

APPENDIX A: PUBLIC COMMENT AND RESPONSES

This draft introduction and stream summary appendix was made available for public review and comment for thirty days beginning on October 23, 2023, on MDEP's 'Opportunity for Comment' webpage, <https://www.maine.gov/dep/comment/index.html>. Email notification was sent to a list of compiled stakeholders, along with any others who expressed interest, as well as to digital subscribers of the comment webpage.

One comment was received and responded to:

DEP Response to Andrew Hamilton/Landowner Comments

SENT VIA EMAIL

January 24, 2024

P. Andrew Hamilton
Eaton Peabody Attorneys at Law
80 Exchange Street, P.O. Box 1210
Bangor, Maine 04402-1210

Re: Maine Impervious Cover TMDL for Impaired Streams Addendum (10/23/2023) -
PENJAJAWOC STREAM & MEADOW BROOK, BANGOR, MAINE/ LANDOWNER
COMMENTS

Dear Andrew Hamilton,

Thank you for your engagement with Maine DEP and the Maine Impervious Cover TMDL Addendum for Penjajawoc Stream and Meadow Brook. The original comments submitted on the 10/23/23 draft TMDL Addendum are included in italics, followed by Maine DEP's responses. The original numbering scheme has been retained for cross-reference to the comment letter.

Questions and Comments:

- 1. Will the Addendum acknowledge that further impervious cover reduction is not needed if the Penjajawoc Stream ever attains Class B Water Quality classification? If there is a need for effective IC% targets to be used as aspirational goals, consider how the IC TMDL being applied to these asserted Urban Impaired Streams help achieve that attainment goal? Please consider the comments of the City on the TMDL report filed on May and July 2011 with the MDEP (detailed further below). It would be helpful for the Addendum to discuss the metrics for the loadings (either by footnote or by attaching a Basis Statement for adding the Penjajawoc and the Meadow Brook to the IC TMDL) and specifically reference these specific tools to implement the TMDL: (1) the Bangor Stormwater Utility, (2) the upcoming Watershed Management Plan, (3) the MS4 permits of the City and MDOT; and (4) the use of Chapters 500 and 502, as may be amended, in development reviews for stormwater associated with any new development.*

The Addendum states “Ultimate success of the TMDL will result in Penjajawoc Stream and Meadow Brook’s compliance with Maine’s water quality criteria for aquatic life, dissolved oxygen, and habitat.” As currently written, the Addendum does not call for impervious cover reduction for success of the TMDL, success will be assessed by meeting water quality standards. The mechanisms to achieve water quality standards are not dictated by the TMDL. The Next Steps section of the Addendum on page 6 has been edited to reference the Stormwater Utility, the Watershed-Based Management Plan, the MS4 permit, and State Stormwater Rules.

2. *Will the Addendum be amended to acknowledge that the IC TMDL may be too broad an indicator to provide the necessary specific guidance in determining what specific measures are needed to improve water quality in a given stream? In the Addendum for these specific waters, it would be helpful to add a specific reference to the fact that "The MDEP will place greater emphasis on the upcoming Watershed Management Plan and a focus there on efforts to manage runoff of any primary pollutants of concern (including, by way of example, chlorides).*

The following text has been added to the Next Steps section of the Addendum on page 6, “The development and implementation of the WBP is the primary strategy for implementing water quality improvements in Penjajawoc Stream. The strategy of WBPs includes locating and identifying specific stressors to the aquatic community in the watershed and addressing them where they occur. This can include implementing appropriate Best Management Practices (BMPs) and Low Impact Development (LID) techniques to address the identified stressors.”

3. *Will the MDEP in the Addendum continue to give focus on the 2011 and 2012 Comments of the City on the IC TMDL Report? As the City of Bangor earlier commented on the IC TMDL in 2011 and 2012, with the MDEP advising it would adopt the comment in its August 14, 2012 response: The focus of the TMDL, and we submit this Addendum, should be on effective impervious cover IF the IC TMDL is to be applied to these asserted Urban Impaired Streams at all and NOT simply on absolute levels of impervious cover.*

The following text has been added to the Impervious Cover Analysis section of the Addendum on page 3, “There are two general ways to quantify impervious cover: total impervious cover and effective impervious cover. Total IC is all the impervious area in a watershed. Effective IC is only the impervious cover in a watershed that is directly connected to a stream via hard surfaces or stormwater conveyances, without treatment or detention. Effective IC presents the greatest pollution risks to streams, and efforts at improving water quality are generally aimed at disconnecting and preventing the addition of connected IC rather than the literal removal or prevention of impervious cover in a watershed. The % IC calculations in this TMDL are the total IC because the level of effort that would be required to determine effective IC is beyond the scope of the TMDL analysis.”

4. *Will MDEP in the Addendum reference the financial tool that the City set up to address implementation of the Stormwater TMDL? Since 2012, the City has adopted and assessed Bangor taxpayers a Stormwater Utility Fee. Under focused watershed management plans (WMPs), the City may have resources available within the Stormwater Utility fund, in part, to address primary contaminants of concern in the implementation of the WMPs. The MDEP may wish to consider referencing in the Addendum to the unique and*

constructive tool that the City of Bangor has put in place, in part, to address Stormwater Management concerns.

The following text has been added to the Next Steps section of the Addendum on page 6, “In 2012, the City of Bangor passed an ordinance creating a stormwater utility. The goal of the utility is to provide funding to deal with stormwater and the problems it creates. This stormwater utility, and the funding source it creates, can help implement the WBP and address water quality impairments due to stormwater and impervious cover.”

5. *It would be helpful to have more information about how the goal of 9% Impervious Cover will be applied. For example:*
 - a. *Existing development on properties in the watershed of the Penjajawoc Stream where IC currently exceeds the goal. We have been advised by the City and MDEP that property owners will not have to rip up or remove IC and that the % IC is only a preliminary goal, with the details to be worked out in the Watershed Management Plan. It would be helpful to have the Addendum specifically state that understanding.*
 - b. *Future Development on properties in the watershed of the Penjajawoc Stream as an urban impaired stream. As noted, we were advised that the 9% (and with a 1% Margin of Safety, 8%) but again that was a goal and that plans for best practices would be placed in the Watershed Management Plan currently being drafted for the Penjajawoc Stream by Stillwater Environmental Associates for the City; please consider the inclusion of Bangor Landowner representatives on the Advisory Committee to the WMP similar to prior efforts.*
 - c. *Please confirm whether the future development will be governed by MDEP review of Chapter 500 and 502 stormwater management permit filings.*

The following text has been added to the Next Steps section of the Addendum on page 6, “This TMDL does not mandate the removal of existing impervious cover or prevent future development. All future development will be governed by existing federal, state, and local regulations, including Maine Stormwater Rules.” Representation on the Advisory Committee to the Watershed Based Plan is determined by the plan lead, the City of Bangor.

6. *Please consider having the Addendum use the detailed terminology reflected in the prior comments of the City and the August 2012 response of the MDEP. As compared with the Chapter 500 and 502 development reviews, the IC TMDL (And the Addendum for the Penjajawoc and Meadow Brook waters) would, instead of discussing just absolute IC% goals and existing impervious areas (see pages 3-5 of the Addendum including an overreliance on "actual impervious cover" for such areas as the Middle Watershed of the Penjajawoc Stream), also benefit from instead focusing on effective impervious cover and the disconnection of the stormwater from the effective impervious cover from runoff to the streams and focus on BMPS and reductions in the primary pollutants of concern.*

The following text has been added to the Impervious Cover Analysis section of the Addendum on page 3, “There are two general ways to quantify impervious cover: total impervious cover and effective

impervious cover. Total IC is all the impervious area in a watershed. Effective IC is only the impervious cover in a watershed that is directly connected to a stream via hard surfaces or stormwater conveyances, without treatment or detention. Effective IC presents the greatest pollution risks to streams, and efforts at improving water quality are generally aimed at disconnecting and preventing the addition of connected IC rather than the literal removal or prevention of impervious cover in a watershed. The % IC calculations in this TMDL are the total IC because the level of effort that would be required to determine effective IC is beyond the scope of the TMDL analysis.”

7. *The Addendum would benefit from having a focus on BMPs and other approaches to address chlorides, as noted in the reasoning expressed by the MDEP in not accepting the City's prior draft Watershed Management Plan for the Penjajawoc Stream and Meadow Brook. Consider a specific focus on the use of Stormwater Utility funds and efforts to have both the Watershed Management Plan and the MS-4 permit focus on the reduction of chlorides in the Stream and Meadow Brook. Again, this is a constructive focus that could be referenced in the Addendum.*

The following text has been added to the Next Steps section of the Addendum on page 6, “The development and implementation of the WBP is the primary strategy for implementing water quality improvements in Penjajawoc Stream. The strategy of WBPs includes locating and identifying specific stressors to the aquatic community in the watershed and addressing them where they occur. This can include implementing appropriate Best Management Practices (BMPs) and Low Impact Development (LID) techniques to address the identified stressors.”

8. *As the City has commented in recent discussions with MDEP, there is the opportunity to focus on BMPs (including the use of practices to reduce the plowing and the salting of larger parking areas when not needed or used).*

The determination of the use of specific BMPs is beyond the scope of the TMDL Addendum. The discussion of BMPs, including any reductions in plowing and salting can be included in the Watershed-Based Management Plan or other stormwater plans carried out by the City. However, the following text has been added to the Next Steps section of the Addendum on page 6, “The development and implementation of the WBP is the primary strategy for implementing water quality improvements in Penjajawoc Stream. The strategy of WBPs includes locating and identifying specific stressors to the aquatic community in the watershed and addressing them where they occur. This can include implementing appropriate Best Management Practices (BMPs) and Low Impact Development (LID) techniques to address the identified stressors.”

Questions and Comments Related to the City’s 2011 and 2012 Comments:

We continue to support the City's 2011 and 2012 Comments in these respects:

1. *Specify that watershed management plans should focus on pollutants of primary concern. The presentations on the Appendix by MDEP and the City in 2023 have focused on the watershed management plan as the primary vehicle of focus, and we support this focus. We understand that MDEP did not accept the City's prior watershed management plan report because it did not focus sufficiently on chlorides. With the City having adopted a Stormwater Utility and having assessed Bangor taxpayers a stormwater fee to fund*

improvements, we hope the MDEP will help the City focus the recently collected funds on pollutants of primary concern.

Part of the development of a Watershed-Based Management Plan includes the identification of stressors within the watershed. It is in the purview of that plan to identify which specific pollutants or structural issues (flow volumes, habitat, etc.) may be the largest stressor at different locations in the watershed and to prioritize these stressors for implementation actions. The following text has been added to the Next Steps section of the Addendum on page 6, “The development and implementation of the WBP is the primary strategy for implementing water quality improvements in Penjajawoc Stream. The strategy of WBPs includes locating and identifying specific stressors to the aquatic community in the watershed and addressing them where they occur. This can include implementing appropriate Best Management Practices (BMPs) and Low Impact Development (LID) techniques to address the identified stressors.”

2. *Clarify that reducing effective impervious cover, not the absolute amount of impervious cover. This comment of the City was focused on the Statewide TMDL, and that same comment would seem to apply to the proposed October 23, 2023 Addendum for the Penjajawoc Stream and Meadow Brook. At pages 3-5 of the Appendix, the MDEP draft of October 23, 2023 speaks only of IC and % IC without use of the City's proposed 2012 edit that the August 14, 2012 letter response of MDEP advised would be used: “Editorial recommendations were incorporated as suggested...” The specific edit recommended in the City's comments was to revise the text of the TMDL as follows: "This TMDL report established the effective % impervious cover ... and outlines the measures which may be needed to reduce the impacts from impervious cover and meet water quality standards."*

The TMDL Addendum is not editing the original Statewide IC TMDL document, so edits to the text of that document cannot be made at this time. The IC TMDL does state for the TMDL target that the goal is “a watershed with **characteristics** of X% IC”, indicating an effective IC, rather than absolute. In addition, the following text has been added to the Impervious Cover Analysis section of the Addendum on page 3, “There are two general ways to quantify impervious cover: total impervious cover and effective impervious cover. Total IC is all the impervious area in a watershed. Effective IC is only the impervious cover in a watershed that is directly connected to a stream via hard surfaces or stormwater conveyances, without treatment or detention. Effective IC presents the greatest pollution risks to streams, and efforts at improving water quality are generally aimed at disconnecting and preventing the addition of connected IC rather than the literal removal or prevention of impervious cover in a watershed. The % IC calculations in this TMDL are the total IC because the level of effort that would be required to determine effective IC is beyond the scope of the TMDL analysis.”

3. *Attainment of water quality standards should eliminate the need for further effective IC reductions.*

The Addendum states “Ultimate success of the TMDL will result in Penjajawoc Stream and Meadow Brook’s compliance with Maine’s water quality criteria for aquatic life, dissolved oxygen, and habitat.” As currently written, the Addendum does not call for impervious cover reduction for success of the TMDL, success will be assessed by meeting water quality standards. The mechanisms to achieve water quality standards are not dictated by the TMDL. It should be noted that Federal regulations (40 CFR

130.7(c)(1)) state that “TMDLs shall be established at levels necessary to attain **and maintain** the applicable narrative and numerical WQS.” Once the stream attains water quality standards, ongoing watershed management, informed in large part by the WBP, will be needed to ensure that the stream continues to meet standards.

4. *As the City commented in 2012 as to the IC TMDL overall, the Addendum should acknowledge in specific text and allow for natural conditions. On page 14 of the State's draft IC TMDL in 2012, the TMDL document noted that impairment may be due at least in part to natural conditions (including impermeable soil group or naturally low dissolved oxygen levels) and that includes elevated temperatures in the Bog section of the Penjajawoc Stream. Furthermore, it should be acknowledged that some streams (or reaches within that stream) are not naturally capable of supporting their current stream classification. With an overreliance on pages 3-5 in the Addendum on IC% cover from aerial photography, it would be well to demonstrate the scientific and specific bases for non-attainment due to some of the natural conditions in the Upper Watershed and include those references from the historical record and place those reference in the discussion on pages 3-5 of the Addendum so that the document is technically balanced.*

A study of Penjajawoc Marsh would likely provide greater insight into natural conditions and into its effect on Penjajawoc Stream. All watersheds have unique and varied conditions that necessarily have downstream effects. That being said, many watersheds include wetlands and neither the wetland nor the downstream stream are assessed as impaired. It is clear in the Penjajawoc watershed there are many non-natural conditions that contribute to the stream's impairment and could be addressed to improve the health of the stream.

5. *Clarify that assessment summaries on pages 3-5 of the Addendum are estimates only. The amount of impervious cover is not clearly and consistently referenced as an estimate. The fact that the City used high resolution aerial photography is helpful but two key concepts are needed and should be liberally applied in the text of the Addendum (particularly at pages 3-5) or built out as a new and additional section of the Addendum: (1) again the focus should be on effective impervious cover; and (2) the focus should be on estimated% IC only. In the MDEP August 14, 2012 response to the City's comments, the MDEP stated: "... estimation is inferred when interpreting orthophotos in GIS." It would be helpful, given the heavy reliance on estimating all watershed reaches of the Stream, to have the fact that the current IC % is estimated made explicit.*

The text on pages 3 and 4 has been updated to specify that the % IC values are estimates. The impervious cover map on page 5 does not contain any % IC values and has not been edited.

6. *It would be helpful to have the Addendum include specific reference to the array of tools available to prevent degradation of stream and habitat quality including those detailed at the outset of these comments. As MDOT commented at the November 8 stakeholder review of the Draft Addendum to the IC TMDL, the language of the Addendum should also focus on the use of the MS4 permits linked to Chapter 502 reviews.*

The mechanisms to achieve water quality standards are not dictated by the TMDL. However, the Next Steps section of the Addendum on page 6 has been edited to reference the Stormwater Utility, the Watershed-Based Management Plan, the MS4 permit, and State Stormwater Rules.

7. *Consider having the Addendum repeat the assurance and credit for the City of Bangor making progress by including the following somewhere in the text of the Addendum: "as an MS4 community that is working to put in place a Watershed Management Plan for the Penjajawoc Stream as a stream of primary concern as identified in its MS4 stormwater management plan, and which has a funding source in place which will allow the municipality to make substantial progress on completing the tasks to be outlined in the watershed management plan, the City of Bangor is considered to be making adequate progress under the IC TMDL."*

The Addendum is not assessing the extent to which the City is meeting the IC TMDL, rather it is establishing that TDML. The Next Steps section of the Addendum on page 6 has been edited to reference the City's work on the Stormwater Utility, the Watershed-Based Management Plan, and the MS4 permit.

Sincerely,



Tracy Krueger
TMDL Coordinator, Maine DEP

P. Andrew Hamilton
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ahamilton@eatonpeabody.com

Eaton Peabody

Attorneys at Law

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SENT VIA EMAIL ONLY

November 21, 2023

Tracy Krueger, Stormwater TMDL Coordinator
Maine DEP
17 State House Station
Augusta, Maine 04333

Re: Maine Impervious Cover TMDL for Impaired Streams Addendum (10/23/2023)--
PENJAJAWOC STREAM & MEADOW BROOK, BANGOR, MAINE/ LANDOWNER
COMMENTS

Dear Tracy:

As you know, I represent certain of the landowners along the Penjajawoc Stream including those copied on this Comments letter (the "Bangor Landowners") and am submitting the following comments on their behalf with respect to the October 23, 2023 DRAFT Addendum to the Maine Impervious Cover (IC) TMDL for Urban Impaired Streams. We appreciate the cooperative nature of this process, MDEP's thoughtful work on this matter, and as a follow-up respectfully submit the following questions and comments for your consideration:

1. Will the Addendum acknowledge that further impervious cover reduction is not needed if the Penjajawoc Stream ever attains Class B Water Quality classification? If there is a need for effective IC % targets to be used as aspirational goals, consider how the IC TMDL being applied to these asserted Urban Impaired Streams help achieve that attainment goal? Please consider the comments of the City on the TMDL report filed on May and July 2011 with the MDEP (detailed further below). It would be helpful for the Addendum to discuss the metrics for the loadings (either by footnote or by attaching a Basis Statement for adding the Penjajawoc and the Meadow Brook to the IC TMDL) and specifically reference these specific tools to implement the TMDL: (1) the Bangor Stormwater Utility, (2) the upcoming Watershed Management Plan, (3) the MS4 permits of the City and MDOT; and (4) the use of Chapters 500 and 502, as may be amended, in development reviews for stormwater associated with any new development.
2. Will the Addendum be amended to acknowledge that the IC TMDL may be too broad an indicator to provide the necessary specific guidance in determining what specific measures are needed to improve water quality in a given stream? In the Addendum for these specific waters, it would be helpful to add a specific reference to the fact that

“The MDEP will place greater emphasis on the upcoming Watershed Management Plan and a focus there on efforts to manage runoff of any primary pollutants of concern (including, by way of example, chlorides).

3. Will the MDEP in the Addendum continue to give focus on the 2011 and 2012 Comments of the City on the IC TMDL Report? As the City of Bangor earlier commented on the IC TMDL in 2011 and 2012, with the MDEP advising it would adopt the comment in its August 14, 2012 response: The focus of the TMDL, and we submit this Addendum, should be on *effective* impervious cover IF the IC TMDL is to be applied to these asserted Urban Impaired Streams at all and NOT simply on absolute levels of impervious cover.
4. Will MDEP in the Addendum reference the financial tool that the City set up to address implementation of the Stormwater TMDL? Since 2012, the City has adopted and assessed Bangor taxpayers a Stormwater Utility Fee. Under focused watershed management plans (WMPs), the City may have resources available within the Stormwater Utility fund, in part, to address primary contaminants of concern in the implementation of the WMPs. The MDEP may wish to consider referencing in the Addendum to the unique and constructive tool that the City of Bangor has put in place, in part, to address Stormwater Management concerns.
5. It would be helpful to have more information about how the goal of 9% Impervious Cover will be applied. For example:
 - a. Existing development on properties in the watershed of the Penjajawoc Stream where IC currently exceeds the goal. We have been advised by the City and MDEP that property owners will not have to rip up or remove IC and that the % IC is only a preliminary goal, with the details to be worked out in the Watershed Management Plan. It would be helpful to have the Addendum specifically state that understanding.
 - b. Future Development on properties in the watershed of the Penjajawoc Stream as an urban impaired stream. As noted, we were advised that the 9% (and with a 1% Margin of Safety, 8%) but again that was a goal and that plans for best practices would be placed in the Watershed Management Plan currently being drafted for the Penjajawoc Stream by Stillwater Environmental Associates for the City; please consider the inclusion of Bangor Landowner representatives on the Advisory Committee to the WMP similar to prior efforts.
 - c. Please confirm whether the future development will be governed by MDEP review of Chapter 500 and 502 stormwater management permit filings.
6. Please consider having the Addendum use the detailed terminology reflected in the prior comments of the City and the August 2012 response of the MDEP. As compared with the Chapter 500 and 502 development reviews, the IC TMDL (And the Addendum for the Penjajawoc and Meadow Brook waters) would, instead of discussing just absolute IC % goals and existing impervious areas (see pages 3-5 of the

Addendum including an overreliance on “actual impervious cover” for such areas as the Middle Watershed of the Penjajawoc Stream), also benefit from instead focusing on *effective* impervious cover and the disconnection of the stormwater from the effective impervious cover from runoff to the streams and focus on BMPs and reductions in the primary pollutants of concern.

7. The Addendum would benefit from having a focus on BMPs and other approaches to address chlorides, as noted in the reasoning expressed by the MDEP in not accepting the City’s prior draft Watershed Management Plan for the Penjajawoc Stream and Meadow Brook. Consider a specific focus on the use of Stormwater Utility funds and efforts to have both the Watershed Management Plan and the MS-4 permit focus on the reduction of chlorides in the Stream and Meadow Brook. Again, this is a constructive focus that could be referenced in the Addendum.
8. As the City has commented in recent discussions with MDEP, there is the opportunity to focus on BMPs (including the use of practices to reduce the plowing and the salting of larger parking areas when not needed or used).

The comments filed by the City of Bangor in its comments of May 27, 2011, and July 2012 (to which the MDEP responded in its August 14, 2012 letter response), continue to be relevant and helpful to this discussion, viz.:

- While impervious cover is useful as a predictive model, it does not indicate what pollutants are causing stream impairment and does not therefore serve the purposes of a TMDL.
- No single mechanism for directly measuring effective IC was ever earlier provided or is now proposed in the Addendum, leaving uncertainty as to how those who are subject to the IC TMDL are to implement it or measure their progress. Specifically, as the City noted, “While stream-specific appendices mention a reduction in runoff volume and associated pollutants [NOTE: in 2022 and 2023, it is apparently “chlorides”], there is no basis given for determining that reduction in runoff volume and associated pollutants bears a linear [or even some] relationship to reduction in effects of IC.”
- No case studies are provided showing how an impaired waterbody has met its water quality classification under the IC TMDL approach. The technical and financial feasibility of the IC TMDL approach has not been established, yet no opportunity for reevaluation of this approach is contemplated in the TMDL document [or, for that matter, in the Addendum to the TMDL].

These comments continue to inform this discussion. We continue to support the City’s 2011 and 2012 Comments in these respects:

1. Specify that watershed management plans should focus on pollutants of primary concern. The presentations on the Appendix by MDEP and the City in 2023 have focused on the watershed management plan as the primary vehicle of focus, and we support this focus. We understand that MDEP did not accept the City’s prior watershed management plan

report because it did not focus sufficiently on chlorides. With the City having adopted a Stormwater Utility and having assessed Bangor taxpayers a stormwater fee to fund improvements, we hope the MDEP will help the City focus the recently collected funds on pollutants of primary concern.

2. Clarify that reducing *effective* impervious cover, not the absolute amount of impervious cover. This comment of the City was focused on the Statewide TMDL, and that same comment would seem to apply to the proposed October 23, 2023 Addendum for the Penjajawoc Stream and Meadow Brook. At pages 3-5 of the Appendix, the MDEP draft of October 23, 2023 speaks only of IC and % IC without use of the City's proposed 2012 edit that the August 14, 2012 letter response of MDEP advised would be used: "Editorial recommendations were incorporated as suggested..." The specific edit recommended in the City's comments was to revise the text of the TMDL as follows: "This TMDL report established the effective % impervious cover ... and outlines the measures which may be needed to reduce the impacts from impervious cover and meet water quality standards."
3. Attainment of water quality standards should eliminate the need for further effective IC reductions.
4. As the City commented in 2012 as to the IC TMDL overall, the Addendum should acknowledge in specific text and allow for natural conditions. On page 14 of the State's draft IC TMDL in 2012, the TMDL document noted that impairment may be due at least in part to natural conditions (including impermeable soil group or naturally low dissolved oxygen levels) and that includes elevated temperatures in the Bog section of the Penjajawoc Stream. Furthermore, it should be acknowledged that some streams (or reaches within that stream) are not naturally capable of supporting their current stream classification. With an overreliance on pages 3-5 in the Addendum on IC % cover from aerial photography, it would be well to demonstrate the scientific and specific bases for non-attainment due to some of the natural conditions in the Upper Watershed and include those references from the historical record and place those reference in the discussion on pages 3-5 of the Addendum so that the document is technically balanced.
5. Clarify that assessment summaries on pages 3-5 of the Addendum are estimates only. The amount of impervious cover is not clearly and consistently referenced as an estimate. The fact that the City used high resolution aerial photography is helpful but two key concepts are needed and should be liberally applied in the text of the Addendum (particularly at pages 3-5) or built out as a new and additional section of the Addendum: (1) again the focus should be on *effective* impervious cover; and (2) the focus should be on *estimated % IC only*. In the MDEP August 14, 2012 response to the City's comments, the MDEP stated: "... estimation is inferred when interpreting orthophotos in GIS." It would be helpful, given the heavy reliance on estimating all watershed reaches of the Stream, to have the fact that the current IC %s is estimated made explicit.
6. It would be helpful to have the Addendum include specific reference to the array of tools available to prevent degradation of stream and habitat quality including those detailed at

Tracy Krueger, Stormwater TMDL Coordinator
Maine Department of Environmental Protection
November 21, 2023

the outset of these comments. As MDOT commented at the November 8 stakeholder review of the Draft Addendum to the IC TMDL, the language of the Addendum should also focus on the use of the MS4 permits linked to Chapter 502 reviews.

7. Consider having the Addendum repeat the assurance and credit for the City of Bangor making progress by including the following somewhere in the text of the Addendum: “as an MS4 community that is working to put in place a Watershed Management Plan for the Penjajawoc Stream as a stream of primary concern as identified in its MS4 stormwater management plan, and which has a funding source in place which will allow the municipality to make substantial progress on completing the tasks to be outlined in the watershed management plan, the City of Bangor is considered to be making adequate progress under the IC TMDL.”

We thank the Department for the opportunity to comment on the October 23 Draft Addendum and respectfully submit these commits for consideration. Also, thank you again for the MDEP’s and the City’s outreach to the Bangor Landowners as part of the collaborative efforts contemplated by the TMDL and collaborate water management planning. We welcome any questions you may have.

Very truly yours,



P. Andrew Hamilton

cc: Wendy Garland, MDEP Division of Environmental Assessment
Richard May, City of Bangor Stormwater
William Fletcher, Maine Community College System
Noreen Patient, Darling’s Auto
Bob Quirk, Quirk Auto
Rick Varney, Varney GMC