantify fishing effort, evaluate customer satisfaction, and better direct state resources to improve the fishing experience.

As Havre de Grace improves its infrastructure and enhances its own resources for residents, it will be serving a greater community for the state and region. The comprehensive plan for Havre de Grace highlights both the vision and challenges associated with meeting public needs, such as parking. Traffic and parking can aggravate the general public and negatively impact fishing experiences. Surveys of Tydings Memorial Park during May (2012) indicated heavy use by bass boaters at times and parking in grassy areas. The traffic in Havre de Grace during large fishing events can challenge existing resources. Encouraging broader use of public transit and maintaining green spaces could help alleviate parking and traffic and promote a healthy watershed.

Once again, thank you for the opportunity to provide comments. If you have any questions about these comments or would like further information, please do not hesitate to contact me at 443-534-4151 or christine.burns1@maryland.gov.

Best,
Christine Burns