

**CASE NO: OLT-22-004597**

**PROCEEDING COMMENCED UNDER** Section 17(36) of the *Planning Act*, R.S.O. 1990, c. P.13.

Applicant/Appellant: 2606609 Ontario Inc.  
Subject: Request to amend the Official Plan – Refusal of the requested amendment  
Property Address/Description: 2 River Street and 50 Orchard Street  
Municipality: Kingston, Frontenac County  
Municipal File No.: D35-009-2017  
OLT Case No.: OLT-22-004597  
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OLT Case Name: 2606609 Ontario Inc. v. Kingston (City)

**PROCEEDING COMMENCED UNDER** Section 34(11) of the *Planning Act*, R.S.O. 1990, c. P.13.

Applicant/Appellant: 2606609 Ontario Inc.  
Subject: Application to amend the Zoning By-law – Refusal of the requested amendment  
Property Address/Description: 2 River Street and 50 Orchard Street  
Municipality: Kingston, Frontenac County  
Municipal File No.: D35-009-2017  
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## I. PART I – OVERVIEW

1. In the natural heritage context, the overarching question to be determined by the Tribunal is whether it is good land use planning to approve a massive residential/commercial development of the subject property in a manner that will destroy the on-site portion of the Provincially Significant Wetland (“PSW”)/Significant Coastal Wetland (“SCW”) and remove the existing Significant Woodland despite its current ecological functions. For the factual, technical, scientific, and planning reasons described below, No Clearcuts Kingston (“NCK”) submits that the Tribunal should answer this central question in the negative.
2. First, the proposed development is fundamentally inconsistent with the Provincial Policy Statement (“PPS”).<sup>1</sup> It is undisputed the Appellant’s proposal includes development and/or site alteration within the boundary of the PSW/SCW, despite the mandatory prohibition in PPS Policy 2.1.4 and contrary to s. 3(5) of the *Planning Act*.<sup>2</sup> This is the fatal flaw of the current development proposal and it alone provides the Tribunal with a clear, compelling, and jurisdictionally valid reason to reject Appellant’s proposed development.
3. Second, the development is being proposed by the Appellant in or adjacent to various natural areas and features (e.g., PSW, significant woodlands, significant wildlife habitat, and species at risk habitat) and will cause adverse impacts upon such features, despite Policies 2.1.5 to 2.1.8 of the PPS and contrary to s. 3(5) of the *Planning Act*. In addition, there is inconsistency between the development proposal and the water-related provisions of PPS Policies 2.2.1 and 2.2.2 that require protection and maintenance of interrelated functions among ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas. If the Tribunal finds that the development proposal is inconsistent with one or more policies of the PPS, then this finding is fully dispositive of both appeals and it is not necessary for the Tribunal to adjudicate the remaining planning issues in dispute.<sup>3</sup>
4. Third, the Appellant’s primary planning rationale for the development is the presence of on-site contamination left behind by previous industrial uses on the subject property. However, the Appellant’s own witnesses conceded that there is no evidence that these legacy contaminants are currently moving off-site via groundwater flow into the Cataraqui River. Similarly, while the Appellant’s witnesses expressed concern about the possibility that storm

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<sup>1</sup> Exhibit (“Ex.”) 1G - Joint Book of Documents (“JBD”), Vol. 7: Provincial Policy Statement 2020 (“PPS”).

<sup>2</sup> Ex. 1F – JBD, Vol. 6, Tab D: *Planning Act*.

<sup>3</sup> NCK Book of Authorities (“NCK BOA”), Tab 1: *Northgate Land Corp v Waterloo (City)*, 2023 LNONLT 650, para 55.

events might transport contaminated soil/sediment from the subject property into the river, the Appellant did not present a scintilla of empirical evidence (e.g., surface water sampling/analysis) to demonstrate that this off-site movement is currently happening or continuously contaminating water quality or bottom sediment in the river. Moreover, there is nothing in PPS Policy 3.2.2 (human-made hazards) that overrides or sidesteps the above-noted natural heritage protection policies, particularly the strict prohibition in Policy 2.1.4.

5. Fourth, the proposed development does not conform with the Official Plan (“OP”) of City of Kingston (“City”), primarily for the same reasons why the development is inconsistent with the PPS in relation to natural heritage protection. Due to s. 24 of the *Planning Act*, the Appellant’s zoning by-law amendment should not be approved due to OP non-conformity.
6. Fifth, while the Appellant filed thousands of pages of documents during the five-week hearing, the Tribunal must closely scrutinize and critically evaluate the quality – not quantity – of such documentation. A careful examination of the Appellant’s key reports, studies, and other materials reveals that they are materially deficient, contain significant data gaps, do not properly characterize hydrogeological site conditions, fail to identify, assess, and mitigate environmental impacts caused or compounded by the development proposal, and fall considerably short of satisfying the Appellant’s evidentiary onus of proving that the development should be approved as proposed under the *Planning Act*.
7. Finally, the Appellant failed to provide persuasive evidence to justify approving the proposed development. Instead, the Appellant presented conceptual, ever-changing, or incomplete plans (e.g., remediation plan, landscaping plan, stormwater management plan, heritage impact statement, and wetland compensation proposal). In addition, placing the Appellant’s suggested “Holding Overlay” provisions in the proposed zoning by-law amendment would effectively exclude the public from commenting on, and providing input to, the City on the adequacy of future updated plans if the development is approved.
8. Accordingly, both appeals filed by the Appellant should be dismissed by the Tribunal.
9. In support of this outcome and while preparing these submissions, NCK has coordinated with the City to avoid repetition or overlap. In this regard, NCK adopts and commends (without repeating) the City’s written submissions in relation to: (a) traffic, transit, and active transportation; (b) building mass, scale, and form; (c) land use compatibility, density, and

overdevelopment;<sup>4</sup> and (d) the cultural heritage landscape of the UNESCO-designated Rideau Canal National Historic Site and Canadian Heritage River. These submissions by NCK therefore focus on the key environmental and planning issues that arise in this case.

## II. PART II – FACTS

10. NCK pleads and relies upon the facts summarized in Parts II to VI of the City’s written submissions, the parties’ Agreed Statement of Facts and Issues,<sup>5</sup> and the submissions below in Part IV.
11. NCK disagrees with the assertions in the following paragraphs of Appellant’s submissions: 27, 42, 43, 49, 197, 203, 205, 217, 223, 224, 225, 230, 231, 237, 281, 282 and 292.

## III. PART III – ISSUES

12. The planning questions to be determined by the Tribunal are set out in the Issues List in Attachment 2 of the procedural order dated June 20, 2023 (as amended by Exhibit 17). NCK’s overall position on these issues is summarized below in Part V of these submissions.

## IV. PART IV – ARGUMENT

### A. Preliminary Matters

#### 1. Burden and Standard of Proof

13. It is well-established that when an appeal has been brought by a proponent, the onus is on the proponent to demonstrate, on a balance of probabilities, that the applicable test for approval of a planning instrument has been met.<sup>6</sup> Conversely, “the objectors to the proposed development need not demonstrate that there will be a negative impact.”<sup>7</sup> In this case, the Appellant – not NCK or the City – bears the burden of proof. Contrary to the Appellant’s submissions (paragraph 230), there is no obligation on NCK to present alternative remediation approaches to facilitate the development of the subject property.

#### 2. The Test for Approval Under the Planning Act

14. The Tribunal must have regard for the matters of provincial interest outlined in s.2 of the *Planning Act* and must have regard for the information (i.e. public comments) before the City

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<sup>4</sup> NCK BOA, Tab 2: *5507 River Development Inc. v Niagara Falls (City)*, 2022 CanLII 18629 (ON LT), paras 120, 140-41 (three residential towers were rejected since they constituted “overdevelopment”, lacked transition to nearby low-rise residences, and there was inconclusive evidence there would be no negative impacts on natural heritage features).

<sup>5</sup> Ex. 2 – Supplemental Brief of Documents of 2606609 Ontario Inc., Tab 2: Agreed Statement of Facts and Issues.

<sup>6</sup> NCK BOA, Tab 1: *Northgate Land Corp v. Waterloo (City)*, 2023 LNONLT 650, para 27; NCK BOA Tab 3: *Acchione v Caledon (Town)*, 2022 LNONLT 144, para 27.

<sup>7</sup> NCK BOA, Tab 4: *James Dick Construction Ltd v Caledon (Town)*, [2010] OMBD No 905, 66 OMBR 263, para 24.

council when it refused to approve the proposed development.<sup>8</sup> In addition, the proposed development cannot be approved under the *Planning Act* unless the Tribunal finds, on the basis of the hearing record, that the proposed development is consistent with the PPS, conforms with the City's OP, and otherwise respects principles of good planning.<sup>9</sup>

15. The above-noted decision-making standards under the *Planning Act* (i.e. “have regard for”, “be consistent with”, and “conform with”) have been recently canvassed by the Tribunal in a case involving proposed development adjacent to significant natural features and areas:

It is also generally understood that the “be consistent with” and “conform with” or “not conflict with” standards fall closer to the other end of the spectrum and command a high degree of adherence. ...

As it applies to s. 3(5)(a) of the Act, the Tribunal finds that the term “be consistent with” demands adherence that is at least ‘parallel with’ the policies of the PPS, and clearly the Tribunal cannot render a decision that is inconsistent with the PPS. Consequently, if it is found that any of the present applications prove to be inconsistent with the PPS, then such application(s) must fail (emphasis added).<sup>10</sup>

16. Reading the *Planning Act*, PPS, and City OP together from the perspective of natural heritage protection, NCK submits that the approval test before the Tribunal boils down to a straightforward question: has the Appellant demonstrated that its proposal does not involve development or site alteration in a PSW/SCW, and will not cause negative impacts upon the on-site or adjacent significant natural features or their ecological functions? For the reasons described below, the straightforward answer to this question is “no.” The approval test under the *Planning Act* has not been satisfied by the Appellant.

### **3. Tribunal’s Independent Jurisdiction Under the Planning Act**

17. Irrespective of what the Ministry of Environment, Conservation and Parks (“MECP”), Ministry of Natural Resources and Forestry (“MNR”) or the Cataraqui Region Conservation Authority (“CRCA”) may do or decide in the future under their respective statutes in this case (e.g., MECP issuance/refusal of a Record of Site Condition (“RSC”) or Certificate of Property Use (“CPU”)), the Tribunal is not bound by these agencies’ current or anticipated position on the proposed development. The Tribunal should not indirectly defer or delegate the

<sup>8</sup> Ex. 1F – JBD, Vol. 6, Tab D: *Planning Act*, s. 2, and s. 2.1(2). The extensive public comments received by the City in opposition to the Appellant’s proposed development are summarized and/or attached to the staff’s 2022 report to the Planning Committee: see Ex. 1E – JBD, Vol. 5, Tab B: Staff Recommendation Report (PC-22-031), PDF pp 274-795. Additional public concerns and comments in relation to the development proposal are contained in Ex. 6: Consolidated Brief of Participant Statements; and Ex. 10, Witness Statement of M. Dorfman (“Dorfman WS”), Attachment C, NCK Submission to Kingston Council, PDF pp 37-41.

<sup>9</sup> NCK BOA, Tab 3: *Acchione v Caledon (Town)*, 2022 LNONLT 144, para 27.

<sup>10</sup> NCK BOA, Tab 1: *Northgate Land Corp v Waterloo (City)*, 2023 LNONLT 650, paras 24-25.

planning issues in dispute to these other agencies, and instead must make its own independent decision reflecting its statutory jurisdiction, the applicable legislative and policy framework, and the hearing record on whether the proposed development should be approved or rejected under the *Planning Act*.<sup>11</sup>

18. Moreover, the Tribunal's decision can only be based on admissible, relevant, and probative evidence received during the hearing, not on the Appellant's speculative (or unduly optimistic) predictions about what may happen in future permitting or approvals processes administered by the MECP, MNRF, or CRCA (if the appeals are allowed by the Tribunal).
19. While the Appellant presented witnesses from the MNRF and CRCA who appeared under summons, the Appellant failed or refused to call a witness from the MECP despite the Appellant's considerable reliance upon the RSC/CPU process as the means for addressing outstanding concerns about the nature, details, efficacy, and implementation of the conceptual remediation plan for the subject property. While the Appellant's witness Kevin Shipley testified about his contact to date with MECP staff about the RSC/CPU process,<sup>12</sup> his summary of what MECP staff apparently communicated to him about the proposed remediation plan is hearsay and should be given no weight by the Tribunal.

#### **4. Mere Apprehension is not Cogent Evidence**

20. The Tribunal (otherwise constituted) has consistently found that "mere apprehension of an adverse impact" is insufficient to overturn a municipal planning decision without "compelling evidence", "weighty evidence", "solid foundation", or supporting technical evidence.<sup>13</sup> In this case, both Mr. Shipley and the Appellant's witness Rob Snetsinger confirmed during cross-examination<sup>14</sup> that they did not conduct any analytical testing to substantiate the hypothesis that on-site contaminants are currently being transported through surface water flow into the Cataraqui River. Instead, these witnesses provided speculative comments that there is a "risk" or "threat" that this off-site movement may happen under severe storm events. This conjecture amounts to mere apprehension from these witnesses and does not provide a rational basis for the Tribunal to overturn the City's refusal to approve the development.

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<sup>11</sup> NCK BOA, Tab 5: *Burleigh Bay Corporation v North Kawartha (Township)*, 2017 CanLII 66321 (ON LPAT), para 168; Tab 6: *Miller Paving Ltd. v McNab-Braeside (Township)*, 2015 CarswellOnt 16697 (OMB), paras 132-135.

<sup>12</sup> Examination of K. Shipley (Feb. 21, 2024).

<sup>13</sup> NCK BOA, Tab 7: *Waterloo (City) By-law No. 2013-057, Re*, 2014 CarswellOnt 1354 (OMB), 79 OMBR 273, para 113; NCK BOA, Tab 8: *Clements v. Ontario (MNRF)*, 2021 CarswellOnt 19432 (OLT) para 153; NCK BOA, Tab 9: *Meloche v. Windsor (City)*, 2015 CarswellOnt 10264 (OMB) paras 14-15.

<sup>14</sup> Examination of K. Shipley (Feb. 21-22, 2024); Examination of R. Snetsinger (Feb. 20, 2024).

## B. Submissions on Hearing Issues 1 to 11

### 1. No Development or Site Alteration is Permitted in the PSW

21. NCK concurs with the City's submission that PPS Policy 2.1.4 contains an "absolute prohibition" on development or site alteration anywhere within the Greater Cataraqui Marsh PSW, including the portion located upon the subject property. Given the extensive loss of wetlands throughout southern Ontario to date,<sup>15</sup> it is imperative that planning authorities – including the Tribunal – fully protect all remaining PSW's by strict application of the Policy 2.1.4 prohibition when considering *Planning Act* applications. This is particularly true in light of the substantial ecological functions and socio-economic benefits provided by wetlands:

They are among the most productive and biologically diverse habitats on the planet. By protecting wetlands, we contribute to the protection of plant and animal species, and surface water and groundwater resources.<sup>16</sup>

22. NCK adopts and relies upon the wetlands caselaw cited in the City's submissions, and notes that the Tribunal has previously rejected residential development in and around PSWs:

The wording of s.2.1.4 and s. 2.1.8 of the PPS are clear – there can be no development in a PSW and there can be no development in the lands adjacent to a PSW unless the ecological function has been evaluated and there is no negative impact (emphasis added).<sup>17</sup>

23. The MNRF's Natural Heritage Reference Manual ("NHRM") provides further guidance to planning authorities on how to ensure consistency with the PPS's wetland prohibition:

[P]lanning authorities shall protect wetlands by:

■ not permitting development and site alteration in significant wetlands in Ecoregions 5E, 6E and 7E and in significant coastal wetlands along all of the Great Lakes, their connecting channels and certain portions of their tributaries...

■ not permitting development and site alteration on adjacent lands unless their ecological functions have been evaluated and it is demonstrated that there will be no negative impacts on the significant wetland or significant coastal wetland feature or its ecological function...

In Ecoregions 5E, 6E and 7E of the province and for coastal wetlands, this means no loss of area or function of significant wetlands or significant coastal wetlands due to development or site alteration (emphasis added).<sup>18</sup>

24. Similar guidance was provided at the hearing by NCK's land use planner Mark Dorfman, who confirmed that "the provincial interest is that development and site alteration shall not be permitted in significant wetlands and significant coastal wetlands", and that "the Provincial

<sup>15</sup> NCK Cross-examination ("Cr. Ex.") of C. Warren (Feb. 15, 2024); Ex. 3 - Brief of Documents of G. Kauffman, Tab 1: MNRF NHRM, PDF pp 72-73 (high loss of coastal wetlands in Great Lakes Basin, and loss of 68% of original wetlands south of the Precambrian Shield due to encroachment, land clearance, draining, and filling).

<sup>16</sup> Ex. 3 - Brief of Documents of G. Kauffman, Tab 1: MNRF NHRM, PDF p 73.

<sup>17</sup> NCK BOA, Tab 5: *Burleigh Bay Corp. v North Kawartha (Township)*, 2017 CanLII 66321 (ON LPAT), para 131.

<sup>18</sup> Ex. 3 - Brief of Documents of G. Kauffman, Tab 1: MNRF NHRM, PDF page 72.

Significant Wetland on the subject property is also a Significant Coastal Wetland.”<sup>19</sup> NCK witness Grant Kauffman, who was qualified as an expert in ecology and natural heritage assessment, also concluded that “the proposed redevelopment is not consistent with s. 2.1, Natural Heritage, of the PPS 2020; in particular, ss. 2.1.4(a) and (b) related to provincially significant wetlands (PSWs) and significant coastal wetlands.”<sup>20</sup>

25. Despite Policy 2.1.4, the Appellant’s original and “alternative” development concepts both propose capping, filling, and converting the on-site PSW to an urbanized meadowland. In addition, while the “alternative” concept (unveiled by the Appellant mere weeks before the hearing) attempts to withdraw the Phase 4 building outside of the delineated PSW boundary, there is still development (i.e. fire access road) that is proposed within the PSW boundary. Accordingly, both development concepts are inconsistent with Policy 2.1.4 and cannot be approved by the Tribunal as a matter of law.
26. For the purposes of Policy 2.1.4, it is immaterial that the remainder of the Greater Cataraqui Marsh would still be classified as a PSW if the wetlands on the subject property are destroyed in the manner proposed by the Appellant. Developing or altering even just 2 ha of the PSW flies in the face of the “no means no” prohibition in Policy 2.1.4, which does not contain any express or implied exceptions for brownfield remediation, as confirmed by Appellant witness James Bar who opined that a Minister’s Zoning Order (MZO) would be needed to get around the Policy 2.1.4 prohibition.<sup>21</sup> No MZO has been issued in this case.
27. On behalf of the Appellant, Mr. Snetsinger claimed that given the PPS definition of “negative impacts” applicable to natural heritage features,<sup>22</sup> only development or site alteration that wholly removes the features’ significance would be contrary to the PPS. NCK submits that this interpretation should be rejected by the Tribunal for various reasons.
28. First, Mr. Snetsinger did not provide any caselaw or documents which support his interpretation of “negative impacts.” Second, Mr. Snetsinger was qualified to provide opinion evidence in biology, not land use planning or environmental planning. Third, during his examination-in-chief, Mr. Dorfman strongly disagreed with Mr. Snetsinger’s interpretation of “negative impacts.”<sup>23</sup> Fourth, Mr. Kauffman also vigorously disputed Mr. Snetsinger’s PPS

<sup>19</sup> Ex. 10 – Dorfman WS, para 38(e), PDF p 15; Examination of M. Dorfman (Mar. 7, 2024).

<sup>20</sup> Ex. 10 – Kauffman WS, para 6, PDF p 81; Examination of G. Kauffman (Mar. 5, 2024).

<sup>21</sup> NCK Cr. Ex. of J. Bar (Feb. 14, 2024).

<sup>22</sup> Ex. 1G - Joint Book of Documents (“JBD”), Vol. 7: Provincial Policy Statement (“PPS”), PDF page 72.

<sup>23</sup> Examination of M. Dorfman (Mar. 7, 2024).

approach.<sup>24</sup> Fifth, the “no negative impacts” criterion in the PPS is only relevant to Policies 2.1.5 (non-wetland natural features) and 2.1.8 (lands adjacent to natural features) but plays no role in the interpretation or application of the Policy 2.1.4 prohibition.

29. Appellant’s witness Mike Dakin stated that it was the CRCA that proposed to the Appellant that the on-site PSW should be remediated rather than be left intact.<sup>25</sup> NCK submits that this unsolicited advice from the CRCA is both disappointing and unfortunate, especially given the CRCA’s traditional role in safeguarding wetlands and floodplains within the watershed. Moreover, as noted in the City’s submissions, the CRCA seems to be labouring under the erroneous misconception that it has regulatory authority to permit development or site alteration in a PSW that is inconsistent with the PPS. In the circumstances, it is unclear why the CRCA abandoned its well-founded opposition to the proposed development<sup>26</sup> and now supports the destruction of the on-site PSW instead of insisting upon the timely cleanup and restoration of the PSW (e.g., ex situ remediation).
30. In any event, the CRCA’s apparently well-intentioned but ultimately misguided suggestion seems to be premised on an incomplete or mistaken understanding of current baseline conditions at the subject property. As described below in more detail, although the subject property contains numerous contaminants, the available evidence indicates the contaminants are presently being sequestered and/or biologically treated on-site. In the result, there is no persuasive evidence that the contaminants are currently being discharged by groundwater or surface water into the Cataraqui River. While Mr. Dakin claimed that “science” warrants remediation of the on-site PSW, NCK submits the actual technical and scientific evidence at the hearing does not support the type of remediation (i.e. capping/filling/conversion) currently being advocated by the Appellant. At present, the on-site wetland is performing its full range of ecological services (including contaminant containment) and should not be destroyed under any circumstances given PPS Policy 2.1.4.
31. Similarly, the Tribunal should give no credence to the Appellant’s conceptual wetland compensation project that is intended to offset or compensate for the loss of the PSW located on the subject property. First, Policy 2.1.4 – and the PPS itself – does not entrench, discuss, or even mention wetlands compensation or other off-setting mechanisms for the purposes of allowing development or site alteration that is otherwise prohibited. Second, there is

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<sup>24</sup> Examination of G. Kauffman (Mar. 5, 2024).

<sup>25</sup> Examination of M. Dakin (Feb. 15, 2024).

<sup>26</sup> Ex. 1B – JBD, Vol. 2, Tab 2R: Letter from CRCA to the City (Feb. 21, 2018).

considerable uncertainty about the details, timing, location, size, efficacy, monitoring, and significance of the compensatory wetlands.<sup>27</sup>

## 2. Safeguarding the Significant Woodland and its Ecological Functions

32. The upland area of the subject property is currently designated under the City's OP as a Significant Woodland,<sup>28</sup> based on an earlier CRCA study.<sup>29</sup> While Mr. Snetsinger asserted that this OP designation is incorrect, he nevertheless conceded that the current wooded area on-site provides ecological functions (e.g., wildlife habitat, stormwater buffer, etc.) despite the existence of invasive or non-native tree species as well as human disturbances (e.g., debris left within the "ribbon of life" zone adjacent to the river).<sup>30</sup> He also conceded that the first 30 m of woodland inland of the shoreline was significant and should be re-vegetated (not just landscaped) if remediated, but he was inexplicably prepared to defer to other parties (e.g. the City if it assumes control of the buffer) to determine what that would entail.<sup>31</sup> With respect, NCK submits that this is an abdication of Mr. Snetsinger's role as an expert.
33. Unless and until OP Schedule 8-A is changed, NCK submits that the Significant Woodland designation is the starting point for the "no negative impact" analysis required under PPS Policy 2.1.5(b), which is precisely why an OPA is required for the subject property. The Appellant's planning witness Mark Touw acknowledged this point when he stated that the on-site Significant Woodland and PSW receive "some" PPS protection, but he insisted that the proposed development will "re-create" the "role" of the Significant Woodland within the "ribbon of life" buffer and wetlands compensation is being proposed.<sup>32</sup>
34. More generally, the Appellant's planning witness Tim O'Brien confirmed that woodlands provide various ecological functions (including mitigation of climate change impacts).<sup>33</sup> Despite these important functions (e.g., soil erosion prevention, nutrient cycling, hydrologic cycling, flood and erosion reduction, clean air and carbon storage, wildlife habitat, etc.) the MNRF NHRM outlines the extensive loss of woodlands.<sup>34</sup>

<sup>27</sup> NCK Cr.-Ex. of M. Dakin (Feb. 15, 2024); NCK Cr.-Ex. of C. Coughlin (Feb. 16, 2024).

<sup>28</sup> Ex. 1H - JBD, Vol. 8, Tab 8G, OP Sch. 8-A, Natural Heritage Area 'B'; Ex. 10 - Kauffman WS, para 16, PDF p 84.

<sup>29</sup> Ex. 3 - Brief of Documents of G. Kauffman, Tab 3: CRCA Natural Heritage Study.

<sup>30</sup> NCK Cr.-Ex. of R. Snetsinger (Feb. 21, 2024).

<sup>31</sup> Examination of M. Touw and NCK Cr.-Ex. of R. Snetsinger (Feb. 20-21, 2024).

<sup>32</sup> Examination of M. Touw (Feb. 23, 2024).

<sup>33</sup> NCK Cr.-Ex. of T. O'Brien (Feb. 6, 2024).

<sup>34</sup> Ex. 3 - Brief of Documents of G. Kauffman, Tab 1: MNRF NHRM, Table 7-1, PDF pp 79-81.

35. Despite the above-noted ecological benefits of woodlands, the Appellant is proposing to wholly remove (and not fully replace) all trees, brush, and vegetation that currently exist on the upland portion of the subject property, including the 30-60 m riparian buffer. Mr. Snetsinger accepted Mr. Kauffman's calculations that there will be a net loss of approximately 5.5 ha of on-site woodland if the proposed development is approved.<sup>35</sup> This translates into a loss of over 1,800 mature trees<sup>36</sup> (and their ecological functions). Mr. Snetsinger agreed that the woodland has now evolved into a deciduous forest (FOD under the Ecological Land Classification system) since canopy closure is now more than 60%.<sup>37</sup>
36. At the same time, the Appellant presented a conceptual landscaping plan that is devoid of implementation details but proposes selective tree plantings at unknown locations to unspecified depths (despite the cap presence) within the 30-60 m "ribbon of life" zone along the river shoreline. However, Mr. Snetsinger acknowledged that planting a small handful of trees in this narrow strip of land will not fully recreate the nature and extent of the wildlife habitat currently provided by the on-site woodland. Mr. Kauffman concurred with this view. Mr. O'Brien also confirmed that the re-planted buffer will not contain 1,800+ mature trees.<sup>38</sup>
37. Despite his dubious interpretation of "negative impact" (see above), Mr. Snetsinger contended that the complete destruction of the on-site Significant Woodland is not a negative impact as per Policy 2.1.5. Mr. Kauffman<sup>39</sup> and Mr. Dorfman<sup>40</sup> strongly disagreed with Mr. Snetsinger's claim, and NCK submits that the Tribunal should prefer their commonsense approach and expert opinion on this point. By any objective standard, the complete removal of the Significant Woodland – and its proposed replacement by a small number of trees in the narrow "ribbon of life" – constitutes a "negative impact" within the meaning of the PPS.<sup>41</sup>
38. Mr. Snetsinger and Mr. Kauffman testified about the criteria<sup>42</sup> set out in the MNRF NHRM for assessing woodland significance under the PPS, and both agreed a woodland is significant if it meets just one of the criteria in the NHRM.<sup>43</sup> While Mr. Snetsinger argued that

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<sup>35</sup> NCK Cr.-Ex. of R. Snetsinger (Feb. 21, 2024).

<sup>36</sup> Ex. 1B – JBD, Vol. 2, Tab 14: Forest Inventory for Davis Tannery Site (2017).

<sup>37</sup> NCK Cr.-Ex. of R. Snetsinger (Feb. 21, 2024).

<sup>38</sup> NCK Cr. Ex. of T. O'Brien (Feb. 6, 2024).

<sup>39</sup> Examination of G. Kauffman (Mar. 5, 2024).

<sup>40</sup> Examination of M. Dorfman (Mar. 7, 2024).

<sup>41</sup> NCK BOA, Tab 10: *Losar Developments Inc. v Aurora (Town)*, 2021 CanLII 6225 (ON LPAT), paras 30-34 (residential development in a Significant Woodland was rejected because tree removal constitutes a "negative impact", details of the restoration plan were left to the future, and tree re-plantings as mitigation will take years).

<sup>42</sup> Ex. 3 - Brief of Documents of G. Kauffman, Tab 1: MNRF NHRM, Table 7-2, PDF pp 83-85.

<sup>43</sup> NCK Cr.-Ex. of R. Snetsinger (Feb. 20, 2024); Examination of G. Kauffman (Mar. 5, 2024).

none of the criteria were satisfied by the woodland on the subject property, Mr. Kauffman explained why the woodland did, in fact, meet one or more of the prescribed criteria.

39. For example, in relation to the ecological function criteria in Table 7-2 of the NHRM, Mr. Kauffman highlighted the functional interrelationship between the on-site woodland and the adjoining PSW.<sup>44</sup> Accordingly, he concluded that the woodland satisfies the NHRM's criterion on the proximity of the woodland to other significant natural heritage features.<sup>45</sup>
40. In relation to the woodland size criteria, Mr. Snetsinger stated that in Kingston's urban area, a woodland must be greater than 20 ha to be significant.<sup>46</sup> However, he focused only on the woodland on the 12.2ha subject property and asserted this area is too small to meet the 20 ha threshold.<sup>47</sup> The MNRF NHRM indicates it is inappropriate to assess a single property in isolation from its surroundings. Because natural features can transcend property boundaries, one must take a landscape approach and consider natural heritage features on adjacent or nearby lands to ensure protection of biodiversity and connectivity in accordance with PPS Policy 2.1.2.<sup>48</sup> It does not appear Mr. Snetsinger gave adequate consideration to the large contiguous wooded areas (e.g., Belle Park and Belle Island) which, on the basis of OP Schedule 8-A, appears to be greater than 20 ha in conjunction with the subject property.

### **3. Protecting Groundwater, Surface Water, and Hydrologic Functions**

40a. The hearing evidence showed fundamental problems and outstanding issues with the Appellant's: (1) hydrogeological characterization of the site; (2) assessment of contamination sources; and (3) remediation strategy for the PSW.

#### ***a. Problems with Appellant Hydrogeological Characterization of Site***

##### **i. Appellant Conducted No Significant Hydrogeological Characterization of Site**

41. The evidence of Mr. Shipley is that: (1) sufficient hydrogeological characterization of the site was conducted in advance of applying for planning approvals; and (2) hydrogeological work conducted by XCG provided useful information for assessing how the proposed

<sup>44</sup> Ex. 10 - Kauffman WS, para 13, PDF p 83.

<sup>45</sup> Examination of G. Kauffman (Mar. 5, 2024).

<sup>46</sup> Examination of R. Snetsinger (Feb. 20, 2024).

<sup>47</sup> Ibid.

<sup>48</sup> Ex. 3 - Brief of Documents of G. Kauffman, Tab 1: MNRF NHRM, Table 7-2, PDF p 141; NCK BOA, Tab 5: *Burleigh Bay Corporation v North Kawartha (Township)*, 2017 CanLII 66321 (ON LPAT), para 57 (Policy 2.1.2 applies even where the natural heritage system has not been formally designated).

development and associated risk management and remediation measures, such as capping, may affect groundwater conditions on the subject lands.<sup>49</sup>

42. NCK witness, Chris Rancourt, disagreed. He: (1) has over 20 years of hydrogeological experience; (2) was qualified to give opinion evidence as a professional geoscientist with expertise in hydrogeology, hydrology, site assessment, and remediation; (3) has conducted over 100 Phase 1 and 2 ESAs under *EPA O. Reg. 153/04*; (4) has been involved in projects in the Kingston/Rideau Canal area, including a contaminated coastal wetland project at Belle Park; and (5) is certified by MNRF as a Wetlands Assessor under the OWES program.<sup>50</sup>
43. Mr. Rancourt's evidence was: "To date, no significant hydrogeological characterization has been conducted on behalf of the proponent to develop a defensible conceptual understanding of the current hydrogeologic and hydrologic system and how it may be altered or negatively impacted as a result of the proposed development".<sup>51</sup> What was needed, but missing from the XCG work, included:
- Hydraulic/hydrogeological data in the wetland including vertical gradients conducted over seasonal changes and events such as drying and flooding because currently there is limited information on where water is going, particularly in the wetland;
  - Meteorological data to develop a water budget and infiltration capacities pre-and post development;
  - Sufficient data to prepare a numerical model to evaluate cause and effect outcomes – specifically with respect to contaminant release;
  - A model that is able to predict the fate of contaminants, which will be very difficult to do in this case with respect to predicting pH changes, but necessary, because the proposal is to cap / kill the wetland and to the extent the wetland is responsible for the pH buffering that is currently managing the contaminants in the wetland, removing the wetland could have significant impacts.<sup>52</sup>
44. Mr. Rancourt testified the rationale for this work is safety. The wetland sequesters metals/other contaminants because of pH buffering but if the proposal to remove the wetland by capping changes that capacity, contaminants will be mobilized into the river. Contrary to paragraphs 197, 203, 224, 225, and 237 of the Appellant's submissions, he was unequivocal that: "The danger of the proposed development in the absence of an appropriately defensible hydrogeologic and hydrologic model is the unknown potential effect of post

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<sup>49</sup> Ex. 11, Brief of Appellant Reply Witness Statements, Tab 5, K. Shipley ("Shipley Reply"), para 30, pp 298-299.

<sup>50</sup> Ex. 10, Rancourt WS, pp 109-112; Examination of C. Rancourt (Mar. 6, 2024).

<sup>51</sup> Ex. 10, Rancourt WS, para 7, pp 105-106. Mr. Bar confirmed the City did not retain a hydrogeologist during the planning application process: NCK Cr. Ex. of J. Bar (Feb. 14, 2024).

<sup>52</sup> Examination of C. Rancourt, Mar. 6, 2024.

development on the transport of contaminants to the Cataraqui River environment”,<sup>53</sup> and that Appellant’s work “does not provide the necessary information to evaluate cause and effect of disturbing the site”.<sup>54</sup> Mr. Rancourt also testified: (1) there was no technical/environmental reason why a complete hydrogeological study could not have been submitted to the City with the development applications; and (2) Appellant’s hydrogeological evidence is conflicting, missing, or simply inadequate.

**(A) Appellant Evidence on Groundwater Flow Direction is Contradictory**

45. Mr. Shipley sought to refute Mr. Rancourt’s evidence that no significant hydrogeological characterization of the site had been conducted by noting while there was no report entitled “Hydrogeological Characterization Study” the table of contents of the XCG Phase 2 ESA was the equivalent. Mr. Shipley took the Tribunal through the table of contents headings noting, for example, there was a heading on groundwater flow direction.<sup>55</sup>
46. There are several groundwater flow directions in the evidence, but Mr. Rancourt pointed out that they conflict. He took the Tribunal to two groundwater flow direction figures. The first, Figure 8 in the 2019 XCG Phase 2 ESA, shows in the southern portion of the site the XCG “inferred groundwater flow direction” is to the east.<sup>56</sup> In the north in the vicinity of the PSW, inferred groundwater flow direction is both to the east and to the west despite the lack of groundwater contour information for much of the wetland.<sup>57</sup>
47. The second, Figure 5 in 2013 CRA Phase 2 ESA,<sup>58</sup> shows a different, largely opposite, indication of groundwater flow direction than XCG Figure 8. Figure 5 shows “interpreted direction of groundwater flow” from the south of the site is to the north. In the north, Figure 5 presents a little more contour information for the PSW for the purpose of determining groundwater flow direction (groundwater flow is perpendicular to groundwater contours) and the PSW appears to be the result of groundwater discharge. Thus, it is clear there is insufficient groundwater contour information for the PSW, the most contaminated portion of the site, and XCG and CRA are at odds on groundwater flow direction. This conflict

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<sup>53</sup> Ex. 10, Rancourt WS, para 8, p 106.

<sup>54</sup> Ex. 10, Rancourt WS, para 7, p 105.

<sup>55</sup> Examination of K. Shipley (Feb. 22, 2024).

<sup>56</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 245. See also NCK Compendium of Selected Exhibit Excerpts to Written Submissions, p 4 (“Compendium”).

<sup>57</sup> Examination of C. Rancourt (Mar. 6, 2024).

<sup>58</sup> Ex. 1J, JBD, Vol. 10, Doc. 10z, p 2314. See also Compendium, p 5.

suggested to Mr. Rancourt that XCG lacks a defensible conceptual hydrogeological model for understanding the site and has significant implications for the proposal to cap the PSW.

***(B) Appellant Lacks Information on Vertical Hydraulic Gradients***

48. Mr. Shipley testified XCG did characterize the site's hydrogeology, including determining hydraulic gradients.<sup>59</sup> Knowing the hydraulic gradient is important because it is the driving force that causes groundwater to move in a particular direction. The XCG Phase 2 ESA states that based on groundwater level measurements, horizontal hydraulic gradient measurements were obtained. However, the report also says: "Vertical gradients were not calculated because only shallow groundwater was investigated".<sup>60</sup>
49. For the purposes of ensuring consistency with PPS Policies 2.2.1 and 2.2.2, the Appellant needed data on both horizontal and vertical gradients to evaluate contaminant movement arising from the proposal to grub, excavate, and cap the site, including the wetland.<sup>61</sup> The lack of vertical hydraulic gradient information undermines the adequacy and reliability of the XCG hydrogeological characterization.

***(C) Appellant Data on Groundwater Elevation / Water Table Levels Missing for Wetland***

50. Comparing groundwater elevations between monitoring well locations determines direction/gradient of groundwater flow. Unexplained contradictions in the Appellant's groundwater flow direction information, and outstanding gaps in its hydraulic gradient evidence in the wetland, are due to lack of data on groundwater elevation/water table levels. This affects whether capping the wetland to stop contaminant release will have the opposite effect and lead to releases to the river by lowering the water table. Knowing the water table level should have been a primary objective in the hydrogeological characterization. But this information is absent.<sup>62</sup>
51. Mr. Shipley suggested the XCG Phase 2 ESA does report on groundwater table levels because it says: "The groundwater elevations were calculated from the surveyed elevations of each monitoring well TOP and the measured depth to groundwater below the monitoring well TOP".<sup>63</sup> However, this is not true for the wetland. First, XCG Figure 8 shows only

<sup>59</sup> Examination of K. Shipley (Feb. 22, 2024).

<sup>60</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, pp 155, 205.

<sup>61</sup> Ex. 10, Rancourt WS, para 7, p 106.

<sup>62</sup> Examination and Cr.-Ex. of C. Rancourt (Mar. 6, 2024).

<sup>63</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, pp 155, 205. Examination of K. Shipley (Feb. 22, 2024).

historical monitoring wells in the wetland (P-series installed by ESG in 2007).<sup>64</sup> Second, the XCG Phase 2 ESA says only historical monitoring wells located and found in good condition were included in the groundwater monitoring program and groundwater elevations set out in Table 4 of the report.<sup>65</sup>

52. Third, XCG reliance on Table 4 is misplaced considering what that Table lacks.<sup>66</sup> Appellant counsel put Table 4 to City witness Rob West on groundwater table elevations to ascertain from him whether that data showed a particular area being inundated with water as an indicator of the area being wetland. Mr. West's response was data were missing from the areas in question. Piezometers were within the wetland but there was no water level information. His firm relied on the XCG Phase 2 ESA to provide such data but there was not enough information to determine water table elevations in the wetland.<sup>67</sup>
53. Fourth, Table 4 confirms Mr. West's observations in conjunction with XCG Figure 8. The P series of monitoring wells identified in Table 4 are mostly found in the wetland as confirmed by XCG Figure 8.<sup>68</sup> However, review of the wetland's western and eastern cells using Table 4 shows these monitoring wells produced no data on groundwater elevations (in the west monitoring wells P5, P10-P12; in the east monitoring wells P14-P19). The only P series monitoring wells producing data (P1-P3, and P8) are not in the wetland.
54. Mr. Rancourt also testified: (1) depending on where a monitoring well is situated/what it is screening, even data showing extreme water level variability in Table 4 may be a function of water pressure, not the water table; and (2) the monitoring well Appellant counsel took Mr. Rancourt to (MW-2) that showed extreme variability was not in the wetland.<sup>69</sup> Taken together, the above evidence makes doubtful: (1) the adequacy of groundwater elevation/water table level data and assessment contained in the XCG Phase 2 ESA; and (2) reliance on such data for predicting the effects grubbing, excavation, and capping will have on contaminant transport and mobility from the wetland to the river environment.

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<sup>64</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 245. See also Compendium, p 4.

<sup>65</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, pp 152-153.

<sup>66</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 154. Compendium, p 6.

<sup>67</sup> Appellant Cr.-Ex. of Rob West (Feb. 28, 2024).

<sup>68</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 245. Compendium, p 4.

<sup>69</sup> Appellant Cr.-Ex. of C. Rancourt (Mar. 6, 2024).

***(D) Groundwater Quality Data Not as Extensive as Appellant Suggests***

55. Inadequate groundwater quality information impacts hydrogeological characterization. Mr. Shipley states that the hydrogeological investigations XCG conducted included over 40 monitoring wells and over 90 groundwater samples collected and analyzed for a wide range of parameters and this groundwater quality data, along with other data, provide useful information for assessing how the proposed development, risk management/remediation measures, such as capping, may impact groundwater conditions.<sup>70</sup>
56. Unfortunately, the adequacy of XCG's groundwater quality data is subject to the same level of doubt as its Table 4 groundwater elevation / water table level data. Mr. Shipley admitted<sup>71</sup> that Table 2 (a summary of monitoring well construction details) shows that of the 31 historical monitoring wells XCG planned on obtaining additional data from on groundwater contaminants in 2018, it was not able to do so from 18 of the wells.<sup>72</sup> That is, XCG could not obtain new data from 58 percent of the historical monitoring wells it planned on obtaining such data from on groundwater contaminants. XCG was only able to obtain new data from 14 of its 2018 installed wells and 13 historical wells for a total of 27. Thus, on a 30 acre site, XCG had less than one new or historical monitoring well per acre producing new or additional data on groundwater contaminants. Sixteen of 46 monitoring wells could not be located, two others were damaged, and one new one (MW18-14) was never installed by XCG. As none of these 19 monitoring wells could be sampled, they produced no new or additional data on groundwater contaminants for the XCG Phase 2 ESA. That is, in 2018 XCG was only able to obtain new or additional groundwater contaminant data from roughly 60 percent of its total of 46 new or historical monitoring wells.<sup>73</sup>
57. Furthermore, the P series of historical monitoring wells identified in Table 2 are those in the wetland as confirmed by XCG Figure 8.<sup>74</sup> Review of the PSW's western and eastern cells using Figure 8, Table 2, and Mr. Shipley's admissions, reveals these monitoring wells produced no new data on groundwater contaminants in 2018 (in the western cell monitoring wells P5, P10-P12 and in the eastern cell monitoring wells P14-P19).<sup>75</sup> This level of gaps in XCG sampling from the monitoring wells casts doubt on the ability of the Phase 2 ESA to

<sup>70</sup> Ex. 11, Shipley Reply, para 30, pp 298-299.

<sup>71</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>72</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 146. See also Compendium, p 7.

<sup>73</sup> See also Ex. 1J, JBD, Vol. 10, Doc. 10c, pp 141-142 (deviations from sampling and analysis plan).

<sup>74</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 245. See also Compendium, p 4.

<sup>75</sup> See also Ex. 1J, JBD, Vol. 10, Doc. 10c, pp 141-142 (deviations from sampling and analysis plan).

provide what Mr. Shipley describes as useful information for assessing how the proposed development and remediation measures, such as capping, may impact groundwater conditions on the subject lands.

**ii. Appellant Lack of Defendable Hydrogeological Model for Characterizing Site Underscores Prematurity in Seeking Approval of Development Applications**

58. Problems associated with the Appellant's: (1) conflicting groundwater flow direction information; (2) lack of vertical hydraulic gradient calculations; and (3) inadequate water table level/groundwater quality data, underscore the prematurity of the development application, particularly regarding the fate of the PSW. As Mr. Rancourt put it, the hydrogeological work performed did not demonstrate a very robust technique.<sup>76</sup>

**(A) Appellant Proposal to Cap Wetland Risks Contaminant Release to River**

59. The Appellant's proposal removes the PSW by capping it without knowing what will happen to the contaminants therein and where they will go.<sup>77</sup> Thus, it is premature to talk about capping the PSW because it could interfere with the current contaminant sequestering function (contamination is highest in the western wetland cell and lower as you move eastward toward the river). In the absence of the PSW, pH buffering of contaminants would not exist. Moreover, contrary to the assertion in paragraph 217 of the Appellant's submissions, Mr. Rancourt did not agree that sequestering does not stop all contaminants from leaving the wetland. His testimony was that we do not have that information and that the lion's share of the contaminants on-site are in the classes of contaminants in the studies he referred to that would be stopped by the presence of the wetland.<sup>78</sup> In this regard, Mr. Rancourt discussed two studies that address: (1) the role wetlands play in sequestering contaminants through pH neutralization that results in immobilization of contaminants, such as heavy metals; and (2) release of metals from a wetland, which are otherwise stabilized, as a result of changing the pH due to disturbances such as creation of drying or acidifying conditions. The first study states:

In wetlands where the soil remains flooded for most of the year, metals are immobilized and largely prevented from leaching and surface runoff losses. However, after drainage and oxidation has occurred, soluble metal concentrations increase, especially in wetlands that become acidic upon oxidation, as is typical of many coastal wetlands. ....

Wetlands are potentially effective traps, or sinks, for metals due to their relative immobility in flooded soils. However, changes in hydrologic conditions, such as drainage or drought, alter pH, which then has major effects on metal forms and concentrations. Also, drainage increases

<sup>76</sup> Appellant Cr.-Ex. of C. Rancourt (Mar. 6, 2024).

<sup>77</sup> Ex. 10, Rancourt WS, para 8, p 106.

<sup>78</sup> Appellant Cr.-Ex. of C. Rancourt (Mar. 6, 2024).

microbial activity and organic matter decomposition, which releases metals bound to organic materials thereby increasing their availability. To minimize potential risks of metals to biological organisms, wetlands should remain flooded to decrease metal availability and export.<sup>79</sup>

60. The second of the two studies referred to by Mr. Rancourt states:

Wetlands convert many dissolved metals to insoluble precipitates which are unavailable for biological uptake. When wetlands are dried/re-flooded, metals can be released.

....  
Under anoxic conditions typical of wetlands...many potentially toxic trace metals (e.g., Cu and Pb) become sequestered in sediments as sparingly-soluble metal sulfide precipitates, which are largely unavailable for biological uptake.... However, under oxic conditions sulfides become unstable and metals can be released.<sup>80</sup>

61. The sequestering function performed by wetlands, described in the two studies, is reflected in the function observed being performed by the PSW on the subject lands. The XCG Phase 2 ESA summary of a 1977 survey of heavy metals on the site noted:

It is noted in the report that the marsh on the northern portion of the site possibly acts as a sink for heavy metals. The humic substances and other organic materials normally present in a marsh will bind metals as will the roots of the Typha (common bullrush cattail) that is present in the marsh.<sup>81</sup>

62. Dr. Rebecca Rooney's evidence,<sup>82</sup> is similar to Mr. Rancourt's, and the 1977 survey. She emphasized the importance cattails play in the PSW because the majority of the marsh is dense cattail that can phyto-remediate (i.e., sequester contaminants out of the environment and keep them from reaching the river), due to an ability to: (1) accumulate metals in their root system; and (2) use their thick root network to stabilize soil so water will not rush through and cause erosion and sedimentation to the river.

63. Mr. Rancourt says capping would lower the water table leading to loss of the sequestering-pH buffering function the wetland provides by exposing contaminants to oxygen:

In my professional opinion, there are a number of important questions to answer that have not been addressed by the proponent to date. These include:

- Grubbing (Removal of trees and vegetation) will lower the groundwater table – how will this impact the Provincially Significant Wetland and contaminant release?
- Capping with low permeable soil will lower the groundwater table - how will this impact the Provincially Significant Wetland and contaminant release?
- How will a proposed impermeable perimeter impact the Provincially Significant Wetland? - how and where will the groundwater flow be redirected? Effects?
- Will the lowering of the water table result in progressive loss of the PSW and its protective role in sequestering of contaminants?

<sup>79</sup> Ex. 1J, Vol. 10, Doc. 10r, JBD, p 2144, Alan L. Wright and K.R. Reddy, Reactivity and Mobility of Metals in Wetlands, pp 2146-2147; Ex. 10, Rancourt WS, para 8, pp 106, 115.

<sup>80</sup> Ex. 1J, Vol. 10, Doc. 10s, JBD, p 2153, Drew J. Hanson and Alex J. Horne, The Effect of Drying/Re-Flooding on Trace Metal, As and Se Fluxes in a Treatment Wetland: Addressing Growing Environmental Concerns, pp 2153-2155; Ex. 10, Rancourt WS, para 8, pp 106, 115.

<sup>81</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 432.

<sup>82</sup> Ex. 9, Tab 4, Dr. Rooney WS, p 548; Examination of Dr. Rooney (Feb. 29, 2024).

- Will the lowering of the water table introduce oxygen and acidification of the subsurface resulting in release of otherwise held metals outward into the Cataraqui River?<sup>83</sup>

64. Paragraph 231 of Appellant’s submissions states agencies were consulted on its conceptual remediation approach. However, Paul MacLatchy, City Environment Director appearing under Appellant summons, admitted the Appellant did not discuss with him what effects remediation of the PSW could have on the groundwater table.<sup>84</sup> On this same point, Valerie Minelga, also under Appellant summons, testified this was an “information gap” that had not been answered but Parks Canada would like answered as it is an important question.<sup>85</sup> Mr. Shipley agreed the potential for wetland sequestered contaminants being released to the river following changes to the site, such as through capping, is a “legitimate concern” but does not need investigation in advance of planning approvals.<sup>86</sup> Mr. Rancourt’s response was considering the problems identified above with the XCG work it is questionable whether currently available information is sufficient to justify proceeding to the next stage.<sup>87</sup>

**(B) *Unanswered Hydrogeologic Questions Do Not Merit Granting Planning Approvals***

65. Mr. Rancourt “strongly” recommended a hydrogeologic and hydrologic study was needed to answer the questions identified in paragraph 9 of his witness statement:

Since these fundamental questions remain unanswered to date, it is my opinion that from a hydrogeological perspective, granting an Official Plan Amendment and Zoning By-law Amendment is not consistent with Ontario’s Provincial Policy Statement provisions relating to maintaining and protecting linkages between and among groundwater features, surface water features, significant wetlands, related hydrologic functions, and other natural heritage features and areas.<sup>88</sup>

66. He added that: (1) the PPS policies he was referring to were PPS 2.2.1 and 2.2.2 relating to Issues 3 and 4; (2) he disagreed capping was consistent with these policies; (3) modeling work is necessary because of the presence of the PSW/SCW and PPS policies designed to protect such features even if MECP RSC regulations would not require such modeling; and (4) because of the presence of the PSW/SCW, contrary to paragraph 27 of Appellant’s submissions, he did not agree this was a typical or normal circumstance, justifying use of the holding authority.<sup>89</sup>

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<sup>83</sup> Ex. 10, Rancourt WS, para 9, p 107.

<sup>84</sup> NCK Cr.-Ex. of P. MacLatchy (Feb. 12, 2024).

<sup>85</sup> NCK Cr.-Ex. of V. Minelga (Feb. 8, 2024).

<sup>86</sup> Ex. 11, Shipley Reply, paras 32-33, pp 299-300.

<sup>87</sup> Examination of C. Rancourt (Mar. 6, 2024).

<sup>88</sup> Ex. 10, Rancourt WS, para 11, p 108.

<sup>89</sup> Examination and Cr.-Ex. of C. Rancourt (Mar. 6, 2024).

**b. Problems with Appellant Assessment of Contamination Sources**

67. Mr. Shipley opined given the risks associated with contamination on-site and in the Kingston Inner Harbour (“KIH”), not proceeding with the development, including proposed remedial measures, will allow serious ongoing environmental risks to persist, and new significant adverse effects to occur.<sup>90</sup>
68. NCK submits remediation of contamination as a justification for approving the development is without merit because Mr. Shipley’s evidence: (1) concedes there are little/no off-site impacts to the river caused by groundwater conditions on the site, particularly in the “non-sensitive area” where the Phase 1-4 buildings are largely proposed to be built; (2) relies on speculation, not studies, that erosion and sedimentation conditions on the site are a source of off-site contamination to the river; and (3) mistakenly characterizes the wetland as a source of resuspension of contaminated sediments to the river. Ironically, Mr. Shipley downplays the presence of non-aqueous phase liquids (“NAPLs”) in the “sensitive area” that **could** be released to the river along with other contaminants if the wetland, which has effectively prevented this to a significant degree, is capped as he proposes.

**i. Groundwater in Non-Sensitive Area Not a Source of Contamination to the River**

69. Appellant’s evidence states: (1) “contamination was identified across the entire property”; and (2) “the soil, groundwater, and sediment across the Subject Lands are contaminated”. The contaminants in question in groundwater include metals, VOCs, and PAHs.<sup>91</sup>
70. However, Mr. MacLatchy stated he had: “not seen evidence of an ongoing leaching issue (groundwater) from the lands within the proposed development area to the river”.<sup>92</sup> Testimony of Michael Dakin, CRCA Supervisor, was to the same effect.<sup>93</sup>
71. Mr. Shipley’s own evidence casts doubt on his statements quoted at paragraph 69, above:
- ...Metals are elemental, which means they do not break down in the environment. They can form different chemical compounds and potentially leave the site via different routes (e.g., leaching into groundwater and migrating into the river, moving with eroding soil or sediment off the site into the river, etc.), *but the evidence indicates that such processes are happening to a limited degree, with much of the contamination remaining relatively immobile in the soil and sediment on-site* (italics added).<sup>94</sup>

<sup>90</sup> Ex. 11, Shipley Reply, para 28, p 298.

<sup>91</sup> Ex. 7, Tab 5, K. Shipley Witness Statement, Nov. 8, 2023 (“Shipley WS”), para 16, p 929, and para 92, p 962; Ex. 1J, JBD, Vol. 10, Doc. 10e, Jun. 10, 2019, p 1057, 4<sup>th</sup> para; Ex. 1J, JBD, Vol. 10, Doc. 10f, Shipley letter to Patry, Mar. 10, 2020, p 1060, 6<sup>th</sup> para; Ex. 1A, JBD, Vol. 1, Tab 1d, Presentation of K. Shipley and M. Touw, Sep. 17, 2020, p 60.

<sup>92</sup> Ex. 1E, JBD, Vol. 5, Tab 2b, p 418, 2<sup>nd</sup> para; City Cr.-Ex. of P. MacLatchy (Feb. 12, 2024).

<sup>93</sup> NCK Cr.-Ex. of M. Dakin (Feb. 15, 2024). This admission is contrary to paragraph 225 in Appellant’s submissions.

<sup>94</sup> Ex. 7, Shipley WS, para 18, p 931.

72. Mr. Shipley's reply witness statement states essentially the same thing where he agrees with Dr. Rooney: "there is little evidence of contamination leaching from the wetland into groundwater and subsequently migrating to the river".<sup>95</sup> He also agreed: (1) notwithstanding large number of metals showing exceedances of MECP standards in non-sensitive area soils, there were no such exceedances for metals in non-sensitive area groundwater and metals do not present groundwater problems from that area based on XCG Phase 2 ESA<sup>96</sup>; and (2) based on 2014 ESG report, which says "no chromium was detected in groundwater collected near the former Davis Tannery property shore, demonstrating that the former tannery site does not act as a continuing source of contamination" contaminants in groundwater are not going to the river.<sup>97</sup>
73. Mr. Shipley agreed with respect to VOCs, notwithstanding exceedances identified for benzene and toluene in soils in a portion of the western half of the non-sensitive area such that these substances were retained as contaminants of concern in soil, there was just one exceedance of benzene in groundwater in a single well in the site's non-sensitive area.<sup>98</sup>
74. Mr. Shipley further agreed with respect to PAHs, notwithstanding exceedances were identified for all analyzed PAHs in soils across the central portion of the non-sensitive area extending into the southwest and northwest corners from surface to bedrock, PAHs in groundwater were identified in a single well in the non-sensitive area and no other historical or 2018 exceedances for PAHs were identified in the non-sensitive area groundwater.<sup>99</sup>
75. Arising from these admissions, Mr. Shipley agreed: (1) the statement appearing in XCG materials (paragraph 69, above) that "Contamination was identified across the entire property" is not accurate with respect to metals, VOCs, and PAHs in groundwater in the non-sensitive area; (2) notwithstanding comments in paragraph 67, above, based on the XCG Phase 2 ESA, metals, VOCs, and PAHs do not pose "serious ongoing environmental risks" to groundwater in the non-sensitive area and he does not see a lot of impact in groundwater; and (3) it would be fair to say metals, VOCs, and PAHs, to the extent they are present in the groundwater in the non-sensitive area, do not pose "serious ongoing environmental risks"

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<sup>95</sup> Ex. 11, Shipley Reply, para 41, p 303.

<sup>96</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 208, and p 217. NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>97</sup> Ex. 9, Dr. R. Rooney WS, ESG-Report, p 1691. NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>98</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 209 (VOCs soil), & p 218 (VOCs groundwater). NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>99</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 211 (PAHs soil), and p 219 (PAHs groundwater). NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

off-site either as he is not seeing this currently based on the Phase 2 ESA. In summary, Mr. Shipley testified he was not saying that in every single medium, contamination is across the whole property in the groundwater. To extent metals, VOCs, and PAHs are in groundwater, they're not posing off-site risk from the non-sensitive area.<sup>100</sup>

## ii. No Studies on Whether Erosion / Sedimentation a River Contamination Source

76. Mr. Shipley considers “the potential for the sediment to erode and reach the Cataraqui River” a greater concern.<sup>101</sup> However, Mr. MacLatchy’s evidence was while: “There is always a potential for physical movement of contaminated soils and sediment from land to water during rain and erosion events, etc., ... that is managed through standard erosion control practices”.<sup>102</sup> Moreover, Mr. Shipley later conceded: (1) the owner has not implemented any erosion control practices in the seven years it has owned the property; and (2) MECP has not issued any order to control surface water contamination during that period.<sup>103</sup>
77. Furthermore, Mr. Shipley testified that while he worries a storm event could cause a disturbance and release contaminants to the river, he agreed: (1) most of the contaminants are immobile in the soil and sediment though erosion is the primary concern; (2) he has performed no studies of storm events or turbidity runoff to see if there has been mobilization of contaminants in storm water runoff; (3) he has not taken advantage of high water events in the last few years to study what impact they had on erosion; and (4) he only has his hypothesis that some of the contaminants near the surface may be migrating to the river, but has done no research or testing to confirm this hypothesis.<sup>104</sup>

## iii. Resuspended Contaminants Already in River Mistakenly Attributed to Wetland

78. In his reply witness statement, Mr. Shipley opined that:
- As indicated above, there is evidence that the contaminated sediment within the wetland on the Subject Lands is continuing to act as a source of sediment contamination within the Cataraqui River via the mechanism of resuspension of contaminated sediment and movement of the re-suspended sediment into the KIH.<sup>105</sup>
79. Mr. Shipley was referring to a quote from the 2014 ESG report that stated: “...continued resuspension of historical contaminated sediments and movement of these sediments into

<sup>100</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>101</sup> Ex. 11, Shipley Reply, para 41, p 303.

<sup>102</sup> Ex. 1E, JBD, Vol. 5, Tab 2b, p 418, 2<sup>nd</sup> para.

<sup>103</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>104</sup> City Cr.-Ex. of K. Shipley (Feb. 23, 2024).

<sup>105</sup> Ex. 11, Shipley Reply, para 20, p 292.

the eastern parts of the KIH is most likely occurring”.<sup>106</sup> Dr. Rooney testified that Mr. Shipley’s statement, suggesting the wetland continues to act as a source of sedimentation to the river, is not consistent with the quote. It says contaminated sediments already in the river are being resuspended by the river’s waters preventing them from staying buried. The quote does not say sediments are coming from the wetland.<sup>107</sup>

#### **iv. NAPLs in Sensitive Area Could Result in River Contamination if Wetland Capped**

80. The evidence of Dr. Douglas J. Hallett, an NCK witness qualified to give opinion evidence in environmental chemistry and environmental toxicology, was that on-site contamination consists of a mixture of organic chemicals that have dissolved into the fuel and oil known to be present on the subject property. Fuel and oil, also known as non-aqueous phase liquids (“NAPLs”), or free product, are present in the sensitive area of the site, including the PSW.<sup>108</sup> This is contrary to the assertion at paragraph 205 of Appellant’s submissions that NCK’s experts did not consider on-site contamination risks across the property.
81. In fact, it was Mr. Shipley who disputed Dr. Hallett’s evidence because he said: (1) he saw little evidence of organic chemicals on-site mixing with fuel oil and migrating toward the wetland; and (2) while NAPLs were observed in several test pits, he did not find free product moving into the wetland.<sup>109</sup> However, the weight of evidence supports Dr. Hallett’s conclusion that the assessment performed by the Appellant is not consistent with PPS policy 3.2.2 (applicable to Issues 3 and 4). The Appellant neither adequately assessed the nature and extent of NAPLs on the site and in the wetland, nor evaluated whether their presence would interfere with the effectiveness of the remediation proposal to cap the wetland to prevent contaminated sediment from reaching the river.<sup>110</sup>

#### **(A) *What NAPLs are and What is Found in Them***

82. Mr. Shipley agreed: (1) NAPLs can be both light and dense; (2) light NAPL includes petroleum oil, gasoline, or diesel fuel that is less dense than water, not very soluble in water, and PAHs can be found in such liquids; and (3) dense NAPL is denser than water, does not dissolve in water, creosote is an example, and PAHs can be found in creosote.<sup>111</sup>

<sup>106</sup> Ex. 11, Shipley Reply, para 20, p 292.

<sup>107</sup> Appellant Cr.-Ex. of Dr. R. Rooney (Feb. 29, 2024).

<sup>108</sup> Ex. 10, Dr. D. J. Hallett WS, para 8(c), pp 50, 57.

<sup>109</sup> Ex. 11, Shipley Reply, para 17, pp 290-291.

<sup>110</sup> Examination of Dr. D. Hallett (Mar. 8, 2024); see also Ex. 1J, JBD, Vol. 10, Doc. 10t, p 2191.

<sup>111</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

**(B) AECs / APECs Show Numerous On-site/Off-site Petroleum Hydrocarbon Sources**

83. Mr. Shipley agreed the Table 1 Summary of AECs and APECs in XCG Phase 1 ESA indicates: (1) potential on-site/off-site sources of petroleum hydrocarbon (“PHC”) contamination from AEC/APEC areas; (2) 25 AECs or APECs were associated with PHCs as contaminants of potential concern; and (3) 25 of 35 AECs or APECs identified in the Phase 1 ESA, or over 70 percent, had potential to contaminate site with PHCs.<sup>112</sup>
84. Mr. Shipley agreed<sup>113</sup>: (1) there is a spur line that entered site along the western boundary and railway lines are an environmental concern because of potential for spills and leaks of diesel, oil, and other contaminants from locomotives/rail cars; and (2) the spur line would be an on-site source of PHCs because they are found in fuels (gasoline, diesel, motor oil).<sup>114</sup>

**(C) Reports of NAPLs in Monitoring Well / Test Pits Southwest of Sensitive Area**

85. The XCG Phase 2 ESA reported the following:
- No evidence or measurements of free phase product [light non-aqueous phase liquids (LNAPL) or dense non-aqueous phase liquids (DNAPL)] was observed during well development and groundwater sampling **except** for off-site monitoring well MW-X. Sheen and creosote odour were noted during purging activities at MW-X.<sup>115</sup>
86. MW-X is on the former rail line just west of site.<sup>116</sup> The XCG Phase 2 ESA also reported: “Coal and clinker fill was found in test pits TP-21 and TP-21A and was saturated near the water table with a black oily substance with an odour similar to creosote”.<sup>117</sup> The 2013 CRA Phase 2 ESA reported the test pit log for TP-21A indicates: (1) at a depth of 1.3m “becomes saturated” and there is a “slight creosote odour”; (2) at a depth of 1.5m there is “200mm layer of oily saturated coal and clinker, trace leather, strong creosote odour”; and (3) at a depth of 1.7m there is a “slight creosote odour”.<sup>118</sup> Dr. Hallett testified: (1) if it smells like creosote, it likely is creosote; and (2) it should have been investigated.<sup>119</sup>

<sup>112</sup> See also Ex. 1J, JBD, Vol. 10, Doc. 10c, pp 137-138; NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>113</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>114</sup> See also Ex. 7, Shipley WS, para 14, p 928.

<sup>115</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 153.

<sup>116</sup> Ex. 1J, JBD, Vol. 10, Doc. 10e, p 1058 – Figure 1.

<sup>117</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 436.

<sup>118</sup> Ex. 1J, JBD, Vol. 10, Doc. 10z, p 2674.

<sup>119</sup> Examination of Dr. D. Hallett (Mar. 8, 2024).

**(D) Test Pit South of Eastern PSW Cell Showed Free Product on Water and PHC Exceedances of MECP Standards in Soil in Sensitive Area**

87. Mr. Shipley agreed<sup>120</sup>: (1) the XCG Phase 2 ESA acknowledges the presence of free product at TP18-8, located in the southern portion of the Sensitive Area just outside the eastern wetland cell (“Free product was observed at TP18-8 in the clay layer encountered at 3.05 to 6.1 metres bgs”); (2) examination of the TP18-8 test pit log indicates at a depth of 4.57m there was light grey clay “with oil throughout, very strong solvent or oil odour, free product on water in the test pit”; and (3) Figure 15-1 shows concentrations of PHCs F2 to F4 exceed MECP Table 1 soil standards at TP18-8.<sup>121</sup> TP18-8 is 100m northeast of TPs-21/21A, and 200m northeast of monitoring well MW-X.<sup>122</sup>

**(E) Logs for Boreholes, Test Pits, and Sediment Sampling Locations in North Central Sensitive Area Near or in PSW Report Petroleum Odours and/or Presence of PHCs and PAHs Well in Excess of MECP Standards**

88. Mr. Shipley agreed<sup>123</sup>: (1) Boreholes 34, 27, 33, 35 and 36 – using Figure 1 referred to above – clustered together in the northern Infill Area of the Sensitive Area, are all less than 50m from the PSW, and their logs all report petroleum odours at various depths<sup>124</sup>; (2) the charts for each of these boreholes, as reflected in Figure 15-1, all report PHC concentrations in soil in the non-marsh portion of the Sensitive Area as being well in excess of MECP Table 1 standards<sup>125</sup>; (3) approximately 20 test pits or boreholes identified by large red circles in Figure 15-1 report exceedances of MECP Table 1 standards for PHCs in the Sensitive Area (non-marsh); (4) the log for sediment sampling location SED6, located in the wetland and identified on Figure 15-2, reports four exceedances of MECP Table 1 standards for PHCs that are quite significantly in excess of the applicable standards<sup>126</sup>; (5) approximately 10 sediment sampling locations identified by large red circles in Figure 15-2 report exceedances of MECP Table 1 standards for PHCs in the Sensitive Area (marsh); and (6) these reports of exceedances of MECP Table 1 standards for PHCs stretch right across the PSW from sediment sampling location SED2 in the western end of the subject lands to sediment sampling location S18-1 near the river in the northeast of site.

<sup>120</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>121</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, pp 168, 563 – Log for TP18-8, and Figure 15-1, p 286; and Doc. 10e, p 1058 – (showing TP18-8 location on Figure 1). See also Compendium, p 8 for Figure 15-1.

<sup>122</sup> Ex. 1J, JBD, Vol. 10, Doc. 10e, p 1058 – Figure 1.

<sup>123</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>124</sup> Ex. 1J, JBD, Vol. 10, Doc. 10z, pp 2634, 2627, 2633, 2635, and 2636.

<sup>125</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 286, Figure 15-1. See also Compendium, p 8.

<sup>126</sup> Ex. 1J, JBD, Vol. 10, Doc. 10c, p 287, Figure 15-2. See also Compendium, p 9.

89. In light of the foregoing, Mr. Shipley agreed: (1) it was an “oversight” for the XCG Phase 2 ESA, his 2019 summary of environmental conditions, and 2020 letter report to Jay Patry, to all fail to indicate PHCs are present in the sediments of the subjects lands, including the wetland; (2) he would now add PHCs have been found in the sediments; and (3) it would be more accurate to say there are PHCs in the sediments in the Sensitive Area (marsh and non-marsh) that exceed MECP Table 1 standards.<sup>127</sup>
90. Mr. Shipley agreed<sup>128</sup>: (1) Figure 16-2i, which shows distribution of PAHs in the marsh portion of the Sensitive Area, indicates sediment sampling locations S18-3, S18-7, S18-2 and SED6, to the east of the boreholes, such as BH-34, show contamination with PAHs, in many (S18-2, PAHs exceed 3 of 7 parameters) if not all (S18-7, S18-3, and SED6) instances in excess of MECP Table 1 standards; and (2) PAHs, a class of organic chemicals, occur naturally in coal, crude, oil, gasoline, and creosote.<sup>129</sup> He testified it is difficult to know how PAHs migrated to the wetland sediments, but agreed it is possible they reached them from borehole areas like BH34, 27, 33, 35, and 36 for which the borehole logs reported petroleum odours and the presence of PHCs, and the sediment sampling stations showed the presence of PHCs not far from the boreholes.<sup>130</sup>

**(F) Appellant Provision for Oily Water Management**

91. Mr. Shipley agreed he was making provision for oily water management on the site.<sup>131</sup> His 2020 remediation cost estimate to Paul MacLatchy has a line item identified as “oily water disposal”.<sup>132</sup> Pinchin, the City’s engineering consultants, noted in their 2020 peer review: “Amounts have been included for each area for managing oily water during the excavation work, however the quantities that have been assigned appear to be very ball-park and on the low side given the extent of the excavation work being proposed”.<sup>133</sup> In Dr. Hallett’s view, Pinchin reported on oily water because of concern about its presence.<sup>134</sup>

<sup>127</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>128</sup> Ibid.

<sup>129</sup> See also Ex. 1J, JBD, Vol. 10, Doc. 10c, p 295, Figure 16-2i. See also Compendium, p 10.

<sup>130</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>131</sup> Ibid.

<sup>132</sup> Ex. 1J, JBD, Vol. 10, Doc. 10g, p 1087.

<sup>133</sup> Ex. 1A, JBD, Vol. 1, Tab 1f, Pinchin Letter to MacLatchy, p 170.

<sup>134</sup> Appellant Cr.-Ex of Dr. D. Hallett (Mar. 8, 2024).

**(G) NAPLs Reason PAHs Reached Wetland and Why Capping May Not Succeed**

92. There is substantial evidence to find that NAPLs are why the PAHs reached the wetland: (1) numerous on-site and off-site sources of PHCs according to the XCG Phase 1 ESA; (2) boreholes in close proximity to the wetlands and logs showing petroleum odours and chemical analysis reporting the presence of PHCs; (3) one test pit in the vicinity of this cluster of boreholes showing free product, as well as others on-site and off-site; (4) soil and analytical summaries showing exceedances of MECP standards for PHCs in the sensitive area at these borehole locations in close proximity to the wetland; (5) borehole logs also showing PAHs in exceedance of MECP Table 1 standards; (6) sediment sampling locations showing exceedances of MECP Table 1 standards for PHCs and PAHs in the Sensitive Area marsh and non-marsh; and (7) Appellant making provision for managing oily water.
93. These lines of evidence are not mere coincidence. In Dr. Hallett's view,<sup>135</sup> NAPLs are in the samples XCG took, including for the wetland. This suggested NAPLs were how contaminants like PAHs got to the wetland and a reason to be cautious about trying to cap the wetland to prevent contaminated sediment migration in their presence.<sup>136</sup>

**c. Problems with Appellant Proposed Remediation Strategy for the Wetland**

94. Mr. Shipley is asking the Tribunal to approve an experiment. He: (1) has never been involved in a project respecting a PSW that was also a Great Lakes Coastal Wetland where he was proposing to eliminate all or part of the wetland by capping; (2) has never been involved in a project where he has attempted to cap 200,000 tonnes of contaminated sediment in a PSW; (3) is not aware of any instance where MECP has approved an RSC that allowed capping of a PSW that was also a Great Lakes Coastal Wetland; and (4) admitted that although his proposed wetland cap is based on O. Reg. 232/98, the law that controls closed landfills, that regulation is not intended to facilitate capping wetlands.<sup>137</sup>
95. There are contradictions in Mr. Shipley's 2023 wetland cap design. His letter to Jay Patry states: "The design of the wetland cap is intended to trap the contaminated sediments beneath a protective layer of suitable infill materials".<sup>138</sup> Yet, he rejected the suggestion the cap needs to be impermeable to rainwater.<sup>139</sup> Furthermore, his suggestion during

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<sup>135</sup> Ibid.

<sup>136</sup> Ex. 1J, JBD, Vol. 10, Doc. 10t, p 2191 (NAPLs risk contaminant migration in sediments notwithstanding capping).

<sup>137</sup> NCK Cr.-Ex. of K. Shipley (Feb. 22, 2024).

<sup>138</sup> Ex. 1J, JBD, Vol. 10, Doc. 10k, p 1106.

<sup>139</sup> City Cr.-Ex. of K. Shipley (Feb. 23, 2024).

examination in chief that the cap could be supplemented with a “reactive permeable barrier” to prevent contaminant migration to the river,<sup>140</sup> Mr. Rancourt regarded as unconvincing, risky, and lacking in any modelling or testing information before the Tribunal. In Mr. Rancourt’s view, if the cap causes the pH to change, there will be no stopping contaminants from getting to the river.<sup>141</sup>

96. Capping the wetland is not consistent with the 2021 Golder investigation of KIH sediment management, otherwise relied upon by Mr. Shipley. Golder does not support capping for the management unit that includes the subject lands (PC-W) under high, moderate, or low intervention scenarios for the purpose of dealing with contaminated sediments.<sup>142</sup> Paragraph 220 of Appellant’s submissions indicates that Mr. Rancourt admitted on cross-examination that there is evidence that remediation of the property should be completed in tandem with the KIH because the federal government does not want to proceed with KIH cleanup without source control. However, paragraph 220 failed to include that Mr. Rancourt went on to say that the question is whether capping the PSW would help or exacerbate the situation.<sup>143</sup>
97. Besides interfering with the sequestering function that currently controls release of metals from the wetland, capping is also contrary to sound environmental chemistry principles by interfering with the breakdown of organic chemicals in the wetland. Dr. Hallett makes clear that putting a cap on organic chemicals, such as PAHs, in the wetland will stop their photo degradation by sunlight and inhibit their biodegradation.<sup>144</sup>
98. Finally, paragraph 223 of the Appellant’s submission adopts the CRCA conclusion that should MECP approve the proposed remediation approach for the wetland not associated with the development footprint, this could achieve a “net environmental benefit. This is highly problematic for several reasons. First, with no off-site groundwater impacts to the river from either the sensitive or non-sensitive areas, as confirmed by both Mr. Shipley and Mr. MacLatchy, there is no net environmental benefit to capping the wetland from that perspective. Second, remediating the wetland by capping / killing it could: (1) interfere with the sequestering function the wetland has been performing; and (2) result in releases of heavy metal and other contaminants to the river. Such results are hardly consistent with producing a “net environmental benefit”, which is not an exception set out in Policy 2.1.4.

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<sup>140</sup> Examination of K. Shipley (Feb. 22, 2024).

<sup>141</sup> Examination of C. Rancourt (Mar. 6, 2024).

<sup>142</sup> Ex. 11, Shipley Reply, Appendix A, 2021 Golder Study, p 354, Table 4. See also Compendium, p 11.

<sup>143</sup> Appellant Cr.-Ex. of C. Rancourt (Mar. 6, 2024).

<sup>144</sup> Examination of Dr. D. Hallett (Mar. 8, 2024).

#### 4. Other Relevant Issues

99. The Tribunal heard conflicting evidence on whether the MECP's RSC/CPU process regarding site remediation should precede or follow the Appellant's *Planning Act* applications. For example, Mr. Shipley contended that it is important to know upfront what the approved development footprint will look like before designing the remediation plan.<sup>145</sup> Conversely, Mr. Dakin confirmed that it was "atypical" for *Planning Act* approvals to be granted in advance of remediation, but the CRCA's position "evolved" in this case due to the perceived opportunity (and associated cost) to remediate the on-site PSW.<sup>146</sup> In contrast, Mr. Dorfman<sup>147</sup> stated that the planning process is "tarnished" by uncertainties and data gaps regarding remediation and, from a land use planning perspective, remediation approval should be applied for first<sup>148</sup> (but not necessarily implemented prior to building construction) in order to identify the nature, extent and location of development (if any) that can be approved under the *Planning Act* and carried out on the subject property.
100. As concluded by Mr. Dorfman, until it is determined how much of the subject property (if any) is developable after remediation, it is premature to grant *Planning Act* approvals.<sup>149</sup> In short, given the uncertainty about the type of remediation, if any, that may be approved by the MECP, the Tribunal can have no confidence the current development, if approved under the *Planning Act*, will actually proceed in the manner proposed by the Applicant. Although the Appellant proposes to address this sizeable uncertainty via the Holding Overlays, this maneuver is not supported by Mr. Dorfman for planning and public participation reasons.<sup>150</sup>
101. NCK submits that the Tribunal should prefer the prudent approach of Mr. Dorfman on this point. The Appellant's projected cost of remediation is not a factor in granting planning approvals, which are driven by PPS and OP policies rather than the financial implications for the developer.<sup>151</sup> Moreover, the Tribunal should reject the Appellant's reliance upon "as-of-right" zoning permissions on the subject property, which were predicated on a now-lapsed 1980s subdivision plan that pre-dates the PPS. This "as-of-right" argument is a "red herring" since the Appellant is not proposing the development permitted under the existing zoning,

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<sup>145</sup> Examination of K. Shipley (February 21, 2024).

<sup>146</sup> Examination of M. Dakin; NCK Cr.-Ex. of M. Dakin (Feb. 15, 2024).

<sup>147</sup> Ex. 10: Dorfman WS, paras 45-47, 50-53, PDF pp 18-19; Examination of M. Dorfman (Mar. 7, 2024).

<sup>148</sup> City Cr.-Ex. of P. MacLachy (February 12, 2024) (it is not "impractical" to file a remediation plan with the MECP at or about the same time as planning applications).

<sup>149</sup> Ex.10, Dorfman WS, paras 45-47, 50-53, PDF pp 18-19; Examination of M. Dorfman (Mar. 7, 2024).

<sup>150</sup> Ex. 10, Dorfman WS, para 52, PDF p 19.

<sup>151</sup> Examination of M. Chown (Feb. 27, 2024); NCK Cr. Ex. of T. O'Brien (Feb. 6, 2024) (City OP doesn't allow cost of development to dictate density).

and it is the Appellant's current proposal itself that must be assessed against the PPS and OP rather than the sequential planning history of the subject property.<sup>152</sup>

## 5. Overall Planning Conclusions

102. For the reasons outlined above, Mr. Dorfman<sup>153</sup> concurs with Mr. Chown's opinion<sup>154</sup> that the proposed development does not represent good planning and is not in the public interest. This is particularly true given the numerous inconsistencies between the development proposal and the PPS and City OP in relation to: (a) long-term protection of natural heritage systems, biodiversity, connectivity, and ecological linkages; (b) protection of groundwater, surface water, and hydrologic functions; (c) PSWs and SCWs; (d) Significant Woodlands; (e) Significant Wildlife Habitat (including species at risk); and (f) the ecological functions of the foregoing natural features.
103. On the basis of the opinion evidence presented by NCK experts, the opinion evidence presented by the City, and the overall hearing record, NCK submits that the Hearing Issues should be answered by the Tribunal as follows:
- Issue 1: Yes.<sup>155</sup>
  - Issues 2, 8: Yes.
  - Issues 3 - 7, 9, 11: No.
  - Issue 10: No, removing and remediating the PSW is not consistent with the PPS. Yes, the PSW should be restored after remediation (if approved).

## V. PART V – ORDER REQUESTED

104. For the foregoing reasons, NCK respectfully requests an order dismissing both appeals.

**ALL OF WHICH IS RESPECTFULLY SUBMITTED this 23<sup>rd</sup> day of April, 2024.**




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Joseph F. Castrilli  
Counsel for NCK




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Richard D. Lindgren  
Counsel for NCK

<sup>152</sup> NCK BOA, Tab 11: *Loerts v. Petrolia (Town)*, 2022 CanLII 63794 (ON LT), paras 50-51; Cr.-Ex. of M. Dorfman (Mar. 7, 2024).

<sup>153</sup> Ex. 10, Dorfman WS, paras 45-47, 50-53, and 59, PDF pp 18-19, 21.

<sup>154</sup> Examination of M. Chown (Feb. 27, 2024).

<sup>155</sup> Ex. 13, Dorfman Reply, paras 1-12, PDF pp 1-2; Examination of M. Dorfman (Mar. 7, 2024).