COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

100 CAMBRIDGE STREET, BOSTON, MA 02114 617-292-5500

THE OFFICE OF APPEALS AND DISPUTE RESOLUTION

March 17, 2023

In the Matter of
Andrew Chaban c/o
Princeton Development, LLC

OADR Docket No. WET-2021-041
DEP File No. 344-1467
Wilmington, MA

RECOMMENDED FINAL DECISION

INTRODUCTION

A Ten-Residents Group, Headwaters Stream Team, ("Petitioners") filed this appeal with the Office of Appeals and Dispute Resolution ("OADR")[1] challenging a Superseding Order of Conditions ("SOC") that the Massachusetts Department of Environmental Protection's Northeast Regional Office ("MassDEP") issued to the Applicant, Andrew Chaban c/o Princeton Development, LLC ("Applicant") pursuant to the Massachusetts Wetlands Protection Act, G.L. c. 131, § 40 ("MWPA"), and the Wetlands Regulations, 310 CMR 10.00 et seq. ("the Wetlands Regulations"). The SOC approved the Applicant's proposed project to construct two residential apartment buildings, related parking, and associated infrastructure ("the Project") at 378-384 Middlesex Avenue & 200 Jefferson Road, Wilmington, Massachusetts ("the Property"). MassDEP

[1] OADR is an independent quasi-judicial office in the Massachusetts Department of Environmental Protection ("MassDEP") which is responsible for advising MassDEP's Commissioner (or an alternative agency Final Decision-Maker where the Commissioner is recused) in resolving all administrative appeals of MassDEP Permit Decisions, Environmental Jurisdiction Determinations, and Enforcement Orders. A detailed description of OADR is set forth in Addendum No. 1, at p. 44 below.

issued the SOC as the result of the Petitioners' appeal of an Order of Conditions issued by the Town of Wilmington Conservation Commission ("WCC") approving the Project.

In this appeal before OADR, the Petitioners request that MassDEP's Acting Commissioner issue a Final Decision vacating the SOC and rejecting the Project because according to the Petitioners the Mean Annual High-Water Line ("MAHW") for the reach of Lubber's Brook on the Property has been incorrectly delineated. They argue that if the current regulatory criteria are applied, then MassDEP and the Applicant's reliance on changes in vegetation, among other Bankfull criteria, has resulted in a grossly incorrect MAHW delineation, and further, that use of USGS StreamStats was inappropriate.[2] The Petitioners also argue that regardless of the wetlands regulatory criteria, the process negotiated in a 2004 Settlement Agreement between parties unrelated to the present appeal must be used to delineate MAHW on the Property. MassDEP, the Applicant, and the WCC assert that when applying the current regulatory criteria there are several reliable Bankfull field indicators on which the MAHW delineation relies and that it is appropriate to utilize StreamStats to corroborate field observations.

As discussed below, on the Parties' Cross-Motions for Summary Decision, I rejected the Petitioners' claim that the 2004 Settlement Agreement governed the MAHW delineation on the Property and then conducted an evidentiary adjudicatory hearing ("Hearing") on the whether the MAHW delineation on the Property, as set forth in the SOC Plan, was proper. Based on a preponderance of the sworn testimonial and documentary evidence presented by the Parties' respective witnesses at the Hearing, including wetlands experts, which I discuss below, I find that the MAHW, as depicted on the SOC Plan, is an accurate representation of the relevant reach of

[2] USGS StreamStats ("StreamStats") is a web application that "provides access to spatial analytical tools that are useful for water-resources planning and management, and for engineering and design purposes." https://www.usgs.gov/streamstats. "The map-based user interface can be used to delineate drainage areas, get basin characteristics and estimates of flow statistics, and more." Id.; Davis PFT, ¶ 43.

Lubber's Brook, and that MassDEP and the Applicant appropriately utilized the current regulatory criteria for determining MAHW, and appropriately used StreamStats as another line of evidence corroborating the MAHW of Lubber's Brook. Accordingly, I recommend that MassDEP's Acting Commissioner issue a Final Decision affirming the SOC.

EVIDENCE

Ex Parte Communication Not Considered in Adjudicating Appeal

Before discussing my Summary Decision ruling that the 2004 Settlement Agreement does not govern the MAHW delineation on the Property and the testimonial and documentary evidence that the Parties presented at Hearing resulting in my finding that the MAHW delineation on the Property, as set forth in the SOC Plan, was proper, I must address the Ex Parte Communication that OADR recently received regarding this appeal and note for the record that it had no bearing on my Recommended Final Decision here recommending that MassDEP's Acting Commissioner issue a Final Decision affirming the SOC.

I begin with stating that adjudication of this appeal is not only governed by the MWPA and Wetlands Regulations but also the Ex Parte Rule of 310 CMR 1.03(7) which provides that:

> No Party or other Person directly or indirectly involved in an adjudicatory appeal shall submit to the Presiding Officer or any Agency employee involved in the Decision-making process, any evidence, argument, analysis or advice, whether written or oral, regarding any matter at issue in an adjudicatory appeal, unless such submission is part of the record or made in the presence of all Parties. This provision does not apply to consultation among Agency members concerning the Agency's internal administrative functions or procedures.

The Ex Parte Rule is consistent with constitutional due process principles that:

> [Administrative] hearing officers, like judges, are held to "high standards [which] are reflective of the constitutional rights of litigants to a fair hearing, as established in art. 29 of the Declaration of Rights of the Constitution of this Commonwealth . . . . 'It is the right of every citizen to be tried by judges as free, impartial and independent as the lot of humanity will admit.'". . . Moreover, . . . "actual impartiality alone is not enough [because of] . . . the importance of maintaining not only fairness but also the appearance of fairness in every judicial proceeding. In

> order to preserve and protect the integrity of the judiciary and the judicial process, and the necessary public confidence in both, even the appearance of partiality must be avoided."

Doe v. Sex Offender Registry Board, 84 Mass. App. Ct. 537, 541-42 (2013).

In accordance with the Ex Parte Rule and the constitutional due process principles discussed above, on February 21, 2023 OADR's Chief Presiding Officer made part of the Administrative Record of this appeal, an Ex Parte Communication that had been brought to his attention by MassDEP's Acting Commissioner, the "Agency employee involved in the Decision-making process" in this appeal, specifically, issuing the Final Decision in this appeal. The Ex Parte Communication was a February 17, 2023 e-mail message that Massachusetts State Senator Barry Finegold had forwarded to MassDEP's Acting Commissioner and his superiors: the Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs ("EEA") and the Massachusetts Lt. Governor, which referred to this appeal and urged final approval of the SOC as soon as possible.[3] The complete text of Senator Finegold's email message is set forth in footnote 4.[4]

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[3] Three days before Senator Finegold's email, on February 14, 2022, the Applicant's counsel sent an email inquiry to OADR's Case Administrator asking when the Recommended Final Decision would be issued in this appeal. OADR's Case Administrator responded that given the press of business in OADR it was expected that the Recommended Final Decision would be issued within the next 30-60 days.

[4] Senator Finegold's email message provided as follows:

> Dear Secretary Tepper, Lieutenant Governor Driscoll, and Acting Commissioner Moran,
>
> I am writing today to request a meeting on the afternoon of **Wednesday, March 8th** to discuss expediting DEP's approval process of an important affordable housing project in Wilmington.
>
> The project in question (**OADR Docket No. WET-2021-041,** DEP File No. 344-1467) is on Jefferson Rd. in Wilmington. The Wilmington Board of Appeals granted approval for the project on July 22nd, 2020, and the Wilmington Conservation Commission issued its order of conditions on February 5th, 2021. Their decision was subsequently appealed by a group of residents to the Department of Environmental Protection and is **still pending with DEP's Office of Appeals and Dispute Resolution.**
>
> It is my understanding that the departure of staff from DEP in 2022 has caused delays on a number of final determinations. This has meant no visible movement for the Wilmington project since the filing of closing and

MassDEP's Acting Commissioner brought Senator Finegold's e-mail message to the Chief Presiding Officer's attention because the latter is the head of OADR and my supervisor and to make him aware of this Ex Parte Communication. At no time have MassDEP's Acting Commissioner, or anyone else, including the EEA Secretary and the Lt. Governor, directed the Chief Presiding Officer, or me, to take any particular action in this appeal. As I stated previously above, Senator Finegold's e-mail message had no bearing on my Recommended Final Decision here recommending that MassDEP's Acting Commissioner issue a Final Decision affirming the SOC. The basis for my Recommended Final Decision is discussed in detail below.

Project Background

The Project, as approved in the SOC, includes Building A, located on the corner of Middlesex Avenue (also referred to as Route 62) and Jefferson Road in Wilmington, a four-story, 58-unit apartment building with a 19,500 square foot footprint with surface parking and an underground garage. This area currently contains existing buildings, parking, and infrastructure. Pre-filed Testimony of Jill Provencal ("Provencal PFT"), ¶ 11. The Project also includes Building B, located on Jefferson Road, a four-story 50-unit apartment building with 16,500 square footprint, with surface parking for 83 vehicles, including two garage bays for 15 additional vehicles. Provencal PFT, ¶ 3.[5]

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post-hearing briefs in mid-September 2022. **DEP's final approval on this project is urgently needed for the Wilmington community and will help add crucial affordable housing units in the community.**

Please let me know what meeting times might work best for you, and do not hesitate to reach out if there is anything that I or my staff can do to bring this matter to a close. Thank you for your time and consideration.

Best, Barry
Barry R. Finegold *State Senator, 2nd Essex & Middlesex District* State House | Room 511-A | Boston, MA 02133
Office: (617) 722-1612

[5] Stormwater management improvements were addressed in the SOC but stormwater is not an issue identified for adjudication in this proceeding.

Lubber's Brook is a tributary to the Ipswich River and runs parallel to the Project site to the north. SOC cover letter, page 1. Lubber's Brook has an associated Bordering Vegetated Wetland ("BVW") and Lubber's Brook traverses through it, exhibits meanders, a low gradient and poorly defined banks. SOC cover letter, page 3. Lubber's Brook appears to be carving a channel through the BVW containing emergent mash and shrub vegetation. SOC cover letter, page 3. According to the FEMA flood map, Lubber's Brook has a base flood elevation of 82'and an additional Zone AE outside the shown Floodway with no base flood elevation. The Project site is not located within the floodplain. SOC cover letter, page 2. The Project Property is bounded by residential lots to the north and east, the MBTA Commuter Rail and Town owned land to the west, and Middlesex Avenue to the south. SOC cover letter, page 1.

As delineated on the SOC Plan, with the MAHW at the Bankfull width of 23.9 feet, the total amount of Riverfront Area ("RA") on the Project Property is 523,948 square feet of which approximately 33,365 square feet is considered degraded due to existing impervious surfaces and structures. Of the remaining 490,583 square feet of RA, approximately 9,872 square feet, located within the outer 200-foot RA, is proposed to be developed by the Applicant in the Project. The Project also proposes to restore approximately 1,580 square feet of RA through planting of native species. SOC cover letter, pages 3-4.

The Wetlands Regulations allow the alteration of up to 5,000 square feet or 10% of the RA within a Property, whichever is greater, provided that at a minimum, a 100-foot wide-area of undisturbed vegetation is provided, stormwater is managed, work does not result in an impairment of wildlife habitat functions and will not impair groundwater or surface water quality. See 310 CMR 10.58(4)(d). According to the SOC, 2% of the Riverfront Area, within the outer 200-foot Riverfront Area, will be developed. None of the work is proposed within the resource areas of

Bordering Land Subject to Floodings ("BLSF"), BVW, or on Inland Bank. SOC Cover letter, page 4-5. The Petitioners estimated MAHW delineation, a width ranging from 40-105 feet, would result a significantly different Riverfront Area. Pre-Filed Testimony of Patrick Garner ("Garner PFT"), ¶ 93.

Procedural Background

The Applicant filed a Notice of Intent ("NOI") with the WCC seeking approval of the Project which it approved with the issuance of an Order of Conditions ("OOC") on February 5, 2021. Pre-filed Testimony of Valerie Gingrich ("Gingrich PFT"), ¶ 9. Thereafter, on February 19, 2021, the Petitioners sought the SOC from MassDEP asserting that the OOC did not accurately and properly define the wetlands and Riverfront resource areas and that several flaws also existed with the stormwater management design. SOC cover letter, page 2.[6]

Jill Provencal, the head of the Wetlands Program in MassDEP's Northeast Office which issued the SOC, conducted a site inspection of the Property on April 5, 2021, attended by the Petitioners, through Suzanne M. Sullivan as the group representative and another member, the Applicant and his representatives and the representatives of the WCC. Provencal PFT, ¶ 6. At the site inspection, the Project was discussed and Ms. Provencal observed existing site conditions, the boundary of the BVW and location of the MAHW associated with Lubber's Brook. Provencal PFT, ¶ 6. Her site inspection and review of the records confirmed that a portion of the Project site is located within the 100-foot Buffer Zone to BVW associated with Lubber's Brook and contains approximately 523,948 square feet of Riverfront Area ("RA"). SOC cover letter, page 2.

[6] Prior to filing the NOI with the WCC, the Applicant filed an Abbreviated Notice of Resource Area Delineation ("ANRAD") with a MAHW delineation based on an attempted compromise with Petitioners. The WCC then issued an Order of Resource Area Delineation ("ORAD") which the Petitioners appealed. The Applicant subsequently withdrew the ANRAD. Gingrich PFT, ¶¶ 7-8. See also Cowell Exhibit 3, Hancock Technical Report, October 30, 2020.

The delineation of the MAHW, depicted on the SOC Plan, was based on multiple corroborating field indicators of Bankfull discharge that included changes in plant species, differences in soil composition, changes in slope and watershed drainage. See SOC Cover letter, page 3; Pre-Filed Testimony of David J. Cowell ("Cowell PFT"), ¶ 13. MassDEP's review included analysis through StreamStats to evaluate the relationship between Lubber's Brook's drainage area and its Bankfull width. SOC Cover letter, page 3; Provencal PFT, ¶ 7; Cowell PFT, ¶ 29. The StreamStats Bankfull Statistics Flow Report predicted a Bankfull width of 23.9 feet for the 5.2 acre drainage area of this reach of Lubber's Brook. SOC Cover letter, page 3; Provencal PFT, ¶ 25; Pre-filed Testimony of Richard Kirby ("Kirby PFT"), ¶ 20.

The SOC plan was revised where the 23.9 feetb Bankfull line extended further upgradient than the field delineated MAHW, to move the MAHW further landward. Provencal PFT, ¶ 9. MassDEP issued the SOC on November 22, 2021 affirming the WCC's approval of the Project and the Petitioners filed a timely appeal with OADR on December 15, 2021.

The prior Presiding Officer in this appeal conducted a Pre-Hearing Conference with the Parties on February 1, 2022. See Pre-Hearing Conference Report and Order ("PHC Report and Order"). At the Pre-Hearing Conference, two issues were identified for adjudication as follows:

1. Whether the 2004 Settlement Agreement Memorandum of Understanding, and Final Order of Resource Area Delineation in an appeal involving a residents group, Edward Doherty, the Wilmington Conservation Commission and MassDEP (DEP File No. 344-827; Docket No. 2002-225) are binding on the parties to this appeal.

2. Whether the MAHW for the perennial stream on the Property was properly delineated pursuant to 310 CMR 10.58(2).

See PHC Report and Order, page 3. The PHC also established a schedule for the Petitioner to file a Motion for Summary Decision regarding Issue 1 by February 17, 2022 and for the Applicant, MassDEP, and the WCC to respond by March 10, 2022. PHC Report and Order, page 6. The PHC

also established that the prior Presiding Officer intended to issue a decision on the Petitioners' Summary Decision Motion by March 17, 2022. On April 20, 2022, the prior Presiding Officer left OADR without having issued a decision on the Petitioners' Summary Decision Motion. I joined OADR on April 25, 2022 and assumed adjudicatory responsibility of this appeal at that time. Less than 30 days later, on May 23, 2022 I issued a ruling denying the Petitioners' Motion for Summary Decision on Issue 1 for the reasons discussed below, at pp. 16-20, reducing issues for adjudication in the appeal to Issue 2, whether the MAHW is correctly delineated.

On May 23, 2022, I also ruled on the WCC's Motion to Strike the testimony of one of Petitioners' witnesses, Keith Hannon, on the grounds that he was the WCC's peer reviewer for 2021 ANRAD that the Applicant withdrew when appealed by the Petitioners. I denied the WCC's Motion stating that, in accordance with 310 CMR 1.01(13)(h)1, I would accord his testimony the weight that it was due within my discretion. However, his testimony was subsequently stricken from the record pursuant to 310 CMR 1.01(13)(h)3 because he did not attend the Hearing for cross-examination on his testimony. Hearing at 5:01-10:57; 2:00:26-2:01:55.

The evidentiary Adjudicatory Hearing ("Hearing") on Issue 2 took place on August 2, 2022. On the previous date, August 1, 2022, with the Parties' assent, I granted the Petitioners' motion to reschedule the Applicant's and MassDEP's cross examination of the Petitioners' witness Patrick Garner to a date after August 2, 2022 due to a medical emergency. On August 2, 2022, I conducted the Hearing at which the remaining eight (8) witnesses were available for cross-examination on the sworn Pre-Filed Testimonial and documentary evidence ("PFT") and Pre-Filed Rebuttal Testimonial and documentary evidence ("PFR") that they had filed prior to the Hearing in support of the Parties' respective positions on Issue 2. At the Hearing, I determined that there was no need to schedule an additional Hearing day for Mr. Garner's cross-examination on the PFT he had filed

on behalf of the Petitioners on Issue 2 after the Applicant, MassDEP, and the WCC stated that they were not going to cross-examine Mr. Garner and waived the authentication of his PFT, agreeing that his PFT was properly filed with OADR. Hearing at 1:54:50-1:56:30.

Witnesses

The witnesses who submitted PFT prior to the Hearing in support of the Parties' respective positions on Issue 2 and were available for cross examination at the Hearing were as follows:

For the Petitioners:

1. Wayne Castonguay: Mr. Castonguay has been the Executive Director of the Ipswich River Watershed Association ("IRWA") for 10 years. Prior to joining the IRWA, he was an Ecologist for the Trustees of the Reservations for 14 years, and a Marine Biologist for the Commonwealth of Massachusetts for 10 years. Mr. Castonguay has participated in more than fifty (50) Riverfront and Mean Annual High Water ("MAHW") delineations. He qualified as an expert witness at the Hearing.
2. Patrick Garner: Mr. Garner is a wetland scientist, professional land surveyor, certified soil evaluator, and hydrologist with more than 30 years of experience in these fields. Mr. Garner has performed hundreds of river evaluations, wetlands studies, and delineations in New England and the southeastern United States. Mr. Garner has taught numerous wetlands workshops and seminars and has been a member of MassDEP wetlands advisory committees including the Intermittent/Perennial River Committee and the Mean Annual High Water/Bankfull Committee. Mr. Garner was also a beta tester for USGS StreamStats. He qualified as an expert witness at the Hearing.
3. Neil Shea: Mr. Shea is the Restoration Program Director at the IRWA in which capacity he directs and develops strategies that further IRWA's goals of restoring and monitoring

aquatic habitats in the Ipswich, Parker, and Essex River watersheds. He previously worked in Washington state as a watershed scientist and conducted watershed and stream modeling, geomorphological mapping and analysis, and interpretation of stream gage data. He qualified as an expert witness at the Hearing.

For the Applicant:

1. David J. Cowell: Mr. Cowell is wetlands scientist and project manager with Hancock Associates and has been providing wetland and ecological consulting and permitting services for more than 20 years. Mr. Cowell has performed hundreds of wetland delineations of BVW, Inland Bank and MAHW associated with Riverfront in accordance with MassDEP methodologies throughout the Commonwealth. He is certified and in good standing as a Professional Wetlands Scientist ("PWS"), Wildlife Biologist ("CBW"), Certified Ecological Restoration Practitioner ("CERP"), and a Certified Erosion, Sediment and Stormwater Inspector ("CESSWI"). He qualified as an expert witness at the Hearing.

For the WCC:

1. Valerie Gingrich: Ms. Gingrich has been the Director of Planning and Conservation for the Town of Wilmington since 2015. Her responsibilities include reviewing and advising the WCC regarding various wetland applications. She is qualified as an expert witness at the Hearing.
2. Richard Kirby: Mr. Kirby is a wetlands scientist at LEC Environmental Consultants, ("LEC") where he has been employed since 1999 and is a Senior Wetlands Scientist and Manager. His practice includes the delineation of wetlands resources include BVWs and MAHWs. He has lectured on Riverfront Area Development and serves as the president of the Association of Massachusetts Wetlands Scientists. He qualified as an expert witness at

the Hearing.

For the Department:

1. Jill Provencal: Ms. Provencal has been employed with MassDEP as an Environmental Analyst since 1989, currently serving as the Wetlands Section Chief in MassDEP's Northeast Regional Office. Her work includes interpreting and applying the MWPA and the Wetlands Regulations. She qualified as an expert witness at the Hearing.
2. Heidi M. Davis: Ms. Davis is a wetlands scientist and has been employed with MassDEP since 1989 and is a senior Environmental Analyst, currently serving as the Division of Wetlands and Waterways Program, Highway Unit Supervisor conducting wetlands, water quality and waterways permitting and compliance on MassDOT projects. Ms. Davis served on the MAHW technical advisory committee, has specific training in Bankfull indicators, has conducted numerous wetlands trainings and participated in USGS field survey of Bankfull dimensions. She qualified as an expert witness at the Hearing.

ISSUE FOR ADJUDICATION

The sole issue for adjudication at the Hearing on which the witnesses presented testimony was:

> Whether the Mean Annual High Water line for the perennial stream on the Property was properly delineated pursuant to 310 CMR 10.58(2).

STATUTORY AND REGULATORY FRAMEWORK

Under the MWPA and the Wetlands Regulations, all perennial streams, or rivers, have a regulated Riverfront Area, defined in the MWPA as, "that area of land situated between a river's mean annual high-water line and a parallel line located two hundred feet way, measured outward horizontally from the river's mean annual high-water line." G.L. c. 131, § 40. Riverfront Areas generally receive special protection under the MWPA and the Wetlands Regulations because of the

multiple environmental benefits they provide. 310 CMR 10.58(1). The Riverfront Area may include or overlap other resource areas or their buffer zones, but the Riverfront Area does not have a buffer zone. 310 CMR 10.58(2), 310 CMR 10.58(2)(a)3.

PEITIONERS' BURDEN OF PROOF AT THE HEARING

As the party challenging the Department's issuance of the SOC, the Petitioners had the burden of proof at the Hearing, to produce credible evidence from a competent source to support its positions.[7] "A 'competent source' is a witness who has sufficient expertise to render testimony on the technical issues on appeal." In the Matter of City of Pittsfield Airport Commission, OADR Docket No. 2010-041, Recommended Final Decision (August 11, 2010), 2010 MA ENV LEXIS 89, at 36-37, adopted by Final Decision (August 19, 2010), 2010 MA ENV LEXIS 31. Whether the witness has such expertise depends "[on] whether the witness has sufficient education, training, experience and familiarity with the subject matter of the testimony." Commonwealth v. Cheromcka, 66 Mass. App. Ct. 771, 786 (2006) (internal quotations omitted). see e.g. In the Matter of Carulli, Docket No. 2005-214, Recommended Final Decision (August 10, 2006)(dismissing claims regarding flood control, wetlands replication, and vernal pools for failure to provide supporting evidence from competent source), adopted by Final Decision (October 25, 2006); In the Matter of Indian Summer Trust, Docket No. 2001-142, Recommended Final Decision (May 4, 2004) (insufficient evidence from competent source showing that interests under MWPA were not protected), adopted by Final Decision (June 23, 2004); In the Matter of Robert Siegrist, Docket No. 2002-132, Recommended Final Decision (April 30, 2003) (insufficient evidence from competent source to show wetlands delineation was incorrect and work was not properly conditioned), adopted by Final Decision (May 9, 2003).

[7] See 310 CMR 10.03(2); 310 CMR 10.05(7)(j)2.b.iv; 310 CMR 10.05(7)(j)2.b.v; 310 CMR 10.05(7)(j)3.a; 310 CMR 10.05(7)(j)3.b.

STANDARD OF REVIEW

My review of the evidence presented by the Parties at the Hearing was de novo, meaning that my review was anew, irrespective of any prior determination of the Department in issuing the SOC. In the Matter of Brian Corey, OADR Docket No. WET 2016-023, Recommended Final Decision (February 28, 2018), 2018 MA ENV LEXIS 10, at 58, adopted as Final Decision (March 15, 2018), 2018 MA ENV LEXIS 9. Put another way, as the Presiding Officer responsible for adjudicating the appeal, "[I am] not bound by MassDEP's prior orders or statements [in the case], [but] instead [am] responsible . . . for independently adjudicating [the] appea[l] and making a recommendation to MassDEP's Commissioner that is consistent with and in the best interest of the [MWPA] and . . . [the Wetlands] Regulations . . . ." Id.

The relevancy, admissibility, and weight of evidence presented at the Hearing were governed by M.G.L. c. 30A, § 11(2) and 310 CMR 1.01(13)(h)(1). Under G.L. c. 30A, § 11(2):

> [u]nless otherwise provided by any law, agencies need not observe the rules of evidence observed by courts, but shall observe the rules of privilege recognized by law. Evidence may be admitted and given probative effect only if it is the kind of evidence on which reasonable persons are accustomed to rely in the conduct of serious affairs. Agencies may exclude unduly repetitious evidence, whether offered on direct examination or cross-examination of witnesses.

Under 310 CMR 1.01(13)(h), "[t]he weight to be attached to any evidence in the record . . . rest[ed] within the sound discretion of the Presiding Officer. . . ." Speculative evidence was accorded no weight given its lack of probative value in resolving the Issues for Resolution in the Appeal. In the Matter of Sawmill Development Corporation, OADR Docket No. 2014-016, Recommended Final Decision (June 26, 2015), 2015 MA ENV LEXIS 63, at 84, adopted as Final Decision (July 7, 2015), 2015 MA ENV LEXIS 62 (petitioners' expert testimony "that pharmaceuticals, toxins, and other potentially hazardous material would be discharged from effluent

generated by . . . proposed [privately owned wastewater treatment facility] . . . was speculative in nature and not reliable").

DISCUSSION

I. Prior Summary Decision Ruling on Issue 1

As noted above, the first issue for adjudication in the appeal, Issue 1, presented the following query: whether the 2003/2004 Settlement Agreement, Memorandum of Understanding, and Final Order of Resource Area Delineation in a prior administrative appeal involving a residents group, Edward Doherty, the Wilmington Conservation Commission, and MassDEP (DEP File No. 344-827; In Matter of Edward Doherty, Docket No. 2002-225 ("Doherty") governed the MAHW delineation on the Property in this appeal. In moving for Summary Decision on Issue 1, the Petitioners argued that the methodology for determining MAHW associated with Lubber's Brook on the Project Property was previously decided in Doherty, and therefore was binding on the Applicant in this appeal under a theory of offensive collateral estoppel. The Petitioners argued that the elements of offensive collateral estoppel were met because Doherty involved the same land, wetlands, and stream segment at issue in the present case.

In opposition to the Petitioners' Motion for Summary Decision, the Department argued that the elements of collateral estoppel were not met and that there was no legal basis to argue that a settlement in prior administrative appeal could supersede MassDEP's Wetlands Regulations. The Applicant and the WCC filed a joint opposition to the Petitioners' Motion for Summary Decision arguing that the application of offensive collateral estoppel was not appropriate in this appeal for a number of reasons including that Doherty was not a final adjudication of the appropriate methodology for determining MAHW; the wetlands permit finalized in Doherty had expired prior to the Applicant's filing of the NOI with the WCC seeking approval of the Project; and the

Applicant was not a party to the Doherty administrative appeal, and as such it would be unfair to apply it to the present Project.

I rejected the Petitioners' claim regarding Issue 1 for the following reasons.

Motions for Summary Decision in administrative appeals before OADR are governed by 310 CMR 1.01(11)(f) and are intended "to avoid needless [evidentiary] adjudicatory hearings" in administrative appeals. In the Matter of Michael Gleason, OADR Docket No. WET-2017-019 ("Gleason"), Recommended Final Decision (December 4, 2019), 2019 MA ENV LEXIS 151, at 8-9, adopted as Final Decision (January 7, 2020), 2020 MA ENV LEXIS 65; See also Massachusetts Outdoor Advertising Council v. Outdoor Advertising Board, 9 Mass. App. Ct. 775, 785-86 (1980) ("administrative summary judgment procedures" are appropriate to resolve administrative appeals without an adjudicatory hearing "when the papers or pleadings filed [in the case] . . . conclusively show . . . that [a] hearing can serve no useful purpose . . ."). Summary decision is appropriate where the party seeking summary decision can "demonstrate that there is no genuine issue of material fact and that the party is entitled to a final decision as a matter of law." 310 CMR 1.01(11)(f).

Contrary to the Petitioners' assertions, the elements of collateral estoppel, or res judicata, are not present in this appeal. Neither the Applicant, the Petitioner, nor the Project are the same in this appeal as were involved in Doherty. Undisputedly, Doherty was resolved in 2004 (nearly 20 years ago) when MassDEP's then Commissioner issued a Final Decision in that appeal that approved the Settlement Agreement reached by the Parties in Doherty. The Settlement Agreement incorporated a 2003 Memorandum of Understanding ("MOU"), signed by representatives for the Doherty applicant, the petitioner, and the WCC creating a methodology for how they would

determine MAHW.[8] By its terms and the Wetlands Regulations, the FORAD expired three (3) years later in 2007 or 16 years ago. The three (3) year expiration period is bounded in well-established wetlands delineation principles that wetlands can change over time as a result of conditions in the environment. The principle is well-established that an expired wetlands permit cannot be revived or reinstated. In the Matter of Elite Home Builders, LLC, 2016 MA ENV LEXIS 33, at 7-8 (June 30, 2016), citing In the Matter of David H. Barrett and Kevin Cunniff, Docket No. 2001-178; File No. 161-293, Recommended Final Decision (June 11, 2002), 2002 MA ENV LEXIS 91, at 4, adopted as Final Decision (July 1, 2002), 2002 MA ENV LEXIS 92.

Nor do the elements of the estoppel doctrine, which apply when one party has reasonably relied to its detriment on the statements/promises of another, apply here for two reasons. First, as noted, the FORAD at issue in Doherty expired three (3) years after its issuance and after that time could not be relied on by any party. Second, Massachusetts courts have long been "reluctant to apply principles of estoppel to public entities where to do so would negate requirements of law intended to protect the public interest." Sullivan v Chief Justice for Administration and Management of the Trial Court, 448 Mass. 15, 30 (2006) (estoppel allowed relative to plaintiff's allegations against Chief Justice sounding in contract) quoting Phipps Prod. Corp. v Massachusetts Bay Transp. Authy., 387 Mass 687, 693 (1982) (public interest in adherence to statutory bidding procedures outweighs private party's reliance on incorrect application by MBTA).

The public interest here is in the protection of wetlands through the MWPA and its attendant Wetlands Regulations, the environmental protection mission that the Massachusetts Legislature has delegated to local conservation commissions and to MassDEP. See Miramar Park Association, Inc. v. Town of Dennis, 480 Mass 366, 368 (2018) citing Healer, supra; See also, Healer v. Dept. of

[8] The MAHW line as memorialized in the Settlement Agreement was for purposes of settlement only and had no field basis. Pre-Filed Testimony of Heidi Davis ("Davis PFT"), ¶ 54.

Envtl. Protection, 73 Mass. App. Ct. 714, 717, 718 (2009), quoting Hamilton v. Conservation Commission of Orleans, 12 Mass. App. Ct. 359, 368 (1981). The Petitioners' effort here to assert that the near 20-year-old MOU negotiated methodology should apply to the MAHW delineation on the Property, even if the Doherty FORAD expired, is not compelling.

The Petitioners' position goes against the well-established principle of wetlands science noted above, that wetlands delineations can change over time, a principle that is built into MassDEP's Wetlands Regulations. Simply stated, compelling MassDEP to set aside its current Wetlands Regulations governing wetlands delineations to utilize a near 20-year-old MOU methodology, that resulted in a 3-year wetlands permit (the Doherty FORAD), long expired, is unreasonable as a matter of law and against public policy.

II. The Mean Annual High Water for Lubber's Brook is Accurately Delineated in the SOC Plan

As discussed previously, my denial of the Petitioners' Motion for Summary Decision on Issue 1 resulted in Issue 2 being the only issue to be adjudicated at the Hearing. Issue 2 posed the following query: whether the MAHW line for Lubber's Brook on the Property was accurately delineated in the SOC Plan. It was the Petitioners' burden at the Hearing to present persuasive evidence demonstrating that the MAHW line at issue had been incorrectly delineated in the SOC Plan. The dispute between the Parties regarding whether the MAHW line was properly delineated in the SOC Plan related to which Bankfull field indicators were reliable where Lubber's Brook traverses through other wetlands resources, namely BVW and Floodplain. The Petitioners argue there are two Bankfull field indicators, bank undercuts and staining, that in combination with other facts demonstrate the MAHW to reflect a wider Bankfull measurement, which would move the RA significantly further landward. MassDEP, the Applicant and the WCC contend that the MAHW is accurately drawn on the SOC Plan based on multiple other Bankfull field indicators, excluding

bank undercuts and most staining, corroborated by StreamStats, resulting in a conservatively delineated MAHW. Based on a preponderance of the evidence presented at the Hearing, I find that the multiple Bankfull field indicators on which the SOC relies demonstrate the MAHW line is accurately drawn and that Petitioners have not met their burden to show that the MAHW line is factually in error.

As noted, the Parties agree that Lubber's Brook is a perennial stream, and therefore has regulated RA which generally receives special protection under the MWPA and Wetlands Regulations because of the environmental benefits they provide. See 310 CMR 58.01. The MWPA define the RA as: "that area of land situated between a river's mean annual high-water line and a parallel line located two hundred feet away, measured outward horizontally from the rivers mean annual high-water line." G.L. c. 131, § 40.

MAHW is the line that is apparent from visible markings of changes in the character or soils or vegetation between a flowing stream and, in this case, BVW and Flood Plain. The regulations at 310 CMR 10.58(2)(a)2 provide,

> "Mean Annual High Water Line of a river is the line that is apparent from visible markings or changes in the character of soils or vegetation due to the prolonged presence of water and that distinguishes between predominantly aquatic and predominantly terrestrial land. Field indicators of Bankfull conditions shall be used to determine the mean annual high-water line. Bankfull field indicators include but are not limited to: changes in slope, changes in vegetation, stain lines, top of pointbars, changes in bank. materials, or bank undercuts.
>
> a) In most rivers, the first observable break in slope is coincident with Bankfull conditions and the man annual high-water line.
>
> b) In some river reaches, the mean annual high-water line is represented by Bankfull field indicators that occur above the first observable break in slope, or if no observable break in slope exists, by other Bankfull field indicators. These river reaches are characterized by at least two of the following features. Low gradient, meanders, oxbows, histosols, a flow-flow channel, or poorly defined or nonexistent banks." (emphasis supplied).

The "visible markings or changes in the character of soils or vegetation" that denote the MAHW are caused by "the prolonged presence of water" or "a river's annual high-water flows." 310 CMR 10.58(2)(a)2.; Preface to Wetlands Regulations Relative to Annual High Water, 2000 Regulatory Revisions ("Preface"). "Bankfull" conditions means the level that flood flows reach on an average annual basis. Field indicators, "visible markings or changes," are the primary tool for locating the MAHW. Id. While "Bankfull" discharge may be determined using "complicated statistical computations," readily observable field indicators are easier to implement. Id. The Preface describes MAHW as "the cross-sectional area that carries the river's annual high-water flows" that "cause morphologic changes that can be observed in the field." Id.

The MAHW for river reaches that are "characterized by features such as low gradient, meanders, oxbows, histols, and low flow channel, or poorly defined or nonexistent banks, will be evidenced by some combination of the Bankfull field indicators that may be quite subtle in a meandering river with a broad floodplain, or in a wetland stream." 310 CMR 10.58(2)(a)2.(b). When MAHW cannot be determined from the first observable break in slope, it should be determined by analyzing multiple Bankfull field indicators. Id. See also In the Matter of Richard W. Skeffington, Jr., OADR Docket No. WET 2009-049, Recommend Final Decision (March 30, 2010), 2010 MA ENV LEXIS 205, at 19, adopted by Final Decision (April 9, 2010) 2010 MA ENV LEXIS 94 (when delineating MAHW observations must be linked to prolonged presence of water or morphological changes from high flow).

A. Multiple Bankfull Field Indicators Demonstrate Mean Annual High-Water

The Parties agree on several facts related to this reach of Lubber's Brook. As a tributary to the Ipswich River, Lubber's Brook is a meandering stream with low flow, low gradient, and poorly defined banks, that flows north to south. Garner PFT, ¶¶ 22-24; Cowell at PFT, ¶¶ 17, 37, 58;

Provencal PFT, ¶ 19; Kirby PFT, ¶¶ 10, 19. There are two culverts through which the Brook passes within an abutment at Middlesex Avenue (Route 62). Garner PFT, ¶ 24; Cowell PFT, ¶ 20; Davis PFT, ¶¶ 69-72. This reach of Lubber's Brook extends through, traverses, is adjacent to or borders BVW, Garner PFT, ¶ 23; Cowell PFT, ¶ 18; Provencal PFT, ¶ 19; Kirby PFT, ¶ 10; and Flood Plain, Davis PFT, ¶¶ 56, 73. This adjacent BVW is perennially flooded, with standing surface water. Garner PFT, ¶ 23; Cowell PFT, 19; Provencal PFT, ¶ 28. Multiple Bankfull field indicators are needed to demonstrate MAHW in a wetlands stream such as this one. Garner PFT, ¶ 37; Cowell PFT, ¶ 13; Provencal PFT, ¶ at 15; Davis PFT, ¶ 35; Kirby PFT, ¶¶ 6, 11, 19; See 310 CMR 10.58(2)(a)2.(b). There the Parties' agreement ends.

"Bankfull field indicators may be quite subtle in a meandering river with a broad floodplain, or in a wetland stream, so multiple observations along both sides of the river, combined with field indicators located up and down the river reach, may be necessary." See Preface (emphasis supplied). Provencal PFT, ¶ 17. The evidentiary record supports the conclusion that there are four (4) reliable Bankfull indicators at this reach of Lubber's Brook: an observable break between riverine aquatic vegetation communities and BVW terrestrial vegetation communities, differences in soil composition from within the channel versus the BVW, watershed drainage patterns and changes in slope. The testimony presented at the Hearing regarding these observed Bankfull field indicators adequately links the "prolonged presence of water" and "morphological changes from high flows that are the hallmark of mean annual high-water" sufficiently to establish the MAHW.

The Bankfull field indicators evaluated here relate to a single channel meandering through a BVW or Floodplain. The Petitioners experts testified that Lubber's Brook has multiple or braided channels and argued that it has "a main-stem," with low flow channels that riddle the adjoining

BVW. Garner PFT, ¶¶ 23, 58, 97; Shea PFT, ¶ 18. However, the evidence presented at the Hearing overwhelmingly demonstrates that this reach of Lubber's Brook is a single channel meandering through broad wetlands. Multiple historic aerials, some dating to 1938, Google Map images dating to 1995, and MassGIS aerial photographs dating between 1990 and 2021 introduced in evidence at the Hearing by the Parties show a single, open channel meandering through a broad floodplain. Cowell Exhibit 3, Hancock's October 20, 2020 Technical Report, Attachment A, aerial photographs; Cowell Exhibit 4, aerial photograph, Appendix B, included in Hancock's August 30, 2020 Technical Report submitted with the NOI; Davis PFT, ¶ 56; Davis Exhibit D; Kirby PFT, ¶¶ 10[9], 19. See also, Cowell Exhibit 4, aerial photograph, Appendix B, included in Hancock's August 30, 2020 Technical Report submitted with the NOI; Cowell Exhibit. 3, Hancock's October 20, 2020 Technical Report, Attachment A, aerial photographs. This photographic evidence is corroborated by the lack of observed Bankfull indicators beyond the Lubber's Brook channel. Kirby PFT, ¶ 19.

This reach of Lubber's Brook has one clear primary channel and "has no braided, sinuous, or anastomosed channelization within it." Cowell PFT, ¶¶ 17-18, 37. "Any braided and sinuous poorly defined channels extending away from the primary channel far into the adjacent BVW and flood plain are beyond the influence of Bankfull discharge" that actively creates, modifies, and maintains the river's channel." This non-linear lateral movement of periodic floodwaters into abutting and tangential BVW and BLSF is considered backwater, not jurisdictional MAHW." Cowell PFT, ¶ 47. On behalf of MassDEP, Ms. Provencal testified that this reach of Lubber's Brook "traverses a large wetland area, exhibits meanders, a low gradient, and poorly defined banks." Provencal PFT, ¶ 19. She also testified that "at the site visit conducted [on the Property] on April 5, 2021, [she] observed the expanse of BVW located adjacent to Lubber's Brook" and

[9] Mr. Kirby references as his source, www.historicaerials.com.

concluded that "[i]t appear[ed] that Lubber's Brook is carving a channel through the BVW." Id. (emphasis supplied).

1. Change in Vegetation:

The expert witnesses for MassDEP, the Applicant, and WCC testified at the Hearing that changes in vegetation are a reliable Bankfull field indicator at this reach of Lubber's Brook and provided testimony explaining the difference between the vegetation communities in wetlands resources at the Property. Ms. Davis, Ms. Provencal, Mr. Cowell, and Mr. Kirby testified that they observed a distinction between "primarily aquatic" or riverine vegetation community and "predominately terrestrial" vegetation community that equates to a BVW system. Cowell PFT, ¶ 23; Provencal PFT, ¶¶ 17-21; Davis PFT, ¶ 79; Kirby PFT, ¶ 12. Characterization of the different vegetational communities were made utilizing the Classification of Wetlands and Deepwater Habitats of the United States, Lewis M. Cowardian et.al., (U.S. Fish and Wildlife Service, December 1979) ("Cowardian Classifications"). Cowell PFT, ¶ at 23; Provencal PFT, ¶¶ 21-22; Davis PFT, ¶ 63.

Based on the Cowardian Classifications, Mr. Cowell identified the area within the MAHW delineation as a Riverine Lower Perennial system, one dominated by open water and emergent graminoid (grass-like) and herbaceous aquatic plant species. Cowell PFT, ¶ 23. He testified that, except for scattered observations of shrub specimens such as common button bush (Cephalanthus accidentalis) and inkberry (Ilex galbra), the vegetational community within the confines of MAHW is clearly dominated by open water and herbaceous vegetation characteristic of an aquatic riverine emergent community. Cowell PFT, ¶ 23. He further testified that beyond the confines of the delineated MAHW, the flora and wetland system changes abruptly to what the Cowardian Classifications characterize as a Palustrine Scrub-Shrub Wetland system. Id.

He testified that the Cowardian Classifications describe these systems as including "all nontidal wetlands dominated by trees, shrubs, persistent emergent, emergent mosses or lichens and all such wetlands." Id. Within this type of wetlands, which he refers to as a Scrub-Shrub Wetland system, are "areas dominated by woody vegetation less than 6 m (20 feet) tall. The species includes true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions." Id. The Cowardian Classifications indicates that the Scrub-Shrub Wetlands "may represent a successional stage leading to Forested Wetland, or they may be relatively stable communities. They occur only in the Estuarian and Palustrine Systems. Id.

Ms. Provencal testified that an open water channel and a transition from adjacent aquatic vegetation was clearly evident. Provencal PFT, ¶ 21. Observed in the channel, in the Lower Perennial System, was pickerel weed (Pontederia cordata), purple loosestrife (Lythrum salicaria) and lurid sedge (Carex lurida), riverine aquatic vegetation which transitioned to a scrub-shrub Palustrine BVW system including sweet pepperbush (Clethra alnifolia), swamp azalea (Rhododendron viscosum), silky dogwood (Swida amomum), button bush (Cephalanthus occidentalis), glossy buckthorn (Rhamnus frangula). Provencal PFT, ¶ 21; Davis PFT, ¶¶ 61-64; Cowell PFT, ¶ 23; Kirby PFT, ¶ 12, 22. Specifically, the Property photographs show the open channel with a riverine aquatic plant community of reed canary grass (Phalaris arundinacea) and inkberry (Illex glabra) extending beyond the open channel and abruptly changing to tall woody shrubs including clammy azalea (Rhododendron viscosum) in the Palustrine Scrub-Shrub BVW system. See Cowell Exhibit 3; Hancock's October 30 2020, Technical Report, Attachment B site photographs #2-7.

Mr. Kirby also testified that while woody shrubs often occur within wetlands, they are terrestrial by nature and not aquatic. Specifically, he testified that "[b]ased on [his] 22+ years of

experience delineating wetlands in Massachusetts, it is extremely uncommon for woody shrubs other than buttonbush, leatherleaf, and swamp rose and or sapling trees, other than bald cypress to occur below the MAHW line." Kirby PFT, ¶ 12. See also Provencal PFT, ¶ 21; Davis PFT, ¶ 67. See also, In the Matter of Berkshire Community College, OADR Docket No. WET 2015-023, Recommended Final Decision, 2016 MA ENV LEXIS 38, (July 18, 2016), adopted by Final Decision, 2016 MA ENV LEXIS 37, (July 29, 2016)(noting that herbaceous plant communities are not typical to channels of perennial streams).

The transition between these plant communities was identified as being along the MAHW line as flagged by the Applicant. Davis PFT, ¶ 63. Ms. Davis testified on behalf of MassDEP that if anything, the flagged line is conservative, or more protective. This is because some woody shrubs and even some Atlantic White Cedar trees (Chamacecyparis thyoides) were present downstream and to the north of Flag Z31, including in the flagged MAHW line meaning that the MAHW line occurs closer to the river channel that the MAHW as approved on the SOC Plan. Davis PFT, ¶ 68.

MAHW ends at the limit of fluvial processes and bankfull discharge as determined based on observation of multiple field indicators which may be "quite subtle." Preface . Here, the testimony of Mr. Cowell, Ms. Provencal, Ms. Davis, and Mr. Kirby identified the change in vegetation field indicators, some subtle and some less so, that indicate where the clear channel of Lubber's Brook transitions from predominantly aquatic riverine vegetation to predominantly terrestrial palustrine BVW vegetation. The terrestrial palustrine BVW is characterized by "vegetated tussocks and hummocks and woody shrubs with buttressed trucks, both of which contribute to pit and mound topography." Pre-Filed Rebuttal Testimony of David J. Cowell ("Cowell PFR"), ¶ 37. These areas may be subject to perennial flooding and standing surface water but reflect common field indicators for BVW delineation, not MAHW delineation. Cowell PFR, ¶ 37; Pre-Filed Rebuttal Testimony of

Richard Kirby ("Kirby PFR"), ¶ 22. Standing water within the adjoining BVW and BLSF "undoubtably have a nebulous non-linear seasonal surface hydrologic interchange with periodic floodwaters and backwaters of Lubber's Brook" but does not equate to "influence of riverine bankfull conditions and fluvial processes that actively creates, modifies and maintains the river's channel." Cowell PFT, ¶ 37.

The Petitioner's expert, Mr. Garner, in his testimony rejected the view that change in vegetation is a reliable Bankfull field indicator testifying that anything "wet" is aquatic and as a result there can be no change from "predominantly aquatic" to "predominately terrestrial" vegetation. Garner PFT, ¶¶ 47, 50. For this conclusion Mr. Garner turned to the Oxford English and Merriam Webster dictionaries stating that "aquatic" means "relating to, living in or frequenting water" and terrestrial means "of or on dry land, or relating to land as distinct from air or water." Garner PFT, ¶ 46.[10] He then concluded that it is impossible for aquatic and terrestrial plant communities to exist together in standing water and that all plants in standing water are aquatic, regardless of their indicator status.[11] Garner PFT, ¶ 48. The other Parties' experts testified at the Hearing that Mr. Garner's characterizations were incorrect. Provencal PFT, ¶ 21; Pre-Filed Rebuttal Testimony of Jill Provencal ("Provencal PFR"), ¶30; Pre-Filed Rebuttal Testimony of Heidi Davis ("Davis PFR"), ¶ 86; Cowell PFR, ¶ 41; Kirby PFR, ¶¶ 21-22. I agree. See also, In the Matter of Scotland Green LLC, Docket No. 2001-144, Recommended Final Decision (May 10, 2004), 2004 MA ENV LEXIS 58, adopted by Final Decision, (June 4, 2004)(the presence of

[10] These are the only two of several undefined terms in this regulatory cite that Mr. Garner seeks to define through his testimony.

[11] Mr. Garner's reference Wetland Indicator Status, to support his assertion that there is no distinction between terrestrial and aquatic vegetation, misses the mark because Wetland Indicator Status is relevant for delineation of BVW, but not for MAHW.

emergent species in standing water is not a good indicator of MAHW line where it can survive inundation and exist in both aquatic and terrestrial environments).

I find Mr. Garner's interpretation to be unpersuasive as it would remove all meaning from the terms "aquatic" and "terrestrial" as used in the regulation to distinguish riverine wetlands resources from BVW wetlands resources, and all meaning from the transition anticipated in the use of the term "predominantly." I agree with the Applicant's, MassDEP's and the WCC's experts that use of these generic definitions does not capture the subtlety and nuance required when determining the subtle changes between these wetland resources in order to determine the MAHW line of a wetland stream. Davis PFT, ¶ 86; Cowell PFT, ¶ 41; Kirby PFT, ¶ 21. Based on a preponderance of the evidence, I find that there is a change in vegetation between predominantly aquatic riverine vegetation and predominantly terrestrial BVW vegetation that is a reliable Bankfull field indicator for this reach of Lubber's Brook.

2. Pronounced change in soil composition/changes in bank material

Ms. Davis testified that changes in bank material is one of the most reliable Bankfull indicators at this reach of Lubber's Brook. Davis PFT, ¶ 79. The Applicant's, MassDEP's, and the WCC's expert witnesses testified that they observed changes in soil composition or changes in bank material that they considered a reliable Bankfull indicator for Lubber's Brook. Mr. Cowell testified on behalf of the Applicant that in determining the MAHW he observed "an abrupt and pronounced change in soil composition, specifically the depth of loose fine sediments occurring along the boundary of the MAHW as it abuts adjacent BVW and BLSF." Cowell PFT, ¶ 24. He testified that the depth of loose fine sediments observed within the confines of the MAHW were consistently greater than 36-inches in depth." Id. In addition, Mr. Cowell's testimony tied the changes in "vegetative species composition from an aquatic Riverine Lower Perennial community to a

terrestrial Palustrine Scrub-Shrub Community" to the abrupt change in the depth of loose fine sediments he observed. Cowell PFT, ¶ 24.

Mr. Cowell also testified that fine sediment within the adjacent BVW or BLSF was observed to be shallow and consistently less than 12 inches in depth. Id. This testimony is consistent with Mr. Kirby's testimony regarding his observations during his Site inspection of the Property. He testified that, "while walking through the wetland s adjacent to the channel, [his] chest water boots sunk into mucky soil material 4 to 6 inches before encountering relatively firm soil" and that "[w]hile walking within the stream channel, [his] chest water boots sunk 2 to 3+ feet into the mucky soil material." Kirby PFT, ¶ 16. Testifying for MassDEP, Ms. Davis also testified to observing a marked change in bank material noting that, "[a]t Flag Z28, we walked towards the centerline of the stream and encountered approximately three feet of loose unconsolidated silty muck at the transition from woody shrubs to herbaceous plants" and that "[t]he depth of this material increased as [she] attempted to walk closer to the centerline of the stream." Davis PFT, ¶ 66.

The Petitioners' expert, Mr. Shea, testified that he observed surficial layers of fine sediments "east of Z-31" and "south of WF117R." However, he did not testify as to depth and places these flag locations at "the estimated MAHW line shown" in Mr. Garner's Exhibit 2. Mr. Garner testified that his Exhibit 2 was a copy of the SOC plan that he scanned and converted to a cad (computer aided design) file so that he could superimpose his estimates, which included his GPS points. Garner PFT, ¶ 22. However, his testimony lacked specificity regarding how his information was incorporated into the cad file to produce his Exhibit and the resulting plan was not

stamped by a Professional Engineer.[12] His "estimates" and "approximate locations" were not supported with documentation as to spatial datam or coordinate plan. Cowell PFT, ¶ 36. As a result, I give little weight to these estimates.

Mr. Shea also testified that he believes that because wetland streams such as Lubber's Brook mainly carry fine sediments like silts and clays, it is possible "one could encounter relatively deep (1-3 feet) deposits of muck at both the "low-flow channel" of Lubber's Brook (which [he] believe[d] Mr. Cowell and Mr. Kirby were describing [in their respective testimony) and at areas that experience regular Bankfull flows, such as at flag Z-18 where [he] encountered 1-3 feet of soft mucky sediment." Pre-Filed Rebuttal Testimony of Neil Shea ("Shea PFR"), ¶ 16. Mr. Shea's testimony, however, does not persuade me that the MAHW extends beyond the line as marked on the SOC Plan for several reasons. First, my review of the testimony, including Mr. Cowell's explanation of the lateral movement of periodic floodwaters into BVW and BLSF being considered backwaters, leads me to conclude that Mr. Shea's identification of relatively deep muck in a single location outside the MAHW is consistent with deposits of muck due to periodic flood waters in BVW and Floodplain backwater, rather than an indication of a wider Bankfull width. Second, flag Z-18 at which Mr. Shea testified he observed this deeper muck is not on the SOC Plan so its location is unclear.[13] Third, Mr. Garner's Exhibit 2 on which he relies carries little weight as discussed above. Finally, Mr. Shea's use of the phrase "low-flow channel" is not a regulatory term with relevance the Bankfull field indicators demonstrating MAHW. Neither Mr. Garner nor Mr. Castonguay offered testimony regarding soil changes.

[12] Nor is it certified by a Professional Land Surveyor, although Mr. Garner's PFT indicates that he is one. The fact that Mr. Garner did not certify the resulting plan as a Professional Land Surveyor called into question the validity of the resulting plan and his testimony regarding the resulting plan.

[13] Flag Z-18 as referenced in the testimony of Petitioner's witnesses is located on the ANRAD Plan, which is not relevant to the SOC Plan at issue. See also, footnote 6.

3. Drainage Patterns, Watershed and Surface Water Flow

Regarding flow, MAHW ends at the limit of fluvial processes and bankfull discharge. Preface. Bankfull width is commensurate with drainage area. Provencal PFT, ¶ 18. Drainage and direction of flow characteristics of a Bankfull channel are quantified using parameters such as Bankfull cross-sectional area, Bankfull width, Bankfull mean depth and streamflow. These characteristics are correlated strongly with drainage area. Davis PFT, ¶ 37.

The Wetlands Regulations at 310 CMR 10,58(2) refer to the MAHW of a channel, in the singular. Mr. Cowell testified at the Hearing that singular tense infers the limit of fluvial influence and bankfull discharge contributing to the formation and morphology of the primary system channel, not contributing tributary systems. Cowell PFR, ¶ 37. He testified that it is appropriate to exclude from riverine MAHW the tangential terrestrial palustrine BVW and BLSF characterized to have vegetated tussocks and hummocks, and woody shrubs that contribute to the mounded topography of the BVW. Id. Mr. Cowell's explanation of non-linear movement of surface water as being characteristic of BVW and BLSF, and not evidence of fluvial processes that actively creates, modifies or maintains the river's channel, is compelling. Mr. Garner's flow tests that were conducted within the BVW and BLSF to show a broader bankfull width do not demonstrate fluvial process. See Cowell PFT, ¶ 37.

Mr. Shea testified that the South Middleton stream gage, located 8.5 miles downstream and located in the Ipswich River, should be utilized to show the MAHW stage and associated water "discharge " (i.e. the total volume of water flowing past the gage) at Lubber's Brook. Shea PFT, ¶ 25. Mr. Shea testified that data from such a gage can be used to determine the general magnitude of flows in stream reaches in the watershed upstream of the gage. Id. The Middleton stream gage is located below the confluence of Lubber's Brook into the Ipswich River. Cowell

PFR, ¶ 51. It is at a location that has a 44.5 mile watershed. Id. The Lubber's Brook watershed of 5.2 miles is a small fraction of that watershed. The Petitioners have not demonstrated how this stream gage data can be used to verify the flow of Lubber's Brook.

Regarding drainage, there are two tributary intermittent stream channels that were observed draining into Lubber's Brook. Cowell PFT, ¶ 28; Provencal PFT, ¶ 28. Mr. Garner testified that he agreed that these two intermittent streams flow into Lubber's Brook. Garner PFT, ¶ 111. The tributaries flowing into Lubber's Brook provide conclusive evidence that these systems drain into Lubber's Brook as opposed to receiving waters from Lubber's Brook under influence of MAHW. Cowell Exhibit 3, Hancock Technical Report, October 30, 2020, page 5. Mr. Cowell recorded MAHW at the confluence of these tributary intermittent streams with the primary channel. Cowell PFT, ¶ 28. The SOC also notes that MassDEP staff observed flow from the standing water in the BVW into Lubber's Brook. SOC cover letter, page 3. Mr. Cowell places the regulatory limit of MAHW of these two tributaries at the point of confluence with the primary channel of Lubber's Brook. Cowell PFT, ¶ 28

4. Change in Slope

One of the Bankfull field indicators relied on in the SOC is change in slope. SOC Cover letter, page 3. Mr. Kirby testified that "[a] distinct bank slope was often observed along the western edge of the Lubber's Brook channel, where the topography within the relatively flat adjacent wetland descends abruptly to the channel bottom." Kirby PFT, ¶ 15. StreamStats confirmed a slope of 1.3. Garner PFT, ¶ 81; Provencal PFT, ¶ 25.

5. Methods Used to Corroborate Observed Bankfull Field Indicators

Regional Curves were also used to help confirm field estimates of Bankfull dimensions but were not used by MassDEP as a stand-alone method to determine Bankfull dimensions. Davis PFT,

¶ 46. Regional curves of bankfull dimensions plot drainage area versus bankfull dimensions. Davis PFT, ¶¶ 36, 38. Ms. Davis testified that regional curves can be very beneficial in helping to locate bankfull stage and "to see where we should be looking." Davis PFT, ¶ 38. Characteristics of the bankfull channel are quantified using parameters such as bankfull cross-sectional area, bankfull width, bankfull mean depth and stream flow. These characteristics are correlated strongly with drainage area (Dunne & Leopold, 1978). Davis PFT, ¶ 37. Estimates of bankfull dimensions are helpful for confirming field identification of the bankfull channel. Id.; Kirby PFT, ¶ 20.

StreamStats was used in this case to corroborate field indicators observed in the field. Cowell PFT, ¶ 29; Provencal PFT, ¶¶ 7, 22; Davis PFT, ¶ 45; Kirby PFT, ¶¶ 20, 24. StreamStats utilizes "regression equations"[14] which were developed for estimating Bankfull geometry – width, mean depth, cross-sectional area – and discharge for streams in Massachusetts. See, Gardner C. Bent and Andrew M. Waite, Equations for Estimating Bankfull Channel Geometry and Discharge for Streams in Massachusetts, 2013 ("Bent &Waite Report").[15] Ms. Davis testified regarding the development of StreamStats, including that it is based "field identification and survey of Bankfull at dimensions at 33 sites in MA." Davis PFT, ¶¶ 39-40.[16]

StreamStats is a map-based web application that incorporates Geographic Information System ("GIS") and includes tools for drainage basin delineations, basin characteristics, and estimates of stream flow statistics. Davis PFT, ¶ 43. StreamStats incorporates a 'delineate drainage

[14] Regression equation is a "best fit" line for data. The data from the 33 sites were used to develop the regression equations. Davis PFT, ¶ 40.

[15] All Parties agree that the Bent & Waite Report is the definitive tome explaining the scientific basis for and use of StreamStats. Garner PFT, ¶ 60; Provencal PFT, ¶ 22; Davis PFT, ¶ 39; Cowell PFT, ¶ 29; Kirby PFT, ¶ 24.

[16] Ms. Davis participated in the field identification and survey of sites associated with these equations on ten (10) separate occasions. Davis PFT, ¶ 41. See also Bent & Waite, Acknowledgements, p. iii.

basin' function for a specified location. The Bent & Waite regression equations were imported into the StreamStats program in 2013 and can provide users with estimates of bankfull dimensions. Davis PFT, ¶ 43. Like regional curves, the basin characteristics generated by StreamStats may be used to help confirm field estimates of bankfull dimensions. They are not intended to be used as a stand-alone method to determine bankfull dimensions. Davis PFT, ¶ 46.

The Bent & Waite Report notes that there are constraints or limitations in the application of the equations and regional curves and that the equations may not be applicable where streams flow through extensive wetlands. The Report goes on to state, "[R]egardless of the setting, the regression equations are not intended for use as the sole method of estimating Bankfull characteristics; however, they may supplement field identification of the Bankfull channel when used in conjunction with field verified Bankfull indictors, flood-frequency analysis, or other supporting evidence." (emphasis supplied) Bent & Waite Report, page 42; Davis PFT, ¶ 42. Mr. Garner incorrectly asserted in his testimony that the Bent & Waite Report limitation states that it is an "inaccurate" or "improper" tool for use in wetlands streams. Garner PFT, ¶¶ 54, 62.[17]

The Petitioners' objection to the use of StreamStats to corroborate the observed Bankfull field indicators and resulting MAHW carries no weight, as contrary to Mr. Garner's opinion, the Wetlands Regulations do not prohibit the use of "complex scientific tools." Garner PFT, ¶ 11 While the MWPA and the Wetlands Regulations reflect a preference for direct observation of Bankfull field indicators, the list of examples provides "**including but not limited to**" which infers discretion and "allows for or does not exclude the use of other indicators." Provencal PFT, ¶ 26;

[17] Mr. Garner testified regarding a phone conversation in which Mr. Bent said that StreamStats was "not intended as a tool to determine bankfull without robust field confirmation." Garner PFT, ¶ 64. While this testimony is not supported by a sworn statement from Mr. Bent, and ordinarily would carry little weight, Mr. Bent's reported opinion is consistent with the Bent & Waite Report and Ms. Davis' testimony. The observations testified to here, of multiple Bankfull field indicators, is robust field confirmation.

Davis PFT, ¶¶ 30, 38, 46; Kirby PFT, ¶ 20. The inferred discretion also allows for the other tools, such as drones, LIDAR, USGS mapping, FEMA floodplain mapping or MassGIS. Provencal PFT, ¶ 26; Davis PFT, ¶ 30.

Additionally, Mr. Garner's objection to the use of StreamStats is selective as he relied on StreamStats to determine stream slope and average stream depth. Garner PFT, ¶ 81. He sought to distinguish his use as "general" and not related to determining Bankfull width, but it is a distinction without a difference in this context. MassDEP's use of StreamStats to corroborate Bankfull field observations was entirely appropriate, as was Mr. Garner's use to determine slope and average stream depth.

Mr. Cowell observed the Bankfull width to be between 20-25 feet. Mr. Kirby testified that his observations were that the channel was 20-30 feet wide with a depth of 1.5 to 2.+ feet. Kirby PFT, ¶ 10. Ms. Provencal testified that the stream's channel was clearly observable with a width of approximately 20-30 feet. Provencal PFT, ¶ 28. The StreamStats report showed a drainage area of 5.2 square miles, a Bankfull depth of 1.33 ft and a Bankfull Width of 23.9 feet. Provencal PFT, ¶ 25; Cowell PFT, ¶ 25; Kirby PFT, ¶ 20. These observations were consistent with the curve. Cowell PFT, ¶ 29; Cowell Exhibit 3, Hancock Technical Report, page 7; Kirby PFT, 20. The regional curves and StreamStats results were consistent with the actual Bankfull channel dimensions Mr. Kirby observed along the relevant reach of Lubber's Brook. Kirby PFT, ¶¶ 10, 20.

Mr. Garner testified that his observations were not consistent with bankfull width of 23.9 feet and that he "catalogued" numerous locations where it was greater than 50 feet wide. Garner PFT, ¶ 56. His testimony did not indicate where he cataloged these widths, but assuming for the sake of argument that he meant those shown on his Exhibit 2, as his "estimated MAHW," as discussed above at page 31, that exhibit is of dubious value. In further support of his contention

that the width is more than double the MAHW on the SOC Plan, he referred to the ANRAD plan previously prepared for the Property. Garner PFT, ¶ 57. The delineation on the ANRAD plan is not relevant to the MAHW delineation on the SOC Plan because it was based on a negotiated MAHW, not a line determined through application of the Wetlands Regulations, and is not the plan that is the subject of this appeal. See footnote 6.

Based on the StreamStats results, the SOC Plan was updated to remove any points upgradient (further landward) of the two lines into a single combined line and also updated the Riverfront Area boundary accordingly. Provencal PFT, ¶ 7, 9.[18] Ms. Davis testified that the resulting MAHW occurs closer to the river than the MAHW on the SOC. Davis PFT, 68. This result makes the MAHW on the SOC Plan a conversative line, more protective of the stream than less protective, and a reasonable application of MassDEP's discretion.

B. Other Bankfull Field indicators or lines of evidence were addressed in testimony but not found to be not reliable relative to determining the MAHW for this reach of Lubber's Brook

1. Stain Lines:

While stain lines can be utilized as a Bankfull indicator, stain lines can be misinterpreted, particularly on concrete which surface water wicks up above water elevation. Provencal PFT, ¶¶ 27, 31; Provencal Exhibit C; Hearing Provencal at 1:31:30-1:32:40; Davis PFT, ¶ 84; Kirby PFT, ¶ 13. Mr. Garner testified that he identified stain lines on the culvert abutment on Middlesex Ave (Rt 62). Garner Exhibit 1, Fig 1, 2, 5. Garner PFT, ¶ 73, 87. However, it is unclear which of several

[18] Ms. Provencal testified that she requested SteamStats because the Petitioners submitted a MAHW delineation that was prepared for the culvert replacement project which indicated that MAWH was at 54.96 feet. Provencal PFT, ¶ 8. She testified that she was aware that this delineation was made on the artificial point in the stream, in front of the existing twin culverts and abutment, instead of a point either upstream or downstream where more natural stream conditions exist. Id.

lines he deemed representative of Bankfull. Provencal PFT, ¶ 27. As such, the stain lines on the concrete abutment are not reliable Bankfull indicators.

Mr. Kirby also testified that stain lines are not necessarily indicative of fluvial processes and can result from the prolonged presence of water which may be relatively static. Kirby PFT, ¶ 13. Mr. Cowell concluded that stain lines on leaves, on the ground and muck are not reliable because such staining is a common BVW indicator, independent of the fluvial process related to MAHW. See Cowell PFT, ¶¶ 25, 31; Cowell Exhibit 3, Hancock Technical Report, October 30, 2020, page 2. In concluding that stain lines are not reliable at this location, Ms. Davis testified that she did not observe stain lines on vegetation. Davis PFT, ¶84. In his rebuttal testimony, Mr. Garner tried to explain why Ms. Davis would not have seen stain lines during her site visit, asserting that stain lines fade in dry weather. Garner RFT, ¶¶ 19 -22 This testimony, however, that stain lines related to fluvial process may disappear given the time year, supports the argument that stain lines are not reliable Bankfull indicators at this site.

Mr. Cowell testified that he observed stain lines on the stems of vegetation and trunks of abutting shoreline trees within the limit of MAHW. Cowell PFT, ¶ 25; Cowell Exhibit 3, Hancock Technical Report, October 30, 2020, Attachment B, Photographs 8 and 9. Mr. Garner also testified that he observed stain lines on tree trunks, woody stemmed shrubs, but where is not known. Garner Exhibit 1, Fig 6, 7 and 8.[19] Mr. Castonguay's testimony included a photograph and a video in reference to stain lines at the base of a tree at flag Z-18 but, but upon viewing the exhibits, stain lines were not apparent to me. Castonguay PFT, ¶ 28; Castonguay Exhibit 2 and 3.[20] In sum, the

[19] Mr. Garner's testimony does not provide the location of these photographs.

[20] As noted previously, there is no flag Z-18 on the SOC Plan. There is a flag Z-18 on Mr. Garner's Exhibit 17, an ANRAD plan that is not relevant to these proceedings. See footnote 6.

overall expert testimony is that stain lines are not reliable and while Mr. Cowell provides some evidence of stain lines on vegetation at the delineated MAHW, and Mr. Garner's exhibits show stain lines at an unknown location, I do not find references to stain lines to be a reliable Bankfull indicator at this reach of Lubber's Brook.

2. Bank Undercuts:

With respect to bank undercuts, the Parties' respective experts all testified that this reach of Lubber's Brook is characterized by poorly defined or nonexistent banks. Garner PFT, ¶ 23, 58; Shea at 18; Cowell PFT, ¶¶ 17,37, 58; Provencal PFT, ¶ 19; Kirby PFT, ¶ 17. Nonetheless, Mr. Garner also testified that bank undercuts are one of only two Bankfull field indicators he found reliable at the site. Garner PFT, ¶¶ 33, 90. His testimony includes a photograph identified as the only bank undercut that he observed which was located at the area of the abutment. Garner Exhibit 1, Figure 4. Bank undercuts are typically associated with lotic or fast-moving streams, unlike this slow-moving stream, and were not observed at the site by the other experts. Davis PFT, ¶ 84; Kirby PFT, ¶ 17. Mr. Garner's testimony is contradictory and does not persuade me that a single bank undercut at this particular location, which he testified is artificially impaired by the culvert, is a reliable Bankfull field indicator.

3. Wrack Lines or rafted debris deposition:

Mr. Cowell identified wrack lines or rafted debris deposition coincident with the observed MAHW line. Cowell PFT, ¶ 26. However, Ms. Davis and Mr. Kirby testified that they did not observe any during their visits to the site. Davis PFT, ¶ 80; Kirby PFT, ¶¶ 18-19. Additionally, on behalf of the Petitioners, Mr. Castonguay testified that he observed rafted debris deposition or wrack lines throughout the site, far landward of the MAHW delineation on the SOC Plan. Castonguay PFR, ¶¶ 14,15. As such, while Mr. Cowell was specific in identifying the location of

his observations, because they were not corroborated by MassDEP and the WCC's expert testimony, and Petitioner's expert testimony was that they were observed "throughout the site" I have not included wrack lines and rafted debris deposition among the multiple bankfull filed indicators that support the MAHW as delineated.

4. Blue Flags:

Mr. Garner testified that he placed blue flags in the field during his site investigation on March 25, 2022 to mark his estimated MAHW. Garner PFT, ¶ 22. The experts for the Applicant, MassDEP and the WCC all testified that they did not find any blue flags during their site investigations. Provencal PFT, ¶ 29; Davis PFT, ¶ 83; Cowell PFR, ¶ 36; Cowell Hearing 39:40-41:10. Mr. Garner testified in his rebuttal testimony that Mr. Cowell was with him when he placed the blue flags. Garner PFR, ¶ 25. Mr. Cowell, however, testified that he did not see Mr. Garner place any blue flags, not having watched him the entire time they were on the Property. Cowell Hearing 39:40-41:10. Mr. Garner testified that the property owner may have removed the blue flags, since he initially objected to their placement. Garner PFR, ¶ 24. Regardless, there is no testimony to corroborate the locations of the blue flags, beyond Mr. Garner's testimony and his Exhibit 2, the unreliability of which as already been addressed. Further, Mr. Garner did not field delineate his estimated MAHW beyond flag Z31, but simply extrapolated elevational survey datum of high water recorded at lower reaches of Lubber's Brook and projected it north. As such, his testimony includes no observed Bankfull Field indicators north of flag Z31. Cowell at PFR, ¶ 49. This lack of observed Bankfull Field indicators further compromises any reliance on his estimated MAHW depicted on Garner Exhibit 2.

5. Impoundment and withdrawals:

Mr. Garner testified that the culvert at Rt 62 impounds Lubber's Brook and that withdrawals in the Ipswich River Basin also impact Lubber's Brook. Garner PFT, ¶¶ 68-71. Mr. Cowell contends however, that whether there are withdrawals or impoundments is not relevant to determining MAHW because MAHW is based on observed Bankfull field indictors of the existing conditions. There is no reference in the Wetlands Regulations to concessions to altered stream systems. Cowell PFR, ¶ 44.[21]

6. Drone Video:

The Petitioners' experts referenced drone video footage as supporting their argument that the MAHW is much wider than the line delineated in the SOC. Castonguay PFT, ¶¶ 16-19; Castonguay Exhibit 1. While Mr. Castonguay does provide some information regarding creation of the video,[22] the drone video footage has very little evidentiary value as it does not provide type of lens used, elevation, scale, or evidence of linear flow or current, and only provides aerial footage of the extent of standing surface water throughout the wetland complex. Cowell PFR, ¶ 54.

The Petitioners' experts did not cite to the drone video footage to show the existence of the Bankfull Field indicators that they relied on, stain lines, and bank undercuts, or to show the absence of those the Applicant, MassDEP, and the WCC's experts described having observed during their

[21] The Wetlands Regulations for evaluating whether a stream is perennial or intermittent take into account whether a perennial stream is impacted by impoundments and withdrawals, but similar regulatory language is not included in 310 CMR 58(2)(a)(2)b.

[22] Mr. Castonguay testified that he engaged a professional drone pilot on March 11, 2022 to video record the reach of Lubber's Brook in proximity of the site and that it was recorded between 9:00-9:30 am. "I directed the drone flight from public property on Frederick Drive to fly over the northwest corner of the Site to document water conditions in Lubber's Brook over the section of the Riverfront Area that was estimated in the Applicant's MAHW delineation, e.g. west of Hancock's flag 200 and east of the Railroad bed. Castonguay PFT, ¶ 16.

site evaluations. Nor do the Petitioners contend that the video evidenced flow or water movement or braided or multiple streams.

They reference it only to contend that the "full width of the open marsh area associated with the Brook, roughly from tree line to tree line, which is well over 100 feet in width." Castonguay PFT, ¶ 17. While the drone video provides no scale for measuring 100 feet, even if true, a wide area of "open marsh" does not equate to a "stream," braided or otherwise. The observation is, however, consistent with the wetlands resource area around this reach of Lubber's Brook being a BVW that contains standing water, a fact the Parties agree on, as noted above.[23] These wet conditions, however, are not indicative of riverine bankfull conditions and fluvial processes and do not represent jurisdictional MAHW. Cowell PFT, ¶¶ 21, 47.

CONCLUSION

For the reasons discussed above, I recommend that MassDEP's Acting Commissioner issue a Final Decision in this appeal affirming the SOC.

Date: March 17, 2023

Margaret R. Stolfa
Presiding Officer

[23] As Mr. Kirby describes it, "[t]his section of Lubber's Brook extends through an expansive Bordering Vegetated Wetland (BVW) containing emergent marsh and shrub swamp vegetation. During our site evaluation, LEC observed surface water above the defined channel and extending laterally across the adjacent BVW. Kirby PFT, ¶ 10

NOTICE- RECOMMENDED FINAL DECISION

This decision is a Recommended Final Decision of the Presiding Officer. It has been transmitted to the Commissioner for his Final Decision in this matter. This decision is therefore not a Final Decision subject to reconsideration under 310 CMR 1.01(14)(d), and may not be appealed to Superior Court pursuant to M.G.L. c. 30A. The Commissioner's Final Decision is subject to rights of reconsideration and court appeal and will contain a notice to that effect.

Because this matter has now been transmitted to the Commissioner, no party shall file a motion to renew or reargue this Recommended Final Decision or any part of it, and no party shall communicate with the Commissioner's office regarding this decision unless the Commissioner, in his sole discretion, directs otherwise.

SERVICE LIST

In the Matter of:	**Andrew Chaban c/o Princeton Development, LLC**
Docket No. WET-2021-041	**File No. 344-1467** **Wilmington, MA**
Representative	Party
Daniel C. Hill, Esq. Elizabeth M. Pyle, Esq. HILL LAW 6 Beacon Street, Suite 600 Boston, MA 02108 dhill@danhilllaw.com elizabeth.m.pyle@gmail.com	PETITIONERS Headwaters Stream Team
Jeffrey M. Brown, Esq. Princeton Properties 1115 Westford Street Lowell, MA 01851 jbrown@princetonproperties.com	APPLICANT Andrew Chaban c/o Princeton Development, LLC
Glenn A. Wood, Esq. Tyler M. Franklin, Esq. Rubin and Rudman LLP 53 State Street Boston, MA 02109 gwood@rubinrudman.com tfranklin@rubinrudman.com	APPLICANT
Terry Wood, Senior Counsel Office of General Counsel MassDEP - Boston 100 Cambridge Street, 9th Floor Boston, MA 02114 Terry.Wood@mass.gov	DEPARTMENT
Alexander Weisheit, Esq. KP Law 101 Arch Street, 12th Floor Boston, MA 02110 aweisheit@k-plaw.com	CONCOMM
Wilmington Conservation Commission c/o Cameron Lynch, Conservation Agent 121 Glen Road Wilmington, MA 01887 clynch@wilmingtonma.gov	CONCOMM

Cc:

Heidi Zisch, Chief Regional Counsel — DEPARTMENT
Mass DEP – Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887
Heidi.Zisch@mass.gov

Jill Provencal, Wetlands Section Chief — DEPARTMENT
Bureau of Water Resources
Mass DEP – Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887
Jill.Provencal@mass.gov

Jakarta Childers, Paralegal — DEPARTMENT
MassDEP/Office of General Counsel
100 Cambridge Street, 9th Floor
Boston, MA 02114
Jakarta.Childers@mass.gov

ADDENDUM NO. 1

OADR DESCRIPTION

The Office of Appeals and Dispute Resolution ("OADR") is a quasi-judicial office within the Massachusetts Department of Environmental Protection ("the Department" or "MassDEP") which is responsible for advising the Department's Commissioner in resolving all administrative appeals of MassDEP Permit decisions and enforcement orders in a neutral, fair, timely, and sound manner based on the governing law and the facts of the case. In the Matter of Tennessee Gas Pipeline Company, LLC, OADR Docket No. 2016-020 ("TGP"), Recommended Final Decision (March 22, 2017), 2017 MA ENV LEXIS 34, at 9, adopted as Final Decision (March 27, 2017), 2017 MA ENV LEXIS 38, citing, 310 CMR 1.01(1)(a), 1.01(1)(b), 1.01(5)(a), 1.01(14)(a), 1.03(7); See also Mass. R. Prof. C. 1.0(p) (definition of "tribunal"). MassDEP's Commissioner is the final agency decision-maker in these appeals. TGP, 2017 MA ENV LEXIS 34, at 9, citing, 310 CMR 1.01(14)(b). To ensure its objective review of MassDEP Permit decisions and enforcement orders, OADR reports directly to MassDEP's Commissioner and is separate and independent of MassDEP's program offices, Regional Offices, and Office of General Counsel ("OGC"). TGP, 2017 MA ENV LEXIS 34, at 9.

OADR staff who advise MassDEP's Commissioner in resolving administrative appeals are Presiding Officers. Id. Presiding Officers are senior environmental attorneys at MassDEP appointed by MassDEP's Commissioner to serve as neutral hearing officers in administrative appeals. Presiding Officers are the equivalent of environmental administrative law judges who have significant authority under the Adjudicatory Proceeding Rules at 310 CMR 1.01 to adjudicate appeals, including the authority to issue Orders "to secure [the] just and speedy determination of every [administrative] appeal." 310 CMR 1.01(1)(a), 1.01(1)(b), 1.01(5)(a), 1.01(13)(d)-(13)(f). This authority includes fostering settlement discussions between the parties in administrative appeals and resolving appeals by conducting pre-hearing conferences with the parties; ruling on dispositive motions; conducting evidentiary Adjudicatory Hearings (quasi-judicial/civil courtroom trial type proceedings), which includes the authority to establish prior to the Hearings, the number of witnesses that the parties may offer at the Hearings and to exclude witnesses whose testimony would be duplicative, irrelevant, or otherwise unnecessary; and issuing Recommended Final Decisions on appeals to MassDEP's Commissioner. TGP, 2017 MA ENV LEXIS 34, at 9-10, citing, 310 CMR 1.01(1)(a), 1.01(1)(b), 1.01(5)(a), 1.01(13)(d)-(13)(f), 1.01(14)(a), 1.03(7). MassDEP's Commissioner, as the agency's final decision-maker, may issue a Final Decision adopting, modifying, or rejecting a Recommended Final Decision issued by a Presiding Officer in an appeal. TGP, 2017 MA ENV LEXIS 34, at 10, citing, 310 CMR 1.01(14)(b). Unless there is a statutory directive to the contrary, the Commissioner's Final Decision can be appealed to Massachusetts Superior Court pursuant to G.L. c. 30A, § 14. TGP, 2017 MA ENV LEXIS 34, at 10, citing, 310 CMR 1.01(14)(f).