



Economic Impact Analysis Virginia Department of Planning and Budget

9 VAC 25-260 – Amendment Designating Segments of Ragged Island Creek in Isle of Wight County as an Exceptional State Water

Department of Environmental Quality

March 3, 2004

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.G of the Administrative Process Act and Executive Order Number 21 (02). Section 2.2-4007.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

The General Assembly mandates in §62.1-44.15 of the Code of Virginia that the State Water Control Board establish standards of quality and policies for any state waters consistent with the purpose and general policy of the State Water Control Law. The code also mandates that the State Water Control Board modify, amend, or cancel any such standards or policies and take all appropriate steps to prevent an alteration to water quality contrary to the public interest or contrary to established standards and policies.

The proposed regulation amends the anti-degradation section of the state's water quality standards to designate a segment of Ragged Island Creek in Isle of Wight county for special protection as exceptional state waters.

Estimated Economic Impact

The proposed regulation designates a segment of Ragged Island Creek in Isle of Wight county for special protection as exceptional state waters. An exceptional water quality designation provides extra protection against water quality degradation due to point source discharges. No new or increased point source discharge of sewage, industrial waste, or other pollution are allowed into the water once it has been designated as an exceptional state water. In addition, no new mixing zones are allowed in the designated waters and mixing zones from upstream or tributary waters are not allowed to extend into these designated waters. The designation only makes an exception in the case of temporary, limited impact activities and discharges.

By designating these waters as exceptional state waters, the proposed regulation will prohibit riparian landowners from new or expanded permanent point source discharges. Moreover, by prohibiting new mixing zones in these waters and by restricting mixing zones upstream from expanding into these waters, the proposed change could also affect discharges directly upstream or in tributary waters upstream to the designated waters. Under these circumstances, the riparian landowners and affected entities upstream of the designation would have to seek alternatives (such as treating the water to a higher degree or using diffusers to reduce the size of the mixing zone) to discharging into the stream as currently allowed. Thus, the designation of these waters as exceptional state waters could have a negative impact on future economic activity in the area. However, the designation is also likely to produce some economic benefits. By designating a segment of Ragged Island Creek as exceptional state waters, the proposed change is likely to encourage tourism in the area. The designation is likely to increase the number of people coming to the area seeking recreational outdoor activities such as fishing, camping, hiking, and kayaking. This, in turn, is likely to boost economic activity in the area.

The proposed designation of Ragged Island Creek as an exceptional state water provoked a number of public comments against the change. Most comments were from various property developers and homebuilders' associations in the area. They were concerned about the boundary descriptions for the Ragged Island Creek designation and the restrictions such a designation would place on the issuance of storm water permits. In response to these concerns, the

Department of Environmental Quality (DEQ) established an ad hoc advisory committee to study the issue. DEQ revised the proposed boundaries for the designation and truncated them so as not to include wetlands or impounded areas (where storm waters discharges tend to occur) and believes that the truncated designation avoids storm water permitting issues along the Route 17 corridor. Property developers and homebuilders' associations were also concerned about any restrictions that the proposed designation might place on mixing zones for storm water. However, while the proposed change does place restrictions on mixing zones for discharges from municipal wastewater treatment plants, industrial treatment plants, and single family home package sewage plants, there are no such restrictions on mixing zones for storm water. Moreover, according to DEQ, recent amendments (independent of the proposed designation) already limit the sizing of mixing zones in estuaries, such that mixing zones from storm water discharges (from current and/or planned development) would not extend into the revised boundaries of the Ragged Island Creek under consideration for designation.

The net impact of the proposed change will depend on whether the negative impact of the proposed change on some types of economic activity will be greater than or less than its positive impact on other types of activity. There are no precise estimates of the net economic impact of the proposed change available at this time. According to DEQ, there are 23 riparian landowners, the Department of Game and Inland Fisheries and 22 private landowners (13 of the 22 private riparian landowners support the designation). There currently are no Virginia Pollution Discharge Elimination System permittees located on these waters or their tributaries. According to DEQ, the area surrounding the waters under consideration for designation is sewered, with little or no discharge of sewage, industrial waste, or other types of pollution into state waters. Moreover, the proposed change is not likely to affect the issuance of storm water permits and nor is it likely to impose any additional restrictions on the mixing zone for storm water discharges. Thus, the negative effect of the proposed designation on economic activity in the area is likely to be limited. However, it is not possible to precisely estimate the net economic impact of the proposed change at this time.

Comments from the Regulated Community:

In conversations with the Home Builders Association of Virginia the following concerns were raised: (i) the designation could restrict or prohibit the development of thousands of acres

within the watershed, (ii) existing outfalls under the Isle of Wight's MS4 (municipal separate storm sewer system) permit entering Ragged Island Creek along Sugar Hill Road would not be allowed to expand or increase their discharge, impairing development in the area, (iii) the designation could lead to additional restrictions being added to the MS4 permits issued to the Isle of Wight county and the city of Suffolk, (iv) the designation could result in intensified on-site best management practices (BMPs) for non-point sources, increasing the cost of development or, in some cases, making the development infeasible, (v) the designation could increase the cost of wastewater treatment by requiring that projects connect directly to the Hampton Roads Sanitation District rather than allowing them to develop individual and on-site treatment projects, and (vi) the designation will restrict the ability of the Virginia Department of Transportation (VDOT) to build and maintain new roads throughout the drainage basin.

The proposed designation could restrict development in the area by prohibiting any new or expanded point source discharges or mixing zones in the designated waters and by restricting the size of mixing zones upstream of the designated waters. According to DEQ, 640 acres (or one square mile) of Ragged Island Creek are being designated as exceptional state waters, affecting 5.2 miles of shoreline. Of this, 2.4 miles is owned by the Department of Game and Inland Fisheries. Of the remaining 2.8 miles, approximately 50% is marshland and not suitable for development. Thus, the designation prohibits any new or expanded point source discharges on 1.4 miles of shoreline along Ragged Island Creek that is or could be developed. Moreover, according to DEQ, much of these riparian lands have already been developed, with single-family homes on many of these properties. Thus, while there is likely to be some negative impact on development in the area, the negative effects are likely to be limited by the fact that only 1.4 miles of shoreline are directly affected by the proposed change and much of that area has already been developed. The restrictions placed by the designation on mixing zones upstream from the designated waters are also likely to be limited by the fact that the locality currently requires hook-ups to the Hampton Roads Sanitation District for the disposal of municipal, industrial, and other types of pollution, rather than allowing discharges into state waters.

DEQ believes that revision of the boundary designation has addressed the issue of new and expanded outfalls along Sugar Hill Road. There are no permitted storm water discharges into the proposed revised boundary designation. Based on a map indicating new developments in the area, the development and subsequent storm water discharges are some distance from

proposed revised area for designation and are not directly into tributaries to the creek. Regarding concerns that additional restrictions will be added to MS4 permits due to the designation, DEQ does not anticipate any changes to the storm water permitting program based on the proposed designation. The agency is not aware of any plans by the federal government to make changes to the storm water permitting program. Neither does DEQ believe that the proposed designation will impose any additional best management practice (BMP) requirements for non-point sources. The Environmental Protection Agency does not require a state to establish BMPs for non-point sources where such BMP requirements do not currently exist. Only existing BMPs required under state law and regulation will be applied. Regarding the increased cost of connecting directly to the Hampton Roads Sanitation District compared to developing individual and on-site treatment projects, according to DEQ the county planner at the advisory committee meeting stated that it was normal locality practice to require hook-ups to the Hampton Roads Sanitation District. Thus, while the proposed designation does prohibit new and expanded point source discharges and restricts the size of mixing zones, it is not likely to affect current practice with respect to wastewater disposal in the area. Finally, DEQ believes that the revised boundary designation will not restrict the ability of the VDOT to build and maintain new roads throughout the drainage basin. VDOT has found the truncated boundary designations to be acceptable and the agency's representative at the advisory committee meetings indicated that the revised boundary designations would not hinder VDOT from maintaining roads in the area.

Businesses and Entities Affected

By prohibiting new or expanded point source discharges or mixing zones in the designated waters and restricting the size of mixing zones directly upstream or in tributary waters upstream, the proposed regulation could have a negative effect on businesses and entities in the area seeking new or expanded point source discharges into the designated waters themselves or upstream of these waters. These businesses and entities will be required to seek alternatives to discharging as currently allowed. However, as much of the area is sewered and it is normal locality practice to require hook-ups to the Hampton Roads Sanitation District, there are not likely to be many entities seeking to discharge into or upstream of these waters. The proposed change is also likely to produce economic benefits for businesses and entities in the tourism industry. By encouraging outdoor recreational activities in the area, the proposed change will benefit these businesses.

According to DEQ, there are 23 riparian landowners, the Department of Game and Inland Fisheries and 22 private landowners. Moreover, neither the waters under consideration for designation nor their tributaries currently contain any permitted point source discharges.

Localities Particularly Affected

The proposed regulation will affect areas of Isle of Wight county around the segment of Ragged Island Creek to be designated as an exceptional state water.

Projected Impact on Employment

The proposed regulation is likely to restrict employment growth in industries that would require discharging into or upstream of the designated waters. Given that much of the area is sewerred and it is normal locality practice to require hook-ups to the Hampton Roads Sanitation District, the negative impact of the proposed designation on employment is likely to be limited. Moreover, by encouraging tourism, the proposed change could lead to increased employment in industries related to tourism and outdoor recreation.

Effects on the Use and Value of Private Property

Firms seeking to discharge into the designated waters or upstream to these waters will be required to find alternative ways of discharging sewage, industrial waste, or other types of pollution. This could involve additional expenditures on the part of these firms, raising their cost of operation and lowering their asset value. However, given that much of the area around the waters under consideration for designation is sewerred and it is normal locality practice to require hook-ups to the Hampton Roads Sanitation District, the negative impact of the proposed designation on businesses and other entities in the area is likely to be limited. On the other hand, an increase in the number of people seeking outdoor recreational activities in the area is likely to increase revenues and hence the asset value of firms involved in the tourism industry.