

**BEFORE THE MARYLAND DEPARTMENT OF THE ENVIRONMENT**

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LOWER SUSQUEHANNA RIVERKEEPER )  
ASSOCIATION, )  
2098 Long Level Road )  
Wrightsville, PA 17368 )  
and ) FERC Project No. P-405  
MDE WSA App. No.17  
WATERKEEPERS CHESAPEAKE, )  
P.O. Box 11075 )  
Takoma Park, MD 20913 )

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**RESPONSE OF LOWER SUSQUEHANNA RIVERKEEPER  
ASSOCIATION AND WATERKEEPERS CHESAPEAKE TO  
CONSTELLATION ENERGY GENERATION’S  
SUPPLEMENTAL BRIEFING**

**INTRODUCTION<sup>1</sup>**

Constellation’s supplemental submission confirms what was plain from its 2018 petition for administrative reconsideration: Constellation has not provided and cannot provide sufficient grounds for the Maryland Department of the Environment (“MDE”) to alter the 2018 Certification. Instead of supplying evidence of “fraud, surprise, mistake, or inadvertence,” Constellation advances legal arguments that it either has made, or could have made, in its 2018 petition.<sup>2</sup> Such arguments are nothing more than a plea that MDE “change [its] mind.” As Maryland courts have held consistently, such pleas do not suffice.<sup>3</sup>

Further, Constellation’s petition relies on conclusory assertions and innuendo. Instead of citing actual court decisions to support its legal arguments, for

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<sup>1</sup> Lower Susquehanna Riverkeeper Association and Waterkeepers Chesapeake are collectively referred to as “Waterkeepers.” Constellation may be used throughout this response to refer to Exelon Generation, which is the former owner and operator of the Conowingo Project, or Constellation Energy Generation, which is the current owner and operator.

<sup>2</sup> *Bd. of Zoning Appeals v. McKinney*, 174 Md. 551, 564 (1938).

<sup>3</sup> *Id.*

example, Constellation repeatedly quotes off-the-cuff remarks from a judge in a case that never even reached a decision. Similarly, instead of citing MDE's actual findings, Constellation attributes opinions to individual MDE officials based on statements taken out of context or never made at all. Although Congress intended the Clean Water Act to maintain and bolster states' authority to protect their own waters, Constellation selectively and misleadingly quotes the Act, case law, and regulatory materials to undermine or obscure long standing interpretations of the Clean Water Act in an improper attempt to tie MDE's hands and prevent Maryland from protecting the Susquehanna River and the Chesapeake Bay.

Where Constellation's supplemental submission discusses old information, such as the findings and requirements in the Certification itself, it misrepresents them. For example, it claims that the Certification effectively requires payment and that reducing the Dam's nutrient discharges is not feasible when, in reality, the Certification makes payment an optional alternative to nutrient reductions, which are entirely feasible even though Constellation does not want to undertake them.

Where Constellation's supplemental submission discusses new information, it disregards facts and findings in favor of unsupported or irrelevant conclusions. Addressing the 2019 UMCES Study, for example, Constellation selectively relies on a statement that scoured nutrient discharges are "less" bioreactive, but ignores inconvenient findings that scour events are growing larger and more frequent. Similarly, Constellation relies on the recent Comprehensive Evaluation of System Response ("CESR") report as support for the truly remarkable arguments that Maryland should stop trying to meet the Chesapeake Bay TMDL and should issue a certification that does not purport to assure compliance with Maryland's water quality standards. In reality, the CESR report underscores the need for significant reductions in the Dam's sediment and nutrient discharges because of their impacts on shallower portions of the Bay and its tributaries.

For the reasons given below and in Waterkeepers' previous submission, MDE should deny Constellation's request to eviscerate the Certification and replace it with the far less protective provisions that were in the settlement agreement. It bears emphasis that MDE's decision will determine the fate of the Chesapeake Bay and the Lower Susquehanna River for generations to come.

Reducing the harms that the Dam does may not, in itself, be *sufficient* to put these water bodies on a path to recovery but, as MDE itself has found, it is *necessary*. MDE correctly described the Dam as "a loaded cannon pointed at the

Bay.”<sup>4</sup> The Dam’s routine nutrient and sediment discharges are one of the main reasons the River and the Bay do not meet Maryland’s water quality standards now and, without the reductions that the Certification requires from Constellation, there is no credible plan to ever meet them. Worse yet, if possible, is the virtual certainty that, if Constellation does not take action to reduce the gigantic stockpile of nutrient-laden sediment it has allowed to accumulate behind the Dam, one of the increasingly frequent and severe storms in this region will scour it into the Susquehanna River and the Chesapeake Bay – doing catastrophic and permanent damage. This is not a hypothetical concern. As discussed below, 1972’s Hurricane Agnes caused sediment discharges exceeding 30 million metric tons, more than 60 times the annual average, in just 10 days. The oyster population north of the Chesapeake Bay Bridge, west of Cobb Island in the Potomac River, and in the upper ends of many of the tributaries was virtually wiped out and has never fully recovered. And that was at a time when the Constellation’s reservoir was not already full of nutrient-laden sediment available to be scoured, as it is now.

In the coming years and decades, people will look to the decision that Maryland’s government makes now and either praise the decision makers' wisdom in protecting the Bay and putting it on a path to recovery, or lament that they had the opportunity to do so but threw it away. Waterkeepers urge MDE to protect the River, the Bay, and the interests of the Marylanders who use and love them.

## **RESPONSE TO CONSTELLATION**

### **I. Constellation Misstates the Standard of Review for *Reconsideration*.**

One point that the parties appear to agree upon is that the relevant question before MDE is “not whether Maryland is bound by its settlement with Constellation, but rather *whether the certification should be reconsidered*.”<sup>5</sup> As discussed in the initial Waterkeepers’ brief, the relevant legal standard, as repeatedly emphasized by the Maryland Supreme Court, is that administrative bodies cannot “merely change their mind” on reconsideration but must instead

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<sup>4</sup> MDE, Overview of Maryland’s Water Quality Certification for the Conowingo Dam at 4 (January 3, 2019) (“Certification Overview”), Ex. 1.c. to Response of Lower Susquehanna Riverkeeper Association and Waterkeepers Chesapeake to Maryland Department of the Environment’s Request for Supplemental Briefing Regarding the Petitions for Administrative Reconsideration of the Clean Water Act Section 401 Certification for the Conowingo Hydroelectric Project, Aug. 1, 2023 (“Waterkeepers Aug. 1, 2023 Submission”).

<sup>5</sup> Constellation Supplemental Submission at ii (emphasis added).

determine whether there are sufficient grounds for reconsidering the prior decision, including “fraud, surprise, mistake, or inadvertence.”<sup>6</sup>

Nothing in the supplemental submission provides any actual basis to reconsider the 2018 Certification under the relevant standard for administrative reconsiderations. Despite this, Constellation asks this agency to make wholesale changes to the 2018 Certification, such as to: “eliminate the nutrient reduction obligation”; “not impose a dredging obligation”; and “revise the 2018 certification in light of the substantial changes Constellation has agreed to make....”<sup>7</sup> Constellation does not point to specific instances of fraud, surprise, mistake, or inadvertence, but instead generally reiterates arguments it has been making for years or could have made years ago to request that MDE essentially write an entirely new water quality certification. This is simply not how the administrative reconsideration process works in theory or as described by the Maryland Supreme Court.

Constellation repeatedly invokes the arbitrary and capricious standard of review under the Maryland Administrative Procedure Act (“APA”), but fails to heed the Circuit Court for Baltimore City’s holding that MDE has not issued a final decision for purposes of judicial review under the Maryland APA. Until the process set forth in COMAR runs its course, the record has not been fully developed and so there is nothing specific to be judged for arbitrariness or capriciousness. Regardless, Constellation’s supplemental submission does not show that any decision by MDE was arbitrary and capricious. To the contrary, it confirms that if the Certification were challenged by Constellation, it would be upheld under the arbitrary and capricious standard.

## **II. Constellation Raises No New Grounds to Challenge Standing, Which Was Previously Established.**

Despite Waterkeepers’ expressed concerns, MDE provided an opportunity to “submit supplemental information relevant to the Certificate reconsideration process.”<sup>8</sup> Constellation’s supplemental submission, however, provides no “new, updated, or relevant information” related to its asserted standing claims.

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<sup>6</sup> *Bd. of Zoning Appeals*, 174 Md. at 564.

<sup>7</sup> Constellation Supplemental Submission at i-ix.

<sup>8</sup> MDE June 1, 2023 Letter regarding Clean Water Act § 401 Water Quality Certification for the Conowingo Hydroelectric Project 17-WQC-02 at 1.

On December 6, 2018, Waterkeepers submitted a response to Constellation’s claims regarding standing. While before MDE, that response is incorporated by reference and attached hereto. Rather than respond to those arguments, Constellation cites two cases decided since 2018. But, neither address the relevant regulatory or statutory provision for administrative reconsideration, “organizational” standing, or the types of harms asserted by the Waterkeepers here.<sup>9</sup> Constellation wholly fails to explain how these cases would be controlling here or how they address the arguments raised by Waterkeepers. This is likely because they are inapposite to the situation here where Waterkeepers identified several concrete and particularized harms beyond “merely a claim of ‘the right, possessed by every citizen, to require that the Government be administered according to law.’”<sup>10</sup>

Maryland courts have recognized “an important difference between standing requirements before [agencies] and standing requirements to bring a petition for judicial review before the circuit court.”<sup>11</sup> This difference is to encourage and ensure public participation in administrative proceedings. Moreover, both State and federal law admonish regulatory agencies charged with administering our water pollution control laws that the public’s right to participate in the Act’s implementation is to be encouraged and promoted. For example, the federal Clean Water Act directs that “[p]ublic participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States.”<sup>12</sup> MDE’s own regulations explicitly direct that “active public involvement throughout the intergovernmental decision-making process shall be encouraged and utilized to accomplish the objectives of State and federal laws and regulations” and that MDE “shall make a maximum effort to seek out and involve the interested public.”<sup>13</sup> Finally, it must be noted that the modern trend is toward the expansion and

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<sup>9</sup> See *Paula v. Mayor and City Council of Baltimore*, 253 Md. App. 566, 585 (2022) (finding no standing to challenge the procedures of a disciplinary review board where claimant “chose not to file a grievance” and the board only makes recommendations to Commissioner that “alone makes the final decision as to what disciplinary action, if any, to take”); *Green v. Comm’n on Judicial Disabilities*, 247 Md. App. 591, 606 (2020) (finding no standing to challenge decision of judicial disciplinary commission which was intended “to protect the public and maintain public confidence in the judiciary, not to vindicate any individual person’s interest”).

<sup>10</sup> *Paula*, 253 Md. App. at 585 (citation omitted).

<sup>11</sup> *Greater Towson Council of Cmty. Ass’ns v. DMS Dev., LLC*, 234 Md. App. 388, 406, 172 A.3d 939, 950 (2017).

<sup>12</sup> 33 U.S.C. § 1251(e).

<sup>13</sup> COMAR 26.08.01.02(E).

liberalization of standing in the environmental context in Maryland, with the General Assembly twice passing laws putting Maryland in harmony with federal standing.<sup>14</sup>

Given these statutory directives and trends and the mission of Waterkeepers here, it would be nonsensical to contend that organizations that use the impacted waters and advocate to protect those waters would not have a specific enough interest to seek reconsideration of a state's determination as to a project's compliance with their water quality standards. Further, Constellation's claim that MDE can determine Waterkeepers' standing beyond the reconsideration process is also counter to the law, as beyond MDE's authority.

While one must look to the statute or regulation, if any, conferring standing to file an administrative appeal. COMAR § 26.08.02.10(F)(4)(a) provides only that a "person aggrieved by the Department's decision concerning a water quality certification may appeal the decision of the Department." "Person" is broadly defined as "an individual, receiver, trustee, guardian, personal representative, fiduciary, or representative of any kind, and any partnership, firm, association, corporation or other entity."<sup>15</sup> Aggrieved is not defined, and Constellation's efforts to define "aggrieved" more stringently goes against the goals of ensuring public participation in administrative proceedings and, indeed, good governance. In fact, Waterkeepers prior submissions outline how they are "aggrieved" by an inadequate 401 Certification, including through the submission of Declarations.<sup>16</sup> Waterkeepers submitted more recent declarations with its August 1, 2023 submission (Exhibit 1.u.). These declarations similarly identified specific harms incurred as a result of the Dam's operations.<sup>17</sup> These are specific interests sufficient to confer standing in this administrative proceeding.

Constellation then attempts to distinguish standing in Maryland versus standing to participate in the FERC proceedings and appeal FERC's issuance of a federal license.<sup>18</sup> Maryland law recognizes that standing should mirror federal law

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<sup>14</sup> See Chapter 651 of 2009 and Chapter 618 of 2021.

<sup>15</sup> COMAR § 26.08.01.01(B)(62).

<sup>16</sup> See, e.g., Administrative Appeal of Final Decision to Issue Clean Water Act Section 401 Certification for the Conowingo Hydroelectric Project, at 2-5 (submitted June 8, 2018) ("Waterkeepers Administrative Appeal"); see also Response of Lower Susquehanna Riverkeeper, et al. in Opposition to Exelon Generation Company, LLC's Renewed Request to Dismiss Appeal, at 6-8 and Decl. of Elizabeth Nicholas (Attachment A).

<sup>17</sup> See, e.g., Waterkeepers Aug. 1 Submission at 37.

<sup>18</sup> Constellation Supplemental Submission at 102 n.282.

in relation to permits authorized under federal law.<sup>19</sup> While Constellation previously argued that these laws relate to specific permits, Maryland’s authority to issue such certifications is granted by federal law, and federal law similarly requires a “particularized” injury.

Indeed, the two cases cited by Constellation affirm that the “aggrievement” test is similar to the “injury-in-fact” requirement under federal law.<sup>20</sup> These cases imposed no “property” requirement as Constellation asserted in its earlier filings. Where, as outlined in Waterkeepers December 2018 Response, the “aggrievement” test only requires a “specific interest,” it makes sense to be consistent with the types of “injury-in-fact” needed to establish standing under federal law. The Waterkeepers clearly had standing to challenge FERC’s failure to include the Certification in federal court. It follows that the Waterkeepers can also show a sufficient “specific interest” to challenge the underlying Certification.

Finally, despite Constellation’s implications that the Waterkeepers’ interests are adequately protected because MDE is allowing for public input, this ignores that the public input process is not required by law, and, moreover, MDE has not confirmed that it will provide for public input if MDE somehow decides to revise the 2018 Certification in a manner that may be less protective of state waters than the existing Certification. Waterkeepers have already raised their concerns with the process being insufficient to ensure proper public participation, as the Clean Water Act envisions. Further, being a party to a proceeding has been found to be different in kind to be able to protect one’s interests from participation in the public comment process.<sup>21</sup> MDE must find Waterkeepers have more than sufficiently established that they are “aggrieved” for purposes of administrative reconsideration.

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<sup>19</sup> See, e.g., *Patuxent Riverkeeper v. MDE*, 422 Md. 294, 29 A.3d 584 (2011); *MDE v. Riverkeeper*, 447 Md. 88, 116 n.36, 118 n.38, 134 A.3d 892 (2016); MD Code, Environment, §1-601; MD Code, Environment, § 5-204 (referring to permits issued under Title 9). Although “permit” is not defined in the relevant Maryland Codes, Title 9 is noted as the authority for COMAR 26.08.02, see COMAR 26.08.02.00 (notations), and MDE broadly defines permits to include: “written authorization issued by the Department under pertinent law and regulations and describing required performance for specific activities and operations.” COMAR 26.08.01.01(B)(60).

<sup>20</sup> *Paula*, 253 Md. App. at 581 (“a plaintiff must allege ‘special damage,’ or that the injury they suffered was ‘concrete and particularized,’ as opposed to an injury based on an ‘abstract, generalized interest’ shared by all members of the general public”) (citation omitted); see also *Green*, 247 Md. App. at 602.

<sup>21</sup> See, e.g., *United States v. Albert Inv. Co.*, 585 F.3d 1386, 1398 (10th Cir. 2009) (“The notice-and-comment mechanism is not an adequate substitute for intervention.”).

### **III. Constellation’s Attempts to Disclaim Responsibility for the Discharges from Its Dam Lack Merit.**

#### **A. MDE properly concluded Constellation is responsible for its Dam’s discharges.**

Throughout its supplemental submission, Constellation argues that provisions in the Certification are inappropriate because they were not the first party to “introduce” pollutants that may be addressed by those provisions. As an initial matter, Constellation has long made this assertion.<sup>22</sup> MDE properly rejected this argument when it issued the 2018 Certification. Reconsideration is not intended to give the applicant numerous “bites at the apple.” Even so, the problem for Constellation is that its argument is both factually and legally meritless.

##### ***1. MDE correctly found Constellation introduces nutrient pollution into the Susquehanna River and the Chesapeake Bay.***

In the Certification, MDE finds that Constellation introduces nutrients into water. MDE states:

Although the Dam has in the past trapped and stored sediment and nutrients and served as a barrier to downstream transport to the Bay, the Reservoir is now full, as no efforts have been undertaken over the life of the Project, such as routine dredging, to maintain any trapping function. *As a result, sediments and nutrients move downstream, and during large storm events, significant amounts of trapped sediment and nutrients are scoured from behind the Dam and discharged downstream.*<sup>23</sup>

Nonetheless, Constellation insists that “MDE does not contend in the 2018 Certification that the ‘activities’ of the ‘applicant’ introduce nutrients into the

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<sup>22</sup> See, e.g., Letter from Exelon to MDE, May 17, 2017, regarding Section 401 Water Quality Certification Application, at 3 (Submitted on May 17, 2017 to FERC Docket) (20170517-5130) (asserting “Clean Water Act imposes no legal obligation on Exelon to address pollutants introduced by others”).

<sup>23</sup> MDE, Clean Water Act Section 401 Certification for the Conowingo Hydroelectric Project at 12 (2018) (“Certification”) (emphasis added).

water” and that “[t]he nutrients at issue are introduced by other parties upstream of Conowingo and are already present in the water flowing through the Project.”<sup>24</sup> It goes on to argue that “MDE lacks authority under § 401 to require Conowingo to remove nutrients introduced by others.”<sup>25</sup>

Constellation’s complaint amounts to an argument that, because the Certification does not use the words “activities” and “introduce,” MDE somehow lacks authority under section 401 of the Clean Water Act to require Constellation to reduce its nutrient discharges. The text of the statute, however, makes plain that Maryland is not only authorized but required to include in the Certification “any effluent limitations and other limitations and monitoring requirements necessary to assure that any applicant for a license or permit will comply with any applicable effluent limitations and other limitations...”<sup>26</sup> Maryland’s authorities and obligations under section 401 are in no way conditional on making findings that activities of Constellation introduce nutrients into the water.

The Certification contains ample explanation of MDE’s conclusion that the nutrient reductions it sets forth are necessary to assure the Dam will comply with Maryland’s water quality standards. It finds that, “as a result” of Constellation’s failure to make any efforts to maintain the reservoir, such as through routine dredging, “sediments and nutrients move downstream, and during large storm events, *significant amounts of trapped sediment and nutrients are scoured from behind the Dam and discharged downstream.*”<sup>27</sup>

In any event, Constellation’s magic words argument about “introducing” nutrients to the water rests on a false premise. The nutrients that Constellation has allowed to build up in the bed of the reservoir are not in the water when they are behind the Dam. Rather, they are in the bed of the reservoir, and they are introduced into the water and discharged into the lower Susquehanna River and the Chesapeake Bay during scour events. The reason these scour events occur, as MDE made clear in the Certification, is that “over the life of the Project,” Constellation has undertaken no efforts “such as routine dredging, to maintain any trapping function” in the reservoir behind the Dam.<sup>28</sup>

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<sup>24</sup> Constellation Supplemental Submission at 18.

<sup>25</sup> *Id.* at 19.

<sup>26</sup> 33 U.S.C. 1341(d).

<sup>27</sup> Certification at 12.

<sup>28</sup> *Id.*

Constellation also introduces nutrients that are not scoured but still caused by Constellation's failure to maintain the trapping capacity of its reservoir. Constellation's contrary argument requires accepting that the current situation should be compared to an imaginary one in which the Dam does not exist. The Dam does exist, however, and the correct comparison is between the nutrient discharges that would occur if the reservoir behind it were properly maintained and those that occur now because it has not been properly maintained. As MDE correctly found, Constellation's failure to maintain the reservoir behind the Dam means that nutrients that should be trapped there are, instead, introduced into the waters below the Dam.

**2. *Constellation misinterprets the scope of Maryland's section 401 certification authority.***

Even if Constellation's claims about the "introduction" of nutrients had any merit, *but see supra*, the "legal standard" Constellation seeks to apply on reconsideration, as outlined in the "Statutory and Legal Background" (at 10-17), is, in short, incorrect for several reasons. Unfortunately for Constellation, its flawed interpretation of MDE's authority under section 401 of the Clean Water Act is used to support much of its contentions as to why the 2018 Certification must be reconsidered. A plain reading of the statute and long-standing interpretations of the broad nature of a state's authority to protect its waters indicate that its reconsideration request must be denied.

First, Constellation seeks to conflate NPDES discharge permit requirements with a section 401 water quality certification.<sup>29</sup> EPA has explained the error in this interpretation, stating, consistent with the Supreme Court, "a point source discharge triggering section 401 does not require the addition of pollutants."<sup>30</sup> As EPA explains, "discharge" has long been defined broadly to include, but not be limited to, "discharges of pollutants."<sup>31</sup> It cannot be disputed that the Dam's operations involve discharges. For purposes of section 401, it is irrelevant if the Dam's operations also "introduced" "pollutants." This is unlike section 402 of the Clean Water Act, 33 U.S.C. § 1342, which governs NPDES permits, that expressly

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<sup>29</sup> See, e.g., Constellation Supplemental Submission at 10.

<sup>30</sup> 87 Fed. Reg. 35,318, 35,328 (June 9, 2022) (*S.D. Warren v. Maine Bd. of Env'tl. Protection*, 547 U.S. 370 (2006)).

<sup>31</sup> *Id.*; see also *S.D. Warren Co.*, 547 U.S. at 385-86 (finding hydroelectric dams releasing water constituted a discharge for purposes of section 401 certification).

references discharges of “pollutants,” rendering the cases Constellation cites that discuss NPDES permits irrelevant.<sup>32</sup>

There is no dispute that a discharge is involved here. As the United States has explained,

Hydroelectric dams, which typically impound water for power production, necessarily produce “a flowing or issuing out” of water when they return the diverted water to the river channel. Indeed, releases of water from dams *and reservoirs* are characteristically and routinely described as “discharges.” ...

As a matter of ordinary usage, the operation of petitioner’s hydroelectric generating facilities results in a “discharge” of diverted water, used to power turbines, when the water is returned to the river channel. That discharge, in turn, triggers Section 401’s state certification requirement, which ensures that the federal licensing authorities properly take account of the impact of those water releases on the State’s “primary responsibilities” to regulate “the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.”<sup>33</sup>

“EPA has consistently maintained that the licensing of hydroelectric facilities under the Federal Power Act is subject to the requirements of Section 401(a). EPA has taken that position in an agency guidance document, in communications with FERC, and in construing its own authority to issue certifications under Section

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<sup>32</sup> See, e.g., *Arkansas v. Oklahoma*, 503 U.S. 91 (1992) (involving NPDES permit issued by EPA despite discharging into already polluted waters); *Potomac Riverkeeper, Inc. v. MDE*, 238 Md. App. 174 (2018) (involving state issued NPDES permit); see also *Appalachian Power Co. v. Train*, 545 F.3d 1351 (4<sup>th</sup> Cir. 1976) (addressing effluent limitations for pollutants issued by EPA); *Natural Res. Defense Council v. EPA*, 301 F. Supp. 3d 133 (D.D.C. 2018) (addressing TMDL related to pollutants issued by EPA); *Am. Iron & Steel Inst. v. EPA*, 526 F.2d 1027, 1056 (3d Cir. 1975) (addressing effluent limitations issued by EPA).

<sup>33</sup> Br. of the United States as Amicus Curiae Supporting Respondent, at 14-15, *S.D. Warren Co. v. Me. Bd. of Env’tl. Protection*, No. 04-1527 (S. Ct. Jan. 2006) (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2022-0128-0064)) (citations omitted).

401(a) when no state agency has authority to do so.”<sup>34</sup> Since the section 401 certification requirement is clearly triggered, it would be nonsensical that one of the most significant impacts of the Dam’s operations cannot be addressed because Constellation claims it did not “introduce” pollutants to the waters initially.<sup>35</sup>

Second, Constellation’s attempt to rely on EPA regulations promulgated in 2020, which is referred to as the “EPA 2020 Rule,” must be rejected.<sup>36</sup> As an initial matter, the Certification was issued in 2018, and the EPA 2020 Rule did not become effective until September 2020.<sup>37</sup> EPA’s 2020 Rule does not apply to the Certification, let alone provide reason to amend it.

While Constellation acknowledges that EPA has proposed to revise the EPA 2020 Rule,<sup>38</sup> it fails to explain that EPA has subsequently “identified substantial concerns about whether portions of the 2020 Rule impinged on the cooperative federalism principles central to CWA section 401.”<sup>39</sup> Indeed, Constellation’s arguments mirror those long made by industry and, until EPA issued the 2020 rule, rejected by EPA. In fact, EPA chose to revise and replace the EPA 2020 Rule to “better reflect the 1972 CWA’s statutory text, the legislative history regarding section 401, and the broad water quality protection goals of the Act.”<sup>40</sup> Although EPA has not yet finalized the proposed revisions, EPA made clear that the EPA

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<sup>34</sup> *Id.* at 22.

<sup>35</sup> Constellation attempts to claim that references to the “*activity of the applicant*” are somehow intended to impose an unwritten requirement that it is the applicant that must initially introduce pollutants for it to be properly addressed by states in a water quality certification. But, even assuming there must be a pollutant, the Clean Water Act makes “the discharge of *any* pollutant by *any* person” unlawful. 33 U.S.C. § 1311(a). Even under other provisions of the Clean Water Act, “any pollutants” may similarly include those introduced by other parties. *See, e.g., Md. Small MS4 Coalition v. MDE*, 479 Md. 1, 40-41 (2022) (upholding municipal sewer general permit’s impervious surface restoration requirement and rejecting claim that it unlawfully made the County responsible for discharges by third parties). Regarding actions to support restoration of the Chesapeake Bay, EPA found it could, under the 2010 TMDL, “reallocate additional load reductions from non-point to point sources of nutrient and sediment pollution, such as wastewater treatment plants.” EPA Region III Letter to Virginia Secretary of Natural Resources, Dec. 29, 2009, at 4, available at [https://www.epa.gov/sites/default/files/2015-07/documents/bay\\_letter\\_1209.pdf](https://www.epa.gov/sites/default/files/2015-07/documents/bay_letter_1209.pdf) (Attachment B). EPA also recognized it could require net improvement offsets, which could require offsets “that do more than merely replace the new or expanding source’s anticipated new or increased loadings.” *Id.*

<sup>36</sup> Constellation Supplemental Submission at 11-13.

<sup>37</sup> 85 Fed. Reg. 42,210, 42,210 (July 13, 2020).

<sup>38</sup> Constellation Supplemental Submission at 12 n.41.

<sup>39</sup> 87 Fed. Reg. at 35,325 (citing 86 Fed. Reg. 29,541, 29,543-29,544 (June 2, 2021)).

<sup>40</sup> *Id.*

2020 Rule was a departure from long-standing interpretations that it was reinstating. There is then no new “legal authority” on which it can rely.<sup>41</sup>

Constellation further seeks to use MDE’s “own regulations” to support a limited scope of 401 certifications.<sup>42</sup> But, MDE opposed the relevant aspects of the EPA 2020 Rule, indicating EPA “put[] forth a series of constraints on state implementation of CWA Section 401 that are contrary to law and fundamentally different from the positions EPA has taken over the past 40 plus years in overseeing the implementation of CWA Section 401.”<sup>43</sup>

Even considering the EPA 2020 Rule, Constellation selectively quotes from the preamble to claim EPA found 401 water quality certifications cannot address pollutants that were not initially introduced by the project proponent. For example, on page 12 of its Supplemental Submission, Constellation states that “EPA confirmed that ‘effects caused by the presence of pollutants in a discharge that are not attributable to the discharge from a federally licensed facility’ would ‘generally ... be beyond the scope of certification as articulated in the final rule.’”<sup>44</sup> Constellation then asserts EPA claimed the rule already found “that certification conditions must be directly related to impacts to water quality requirements from the project proponent’s activity, and not water quality concerns caused by other entities.”<sup>45</sup> These quotes are taken out of context and only indicate that EPA found that the purpose of a 401 certification is to address impacts to *water* from the proposed project. Indeed, reading the entire discussion in the preamble makes clear that whether a certification may address pollutants initially attributed to other parties depends on the circumstances:

Some commenters requested examples of what considerations would be outside the scope of certification, based on the Agency’s limiting the scope of certification to discharges, rather than to the entire activity or project. Commenters mentioned specific considerations that they believed should be excluded

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<sup>41</sup> We are also compelled to note that the proposed 2022 Rule is no doubt more in line with the views of the Moore Administration than the extremist views propounded by the Trump Administration in the 2020 Rule.

<sup>42</sup> Constellation Supplemental Submission at 13.

<sup>43</sup> Letter from MDE to EPA Administrator, Oct. 21, 2019, at 1 (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2019-0811)) (Attachment C).

<sup>44</sup> Constellation Supplemental Submission at 12 (citing 85 Fed. Reg. at 42,253).

<sup>45</sup> *Id.* at 12-13 (citing 85 Fed. Reg. at 42,257).

from the scope of certification in the regulatory text, such as effects caused by the presence of pollutants in a discharge that are not attributable to the discharge from a federally licensed activity, effects attributable to features of the permitted activity besides the discharge, and effects caused by the absence or reduction of discharge. The Agency generally agrees that such considerations would be beyond the scope of certification as articulated in this final rule; however, *the Agency is not modifying the regulatory text to reflect these specific considerations, as there may be unique project-specific facts or circumstances that must inform whether a particular impact is caused by the discharge, as defined in this final rule.*<sup>46</sup>

Constellation appears to believe it can create some exclusion from conditions under a 401 certification for a project's impacts that involve pollutants it claims are "introduced by others"<sup>47</sup> by referring to the "*applicant's* 'impacts to water.'" But not even the cases cited in its Supplemental Submission support the creation of such an exclusion.<sup>48</sup> Indeed, in one of the cases cited by Constellation, *In re Water Quality Certification*, 822 N.W.2d 676 (Minn. Ct. App. 2012), the court upheld a certification that addressed ballast water discharges that may spread the presence of invasive species already present in the waters.<sup>49</sup> This is not the case where, for example, sediment, trash and debris are passively moving downstream, which may have occurred had the Dam not been built. Rather these pollutants are "discharged," for example, when the gates of the Dam are opened or when the Dam changes the natural flow rate of the river. Similarly, ship owners do not

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<sup>46</sup> 85 Fed. Reg. at 42,253 (emphasis added).

<sup>47</sup> Constellation Supplemental Submission at 19.

<sup>48</sup> See, e.g., *Mt. Valley Pipeline, LLC v. N.C. Dep't of Env't Quality*, 990 F.3d 818, 830 (4th Cir. 2021) ("To deny certification under a practical alternatives requirement, a State's decision must be grounded in impacts to water; the alternatives considered must be practical; the consideration of alternatives must be reasonably consistent with the administrative record; and the agency's decision must not be arbitrary and capricious."); see also *Port of Seattle v. Pollution Control Hearings Board*, 90 P.3d 659 (Wash. 2004) (addressing extent of impacts of stormwater runoff on flow not addition of pollutants and upholding conditions on extent of contaminants that could be found in fill material used by project proponent). In *Mountain Valley Pipeline, LLC v. N.C. Dep't of Env't Quality*, the court found the agency failed to explain why it denied the certification rather than impose conditions, not that it could not impose conditions.

<sup>49</sup> See also *Port of Oswego Auth. v. Grannis*, 897 N.Y.S.2d 736, 738-39 (N.Y. App. Div. 3d Dep't 2010) (involving state regulation of ballast water).

initially place invasive species in the waters, but their activities cause those species to move downstream or into other waters.

Finally, even under Constellation’s interpretation that the 2018 Certification must address “changes in water quality *caused* by the activities of the applicant,”<sup>50</sup> how is the operation and maintenance of the reservoir, a vital part of the Dam’s operations, not part of the applicant’s “activity” that “causes” impacts downstream? As EPA noted, “[t]o assure—as it must under section 401(d)—that ‘the applicant’ complies with all applicable state or tribal and Federal water quality requirements, the certifying authority must be able to evaluate potential water quality effects from the applicant’s ‘activity as a whole.’”<sup>51</sup> Nothing in the CWA prohibits MDE from considering those impacts even if the “pollutant” was initially placed in the water, which is discharged by the Dam, by another party.

EPA recently reaffirmed that, once the discharge requirement is triggered, “the certifying authority may choose to grant, condition, or deny water quality certifications based on the potential impact of the ‘activity as a whole’ on waters of the United States and other state or tribal waters.”<sup>52</sup> This is consistent with the scope of certification standard affirmed by the Supreme Court in *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700 (1994), which held that section 401 “‘is most reasonably read’ as authorizing the certifying authority to evaluate and place conditions on what the Court described as the ‘project in general’ or the ‘activity as a whole’ to assure compliance with various provisions of the [CWA] and ‘any other appropriate requirement of State law’ . . . .”<sup>53</sup> To codify this, EPA has proposed to define “activity as a whole” as “any aspect of the project activity with the potential to affect water quality.”<sup>54</sup> MDE supported “the continued authority of the State to review an entire project for actions, deliberate or inadvertent, during construction, operations, maintenance and repair, which may result in any discharge to a navigable water.”<sup>55</sup> These long-

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<sup>50</sup> Constellation Supplemental Submission at 13.

<sup>51</sup> 87 Fed. Reg. at 35,344; *see also id.* at 35,345 (referring to “applicant” as a “different and more expansive formulation” and to Congress’ support for “application of the broader ‘activity’ approach”).

<sup>52</sup> 87 Fed. Reg. at 35,329.

<sup>53</sup> *Id.* at 35,342 (quoting *PUD No. 1 of Jefferson Cty.*, 511 U.S. at 711-712); *see also id.* at 35,344 (“EPA has concluded that the statutory text, legislative history, and goals of section 401 more reasonably support the ‘activity as a whole’ standard that was accepted practice for the preceding 50 years.”).

<sup>54</sup> *Id.* at 35,377 (Proposed §121.1(a)); *see also id.* at 35,345.

<sup>55</sup> Letter from MDE to EPA Administrator, Oct. 21, 2019, Attachment 1, at 1 (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2019-0811)) (Attachment C); *see also* Letter from MDE to

standing precedents are the appropriate reading of the Clean Water Act, not Constellation’s attempts to avoid its responsibilities by somehow narrowing the scope of the certification by referencing *the applicant* or *the activity*. Indeed, the reservoir is part of the Dam’s operations. When discussing the renewal of a license (versus a new project), retaining the reservoir (versus removing the Dam and, thereby, the reservoir) is part of the Dam’s “activities.”

Moreover, EPA has recognized the potential non-discharge related conditions that may be required with respect to a hydroelectric dam facility to protect water quality and designated uses, rejecting the claims Constellation appears to be making here to seek to limit MDE’s authority to place conditions on its operations through the 401 certification.<sup>56</sup> These conditions relate to the fact that “a dam alters the chemical, physical, and biological integrity of a river by placing a barrier across it, blocking upstream and downstream passage of nutrients and aquatic species, altering the timing and volume of flows, transforming a free-flowing riverine reach into a reservoir, and converting the energy that oxygenates water into electricity.”<sup>57</sup> EPA listed several conditions that it found states should be able to address under an “activity as a whole” approach with respect to dams otherwise it “could seriously impair their ability to protect valuable water resources ... inconsistent with Congress’s intention to provide states and tribes with this powerful certification tool to prevent their water resources from being adversely impacted by projects needing Federal licenses or permits,” including fish and eel passage facilities (upstream and downstream), fish protection measures concerning intakes, wildlife habitat enhancements, aquatic resource enhancements, and conditions assuring protection of designated uses.<sup>58</sup> “EPA believes that it is appropriate for the certifying authority to consider the broadest possible range of water quality effects and that the appropriateness of any given condition will depend on an analysis of all relevant facts.”<sup>59</sup>

In attempting to narrow the meaning of “activity,” Constellation appears to ignore the fact that, by definition, the Dam “trap[s]” or “block[s]” the pollution of

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EPA, Aug. 1, 2022, at 5 (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2022-0128-0186)) (Attachment D) (“MDE supports the definition’s inclusion of any aspect of the project which may affect water quality. MDE interprets aspects to include but not be limited to the construction or operation of the project as well as impacts in addition to those which triggered the request for Section 401 certification.”).

<sup>56</sup> 87 Fed. Reg. at 35,342.

<sup>57</sup> *Id.*

<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at 35,343.

others by its mere existence. When discussing the renewal of a license (versus a new project), retaining the reservoir (versus removing the Dam and, thereby, the reservoir) is part of the Dam’s “activities.” These activities are directly attributed to owner and operator of the Dam that, among other things, allows the sediment to build up to be scoured during heavy rain events, opens the flood gates to release those sediments, trash, and debris downstream and flow into the Bay, and otherwise fails to maintain the Dam and reservoir to ensure good working order and compliance with water quality requirements. Unlike cases cited by Constellation, it is undisputed that Constellation is required to obtain a 401 certification,<sup>60</sup> and Constellation does have control over these impacts, as the project has exacerbated the impacts of the nutrients, trash and debris, and sediments because of, among other things, the unnatural flows and scour events.<sup>61</sup> MDE properly can impose conditions to address these impacts to waters.

**3. *Constellation’s claimed “legal authority” should bear no weight in these proceedings.***

Constellation asserts that “legal authority continues to underscore that MDE lacks authority under § 401” to address pollutants that, it claims, have been “introduced by others.”<sup>62</sup> Despite claiming MDE has no legal authority to require removal of pollutants introduced by other parties, Constellation cites to no authority directly on point. As discussed above, Constellation, in fact, cites to no “statutory text,” “court decisions,” or lawful EPA interpretations that “certification conditions must be directly related to impacts to water quality requirements from the project proponent’s activity, *and not water quality concerns caused by other entities.*”<sup>63</sup> Instead, Constellation tries to rely on its claimed review of other

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<sup>60</sup> *Del. Riverkeeper Network v. Secretary of the Penn. Dep’t of Env’tl. Prot.*, 833 F.3d 360, 386 (3d Cir. 2016) (finding tree-clearing activity did not require state water quality certification and, thus, challenge related to those impacts failed).

<sup>61</sup> *Niagara Mohawk Power Corp. v. N.Y. State Dep’t of Env’tl. Conservation*, 50 N.Y.S.3d 197, 199-200 (N.Y. 2021) (finding “respondent was authorized to require some form of invasive-species mitigation as a condition of a WQC,” but that the conditions to mitigate irrespective of the applicant’s role in creating *or exacerbating* such growth was “effectively requiring petitioner to do something impossible”); *cf. Am. Iron & Steel Inst.*, 526 F.2d at 1056 (finding individual source should be eligible for an adjustment “if it can show that its inability to meet the limitation is attributable to significant amounts of pollutants in the intake water”).

<sup>62</sup> Constellation Supplemental Submission at 18-19.

<sup>63</sup> *Id.* at 19 (citing 85 Fed. Reg. at 42,257). As discussed above, this selective quote is misleading and, in any event, used by Constellation to go well beyond any statements EPA has made regarding a State’s authority under section 401.

certifications and on statements (again) taken out of context. Neither of these have any precedential or persuasive value.

First, Constellation claims that, surveying nearly 400 certifications involving a hydropower project, it has been unable to find “a *single* § 401 certification” imposing similar conditions as the 2018 Certification imposes regarding removal of nutrients.<sup>64</sup> All that is said, however, is that “Constellation has attempted to survey” several hundred certifications.<sup>65</sup> There is no indication as to who did the survey and what is their experience or expertise in conducting such a review. Nor is there an explanation as to the methodology used for conducting such a survey. Constellation does not actually provide copies of the certifications it reviewed or any descriptions to test this theory (nor, in the time provided by MDE to respond was there an ability to undertake such a review independently). In any event, what MDE may have done elsewhere (in Constellation’s opinion) does not define the scope of its authority, which is essentially a legal issue and testimony on questions of law are not favored.

Even assuming their review is correct, it is irrelevant to reconsideration here. The water quality concerns of the Susquehanna River and the Chesapeake Bay watershed are complex, and the Chesapeake Bay is the largest estuary in the country. It would not seem unusual that ensuring compliance with water quality standards as it relates to such a complex and significant watershed may require unique actions. In other words, that MDE found unprecedented impacts stemming from the Conowingo Dam must be addressed in a 401 certification is not grounds to reconsider the 2018 Certification. Moreover, this does not mean that there is a broad rule disallowing these types of conditions. For example, states have included provisions related to “run-on” (i.e., non-point discharges, including pollutants, stemming from other activities).<sup>66</sup>

In an apparent acknowledgement that there are no court decisions directly on point, Constellation then references remarks made by a judge in a hearing on a motion to dismiss Constellation’s complaint filed by MDE for lack of

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<sup>64</sup> *Id.* at 19. Elsewhere Constellation contends they reviewed “more than 500 other water quality certifications issued by MDE.” *Id.* at 41.

<sup>65</sup> *Id.* at 7.

<sup>66</sup> *See, e.g.*, California Water Boards, General Clean Water Act Section 401 Water Quality Certification, at 11 (2023), *available at* [https://www.waterboards.ca.gov/water\\_issues/programs/cwa401/generalorders/2023/2-wildfire-rgp-certification-main-body.pdf](https://www.waterboards.ca.gov/water_issues/programs/cwa401/generalorders/2023/2-wildfire-rgp-certification-main-body.pdf).

jurisdiction.<sup>67</sup> Recognizing the court did not reach the merits of any of Constellation’s substantive claims, it nonetheless asserts the federal judge “expressed a strong reaction in opposition to her perception that ‘Maryland thinks that Exelon should pay for everybody else’s pollution.’”<sup>68</sup> Again, Constellation takes the Judge’s comments out of context. The Judge herself acknowledged that the so-called “strong reaction” “really goes to the merits,” which had not been briefed.<sup>69</sup> In other words, the comments were irrelevant to the venue issue that was being heard at the time she made those comments. Because the merits hadn’t been briefed for that hearing on venue, the judge’s comments have even less persuasive value than dicta, which means, they have none at all.<sup>70</sup>

Finally, Constellation cites to testimony before the Maryland legislature after the 2018 Certification issued where then-MDE Secretary Ben Grumbles purportedly acknowledged that the real focus of the certification is not activities of Conowingo, but rather helping “the Commonwealth of Pennsylvania to step up its game, in part with [Constellation] dollars, to reduce runoff upstream.”<sup>71</sup> This is, again, selective quotation and a mischaracterization of his testimony.

Listening to the entire testimony reveals that Grumbles laid out the Administration’s three-prong approach to dealing with the “Conowingo factor.”<sup>72</sup> In his testimony, Grumbles reiterated that the presence of the dam has “fundamentally altered” the ecosystems of Susquehanna River and the Chesapeake Bay, having significant negative impacts on water quality. He further testified that addressing the Conowingo factor is “key” to meeting the State’s water quality goals, referring to it as a “growing problem.” The 2018 Certification, which he testified was based on science, was step one of this approach. Step two was working on the Conowingo WIP, which would not just rely on Constellation’s actions. Step three was to gain more insight into future beneficial reuse of sediment

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<sup>67</sup> Constellation Supplemental Submission at 19.

<sup>68</sup> *Id.* at 20 (citing Ex. 7 (2019 Hearing Tr.) at 41).

<sup>69</sup> Constellation Supplemental Submission, Ex. 7 at 42; *see also id.* at 30-31.

<sup>70</sup> In addition, MDE responded to the Judge’s concerns stating: “The discharge is at the dam and the discharge is what is jurisdictional under the Clean Water Act. And Maryland is looking at ways to try to improve the ecology of the lower Susquehanna and the dam is there.”

Constellation Supplemental Submission, Ex. 7 at 41. To which the Judge responded: “Okay.” *Id.*

<sup>71</sup> Constellation Supplemental Submission at 20 (citing Ex. 13, Grumbles 2019 Testimony).

<sup>72</sup> Secretary Grumbles full testimony is available at

[https://mgaleg.maryland.gov/mgaweb/Committees/Media/false?cmte=pst&clip=PST\\_1\\_24\\_2019\\_meeting\\_1&ys=2019rs](https://mgaleg.maryland.gov/mgaweb/Committees/Media/false?cmte=pst&clip=PST_1_24_2019_meeting_1&ys=2019rs). Key aspects of his testimony regarding the Conowingo Dam can be heard at the 45th to 55th minute, as well as the discussion around the one hour and five minute mark.

behind the dam. In response to a question about what happens if Constellation tries to walk away, Grumbles reiterated that the Certification laid out a path for Constellation to do “what’s necessary for the Conowingo Dam.” He further stated that MDE thought it would lead to private-public partnership opportunities to help others, such as Pennsylvania, to step up. Grumbles was clear that the approach was to combine actions under the certification and the Conowingo WIP and bring more players to the table to reduce Constellation’s costs. Indeed, consistent with cases cited by Constellation regarding imposing obligations for the “net” obligations, the 2018 Certification allows Constellation to obtain credits to reduce its obligations for reducing nutrients. Constellation simply complains that this is insufficient because they should have no obligation in the first place.<sup>73</sup> As explained above, Constellation is incorrect.

**B. Constellation ignores that the MDE has authority to ensure compliance with a broad range of requirements related to water quality.**

As recently expressed by EPA, “Congress intended section 401 to afford states broad power to protect their waters from harm caused by federally licensed or permitted projects” and so it “defers to the relevant state and tribe to define which of their state or tribal provisions qualify as appropriate ‘State laws’ or ‘Tribal laws’ for purposes of implementing section 401.”<sup>74</sup> As EPA explained, consistent with the statute and legislative history, it is appropriate to interpret the term “water quality requirements” “in a way that respects what EPA believes is the full breadth of the Federal and state water quality-related provisions that Congress intended a certifying authority to rely upon when developing its certification and conditions.”<sup>75</sup> The text, purpose, and legislative history of the statute support a broad interpretation of water quality requirements to assure that any applicant will comply with “*any* other appropriate requirement of State law.”<sup>76</sup> Because the Certification is intended to ensure broad compliance with the full suite of applicable State requirements it is inappropriate to confine any analysis of the Conowingo dam to any singular pollutant or ecological impact or to the federal regulatory framework.

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<sup>73</sup> Constellation Supplemental Submission at 24.

<sup>74</sup> 87 Fed. Reg. at 35,348-35,349.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at 35,347 (quoting 33 U.S.C. § 1341(d)).

In its supplemental submission, Constellation ignores that Maryland’s General Assembly has for decades steadily constructed a far more stringent water pollution control framework than the federal minimum. For example, Maryland law defines “pollutant” and “discharge” much more broadly than the comparable federal definitions.<sup>77</sup> By contrast, Constellation states that the “[t]he lesson of [several *federal* court decisions resolving § 401 cases] is that MDE cannot impose onerous conditions relating to the ‘discharge of pollutants’ (i.e., *nitrogen and phosphorus*) already present in the waterway under the guise of regulating Conowingo’s ‘discharge’ of water.”<sup>78</sup> Constellation argues it “cannot lawfully be held responsible under the CWA for these nutrients because, it claims, the Project’s operation does not result in ‘any addition of any pollutant to navigable waters’” and requiring Constellation to reduce its nutrient discharges is not “necessary to assure that any applicant for a Federal license or permit will comply” with applicable provisions of the CWA and state law.”<sup>79</sup> Constellation focuses here and throughout their brief predominantly on *nitrogen and phosphorus* and ignores that the federal Clean Water Act’s definition of “discharge of a pollutant” is considerably narrower than the state definitions of “pollutant” and “discharge,” just as the Clean Water Act is far narrower in scope and less stringent overall than Maryland’s water pollution control laws.<sup>80</sup>

Courts have long recognized *the states’* broad authority to take appropriate actions under section 401 to protect water quality, including enforcing *state* antidegradation policies and maintaining designated uses.<sup>81</sup> Meeting the nutrient load reductions in the TMDL is not the only relevant consideration in this proceeding and, in fact, a shift is presently underway in Maryland and among the Chesapeake Bay Program Partnership to shift away from impacts on dissolved oxygen levels in the deep channel of the Chesapeake Bay and to focus on shallow

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<sup>77</sup> Md. Code Ann., Envir. § 9-101.

<sup>78</sup> Constellation Supplemental Submission at 16 (emphasis added).

<sup>79</sup> *Id.*

<sup>80</sup> *See* Md. Code Ann., Envir. § 9-101 *et seq.*

<sup>81</sup> *PUD No 1 of Jefferson Cty.*, 511 U.S. at 715 (upholding state authority to include conditions in 401 certification state determined were necessary to protect and comply with water quality standards “or any other ‘appropriate requirement of State law,’” and explaining that “under the literal terms of the statute, a project that does not comply with a designated use of the water does not comply with the applicable water quality standards”); *Sierra Club v. U.S. Army Corps of Eng’rs*, 909 F.3d 635, 645-49 (4th Cir. 2018); *AES Sparrows Point LNG v. Wilson*, 589 F.3d 721, 731-34 (4th Cir. 2009).

water quality and other pollutants that have a greater impact on the use or habitat of these waters.<sup>82</sup>

Where Constellation does recognize other pollutant parameters (“bacteriological criteria, water temperature, pH, turbidity, color, toxic substance criteria, DO criteria, water clarity criteria, chlorophyll-a concentrations”) it nevertheless attempts to largely dismiss their relevance with little more than unsupported assertions.<sup>83</sup> For example, Constellation asserts that the regulated flow regime “could potentially impact only two of these numeric criteria—DO and temperature” with no further explanation about why other numeric criteria would not also be implicated or why non-numeric criteria should not also be analyzed.<sup>84</sup>

Similarly, where Constellation does acknowledge “applicable narrative criteria” in Maryland’s water quality standards, it again offers a bold but unsupported statement that “[n]one of these conditions or any resulting narrative criterion is implicated by any discharges from Conowingo.”<sup>85</sup> That statement is neither accompanied by a citation or reference, nor followed by any explanatory sentences.

Curiously, Constellation specifically points to the narrative criteria at issue in COMAR 26.08.02.03(B), particularly subparagraphs (B)(3) and (5), but provides nothing more than conclusory statements about the inapplicability of these criteria. Subparagraph (B)(3) applies to “[a]ny material, including floating debris, oil, grease, scum, sludge, and other floating materials attributable to sewage, industrial waste, or other waste”, and (B)(5) applies to “[t]oxic substances attributable to sewage, industrial waste, or other waste.”<sup>86</sup> As if the term “any material” were not broad enough, the term “waste” is explicitly defined in COMAR in an extraordinarily broad fashion to include “all other liquid, gaseous, solid, or other substances which will pollute any waters of this State.”<sup>87</sup> It is difficult to comprehend how such broadly defined criteria could exclude pollution from a source of discharge as indiscriminate as a dam’s floodgate; to argue otherwise should, at the very least, necessitate a thorough explanation. It is worth

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<sup>82</sup> See Executive Order 01.01.2023.11; see also Christine Condon, *After new research, Maryland to change Chesapeake Bay cleanup strategy*, The Baltimore Sun, July 20, 2023, available at <https://rb.gy/ryui3>.

<sup>83</sup> Constellation Supplemental Submission at 71.

<sup>84</sup> *Id.*

<sup>85</sup> *Id.* at 72.

<sup>86</sup> COMAR 26.08.02.03.

<sup>87</sup> COMAR 26.08.01.01(98).

emphasizing once again that the *State's* statutory definition of “discharge,” like the regulatory definition of “waste,” is an exceptionally broad and functional one, including “(1) [t]he addition, introduction, leaking, spilling, or emitting of a pollutant into the waters of this State; or (2) [t]he placing of a pollutant in a location where the pollutant is likely to pollute.”<sup>88</sup>

Taken on its face, the suggestion that the Conowingo Dam has no potential impact on narrative water quality criteria in COMAR (i.e., discharges no “material” or “waste” or “floating debris”) would seemingly imply that the dam should be wholly exempt from the Clean Water Act and Maryland Water Pollution Control laws and the necessity of obtaining a discharge permit under both of these legal frameworks. Constellation has not otherwise indicated it should be exempt from state or federal law and obviously any such notion would be absurd. Thus, any argument that Maryland’s surface water quality criteria are “not implicated” should be summarily dismissed.

Moreover, in other Clean Water Act regulatory contexts (e.g., stormwater permitting), just because there are natural background sources of pollution does not relieve a discharger of the necessity of controlling their discharges and ensuring they are consistent with the full suite of state and federal regulatory requirements. Indeed, an MS4 operator is responsible for controlling to the maximum extent practicable the pollution that flows through its outfalls even though it neither produced the rain or deposited most of the pollution that is discharged via stormwater runoff. It is impossible to believe one can build and operate a massive dam across one of the nation’s largest rivers without impacting the “chemical, physical, and biological integrity” of downstream waters of the United States or impacting a state’s broad water quality standards. And it would be illogical and unfair to allow an entity to construct a massive artificial impoundment and then allow it skirt any regulatory responsibility for the pollution that flows from it.

Until the promulgation of the 2020 Rule on which Constellation repeatedly seeks to rely in its submission, EPA had long recognized that the legislative history of section 401(d) “indicates that the Congress meant for the States to impose whatever conditions on the certification are necessary to ensure that an applicant complies with *all State requirements that are related to water quality concerns.*”<sup>89</sup>

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<sup>88</sup> Md. Code Ann., Envir. § 9-101.

<sup>89</sup> EPA, Office of Water, *Wetlands and 401 Certification, Opportunities and Guidelines for States and Eligible Tribes*, at 23 (Apr. 1989) (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2022-0128-0015)); see also EPA, Office of Wetlands, Oceans, and Watersheds, *Clean Water Act*

This is the proper scope of consideration for MDE in this proceeding and strongly counsels that MDE reject Constellation’s efforts to limit or eliminate the aspects of Maryland law.

#### **IV. Constellation Does Not Provide Grounds to Reconsider the 2018 Certification Requirements for Nutrient Reductions.**

##### **A. Constellation’s assertions regarding the “indisputable” benefits received from the reservoir are irrelevant and ignore the many harms caused by the dam’s operation.**

Constellation appears to contend that it should not be required to do anything more than it chooses voluntarily to do to address the harms caused by the Dam’s operations merely because, among other things “Conowingo has long served to protect the water quality of the Chesapeake Bay by blocking a significant portion of the harmful nutrient pollution that is discharged into the Susquehanna River through its watershed.”<sup>90</sup> Constellation proceeds to reference the recent 2019 study by UMCES which characterized the dam as “a nutrient and sediment sink”<sup>91</sup> and states without citation or substantiating support that “[t]he scientific evidence ... shows that the Project’s benefits to the Bay have exceeded any harms....”<sup>92</sup> As discussed below, we fail to see how any of these claims are a relevant consideration in the present administrative process. Moreover, while a characterization of the dam as a pollutant “sink” may have some relevance specifically in the context of the Bay TMDL, which counts various “BMPs” to credit pollution reductions toward jurisdictional allocations, it would not make ecological sense to an estuarine scientist inquiring what the actual and *forward looking* impact might be of a dam’s continuing operation. Indeed, the very first paragraph of the 2019 UMCES study that Constellation references here notes the well understood fact that “[d]ams initially *starve downstream ecosystems*”<sup>93</sup> even during the phase in which they are a supposed “sink.”

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*Section 401 Water Quality Certification: A Water Quality Protection Tool for States and Tribes*, at 22 (Apr. 2010) (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2022-0128-0067)).

<sup>90</sup> Constellation Supplemental Submission at 3 (emphasis added).

<sup>91</sup> *Id.*, quoting Constellation Ex. 5, Palinkas *et al.* 2019, Influences of a River Dam on Delivery and Fate of Sediments and Particulate Nutrients to the Adjacent Estuary: Case Study of Conowingo Dam and Chesapeake Bay. *Estuaries and Coasts* (“UMCES Study”), at 20.

<sup>92</sup> *Id.* at 30.

<sup>93</sup> Palinkas *et al.* at 1.

To argue that the dam should be seen as nothing more than “an unintended watershed BMP” is an obvious oversimplification of the dramatic ecological impacts that visit a dam’s upstream and downstream ecosystems. From periods of starvation to periods of overwhelming inundation a dam’s ecological impacts are massive and complex.<sup>94</sup> The Lower Susquehanna and Upper Bay ecosystems do not care what “benefits” the dam may have previously provided for those writing a TMDL, nor should they view a long period of deprivation followed by a sudden reversal of that state as any sort of benefit at all. Ecosystems are often “resilient” to changes, first adapting, then even incorporating and becoming reliant on those changes; but any sudden reversal of an artificially precipitated change in ecosystem conditions can be catastrophic. It is irrelevant from a scientific or legal standpoint what alleged previous and temporary benefits or burdens the dam exacted on aquatic ecosystems over the last century; both the water quality and habitat of the Lower Susquehanna and Upper Bay, as well as State and federal law, are concerned only with whether or not the dam’s continued operation “will comply” with applicable water quality standards.

**B. Constellation’s failure to maintain the reservoir exemplifies why MDE must address the Dam’s impacts on sediments and nutrients over the next 50 years.**

Constellation contends it need not address the impacts of the Dam’s operations that may be attributed to its failure to maintain the reservoir because it had no previous obligation “to conduct ‘routine dredging’ to ‘maintain [a] trapping function’ of the Reservoir.”<sup>95</sup> This is a nonsensical argument. As described above, MDE has broad authority to ensure federally permitted activities comply with state water quality requirements. Just because no one had previously required dredging does not mean that there is not the authority for MDE to do so now (or even that it should not have been done previously).

Constellation’s argument here is particularly absurd in light of the fact that the project received 50-year licenses and it only refers to a 1975 Certification (issued almost 50 years ago). Constellation asserts the “2018 Certification bears no resemblance to Maryland’s 1975 § 401 certification for Conowingo,” as if this has any relevance.<sup>96</sup> Constellation, however, provides no indication that, in 1975, the reservoir reaching capacity might have been an issue (or that the trapping function

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<sup>94</sup> *Id.* at 20.

<sup>95</sup> Constellation Supplemental Submission at 50.

<sup>96</sup> *Id.* at 7.

was even recognized then). Rather, “recent studies have drawn attention to its changing effectiveness as a ‘pollution gate.’”<sup>97</sup>

One of these “recent studies” is the USGS Study submitted by Constellation as Exhibit 4.<sup>98</sup> That study notes only two surveys conducted since construction of the Dam regarding the reservoir’s capacity—one done in 1959 that showed at least half of the sediment storage capacity remained and the other done in 1990 that showed only 20% remaining, indicating a reduction of incoming sediment, a loss of trapping efficiency, or both.<sup>99</sup> While Constellation cites this USGS study to support its claim that the reservoir has provided benefits, that study found that the loads to the Chesapeake Bay are substantially impacted by reservoirs.<sup>100</sup> The study further found that filling of the reservoir increases the velocity of the water and acknowledged that this may impact the ability to meet water quality standards.<sup>101</sup> In light of these identified impacts, the failure to actually require such maintenance during the prior over 90 years of operation shows the dangers of allowing another 50-years of operation without addressing this significant impact.

Moreover, the reservoir is part and parcel of the Dam’s operations and has numerous uses that should, inherently, ensure sufficient capacity for those uses. Indeed, restoring the capacity of the reservoir is also beneficial to the Dam’s operations. The project is intended to use hydropower to generate electricity. It is axiomatic that such a facility would be able to generate more power with a larger/deeper reservoir. “Where enough water can be stored, hydroelectricity is reliable and consistent. However Maryland has relatively small water storage capacity, and water supplies that can vary greatly from year to year. If there is a shortage of rainfall before or during winter, there is a risk of insufficient generation capacity to provide for demand.”<sup>102</sup> Even Constellation acknowledges that dredging has been included in other Maryland water quality certifications “such as to improve navigational access or *provide for operational capacity*.”<sup>103</sup> Despite

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<sup>97</sup> Chesapeake Bay Activities, Conowingo Dam, U.S. Geological Survey (“USGS”), July 10, 2019, <https://www.usgs.gov/centers/chesapeake-bay-activities/science/conowingo-dam>.

<sup>98</sup> Michael J. Langland, Sediment Transport and Capacity Change in Three Reservoirs, Lower Susquehanna River Basin, Pennsylvania and Maryland, 1900–2012 (2015) (“Langland (2015)”).

<sup>99</sup> Constellation Supplemental Submission, Ex. 4 at 12 (Langland 2015).

<sup>100</sup> *Id.* at 3.

<sup>101</sup> *Id.* at 12, 16-17.

<sup>102</sup> Drew Schiavone, *Energy 101: Hydropower (What are the pros and cons?)*, University of Maryland Extension, updated May 5, 2023, <https://extension.umd.edu/resource/energy-101-hydropower>.

<sup>103</sup> Constellation Supplemental Submission at 51 (emphasis added).

Constellation’s irrelevant claims that the ongoing operation of the Dam will provide “a clean and reliable alternative for PJM to power central Maryland,”<sup>104</sup> there is no explanation why routine maintenance of the reservoir, notwithstanding water quality concerns, would not have been useful for the Dam’s overall operations. All that we know is that such maintenance was simply not performed.

Further, while implying that it should only be required to comply with its NPDES permit, which was referenced in its 1975 Certification, Constellation ignores key aspects of the NPDES permit.<sup>105</sup> For example, Section I.A.1 of their most recent NPDES permit says: “There shall be no discharge of floating solids or persistent foam in other than trace amounts. Persistent foam is foam that does not dissipate within one half-hour from the point of discharge.”<sup>106</sup> While the permit provides for an affirmative defense for violations related to an “upset,” upset is defined as an exceptional incident where unintentional and temporary noncompliance with technology-based effluent limitations occurs “due to factors beyond the reasonable control of the permittee.”<sup>107</sup> Moreover, an upset does not include noncompliance to the extent it is caused by “lack of preventive maintenance, or careless or improper operation.”<sup>108</sup> Indeed, the permit provides that: “All treatment, control and monitoring facilities, or systems installed or used by the permittee are to be maintained in good working order and operated efficiently.”<sup>109</sup> For example, ensuring sufficient trapping capacity would help alleviate the sediments, trash and debris that flows downstream when Constellation just opens the floodgates. Those flood gates would not have to be opened as much if there were greater capacity in the reservoir.

Indeed, contrary to Constellation’s protests that the 2018 Certification cannot address pollutants that, it claims, are “introduced by other parties,” other provisions of the NPDES permit make clear that MDE was nonetheless concerned with discharges of, inter alia, sediments, nutrients, trash, and debris associated with the Dam that it is now addressing in the 2018 Certification. The NPDES permit states that “[b]ased on facility operations and/or discharge characteristics this permit limits discharges of total suspended solids to prevent water quality degradation of receiving waters and ultimately the Chesapeake Bay, but does not

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<sup>104</sup> *Id.* at 65.

<sup>105</sup> *Id.* at 2, 51.

<sup>106</sup> Constellation Supplemental Submission, Ex. 2 at 3.

<sup>107</sup> *Id.* at 8, 16.

<sup>108</sup> *Id.* at 8.

<sup>109</sup> *Id.* at 16.

impose limits for total nitrogen and total phosphorus.”<sup>110</sup> “To ensure the Chesapeake Bay and its tributaries are protected from discharges of sediments, nitrogen and phosphorus this permit may be reopened as a major modification to implement any future requirements associated with the Chesapeake Bay TMDL. At that time the permittee may become subject to a Department-issued General Permit for the discharge of such pollutants.”<sup>111</sup>

The NPDES permit also provides: “If a discharge regulated by this permit causes or contributes to an exceedance of water quality standards in COMAR 26.08.02.03, including but not limited to general water quality standards, or if the discharge includes a pollutant not disclosed or addressed in the public record for the permit determination; the Department is authorized to modify, suspend or revoke this permit or take enforcement action to address unlawful discharges.”<sup>112</sup> The cited COMAR provision prohibits pollution of: “Any material, including floating debris, oil, grease, scum, sludge, and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to: (a) Be unsightly; (b) Produce taste or odor; (c) Change the existing color to produce objectionable color for aesthetic purposes; (d) Create a nuisance; or (e) Interfere directly or indirectly with designated uses.”<sup>113</sup> The discharged sediment, trash, and debris certainly are “unsightly,” “change the existing color,” “create a nuisance,” and “interfere directly or indirectly with designated uses.”

In short, any assertions that the 2018 Certification cannot now “fault” Constellation for “failing to do something that it was neither obligated nor authorized to do” are simply false.

### **C. Constellation improperly focuses on the long-term goals of the TMDL.**

Constellation finds issue with MDE’s logic in allocating nutrient reduction responsibilities to the owner of the Conowingo Dam. The section 401 Certification and section 402 discharge permit for the Conowingo Dam are separate and distinct Clean Water Act creatures from the TMDL for the Chesapeake Bay, facts that Constellation apparently ignores.

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<sup>110</sup> *Id.* at 11.

<sup>111</sup> *Id.*

<sup>112</sup> *Id.* at 12.

<sup>113</sup> COMAR 26.08.02.03(B).

Constellation makes much of the timing of scientists' recognition that the Conowingo Dam reservoir had reached dynamic equilibrium. Constellation argues that because this discovery occurred just before the 2017 Midpoint Assessment, rather than just before the TMDL was written, that it somehow affected regulators' decision as to how to allocate reduction responsibilities (“[i]n other words, the ‘additional reduction of 6.0 million pounds of nitrogen and 0.26 million pounds of phosphorus’ would have been allocated to the Bay jurisdictions in the original 2010 Bay TMDL (and not Constellation), along with the other nutrient reductions the Bay TMDL required the jurisdictions to achieve.”)<sup>114</sup>

We fail to understand how this would fundamentally alter the Certification process or MDE's conclusions. MDE would have been in the same position of issuing the section 401 Certification and the section 402 permit for the dam, which would be required to be consistent with any applicable TMDL all the same. In fact, arguably MDE would have had even more reason and motivation to distribute the load reduction responsibility to dischargers, since the overall load assigned to Maryland in the Bay TMDL and Phase I WIP would have been even larger. And the reason for allocating this responsibility to Constellation in the Phase I WIP would have been even clearer with a specific and calculable load of nutrients, sediment, and other pollutants associated with the newly created condition of the dam's reservoir. Any load reduction responsibilities not assigned to the operator of the dam that is both profiting from its operation and polluting downstream waters would have to be made up through load or wasteload allocations to other dischargers or the public.

Constellation seems to suggest that, just because the Conowingo WIP allocated the additional and previously unanticipated loads to three different jurisdictions, the load reductions must actually be borne by the states themselves. This is plainly not how the Clean Water Act or the Bay TMDL works. That a discharger is located *within a state* does not mean that *the state* is directly or wholly responsible for all the pollution or any responsibility to reduce it. In the context of the Bay TMDL, EPA approves the allocation of the load reduction responsibility and then leaves it to the states to determine the best way to reduce such pollution, subject to their own state laws and policies. Obviously, any state regulatory agency delegated authority for implementing the Clean Water Act possesses the duty and authority to compel sources of pollution to comply with discharge permits and to write permits that incorporate wasteload allocations. To

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<sup>114</sup> Constellation Supplemental Submission at 23 (quoting Ex. 6, EPA Conowingo WIP Evaluation).

suggest that the residents and taxpayers of Maryland are solely responsible for the obligations under the Conowingo WIP, or any other WIP, would upset the firmly embedded “polluter pays” principle in our environmental statutes, a principle which indeed has received renewed attention in the Maryland General Assembly.<sup>115</sup>

We would also like to respond to a mischaracterization of the recent Comprehensive Evaluation of System Response report. Constellation claims that the “CESR Report concludes that by replacing the one-size-fits-all TMDL and WQS frameworks with tiered requirements that prioritize implementation, such as in shallow water habitats, policymakers could accelerate results and reach better outcomes.”<sup>116</sup> First, the CESR report at no point suggests “replacing” the TMDL; not only is that not discussed at all, the authors actually suggested creating rigorous new methodologies (e.g., “sandboxing”) to introducing alterations to the Bay Program Partnership’s processes so as not to allow for the chaos that would sure ensue from a wholesale “replacement” of the TMDL.

Secondly, as indicated in the referenced quote the authors of the report emphasized the need to “*prioritize implementation.*” It seems rather obvious that moving forward expeditiously with a strong water quality certification and robust discharge permit for the Conowingo Dam would be the best way to implement a recommendation of prioritizing implementation. Third, it is more than a little ironic that Constellation references the report’s recommendation to focus on shallow water habitats after myopically focusing on issues of nutrient pollution and dissolved oxygen levels, while attempting to selectively ignore the other impacts of the Dam’s operations and Maryland’s myriad numeric and narrative water quality criteria. Fourth, it bears emphasis that the 2018 Certification does – and must – assure the Dam’s compliance with *all* of Maryland’s water quality standards.<sup>117</sup>

Finally, it is inappropriate for Constellation to state that “MDE should not impose burdensome and legally untenable requirements on Conowingo that are not even in line with the State’s current Bay restoration priorities.” Constellation is not in a position to speak for a regulator or state that it has just spent the last half a

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<sup>115</sup> Department of Legislative Services, Budget Analysis for the Maryland Department of the Environment (2023), available at <https://mgaleg.maryland.gov/pubs/budgetfiscal/2024fy-budget-docs-operating-U00A-Department-of-the-Environment.pdf>.

<sup>116</sup> Constellation Supplemental Submission at 29.

<sup>117</sup> 33 U.S.C. § 1341(a)(1), (d).

decade suing. Governor Moore has just signed an Executive Order<sup>118</sup> that reaffirmed that the State “is committed to protecting the Chesapeake Bay and Coastal Bays Watershed” and focused on the need to “[a]ccelerate the restoration of the Chesapeake and Atlantic Coastal Bays and local watersheds.” Nowhere in the Executive Order was any language to suggest that Maryland would be backing away from its efforts to restore the Chesapeake Bay or protect water quality, or in any way weakening its stance against water pollution. To suggest that either the CESR report or the Executive Order was ushering in some sort of a change that would allow for a more lax approach to pollution is absurd.

#### **D. Constellation’s reliance on the UMCES study is misplaced.**

Constellation’s supplemental submission includes a section on the 2019 UMCES study to provide “the facts” that Constellation indicates should take the place of MDE’s prior findings with regard to the 2018 Certification, which it alleges had “no support.” In reality, the “facts” on which Constellation seeks to rely are largely unhelpful to Constellation’s cause and only provide further support for a Certification with strong conditions.

For instance, Constellation argues that everyone is confused about distinctions between nutrients that are “bioavailable” and “inert.” Yet, they cite a 2017 presentation by the Director of MDE’s Water and Science Administration in support of this idea.<sup>119</sup> It is hard to believe MDE was unaware of “the facts” that were clearly understood by one of its senior staff. Constellation goes on to discuss the fact that nutrients in the reservoir become “*less* bioreactive.”<sup>120</sup> Again, not only was that already well understood by MDE (in 2017) before the Certification was issued, it is nothing more than an acknowledgement of the fact that the nutrients nevertheless pollute downstream waters. *Less* bioreactive nutrients are still nutrients and “less harmful” nutrients are still harmful to downstream water quality. The distinctions that Constellation claims were lost on MDE clearly were not.

Constellation claims that “most scoured material is heavy and sinks quickly in the upper Bay near the River mouth, and does not even reach the deep channel zones of the Bay where DO rates are low and water quality is impaired.” Once again, we are left with the need to point out that discharging “heavy” pollution

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<sup>118</sup> Executive Order 01.01.2023.11, Governor’s Council on the Chesapeake and Coastal Bays Watershed.

<sup>119</sup> Constellation Supplemental Submission at 31.

<sup>120</sup> *Id.* at 32 (emphasis added).

directly upon the upper Bay and River mouth is still pollution with impacts on various water quality standards. Moreover, protection of the shallow water habitats of this upper Bay and River mouth region are quite in line with one of the recommendations of the CESR report that Constellation repeatedly discusses.

Constellation cites the UMCES study in stating that “elevated inputs are limited in time and space.”<sup>121</sup> These “elevated inputs” are references to the “more frequent scour events within the Conowingo Reservoir.”<sup>122</sup> These more frequent scour events are occurring, according to the UMCES researchers, because of the twin hazards of “[b]oth a lower scour threshold and decreasing deposition” which, together, “drive the observed increase in suspended loads during moderately large flows.”<sup>123</sup> In any case, the Study notes that these more frequent “event flows are capable of transporting fine sediment *downstream of the ETM* as evidenced by model results and preservation of event-sediment signatures in cores.”<sup>124</sup> Just because the ecosystem is resilient and is doing its job in protecting downstream water quality some of the time, does not mean that the increasing frequency of large scour events are not reaching the “mid-Bay region” where they have and will continue to suffocate living resources in the shallow water habitats, including, notably, those very filter feeders needed to offset the increasing nutrient impacts from a full reservoir.

Following its recitation of these new “facts” evident from the publication of the UMCES study, Constellation goes on to discuss findings from studies or documents released *before* 2018 that are *not* new information and that we do not believe advance any knowledge relevant to the present reconsideration process. For example, for obvious reasons, MDE is already acutely aware of the 2015 Lower Susquehanna River Watershed Assessment (“LSRWA”)<sup>125</sup> and needs no primer on what some of the study showed with respect to dissolved oxygen levels. Nevertheless, Constellation proceeds to recount some of those findings<sup>126</sup> while ignoring many of the inconvenient conclusions of that study. For example, Constellation claims that the concerns regarding scour are “greatly exaggerated”<sup>127</sup> and that “an overwhelming majority of the pollutant loads during a major storm ...

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<sup>121</sup> *Id.* at 31.

<sup>122</sup> Palinkas *et al.* at 19.

<sup>123</sup> *Id.* at 18.

<sup>124</sup> *Id.* at 19 (emphasis added).

<sup>125</sup> Available at <https://dnr.maryland.gov/waters/bay/pages/lswa/final-report.aspx>. MDE staff were helping lead this assessment.

<sup>126</sup> Constellation Supplemental Submission at 35-36.

<sup>127</sup> *Id.* at 30.

comes directly from runoff and other sources, and *has nothing to do with the scouring of the Reservoir bottom.*”<sup>128</sup> The LSRWA contradicts this, stating that “[t]he net scour loads are the predominant source of solids and nutrients during the storm interval. For solids and phosphorus, the scour loads are the predominant source over the entire winter-spring period.”<sup>129</sup> Notably, this is also contradicted by actual “new information,” as the UMCES study clearly notes that the scour from Tropical Storm Lee, by itself, was estimated to generate 4 million tons of additional sediment in a plume that reached “halfway down the Bay.”<sup>130</sup>

The LSRWA even goes on to contrast its findings regarding storm event scour with previous researchers’ lower estimates that still estimated scoured sediment load at roughly 20 percent for Tropical Storm Lee.<sup>131</sup> And while Constellation points to the LSRWA discussion on modeled impacts to dissolved oxygen levels, that study also described countervailing and “widespread” impacts on chlorophyll levels all the way to the Potomac River.<sup>132</sup> Notably, the LSRWA also thoroughly examined impacts of scour events based on the timing and season of the event, describing more severe impacts during a summer (June) storm, which we now know is becoming more common in this region.<sup>133</sup>

In this ongoing mix and match of new and old studies, Constellation also states that “[f]rom the 1980s through 2013, annual median total nitrogen and total phosphorus exiting from Conowingo was less than or roughly equal to the amounts flowing downriver toward Conowingo from Pennsylvania.”<sup>134</sup> Notably, this information is also not *new* at all, but a reference to a 2016 study, which again, is inconsistent with actual new information. The 2019 UMCES study states “recent studies indicate that discharge of these materials [nutrients and sediment] from

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<sup>128</sup> *Id.* at 38 (emphasis added).

<sup>129</sup> U.S. Army Corps of Engineers, *Application of the Chesapeake Bay Environmental Model Package to Examine the Impacts of Sediment Scour in Conowingo Reservoir on Water Quality in Chesapeake Bay* (2014), LSRWA, Appendix C at 48 (2014), available at <https://dnr.maryland.gov/waters/bay/Documents/LSRWA/Reports/appc.pdf>.

<sup>130</sup> Palinkas *et al.* at 3.

<sup>131</sup> LSRWA, Appendix C at 48.

<sup>132</sup> *Id.* at 50.

<sup>133</sup> See, e.g. Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA), *Projected Intensity-Duration-Frequency (IDF) Curve Data Tool for the Chesapeake Bay Watershed and Virginia*, available at <https://midatlantic-idf.rcc-acis.org/>; see also Alejandra Borunda, *Thunderstorms are moving East with climate change*, National Geographic, Aug. 9, 2022, <https://www.nationalgeographic.com/environment/article/thunderstorms-are-moving-east-with-climate-change>.

<sup>134</sup> Constellation Supplemental Submission at 35-36.

Conowingo has remained relatively steady or *perhaps even increased, despite declines* at the reservoir inlet from watershed reductions (Hirsch 2012; Zhang et al. 2016).”<sup>135</sup>

Finally, we find it perplexing that Constellation chose to support its bottom line position that “the Conowingo Project itself produces zero sediment, zero nitrogen, and zero phosphorus” via reference to a 2017 presentation by *the now Director of MDEs Water and Science Administration*.<sup>136</sup> Not only is this not “new” information, nor information that MDE is not already aware of, it is also completely contradicted by the substance of that presentation. Rather than “zero sediment, zero nitrogen, and zero phosphorus” the presentation quite thoughtfully describes the non-zero amount of nutrients from the Conowingo Project (as opposed to “upstream sources”) during small storms and the much larger amount of nutrients from Conowingo during larger storm events.<sup>137</sup> The slide even delves into the distinctions in “bioavailability” between nutrients discharged in small and large storms. It is thus, not only inaccurate but egregiously misleading to attribute such a bold claim about the dam’s lack of pollution to senior MDE staff.

**E. Constellation’s misrepresentations of what the 2018 Certification actually requires regarding nutrients are not grounds for reconsideration.**

Constellation contends that the required nutrient reductions in the 2018 Certification are impermissible because they impose a “purely financial obligation on Conowingo.”<sup>138</sup> But, nothing in the 2018 Certification requires the claimed \$172 million a year. As Constellation recognizes the 2018 Certification gives it flexibility as to how to remove the nutrients.<sup>139</sup> While the 2018 Certification identifies three corrective action strategies that “may” be included in a plan to achieve these reductions, as then-MDE Secretary Grumbles noted, the 2018 Certification leaves it up to Constellation as to how it will meet this requirement.<sup>140</sup>

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<sup>135</sup> Palinkas *et al.* at 3.

<sup>136</sup> Constellation Supplemental Submission at 35.

<sup>137</sup> Constellation Supplemental Submission, Ex. 18 at 346.

<sup>138</sup> Constellation Supplemental Submission at 43.

<sup>139</sup> *Id.* (citing Certification, § 7(D)(iv)).

<sup>140</sup> *See, supra* n.72 (Grumbles 2019 testimony). Constellation again misquotes Grumbles to claim that MDE viewed this requirement as a “financial burden.” Constellation Supplemental Submission at 45-46; *see supra* at 19-20 (discussion of Grumbles 2019 testimony); *see also* MDE Apr. 27, 2018 Press Release, *Hogan administration issues comprehensive environmental plan for Conowingo Dam, Susquehanna River, Chesapeake Bay*,

Additionally, as discussed, these actions can be reduced based on actions taken under the Conowingo WIP, which outlines different actions that could be taken to address the additional nutrient load due to the Conowingo Dam's operations.

Although the 2018 Certification is not, in fact, so limited, Constellation asserts that, of the three strategies identified in the 2018 Certification, “only option (a) [payment of in-lieu fees] is *feasible*.”<sup>141</sup> We note that “Feasible” is defined as “capable of being done or carried out.”<sup>142</sup> Such an admission calls into question Constellation's claims that the option is “impermissible” or that the Conowingo Dam would be forced to close if it “simply must pay this amount annually.”<sup>143</sup> Regardless, Constellation's claims that this is the only feasible option are incorrect.

First, Constellation claims that it cannot install best management practices and/or ecosystem restoration actions (MDE's option (b)) because “Conowingo's Project lands are minimal.”<sup>144</sup> Constellation is incorrect. Nothing in the 2018 Certification limits such actions to “Conowingo's Project lands,” which are miles long and “minimal[ly]” encompass “10,120 acres: 8,850 acres of flowed land and 1,270 acres above the normal high water elevation.”<sup>145</sup> And nothing prevents Constellation from working with others to engage in such practices or implement restoration activities. For example, EPA has supported “trading of nutrient and sediment among point and nonpoint sources, consistent with EPA's guidance on water quality trading.”<sup>146</sup> Such trading allows non-point sources to take actions to reduce sediments and nutrients, but those actions count toward a point source's

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<https://news.maryland.gov/mde/2018/04/27/hogan-admin-issues-comprehensive-plan-for-conowingo-dam-susquehanna-river-chesapeake-bay/> (“The certification establishes a requirement, based on the Clean Water Act, for Exelon to reduce nutrient pollution in amounts equal to what had previously been trapped by the dam.”).

<sup>141</sup> Constellation Supplemental Submission at 43 (emphasis added).

<sup>142</sup> <https://www.merriam-webster.com/dictionary/feasible>; see also Market Business News, *What is a feasibility study? Definitions and examples*, <https://marketbusinessnews.com/financial-glossary/feasibility-study/> (last visited Aug. 10, 2023) (“If something is ‘feasible,’ it means that we can do it, make it, or achieve it. In other words, it is ‘doable’ and also ‘viable.’”).

<sup>143</sup> Constellation Supplemental Submission at 45; see also, *infra* Section V.

<sup>144</sup> Constellation Supplemental Submission at 43.

<sup>145</sup> Exelon, Application for New License for Major Water Power Project-Existing Dam, at E-314 (2012), available at <https://mde.maryland.gov/programs/water/WetlandsandWaterways/Documents/ExelonMD/FERC/Conowingo-Vol1-Public.pdf>.

<sup>146</sup> EPA Region III Letter to Virginia Secretary of Natural Resources, Dec. 29, 2009, at 10-11, available at [https://www.epa.gov/sites/default/files/2015-07/documents/bay\\_letter\\_1209.pdf](https://www.epa.gov/sites/default/files/2015-07/documents/bay_letter_1209.pdf) (Attachment B).

reduction requirements. While the guidance on water quality trading relates to NPDES permits, there is no indication that such actions could not also be done for purposes of a 401 certification. Indeed, as noted above, Grumbles testified to the Maryland legislature that he hoped the 2018 Certification would allow for the establishment of private-public partnerships to support actions to reduce the nutrient loads in the Bay.<sup>147</sup>

Second, contrary to Constellation’s claims, dredging (MDE’s option (c)) is both “realistic” and “feasible.”<sup>148</sup> Constellation complains that dredging “would require numerous government approvals.”<sup>149</sup> But additional approvals are often required to comply with conditions in a water quality certification. The mere fact that additional approvals may be required does not “legally bar[]” Constellation from conducting dredging.<sup>150</sup> Since a permit does not overrule other applicable, federal, state or local laws, as is standard in many permits and government approvals, including in Maryland, they may be subject to other laws that must also be complied with.<sup>151</sup> There is no legal bar. As Constellation itself recognizes, obtaining additional approvals was contemplated by the 2018 Certification, and it would simply be required to obtain those approvals. Constellation does not provide any explanation or evidence that it would be unable to obtain those approvals. Further, several studies show that dredging can, in fact, be done. While it may be done at a cost Constellation disapproves of (costs that may be less than the in lieu fees) and additional actions may also be needed to meet the full reduction requirements, this does not render dredging infeasible. It is still doable and viable. Constellation’s complaints about potential delay in conducting any claimed needed feasibility studies is of its own doing and does not render the 2018 Certification, which was issued more than five years ago, arbitrary.

Constellation argues that dredging is not a recognized “best management practice” and Maryland cannot get credit under the TMDL for performing

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<sup>147</sup> *See, supra* n.72 (Grumbles 2019 Testimony).

<sup>148</sup> Constellation Supplemental Submission at 44.

<sup>149</sup> *Id.*

<sup>150</sup> *Id.*

<sup>151</sup> *See, e.g.*, U.S. Army Corps of Engineers, 2021 Nationwide Permits, at 49-52 (requiring compliance with other federal laws, including, but not limited to, engaging in consultation under the Endangered Species Act), *available at* <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll7/id/20099>; COMAR 26.08.02.11(B)(5)(b) (“This [general water quality certification (GWQC)] does not authorize the beginning of any proposed work in the absence of necessary approvals, licenses, or permits.”).

dredging.<sup>152</sup> That argument misses the point. The purpose for the certification is to assure the Dam will comply with Maryland’s water quality standards and, by reducing the Dam’s nutrient discharges, dredging can do so or help to do so regardless of whether it is recognized as a best management practice.

Constellation also argues “dredging is an impractical solution, the high costs of which cannot be justified by water-quality benefits, which likely would be both minimal and shortlived.”<sup>153</sup> The claim that dredging’s benefits are short-lived assumes the dredging itself is short-lived. No one would seriously contend the benefits of routine dredging would be short-lived, and sufficient dredging could significantly restore the reservoir’s trapping capacity. Constellation does not substantiate its claim that the costs of dredging are high with any actual cost figures and, in any event, that claim misses the point. As MDE found, reductions in the Dam’s nutrient discharges are necessary to assure the Dam’s compliance with water quality standards. Whether these reductions are obtained through dredging, other measures, or some combination of measures, they will entail costs. Constellation operates the Dam, and has enjoyed the substantial profits from its exploitation of a public resource. By making no efforts to maintain the reservoir, it has saved money and increased these profits. Now, the cost of cleaning up the Dam’s nutrient pollution must be paid if the lower Susquehanna River and the Chesapeake Bay are to be protected and restored. Whatever this cost might be, it is appropriate for Constellation to pay it.

While the payment option is not an actual requirement of the Certification, Constellation’s claims that “a purely financial obligation is not a lawful condition under § 401” are unsupported.<sup>154</sup> Again, Constellation starts with a misinterpretation of the Clean Water Act. Constellation asserts that section 401(d) “does not authorize a State simply to require a federal permittee to pay money, or otherwise impose a purely financial obligation upon a federal permittee.”<sup>155</sup> Section 401(d) provides:

Any certification provided under this section shall set forth *any* effluent limitations and *other* limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with

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<sup>152</sup> Constellation Supplemental Submission at 53-54.

<sup>153</sup> *Id.* at 54 (citing LSRWA at 143).

<sup>154</sup> *Id.* at 46.

<sup>155</sup> *Id.* at 46-47.

*any* applicable effluent limitations and *other* limitations, under section 1311 or 1312 of this title, standard of performance under section 1316 of this title, or prohibition, effluent standard, or pretreatment standard under section 1317 of this title, *and with any other appropriate requirement of State law* set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.<sup>156</sup>

The statute uses the term “any” and refers to “any ... other limitations.” The definition of limitation is merely “something that limits; Restraint.”<sup>157</sup> A synonym of limitation is “condition.” The limitation is the requirement to reduce nutrients. One such means of meeting that condition is to pay in lieu fees.

In addition, monetary payments may be considered limitations if they are intended to influence behavior, not to compensate for past harms.<sup>158</sup> The cases cited by Constellation do not dispute this. At best, they stand for the proposition that compensation for *damages* may be inappropriate.<sup>159</sup> It is unclear how these statements by FERC regarding compensatory damages equate to FERC having “no authority under the FPA to *enforce* such a condition in Conowingo’s license.”<sup>160</sup> The Clean Water Act requires it.<sup>161</sup> Indeed, if talking about compensation for damages over the 100 years of operation, fair compensation for the damages caused by the Conowingo Dam’s operations would be much, much higher.

The in lieu fees are not based on compensation for damages, but represent estimates for taking actions to reduce the nutrients in the Bay, as Constellation

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<sup>156</sup> 33 U.S.C. § 1341(d) (emphasis added).

<sup>157</sup> <https://www.merriam-webster.com/dictionary/limitation>.

<sup>158</sup> *See S. Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882, 903 (D.C. Cir. 2006) (“Because these [Section 185 noncompliance] penalties were designed to constrain ozone pollution, they are controls that section 172(e) requires to be retained.”).

<sup>159</sup> *See, e.g., Consumers Power Co.*, 68 FERC ¶61,077, at 13, 25 (relating to penalties labeled “liquidated damages” for failure to comply with the terms of settlement agreement); *South Carolina Public Service Authority v. FERC*, 850 F.2d 788, 792 (D.C. Cir. 1988) (addressing requirement that applicant compensate its neighbors for property damage resulting from flooding due to earthquake); *Ohio Power Co.*, 71 FERC ¶61,092 (1995) (referring to “payment of, damages,” such as “a sum reflecting a monetary value for each fish destroyed by the project”)

<sup>160</sup> Constellation Supplemental Submission at 40.

<sup>161</sup> 33 U.S.C. § 1341(d).

itself admits, albeit halfheartedly.<sup>162</sup> The fees most decidedly address water quality impacts, although Waterkeepers believe, as outlined in their request for reconsideration (at 13-14), that the 2018 Certification should more clearly *require* monies go to dredging. This does not, however, mean in lieu fees are per se improper. And, in any event, they are merely an option; the Certification leaves Constellation free to make the necessary reductions instead.

Again, Constellation selectively quotes EPA to try to support its assertions.<sup>163</sup> However, EPA, again, indicated that the conditions would depend on “the particular facts presented by each certification.”<sup>164</sup> As EPA explained:

The preamble to the final 2020 Rule identified examples of certification conditions *possibly* falling outside the water quality-related scope of section 401 review *because they did not address water quality impacts*, including one-time and recurring payments to state agencies for improvements or enhancements that are unrelated to the proposed federally licensed or permitted project; conditions to address potential non-water quality-related environmental impacts from the creation, manufacture, or subsequent use of products generated by a proposed federally licensed or permitted activity or project; and conditions related only to non-water quality-related impacts associated with air emissions and transportation effects. See 85 FR 42230. Subject to a case-by-case review of the particular facts presented by each certification, EPA thinks it reasonable to assume that such non-water quality-related conditions would generally be beyond the scope of section 401.<sup>165</sup>

Reading further, EPA identifies conditions it would view as appropriate, which include “financial obligation[s],” such as “compensatory wetland and riparian

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<sup>162</sup> See Constellation Supplemental Submission at 46 (asserting money from 2018 Certification would be given to Maryland “to spend as it pleases, at least in theory, to support nutrient reduction throughout the Susquehanna watershed”).

<sup>163</sup> *Id.* at 47 n.162.

<sup>164</sup> 87 Fed. Reg. at 35,343.

<sup>165</sup> *Id.* (emphasis added).

mitigation (related to protecting designated uses and criteria).”<sup>166</sup> Compensatory mitigation can include in lieu fee programs.<sup>167</sup> “For these and other potentially qualifying conditions, EPA believes that it is appropriate for the certifying authority to consider the broadest possible range of water quality effects and that the appropriateness of any given condition will depend on an analysis of all relevant facts.”<sup>168</sup> Indeed, Constellation’s protests are inconsistent with their request to be given credit for actions they view as “unrelated to the proposed federally licensed or permitted project.”<sup>169</sup>

**F. MDE can and must include dredging as a means of meeting the nutrient reduction requirements.**

***1. Dredging is a practical necessity given reservoir infill and climate change.***

The Conowingo reservoir has gone through dramatic changes in the last 95 years since the inception of the project. The bathymetry of the reservoir as it was in 1928 through 1972 (when Hurricane Agnes hit our area) to the depths currently in 2023 must be considered when addressing the dam’s operations and mitigating the effects of a catastrophic pulse to the Chesapeake Bay. The TMDL developed in 2010 identified the overall loading capacity of nitrogen, phosphorus, and sediment that can be present in the Bay to achieve applicable water quality standards – specifically, the TMDL set Bay watershed limits of 185.9 million pounds of nitrogen, 12.5 million pounds of phosphorus, and 6.45 billion pounds of sediment per year.<sup>170</sup>

It is abundantly clear that the reservoir behind Conowingo Dam is not the same reservoir which was formed when the dam was erected in 1928. One of the

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<sup>166</sup> *Id.* EPA’s list of conditions are all the types of actions that could be taken with the monies obtained under the 2018 Certification or, under option (b) of the 2018 Certification, could be actions taken directly by Constellation, even if not on its own property.

<sup>167</sup> *See, e.g.,* EPA, *Background about Compensatory Mitigation Requirements under CWA Section 404*, <https://www.epa.gov/cwa-404/background-about-compensatory-mitigation-requirements-under-cwa-section-404> (last updated Feb. 9, 2023).

<sup>168</sup> 87 Fed. Reg. at 35,343.

<sup>169</sup> *See, e.g.,* Constellation Supplemental Submission at 42. *See also* Constellation Energy donates land near Conowingo hydro project for conservation, Hydro Review, Oct. 19, 2022, <https://www.hydroreview.com/environmental/constellation-energy-donates-land-near-conowingo-hydro-project-for-conservation/>.

<sup>170</sup> Chesapeake Bay TMDL Fact Sheet (updated Aug. 2021), *available at* [https://www.epa.gov/sites/default/files/2015-07/documents/bay\\_tmdl\\_fact\\_sheet.pdf](https://www.epa.gov/sites/default/files/2015-07/documents/bay_tmdl_fact_sheet.pdf).

main concerns that has become even more apparent due to the effects of climate change is the risk of catastrophic pulses reaching the Chesapeake Bay. A catastrophic pulse is an enormous surge of scoured sediment and other pollutants from the dam caused by large storm events. Researchers are finding that these major storms are getting worse and more frequent in this region.

Hurricanes are fueled by moisture from the ocean and so, traditionally, hurricane intensity had decayed rapidly after reaching land. However, due to climate change that pattern is changing rapidly. In a 2020 study published in *Nature* titled “*Slower decay of landfalling hurricanes in a warming world*” researchers analyzed intensity data for North Atlantic landfalling hurricanes over the past 50 years and showed that hurricane decay had slowed, and that the slowdown in the decay over time is in direct proportion to a contemporaneous rise in the sea surface temperature. Their findings suggest that as the world continues to warm, the destructive power of hurricanes will extend progressively farther inland.<sup>171</sup>

**2. *Without dredging we cannot protect shallow water habitat, water quality standards, or the filter feeders and vegetation the Bay Needs.***

Hurricane Agnes may have been a “black swan” event historically, but there is little doubt that it is a harbinger of future climate events, especially over a 50-year timeframe. In any case, it provides an illustrative example of the impacts from scour events and provides a glimpse of what *will* occur again if no dredging occurs.

Over a 10-day period in June 1972, the Susquehanna River flows averaged 15.5 times greater than normal, a volume of water that was capable of a 30 mile translation of fresh water in the Bay.<sup>172</sup> During this 10-day event the Susquehanna discharged more than 31 million metric *tons* of sediment, more than during the preceding ten years.<sup>173</sup> Consequently, dissolved oxygen concentrations declined so significantly in both the Chesapeake Bay and in its tributaries that it caused “massive mortalities” of shellfish, including “nearly 100%” of oysters north of the

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<sup>171</sup> Li, L., Chakraborty, P., *Slower decay of landfalling hurricanes in a warming world*, *Nature* 587, 230–234 (2020), available at <https://doi.org/10.1038/s41586-020-2867-7>.

<sup>172</sup> The Chesapeake Research Consortium, *The Effects of Tropical Storm Agnes on the Chesapeake Bay Estuarine System*, CRC Publication No. 54, at 1 (Nov. 1976), available at [https://chesapeake.org/wp-content/uploads/2018/07/CRC0054-76\\_Effect-of-Tropical-Storm-Agnes-on-Ches-Bay.pdf](https://chesapeake.org/wp-content/uploads/2018/07/CRC0054-76_Effect-of-Tropical-Storm-Agnes-on-Ches-Bay.pdf).

<sup>173</sup> *Id.* at 13.

Bay Bridge.<sup>174</sup> “The influx of fresh water exposed extensive beds of shellfish to low salinities for periods longer than the shellfish could endure.”<sup>175</sup> Unfortunately, the ecological damage was not confined to shellfish, as submerged aquatic vegetation declines were almost as bad.<sup>176</sup> One could not choose two more important keystone species for the overall ecosystem, as both shellfish and SAV provide critical functions for water quality - an attack on either of these ecological groups is an attack on the foundation of the overall Bay ecosystem itself.

These analyses of Hurricane Agnes reveal the inevitable consequences of the Conowingo reservoir’s continued existence on the health of the Chesapeake Bay and the very existence of many of its aquatic species, with especially dire impacts on the Upper Chesapeake Bay and Susquehanna Flats. With the effects of climate change and the time horizon of this new license we have no choice but to require “routine dredging”; the Clean Water Act, Maryland Water Pollution Control Laws, and the overwhelming desire of Marylanders necessitate this outcome. Any other outcome will appear foolishly shortsighted in the years and decades to come.

While the LSRWA authors claimed that the benefits of dredging would be short-lived, that claim reflected two shortcomings in the study: it seriously underestimated the impacts of scour, and only modeled dredging scenarios that are nowhere near proportionate to the effects of a 50-year storm under future climate conditions. The likelihood of at least one storm of the magnitude of Agnes is high given current and projected climate conditions, and the likelihood of a scour event of that magnitude is even higher given the dramatically greater degree of infill now versus 1972.

There is an opportunity here to get ahead of future catastrophes. As shown by the most recent pilot dredging study and the Innovative Reuse and Beneficial Use Evaluation and Demonstration Project Report, dredging is both effective and feasible.<sup>177</sup> For Constellation to operate this facility not just for the next 50 years but in perpetuity, it must undertake routine and effective dredging. We strongly recommend that MDE give careful consideration to the recommendations and conclusions section of the IRBU Report.

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<sup>174</sup> *Id.* at 16.

<sup>175</sup> *Id.*

<sup>176</sup> *Id.* at 19.

<sup>177</sup> Northgate Environmental Management, Inc., Innovative Reuse And Beneficial Use Evaluation And Demonstration Project Report (Re02) (Dec. 2022) (“IRBU Report”), available at <https://mde.maryland.gov/programs/marylander/Documents/IRBU%20Report.pdf>.

**3. *Dredging has long been considered a potential option to address the water quality impacts of the Conowingo Dam.***

Constellation contends that MDE should not require dredging because it has not been recognized as a best management practice.<sup>178</sup> Constellation cites to no law imposing such a requirement on conditions that may be included in a water quality certification. Instead, states have broad authority to impose conditions that it believes are needed to ensure water quality requirements are being met.

As discussed above, MDE has indicated that its approach to addressing the “Conowingo factor” is through the 2018 Certification, implementation of the Conowingo WIP, and its review of beneficial uses of dredged material. In other words, the Conowingo WIP is separate and distinct from MDE’s authority (and obligation) under section 401 of the Clean Water Act to ensure *all* water quality standards are complied with. Moreover, there is nothing to prevent putting a process in place for crediting such reductions in the future. “The CWIP also recognizes that in-water practices—such as reservoir dredging and reuse, submerged aquatic vegetation, and a restored aquatic ecosystem—have pollution reduction benefits that should be further explored and possibly utilized.”<sup>179</sup> Crediting of new BMPs is an ongoing process within the Chesapeake Bay Program and its BMP expert panel.<sup>180</sup>

In addition, dredging has long been contemplated as a means of reducing the impacts of the Conowingo Dam, including as part of a 401 water quality certification. For example, concerns with the Conowingo reservoir being filled was identified by EPA in establishing the TMDL. EPA found that “[o]nce storage capacity is reached, the nitrogen load will increase by 2 percent; the phosphorus load will increase by 40 percent; and the suspended sediment load will increase by at least 150 percent.”<sup>181</sup> EPA also noted that it had been found that “dredging may provide the needed sediment storage capacity behind the dams.”<sup>182</sup> “Exelon noted

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<sup>178</sup> Constellation Supplemental Submission at 53.

<sup>179</sup> Final Conowingo Watershed Implementation Plan at 3 (2021) (Ex. 1.k. to Waterkeepers Aug. 1, 2023 Submission).

<sup>180</sup> Current BMP Expert Panels include both Oyster Restoration and Animal Mortality Management. See Chesapeake Bay Program, *BMP Expert Panels*, <https://www.chesapeakebay.net/who/group/bmp-expert-panels> (last visited Aug. 16, 2023).

<sup>181</sup> Appendix T - Sediments behind the Susquehanna Dams Technical Documentation, EPA Chesapeake Bay TMDL at T-3 (2010), available at [https://www.epa.gov/sites/default/files/2015-02/documents/appendix\\_t\\_susquehanna\\_dams\\_final.pdf](https://www.epa.gov/sites/default/files/2015-02/documents/appendix_t_susquehanna_dams_final.pdf).

<sup>182</sup> *Id.* (citation omitted).

that the estimated cost in 1995 dollars of dredging to simply keep up with annual sediment inflow (estimated to be 2.3 million cubic yards per year at the time) was \$28 million per year.”<sup>183</sup> EPA did not raise concerns with the feasibility of dredging, but did note that “dredging costs are highly variable, and, to a large extent, depend on the selected destination and use of the dredged materials.”<sup>184</sup> Nonetheless, a comparison of costs showed dredging may have been less expensive than other means of reducing the added nutrient load as a result of Constellation’s failure to maintain the reservoir.

Constellation claims that the costs associated with dredging would outweigh the benefits. This claim is short sighted. Constellation wants MDE to view the costs in light of the dam’s revenues or profits, not in terms of the *overall amount of spending* by the public and private sector needed to bring the Chesapeake Bay into compliance with water quality standards. As noted above, in Maryland alone, and only from the public sector, the annual costs of our Bay restoration efforts likely exceed \$1 billion per year. Extrapolate this to the seven-jurisdiction Bay watershed and add in the financial contribution and impacts from the private sector and the overall amount of ongoing spending just to maintain the Bay at the status quo dwarfs any estimate of the costs of dredging. And this is the important point worth remembering: this massive and much larger “cost” is squandered if the “loaded cannon” behind the dam is shot with all its might in an Agnes-style storm, destroying the oyster population, smothering SAVs Baywide, and perhaps worst of all, crushing the will of the public and policymakers to keep fighting to restore the Chesapeake Bay. And this calculation does not even factor in the multi-billion dollar economy that the Bay supports. If MDE did a true cost-benefit analysis, taking into account all direct and indirect costs and benefits in scenarios that involved dredging and not dredging, properly considering new information from the UMCES Study about the frequency and probability of massive new scour events, there is no doubt that the only remaining question would be *how* to dredge most effectively and efficiently, not *whether* to dredge behind the dam.

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<sup>183</sup> *Id.* at T-3-T-4. This indicates that the operators of Conowingo were aware of the potential need for dredging since 1995, yet continued to do nothing. Now they complain because of potentially higher costs.

<sup>184</sup> *Id.*

**V. Contrary to Constellation’s Assertions, the Claimed Benefits of the Conowingo Dam to Maryland’s Clean Energy and Climate Change Goals are Irrelevant to Reconsideration of the Certification, which Must Address the Water Quality Impacts of the Dam.**

Constellation erroneously asserts that “MDE must consider Conowingo’s characteristics as a non-emitting, dispatchable generator, and therefore, a key tool in the fight against climate change.”<sup>185</sup> While Constellation would like to pretend that deciding on water quality certifications consists of mere policy choices and the issuance of the 2018 Certification is meaningless, discussions of the claimed benefits and purpose of the Conowingo project are immaterial to whether the 2018 Certification *requires reconsideration*. “[T]he scope of certification decisions and conditions are limited to water quality-related considerations.”<sup>186</sup> It would be arbitrary for MDE to discount, ignore, or withdraw conditions it previously found necessary to comply with state water quality requirements solely on the claimed benefits of hydropower production.

Section 401 is intended solely to recognize the State’s primary role in *protecting state waters*. Congress expressed concerns with federal agencies issuing permits and licenses without any assurance that water quality standards would be met or even considered.<sup>187</sup> In passing the 1972 legislation, “Congress reaffirmed ‘the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution.’”<sup>188</sup> “Consistent with Congress’s intent to empower states to protect their waters from the effects of federally licensed or permitted projects, [Section 401(d)] ‘assure[d] that Federal licensing or permitting agencies cannot override State water quality requirements.’”<sup>189</sup> The Conowingo project is not authorized by MDE, but by FERC, and the goals of renewable energy production are not proper considerations in determining whether the project complies with the State’s water quality determination. Indeed, Conowingo’s electricity generation is placed into the grid, which provides power to the PJM region, not just Maryland.<sup>190</sup> Yet it is Maryland residents who are suffering the most from the harm caused by the Dam’s operations.

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<sup>185</sup> Constellation Supplemental Submission at 64, *see also id.* at ii.

<sup>186</sup> 87 Fed. Reg. at 35,347 (citation omitted).

<sup>187</sup> *Id.* at 35,321.

<sup>188</sup> *Id.* (quoting 33 U.S.C. §1251(b)).

<sup>189</sup> *Id.* at 35,322 (quoting S. Rep. No. 92-414, at 69 (1971)).

<sup>190</sup> *See* Constellation Supplemental Submission, Ex. 7, Tr. of Hearing at 15-16 (“It is not used primarily or necessarily by people in Maryland.”).

And as a peaking facility, Constellation does not explain how the Conowingo Dam’s already existing generation into the grid (representing 0.61 percent of PJM total capacity)<sup>191</sup> will help support potential “overloads” in the future.<sup>192</sup> It should also be noted that PJM itself did not cite to peaking facilities to address these “overloads.” Rather, it said “[s]uch overloads may be mitigated through electrical transmission network upgrades as well as further enhanced operating procedures.”<sup>193</sup>

Presumably recognizing that section 401 relates to water quality, Constellation then claims the Dam’s “beneficial impacts” on climate “have a direct effect on the water quality of the Chesapeake Bay.”<sup>194</sup> But Constellation merely discusses the impacts of climate change generally on water resources, which, as Constellation agrees, will require additional actions to ensure water quality.<sup>195</sup> Constellation provides no connection to the claimed “avoided” greenhouse gas (“GHG”) emissions to climate change benefits or *any* benefits to State waters, much less any actual analysis to determine if such “benefits” are sufficient for the project to comply with state water quality requirements, as required.

In addition, the claimed benefits are clearly overstated. Constellation claims that the project “avoids roughly 867,000 metric tons of greenhouse gas emissions annually from entering the air,” which it claims is equivalent to removing 190,000 cars from the road.<sup>196</sup> But, the Conowingo Dam has been in place since 1928. It does not provide new GHG emissions reductions, which is what is needed to have an actual impact on climate change.

Presumably Constellation’s claims relate to its assertion that having to comply with the 2018 Certification will require it to shut down the Conowingo project. Even if true, this does not obviate a meaningful increase in GHG emissions, if any at all, as a result. According to the U.S. Energy Information

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<sup>191</sup> PJM, RTEP 2022, at 139 (2023), available at <https://www.pjm.com/-/media/library/reports-notices/2022-rtep/2022-rtep-report.ashx>.

<sup>192</sup> Constellation Supplemental Submission at 65 (citation omitted).

<sup>193</sup> PJM Interconnection, LLC, Report to Maryland House of Delegates Environment and Transportation Committee, at 2 (Mar. 5, 2020), available at <https://www.pjm.com/-/media/library/reports-notices/special-reports/2020/20200305-pjm-requested-reliability-analysis-response-md-house-environment-transportation-committee.ashx>, cited in Constellation Supplemental Submission at 65.

<sup>194</sup> *Id.* at 63.

<sup>195</sup> *Id.* at 63-64; see, e.g., Waterkeepers Aug. 1, 2023 Submission at 44-45.

<sup>196</sup> Constellation Supplemental Submission at 60, 64.

Administration (“EIA”), “Maryland consumes about five times more energy than it produces.”<sup>197</sup> Even when looking at generation, Conowingo provided 5 percent of the total amount of electricity generated in Maryland in 2021, and even assuming its claim on avoided GHG emissions is correct, this is only 7 percent of total emissions attributed to electricity generation in Maryland.<sup>198</sup> In addition, concerns have been raised as to the potential GHG emissions ramifications of reservoirs for hydroelectric projects, indicating that the Conowingo Dam may not provide carbon-free electricity generation.<sup>199</sup> And, 190,000 vehicles is less than 4 percent of total vehicles registered in Maryland in 2022. According to Motor Vehicle Administration data,<sup>200</sup> there were 5,123,342 vehicles registered in Maryland in 2022. While Waterkeepers are fully supportive of actions to reduce GHG emissions, this is a drop in the bucket of what would be needed to have any real impact on climate change today and certainly does not outweigh the benefits to the Bay and its users from the 2018 Certification.

Further, in light of Maryland’s efforts, as well as EPA proposed rules to address GHG emissions from power plants, it is not a foregone conclusion that the Dam, in the highly unlikely event it would be shutdown, would be replaced by

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<sup>197</sup> EIA, Maryland State Profile and Energy Estimates, <https://www.eia.gov/state/analysis.php?sid=MD> (last updated Nov. 17, 2022).

<sup>198</sup> EIA, State Electricity Profiles – Maryland Electricity Profile 2021, <https://www.eia.gov/electricity/state/maryland/> (release date Nov. 10, 2022). Using actual generation in 2021 (2.1 million megawatt hours), we also calculate less claimed “avoided GHG emissions” by about 15% (811 pounds per MWh average emissions rate of PJM = .367863 metric tons per MWh x 2,097,157 MWh generated = 771,397 metric tons and about 168,000 cars off the road based on EPA’s estimate that a typical passenger vehicle emits about 4.6 metric tons of CO<sub>2</sub> per year (<https://www.epa.gov/greenvehicles/tailpipe-greenhouse-gas-emissions-typical-passenger-vehicle>)).

<sup>199</sup> See, e.g., U.S. Department of Energy, *Tracking the Carbon Footprint of Hydropower*, <https://www.energy.gov/eere/water/tracking-carbon-footprint-hydropower> (last visited Aug. 10, 2023); see also Huron River Watershed Council, *Hydroelectric Dams, Methane, and the Huron River*, Oct. 5, 2021, <https://www.hrwc.org/dams-methane-huron-river/> (“Methane production from dams is a growing environmental concern, because methane is a potent greenhouse gas.”). “[W]e can expect methane emissions from reservoirs to increase with climate change.” Tara Hohan, *Dam Accounting: Taking Stock of Methane Emissions from Reservoirs*, The Revelator, <https://therevelator.org/methane-dams-reservoirs/>. Nutrient reduction measures have been found to also be a means to reduce GHG emissions from dam reservoirs. Bridget Deemer, *Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis*, *Bioscience*, Vol. 66, Issue 11, Pages 949-964 (Nov. 2016), available at <https://academic.oup.com/bioscience/article/66/11/949/2754271>.

<sup>200</sup> This data is available at <https://opendata.maryland.gov/Transportation/MVA-VEHICLE-REGISTRATION-by-COUNTY-from-2010-to-20/kqkd-4fx8>.

fossil fuel generation. Under the Climate Solutions Now Act, more than 2,000 MW of offshore wind energy is expected to be in service by 2026.<sup>201</sup> According to PJM, solar and wind projects (191,207 MW) represent over 75 percent of its queued capacity overall, and solar projects (3,305 MW) represent almost 46 percent of its queue capacity in Maryland.<sup>202</sup> Hydropower represents 0.3 percent (824 MW) and 0.2 percent (15 MW) of queued capacity overall and in Maryland, respectively.<sup>203</sup>

In addition, Constellation provided no evidence that the obligations in the 2018 Certification (or the additional requirements requested by Waterkeepers) “would force closure of Conowingo.”<sup>204</sup> MDE previously acknowledged that Constellation “would not be able to walk away from their responsibilities for the Conowingo Dam.”<sup>205</sup> There are several steps involved in shutting down the Dam and other projects that are dependent on its operations, such as Peach Bottom Atomic Power Station that withdraws cooling water from the Conowingo Pond and the 800-MW Muddy Run Pumped Storage Project that uses the Conowingo Pond as its lower reservoir, and the municipalities that use the Conowingo Pond for drinking water use.

It is telling that Constellation only refers to an assertion by “Riverkeepers” on appeal that Conowingo’s annual revenues range between \$115 and \$121 million.<sup>206</sup> We assume Constellation is referencing the appeal of the FERC license, where estimated revenues were shown to be higher than estimated dredging costs in new information provided to FERC. In any event, this estimate was based on a 2017 analysis conducted for the Chesapeake Bay Foundation, considering impacts on revenues of using different flow rates and did not include all potential sources of revenue.<sup>207</sup> Actual Conowingo revenues are a black box, and Constellation’s complaints about cost are not only irrelevant to its legal obligations but lack credibility given Constellation’s refusal to make public its revenues and profits.

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<sup>201</sup> See Gabel Assocs., Inc., *Maryland Offshore Wind: Estimating the Costs and Benefits of Offshore Wind Energy Development*, at v (2022), available at <https://chesapeakeclimate.org/wp-content/uploads/2022/12/MD-Offshore-Wind-Report-Dec-2022-Gabel-Associates.pdf>.

<sup>202</sup> PJM, 2022 Maryland and District of Columbia State Infrastructure Report (January 1, 2022 – December 31, 2022), at 9-10 (2023), available at <https://www.pjm.com/-/media/library/reports-notices/state-specific-reports/2022/2022-maryland-dc-state-infrastructure-report.ashx>.

<sup>203</sup> *Id.*

<sup>204</sup> Constellation Supplemental Submission at 45.

<sup>205</sup> Grumbles Testimony, *supra* n.72 (102d minute).

<sup>206</sup> Constellation Supplemental Submission at n.158.

<sup>207</sup> Chesapeake Bay Foundation Comments, Attach., Energy and Environmental Economics, *An Economic Analysis of Conowingo Generating Stations* (2017) (Waterkeepers Aug. 1, 2023 Submission, Ex. 1.s.).

Notably, Constellation does not claim it cannot afford to comply with the Certification, and any such claim would be highly implausible. Constellation reported over \$24.4 billion in revenues in 2022, a 24 percent increase from 2021.<sup>208</sup> The president and CEO of Constellation said: “We had an incredible first year that exceeded expectations as we adapted to rapidly evolving market conditions, successfully advocated for clean energy policies and positioned the company for sustainable, long-term growth.”<sup>209</sup> Underscoring its profitability and spending power, Constellation recently announced a \$1 billion share repurchase program.<sup>210</sup> On August 3, 2023, Constellation announced it had a GAAP net income of \$833 million in one quarter alone and was continuing its “share repurchase program, repurchasing nearly 3 million shares for a total of \$252 million in the second quarter 2023.”<sup>211</sup> There was no concern raised regarding the certification for Conowingo. Constellation’s 10-K for 2022, which it submitted to the Securities and Exchange Commission, also does not raise concerns with the vacatur of the license due to an invalid waiver, putting the certification back in place.<sup>212</sup> Rather, Constellation simply states: “We are unable to further predict the outcome of this proceeding at this time. Depreciation provisions continue to assume operation through 2071 given our expectation that a 50-year license will be issued.”<sup>213</sup> Moreover, the \$172 million a year is a number cited by Constellation, but, again, Constellation has flexibility in meeting this requirement and, if it implements nutrient reducing measures in one year, then the nutrients would be addressed and potential in lieu fees would go down.

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<sup>208</sup> Constellation Energy Revenue 2020-2023, macro trends, <https://www.macrotrends.net/stocks/charts/CEG/constellation-energy/revenue> (last visited Aug. 11, 2023).

<sup>209</sup> Feb. 16, 2023 Constellation News Release, *Constellation Reports Fourth Quarter and Full Year 2022 Results and Initiates 2023 Financial Outlook*, <https://investors.constellationenergy.com/news-releases/news-release-details/constellation-reports-fourth-quarter-and-full-year-2022-results>.

<sup>210</sup> Garrett Dvorkin, *Constellation Energy plans to buy back billions of its own stock*, Baltimore Business Journal, May 5, 2023, <https://www.bizjournals.com/baltimore/news/2023/05/05/constellation-buying-back-billions-in-shares.html>.

<sup>211</sup> Aug. 3, 2023 Constellation News Release, *Constellation Reports Second Quarter 2023 Results*, <https://www.constellationenergy.com/newsroom/2023/Constellation-Reports-Second-Quarter-2023-Results.html>.

<sup>212</sup> Constellation Energy Corp., Form 10-K for the Fiscal Year Ended December 31, 2022, at 110-111, available at <https://investors.constellationenergy.com/static-files/9e7b2586-3b65-4ccc-8bd9-fddf733a9d>.

<sup>213</sup> *Id.* at 111.

While irrelevant, for comparison purposes, we point to Constellation’s agreement to make a total of more than \$63 million in payments to Maryland over the course of a new 50-year license for Conowingo (to be escalated with inflation), specifically to help mitigate the effects of nutrient pollution.<sup>214</sup> The State of Maryland alone (not including its counties) has spent more than \$14 billion over the last two decades, according to the latest annual Bay spending report.<sup>215</sup> Add to this the cumulative spending by local jurisdictions and the total likely greatly exceeds \$20 billion, or roughly a billion a year. So spending between \$1-3 million per year, by comparison is a negligible percentage which is completely out of line with the contribution of pollutants from the Dam.

## **VI. Reconsideration May Not Be Based on “Changes Constellation Has Agreed to Make in Conowingo’s Operations.”**

Part IV of Constellation’s Supplemental Submission (at 66-101) is easily dismissed. Nothing in that section identifies any errors with the 2018 Certification. Constellation’s policy preferences are not grounds for reconsideration.

### **A. Constellation’s preferred flow rate must be rejected.**

Constellation argues that, on reconsideration, MDE should drop the flow requirements in the Certification in favor of those in its 2019 settlement because in its view, those “agreed-to revised operations provide reasonable assurance that the discharges from the Project will comply with state water quality standards.”<sup>216</sup> There are several problems with that argument.

First, Constellation’s understandable preference for the settlement flow regime was made amply plain when it obtained the settlement. Constellation’s continued preference for this regime does not show anything resembling “fraud, surprise, mistake, or inadvertence” by MDE in establishing the Certification’s flow regime. To the contrary, it is a meritless request that MDE “merely change [its] mind.”<sup>217</sup>

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<sup>214</sup> Constellation Supplemental Submission at 42.

<sup>215</sup> MDE et al., *Bay Restoration Spending Report - A Report to the Maryland General Assembly pursuant to the 2022 Joint Chairmen’s Report*, at 4 (2022), available at [https://mde.maryland.gov/programs/water/TMDL/TMDLImplementation/Documents/JCR\\_Reports/2022\\_p251\\_BayCabinet\\_ChesBayRestorationSpending.pdf](https://mde.maryland.gov/programs/water/TMDL/TMDLImplementation/Documents/JCR_Reports/2022_p251_BayCabinet_ChesBayRestorationSpending.pdf).

<sup>216</sup> Constellation Supplemental Submission at 66-73.

<sup>217</sup> *Bd. of Zoning Appeals*, 174 Md. at 564.

Second, contrary to the premise built into Constellation’s request, the relevant standard is not whether the Certification “provide[s] *reasonable* assurance” that the Dam will comply with Maryland’s water quality standards.<sup>218</sup> In this context, the word “reasonable” alters and weakens the statutory text, which requires – without any qualifying words – that any certification “*assure* that any applicant for a Federal license or permit *will comply* with any applicable effluent limitations and other limitations...”<sup>219</sup> Indeed, the whole point of section 401 is to provide a “certification” from the state that the project “will comply” with water quality standards.<sup>220</sup>

Constellation argues that its preferred flow regime suffices, despite the extraordinary damage it would cause to aquatic life and aquatic habitat, because Maryland’s water quality standards do not require the protection of aquatic life and habitat.<sup>221</sup> That argument would apply equally to the weak flow regime that Constellation prefers. Regardless, it is without merit. Constellation neglects to mention that Maryland’s water quality standards permit the discharge or “waters” only “if” “The discharge does not contravene the surface water quality standards established by this State to protect legitimate beneficial water uses” and specifically identifies as “designated uses”: “(a) Water contact recreation; (b) Fishing; (c) Propagation of fish, other aquatic life, and wildlife.”<sup>222</sup> Contrary to Constellation’s misleading claims, the Certification’s flow requirements are necessary to assure compliance with Maryland’s water quality standards, and MDE so found in the Certification itself.<sup>223</sup>

Another misleading notion that Constellation advances is that the far less protective flow regime in the settlement nonetheless provides “reasonable” assurance of compliance with Maryland’s water quality standards because it: (1) is better than the flow regime in Constellation’s previous license; (2) “enhances” aquatic habitat and submerged aquatic vegetation; and, (3) “addresses” fish migration and stranding.<sup>224</sup> Even if “reasonable” assurance were all that section 401 required, *but see supra*, Constellation’s claims would still be irrelevant. The question under the statute is whether the Certification contains all requirements

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<sup>218</sup> Constellation Supplemental Submission at 66 (emphasis added).

<sup>219</sup> 33 U.S.C. § 1341(d) (emphasis added).

<sup>220</sup> 33 U.S.C. § 1341(a)(1), (d).

<sup>221</sup> Constellation Supplemental Submission at 70-73.

<sup>222</sup> COMAR 26.08.02.01, 26.08.03.01.

<sup>223</sup> *See* 33 U.S.C. § 1341(d).

<sup>224</sup> Constellation Supplemental Submission at 73-82.

that are “necessary to assure” the Dam “will comply.”<sup>225</sup> MDE has already found that the flow regime spelled out in the Certification is necessary to assure the Dam will comply. Because the settlement regime is less protective than the Certification’s flow regime – *i.e.* the degree of protection MDE found necessary to assure the Dam will comply – it did not and cannot possibly provide such assurance.

Seeking to rely on the Environmental Impact Statement (“EIS”) prepared by FERC long before the Certification was issued, Constellation falsely claims the settlement flow regime was “as protective” as the Certification flow regime.<sup>226</sup> Needless to say, MDE was well aware of that EIS regime when it concluded the Certification flow regime is necessary to assure the Dam’s compliance with Maryland’s water quality standards. In any event, FERC itself never even claimed that the settlement flow regime was “as protective” as the Certification flow regime.

Further, a simple comparison between the Certification’s flow regime and the settlement flow regime shows that the latter falls far short.<sup>227</sup> The settlement allows lower flows in almost every month of the year. In January through March, for example, it allows flows at less than one half to one third of the levels required by the Certification flow regime.<sup>228</sup>

The settlement flow regime also falls far short of providing 70 percent habitat availability, a benchmark identified by The Nature Conservancy and accepted by FERC for purposes of evaluating flow regimes. As FERC admitted in its rehearing order, for example, the settlement flow regime would provide only 42 percent habitat availability across all months and life stages of striped bass, and it provides less than 25 percent habitat availability for adult striped bass in August.<sup>229</sup> Indeed, the settlement regime’s flows are, in some time periods, even lower than those provided by Constellation’s previous license.<sup>230</sup> They provide approximately

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<sup>225</sup> 33 U.S.C. § 1341(a)(1), (d).

<sup>226</sup> Constellation Supplemental Submission at 75.

<sup>227</sup> Compare Certification at Attachment 5 with Constellation Supplemental Submission at 67-68.

<sup>228</sup> *Id.* FERC, Order Addressing Arguments Raised On Rehearing, 176 FERC ¶ 61,029 (July 15, 2021) (“FERC Rehearing Order”) at ¶ 26-28.

<sup>229</sup> *Id.* at ¶ 26.

<sup>230</sup> FERC Rehearing Order at ¶22.

half the water necessary to maintain the habitat availability benchmark for juvenile striped bass and less than one fifth the water necessary for adult striped bass.<sup>231</sup>

Effectively admitting the settlement regime is less protective than the Certification regime, Constellation states it falls “just short” in the second half of June.<sup>232</sup> In reality, as shown in FERC’s Rehearing Order, the EIS, and above, the settlement flow regime falls far short of the flow regime in the Certification throughout the calendar and for all life stages of the relevant fish species. No wonder then, that Constellation seeks to rewrite the Clean Water Act with a weakened, “reasonable assurance” standard.<sup>233</sup> The statute requires certifications to assure an applicant “will comply,” not to provide “reasonable assurance” of compliance, but the settlement would not even provide “reasonable” assurance. What it actually would assure is that neither fish habitat nor fish populations can recover during the next 50-year license period.

**B. Constellation does not dispute MDE’s finding that the fish and eel passage conditions (§7(B)(i)-(iv)) are necessary to ensure compliance with water quality standards.**

Section 401(d) provides that a state water quality certification must include conditions “necessary to assure that any applicant for a Federal license or permit will comply” with water quality standards.<sup>234</sup> As with the flow rate, Constellation identifies no errors with the provisions in the 2018 Certification. Instead, it argues that the settlement with the U.S. Department of the Interior (“DOI”) and additional provisions in the Settlement are “fully adequate to provide reasonable assurance that Conowingo’s activities will not violate Maryland’s water quality standards.”<sup>235</sup> As noted above, this is the wrong standard for reconsideration. Indeed, MDE itself indicated that Constellation agreed it had not challenged the fish passage conditions (or the flow rates) in its administrative reconsideration.<sup>236</sup> Constellation should not be allowed to challenge it simply because MDE has allowed for

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<sup>231</sup> FERC, Final Multi-Project Environmental Impact Statement for Hydropower Licenses (March 2015) (“EIS”) at Table 3-22.

<sup>232</sup> Constellation Supplemental Submission at 77.

<sup>233</sup> *Id.* at 78.

<sup>234</sup> 33 U.S.C. § 1341(d).

<sup>235</sup> Constellation Supplemental Submission at 82.

<sup>236</sup> See Protest and Answer of MDE at 54-55 (Submitted on Mar. 28, 2019 to FERC Docket) (20190328-5210) (Waterkeepers Aug. 1, 2023 Submission, Ex. 1.o.) (“MDE Answer”).

supplemental information to be submitted.<sup>237</sup> If that could be allowed, the administrative process would be never ending, and Constellation could delay even longer than it already has.

Assuming the issue of fish and eel passage is properly before MDE now, which it is not, Conowingo first attempts to rely on its 2016 settlement with DOI.<sup>238</sup> There is no claim that the 2018 Certification or the fishway prescriptions are inconsistent. Constellation, instead, merely summarizes provisions in the settlement, makes an unsupported claim that compliance with the 2016 settlement will cost from \$155-\$355 million *over 50 years*, and characterizes it as “unprecedented.” Even if true, none of these statements call into question the 2018 Certification. And, while supportive of the fishway prescriptions as an improvement over the prior almost 90 years of operation, there were comments raising concerns with the sufficiency of the fishway prescriptions, particularly with respect to eel passage.<sup>239</sup> The 2018 Certification outlined the numerous and substantial impacts the Dam has had on fish, eel, and mussels.<sup>240</sup> MDE was not required to comment or raise concerns with the fishway prescriptions, as it retained authority to ensure its own requirements were being met. Along those lines, MDE

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<sup>237</sup> In passing, Constellation states that it has “not identified an applicable provision of the COMAR, but any water quality criteria applicable to fish and eel passage would be, at most, narrative and subjective.” Constellation Supplemental Submission at 87. While this concedes MDE’s discretion on necessary fish passage provisions, Constellation did not challenge MDE’s authority to place conditions related to fish passage in the “Protective Petition for Reconsideration and Administrative Appeal.” The time for seeking reconsideration has long since passed. Constellation’s delay in pursuing its challenges did not reopen the time for it to raise new claims. Similarly, Constellation points to several issues not mentioned in its reconsideration petition, including Fish kill monitoring plan, Shoreline management plan, Bog turtle management plan, Map turtle plan, Waterfowl nesting protection plan, Monitoring stream flows in the tailrace, Sturgeon protection, Habitat improvement projects, Lower river fisheries survey, and Spillway modifications/fish stranding minimization. Other issues, such as provisions on invasive species, PCBs, and chlorophyll, were mentioned without much discussion, except concerns raised about the authority to address and the record supporting these provisions. Actions to be taken under the Settlement have no bearing on these (disputed and incorrect) claims.

<sup>238</sup> Constellation Supplemental Submission at 82-87.

<sup>239</sup> See, e.g., Earthjustice Sept. 11, 2015 Letter to DOI (Submitted on Sept. 15, 2015 to FERC Docket) (20150914-5044); Comments of Waterkeepers on Offer of Settlement and Explanatory Statement (Submitted on June 1, 2016 to FERC Docket) (20160601-5233); see also Comments of the Nature Conservancy on the Offer of Settlement (Submitted on June 1, 2016 to FERC Docket) (20160601-5358) (explaining why The Nature Conservancy declined to sign 2016 settlement).

<sup>240</sup> Certification at 11-13.

imposed the conditions it believed were *necessary*, including incorporating the DOI fishway prescriptions. In short, nothing in this discussion calls MDE’s determinations into question.

Then Constellation points to “further fish and eel passage enhancements with Maryland.”<sup>241</sup> The first example provided, however, appears to be a deviation from the 2016 settlement with DOI, which requires an attraction flow of 900 cubic feet per second that was incorporated into the 2018 Certification.<sup>242</sup> This was identified by Constellation as a key provision supporting approval of the 2016 settlement by FERC.<sup>243</sup> While Constellation contends that “the language from the 2018 Certification would merely delay the modifications to the EFL,”<sup>244</sup> it does not cite to what specific language would do so nor does it indicate whether DOI approves of the change to the “unprecedented” and “landmark” settlement that Constellation noted DOI found “honors the science-based recommendations developed by the federal and state agencies that manage these resources.”<sup>245</sup> Nor is there evidence provided that a lower attraction flow would “best optimize fish passage at the EFL.”<sup>246</sup> As with much of the supplemental submission, Constellation seeks to rely on its own views on which provisions are better, rather than any scientific analysis. Unfortunately for Constellation, mere disagreements are not sufficient to call into question’s MDE’s expertise.

Apparently recognizing that the 2016 settlement with DOI was not sufficient, particularly with respect to eel passage, Constellation then points to the “additional enhancements in the settlement with Maryland” that address eel and mussels.<sup>247</sup> As Constellation admits, mussels provide “important ecosystem services, including filtration and transformation of sediment and nutrient pollution.”<sup>248</sup> As Waterkeepers August 1 submission explained (at 45-54), the

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<sup>241</sup> Constellation Supplemental Submission at 87.

<sup>242</sup> *Id.*

<sup>243</sup> *See, e.g.*, Offer of Settlement and Explanatory Statement, at 4, 10 (Submitted on May 12, 2016 to FERC Docket) (20160512-5272).

<sup>244</sup> Constellation Supplemental Submission at 87.

<sup>245</sup> *Id.* at 83 (quoting Exelon Corp., Landmark Agreement with Exelon, U.S. Fish and Wildlife Service uses Cutting-edge Science to Drive Fishes’ Return to Susquehanna River (Apr. 15, 2016), <https://www.exeloncorp.com/newsroom/landmark-agreement-with-exelon-u-s-fish-and-wildlife-service>).

<sup>246</sup> *Id.*

<sup>247</sup> *Id.* at 88.

<sup>248</sup> *Id.* Despite this acknowledgement, Constellation appears to claim ignorance of how the fish and eel passage provisions ensure the Dam’s operations, which have decimated the mussel population, address water quality requirements.

Dam's operations have had devastating effects on mussels, and that loss has had significant impacts on the ability of the Susquehanna and Bay to address nutrients. While Constellation explains how the Settlement with MDE is different from the 2016 settlement with DOI, it does not compare the Settlement with MDE with the conditions MDE found *necessary* in the 2018 Certification. Contrary to Constellation's contentions, it not only makes sense that MDE "jettison" the Settlement with respect to fish and eel passage, MDE is obligated to do so in favor of the more protective measures in the 2018 Certification.<sup>249</sup> In other words, any discussion of what the Settlement with MDE provides regarding eel passage again has no bearing on whether the 2018 Certification requires reconsideration.

**C. Constellation cannot avoid its obligations to address the impacts of discharged trash and debris.**

Constellation again attempts to avoid its obligations under the 2018 Certification by arguing that it had never previously been required to remove trash and debris by MDE and "Conowingo itself does not introduce any material amount of trash and debris into the water."<sup>250</sup> As explained above, it is immaterial whether MDE previously required it to remove trash and debris, and it is irrelevant how the trash and debris got into the water in the first place. Even so, Constellation is incorrect.

As explained, discharges of waste that cause a nuisance or impact designated uses are prohibited under Maryland regulations. Floating debris also is prohibited under Maryland's regulations and Constellation's NPDES permit. These prohibitions are not limited based on the original source of that waste or debris. Also, as explained above, the discharges here are a direct result of the Dam's "activities." But for the Dam, the trash and debris would not accumulate. But for the Dam, the accumulated trash and debris would not be discharged into the Susquehanna River and further down into the Bay when the flood gates open or when the reservoir overflows due to a storm event. In fact, Constellation still does not dispute the findings in the 2018 Certification, which state:

The Project traps trash and debris behind the Dam, which accumulates over time, threatening recreational uses of the Reservoir and potentially concentrating pollutants, and if not removed regularly is vulnerable to sudden

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<sup>249</sup> Constellation Supplemental Submission at 89.

<sup>250</sup> *Id.* at 90.

downstream transport during moderate to large storm events. Significant amounts of trash and debris moving downstream in single events creates hazards for recreational uses and blocks water supply intakes downstream.<sup>251</sup>

Contrary to Constellation’s claims (at 90), this is a significantly different circumstance than might occur if the Dam were not present.

The evidence is that trash and debris discharged by the Dam’s operations have caused a nuisance and impacted designated uses, including fishing and recreational uses.<sup>252</sup> It is these discharges that, contrary to Constellation’s claims, MDE is trying to prevent. Maryland has long noted that debris management “is an important issue for the State.”<sup>253</sup> To avoid these harms, it is entirely reasonable that MDE included provisions in the 2018 Certification to prevent these discharges. As discussed above, one can look at the provisions for discharges from municipal stormwater sewers. Courts have upheld Maryland’s general permits (MS4) that seek to limit the amount of pollution entering the stormwaters through these sewer systems.<sup>254</sup> Similarly, here, MDE is seeking to prevent the discharge of trash and debris by removing it prior to going through the flood gates or flowing over the Dam. This is unlike the one case cited by Constellation—the same case it cited in its 2018 reconsideration petition—that involves the development of a TMDL, which was required to identify the maximum load of a pollutant a waterbody could handle.<sup>255</sup> MDE regulations already did this. As discussed, it prohibits, among other things, floating debris that impacts designated uses. MDE was fully authorized to include conditions that would comply with this standard.

Indeed, Constellation then appears to waive these arguments entirely by saying it “does not object to MDE incorporating [the trash and debris] provisions into a revised § 401 certification consistent with the terms of the settlement.”<sup>256</sup> This makes clear Constellation’s disagreement is simply that it prefers other requirements to those requirements in the 2018 Certification that it believes are too expensive. While mere disagreements are not adequate grounds for

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<sup>251</sup> Certification at 13.

<sup>252</sup> See Waterkeepers Aug. 1, 2023 Submission at 35-39, 42-43.

<sup>253</sup> Maryland Department of Natural Resources Comments, at 7 (Jan. 31, 2014), *cited in* MDE Answer at 55.

<sup>254</sup> *Md. Small MS4 Coalition*, 479 Md. at 40-41.

<sup>255</sup> *Natural Resources Def. Council*, 301 F. Supp. 3d 133.

<sup>256</sup> Constellation Supplemental Submission at 91.

reconsideration, Constellation attempts to argue (without any analysis) that the provisions in the Settlement with MDE are “sufficient to provide reasonable assurance that the Project’s activities will not violate any of Maryland’s applicable water quality standards.”<sup>257</sup> Again, Constellation uses the wrong standard under section 401.

In either case, this is inconsistent with the evidence. Constellation had argued, in support of the Settlement, that it agreed to remove debris “up to the level of removal undertaken by Exelon in 2018.”<sup>258</sup> MDE had explained that 2018 was “a historically high rainfall year in which the amount of trash and debris arriving at the Project from upstream sources was significantly greater than in prior years.”<sup>259</sup> It should be noted that MDE did not state this amount was sufficient to ensure compliance with water quality standards, only that the provisions “will improve aquatic recreational activities and aesthetics.”<sup>260</sup> Constellation now claims that MDE never imposed an obligation to remove trash and debris before. As such, of course this is an *improvement* over lack of prior enforcement regarding discharges of trash and debris as a result of the Dam’s operations. Regardless, statements of users of the river and Bay noted the continuous problems faced as a result of trash and debris released by the Dam, even in 2018.<sup>261</sup> This indicates that those efforts were not sufficient to protect designated uses. Evidence was also presented that climate change makes it likely that there will be worse years than 2018.<sup>262</sup> In other words, MDE must, at a minimum, retain the trash and debris provisions in the 2018 Certification. Nothing in the Constellation supplemental submission requires otherwise.

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<sup>257</sup> *Id.*

<sup>258</sup> Joint Offer of Settlement and Explanatory Statement of Exelon Generation Company, LLC and MDE, at 12, Oct. 29, 2019, *available at* [https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Documents/Conowingo\\_Settlement.pdf](https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Documents/Conowingo_Settlement.pdf).

<sup>259</sup> Reply Comments of MDE, at 15 (Submitted on Jan. 31, 2020 to FERC Docket) (20200131-5252).

<sup>260</sup> *Id.* at 16.

<sup>261</sup> Waterkeepers Aug. 1, 2023 Submission at 35-39.

<sup>262</sup> *Id.* at 37-45, and Ex. 1.q (Waterkeepers Comments on Settlement) at 6; *see also* Waterkeepers Administrative Appeal at 7 n.16, 19-21.

## **CONCLUSION**

For the foregoing reasons, Waterkeepers respectfully requests MDE not weaken the 2018 Certification and deny Constellation's request for reconsideration. Rather, as outlined in their 2018 administrative petition, as supplemented by the August 1, 2023 submission, Waterkeepers urges MDE to strengthen the 2018 Certification.

LIST OF ATTACHMENTS TO  
RESPONSE OF LOWER SUSQUEHANNA RIVERKEEPER ASSOCIATION  
AND WATERKEEPERS CHESAPEAKE TO CONSTELLATION ENERGY  
GENERATION'S SUPPLEMENTAL BRIEFING

August 16, 2023

- A. Response of Lower Susquehanna Riverkeeper, et al. in Opposition to Exelon Generation Company, LLC's Renewed Request to Dismiss Appeal and Declaration of Elizabeth Nicholas
- B. EPA Region III Letter to Virginia Secretary of Natural Resources, Dec. 29, 2009, *available at* [https://www.epa.gov/sites/default/files/2015-07/documents/bay\\_letter\\_1209.pdf](https://www.epa.gov/sites/default/files/2015-07/documents/bay_letter_1209.pdf)
- C. Letter from MDE to EPA Administrator, Oct. 21, 2019 (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2019-0811))
- D. Letter from MDE to EPA, Aug. 1, 2022 (available at [www.regulations.gov](http://www.regulations.gov) (EPA-HQ-OW-2022-0128-0186))