
On July 31, 2012, Oxford filed a Motion for Summary Judgment, arguing the Director acted unlawfully in basing certain terms and conditions of Oxford’s 401 Certification on Primary Headwater Habitat (“PHWH”) classifications that appear in an
Agency guidance document, but are absent from both the Ohio Revised Code ("R.C.") and the Ohio Administrative Code ("Ohio Adm.Code"). The Director filed a Memorandum in Opposition on August 17, 2012, and Oxford filed its Reply on August 24, 2012. The Commission held an oral argument on September 12, 2012. Following the oral argument, the Commission granted Oxford’s motion. Case File Items Y, EE, FF, JJ.

Because Oxford’s Motion for Summary Judgment did not resolve all the assignments of error raised in this appeal, the Commission held a de novo hearing from November 26 to December 6, 2012. The parties filed Proposed Findings of Fact and Conclusions of Law on March 1, 2013. Case File Items JJ, EEE, FFF.

Based upon the pleadings, the evidence adduced at the hearing, and the relevant statutes, regulations, and case law, the Commission issues the following Findings of Fact, Conclusions of Law, and Final Order REMANDING Oxford’s 401 Certification and ORDERING the Director to issue a modified Section 401 certification consistent with this decision within 90 days.

**FINDINGS OF FACT**

**I. Background and Regulatory Framework**

Oxford operates several surface coal mining sites in Ohio. Relevant to this appeal is an approximately 1,120-acre site in Guernsey and Muskingum counties known as Otsego 1. Case File Item A.

In order to mine coal from the Otsego 1 site, Oxford obtained a coal mining and reclamation permit (Permit No. D-2373) from the Ohio Department of Natural Resources ("ODNR") on September 22, 2011. Certified Record ("CR") Item 13.

Additionally, because Oxford’s mining plan proposed to place dredge or fill material into certain waters subject to the federal Clean Water Act, Oxford was
required to obtain a Section 404 permit from the United States Army Corps of Engineers ("Corps"). 33 United States Code ("U.S.C.") 1344.

Among other requirements, Section 404 permit applicants must obtain a Section 401 water quality certification from the state in which the proposed discharge will occur. Such Section 401 certifications serve to verify that activities proposed in federal Section 404 permit applications will comply with state water quality requirements. 33 U.S.C. 1341.

Oxford initially submitted its application for Section 401 certification to Ohio EPA on February 18, 2011. CR Item 35.

In evaluating an application for a Section 401 certification, Ohio EPA applies two sets of rules: (1) the certification rule (Ohio Adm.Code Chapter 3745-32) and (2) the anti-degradation rule (Ohio Adm.Code Chapter 3745-1).

The certification rule sets forth the factors that the Director must consider when evaluating a Section 401 certification application. Specifically, Ohio Adm.Code 3745-32-05 provides in pertinent part:

(A) The director shall not issue a section 401 water quality certification unless he determines that the applicant has demonstrated that the discharge of dredged or fill material to waters of the state * * * will:

(1) Not prevent or interfere with the attainment or maintenance of applicable water quality standards;
* * *

(Emphasis added).

"Water quality standards" are, in turn, set forth in Ohio Adm.Code Chapter 3745-1 and contain two distinct elements: (1) use designations and (2) numerical or narrative criteria designed to protect such use designations.
For certain water bodies, use designations are specifically assigned by rule. Such “designated uses” appear in Ohio Adm.Code 3745-1-08 through 3745-1-32. For water bodies not identified in Ohio Adm.Code 3745-1-08 through 3745-1-32, “existing uses” are assigned pursuant to Ohio Adm.Code 3745-1-07(B).

The rules establish three broad categories of “existing uses”: (1) aquatic life, (2) water supply, and (3) recreational. Relevant to this appeal are the aquatic life existing uses. Aquatic life existing uses are defined in Ohio Adm.Code 3745-1-07(B) and consist of the following designations:

(a) Warmwater habitat
(b) Limited warmwater habitat
(c) Exceptional warmwater habitat
(d) Modified warmwater habitat
(e) Seasonal salmonid habitat
(f) Coldwater habitat
   (i) Inland trout streams
   (ii) Native fauna
(g) Limited resource water

The Otsego 1 site is located within the White Eyes Creek watershed, which is designated a “limited warmwater habitat” in Ohio Adm.Code 3745-1-24. Although the streams at the Otsego 1 site are tributaries of White Eyes Creek, Ohio EPA has not assigned specific use designations to these tributaries in its rules. Testimony Skalski.

The second component of Ohio EPA’s review of Section 401 certification applications is Ohio’s anti-degradation rule, contained in Ohio Adm.Code Chapter 3745-1. As an initial matter, Ohio’s anti-degradation rule expressly requires that “existing
uses” be maintained and protected, providing in pertinent part, “[e]xisting uses, which are determined using the use designations defined in rule 3745-1-07 of the Administrative Code, and the level of water quality necessary to protect existing uses, shall be maintained and protected.” (Emphasis added).

§17 Further, the anti-degradation rule requires the Director to consider several additional factors when making determinations regarding proposed activities that lower water quality. The rule provides, in pertinent part, as follows:

(C)(5) When making determinations regarding proposed activities that lower water quality the director shall consider the following:

(a) The magnitude of the proposed lowering of water quality;

(b) The anticipated impact of the proposed lowering of water quality on aquatic life and wildlife, including threatened and endangered species, important commercial or recreational sport fish species, other individual species and the overall aquatic community structure and function;

(c) The anticipated impact of the proposed lowering of water quality on human health and the overall quality and value of the water resource;

(d) The degree to which water quality may be lowered in waters located within national, state or local parks, preserves or wildlife areas, waters listed as state resource waters in rules 3745-1-08 to 3745-1-30 of the Administrative Code, or waters categorized outstanding national resource waters, outstanding state waters or superior high quality waters;

(e) The effects of lower water quality on the economic value of the water body for recreation, tourism and other commercial activities, aesthetics, or other use and enjoyment by humans;

(f) The extent to which the resources or characteristics adversely impacted by the lowered water quality are unique or rare within the locality or state;

(g) The cost of the water pollution controls associated with the proposed activity;

(h) The cost effectiveness and technical feasibility of the non-degradation alternatives, minimal degradation alternatives or mitigative technique alternatives and the effluent reduction benefits and water quality benefits associated with such alternatives;
(i) The availability, cost effectiveness, and technical feasibility of central or regional sewage collection and treatment facilities, including long-range plans outlined in state or local water quality management planning documents and applicable facility planning documents;

(j) The availability, reliability and cost effectiveness of any non-degradation alternative, minimal degradation alternative or mitigative technique alternative;

(k) The reliability of the preferred alternative including, but not limited to, the possibility of recurring operational and maintenance difficulties that would lead to increased degradation;

(l) The condition of the local economy, the number and types of new direct and indirect jobs to be created, state and local tax revenue to be generated, and other economic and social factors as the director deems appropriate; and

(m) Any other information regarding the proposed activities and the affected water body that the director deems appropriate.

Ohio Adm.Code 3745-1-05(C)(5).

{¶18} For wetlands, Ohio EPA established a specific anti-degradation rule, Ohio Adm.Code 3745-1-54, that divides wetlands into three categories—Category 1 (lowest quality), Category 2, and Category 3 (highest quality).

{¶19} Allowable impacts to wetlands depend, in part, on the particular wetland category. Category 3 wetlands are most relevant to this appeal. Ohio Adm.Code 3745-1-54(D)(1)(c) governs allowable impacts to Category 3 wetlands and provides in pertinent part as follows:

(c) Category 3 wetlands. The wetland designated use shall be maintained and protected in wetlands assigned to category 3, and no lowering of water quality shall be allowed, unless it is demonstrated to the satisfaction of the director that:

(i) Avoidance. There is no practicable alternative, based on technical, social and economic criteria, which would have less adverse impact on the wetland ecosystem * * *, and

(ii) Minimization. Appropriate and practicable steps have been taken to minimize potential adverse impacts on the wetland ecosystem. * * *
(iii) The proposed activity is necessary to meet a demonstrated public need, as defined in rule 3745-1-50 of the Administrative Code; and

(iv) The lowering of water quality is necessary to accommodate important social or economic development in the area in which the water body is located; and

(v) Storm water and water quality controls will be installed in accordance with paragraph (D)(3) of this rule; and

(vi) The wetland is not scarce regionally and/or statewide ***; and

(vii) Compensatory mitigation. The designated use is replaced by a category 3 wetland, of equal or higher quality, in accordance with paragraph (E) of this rule. ***

(Emphasis added).

II. Application, Review, and Issuance of Oxford’s 401 Certification

§20 The Commission will now outline Oxford’s initial application, Ohio EPA’s Section 401 certification application review process, and Ohio EPA’s final issuance of Oxford’s 401 Certification.

A. Initial Section 401 Certification Application

§21 On February 16, 2011, after receiving notice from the Corps that Oxford had applied for a Section 404 permit for the Otsego 1 site, Rachel Taulbee, Environmental Specialist for Ohio EPA Division of Surface Water, sent a letter to Nathan Leggett, Director of Environmental Compliance for Oxford, informing him that Oxford must apply for a Section 401 certification within twenty-one days. CR Item 25.

§22 Oxford submitted its initial application for Section 401 certification at the Otsego 1 site (“401 Certification Application”) on February 18, 2011. The application, prepared by Linn Consulting, contained Oxford’s proposal to mine approximately 1.7 million tons of coal using primarily “contour” and “high wall” mining techniques. CR Item 35; Testimony Hummel.
"Contour mining" is so-called because the technique involves the creation of a series of strip mining pits that follow the contour of a hill along the coal seam. First, overburden, the soil and rock found above a coal seam, is removed using a box cut\(^1\) to expose the coal seam below. The exposed coal is then excavated and removed from the ground. The box cut and coal removal process is illustrated below.

![Diagram of pre-mining and box cut with coal seam and box cut](image1)

**Figure 1-- Pre-mining**

![Diagram of box cut and box cut with coal seam](image2)

**Figure 2 -- Box cut and coal removal**

Case File Item UU; Testimony Hummel.

Subsequently, the process is repeated in an adjacent cell. As mining activity progresses along the contour of the hill, overburden removed from one cell replaces the portion of the hill removed by the box cut in an adjacent cell. For example, in the figure below, overburden removed from “Pit 12” would be used to back fill or reform the hill in the adjacent “Pit 11.” Once overburden has been used for back filling, it is referred to as “mine spoil.”

\(^1\) A “box cut” is a specialized cut directly into the face of the hill. A box cut results in the creation of a three-sided trench in the side of the hill. The floor of the trench is exposed coal, and the side parallel to the hill contour is known as the high wall. Testimony Hummel.
Oxford Ex. 62; Testimony Hummel.

¶25 “High wall mining” refers to the use of a high wall miner\(^2\) to recover additional coal after the box cut and removal of coal from within a strip mining pit. As illustrated below, a high wall miner can remove additional coal up to approximately 800-900 feet into the hill without removing overburden from above the coal seam.

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Case File Item UU; Testimony Hummel.

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\(^2\) A high wall miner is approximately 80 feet long, three stories tall, and weighs approximately 200 tons. Testimony Hummel.
As a part of its mining plan, Oxford’s Section 401 Certification Application included proposed impacts to numerous streams and wetlands at the Otsego 1 site. Regarding proposed stream impacts, the application included a “Stream Impact/Avoidance Summary” table detailing proposed impacts to streams at the Otsego 1 site. However, neither the copy of Oxford’s February 18, 2011 Section 401 Certification Application provided to the Commission in the Certified Record nor the copies introduced as evidence at hearing include the Oxford’s proposed stream impact table. CR Item 35; Oxford Ex. 37; Director’s Ex. 3.

Regarding proposed wetland impacts, Oxford’s February 18, 2011 Section 401 Certification Application included a “Wetland Impact/Avoidance Summary” table detailing proposed impacts to wetlands at the Otsego 1 site. Oxford described the proposed impacts to Wetland 71 and Wetland 72 as follows:

<table>
<thead>
<tr>
<th>ID#</th>
<th>ORAM Score</th>
<th>Total Acres On-site</th>
<th>Type of Impact</th>
<th>Preferred Degradation Alternative (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Forested</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Forested</td>
</tr>
<tr>
<td>71</td>
<td>49</td>
<td>2.54</td>
<td>PC/RG</td>
<td>0</td>
</tr>
<tr>
<td>72</td>
<td>55</td>
<td>4.18</td>
<td>PC/MT</td>
<td>0</td>
</tr>
</tbody>
</table>

CR Item 35.

Oxford based its proposed wetland and stream impacts, in part, on wetland and stream assessments conducted by Strategic Environmental and Ecological Services (“Strategic”), whom Oxford had hired as a consultant. Strategic performed an

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3 PC refers to “Pond Construction”

RG refers to “Reclamation Gradation”

MT refers to “Mine Through”
assessment of the wetlands and streams located at the Otsego 1 site, assigning a PHWH class to each stream and a category to each wetland. Testimony Linn, Smith.

{¶29} To perform the wetland assessments at the Otsego 1 site, Strategic utilized the Ohio Rapid Assessment Method (“ORAM”), which Ohio EPA considers to be “an appropriate wetland evaluation methodology.” ORAM is a method for scoring (out of 100) and categorizing wetlands based on a variety of factors, including wetland size, surrounding land use, hydrology, habitat alteration and development, and plant communities. Strategic assigned Wetland 71 an ORAM score of 49 and Wetland 72 an ORAM score of 55. Both scores corresponded to Category 2 wetlands. Oxford Ex. 36; Testimony Smith.

{¶30} To classify the streams at the Otsego 1 site, Strategic conducted Headwater Habitat Evaluation Index (“HHEI”) evaluations for each stream. HHEI is a method that utilizes a variety of metrics to assess the quality and biological potential of streams with a drainage area of less than one square mile. Relevant metrics include stream channel modifications, substrate type, maximum pool depth, bank width, riparian width, floodplain quality, flow regime, sinuosity, and stream gradient. Testimony Skalski, Taulbee.

{¶31} After assigning HHEI scores, Strategic placed each stream into a Primary Headwater Habitat (“PHWH”) class based on Ohio EPA’s Field Evaluation Manual for

4 As discussed in greater detail below, Oxford argued that it should not have been required to assign PHWH classifications for each stream.

5 Ohio Adm.Code 3745-1-54(C)(1)-(3) requires the use of “an appropriate wetland evaluation methodology acceptable to the director” for the purpose of assigning wetland categories.

6 For streams with a drainage area greater than one square mile, Ohio EPA instructs applicants to use the Qualitative Habitat Evaluation Index (“QHEI”). Testimony Taulbee.
Ohio’s Primary Headwater Streams (“Field Manual”). The Field Manual explains the three PHWH classes as follows:

In general, * * * two fundamental types of biological communities are present in the primary headwaters of Ohio:

1. Streams found to have native fauna adapted to cool-cold perennial flowing water characterized by a community of vertebrates (either cold water adapted species of headwater fish and/or obligate aquatic species of salamanders from the lungless family Plethodontidae), and/or a diverse community of benthic macroinvertebrates including cold water taxa, with larval life stages resident in the stream continuously or on an annual basis. This type of PHWH stream is * * * referred to as a **Class III-PHWH stream**.

2. Streams found to have a moderately diverse community of warm-water adapted native fauna either present seasonally or on an annual basis. The native fauna of these streams is characterized by species of vertebrates (fish or salamanders) and/or benthic macroinvertebrates that are pioneering, headwater, temporary, and/or temperature facultative. This type of PHWH stream is * * * referred to as a **Class II-PHWH stream**.

3. Primary headwater streams that are normally ephemeral, with water present for short periods of time due to infiltration from snow melt or rainwater runoff. Primary headwater stream channels observed to be normally dry, with little or no aquatic life present are * * * referred to as **Class I-PHWH streams**.

Director’s Ex. 117.
Based on HHEI scores, the Field Manual states that PHWH stream classification assignments should be made using the decision-making flowchart below:

Director’s Ex. 117.
Additionally, the Field Manual states, “[w]hen the results of both a biological assessment and a HHEI assessment are available, the data from the biological assessment is used to classify the PHWH stream.” Director’s Ex. 117.

Because Oxford’s February 18, 2011 application did not contain biological assessment data, Strategic assigned PHWH stream categories based on its HHEI scores for the streams at the Otsego 1 site. Strategic’s HHEI scores and PHWH classifications for the streams at issue in this appeal are listed below:

<table>
<thead>
<tr>
<th>Stream ID</th>
<th>HHEI</th>
<th>PHWH Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-37</td>
<td>69</td>
<td>2</td>
</tr>
<tr>
<td>S-48</td>
<td>38</td>
<td>2</td>
</tr>
<tr>
<td>S-48A</td>
<td>38</td>
<td>2</td>
</tr>
<tr>
<td>S-53</td>
<td>39</td>
<td>2</td>
</tr>
<tr>
<td>S-73 (eph.)</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>S-73 (per.)</td>
<td>63</td>
<td>2</td>
</tr>
<tr>
<td>S-74</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>S-79</td>
<td>66</td>
<td>2</td>
</tr>
<tr>
<td>S-86 (per.)</td>
<td>83</td>
<td>3</td>
</tr>
<tr>
<td>S-105</td>
<td>74</td>
<td>3</td>
</tr>
<tr>
<td>S-115</td>
<td>66</td>
<td>2</td>
</tr>
<tr>
<td>S-116</td>
<td>69</td>
<td>2</td>
</tr>
<tr>
<td>S-125</td>
<td>64</td>
<td>2</td>
</tr>
</tbody>
</table>

CR Item 35.

Finally, Oxford’s Section 401 Certification Application also included a Stream and Wetland Mitigation Plan (“Mitigation Plan”) prepared by Mr. Leggett and

7 “Eph.” refers to ephemeral flow, which is flow that occurs primarily in response to precipitation events. Testimony Skalski, Taulbee.

8 “Per.” refers to perennial flow, which is flow that occurs continuously throughout the year. Testimony Skalksi, Taulbee.
Mr. Timothy Linn, President, Linn Consulting, whom Oxford had hired to assist with the preparation of its Section 401 Certification Application. Regarding streams, the Mitigation Plan states that all streams, except ephemeral streams, impacted by mining will be restored using “natural” stream reconstruction techniques. In addition, the Mitigation Plan included the use of sediment pools, ditches, and other features to control runoff and erosion, as well as the replanting of trees along the riparian corridors of the impacted streams. CR Item 35; Testimony Leggett.

Paragraph 36 Regarding wetlands, the Mitigation Plan stated that Oxford would create at least 11.9 acres of wetlands to replace the 5.82 acres of wetlands lost due to mining operations. CR Item 35; Testimony Leggett.

B. Ohio EPA Initial Completeness Review and Site Visits

Paragraph 37 Upon receiving Oxford’s revised Section 401 Certification Application, Ohio EPA conducted a completeness review. A completeness review is a preliminary review of an application that enables Ohio EPA to quickly determine whether the application contains specific information necessary for the Agency to conduct a more detailed technical review before ultimately granting or denying the application. During its completeness review of Oxford’s Section 401 Certification Application, Ohio EPA reviewed the materials submitted the Agency to ensure they contained the following:

1. A complete 401 WCC application form
2. A copy of the United States Army Corps of Engineers’ jurisdictional determination letter
3. A wetland characterization analysis consistent with the Ohio Rapid Assessment Method
4. A use attainability analysis, if the project impacts a stream for which a specific aquatic life use designation has not been made (QHEI or HHEI)
5. A specific and detailed mitigation proposal, including the location and proposed legal mechanism for protecting the property in perpetuity

6. Applicable permit fees

7. Site photographs of water resources

8. Documentation confirming that the applicant has requested comments from ODNR and USFWS regarding threatened and endangered species, including the presence or absence critical habitat

9. Descriptions, schematics, and appropriate economic information of the applicant’s preferred, non-degradation and minimal degradation alternatives for design and operation of the facility

10. The delineation report of the waters of the United States in support of the 404 permit application

11. A copy of the United States Army Corps of Engineers’ public notice regarding the 505 application. If no public notice is to be issued by the Corps, notification that the project is to be authorized under a general permit will fulfill this requirement

Testimony Taulbee; CR Item 15.

{¶38} On March 14, 2011, Ms. Taulbee sent Mr. Linn a letter notifying him that Oxford’s application was incomplete. Specifically, the letter indicated that the application was missing an ORAM form for Wetland 101, did not address proposed impacts to Stream 70, and did not include schematics for Oxford’s non-degradation alternative. In addition, the letter stated that the application fee had been calculated incorrectly. CR Item 24.

{¶39} As a part of its review of Oxford’s Section 401 Certification Application, Ohio EPA also conducted a total of three site visits to verify Oxford’s ORAM and HHEI scoring, as well as to conduct biological and water quality sampling. Testimony Skalski, Taulbee.
During the first site visit, which occurred on March 15, 2011, Ms. Taulbee conducted ORAM assessments of Wetlands 71 and 72, assigning scores of 61 and 66, respectively. These scores differed from Oxford’s original ORAM scores of 49 and 55, and resulted in Ohio EPA upgrading the wetlands’ classification from Category 2 to Category 3. Oxford Ex. 50; Testimony Taulbee.

Ohio EPA also altered Oxford’s classification of several streams at the Otsego 1 site. In an email to Mr. Linn and Mr. Leggett, Ms. Taulbee explained Ohio EPA’s changes to stream classifications as follows:

* * *

Several of the streams that were classified as Class II streams in the application are Class III streams, based on the information given in the original HHEI forms. The original classification in the application appears to have been assigned using the numeric score alone; this is not the correct procedure when assigning PHWH class. The field Evaluation Manual for Ohio’s Primary Headwater Habitat Streams instructs the user to use the decision making flowchart to assign the appropriate classification to a PHWH stream. This doesn’t appear to have been done- when using the information given in the original HHEI forms in the flowchart, the following Class II streams are actually Class III streams:

Stream 79
Stream 115
Stream 116
Stream 125
Stream 127

Additionally, Stream 129 is assigned a PHWH Class II status in the application packet; however it was scored using the QHEI [and] received of 52. The PHWH Class II status would be appropriate if the stream score a 52 using the HHEI. Stream 129 has a watershed large enough to be scored using the Qualitative Habitat Evaluation Index (QHEI) which was done by Strategic Consulting.

Changes made in the field when verifying scoring forms

Stream 53 was originally scored as a Class II stream with a score of 39. At the time of the site visit, Ohio EPA made the following changes:
- the dominant substrates appeared to be cobble, gravel not gravel, sand as checked and there appeared to be five substrates present, not four as checked. This changed Metric 1 from a 19 to a 26.

- the maximum pool depth was 18 centimeters. This changed Metric 2 from a 5 to a 25.

The above changes modified the score from a 39 to a 66, making Stream 53 a Class III PHWH stream.

Stream 54 was originally scored as a Class II stream with a score of 39. At the time of the site visit, Ohio EPA made the following changes:

- the dominant substrates appeared to be cobble, gravel, sand not gravel, sand as checked and there appeared to be five substrates present, not four as checked. This changed Metric 1 from a 19 to a 20.

- the maximum pool depth was 19 centimeters. This changed Metric 2 from a 5 to a 25.

- the bank full width average was 2.3 meters, not 1.5 meters as checked. This changed Metric 3 from a 15 to a 20.

The above changes modified the score from a 39 to a 65, making Stream 54 a Class III PHWH stream.

* * *

CR Item 38.

\{¶42\} The second Ohio EPA visit to the Otsego 1 site occurred on March 22, 2011. This site visit included macroinvertebrate sampling at Stream 116, where Ms. Taulbee and Mr. Chris Skalski, Environmental Specialist 2 for Ohio EPA, collected a macroinvertebrate taxon known as *Peltoperla sp.* A stonefly rarely collected in Ohio, *Peltoperla sp.* is not listed on the state or federal endangered species list. CR Items 20, 30, 33; Testimony Taulbee.

\{¶43\} Finally, at the third site visit, which occurred on April 6, 2011, Ohio EPA personnel conducted HHEI evaluations and sampled for fish, salamanders, and macroinvertebrates at several locations at the Otsego 1 site. The results are summarized below:
Among other data, Ohio EPA’s macroinvertebrate sampling at the Otsego 1 site resulted in the identification of a state endangered mayfly, Litobrancha recurvata, collected near Stream 79. Litobrancha recurvata is classified taxonomically under the order Ephemeroptera. Director’s Ex. 59; Testimony Taulbee.

Additionally, during the third site visit, Ohio EPA employees collected water chemistry data at each sampling location. This data consisted of measurements of water temperature, conductivity, pH, and dissolved oxygen content in the sampled streams. Ohio EPA’s water chemistry data is summarized below:

<table>
<thead>
<tr>
<th>Stream ID</th>
<th>HHEI</th>
<th>HMFEI⁹</th>
<th>Fish</th>
<th>Salamanders</th>
</tr>
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<tbody>
<tr>
<td>54</td>
<td>68</td>
<td>33</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>59</td>
<td>67</td>
<td>37</td>
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<td>Yes</td>
</tr>
<tr>
<td>73</td>
<td>71</td>
<td>29</td>
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<td>Yes</td>
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<td>116</td>
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<td>40</td>
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<tr>
<td>125</td>
<td>--</td>
<td>0</td>
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</tr>
</tbody>
</table>

⁹ “HMFEI” refers to the Headwater Macroinvertebrate Field Evaluation Index. HMFEI is a method of assigning PHWH classifications to streams based on macroinvertebrate sampling. Director’s Ex. 117.
<table>
<thead>
<tr>
<th>Stream ID</th>
<th>Temp. (˚C)</th>
<th>Conductivity</th>
<th>pH</th>
<th>Dissolved Oxygen</th>
<th>Oxygen Saturation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>8.92</td>
<td>94</td>
<td>7.57</td>
<td>10.26</td>
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<td>105</td>
<td>9.6</td>
<td>211.3</td>
<td>7.39</td>
<td>12.02</td>
<td>105.6</td>
</tr>
<tr>
<td>115</td>
<td>10.43</td>
<td>85.5</td>
<td>6.88</td>
<td>11.18</td>
<td>100</td>
</tr>
<tr>
<td>116</td>
<td>9</td>
<td>68</td>
<td>7.23</td>
<td>11.95</td>
<td>103.4</td>
</tr>
</tbody>
</table>

Director’s Ex. 109; Testimony Skalksi.

C. Oxford’s Revised Section 401 Certification Application

{¶46}  On July 26, 2011, Oxford submitted a revised Section 401 Certification Application addressing the items identified in Ohio EPA’s March 14, 2011 incompleteness letter: (1) ORAM form for Wetland 101, (2) proposed impacts to Stream 70, (3) schematics for non-degradation alternative, and (4) application fee. The revised application also included the following proposed impacts to the streams at issue in this appeal:10

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10 The Commission is unable to determine whether this table had been revised following Oxford’s initial February 2011 application, as it was absent from the copies supplied to the Commission in the CR and introduced as evidence at hearing. Findings of Fact, Part II.A, supra, at ¶26; see CR Item 35, Oxford Ex. 37, Director’s Ex. 3.
<table>
<thead>
<tr>
<th>Stream ID</th>
<th>HHEI</th>
<th>Total Length on Otsego 1 site (ft.)</th>
<th>Proposed Impacts</th>
<th>Description of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-37</td>
<td>69</td>
<td>3,634</td>
<td>154, 3,480</td>
<td>Temporary haul road</td>
</tr>
<tr>
<td>S-48</td>
<td>38</td>
<td>326</td>
<td>121, 205</td>
<td>Temporary haul road</td>
</tr>
<tr>
<td>S-48A</td>
<td>38</td>
<td>105</td>
<td>0, 105</td>
<td>Culvertting</td>
</tr>
<tr>
<td>S-53</td>
<td>39</td>
<td>683</td>
<td>321, 362</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-73 (eph.)</td>
<td>27</td>
<td>530</td>
<td>101, 429</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-73 (per.)</td>
<td>63</td>
<td>1,708</td>
<td>1,518, 190</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-74</td>
<td>32</td>
<td>65</td>
<td>65, 0</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-79</td>
<td>66</td>
<td>2,538</td>
<td>1,352, 1,186</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-86 (per.)</td>
<td>83</td>
<td>2,722</td>
<td>1,555, 1,167</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-105</td>
<td>74</td>
<td>2,185</td>
<td>1,814, 371</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-115</td>
<td>66</td>
<td>1,441</td>
<td>1,380, 61</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-116</td>
<td>69</td>
<td>1,613</td>
<td>1,022, 591</td>
<td>Mined through</td>
</tr>
<tr>
<td>S-125</td>
<td>64</td>
<td>783</td>
<td>610, 173</td>
<td>Mined through</td>
</tr>
</tbody>
</table>

CR Item 36.

To address wetland impacts, Oxford’s revised application included a wetlands mitigation plan proposing the creation of 10.8 acres of wetlands. See CR Item 15.

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Oxford’s original February 2011 application appears to have proposed the creation of 11.9 acres of wetlands. CR Item 35.

The Commission notes that this 10.8 acre figure is based on Ohio EPA’s August 15, 2011 notice of incompleteness. The copy of Oxford’s July 2011 revised application provided to the Commission does not appear to contain the correct wetlands gain/loss summary table. The table included in the July 2011 application appears to indicate that it had been revised in November 2011. CR Items 15 and 36.
D. Ohio EPA Completeness Review of Oxford’s Revised Section 401 Certification Application

{¶48} On August 15, 2011, Ms. Taulbee sent Mr. Linn a second incompleteness letter stating that the revised application was incomplete because it lacked a “specific and detailed” mitigation plan. The incompleteness letter read, in part, as follows:

The 401 WQC proposes impacts to 0.99 acres of Category 1 and 2 jurisdictional and non-jurisdictional wetlands and 5.13 acres of jurisdictional Category 3 wetlands (Wetlands 71 and 72). Therefore, a total of 11.75 acres of wetland mitigation is required in accordance with Ohio Administrative Code 3745-1-54(F)(1). The application currently proposes 10.8 acres of wetland mitigation and a portion of that is proposed for ephemeral stream impacts.

CR Item 15 (emphasis in original).

{¶49} Subsequently, on September 7, 2011, Mr. Michael Gardner, in-house counsel for Oxford, sent Director Nally an e-mail detailing several concerns with Ohio EPA’s review of Oxford’s Section 401 Certification Application. Among other concerns, Mr. Gardner’s e-mail raised objections to Ohio EPA’s ORAM scoring for Wetlands 71 and 72 and read in pertinent part as follows:

Your staff scored WTL-71 & 72 Metric 2b with higher values by overlooking the fact of “mining” as a surrounding land use and Metrics 3e, 4a, and 4c as “Recovered” with Metric 4b as “Good” habitat development by failing to observe Acid Mine Drainage (AMD) disturbance of these wetland habitats. Our professionals correctly identified mining as surrounding land use in Metric 2b and scored Metrics 3e, 4a and 4c as between “Recovered” and “Recovering” (averaging the two data points) with “Moderately good” habitat development (Metric 4b) by the observed AMD disturbances. Your staff’s biased scoring results in the difference between Category 2 and 3 wetland and more mitigation, if we are successful at a public hearing in demonstrating a public necessity to impact Category 3 wetland.

In my opinion, your staff has no business re-scoring these wetlands 5 years after the fact, particularly when the application was deemed incomplete the day before. These are not matters of such importance, like nuclear arms reduction, where it’s necessary to trust but verify every element of a mitigation plan to this level of detail, particularly where the scoring metrics are so subjective. If Ohio EPA is going to do its own ORAM scoring
and then conclude that its results are all that matters, then there’s no good reason for the applicant to do this work.

CR Item 38.

{¶50} Although Oxford continued to object to Ohio EPA’s ORAM scoring for Wetlands 71 and 72, it nonetheless submitted a revised wetland mitigation plan on November 22, 2011, addressing the deficiencies identified in Ohio EPA’s second incompleteness letter. The revised plan proposed the creation of 11.9 acres of wetlands, as compared to the 10.8 acres proposed in its July 27, 2011, revised application.\[12\] Director’s Ex. 91.

{¶51} The next day, on November 23, 2011, Ohio EPA deemed Oxford’s Section 401 Certification Application complete. Director’s Ex. 92.

\[12\] See note 11, supra.

E. Ohio EPA Technical Review

{¶52} After having deemed the application complete, Ohio EPA began its technical review of Oxford’s Section 401 Certification Application. As a part of this technical review, on November 29, 2011, Ms. Taulbee met with representatives from Oxford to discuss the technical feasibility and cost effectiveness of avoiding mining impacts to “high quality” water resources at the Otsego 1 site. Testimony Taulbee.

{¶53} Ms. Taulbee testified that she understood Oxford’s primary permitting concern to be its ability to allow the high wall miner to cross certain streams at the Otsego 1 site. It was Ms. Taulbee’s understanding that if such crossings were prohibited, the costs for mining the site would increase significantly. Thus, Ms. Taulbee testified that she discussed with Oxford’s representatives the possibility of allowing for temporary crossings, with the understanding that Oxford would analyze the issue and
later notify Ohio EPA whether such temporary crossings would enable cost effective operations at the Otsego 1 site. Testimony Taulbee.

{¶54} Ms. Taulbee sent Mr. Linn her comments on Oxford’s Section 401 Certification Application on January 4, 2012. The letter contained thirty-three comments and included requests for detailed information regarding cost effectiveness, as well as requests for revisions to the Mitigation Plan. Mr. Linn responded to Ms. Taulbee on January 19, 2012. Director’s Ex. 94, 102.

{¶55} On January 26, 2012, after reviewing Mr. Linn’s January 19, 2012 response, Ms. Taulbee sent Mr. Linn an e-mail detailing several additional deficiencies with the Mitigation Plan. Oxford does not assert nor does the record support that Mr. Linn or Oxford responded to Ohio EPA’s second notice of deficiency. Director’s Ex. 104.

{¶56} On January 27, 2012, Ms. Taulbee sent Oxford a draft Section 401 water quality certification for review, requesting that Oxford submit any comments or proposed revisions to Ohio EPA by February 2, 2012. The draft certification contained the following restrictions on impacts to the streams relevant to this appeal:
<table>
<thead>
<tr>
<th>Stream ID</th>
<th>Designation PHWH Class</th>
<th>Total Length on Otsego 1 Site (ft.)</th>
<th>Impacted (ft.)</th>
<th>Impact Type</th>
<th>Percent Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-37</td>
<td>* To be determined</td>
<td>3,634</td>
<td>154</td>
<td>Culvert</td>
<td>96%**</td>
</tr>
<tr>
<td>S-48</td>
<td>* To be determined</td>
<td>326</td>
<td>121</td>
<td>Culvert</td>
<td>63%**</td>
</tr>
<tr>
<td>S-48A</td>
<td>* To be determined</td>
<td>105</td>
<td>105</td>
<td>n/a</td>
<td>0%**</td>
</tr>
<tr>
<td>S-53</td>
<td>* To be determined</td>
<td>683</td>
<td>321</td>
<td>Mined through</td>
<td>44%**</td>
</tr>
<tr>
<td>S-73 (eph.)</td>
<td>I</td>
<td>530</td>
<td>101</td>
<td>Mined through</td>
<td>81%</td>
</tr>
<tr>
<td>S-73 (per.)</td>
<td>III</td>
<td>1,708</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-74</td>
<td>* To be determined</td>
<td>65</td>
<td>65</td>
<td>Mined through</td>
<td>0%**</td>
</tr>
<tr>
<td>S-79</td>
<td>III</td>
<td>2,538</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-86 (per.)</td>
<td>III</td>
<td>2,722</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-105</td>
<td>III</td>
<td>2,185</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-115</td>
<td>III</td>
<td>1,441</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-116</td>
<td>III</td>
<td>1,613</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-125</td>
<td>I</td>
<td>783</td>
<td>610</td>
<td>Mined through</td>
<td>22%</td>
</tr>
</tbody>
</table>

* Streams class to be determined by baseline sampling effort.
** Additional avoidance may be required, based on the results of the baseline sampling effort.

Director’s Ex. 105.

{¶57} Regarding wetland impacts, the draft certification contained the following restrictions:

<table>
<thead>
<tr>
<th>Wetland ID</th>
<th>Category</th>
<th>Total Acreage</th>
<th>Acreage Impacted</th>
<th>Percent Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>WL-71</td>
<td>3</td>
<td>2.54</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>WL-72</td>
<td>3</td>
<td>4.18</td>
<td>??</td>
<td>??%</td>
</tr>
</tbody>
</table>

Director’s Ex. 105.

{¶58} Mr. Leggett responded via e-mail to Ms. Taulbee on February 1, 2012. The e-mail contained Oxford’s comments to the draft Section 401 water quality certification and read in pertinent part as follows:
* * * If possible, please provide an explanation for the impacts totals for both streams and wetlands as they were changed from what we submitted. Considering the impact totals will greatly alter our available mining areas, an explanation for the change is warranted. Specifically, the impact changes to Streams 54, 59, 73, 79, 86, 105, 115, and 116. These unexplained changes to the stream impacts have resulted in a 10,348 foot stream impact reduction. Also, please explain how we are to impact Streams 75, 76, 80, 82, 83, 85, 87, 88, 89, 91, 92, 99, 100, and stream 101 when in the 401 it states we are not able to impact the 100 foot buffer of the streams you changed to ‘no impact’. These streams fall within the 100 foot buffer, thereby making them untouchable. Please explain or revise the tables to reflect this.

There was also no explanation given for the change in our proposed impacts to wetlands 71 and 72. We specifically requested impacts to these wetlands.

CR Item 38.

{¶59} Ms. Taulbee responded to Mr. Leggett’s comments the next day, stating:

Thank you for pointing out the technical error in the certification seeming to allow impacts to lengths of tributary streams within the 200 foot buffer of Class III PHWH streams. The certification has been revised based on your comments and now allows impacts to 9,065 linear feet of stream (contingent upon baseline sampling), avoiding all lengths of stream within the two hundred foot buffer of all Class III streams. * * *

Ohio EPA has determined that the application does not adequately demonstrate the applicant’s ability to mitigate for the loss of the current aquatic use and functions of to the high quality Class III Primary Headwater Habitat (PHWH) streams and high quality Category 3 wetlands, and replace them to meet their current pre-mining use and quality.

* * *

CR Item 38.

{¶60} Ms. Taulbee testified that on February 6, 2012, Ohio EPA met with Oxford again to discuss the cost effectiveness of stream and wetland impact avoidance, as well as to discuss the draft Section 401 certification. Ms. Taulbee testified that this meeting further reinforced her understanding that the ability to cross certain streams
with the high wall miner was the critical issue for Oxford to recover coal at the Otsego 1 site in a cost effective manner. Oxford Ex. 51; Testimony Taulbee.

**F. Final Section 401 Water Quality Certification**

{¶61} On February 7, 2012, Ohio EPA issued Oxford’s final Section 401 Water Quality Certification (“401 Certification”). The 401 Certification contained the following restrictions to impacts to the streams relevant to this appeal:

<table>
<thead>
<tr>
<th>Stream ID</th>
<th>Designation PHWH Class</th>
<th>Total Length on Otsego 1 Site</th>
<th>Impacted (ft.)</th>
<th>Impact Type</th>
<th>Percent Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-37</td>
<td>* To be determined</td>
<td>3,634</td>
<td>154</td>
<td>Culvert</td>
<td>96%**</td>
</tr>
<tr>
<td>S-48</td>
<td>* To be determined</td>
<td>326</td>
<td>121</td>
<td>Culvert</td>
<td>63%**</td>
</tr>
<tr>
<td>S-48A</td>
<td>* To be determined</td>
<td>105</td>
<td>105</td>
<td>n/a</td>
<td>0%**</td>
</tr>
<tr>
<td>S-53</td>
<td>* To be determined</td>
<td>683</td>
<td>321</td>
<td>Mined through</td>
<td>53%</td>
</tr>
<tr>
<td>S-73 (eph.)</td>
<td>I</td>
<td>530</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-73 (per.)</td>
<td>III</td>
<td>1,708</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-74</td>
<td>* To be determined</td>
<td>65</td>
<td>0</td>
<td>Mined through</td>
<td>100%</td>
</tr>
<tr>
<td>S-79</td>
<td>III</td>
<td>2,538</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-86 (per.)</td>
<td>III</td>
<td>2,722</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-105</td>
<td>III</td>
<td>2,185</td>
<td>150</td>
<td>Temp. Culvert</td>
<td>93%</td>
</tr>
<tr>
<td>S-115</td>
<td>III</td>
<td>1,441</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-116</td>
<td>III</td>
<td>1,613</td>
<td>0</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>S-125</td>
<td>I</td>
<td>783</td>
<td>610</td>
<td>Mined through</td>
<td>22%</td>
</tr>
</tbody>
</table>

* Streams class to be determined by baseline sampling effort.
** Additional avoidance may be required, based on the results of the baseline sampling effort

CR Item 1.

{¶62} Compared to the draft certification, the final 401 Certification authorized additional impacts to Streams 53 and 105 and reduced authorized impacts to Streams 73
and 74. Further, for the streams listed in bold above, the 401 Certification states, “[a] plan may be submitted to Ohio EPA for discussion and agency approval at a later date regarding additional impacts. Ohio EPA may allow additional temporary road crossings as part of this plan.” CR Item 1.

\[63\] As to wetland impacts, Oxford’s 401 Certification contained the following restrictions to impacts to Wetlands 71 and 72:

<table>
<thead>
<tr>
<th>Wetland ID</th>
<th>Category</th>
<th>Total Acreage</th>
<th>Acreage Impacted</th>
<th>Percent Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>WL-71</td>
<td>3</td>
<td>2.54</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>WL-72</td>
<td>3</td>
<td>4.18</td>
<td>??</td>
<td>??%</td>
</tr>
</tbody>
</table>

CR Item 1.

III. Oxford’s Assignments of Error

\[64\] Oxford timely filed a Notice of Appeal on March 8, 2012, raising the following six assignments of error:

1) The terms and conditions in the Oxford 401 Certification are unreasonable and unlawful because Ohio EPA considered factors beyond the Director’s authority

   A) Consideration of primary headwater habitat

   B) Consideration of waters of the State of Ohio that are not subject to the Clean Water Act

   C) Consideration of stream and wetland buffers

   D) Consideration of comments from U.S. EPA and ACOE-HD

   E) In general, Ohio EPA unreasonably and unlawfully reviewed the Oxford application using a process that relies on factors other than those related to the State of Ohio’s water quality standards

\[63\] Oxford’s 401 Certification allows for a temporary road crossing within Wetland 72. Ms. Taulbee testified that Ohio EPA did not impose specific limitations on impacted acreage and percent avoided for Wetland 72 because Oxford could not, at the time of issuance, identify the precise location for the temporary crossing. Testimony Taulbee.
2) The terms and conditions in the Oxford 401 Certification related to additional sampling and assessment of streams and wetlands, including the submittal of a revised baseline and during mining biological sampling plan and an adaptive management plan, before impacts are authorized are unreasonable and unlawful.

3) The Director has improperly, unreasonably and unlawfully misapplied water quality standards to the project.

4) The mitigation requirements for streams and wetlands in the Oxford 401 Certification are unreasonable and unlawful.

5) The best management practices required in the Oxford 401 Certification are unreasonable.

6) It is unreasonable to prohibit permanent in-stream ponds.

Case File Item A.

IV. Oxford’s Motion for [Partial] Summary Judgment

{¶65} On July 31, 2012, Oxford filed a Motion for Summary Judgment and Order Vacating Director’s Final Action (“Motion”). In its Motion, Oxford argued that the 401 Certification is unlawful “because it was based on ‘primary headwater habitat’ use classes.” Oxford requested that the Commission “determine that the 401 water quality certification requirement is waived” or, in the alternative, “issue an Order vacating the unlawful provisions of the Otsego #1 401 Water Quality Certification which rely on the ‘primary headwater habitat’ use classes and directing the Director to immediately re-issue the Otsego #1 Water Quality Certification * * *.” Case File Item Y.

{¶66} The Director filed a response on August 17, 2012, and Oxford filed its Reply August 24, 2012. Case File Items EE, FF.

{¶67} Following oral argument on September 12, 2012, the Commission granted Oxford’s Motion and indicated that findings of fact and conclusions of law supporting the ruling would be included in this decision. Case File Item JJ.
On September 27, 2012, Oxford filed Proposed Findings of Fact and Conclusions of Law and Motion for Entry of Proposed Order, requesting that the Commission clarify its order granting Oxford’s Motion for Summary Judgment. Essentially, Oxford moved the Commission to enter an order vacating certain specific terms of Oxford’s 401 Certification. The Director filed his response on October 9, 2012.

On October 11, 2012, the Commission denied Oxford’s Motion for Entry of Proposed Order, stating as follows:

In its September 12, 2012 Ruling, the Commission found that to the extent the Director relied on the ‘Field Evaluation Manual’ to expand the definitions of one or more of the ‘use designations’ found in Ohio Administrative Code 3745-1-07, such action was unlawful. However, Appellant’s Motion for Summary Judgment presented no specific evidence regarding individual terms within Appellant’s 401 Water Quality Certification. Accordingly, the lawfulness of specific permit terms was not properly before the Commission and thus was not considered in the Commission’s September 12, 2012 Ruling.

V. Arguments Presented at De Novo Hearing

Because Oxford’s Motion for Summary Judgment did not resolve all the assignments of error raised in this appeal, the Commission held a de novo hearing from November 26 to December 6, 2012. As presented at hearing, Oxford’s arguments can be broadly divided into two categories: (1) arguments relating to streams and (2) arguments relating to wetlands. A discussion of each of the arguments presented at hearing, as well as the assignments of error raised in Oxford’s Motion for Summary Judgment, is presented below.
A. Stream Restrictions

{¶71} In its Motion, Oxford argued that the direct stream impact restrictions, listed in Part I.C.1 of Oxford’s 401 Certification, are unlawful because the Director based these restrictions on PHWH classifications rather than on “existing uses” as defined by Ohio Adm.Code 3745-1-07. At hearing, Oxford also argued that, contrary to the Director’s contention, Ohio EPA could not have reasonably assigned the “coldwater habitat, native fauna” existing use, as defined by Ohio Adm.Code 3745-1-07(B)(1)(f)(ii), to any of the streams at the Otsego 1 site.

{¶72} Notwithstanding the classification scheme, Oxford argued that the 401 Certification’s direct stream impact restrictions are also unlawful and/or unreasonable for three additional reasons: (1) the Director unreasonably concluded that Oxford’s Mitigation Plan was insufficient to restore streams at the Otsego 1 site to pre-mining conditions; (2) the Director failed to reasonably consider the full extent of the economic impact resulting from the 401 Certification’s stream impact restrictions; and (3) the Director unlawfully listed allowable impacts to certain streams as “to be determined.”

{¶73} Finally, in addition to the stream impact restrictions found in Part I.C.1 of its 401 Certification, Oxford opposed certain other stream-related terms and conditions. Specifically, Oxford challenged terms and conditions relating to buffer zones, monitoring requirements, wildlife protection, and in-stream ponds, arguing that they are unlawful and/or unreasonable.

i. Classification of Streams

{¶74} The parties do not dispute that the stream impact restrictions, listed in Part I.C.1 of Oxford’s 401 Certification, are based, in part, on PHWH class designations for the streams at the Otsego 1 site. In its Motion, Oxford argued that the use of such
PHWH classifications was unlawful. At hearing, Oxford also argued that contrary to the Director’s assertion, the streams at issue in this appeal could not have reasonably been deemed “coldwater habitat, native fauna” streams as defined by Ohio Adm.Code 3745-1-07(B)(1)(f)(ii).

a. Class III PHWH (Motion for Summary Judgment; Assignments of Error 1A, 1E, and 3)

{¶75} In its Motion, Oxford argued that the Director acted unlawfully by imposing terms and conditions in Oxford’s 401 Certification based on PHWH classifications contained in Ohio EPA’s Field Manual. Oxford contended that such restrictions were not permitted by any provision of the Revised Code or the Administrative Code. Specifically, Oxford argued that the classifications outlined in the Field Manual amounted to water quality standards, which, pursuant to R.C. 6111.041, must be promulgated through rulemaking in accordance with R.C. Chapter 119. Because the Field Manual’s PHWH classification system was not promulgated pursuant to R.C. Chapter 119, Oxford argued that any terms and conditions derived from such classification system were unlawful. Case File Items Y, FF.

{¶76} The Director responded that the stream impact restrictions in Oxford’s 401 Certification were required pursuant to Ohio’s anti-degradation rule. The anti-degradation rule, contained in Ohio Adm.Code Chapter 3745-1, states, “[e]xisting uses, which are determined using the designations defined in rule 3745-1-07 of the Administrative Code * * * shall be maintained and protected.” Ohio Adm.Code 3745-1-05(C)(1) (emphasis added). The Director argued that the PHWH classifications were the equivalent of “existing uses” and must therefore be preserved pursuant to Ohio Adm.Code Chapter 3745-1-05(C)(1). Case File Item EE.
Further, the Director argued that even if the stream impact restrictions were not authorized pursuant to Ohio’s anti-degradation rule, they were nonetheless lawful pursuant to Ohio Adm.Code 3745-32-05(C), which provides as follows:

The director may impose such terms and conditions as part of a section 401 water quality certification as are appropriate or necessary to ensure compliance with the applicable laws and to ensure adequate protection of water quality.

The Director argued that the stream impact restrictions were necessary and/or appropriate to ensure compliance with applicable laws, namely, Ohio Adm.Code 3745-1-05(C)(1), and to ensure the adequate protection of water quality. Therefore, the Director argued that the restrictions were authorized under Ohio Adm.Code 3745-32-05(C). Case File Item EE.

Following oral argument on September 12, 2012, the Commission ruled to grant Oxford’s Motion for Summary Judgment. Case File Item JJ.

b. Coldwater Habitat, Native Fauna (Assignments of Error 1A, 1E, and 3)

At hearing, the Director argued that, notwithstanding the lawfulness or unlawfulness of the PHWH classification system, all streams at issue in this appeal that were designated as Class III PHWH streams at the Otsego 1 site also fell within the scope of the “coldwater habitat, native fauna” existing use category. Ohio Adm.Code 3745-1-07(B)(1)(f)(ii) defines “coldwater habitat, native fauna” as “waters capable of supporting populations of native coldwater fish and associated vertebrate and invertebrate organisms and plants on an annual basis.” (Emphasis added).

The Director argued that the results of the HHEI evaluations, macroinvertebrate sampling, and water chemistry data, obtained during Ohio EPA’s three site visits, support the conclusion that the Class III PHWH streams at the Otsego 1 site...
site are “capable of supporting” populations of native coldwater fish and associated macroinvertebrates, vertebrates, and plants. Thus, the Director argued that even though Ohio EPA relied upon the PHWH classifications contained in the Field Manual to develop the stream impact restrictions contained in Part I.C.1 of Oxford’s 401 Certification, the terms are nonetheless lawful and reasonable because the streams could have been assigned a “coldwater habitat, native fauna” existing use. Testimony Skalski, Taulbee.

Ohio EPA conducted sampling at each of the streams designated as Class III PHWH streams at issue in this appeal. Specifically, Ohio EPA conducted HHEI evaluations, macroinvertebrate sampling, and collected water chemistry data at Streams 73, 79, 86, 105, 115, and 116. Testimony Taulbee.

Ms. Taulbee explained that the metrics Ohio EPA used to conduct the HHEI evaluations correlate with a stream’s ability to support coldwater fish and macroinvertebrate species. For example, Ms. Taulbee testified that high substrate diversity and well-developed riffle-run-pool complexes, both of which are factors in HHEI evaluations, are indicative of a stream’s ability to support diverse populations of coldwater fish and macroinvertebrates. Additionally, Ms. Taulbee testified that a well-developed riparian buffer, also an HHEI metric, is important for supporting coldwater aquatic life because shade from trees and other plants along the stream bank aids in maintaining low water temperatures. Testimony Taulbee.

Ohio EPA conducted HHEI evaluations at the Otsego 1 site in Streams 73, 19, 86, 105, and 115 on April 6, 2012. The Agency did not conduct an HHEI evaluation for Stream 116. Ohio EPA’s HHEI data is summarized below:
CR Item 33.

Additionally, Ms. Taulbee and Mr. Skalski explained that the presence of certain macroinvertebrate and vertebrate species can provide important information about an aquatic habitat. They testified that certain macroinvertebrate taxa are particularly sensitive to environmental stress. Thus, their presence is indicative of a “high quality” aquatic habitat. Certain other species of macroinvertebrates and vertebrates are also adapted specifically to survive in coldwater environments only. Although many warmwater species can survive in coldwater, coldwater species cannot similarly survive in warmwater. Finally, Ms. Taulbee explained that certain macroinvertebrate species from the taxonomic orders Ephemeroptera, Plecoptera, and Trichoptera (“EPT”) are often sensitive to pollution. Testimony Taulbee, Skalksi.

For the Otsego 1 site, Ohio EPA conducted macroinvertebrate sampling at Stream 116 on March 22, 2012, and at Streams 73, 79, 86, 105, and 115 on April 6, 2012. Ohio EPA’s macroinvertebrate sampling data is summarized below:

<table>
<thead>
<tr>
<th>Stream ID</th>
<th>HHEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>71</td>
</tr>
<tr>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>86</td>
<td>75</td>
</tr>
<tr>
<td>96</td>
<td>24</td>
</tr>
<tr>
<td>105</td>
<td>56</td>
</tr>
<tr>
<td>115</td>
<td>66</td>
</tr>
<tr>
<td>116</td>
<td>--</td>
</tr>
<tr>
<td>Stream ID</td>
<td>HMFEI^4</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>73</td>
<td>29</td>
</tr>
<tr>
<td>79</td>
<td>40</td>
</tr>
<tr>
<td>86</td>
<td>44</td>
</tr>
<tr>
<td>105</td>
<td>46</td>
</tr>
<tr>
<td>115</td>
<td>46</td>
</tr>
<tr>
<td>116</td>
<td>40</td>
</tr>
</tbody>
</table>

Oxford Ex. 51; Testimony Taulbee, Skalski.

{¶86} Finally, Ohio EPA also collected water samples at the relevant streams on April 6, 2012. Water chemistry data obtained from these samples are summarized below:

<table>
<thead>
<tr>
<th>Stream ID</th>
<th>Temp. (˚C)</th>
<th>Conductivity</th>
<th>pH</th>
<th>Dissolved Oxygen</th>
<th>Oxygen Saturation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>6.95</td>
<td>101.2</td>
<td>7.27</td>
<td>12.99</td>
<td>106.9</td>
</tr>
<tr>
<td>79</td>
<td>9.98</td>
<td>68.3</td>
<td>--</td>
<td>11.64</td>
<td>103.1</td>
</tr>
<tr>
<td>86</td>
<td>9.23</td>
<td>96.8</td>
<td>--</td>
<td>12.01</td>
<td>104.5</td>
</tr>
<tr>
<td>96</td>
<td>6.48</td>
<td>50</td>
<td>--</td>
<td>9.86</td>
<td>80.2</td>
</tr>
<tr>
<td>105</td>
<td>9.6</td>
<td>211.3</td>
<td>7.39</td>
<td>12.02</td>
<td>105.6</td>
</tr>
<tr>
<td>115</td>
<td>10.43</td>
<td>85.5</td>
<td>6.88</td>
<td>11.18</td>
<td>100</td>
</tr>
<tr>
<td>116</td>
<td>9</td>
<td>68</td>
<td>7.23</td>
<td>11.95</td>
<td>103.4</td>
</tr>
</tbody>
</table>

CR Item 33.

{¶87} Ms. Taulbee and Mr. Skalski testified that the HHEI evaluations, macroinvertebrate data, and water chemistry data combine to support the conclusion that Streams 73, 39, 86, 105, 115, and 116 are “capable of supporting” populations of coldwater fish and associated vertebrates, invertebrates, and plants. Ms. Taulbee and Mr. Skalski concluded that each stream thus falls within the scope of the “coldwater

^4 Note 9, supra.
habitat, native fauna” existing use, as defined by Ohio Adm.Code 3745-1-07(B)(1)(f)(ii). Testimony Taulbee, Skalski.

¶88 In response, Oxford argued, that as an initial matter, the plain language of the 401 Certification demonstrates that Ohio EPA based the stream classifications on the Field Manual’s PHWH classification system, rather than the existing uses categories found in Ohio Adm.Code 3745-1-07. Notwithstanding the basis for the restrictions, however, Oxford also contended that the streams at issue do not, in fact, fall within the definition of the “coldwater habitat, native fauna” existing use because they are not “capable of supporting” populations of coldwater fish.

¶89 In particular, Oxford argued that the Class III PHWH streams at the Otsego 1 site may not have sufficient water flow or appropriate water temperatures to support coldwater fish populations. Regarding water flow, Oxford cited an Ohio EPA document entitled “Technical Report: Ohio’s Primary Headwater Streams – Fish and Amphibian Assemblages,” which states, “[i]t was observed that many Class III-PHWH streams do not contain coldwater fish, likely due to physical habitat constraints such as shallow depth of deep pools, and rock ledges.” Oxford did not, however, introduce specific evidence indicating that either the particular streams at issue in this appeal lack the requisite water flow or that they are not capable of supporting populations of native coldwater fish. Oxford Ex. 59; Testimony Taulbee.

¶90 Regarding water temperature, Oxford noted that Ohio EPA only sampled water temperature at the Otsego 1 site in April 2011 and thus had not gathered temperature data for summer months, when water temperature is likely to be highest. Again, however, Oxford did not introduce affirmative evidence indicating that summer
water temperatures in the Class III PHWH streams at the Otsego 1 site would be unable to sustain populations of coldwater fish. Testimony Taulbee.

{¶91} Finally, Oxford argued that the streams could not have been “coldwater habitat, native fauna” streams because Ohio EPA did not find coldwater fish at the Otsego 1 site. In essence, Oxford argued that Ohio EPA lacked the “best evidence” that the streams were “capable of supporting” populations of native coldwater fish. Therefore, Oxford insisted that the Director acted unreasonably in determining that the streams could have fallen within the definition of “coldwater habitat, native fauna.” Testimony Skalski.

ii. Direct Impact Restrictions

{¶92} As discussed above, the classification of the streams at the Otsego 1 site is only one factor that the Director must consider when determining authorized stream impacts at the Otsego 1 site. Ohio Adm.Code 3745-1-05(C)(5) also requires the Director to consider, among other factors, the availability and feasibility of mitigative techniques, as well as economic and social impacts. Thus, notwithstanding the lawfulness or unlawfulness of the 401 Certification’s stream classifications, Oxford argued that the stream impact restrictions found in Part I.C.1 were unlawful and/or unreasonable because the Director lacked a valid factual foundation to conclude that Oxford’s proposed Mitigation Plan would be insufficient to restore the streams at the Otsego 1 site and because the Director failed to fully evaluate the cost effectiveness and technical feasibility of the restrictions imposed by the 401 Certification. Moreover, Oxford contends that it was unlawful and unreasonable to list some stream impact restrictions as “to be determined.” Testimony Leggett, Linn, Taulbee.
a. Evaluation of Proposed Mitigation Plan (Assignment of Error 3)

[¶93] Oxford argued that the stream impact restrictions in its 401 Certification were unreasonable because Ohio EPA lacked a valid factual foundation to conclude that Oxford’s proposed Mitigation Plan would be insufficient to restore the streams at the Otsego 1 site. Specifically, Oxford asserted that its 401 Certification Application included a plan to restore streams impacted by mining at the Otsego 1 site and the engineering design for such restored streams was sufficient to ensure that the streams would be capable of returning to pre-mining conditions. Testimony Leggett.

[¶94] Mr. Leggett explained that the Mitigation Plan included several elements designed to ensure the success of the restored streams. First, Oxford would construct the streams using natural stream construction techniques. Natural stream construction techniques include the use of a relatively gentle stream slope and the creation of meanders along a stream channel to create the pools and riffle-run complexes necessary to support aquatic life. Testimony Leggett.

[¶95] Second, Mr. Leggett testified that the reconstructed streams would be designed to maintain sufficient water flow to support aquatic life. Oxford would line stream beds with top soil and/or clay to prevent surface water from infiltrating too quickly into the ground, and would maintain groundwater recharge by preserving the drainage area and headwaters for the streams. Although Mr. Leggett conceded that the precise location of groundwater seeps and springs may be impacted as a result of mining operations, he explained that groundwater will eventually emerge as a seep at the side of a slope once it reaches an stratigraphic layer with low permeability relative to those above, such as the coal seam present at the Otsego 1 site. Thus, groundwater would
continue to supply water for reconstructed streams at the Otsego 1 site, at least at lower elevations. Oxford Ex. 20; Testimony Leggett.

Mr. Leggett further explained that Oxford would create “stepped pools” in the restored streams to slow the velocity of water and reduce erosion along the steeper portions of the Otsego 1 site. Stepped pools involve the formation of a series of shallow rock pools in a stair-step pattern down the face of a hill. This allows water flowing through the channel to slow, thereby stabilizing the slope and reducing erosion. Testimony Leggett.

Finally, Mr. Leggett testified that Oxford would replant trees along the riparian corridors of the impacted streams. Mr. Leggett explained that Oxford would ensure the survival of the replanted trees through the selection of appropriate tree species and through periodic monitoring and additional replanting, if necessary. Testimony Leggett.

In response, the Director argued that Oxford’s 401 certification applications lacked the necessary detail for Ohio EPA to determine whether the reconstructed streams would be successful. For example, the Director noted that Oxford’s Section 401 Certification Application did not contain information regarding the top soil stream bed sealing process described above. CR Item 36; Testimony Taulbee, Leggett.

By contrast, on cross-examination, Mr. Leggett readily identified a reference to the stepped pool design (referred to a “rock check” in the application) in the “design guidelines” section of Oxford’s 401 Certification Application. Nonetheless, the Director argued that because “guidelines” are not mandatory, the application lacked
sufficient detail to ensure that Oxford would, in fact, include stepped pools as a part of its actual stream reconstruction design. CR Item 36; Testimony Leggett.

¶100 Further, the Director argued that the process of strip mining and backfilling does not ensure adequate groundwater recharge for reconstructed perennial streams. Ms. Taulbee explained that perennial streams are supplied primarily by groundwater rather than by precipitation. However, because mine spoil does not contain the various stratigraphic layers that occur in natural geology, groundwater in post-mining environments simply infiltrates downward, rather than acting as a water source for such streams. Although Ms. Taulbee acknowledged that groundwater would ultimately emerge as a seep, thus acting as a water source for the stream, she explained that this typically occurs only where the back-filled mine spoil meets natural geology, i.e., at lower elevations. Ms. Taulbee testified that portions of reconstructed streams at higher elevations thus may not maintain sufficient flow as to support aquatic life. Testimony Taulbee; see also Testimony Leggett, Linn.

¶101 Finally, the Director argued reconstructed streams are not likely to exhibit well-developed riffle-run-pool complexes and that the trees planted along the riparian corridor are not likely to survive. Ms. Taulbee explained that based on Ohio EPA’s past experience with reconstructed streams at coal mining sites, the Agency has observed that reconstructed stream channels often do not exhibit the riffle-run-pool complexes necessary to maintain coldwater macroinvertebrate populations. Further, Ms. Taulbee explained that replanted riparian trees do not have high survival rates due to over-compaction of mine spoil, as well as grazing by wildlife such as deer. Without riffle-run-pool complexes and shade, Ms. Taulbee concluded that the reconstructed
streams would likely not support populations of coldwater-adapted fish and macroinvertebrate species. Testimony Taulbee.

\[b. \text{Cost Effectiveness and Technical Feasibility (Assignment of Error 3)}\]

\{¶102\} Oxford contended that the Director acted unreasonably by failing to evaluate the full extent of the economic impact resulting from the restrictions imposed in the 401 Certification. On Oxford’s behalf, Mr. Leggett testified that because of the high cost of removing overburden, economic feasibility for strip mining operations is primarily determined by the ratio of coal recovered to overburden that must be removed in order to recover that coal. Mr. Leggett explained that increased coal recovery in relation to overburden removal increases cost-effectiveness. Thus, because a high wall miner is capable of mining coal without the removal of additional overburden, its use makes the recovery of coal more economically feasible. Testimony Leggett.

\{¶103\} Mr. Leggett and Mr. Rex Hummel, mine engineer for Oxford, each explained that in order to use a high wall miner at the Otsego 1 site, the miner would need to cross Streams 73, 86, 79, 115, 116, 125, 123, and 105. For example, as shown below, the high wall miner would be required to cross Stream 73 to move from Pit 25 to Pit 26.

Oxford Ex. 27; Testimony Leggett, Hummel.
Mr. Leggett and Mr. Hummel outlined several financial and environmental obstacles to mining the site if the high wall miner were prohibited from crossing these streams. First, the high wall miner would be required to climb and descend steep slopes, which is both difficult and dangerous due to the high wall miner’s size. Further, Oxford’s ODNR permit restricts surface impacts such as constructing roads to move the high wall miner around the relevant streams.

Finally, Mr. Leggett and Mr. Hummel explained that the cost of assembling and disassembling the high wall miner for each move is prohibitively high. Mr. Leggett and Mr. Hummel summarized that the stream impact restrictions in Oxford’s 401 Certification prevent the use of the high wall miner in certain areas of the Otsego 1 site, thereby reducing coal recovery and rendering mining in those areas economically infeasible. Testimony Leggett, Hummel.

Regarding the amount of coal rendered economically infeasible to recover, Mr. Hummel and Mr. Gregory Honish, Senior Vice President of Operations for Oxford, testified that approximately 1.3 million tons of coal would be “sterilized” at the Otsego 1 site. Mr. Honish testified that this amount represented approximately $20 million in lost margin for Oxford. Testimony Hummel, Honish.

Mr. Honish further testified that as a result of the 401 Certification, Oxford would need to use coal recovered from other sites to fulfill contracts that had been intended to be filled by coal from the Otsego 1 site. Because utilizing coal from such alternative sites would require additional transportation, Mr. Honish estimated that

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15 At hearing, the parties utilized the term “sterilized” to refer to coal rendered economically infeasible to recover.
operational costs would increase for Oxford by approximately $4 per ton. Testimony Honish.

{¶108} Comparatively, the Director argued at hearing that Ohio EPA’s evaluation of cost effectiveness was reasonable because it determined that Oxford could still recover some coal from the Otsego 1 site and could still generate some profit. The Director’s argument can be summarized by the following colloquy during cross-examination of Mr. Honish:

**Q:** Have you figured out what [the strip ratio] was for the Otsego mine?

**A:** I didn’t personally, but it’s in the range of about 20 to 1 strip ratio.

**Q:** So that means 20 cubic yards for each ton of coal recovered; is that a fair assessment there?

**A:** Yeah. It’s going to be in that range. I haven’t looked at it here recently, but it’s going to be in that range.

* * *

**Q:** If your ratio is 20 to 1, does that mean Oxford is losing money on that site or they’re not meeting their investment objective?

**A:** 20 to 1 on this site is where we feel that’s the limit. That’s as high as we can go to be able to meet our financial criteria.

**Q:** And that would mean making money, correct?

**A:** Yes.

**Q:** So you’re still profitable at 20 to 1, correct?

**A:** Yes.

Testimony Honish.

{¶109} Additionally, the Director argued that because Oxford is a large company, it is able to absorb many of the costs associated with avoiding impacts to streams. For example, on cross-examination, counsel for the Director questioned Mr. Honish as to whether Oxford could use reserve coal obtained from other locations to
fulfill contracts originally intended to be fulfilled with coal mined from the Otsego 1 site. Testimony Honish.

\{¶110\} Finally, the Director argued that the Agency considered the information provided to Ohio EPA in Oxford’s 401 Certification Application and that the specific details Oxford presented at hearing were not provided to Ohio EPA during the application process. The Director noted that Oxford’s 401 Certification Application contained the following pertinent information regarding cost effectiveness and technical feasibility:

10c) Include a discussion of the technical feasibility, cost effectiveness, and availability. In addition, the reliability of each alternative shall also be addressed (including potential recurring operational and maintenance difficulties that could lead to increased surface water degradation.) (OAC 3745-1-05(C)(6)((h, j-k) and OAC 3745-1-54)

PREFERRED and MINIMAL DEGRADATION ALTERNATIVES

* * *

The ability to maximize coal recovery is not only one of the criteria used in the review of the DMRM permit, but is also one of the main factors in operating a cost-effective mine. Oxford has determined that mining the proposed area will be more economically feasible under the Preferred Degradation Alternative than under the Minimum Degradation Alternative. TO mine only a portion of the area or to mine in a different method than that which is proposed under the Preferred Degradation Alternative would compromise resource recovery and introduce inefficiencies that would result in a mining operation that is not as cost effective as the Preferred Alternative. As the Minimal Degradation Alternative is not as cost effective as the Preferred; the Preferred Alternative is therefore advocated for approval by this application.

* * *

NON-DEGRADATION ALTERNATIVE

Under this alternative, the area in which to operate a surface mine is limited to the northern area of the project. Site topography and constraints of avoiding Jurisdictional Waters limits the operational area and compromises earthmoving operations and construction, operation and
maintenance of drainage controls, as well as reclamation activities. As such the cost of this production is excessive relative to the costs to acquire and permit the reserves because of economies of scale do not allow expenses to be spread over a large production base. Consequently, operating under the Non-Degradation Alternative is not technically prudent or economically feasible.

CR Item 36.

During Ohio EPA’s technical review of Oxford’s 401 Certification Application, Ms. Taulbee also sent Oxford a letter, dated January 4, 2012, requesting additional information regarding the cost effectiveness and technical feasibility section of Oxford’s application. Ms. Taulbee’s letter stated in pertinent part as follows:

7. **Page 21; 10c):** The response noted that Oxford has the resources, in terms of financial strength, personnel, equipment and experience to address operational and maintenance issues before they develop into chronic problems. It isn’t clear what “issues” could develop into chronic problems. Clearly explain what recurring and maintenance difficulties could potentially lead to increased surface water degradation and how these issues will be addressed.

8. **Page 21; 10c):** Provide the cost effectiveness of each alternative. Compare the coal recovered (tonnage and monetary value) for each alternative to operational costs. Include personnel, equipment and site maintenance costs in this estimate.

Director’s Ex. 94.

Mr. Linn provided the following email response to Ohio EPA on Oxford’s behalf on January 19, 2012. Mr. Linn’s email stated in pertinent part as follows:

7. **Page 21, 10c)**

*Insert the following after the last paragraph*

Typical maintenance issues which could potentially lead to increased surface water degradation, if not properly addressed include, failure to achieve stable backfilled slopes which could lead to land slips, failure to maintain properly functioning drainage controls, failure to maintain adequate haul roads in terms of width, gradient and surface materials, failure to meet reclamation timetables, and failure to meet re-vegetation standards. Oxford actively monitors its mining and reclamation operations to maintain compliance with applicable law and timely responds to notice of any noncompliance issues.
8. **Page 21, 10c**

The information requested by the review comment is address in item 10h).

Director’s Ex. 102.

{¶113} The information included in Oxford’s 401 Certification Application regarding “item 10h” (social and economic benefits to be gained) consists of information addressing the benefits of the coal industry in general. It does not address specific information regarding the costs Oxford would incur if it could not proceed with its preferred alternative. CR Item 36.

\[c. \quad \text{“To Be Determined” Streams (Assignments of Error 2 and 3)}\]

{¶114} Part I.C.1 of Oxford’s 401 Certification lists PHWH class designations as “to be determined” for Streams 37, 48, 48A, 52, 53, 60, 61 (int.), 61 (per.), 70, 74, 77, 78 (int.), 97, 107, 109, 113, 114, 120 (int.), 123 (int.), 123 (per.), 126, 127, and 129.\(^{16}\) For these “to be determined” streams, the 401 Certification requires Oxford to conduct baseline biological sampling before assigning PHWH classifications. In addition, the 401 Certification states that for these streams, “[a]dditional avoidance may be required, based on the results of the baseline sampling effort.” CR Item 1; Testimony Leggett.

{¶115} Oxford argued that the Director acted unlawfully and unreasonably in listing such streams as “to be determined” because such a classification does not provide Oxford with sufficient regulatory certainty. Mr. Leggett explained that the baseline sampling required by Oxford’s 401 Certification would take at least two months to complete, depending on the availability of consultants. Testimony Leggett.

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\(^{16}\) Of these “to be determined” streams, Oxford appears to challenge the impact restrictions for Streams 37, 48, 48A, 53, and 74 only. Case File Item UU.
The Director countered that the “to be determined” classifications were necessary to meet a federal deadline. Ms. Taulbee explained that pursuant to 33 U.S.C. 1341, Ohio EPA must act on Section 401 certification applications within one year of receipt of the application, after which time the certification requirement is deemed to have been waived by the state. Because additional biological data was needed to assign PHWH classifications for certain streams at the Otsego 1 site and the federal one-year deadline was approaching, Ohio EPA “conditionally” issued the 401 Certification with the requirement that Oxford conduct baseline biological sampling and submit that information to Ohio EPA within 90 days of issuance. Testimony Taulbee.

iii. Other Terms and Conditions Related to Stream Impacts

In addition to the direct stream impact restriction table contained in Part I.C.1 of its 401 Certification, Oxford also challenged certain other terms and conditions related to streams. In particular, Oxford challenged terms and conditions relating to buffer zones, mitigation monitoring requirements, in-stream ponds, and wildlife protection.

a. Buffer Zones (Assignment of Error 1C)

Oxford’s 401 Certification contains two provisions restricting impacts to 100-foot “buffer zones” surrounding certain streams. First, Part II.B of Oxford’s 401 Certification provides as follows:

This 401 Water Quality Certification (WQC) does not authorize impacts to any Class III and/or Coldwater Streams based on current sampling results, or any streams determined to be Class III and/or Coldwater Streams based on results of biological sampling required in General Condition A). This avoidance shall include all associated one hundred foot riparian buffers on each side of the avoided streams or any lengths of tributaries existing within those buffers, except S-54, S-59, and S-105.

CR Item 1 (emphasis added).
Second, Part II.C of Oxford’s 401 Certification provides, “[a]ll streams required to be avoided shall have one hundred foot buffers on each side of the stream and around the seep or spring at the source.” CR Item 1.17

Oxford argued that these restrictions are unlawful because restrictions on impacts to buffers are not specifically authorized by any provision of the Revised Code or Administrative Code. Moreover, Oxford argued that the buffer restrictions contained in its 401 Certification are unreasonable because they do not provide sufficient regulatory clarity. Mr. Leggett explained that the 401 Certification authorizes impacts to certain lower quality streams, including some that flow into higher quality streams. Buffers surrounding such higher quality streams are not, however, authorized for impacts by the 401 Certification. Mr. Leggett testified that it is thus unclear whether the 401 Certification authorizes impacts to the portions of such lower quality streams located within the buffer zones surrounding restricted higher quality streams. Oxford Ex. 35; Testimony Leggett.

The Director countered that the buffer restrictions are necessary to protect water quality. Ms. Taulbee explained that trees located within riparian buffers around coldwater streams are necessary to provide shade and thereby maintain cool water temperatures. Further, an email from Ms. Taulbee to Mr. Leggett notes that Ohio EPA modified the draft 401 Certification to expressly clarify whether impacts are authorized to portions of lower quality streams located within buffer zones of higher quality streams. The email cites Part II.B of the final 401 Certification, which states that

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17 In its Proposed Findings of Fact and Conclusions of Law and Motion for Entry of Proposed Order, Oxford also appeared to challenge Part II.A, Part II.H, and Part II.M.1 of the 401 Certification. However, no evidence relating specifically to these terms was presented at hearing. Case File Item NN.
Oxford must avoid impacts to “any lengths of tributaries existing within [a] buffer.” CR Item 38; Testimony Taulbee.

b. Mitigation Monitoring Requirements (Assignments of Error 1A, 1E, 3, and 4)

{¶122} Oxford also challenged certain terms and conditions relating to monitoring requirements and performance goals. First, Oxford contended that two of the monitoring criteria in its 401 Certification are unlawfully derived from the PHWH classification system. Specifically, Oxford challenges Part III.J.6-7 of its 401 Certification, which provides as follows:

6. Primary Headwater Habitat Evaluation Index (HHEI)

HHEI assessments, using the most current version of that document available at the time the assessment is performed, shall be completed during years one, three and five on all reconstructed streams.

7. Headwaters Macroinvertebrate Field Evaluation Index (HMFEI)

HMFEI assessments, using the most current version of that document available at the time the assessment is performed, shall be completed during years three and five on all reconstructed intermittent and perennial streams.

CR Item 1.

{¶123} Additionally, Oxford challenged certain “performance goals,” as set forth Part III.L, arguing that some of the performance goals contained in its 401 Certification are unlawfully based on the PHWH classification system. Part III.L.2-4 of Oxford’s 401 Certification reads in pertinent part as follows:

Within five years after completion of construction: the applicant shall have:

* * *

2. Demonstrated through biological monitoring that all reconstructed perennial and intermittent streams support the same PHWH aquatic life use score as the pre-mining streams.
3. Demonstrated through biological monitoring that all reconstructed Class III PHWH streams contain the same number or higher of EPT, sensitive and CWH taxa.

4. Demonstrated through biological monitoring that all streams performing as Class III and/or cold water habitat and required to be avoided shall continue to perform as such both during and post mining.

CR Item 1.\(^{18}\)

\{¶124\} On cross-examination, Ms. Taulbee admitted that the phrase “biological monitoring,” as used in Part III.L.2-4 of Oxford’s 401 Certification, refers to the same HHEI and HMFEI assessments that are used to assign PHWH classifications. Further, Ms. Taulbee admitted that the benchmarks contained in Part III.L.2-4 of Oxford’s 401 Certification (PHWH aquatic life use score; number of EPT, sensitive, and CWH taxa; and performance as Class III PHWH) are indeed derived from the PHWH classification system. Testimony Taulbee.

\{¶125\} Significantly, Ms. Taulbee also conceded that HHEI is not an appropriate tool for the evaluation of stream restoration success:

**Q:** So in your view, the HHEI and the HMFEI are appropriate tools to evaluate mitigation performance?

**A:** I don’t believe the HHEI is, no. I believe the HHEI can be manipulated. For example, if you have a very wide channel with very large boulders, it would score well in the HHEI, even if that stream never had water. So I don’t believe the HHEI is an appropriate tool for mitigation.

I do believe the HMFEI is a more appropriate tool as it looks at the biology present within the stream, and we can do a comparison to pre-mining data. * * *

* * *

\(^{18}\) In its Proposed Findings of Fact and Conclusions of Law and Motion for Entry of Proposed Order, Oxford also appeared to challenge Part III.A.1, Part III.D, and the remaining terms and conditions within Part III.J and Part III.L. However, no evidence relating specifically to these terms was presented at hearing. Case File Item NN.
Q: So going forward, you would not put HHEI evaluations in a permit as a basis for evaluating the success of a mitigation, correct?

* * *

A: I myself would not.

Q: So to the extent that any of that exists in the 401 as it stands now, it would be appropriate to take that out?

A: The HHEI in the mitigation section? Sure. I do not believe the HHEI is an appropriate tool for evaluating mitigation success.

Testimony Taulbee.

{¶126} And finally, in addition to the terms and conditions discussed above, Oxford also challenged Part III.L.6 of its 401 Certification, which requires that Oxford demonstrate that it has protected the state endangered mayfly found near Stream 79. The term provides as follows:

Within five years after completion of construction: the applicant shall have:

* * *

2. Demonstrated through biological monitoring that all streams with the state endangered species (*Litobrancha recurvata*) present shall continue to support this species both during and post mining.

CR Item 1.

{¶127} Oxford argued that this provision is unlawful because endangered species are regulated by ODNR—not Ohio EPA—under R.C. Chapter 1518. See *Patriot Water Treatment, LLC v. Korleski*, ERAC Nos. 156477, 156588, 786501, 786589 (July 3, 2012). Further, Oxford argued that the term is unreasonable because Ohio EPA removed the sample of *Litobrancha recurvata* collected near Stream 79 from the Otsego 1 site during its April 6, 2012 site visit. Oxford contended that this particular specimen could have been the only specimen present at the Otsego 1 site, and therefore, it may be
impossible for Oxford to comply with its obligation to demonstrate that Stream 79 continues to support *Litobrancha recurvata*. Testimony Taulbee.

§128 In response, Ms. Taulbee explained that sampling does not recover every specimen from a particular location. Thus, even though only one specimen was recovered from the Otsego 1 site, additional *Litobrancha recurvata* may exist at that location. Testimony Taulbee.

c. In-Stream Ponds (Assignment of Error 6)

§129 Part III.L.7 of Oxford’s 401 Certification requires Oxford to remove “in-stream” sediment ponds, providing in pertinent part as follows:

Within five years after completion of construction, the applicant shall have:

* ***

7. Removed all in-stream sediment ponds except for existing impoundments 010 and 012.

CR Item 1.

§130 At hearing, Mr. Leggett explained that Oxford constructs ponds at its mining sites for the purpose of controlling sediment in runoff. Such ponds reduce flow velocity, allowing sediment particles to settle out of suspension. Eventually, as the ponds fill with sediment, they are dredged in order to maintain adequate capacity. Testimony Leggett.

§131 Oxford argued that the Director acted unreasonably in requiring that Oxford remove in-stream sediment ponds. Mr. Leggett explained that locating sediment ponds within stream channels is the most efficient design because runoff naturally flows into the streams, and in-stream ponds do not require the construction of additional drainage channels. Mr. Leggett testified that the prohibition of in-stream ponds requires
Oxford to construct a series of smaller sediment ponds rather than only one or two larger ponds. Mr. Leggett explained that smaller ponds must be dredged more frequently, which increases costs for Oxford, and smaller ponds are more difficult to construct and can represent a safety hazard for workers due to crowded work areas. Testimony Leggett.

\{¶132\} In response, the Director argued that the 401 Certification does not prohibit temporary in-stream ponds. Instead, Ms. Taulbee explained that the 401 Certification prohibits only permanent in-stream sediment ponds, requiring that in-stream ponds be removed within five-years after completion of construction.\(^9\) Ms. Taulbee explained that permanent in-stream ponds can lead to the loss of aquatic habitat because it reduces overall stream length available to aquatic species. Testimony Taulbee.

\textit{d. Wildlife Protection (not raised in Notice of Appeal)}

\{¶133\} Finally, Oxford argued that the Director acted unlawfully by including terms and conditions in the 401 Certification designed to protect rare, threatened, and/or endangered species at the Otsego 1 site. Specifically, Part II.N of Oxford’s 401 Certification provides as follows:

1. In the event that an eastern massasagua rattlesnake (\textit{Sistrurus catenatus catenatus}) is encountered during construction of the project, work should immediately cease and the Ohio Department of Natural Resources, Division of Wildlife contacted. Caution should be employed during construction during the snakes’ active season (March 15 - November 15).

\(^9\) Additionally, regarding existing ponds 010 and 012, Ms. Taulbee explained that these particular in-stream ponds currently provide hydrology to Wetland 72, and their removal could harm that wetland. Therefore, the 401 Certification does not require Oxford remove existing ponds 010 and 012. Testimony Taulbee.
2. If native mussels and/or mussel beds, not previously identified, are encountered at any time during construction or dredging activities, work must cease immediately and the Ohio Department of Natural Resources’ Division of Wildlife contacted for further evaluation.

CR Item 1; Testimony Elmaraghy.

{¶134} Oxford argued that endangered species are regulated by ODNR under R.C. Chapter 1518 and Ohio Adm.Code Chapter 1501:31-23, rather than by Ohio EPA. Thus, Oxford contended that the Director is not authorized to include terms and conditions related to endangered species in its Section 401 certifications. Testimony Elmaraghy; see also Patriot Water Treatment, LLC v. Korleski, ERAC Nos. 156477, 156588, 786501, 786589 (July 3, 2012).

{¶135} In response, George Elmaraghy, Division Chief, Division of Surface Water at Ohio EPA, argued that R.C. Chapter 6111 grants the Director broad authority to impose terms and conditions necessary or appropriate to protect the environment and that these terms fall within that broad authority. Testimony Elmaraghy.

B. Wetland Restrictions

{¶136} In addition to challenging various terms and conditions related to stream impacts, Oxford also opposed the 401 Certification’s restrictions on impacts to Wetlands 71 and 72. Part I.C.2 of Oxford’s 401 Certification contains the following restrictions:

<table>
<thead>
<tr>
<th>Wetland ID</th>
<th>Category</th>
<th>Total Acreage</th>
<th>Acreage Impacted</th>
<th>Percent Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>WL-71</td>
<td>3</td>
<td>2.54</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>WL-72</td>
<td>3</td>
<td>4.18</td>
<td>??</td>
<td>??%&lt;sup&gt;20&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

CR Item 1.

{¶137} Oxford argued that the Director acted unreasonably in classifying the wetlands as Category 3. Further, Oxford argued that the Director acted unlawfully and

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<sup>20</sup> Note 13, supra.
unreasonably in failing to evaluate the full extent of the “public need” for impacts to Wetlands 71 and 72.

   i. Classification (Assignment of Error 3)

   {¶138} As discussed above, allowable impacts to a wetland depend, in part, on the wetland’s category. Greater impacts are permitted for lower-quality wetlands (e.g., Category 1 wetlands), while fewer impacts are permitted for higher-quality wetlands (e.g., Category 3 wetlands). During its March 15, 2011 site visit, Ohio EPA conducted ORAM assessments for Wetlands 71 and 72, assigning ORAM scores of 61 and 66, respectively. These scores led Ohio EPA to classify Wetlands 71 and 72 as Category 3.

   {¶139} The parties do not dispute that Ohio EPA’s use of the ORAM method was lawful and reasonable. Instead, Oxford argued that Ohio EPA did not properly conduct the ORAM assessments of Wetlands 71 and 72, and therefore, the Director lacked a valid factual foundation for assigning the particular ORAM scores and classifications. Oxford contends that Ohio EPA should have accepted the ORAM scores included in Oxford’s initial Section 401 Certification Application—49 and 55 for Wetlands 71 and 72, respectively. And based on these scores, Oxford argues that Ohio EPA should have accepted Oxford’s classification of Wetlands 71 and 72 as Category 2 wetlands rather than amend the classifications to Category 3.

   {¶140} Mr. Robert Smith, Project Manager for Strategic, conducted the ORAM assessments Oxford submitted with its 401 Certification Application. Additionally, subsequent to filing its Notice of Appeal in this case, Oxford retained Mr. Robert Madej, Egret Environmental Consulting (“Egret”), to conduct follow-up ORAM assessments for Wetlands 71 and 72. Testimony Smith, Madej.
Both Mr. Smith and Mr. Madej testified that as a part of their ORAM assessments, they observed the presence of invasive plant species in Wetlands 71 and 72. Mr. Smith and Mr. Madej explained that the presence of invasive plant species indicates lower quality wetlands because invasive species are generally adapted to thrive in “disturbed” environments. Therefore, the presence of invasive plant species corresponds to various deductions on the ORAM scoring form. Mr. Smith testified that he found “sparse” invasive plant species coverage (5-25%) at both Wetlands 71 and 72, resulting in a 1-point deduction for both locations. Mr. Madej testified that he observed “moderate” (25-75%) invasive plant species coverage at Wetland 71, resulting a 3-point deduction for Wetland 71, and “sparse” coverage at Wetland 72, resulting in a 1-point deduction for Wetland 72. Oxford Ex. 36, 41; Testimony Smith, Madej.

Comparatively, Ms. Taulbee, on Ohio EPA’s behalf, stated that she found invasive plant species coverage to be “sparse” for both Wetlands 71 and 72, resulting in a 1-point ORAM deduction for each of the locations. Director’s Ex. 23, 24; Testimony Taulbee.

In addition to invasive plant species coverage, Oxford also argued that the presence of acid mine drainage at the Otsego 1 site lowers the quality of the wetlands. Mr. Smith explained that acid mine discharges can be caused by prior mining activity, including small “pick mines,” where the coal seam has been exposed. He explained that low pH, i.e. acidic, discharges can occur when water comes into contact with exposed coal. Further, Mr. Smith testified that he observed pick mines and orange-

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21 The Commission notes that this matches Mr. Smith’s ORAM scoring for the invasive species metric, which Oxford included in its initial Section 401 Certification Application. Compare Director’s Ex. 23, 24 with Oxford Ex. 36.
stained water indicative of acid mine drainage at the Otsego 1 site near Stream 21. Because he observed acid mine drainage at the Otsego 1 site, Mr. Smith scored the “habitat alteration” ORAM metric as between “recovered” and “recovering” for both Wetland 71 and Wetland 72, resulting in 4.5 points (out of a possible 9) for that metric. Mr. Madej testified that he also observed acid mine drainage at the Otsego 1 site and scored the “habitat alteration” metric as “recovering” for both Wetland 71 and 72, resulting in a score of 3 points. Oxford Ex. 36, 41; Testimony Smith, Madej.

{¶144} In response, the Ms. Taulbee noted that both Mr. Smith and Mr. Madej observed acid mine drainage at the north end of the Otsego 1 site, whereas Wetlands 71 and 72 are located at the south end of the Otsego 1 site. Thus, even if present at the Otsego 1 site, acid mine drainage may or may not be impacting Wetlands 71 and 72. Further, Ms. Taulbee explained that when she conducted her ORAM assessments for Wetlands 71 and 72, she did not personally observe acid mine drainage. Director’s Ex. 23, 24; Testimony Taulbee.

{¶145} As additional support for its argument that Wetlands 71 and 72 should be classified as Category 2, Oxford argued that several non-natural disturbances negatively affect Wetlands 71 and 72. Specifically, Mr. Madej noted the presence of a power line and all-terrain vehicle (“ATV”) trails. Oxford Ex. 41; Testimony Madej.

{¶146} Ms. Taulbee responded that she did not consider the power line to be a significant disturbance. And although she did observe logging roads, Ms. Taulbee testified that she did not observe ATV trails. Director’s Ex. 23, 24; Testimony Taulbee.

{¶147} Finally, on Oxford’s behalf, Mr. Don Lucas, who resides at 65711 Boden Road, Cambridge, Ohio, approximately six miles from the Otsego 1 site, testified that man-made ponds border both Wetland 71 and Wetland 72, thereby negatively affecting
the natural hydrologic regime. Mr. Lucas explained that between 1947 and 1953, his family, who owned the land comprising the Otsego 1 site at that time, hired contractors to build five ponds in the area. Oxford argued that these non-natural ponds should have led Ohio EPA to assign a score of “recovering,” rather than “recovered,” for the “modifications to natural hydrologic regime” ORAM metric. Such an assignment would have lowered Ohio EPA’s ORAM scores for Wetlands 71 and 72. Oxford Ex. 42; Testimony Lucas.

{¶148} Ms. Taulbee countered that although the disturbances are non-natural, they have been present for a sufficient period of time and now function as if they were “natural.” As Ohio EPA’s ORAM manual explains, “the [ORAM] Rater must determine whether any of the observed disturbances caused more than trivial alterations to the natural hydrologic regime, or have occurred so far in the past that current hydrology should be considered ‘natural.’” (Emphasis added). Here, Ms. Taulbee testified that the ponds were created so far in the past, i.e., 1940s and 1950s, that the current hydrology should be considered “natural.” Therefore, Ms. Taulbee scored the “modifications to natural hydrologic regime” ORAM metric as “recovered” for both Wetland 71 and Wetland 72. Director’s Ex. 23, 24, 116; Testimony Taulbee.

{¶149} Based on the above factors, among others, Mr. Smith assigned Wetlands 71 and 72 ORAM scores of 49 and 55, respectively. Mr. Madej assigned the wetlands similar ORAM scores of 52 and 56. Both Mr. Smith’s and Mr. Madej’s scores correspond to Category 2 wetlands and Oxford argues that it was thus unreasonable for Ohio EPA to classify the wetlands as Category 3. Oxford Ex. 36, 41; Testimony Smith, Madej.

{¶150} By comparison, Ms. Taulbee assigned Wetlands 71 and 72 ORAM scores of 61 and 66, respectively. These scores, which Ohio EPA subsequently adopted,
correspond to Category 3 wetlands. Thus, the Director maintained that Ohio EPA’s classification of Wetlands 71 and 72 as Category 3 wetlands was reasonable. Director’s Ex. 23, 24; Testimony Taulbee.

**ii. Public Need (Assignment of Error 3)**

Ohio Adm.Code 3745-1-54(D)(1)(c) governs allowable impacts to Category 3 wetlands. The regulation provides that no lowering of water quality shall be permitted for Category 3 wetlands unless the applicant can establish several factors, including, for example, that no practicable less-harmful alternative is available and that appropriate steps have been taken to minimize impacts to the wetland ecosystem. Relevant to this appeal is the public need requirement, which provides that an applicant must demonstrate that “[t]he proposed activity is necessary to meet a demonstrated public need, as defined in rule 3745-1-50 of the Administrative Code.” Ohio Adm.Code 3745-1-54(D)(1)(c)(iii).

Oxford argued that even if the Director had a valid factual foundation to classify Wetlands 71 and 72 as Category 3, Oxford’s Section 401 Certification Application nonetheless demonstrated a “public need” sufficient to justify impacts to those wetlands. Specifically, Oxford contended that the Director acted unreasonably by failing to fully evaluate the extent of the “public need” for coal mined from the Otsego 1 site.

On behalf of the Director, Ms. Taulbee conceded that coal used for energy and electricity generation can indeed be a “public need,” but stated that Ohio EPA considers the public need requirement to be site specific. In other words, Ms. Taulbee testified that an applicant must demonstrate that it is necessary to impact the specific Category 3 wetland under consideration in order to meet the stated public need.
According to Ms. Taulbee, it is not sufficient simply to demonstrate that impacting the Category 3 wetland will aid in fulfilling the need. Testimony Taulbee.

\{¶154\} Further, Ms. Taulbee explained that her January 4, 2012 email to Mr. Linn expressly requested such site specific information. The email requested that Oxford “[c]learly demonstrate how the mining in this specific location fulfills a demonstrated ‘public need.’” (Emphasis in original). Director’s Ex. 94; Testimony Taulbee.

\{¶155\} Oxford’s response, contained in Mr. Linn’s January 19, 2012 email, stated the following:

There is no less damaging alternative. In fact, there is no upland alternative. The coal lies under the wetland identified as WTL-72. Avoiding impact to WTL-72 will sterilize roughly 600,000 tons of coal and will shorten the life of [the] mine and result in the loss of important social and economic development in the State and reduce our nation’s energy production.

Director’s Ex. 102; Testimony Taulbee.

\{¶156\} The Director argued that based on this response, Ohio EPA concluded that the coal underlying Wetlands 71 and 72 was not necessary to fulfill the public need for energy. Ms. Taulbee testified that coal is available from other sites in Ohio, and Mr. Linn’s response did not indicate that coal recovered from an area that impacts the specific Category 3 wetlands at the Otsego 1 site was necessary to fulfill a public need. Testimony Taulbee.

\{¶157\} By contrast, Oxford argued that the coal at the Otsego 1 site was necessary to meet the public need for energy. First, Oxford argued that increased transportation costs incurred as a result of using coal from an alternative location would affect Oxford’s ability to supply coal to local power generators. Mr. Honish testified that reduced coal production from the Otsego would site would necessitate the use of coal
from Oxford’s reserves to fulfill existing contracts. This, Mr. Honish explained, would result in additional transportation costs and increased risks associated with future disruptions. The increased transportation costs would raise operational costs for Oxford by approximately $4 per ton and Mr. Honish speculated that such increased costs could eventually be passed on to the utility and subsequently to customers. Testimony Honish.

Mr. Honish also explained that the quality and characteristics of coal vary from one location to the next and that coal is not a fungible good. Mr. Honish testified that coal mined from one mine location might lack the characteristics required to fulfill the requirements of a contract originally intended to be satisfied using coal mined from another location. Testimony Honish.

VI. Arguments Not Presented at Hearing

In addition to the arguments discussed above, Oxford raised several assignments of error in its Notice of Appeal and Pre-Hearing Brief that were not discussed at hearing.22 The Commission will now address Oxford’s arguments raised in pleadings, but not presented at hearing.

i. Multiple Incompleteness Letters (Raised in Pre-Hearing Brief)


In its Pre-Hearing Brief, Oxford argued that this was unlawful because it violated R.C. 6111.30(B), which states in pertinent part:

(B) Not later than fifteen business days after the receipt of an application for a section 401 water quality certification, the director shall review the

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22 These assignments of error were also not addressed in Oxford’s Motion.
application to determine if it is complete and shall notify the applicant in writing as to whether the application is complete. ***

(Emphasis added).

\{¶162\} Oxford argued that because the August 15, 2011 letter was issued more than fifteen days after receipt of the application, the incompleteness letter was therefore unlawful. Case File Item UU.

\textit{ii. Jurisdiction of Ohio EPA to Regulate Streams and Wetlands at Otsego 1 (Assignment of Error 1B)}

\{¶163\} In its Notice of Appeal, Oxford argued that the 401 Certification unlawfully restricts impacts to Stream 70. The Notice of Appeal contended that Stream 70 is not subject to the federal Clean Water Act and was therefore not within the scope of Ohio EPA’s Section 404 certification program. Case File Item A.

\textit{iii. Consideration of Comments from U.S. EPA and Army Corps (Assignment of Error 1D)}

\{¶164\} The record indicates that on March 25, 2011, the United States Environmental Protection Agency (“U.S. EPA”) sent a letter to the Corps regarding Oxford’s Section 404 permit application, with copies sent to Ohio EPA and others. In its Notice of Appeal, Oxford argued that Ohio EPA unlawfully considered this letter during its evaluation of Oxford’s Section 401 Certification Application. Case File Item A; CR Item 21.

\textit{iv. Prohibition of Use of Straw Bales as Erosion Control (Assignment of Error 5)}

\{¶165\} Finally, Oxford’s Notice of Appeal stated that certain terms and conditions relating to best management practices are unlawful. Specifically, Oxford challenged Part II.M.2 of its 401 Certification, which states, “[s]traw bales shall not be used as a form of erosion/sediment control.” Oxford’s Pre-Hearing Brief asserted,
“Oxford has found that the use of straw bales as Best Management Practices to reduce sediment is effective.” Case File Items A, UU; CR Item 1.

{¶166} Although Oxford presented no evidence at hearing regarding the above assignments of error, the Commission will nonetheless briefly address them in the Conclusions of Law below.

VII. Relief Requested

{¶167} Finally, the Commission will address the relief requested in Oxford’s Motion for Summary Judgment. In its Motion, Oxford requested that the Commission deem the Section 401 certification requirement to have been waived by Ohio EPA. Pursuant to 33 U.S.C. 1341, states must issue Section 401 certifications within one year of receipt of the application, after which time the requirement is deemed waived. Because Oxford’s initial Section 401 Certification Application was submitted to Ohio EPA on February 18, 2011, and it is currently more than one year after that date, Oxford argued that the Section 401 certification requirement should now be deemed waived. Case File Item Y.

{¶168} In the alternative, Oxford asked the Commission to modify the 401 Certification by striking any unlawful or unreasonable terms without remand to the Director. Oxford argued that remand would unnecessarily delay operations at the Otsego 1 site and would likely not result in significant changes to permit terms and conditions. Case File Items Y, FF, NN, UU.

{¶169} As a final alternative, Oxford requested the Commission remand the 401 Certification to the Director with explicit instructions to “immediately” modify the certification in a manner consistent with the Commission’s decision. Case File Items Y, FF, UU.
CONCLUSIONS OF LAW

I. Standard of Review

Ohio Revised Code 3745.05 sets forth the standard ERAC must employ when reviewing a final action of the Director. The statute provides, in relevant part, “[i]f, upon completion of the hearing, the commission finds that the action appealed from was lawful and reasonable, it shall make a written order affirming the action, or if the commission finds that the action was unreasonable or unlawful, it shall make a written order vacating or modifying the action appealed from.” R.C. 3745.05.

This standard does not permit ERAC to substitute its judgment for that of the Director as to factual issues. CECOS Internatl., Inc. v. Shank, 79 Ohio App.3d 1, 6 (10th Dist. 1992). The term “unlawful” means “that which is not in accordance with law,” and the term “unreasonable” means “that which is not in accordance with reason, or that which has no factual foundation.” Citizens Committee to Preserve Lake Logan v. Williams, 56 Ohio App.2d 61, 70 (10th Dist. 1977). “It is only where [ERAC] can properly find from the evidence that there is no valid factual foundation for the Director’s action that such action can be found to be unreasonable. Accordingly, the ultimate factual issue to be determined by [ERAC] upon the de novo hearing is whether there is a valid factual foundation for the Director’s action and not whether the Director’s action is the best or most appropriate action, nor whether [ERAC] would have taken the same action.” Id.

In cases “[w]here qualified, credible expert witnesses disagree on a matter within their expertise, the Commission defers to the decision of the Director.” Tube City Olympic of Ohio v. Jones, ERAC No. 994681 (March 5, 2003); see also Copperweld Steel Co. v. Shank, EBR No. 781787 (October 24, 1989) (stating, where “the
question of what levels of treatment or design are necessary to protect public health or
ground water are the subject of legitimate debate or dispute between qualified experts,
the [Commission] will defer to the action of the Director where that action is otherwise
reasonable and lawful”).

Further, the Commission is required to grant “due deference to the
Director’s ‘reasonable interpretation of the legislative scheme governing his Agency.’”
Sandusky Dock Corp. v. Jones, 106 Ohio St.3d 274 (2005), citing Northwestern Ohio
Bldg. & Constr. Trades Council v. Conrad, 92 Ohio St.3d 282 (2001); State ex rel.
Celebrezze v. National Lime & Stone Co., 68 Ohio St. 3d 377 (1994); North Sanitary
Landfill, Inc. v. Nichols, 14 Ohio App. 3d 331 (2nd Dist. 1984). The deference is not,
however, without limits. See e.g., B.P. Exploration and Oil, Inc. v. Jones, ERAC Nos.
184134-36 (March 21, 2001) (in which the Commission noted that such deference must-
be granted to the Director’s interpretation and application of his statutes and rules,
“particularly if the Director's interpretation is not at variance with the explicit language
of the regulations”).

II. Analysis

The Commission will now discuss Oxford’s Motion and the arguments
presented at hearing, as well as those arguments raised in Oxford’s Notice of Appeal
and/or Pre-Hearing Brief but not addressed at hearing.

A. Classification of Streams

i. Class III PHWH (Motion for [Partial] Summary Judgment;
Assignments of Error 1A, 1E, and 3)

In its Motion, Oxford argued that the Director acted unlawfully by
imposing stream impact restrictions, contained in Part I.C.1 of Oxford’s 401
Certification, based on PHWH classifications rather than on the “existing use”
classifications found in Ohio Adm.Code 3745-1-07. Oxford argued that the Director used PHWH classifications to unlawfully expand the scope of his authority under Ohio’s certification and anti-degradation rules because the PHWH classification system amounted to water quality standards that had not been promulgated as an administrative regulation pursuant to R.C. Chapter 119. Therefore, Oxford contended that all terms and conditions derived from the PHWH classification system are unlawful.

{¶176} In response, the Director maintained that the stream impact restrictions in Oxford’s 401 Certification are required by Ohio’s anti-degradation rule. The anti-degradation rule states, “[e]xisting uses, which are determined using the designations defined in rule 3745-1-07 of the Administrative Code * * * shall be maintained and protected.” Ohio Adm.Code 3745-1-05(C)(1) (emphasis added).

{¶177} The Director argued that, although the definitions of PHWH classifications may differ slightly from the “existing use” classification definitions contained in the Ohio Adm.Code 3745-1-07, they are functionally equivalent and therefore must be protected pursuant to Ohio Adm.Code 3745-1-05(C)(1).

{¶178} Further, the Director argued that even if the stream impact restrictions are not authorized pursuant to Ohio’s anti-degradation rule, they are nonetheless lawful pursuant to the catch-all provision in the certification rule. The certification rule, contained in Ohio Adm.Code Chapter 3745-32, provides in pertinent part as follows:

The director may impose such terms and conditions as part of a section 401 water quality certification as are appropriate or necessary to ensure compliance with the applicable laws and to ensure adequate protection of water quality.

Ohio Adm.Code 3745-32-05(C).
The Director argued that the stream impact restrictions are necessary to ensure compliance with applicable laws (namely, the anti-degradation rule) and to ensure the adequate protection of water quality. Therefore, the Director concluded that the restrictions are authorized under Ohio Adm.Code 3745-32-05(C). The Commission disagrees.

As an initial matter, the Commission notes that the Director did not dispute Oxford’s contention that the stream impact restrictions contained in Part I.C.1 of Oxford’s 401 Certification are based, in part, on PHWH classifications assigned to each stream at the Otsego 1 site.

Regarding the Director’s authority under the anti-degradation rule, the Commission finds that the PHWH classifications are not “existing uses” and therefore, are not authorized pursuant to Ohio Adm.Code 3745-1-05(C)(1). In arguing that the PHWH classifications are functionally equivalent to the “existing use” classifications, the Director suggests that the Field Manual is merely a guidance document explaining the existing use definitions.

The Tenth District Court of Appeals has explained that although agencies may indeed promulgate guidance documents for the purpose of explaining and clarifying rules, a guidance document may not expand upon the scope of the administrative rule it purports to explain. Textileather v. Korleski, 10th Dist. Nos. 06AP-955 & 06AP-956, 2007-Ohio-4129, at ¶¶42-44, citing State ex rel. Saunders v. Indus. Comm., 101 Ohio St.3d 125, 2004-Ohio-339. If a document expands upon the scope of existing regulations, it is more than a mere guidance document and must be promulgated as an administrative regulation pursuant to R.C. Chapter 119. Id.
Here, the Commission finds that the PHWH classification system, as employed by the Director in Oxford’s 401 Certification, expands the scope of the regulatory definitions of the “existing use” classifications. Therefore, as applied to Oxford’s 401 Certification, the Field Manual does not function as a mere guidance document. And, because the PHWH classification system has not been lawfully promulgated as a rule pursuant to R.C. Chapter 119, it cannot serve as the legal basis for permit terms and conditions.

The Commission notes that the definitions of “coldwater habitat, native fauna” and “Class III PHWH” streams are of particular relevance to this appeal. Ohio Administrative Code 3745-1-07(B)(1)(f)(ii) defines the “coldwater habitat, native fauna” existing use as follows:

“Coldwater habitat, native fauna” – these are waters capable of supporting populations of native coldwater fish and associated vertebrate and invertebrate organisms and plants on an annual basis. The director shall designate these waters based upon results of use attainability analyses.

(Emphasis added).

Comparatively, the Field Manual explains Class III PHWH streams as follows:

Streams found to have native fauna adapted to cool-cold perennial flowing water characterized by a community of vertebrates (either cold water adapted species of headwater fish and/or obligate aquatic species of salamanders from the lungless family Plethodontidae), and/or a diverse community of benthic macroinvertebrates including cold water taxa, with

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23 Neither party provided the Commission with an authenticated copy of the Field Manual as an attachment to summary judgment motion or responses thereto. Both the Director’s Memorandum in Opposition and Oxford’s Reply, however, referenced the 2012 version of the Field Manual, which was available at http://www.epa.ohio.gov/portals/35/wqs/headwaters/PHWHManual_2012.pdf (last visited October 31, 2012). At hearing, the testimony indicated that the 2009 version of the manual, rather than the 2012 version, was used in evaluating Oxford’s 401 Certification Application. Although the explanations of Class III PHWH streams differ between the 2009 and 2012 versions, the differences do not alter the Commission’s analysis of Oxford’s Motion, and the Commission will thus use the 2009 version in its discussion. Case File Items Y, EE, FF; Testimony Skalski.
larval life stages resident in the stream continuously on an annual basis. This type of PHWH stream is herein referred to as a Class III-PHWH stream.

(Emphasis added).

{¶186} Although the two definitions may initially appear similar, a closer review reveals significant differences. The Field Manual’s definition of “Class III PHWH” streams, on its face, encompasses a broader scope of streams than does the regulatory definition of “coldwater habitat, native fauna.” Specifically, Ohio Adm.Code 3745-1-07(B)(1)(f)(ii) requires that “coldwater habitat, native fauna” streams be capable of supporting populations of both native coldwater fish and associated vertebrate and invertebrate organisms and plants on an annual basis. By contrast, the Field Manual’s definition of “Class III PHWH” streams includes streams capable supporting coldwater fish and/or coldwater vertebrates and/or coldwater macroinvertebrates.

{¶187} Thus, the PHWH classifications are not equivalent to the “existing uses” found in Ohio Adm.Code 3745-1-07. Accordingly, the Commission finds that Ohio Adm.Code 3745-1-05(C)(1) did not authorize the Director to include terms and conditions in Oxford’s 401 Certification for the purpose of maintaining and protecting such PHWH classifications.

{¶188} Moreover, the Commission finds that to the extent the stream impact restrictions in Oxford’s 401 Certification are based upon PHWH classifications, the stream impact restrictions also do not fall within the Director’s authority under Ohio Adm.Code 3745-32-05(C), which authorizes terms and conditions that are necessary or appropriate to ensure compliance with “applicable laws” or to ensure the adequate protection water quality.
{¶189} Regarding compliance with “applicable laws,” the Director argued that the stream impact restrictions are necessary to ensure compliance with Ohio Adm.Code 3745-1-05(C)(1). As noted above, however, Ohio Adm.Code 3745-1-05(C)(1) did not require the Director to protect PHWH classifications. Thus, to the extent the Director included the stream impact restrictions for the purpose of protecting PHWH classifications, they cannot have been “necessary to ensure compliance” with Ohio Adm.Code 3745-1-05(C)(1).

{¶190} Regarding the protection of water quality, the Commission also rejects the Director’s contention that the stream impact restrictions at issue are authorized by the catch-all “water quality” provision in Ohio Adm.Code 3745-32-05(C). Such a broad interpretation of the regulation would render superfluous other provisions of the Administrative Code—specifically, the existing uses listed in Ohio Adm.Code 3745-1-07.

{¶191} The Director did not dispute that the definitions of “existing uses” are found exclusively in Ohio Adm.Code 3745-1-07. The Field Manual’s PHWH classification system expands the scope of these definitions, and its use as an alternative classification system upon which Ohio EPA could base stream impact restrictions would render such regulatory definitions meaningless.

{¶192} It is a well-settled rule of construction that no part of a statutory or regulatory scheme should be treated as superfluous unless that is manifestly required. See Village of Harbor View v. Jones, 10th Dist. Nos. 10AP-356 & 10AP-357, 2010-Ohio-6533, citing Bergman v. Monarch Constr. Co., 124 Ohio St.3d 534, 2010-Ohio-622, at ¶9. Accordingly, the Commission rejects the Director’s broad interpretation of the catch-all provision of Ohio Adm.Code 3745-32-05(C) because such an interpretation would render the regulatory definitions of “existing uses” found in Ohio Adm.Code 3745-1-07
meaningless. Therefore, the Commission finds that the stream impact restrictions are not authorized under Ohio Adm.Code 3745-32-05(C).

\{¶193\} For the foregoing reasons, the Commission finds that neither Ohio Adm.Code 3745-01-05(C)(1) nor Ohio Adm.Code 3745-32-05(C) authorize the Director to include terms and conditions for the purpose of protecting PHWH classifications. As discussed above, the Director conceded that the stream impact restrictions contained in Part I.C.1 of Oxford’s 401 Certification were included in part to protect PHWH classifications. Accordingly, the Commission finds the stream impact restrictions are unlawful.

\textit{ii. Coldwater Habitat, Native Fauna (Assignments of Error 1A, 1E, and 3)}

\{¶194\} Notwithstanding the unlawfulness of the Director’s consideration of PHWH classifications, the Director argued at hearing that Ohio EPA could have reasonably assigned each of the Class III PHWH streams at the Otsego 1 site an “existing use” classification of “coldwater habitat, native fauna.”

\{¶195\} However, as discussed above, the Director conceded that the stream impact restrictions contained in Part I.C.1 of Oxford’s 401 Certification are based upon the PHWH classifications rather than the “existing use” classifications found in Ohio Adm.Code 3745-1-07. Thus, having found the stream impact restrictions unlawful because the Director based such restrictions on PHWH classifications, the Commission declines to address whether the Director could have potentially based certain restrictions on a particular existing use classification found in the Administrative Code.

\textbf{B. Direct Impact Restrictions}

\{¶196\} In addition to challenging the Director’s classification of streams at the Otsego 1 site, Oxford also argued that the stream impact restrictions contained in Part
I.C.1 of its 401 Certification are unreasonable and/or unlawful for two reasons: (1) because the Director lacked a valid factual foundation to conclude that Oxford’s proposed Mitigation Plan would be insufficient to successfully restore impacted streams at the Otsego 1 site, and (2) because the Director failed to fully evaluate the cost-effectiveness and technical feasibility of the restrictions imposed by the 401 Certification. Further, Oxford argues that the Director acted unlawfully when he listed authorized impacts to certain streams as “to be determined.”

i. Evaluation of Proposed Mitigation Plan (Assignment of Error 3)

Ohio Adm.Code 3745-1-05(C)(5)(k) requires the Director to consider “[t]he reliability of the preferred alternative including, but not limited to, the possibility of recurring operational and maintenance difficulties that would lead to increased degradation.” Oxford’s preferred alternative included a proposed Mitigation Plan involving the restoration of streams impacted by mining operations. Thus, as a part of his review of Oxford’s Section 401 Certification Application, the Director was required to consider the reliability of Oxford’s proposed stream restorations.

Testimony presented at hearing established that the 401 Certification’s stream impact restrictions were based, in part, on the Director’s conclusion that it was unlikely that Oxford could successfully restore certain streams at the Otsego 1 site to “pre-mining conditions.” Significantly, the testimony indicated that the Director characterized pre-mining conditions at the Otsego 1 site in the context of PHWH classifications, rather than existing uses classifications, as defined by Ohio Adm.Code 3745-1-07. Subsequent considerations, based upon the Director’s evaluation of pre-mining conditions at the Otsego 1 site, also necessarily occur in the context of PHWH classifications. Accordingly, because the Director’s evaluation of Oxford’s Mitigation
Plan was based on his evaluation of pre-mining conditions at the Otsego 1 site, the Commission finds that Ohio EPA’s analysis of Oxford’s Mitigation Plan occurred in the context of PHWH classifications.

§199 As discussed above, the Director’s use of the PHWH classification system, as applied to Oxford’s 401 Certification, expanded the scope of the regulatory definitions of the “existing use” classifications. And therefore, the Commission finds the Director’s review of Oxford’s Mitigation Plan unlawful.

§200 Having found the Director’s evaluation of Oxford’s Mitigation Plan unlawful because the Agency conducted its evaluation in the context of PHWH classifications, the Commission declines to address whether the Director could have reasonably concluded that Oxford’s Mitigation Plan would be insufficient to restore streams to particular “existing use” classifications, such as coldwater habitat, native fauna. As noted above, the Director’s characterization of “pre-mining conditions” at the Otsego 1 site occurred in the context of PHWH classifications; it did not occur in the context of existing uses, as defined by Ohio Adm.Code 3745-1-07.

ii. Cost Effectiveness and Technical Feasibility (Assignment of Error 3)

§201 Ohio’s anti-degradation rule requires the Director to “consider” the “cost effectiveness and technical feasibility of the non-degradation alternatives, minimal degradation alternatives or mitigative technique alternatives and the * * * water quality benefits associated with such alternatives.” Ohio Adm.Code 3745-1-05(C)(5)(h).

§202 Oxford contended that the Director failed to fully evaluate the economic impact that the stream impact restrictions would have on Oxford, and that therefore, he acted unlawfully and/or unreasonably. Specifically, Oxford contended that due to increased costs and safety concerns regarding moving the high wall miner on steep
slopes, the stream impact restrictions prevent the use of a high wall miner for certain portions of the Otsego 1 site. And, because the high wall miner is necessary to enable the cost-effective recovery of coal, Oxford argued that the stream impact restrictions “sterilize” approximately 1.3 million tons of coal. Without this coal, Oxford argued that it will incur increased transportation costs as it will be required to use coal from other sites to fulfill existing contracts.

{¶203} The Director responded that during its review of Oxford’s 401 Certification Application, the Agency conducted an analysis of cost effectiveness and technical feasibility, based on the information provided to Ohio EPA, and thus satisfied the requirements of the regulation. Specifically, the Director remarked that the 401 Certification Application contained questions to which Oxford responded with information concerning the cost effectiveness and technical feasibility. Moreover, the Director noted that during Ohio EPA’s technical review of Oxford’s 401 Certification Application, Ms. Taulbee sent a letter to Oxford in which she requested additional information from Oxford regarding cost effectiveness and technical feasibility. The testimony also established that Ms. Taulbee met with Oxford twice to address concerns about the cost effectiveness and technical feasibility of avoiding certain stream impacts. Ms. Taulbee explained that as a result of these meetings, she understood that some stream crossings would be necessary to enable the high wall miner to maneuver around the Otsego 1 site and thereby allow Oxford to recover coal from the site in a cost-effective manner.

{¶204} Ohio’s anti-degradation rule expressly requires the Director to “consider” thirteen factors, including cost effectiveness and technical feasibility. Ohio Adm.Code 3745-1-05(C)(5). It does not, however, require the Director to assign a
particular weight to any individual factor, nor does it define the scope of the term “consider.” *Id.* Moreover, the regulation does not prescribe specific guidelines governing the scope of the Director’s evaluation of cost effectiveness and technical feasibility. *Id.* In the absence of express guidance from statute or regulation, such determinations are within the discretion of the Director.

{¶205} The Commission has previously held that the Director must affirmatively “consider,” in some manner, each of the thirteen factors listed in Ohio Adm.Code 3745-1-05(C). *Bd. of Comm’rs. Fairfield Co. v. Koncelik*, ERAC No. 235929 (May 12, 2011) (“Fairfield I”). In *Fairfield I*, the Director imposed a numerical phosphorous limit of 0.5 mg/l on the county’s wastewater treatment works facility. *Id.* at ¶12. The Director argued that the 0.5 mg/l limitation was necessary to comply with federally-approved water quality standards and that he was thus not required to consider, in any manner, the cost of removing phosphorous from the wastewater stream at the wastewater treatment works facility. *Id.* at ¶85. The Commission disagreed, noting that “[a]fter considering [economic and technical feasibility], the Director may indeed determine the 0.5 mg/l phosphorus limit [is appropriate],” but that nonetheless, “a technical feasibility and economic reasonableness analysis must be conducted for Fairfield County’s NPDES permit to be lawful.” *Id.* at ¶89.

{¶206} The Tenth District affirmed ERAC’s holding, stating as follows:

The Director * * * contends that because he has been given discretion, he should be able to choose how he wishes to comply with the requirements of the TMDL. In essence, he claims that if he chooses to simply implement the limitations set forth in the TMDL "as is" (which results in making it impossible to consider economic reasonableness or technical feasibility),

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24 A discretionary appeal is currently pending before the Ohio Supreme Court. To date, the Court has not ruled to either accept or decline jurisdiction. *Bd. of Comm’rs. v. Nally*, Case No. 2013-1085.
rather than making adjustments, it is an abuse of discretion for ERAC to essentially find that he must consider the option of making adjustments so that he can then consider the economic reasonableness or technical feasibility analysis. However, we find the Director does not have the discretion to ignore statutory mandates.


 Thus, in Fairfield I and II, the Commission held, and the Tenth District affirmed, that the Director must affirmatively “consider” cost effectiveness and technical feasibility pursuant to Ohio's anti-degradation laws. Id. Significantly, however, neither the Commission nor the Tenth District analyzed the requisite scope of the Director's consideration. Id.

 The Commission has also previously noted that no bright-line test exists to determine whether the Director satisfied his obligation to “consider” the various anti-degradation factors. National Wildlife Federation v. Korleski, ERAC Nos. 996447-256451 (Feb. 29, 2012) (“NWF I”). In NWF, appellants argued that the Director failed to adequately consider the magnitude of water quality degradation and the availability of alternatives as required by Ohio's anti-degradation rule. Id. at ¶86. The Commission disagreed, noting that in addition to extensive testimony establishing that the Director considered the various anti-degradation factors, “the anti-degradation requirements set out in Ohio Adm.Code 3745-1-05(C)(5)(a)-(m) are interwoven directly into the application itself.” Id. at ¶89.

 The Commission noted that the application requires an applicant to respond to questions addressing specific aspects of the anti-degradation requirement. Id. Thus, the Commission found that “as the Director reviews and evaluates 401
certification applications, he is analyzing and considering whether the project will violate water quality standards and whether a lowering of water quality is necessary.” Id.

¶210 Recently, the Tenth District affirmed the Commission’s decision, stating as follows:

Although there was no independent document precisely outlining the internal process of considering whether open lake placement will result in a violation of water quality standards and that a lowering of water quality is necessary, there was evidence in the record that supports a finding that the Director considered all the anti-degradation factors as required.


¶211 Here, the Commission acknowledges that the stream impact restrictions may negatively affect Oxford’s ability to recover coal from the Otsego 1 site by potentially increasing costs as compared to Oxford’s preferred alternative. Nonetheless, the record indicates that the Director did “consider” the cost effectiveness and technical feasibility of complying with the terms of Oxford’s 401 Certification, weighing those factors against the water quality benefits of the stream impact restrictions.

¶212 As noted above, the Commission must defer to the Director’s reasonable interpretation of his own regulatory scheme. Neither Ohio Adm.Code 3745-1-05(C) nor the applicable statutes prescribe express guidelines governing the scope of the Director’s consideration of cost effectiveness and technical feasibility. Thus, the Commission finds that the Director’s interpretation of the requirement does not expressly conflict with the text of the regulation and the Commission must defer to the Director’s exercise of his discretion.

¶213 As in _NWF I_ and _II_, the Commission finds that Director need not create an independent document precisely describing how Ohio EPA “considered” the anti-
degradation factors. Instead, the Commission notes that the act of reviewing Oxford’s 401 Certification Application supports the conclusion that the Director affirmatively “considered” cost effectiveness and technical feasibility. In fact, the evidence establishes that the 401 Certification Application contained specific questions concerning the cost effectiveness and technical feasibility. The responses Oxford provided led Ms. Taulbee to send a letter to Oxford requesting additional information. Significantly, Oxford’s response did not contain the detailed information regarding potential increased costs at the Otsego 1 site that Oxford presented at hearing. Rather, the response merely referenced a section in Oxford’s 401 Certification Application discussing the benefits of the coal industry as a whole.

{¶214} Additionally, the testimony establishes that Ms. Taulbee even met twice, in person, with representatives from Oxford to discuss whether temporary stream crossings would allow for the cost-effective recovery of coal at the Otsego 1 site.

{¶215} The Commission may not substitute its judgment for the Director’s as to factual issues. CECOS Internat., 79 Ohio App.3d 6. Thus, in this scenario, where the evidence and testimony demonstrates that the Director affirmatively “considered” the cost effectiveness and technical feasibility section of Oxford’s 401 Certification Application, and even requested additional information in a letter and in two in-person meetings, the Commission must defer to the Director’s conclusion regarding how Ohio EPA is to balance economic and operational factors with environmental concerns. In the absence of specific statutory or regulatory guidance regarding the weight of individual factors or the scope of the Director’s “consideration,” the Commission must defer to the experience and expertise of Ohio EPA. See NWF II, 2013-Ohio-3923, at ¶¶53-56.
Accordingly, the Commission finds that the Director considered the cost effectiveness and technically feasibility of the stream impact restrictions, as required by Ohio Adm. Code 3745-1-05(C)(5), and finds that the Director's consideration was lawful and reasonable. Oxford’s argument regarding cost effectiveness and technical feasibility is not well-taken.25

iii. “To Be Determined” Streams (Assignments of Error 2 and 3)

Part I.C.1 of Oxford’s 401 Certification lists PHWH class designations as “to be determined” for Streams 37, 48, 48A, 52, 53, 60, 61 (int.), 70, 74, 77, 78 (int.), 97, 107, 109, 113, 114, 120 (int.), 123 (int.), 123 (per.), 126, 127, and 129.26 For these “to be determined” streams, the 401 Certification requires Oxford to conduct baseline biological sampling before assigning PHWH classifications. In addition, the 401 Certification states that for these streams, “[a]dditional avoidance may be required, based on the results of the baseline sampling effort.”

Oxford argued that these “to be determined” designations are unlawful and/or unreasonable because they do not provide sufficient regulatory certainty.

The Director responded that Ohio EPA did not have sufficient data to evaluate proposed impacts to some of the streams at the Otsego 1 site and that it was

25 The Commission expresses its concern regarding certain characterizations of corporate economic considerations made by Appellee at hearing. During cross-examination of Mr. Leggett and Mr. Honish, the Director appeared to argue that, in essence, Ohio EPA acted reasonably because operating the Otsego 1 site under the 401 Certification as issued would still allow Oxford to generate some undetermined amount of profit. Further, counsel for the Director appeared to argue that because Oxford is a large corporation, it is capable of absorbing increased transportation costs.

The Commission further expresses its concern that this line of reasoning appears to reflect a suggestion that Oxford’s efforts to increase revenue and coal recovery were somehow improper. Protection of the environment is both important and necessary; however, it is axiomatic that a for-profit corporation can and should seek to generate revenue. As a general matter, regulatory agencies such as Ohio EPA are not tasked with determining “appropriate” levels of profit.

26 Note 16, supra.
nearing the federal one-year deadline to issue or deny certification, after which time the certification requirement is waived. Thus, the Director argued that it was lawful and reasonable to “conditionally” issue Oxford’s 401 Certification in order to avoid missing its deadline.

\{\footnotesize 220\} The Commission finds that neither the Revised Code nor the Administrative Code authorizes “conditional” Section 401 certifications. Therefore, the Commission finds that the Director acted unlawfully by listing certain streams as “to be determined.”

\{\footnotesize 221\} Revised Code 6111.03 outlines the Director’s authority as to water pollution control, providing in pertinent part as follows:

The director of environmental protection may do any of the following:

(P) *Certify or deny certification* to any applicant for a federal license or permit to conduct any activity that may result in any discharge into the waters of the state that the discharge will comply with the Federal Water Pollution Control Act;

(Emphasis added).

\{\footnotesize 222\} Further, Ohio Adm.Code 3745-32-05 directs the Director as to the evaluation and issuance of Section 401 certifications, providing in pertinent part as follows:

(A) The director *shall not issue* a section 401 water quality certification *unless* he determines that the applicant has demonstrated that the discharge *will*:

(1) Not prevent or interfere with the attainment or maintenance of applicable water quality standards;

* * *

* * *

(Emphasis added).
The Commission finds that neither R.C. 6111.03(P) nor Ohio Adm.Code 3745-32-05 authorizes the Director to “conditionally” issue a Section 401 certification. Rather, the provisions each grant the Director explicit authority to either issue or deny a certification.

The Director argued that Oxford had not provided Ohio EPA with sufficient information to evaluate whether the proposed impacts to Streams 37, 48, 48A, 52, 53, 60, 61 (int.), 61 (per.), 70, 74, 77, 78 (int.), 97, 107, 109, 113, 114, 120 (int.), 123 (int.), 123 (per.), 126, 127, and 129 would result in a violation of applicable water quality standards. Under such a scenario, where the applicant has not “demonstrated that the discharge * * * will * * * not prevent or interfere with the attainment or maintenance of applicable water quality standards,” Ohio Adm.Code 3745-32-05(A) directs the Director to deny the application for certification. It does not provide him with the option to “conditionally” issue a certification. Ohio Adm.Code 3745-32-05(A).

Accordingly, the Commission finds that the Director acted unlawfully by listing authorized impacts to Streams 37, 48, 48A, 52, 53, 60, 61 (int.), 61 (per.), 70, 74, 77, 78 (int.), 97, 107, 109, 113, 114, 120 (int.), 123 (int.), 123 (per.), 126, 127, and 129 as “to be determined” in Part I.C.1 of Oxford’s 401 Certification.

Having found that the conditional stream impact authorizations are unlawful, the Commission declines to address the reasonableness of those terms.

Because the issue was not specifically addressed at hearing, the Commission declines to address whether or not Oxford had, in fact, “demonstrated that the discharge * * * will * * * not prevent or interfere with the attainment or maintenance of applicable water quality standards” pursuant to Ohio Adm.Code 3745-32-05(A). See Conclusions of Law, Part II.A.ii, supra.
C. Other Terms and Conditions Related to Stream Impacts

§227 In addition to challenging stream impact restrictions, Oxford challenges certain terms and conditions in its 401 Certification relating to buffer zones, mitigation monitoring requirements, in-stream ponds, and wildlife protection.

i. Buffer Zones (Assignment of Error 1C)

§228 Part II.B of Oxford’s 401 Certification provides as follows:

This 401 Water Quality Certification (WQC) does not authorize impacts to any Class III and/or Coldwater Streams based on current sampling results, or any streams determined to be Class III and/or Coldwater Streams based on results of biological sampling required in General Condition A). This avoidance shall include all associated one hundred foot riparian buffers on each side of the avoided streams or any lengths of tributaries existing within those buffers, except S-54, S-59, and S-105.

§229 Further, Part II.C of Oxford’s 401 Certification provides, “[a]ll streams required to be avoided shall have one hundred foot buffers on each side of the stream and around the seep or spring at the source.”

§230 Oxford argued that these restrictions are unlawful because neither the Revised Code nor the Administrative Code explicitly requires buffer zones for streams. Further, Oxford contended that the restrictions are unreasonable because they are unclear as to whether impacts are allowed to portions of low-quality tributaries of high-quality streams.

§231 The Director responded that creating buffer zones surrounding high-quality streams is necessary to ensure adequate shade, which aids in maintaining cool water temperatures within the stream. Further, the 401 Certification explicitly states, “[t]his avoidance shall include all associated one hundred foot riparian buffers on each side of the avoided streams or any lengths of tributaries existing within those buffers.”
¶232 As an initial matter, the Commission finds that the restrictions are not so ambiguous as to be unreasonable. The 401 Certification explicitly states that no impacts are permitted to portions of tributaries that are located within buffer zones.

¶233 Significantly, however, the evidence established that the buffer restrictions serve the purpose of protecting particular PHWH classifications. Specifically, Ms. Taulbee testified that Ohio EPA included the buffer restrictions in Oxford’s 401 Certification, in part, because such restrictions are necessary to protect certain Class III PHWH streams. Although the Director argued that the buffer zone restrictions were also justified because the Class III PHWH streams at the Otsego 1 site could have been classified as coldwater habitat, native fauna streams, the evidence established that the Director’s characterization of pre-mining conditions at the Otsego 1 site occurred in the context of PHWH classifications, rather than existing uses as defined by Ohio Adm.Code 3745-1-07.

¶234 Accordingly, because the buffer restrictions serve to protect Class III PHWH streams, rather than a particular existing use, the Commission finds the restrictions unlawful.

¶235 Having found the inclusion of the buffer restrictions unlawful to the extent they serve to protect PHWH classifications, the Commission declines to address whether the Director could have reasonably included buffer restrictions for the purpose of protecting a particular existing use, such coldwater habitat, native fauna. In this instance, the Director’s characterization of “pre-mining conditions” at the Otsego 1 site occurred in the context of PHWH classifications; it did not occur in the context of existing uses, as defined by Ohio Adm.Code 3745-1-07.
ii. Mitigation Monitoring Requirements (Assignments of Error 1A, 1E, 3, and 4)

§236 Oxford objects to various mitigation monitoring requirements contained in Part III of its 401 Certification on two grounds. First, Oxford objects to the requirement to perform HHEI and HMFEI evaluations, arguing that these methods of evaluation are derived from the PHWH classification system and are therefore unlawful. Second, Oxford objects to certain performance goals set forth in the 401 Certification that it contends are based on PHWH classification criteria and are therefore unlawful. The Commission agrees.

§237 Regarding the HHEI and HMFEI evaluations, Part III.J.6-7 of Oxford’s 401 Certification provides as follows:

6. Primary Headwater Habitat Evaluation Index (HHEI)

HHEI assessments, using the most current version of that document available at the time the assessment is performed, shall be completed during years one, three and five on all reconstructed streams.

7. Headwaters Macroinvertebrate Field Evaluation Index (HMFEI)

HMFEI assessments, using the most current version of that document available at the time the assessment is performed, shall be completed during years three and five on all reconstructed intermittent and perennial streams.

§238 Further, regarding performance goals, Part III.L.2-4 of Oxford’s 401 Certification reads in pertinent part as follows:

Within five years after completion of construction: the applicant shall have:

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2. Demonstrated through biological monitoring that all reconstructed perennial and intermittent streams support the same PHWH aquatic life use score as the pre-mining streams.
3. Demonstrated through biological monitoring that all reconstructed Class III PHWH streams contain the same number or higher of EPT, sensitive and CWH taxa.

4. Demonstrated through biological monitoring that all streams performing as Class III and/or cold water habitat and required to be avoided shall continue to perform as such both during and post mining.

{¶239} As discussed above, PHWH classifications may not be substituted for existing use classifications. Because the evaluations and performance goals above are used for the purpose of preserving PHWH classifications rather than protecting existing uses, the Commission finds that Part III.J.6-7 and Part III.L.2-4 of Oxford’s 401 Certification are unlawful.

{¶240} The Commission notes that references to HHEI and HMFEI, which are evaluation methodologies outlined in the PHWH Field Manual, are not inherently unlawful. Significantly, at hearing, Ms. Taulbee and Mr. Skalski explained that HHEI and HMFEI evaluations can be used to evaluate a stream’s potential under the existing use classifications listed in Ohio Adm.Code 3745-1-07. Their use is not limited to PHWH classification determinations. Thus, it is the manner in which Ohio EPA uses the information gathered from HHEI and HMFEI assessments that ultimately determines whether the requirement that Oxford perform such evaluations is lawful.

{¶241} Ms. Taulbee testified that Ohio EPA used the HHEI and HMFEI evaluations required by Part III.J.6-7 to evaluate mitigation success relative to the performance goals in Part III.L.2-4. Moreover, Ms. Taulbee conceded that the performance goals in Part III.L.2-4 are derived from the criteria used to assign PHWH classifications. Thus, the required HHEI are HMFEI evaluations at issue here are used in a manner that relates to the protection of PHWH classifications, rather than existing
uses. And accordingly, the HHEI and HMFEI testing requirements in Part III.J.6-7 are unlawful.

\[\text{¶242}\] Additionally, Ms. Taulbee explicitly conceded that HHEI is not appropriate to evaluate mitigation success because the various metrics that comprise the scoring system can be easily manipulated. Thus, the Commission finds that Part III.J.6, which requires Oxford to conduct HHEI evaluations, is also unreasonable.

\[\text{¶243}\] Regarding the 401 Certification’s performance goals, the Director conceded that Part III.L.2-4 is derived from the PHWH classification criteria and was included for the purpose of preserving pre-mining PHWH classifications rather than existing uses. Thus, the Commission finds that the performance goals listed in Part III.L.2-4 are unlawful.

\[\text{¶244}\] Finally, Oxford also challenges Part III.L.6 of its 401 Certification, which requires Oxford to demonstrate that the state endangered mayfly found near Stream 79 is still present. Oxford contended that it is unlawful for Ohio EPA to regulate endangered species because endangered species are regulated by ODNR rather than Ohio EPA. See Patriot Water Treatment, LLC v. Korleski, ERAC Nos. 156477, 156588, 786501, 786589 (July 3, 2012). Further, Oxford argued that it is unreasonable to require the collection of a species that, by virtue of being endangered, is inherently uncommon. Specifically, Oxford argued that it is possible that Ohio EPA collected the only sample at the Otsego 1 site during its site visit.

\[\text{¶245}\] In response, the Director simply argued that Ohio EPA’s sampling efforts did not involve the collection of every specimen present at that particular location. Thus, the Director contended that it should be possible for Oxford to collect a sample of *Litobrancha recurvata* from near Stream 79.
{¶246} As an initial matter, the Commission finds that the present factual scenario differs from that in Patriot Water Treatment because the testimony established that the presence or absence of *Litobrancha recurvata* relates to the protection of water quality, which is within the Director’s jurisdiction under R.C. Chapter 6111. Specifically, Ms. Taulbee testified that the species of mayfly at issue, *Litobrancha recurvata*, belongs to the taxonomic order Ephemeroptera, an order sensitive to pollution and thus indicative of water quality. Accordingly, its presence or absence is indicative of the presence or absence of water pollution, and thus water quality, at a particular location.

{¶247} Nonetheless, the Commission finds that the Director acted unlawfully in including Part III.L.6 in Oxford’s 401 Certification. The testimony established that, in this instance, the manner in which the presence or absence of *Litobrancha recurvata* related to water quality at the Otsego 1 site was through the Agency’s use of the PHWH classification system. Ohio EPA’s macroinvertebrate sampling at the site, including its discovery of *Litobrancha recurvata* near Stream 79, contributed to the Agency’s PHWH designations for the streams at issue in this appeal. Thus, similar to the performance goals in Part III.L.2-4, the Commission finds that Part III.L.6 is both derived from and supports Ohio EPA’s classification of Stream 79 as a Class III PHWH stream. Therefore, the Commission finds that the Director’s inclusion of Part III.L.6 in Oxford’s 401 Certification was unlawful.

**iii. In-Stream Ponds (Assignment of Error 6)**

{¶248} Part III.L.7 of Oxford’s 401 Certification requires the removal of in-stream sediment ponds, except in Ponds 010 and 012, which were both present prior to mining operations at the Otsego 1 site. Oxford contended that this requirement is
unreasonable because it essentially requires Oxford to construct a series of smaller ponds rather than one or two larger ponds, which are more efficient because they do not require frequent dredging.

\(\text{¶249}\) In response, the Director noted that the 401 Certification prohibits only *permanent* in-stream ponds. Thus, Oxford’s 401 Certification does not prohibit temporary in-stream ponds for use during mining operations. Ms. Taulbee explained that Ohio EPA prohibited permanent in-stream ponds because they reduce the overall length of the stream and thereby reduce available stream habitat for aquatic wildlife.

\(\text{¶250}\) The Commission finds that Part III.L.7 of Oxford’s 401 Certification is both lawful and reasonable. The Director had a valid factual foundation for prohibiting *permanent* in-stream sediment ponds. Specifically, the Director could have reasonably concluded that the restriction would preserve stream length and thereby preserve aquatic habitat. Having found that the Director had a valid factual foundation to prohibit permanent in-stream ponds, the Commission finds that the Director acted lawfully and reasonably with regard to Part III.L.7 of Oxford’s 401 Certification. Oxford’s Assignment of Error 6 is not well-taken.

*iv. Wildlife Protection (not raised in Notice of Appeal)*

\(\text{¶251}\) Part II.N of Oxford’s 401 Certification provides as follows:

3. In the event that an eastern massasagua rattlesnake (*Sistrurus catenatus catenatus*) is encountered during construction of the project, work should immediately cease and the Ohio Department of Natural Resources, Division of Wildlife contacted. Caution should be employed during construction during the snakes’ active season (March 15 - November 15).

4. If native mussels and/or mussel beds, not previously identified, are encountered at any time during construction or dredging activities, work must cease immediately and the Ohio Department of Natural Resources’ Division of Wildlife contacted for further evaluation.
Oxford argued that endangered species are regulated by ODNR—not Ohio EPA—under R.C. Chapter 1518 and Ohio Adm.Code Chapter 1501:31-23. Thus, Oxford contended that the terms contained in Part II.N are unlawful because they invoke ODNR regulations. See *Patriot Water Treatment, LLC v. Korleski*, ERAC Nos. 156477, 156588, 786501, 786589 (July 3, 2012).

Mr. Elmaraghy responded that Ohio EPA maintains broad authority to impose terms and conditions necessary or appropriate to protect the environment, and these terms fall within that broad authority. The Commission disagrees.

In *Patriot*, the Commission addressed the relationship between the jurisdictions of Ohio EPA and ODNR. The permit at issue in *Patriot* contained the following term prohibiting the acceptance of brine wastewater (“Section BB”):

BB. Beginning on the effective date of this permit, the permittee shall stop accepting brine wastewater from oil or gas drilling, exploration or production. Disposal of brine wastewater from oil or gas drilling, exploration or production through a wastewater treatment plant and discharge to waters of the state is not an authorized method of disposal under R.C. 1509.22(C)(1) unless and until it is approved by the Chief of the Division of Oil and Gas Resources Management for testing or implementing a new technology or method of disposal. If such an approval is granted under R.C. 1509.22(C)(1) by the Chief of the Division of Oil and Gas Resources Management, the permittee must submit an NPDES Permit Modification application to Ohio EPA for approval prior to acceptance of brine wastewater. The permittee may not accept brine wastewater from oil or gas drilling, exploration or production until after an NPDES Permit Modification authorizing acceptance of the material is approved. *Patriot*, at ¶48.

Ohio EPA argued that (1) Section BB was not substantive and (2) even if Section BB were substantive, Ohio Adm.Code 3745-33-07(A) (an Ohio EPA regulation) authorized its inclusion because the term was necessary to ensure compliance with applicable laws and/or protect water quality. *Id.* at ¶137.
The Commission first found that the provision was substantive because it required the appellant to affirmatively stop accepting brine wastewater and to submit a modification application. The Commission noted that these affirmative prohibitions distinguished Section BB from boilerplate terms and conditions “generally informing a permittee of its duty to comply with other applicable laws.” Id. at ¶¶138-44.

Having found the provision substantive, the Commission then concluded that it was unlawful because Ohio EPA lacked the authority to enforce R.C. Chapter 1509, as it was outside the scope of its governing statutes. The Commission found that although Ohio Adm.Code 3745-33-07(A) granted Ohio EPA the authority to impose terms and conditions “as are appropriate or necessary to ensure compliance with the applicable laws and to ensure adequate protection of water quality,” the phrase “applicable laws” “must be limited to those laws and regulations that fall within the scope of Chapter 6111.” Id. at ¶155.

Similarly, the Commission finds that Part II.N of Oxford’s 401 Certification is a substantive provision in Oxford’s 401 Certification. Specifically, it requires that Oxford immediately cease all work at the Otsego 1 site upon finding either an eastern massasagua rattlesnake or native mussels.

The Director does not dispute that endangered species regulations are enforced by ODNR and not by Ohio EPA. The Director cites no statutory or regulatory provision authorizing Ohio EPA to impose terms and conditions in Section 401 certifications for the purpose of protecting endangered species. As in Patriot, the Commission finds that Director may not impose terms and conditions that expand upon the scope of his statutory authority. Therefore, the Commission finds that Part II.N is unlawful.
The Commission rejects the Director’s contention that he has broad authority to impose any term or condition related to the “environment.” Although Ohio Adm.Code 3745-32-05(C) does authorize the Director to impose additional terms and conditions “as are appropriate or necessary to ensure compliance with the applicable laws and to ensure adequate protection of water quality,” the scope of the Director’s authority to impose such additional terms and conditions is limited to those terms and conditions that serve to ensure the protection of water quality, not the environment generally. The Director presented no evidence to support that the presence or absence of either the eastern massasagua rattlesnake or native mussels is related to water quality. Thus, the Commission finds that Part II.N of Oxford’s 401 Certification was not authorized under Ohio Adm.Code 3745-32-05(C). Oxford’s argument with respect to Part II.N of its 401 Certification is well-taken.

D. Wetland Impact Restrictions

Oxford challenges wetland impact restrictions for Wetlands 71 and 72. Oxford argued that the Director lacked a valid factual foundation to conclude that the wetlands are Category 3 wetlands. Further, Oxford contended that the Director acted unlawfully and unreasonably by failing to fully evaluate the extent of the “public need” for coal mined from the Otsego 1 site.

i. Classification (Assignment of Error 3)

Oxford argued that the Director lacked a valid factual foundation for classifying Wetlands 71 and 72 as Category 3. Specifically, Oxford contended that the presence of invasive plant species, acid mine drainage, and non-natural disturbances such as a power line, ATV trails, and artificial berms should have resulted in lower ORAM scores. Mr. Smith, who conducted Oxford’s initial ORAM assessments provided
to Ohio EPA, testified that he assigned ORAM scores of 49 and 55 for Wetlands 71 and 72, respectively, and that these scores correspond to Category 2 wetlands. Similarly, Mr. Madej, whom Oxford retained to conduct further wetland assessments after filing this appeal, testified that he assigned ORAM scores of 52 and 56, which would also classify Wetlands 71 and 72 as Category 2 wetlands.

¶263 Ms. Taulbee countered that she did not observe acid mine drainage during her visits to the Otsego 1 site. Further, she testified that Mr. Smith and Mr. Madej appeared to have observed acid mine drainage only near the northern portions of the Otsego 1 site. As Ms. Taulbee explained, both Wetland 71 and Wetland 72 are on the southern portion of the site.

¶264 Regarding invasive species, Ms. Taulbee testified that she found invasive plant species coverage to be “sparse.” Notably, her ORAM scoring for invasive species coverage also matched that of Mr. Smith’s.

¶265 Finally, regarding the various non-natural disturbances, Ms. Taulbee testified that she did not consider the power line or trails at the Otsego 1 site to be significantly detrimental to the wetland environments. Ms. Taulbee further testified that the man-made ponds had been present for a sufficient period of time that they functioned as if they were “natural” sources of hydrology for the wetlands.

¶266 The Commission finds that based on the evidence presented at hearing, the Director had a valid factual foundation for classifying Wetland 71 and Wetland 72 as Category 3. Specifically, based on the presence, or absence, of invasive species, acid mine drainage, and non-natural disturbances, the Commission finds that the Director reasonably assigned ORAM scores of 61 and 66 for Wetlands 71 and 72, corresponding to a classification as Category 3 wetlands.
Essentially, Oxford disagrees with certain factual determinations made by Ohio EPA personnel during their site visits. In cases “[w]here qualified, credible expert witnesses disagree on a matter within their expertise, the Commission defers to the decision of the Director.” *Tube City Olympic of Ohio v. Jones*, ERAC No. 994681 (March 5, 2003). In addition, the Commission must not substitute its judgment for that of Ohio EPA as to factual issues. *CECOS Internatl.*, 79 Ohio App.3d 1.

Oxford did not dispute that Ms. Taulbee was qualified to conduct ORAM assessments or argue that the assessments were otherwise improper. Instead, Oxford merely challenged certain factual determinations made during Ohio EPA’s site visits. Because Oxford’s arguments regarding wetland classifications are factual in nature and the Director presented evidence supporting his factual determinations, the Commission may not substitute its judgment for the Director’s. *Id.* Accordingly, Oxford’s argument with regards to wetland classification is not well-taken.

ii. Public Need (Assignment of Error 3)

Oxford argued at hearing that the Director acted unlawfully and unreasonably by failing to evaluate the full extent of the public need for coal. Even if Wetlands 71 and 72 are properly classified as Category 3 wetlands, Oxford contended that pursuant to Ohio Adm.Code 3745-1-54(D)(1)(c), impacts to those wetlands should have been justified due to “public need.”

“Public need” is one of several factors an applicant must demonstrate before impacting Category 3 wetlands.\(^{28}\) Ohio Adm.Code 3745-1-54(D)(1)(c) provides:

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\(^{28}\) At hearing, Oxford discussed only public need and did not discuss any of the other six factors. Thus, the Commission notes that it is unclear whether the Director could have authorized impacts to Wetlands 71 and 72 even if Ohio EPA had determined that Oxford demonstrated “public need.”
The wetland designated use shall be maintained and protected in wetlands assigned to category 3, and no lowering of water quality shall be allowed, unless it is demonstrated to the satisfaction of the director that:

(i) Avoidance. There is no practicable alternative, based on technical, social and economic criteria, which would have less adverse impact on the wetland ecosystem * * *; and

(ii) Minimization. Appropriate and practicable steps have been taken to minimize potential adverse impacts on the wetland ecosystem. * * *

(iii) The proposed activity is necessary to meet a demonstrated public need, as defined in rule 3745-1-50 of the Administrative Code; and

(iv) The lowering of water quality is necessary to accommodate important social or economic development in the area in which the water body is located; and

(v) Storm water and water quality controls will be installed in accordance with paragraph (D)(3) of this rule; and

(vi) The wetland is not scarce regionally and/or statewide * * *; and

(vii) Compensatory mitigation. The designated use is replaced by a category 3 wetland, of equal or higher quality, in accordance with paragraph (E) of this rule. * * *

(Emphasis added).

{¶271} The Director explained that Ohio EPA’s consideration is site specific and that Oxford would have been required to establish that the specific coal underlying Wetlands 71 and 72 was necessary to fulfill that need. Ms. Taulbee stated that although coal and energy could indeed be “public needs,” Oxford failed to demonstrate during the application process that the specific coal underlying Wetlands 71 and 72 is required to fulfill that need.

{¶272} Oxford contended that, contrary to the Director’s assertion, the specific coal underlying Wetlands 71 and 72 is required to fulfill the public need for coal and energy. In particular, Oxford argued that increased transportation costs prohibit the
cost-effective use of coal from alternative sites to fulfill local contracts near the Otsego 1 site.

\{¶273\} The Director noted that Ms. Taulbee sent Oxford an email requesting Oxford to “clearly demonstrate how the mining in this specific location fulfills a demonstrated ‘public need.’” (Emphasis in original). Oxford’s response read as follows:

There is no less damaging alternative. In fact, there is no upland alternative. The coal lies under the wetland identified as WTL-72. Avoiding impact to WTL-72 will sterilize roughly 600,000 tons of coal and will shorten the life of [the] mine and result in the loss of important social and economic development in the State and reduce our nation’s energy production.

\{¶274\} The Director argued that, as demonstrated by this response, Oxford failed to provide Ohio EPA with information about transportation costs or indeed with any information as to why coal from an alternative site could not be used.

\{¶275\} The Commission finds that the Director acted lawfully and reasonably in considering public need. First, the Commission finds that the Director’s interpretation of public need requirement is reasonable.

\{¶276\} The Director argued that “public need” is site specific and that an applicant must demonstrate that the particular resource at issue is necessary to fulfill that need. “Public need” is defined as follows:

(II) “Public need” means an activity or project that provides important tangible and intangible gains to society, that satisfies the expressed or observed needs of the public where accrued benefits significantly outweigh reasonably foreseeable detriments.

Ohio Adm.Code 3745-1-50(II).

\{¶277\} This definition is silent as to whether an applicant must demonstrate the need to impact the particular wetland at issue, as opposed to some other location. Thus,
the Director’s interpretation is not at odds with the regulation and is therefore entitled to deference. *Sandusky Dock Corp.*, 106 Ohio St.3d 274.

Moreover, the Commission finds the Director’s interpretation is rational. High quality (Category 3) wetlands are an important natural resource. Thus, it is reasonable to require an applicant to demonstrate that the public need could not be fulfilled in an alternative, less damaging manner. In other words, it was reasonable for Ohio EPA to request that Oxford demonstrate that its local coal contracts could not have been fulfilled using coal obtained from an alternative location.

Testimony established that Oxford did not provide Ohio EPA with site-specific information regarding public need during the application process. Although Mr. Honish testified regarding increased transportation costs and other factors that affect Oxford’s ability to supply local generators using coal from alternative sites, Oxford did not offer this information to Ohio EPA prior to issuance of the 401 Certification, even when specifically requested to do so by Ms. Taulbee.

Accordingly, the Commission finds that the Director had a valid factual foundation for concluding that Oxford failed to demonstrate public need. Therefore, the Commission finds that the Director acted lawfully and reasonably in prohibiting impacts to Wetlands 71 and 72.

**E. Arguments Not Presented at Hearing**

In its Notice of Appeal and Pre-hearing Brief, Oxford also presented several arguments that it did not discuss at hearing. The Commission will now address each of these arguments.
i. **Multiple Incompleteness Letters (Raised in Pre-Hearing Brief)**

\(\textbull{282}\) Ohio EPA sent Oxford a total of two letters informing Oxford that Ohio EPA had deemed Oxford’s Section 401 Certification Application incomplete. Ohio EPA sent the first letter on March 14, 2011 and the second letter on August 15, 2011.

\(\textbull{283}\) In its Pre-Hearing Brief, Oxford argued that the second letter was unlawful because it violated R.C. 6111.30(B), which states in pertinent part:

\begin{quote}
(B) *Not later than fifteen business days after the receipt of an application for a section 401 water quality certification, the director shall review the application to determine if it is complete and shall notify the applicant in writing as to whether the application is complete.*
\end{quote}

(Emphasis added). Oxford argued that because the August 15, 2011 letter was issued more than fifteen days after receipt of the application, the incompleteness letter was therefore unlawful.

\(\textbull{284}\) Oxford did not present any evidence regarding this specific issue at hearing. Significantly, Oxford did not articulate any particular requested relief with respect to this assignment of error, and it is unclear what impact, if any, the letter had on Oxford’s final 401 Certification.

\(\textbull{285}\) Moreover, the Commission notes that in sending its March 14, 2011 letter, the Director did fulfill his statutory obligation to inform Oxford, within fifteen business days of receipt of the application, whether Ohio EPA had deemed the application complete. The statute does not appear to affirmatively prohibit subsequent letters of incompleteness.

\(\textbull{286}\) Accordingly, Oxford’s argument regarding multiple incompleteness letters is not well-taken.
ii. Jurisdiction of Ohio EPA to Regulate Streams and Wetlands at Otsego 1 (Assignment of Error 1B)

In its Notice of Appeal, Oxford argued that the 401 Certification unlawfully restricts impacts to Stream 70. The Notice of Appeal states that Stream 70 is not subject to the federal Clean Water Act, and was therefore not within the scope of Ohio EPA’s Section 401 certification program. However, because Oxford did not present any specific testimony regarding this issue at hearing, the Commission finds that Oxford failed to meet its burden to demonstrate that the Director acted unlawfully or unreasonably with respect to this issue.

iii. Consideration of Comments from U.S. EPA and Army Corps (Assignment of Error 1D)

The record indicates that on March 25, 2011, U.S. EPA sent a letter to the Corps regarding Oxford’s Section 404 permit application, with copies to Ohio EPA, among others. In its Notice of Appeal, Oxford argued that Ohio EPA unlawfully considered this letter during its evaluation of Oxford’s Section 401 Certification Application. Again, however, Oxford presented no evidence regarding this assignment of error at hearing. Accordingly, the Commission finds that Oxford failed to meet its burden to demonstrate that the Director acted unlawfully or unreasonably with regard to this issue.

iv. Prohibition of Use of Straw Bales as Erosion Control (Assignment of Error 5)

Finally, Oxford’s Notice of Appeal and Pre-Hearing Brief argue that the Director acted unlawfully and unreasonably by prohibiting the use of straw bales as a form of erosion control. However, no evidence was presented at hearing regarding this assignment of error. Accordingly, the Commission finds that Oxford failed to meet its
burden to demonstrate that the Director acted unlawfully or unreasonably by prohibiting the use of straw bales.

III. Relief Requested

{¶290} In both its Motion and at hearing, Oxford argued that the Commission should deem the Section 401 certification requirement as having been waived by Ohio EPA. Oxford argued that under 33 U.S.C. 1341, states must issue Section 401 certifications within one year of receipt of the application, after which time the requirement is deemed waived. Because Oxford’s initial Section 401 certification application was submitted to Ohio EPA on February 18, 2011, more than one year has since passed. Oxford argued that the Section 401 certification requirement should therefore be deemed waived.

{¶291} In the alternative, Oxford argued that the Commission should modify the 401 Certification by striking any unlawful or unreasonable terms without remand to the Director. Oxford argued that remand would unnecessarily delay operations at the Otsego 1 site and would likely not result in significant changes to permit terms and conditions.

{¶292} Finally, Oxford argued that the Commission could, as an additional alternative, remand the 401 Certification to the Director with explicit instructions to “immediately” modify the certification in a manner consistent with this decision.

{¶293} The Commission notes that R.C. 3745.05 outlines ERAC’s authority with regard to final orders following the completion of a hearing. The statute provides in pertinent part:

If, upon completion of the hearing, the commission finds that the action appealed from was lawful and reasonable, it shall make a written order affirming the action, or if the commission finds that the action was
unreasonable or unlawful, it shall make a written order vacating or modifying the action appealed from.

{¶294} Accordingly, the Commission finds that ERAC does not possess the authority to deem the Section 401 certification requirement as having been waived. If the Commission finds an action lawful and reasonable, it must affirm the action. Where the Commission finds an action unlawful and unreasonable, R.C. 3745.05 authorizes the Commission only to issue orders vacating or modifying the action.

{¶295} Further, the Commission declines to simply strike provisions from Oxford’s 401 Certification. The terms and conditions at issue in this appeal do not exist in isolation and are not separable from the other terms and conditions present in the 401 Certification. Accordingly, the Commission declines to exercise its authority to modify the Director’s action in this case.
**FINAL ORDER**

\{¶296\} For the foregoing reasons, the Commission finds specific portions of Oxford’s 401 Certification unreasonable and unlawful.

\{¶297\} First, as previously held in its ruling on Oxford’s Motion, the Commission finds the stream impact table (Part I.C.1) unlawful because the Director applied PHWH classifications as existing uses in his evaluation of Oxford’s 401 Certification Application, including in his review of Oxford’s Mitigation Plan. Thus, to the extent the Director based the stream impact restrictions in Oxford’s 401 Certification on the Agency’s use of PHWH classifications, the Director must reevaluate Oxford’s proposed stream impacts in the context of existing uses, as defined in Ohio Adm.Code 3745-1-07. Additionally, the Commission finds that the buffer zone restrictions, (Part II.B) unlawful because they flow from the Director’s characterization of pre-mining conditions at the Otsego 1 site, which occurred in the context of PHWH classifications.

\{¶298\} Second, based on the testimony and evidence adduced at hearing, the Commission finds the stream impact table unlawfully conditions allowable stream impacts on yet “to be determined” stream classifications for Streams 37, 48, 48A, 52, 53, 60, 61 (int.), 61 (per.), 70, 74, 77, 78 (int.), 97, 107, 109, 113, 114, 120 (int.), 123 (int.), 123 (per.), 126, 127, and 129. Neither R.C. 6111.03(P) nor Ohio Adm.Code 3745-32-05 authorizes the Director to “conditionally” issue a Section 401 certification.

\{¶299\} Third, the Commission finds that the PHWH classification-based performance goals (Part III.L.2 through Part III.L.4), the HHEI and HMFEI testing requirements (Part III.J.6 and Part III.J.7), and the requirement that Oxford demonstrate the streams at the Otsego 1 site continue to support *Litobrancha recurvata*
(Part III.L.6) are unlawful to the extent that they were included to protect the pre-mining PHWH classifications at the Otsego 1 site. The HHEI testing requirement (Part III.J.6) is also unreasonable.

\{¶300\} Finally, the Commission finds the section pertaining to wildlife protection (Part II.N) unlawful because it seeks to enforce a statutory and regulatory scheme outside of Ohio EPA’s jurisdiction.

\{¶301\} Having found the above terms and conditions unlawful and/or unreasonable, the Commission hereby REMANDS Oxford’s 401 Certification to the Director with instructions to issue a modified 401 certification, consistent with this opinion within 90 days.

\{¶302\} Significantly, the Commission recognizes that modification of Oxford’s 401 Certification on remand, based on the “existing uses” found in Ohio Adm.Code 3745-1-07 rather than PHWH classifications, may necessitate the Director’s reconsideration of certain components not expressly deemed unlawful or unreasonable in this decision. For example, the Director may determine that it is necessary to reevaluate various anti-degradation factors, such as cost effectiveness and technical feasibility, in the context of existing uses. Nothing in this opinion should be construed as prohibiting the Director from doing so.
{¶303} In accordance with Ohio Adm.Code 3746-13-01, the Commission informs the parties of the following:

Any party adversely affected by an order of the commission may appeal to the court of appeals of Franklin County, or, if the appeal arises from an alleged violation of a law or regulation, to the court of appeals of the district in which the violation was alleged to have occurred. The party so appealing shall file with the commission a notice of appeal designating the order from which an appeal is being taken. A copy of such notice shall also be filed by the appellant with the court, and a copy shall be sent by certified mail to the director or other statutory agency. Such notices shall be filed and mailed within thirty days after the date upon which appellant received notice from the commission of the issuance of the order. No appeal bond shall be required to make an appeal effective.

The Environmental Review Appeals Commission

[Signatures]

Melissa M. Shilling, Chair

Shaun K. Petersen, Vice Chair

Michael G. Verich, Member

Entered into the Journal of the Commission this ___ day of September, 2013.
VERICH, Commissioner, concurring.

{¶304} I concur with the outcome of the Commission's decision. However, I must express my concern that the Director did not, in this case, articulate in a more detailed manner the value of the environmental benefits gained by restricting impacts to streams at the Otsego 1 site and compare those benefits to the increased costs that Oxford would incur as a result of those restrictions. Although Oxford did not provide the detailed information it presented at hearing to Ohio EPA during the application process, Ohio EPA could have made additional requests for more detailed information. Alternatively, the Director retains the authority to deny 401 certification applications if he determines that the applicant has failed to provide sufficient information.

{¶305} In this instance, Oxford's operation at the Otsego 1 site represented a project of significant scale—approximately 1.7 million tons of coal as originally proposed. Given the scale of the project and its importance to the local economy, I am troubled that the Agency did not insist on obtaining detailed cost effectiveness and technical feasibility data prior to issuing Oxford's 401 Certification. With regard to projects of such importance, I believe that it is critical that the Director elaborate to some degree how Ohio EPA balances the thirteen factors required by Ohio's anti-degradation rule, including cost effectiveness and technical feasibility.

{¶306} As the Tenth District stated in National Wildlife Federation v. Korleski, 2013-Ohio-3923 (10th Dist. 2013), although there is no statutory or agency rule requirement that the Director set forth his findings in writing, it is a better practice to make written findings. The Court went on to say that the Director was not required to specifically state his findings prior to issuing the permit.
In this case, I am left with a record that reflects that Ms. Taulbee of Ohio EPA reviewed the information submitted along with Oxford's 401 Certification Application, sent a letter to Oxford requesting additional information regarding cost effectiveness, and had several meetings with Oxford per that subject matter. Based on the statutory and legal definition of "consider," it appears the Director, at a minimum, met that test. However, it would have been highly preferable if he had made an effort to offer more clarity on those important considerations.

Entered into the Journal of the Commission this 18th day of September, 2013.

Michael G. Verich, Member

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No. 12-256581

CERTIFICATION

I hereby certify that the foregoing is a true and accurate copy of the DECISION in

Oxford Mining Company, LLC v. Scott Nally, Director of Environmental

Protection, Case No. ERAC 12-256581 entered into the Journal of the Commission this

5th day of September, 2013.

Julie A. Slane, Executive Secretary

Dated this 8th day of
September 2013, at Columbus, Ohio.