



TAUNTON RIVER WATERSHED ALLIANCE

A VOICE FOR THE RIVER SINCE 1988

January 22, 2023

Purvi Patel
MEPA Office
100 Cambridge St., Suite 900
Boston, MA 02114

Via email: purvi.patel@mass.gov

Re: **December 15, 2022 Draft Environmental Impact Report EEA No 16558: Lakeshore Center Phase 4 (Bridgewater)**

Dear Ms. Patel:

On behalf of the Taunton River Watershed Alliance (TRWA) and the membership we represent including many who reside within the Town of Bridgewater, we are writing to urge that the Secretary of EEA withhold approval of or deny this project which has significant potential to adversely affect the headwaters of the Taunton River including Lake Nippenicket and the Town River, a primary tributary of the Wild and Scenic Taunton River. We note that this fourth phase is proposed in an already highly developed small headwaters sub-watershed. The project will disturb 27.85 acres, create 12.74 acres of new impervious cover and include 1,114 parking spaces. Despite substantial concern raised about the large size of the June 2022 ENF Alternative the proponent has added +121,040 SF and +31 parking spaces in the current DEIR Preferred Alternative.

As discussed below, the [December 15, 2022 Draft Environmental Impact Report](#) (DEIR) leaves reasons to question this major project in such a small vulnerable headwaters watershed which is already suffering adverse impacts from previously completed project phases. There is a need for greater information for adequate review by both interested citizens and public agencies.

As requested in our letter of June 14, 2022, TRWA requests that MEPA approval not be granted for this project until more is known about:

- The environmental impact of the phases of development completed to date, the stormwater pollution load generated by the project's phases completed to date (particularly the phosphorus and bacteria load to the streams on site, Lake Nippenicket and the Town River),
- Stormwater volumes and pollutant loads (particularly phosphorus load) generated by the development to date and projected to be generated from each proposed phase of new development,
- Analysis/assessment of the current state of eutrophication of the streams on site, Lake Nippenicket and the Town River, along with an analysis of the remaining assimilative capacity (if any) of these waterbodies to accept the additional loadings from the proposed phases.

Our Mission: ...to protect and restore the watershed's natural resources for current and future generations.

Taunton River Watershed Alliance, at Sweets Knoll State Park, 1387 Somerset Ave., (Rt. 138), Dighton
Mailing address: P.O. Box 1116, Taunton, MA 02780 • 508 -828-1101 • www.savethetaunton.org

- Compliance of this project with Bridgewater’s stormwater regulations, specifically the required total phosphorus (TP) reduction required.

It is not enough to simply state as the proponent does in its response to comments that the Project will be reviewed by the Bridgewater Conservation Commission and comply with the 15-year-old MassDEP stormwater regulations.

Cumulative impacts are important and must be quantified as well as the assimilative capacity of the receiving waters to accept more pollution for a valid MEPA DEIR analysis.

Receiving Water Assimilative Capacity

The residents of the area report and have pictures of significant eutrophication (algae, weed growth, impaired transparency) in Lake Nippenicket. The Lake is listed on MassDEP’s Clean Water Act Section 303(d) Impaired Waters List for nuisance weed growth – macrophyte non-native aquatic plant *cabomba caroliniana* (fanwort). This is not surprising due to the low water depth and large surface area of the lake along with the significant development which has taken place in this small sub watershed. We believe the Lake has reached and indeed exceeded its assimilative capacity to absorb additional phosphorus and pollution from stormwater. The DEIR presents no information on pollutant loading such as phosphorus and bacteria from the proposed project elements and no information on the assimilative capacity of the receiving waters.

Stormwater

The Draft EIR fails to quantitatively describe how the development will meet MassDEP Stormwater Policy Standard 3 “Loss of annual recharge to groundwater shall be eliminated or minimized”. The Draft EIR should include a table of pre and post development stormwater runoff volumes (both without and with the proposed stormwater treatment) for each area of the proposed development.

The report must demonstrate compliance with Bridgewater’s stormwater regulations, specifically the TP reductions. Section 11 (A)(2) of Bridgewater’s stormwater regulations reads:

“(2) Stormwater management systems for New Development projects are also to meet minimum requirements of the General Permit for Stormwater Discharges From Small Municipal Separate Storm Sewer Systems in Massachusetts (MS4 Permit) including the following: (a) Retain the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the site AND/OR (b) Remove 90% of the average annual (not per storm) load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site AND 60% of the average annual (not per storm) load of Total Phosphorus (TP) generated from the total postconstruction impervious surface area on the site. Pollutant removal shall be calculated consistent with EPA Region 1’s BMP Performance Extrapolation Tool or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance any federally or State approved BMP design guidance or performance standards (e.g., State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance.”

Bridgewater is required to implement and enforce their SW regulations consistent with MS4 permit requirements. If any of the project components were to move forward it is unclear if the MS4 permit conditions would be met, potentially putting the town at risk of non-compliance for not properly implementing their post-construction stormwater bylaw and regulations. At a minimum, the report should contain the required information to assess if the town stormwater standards are being met so the town can remain in compliance with their MS4 permit.

We believe that stormwater management, including remediation of existing inadequate stormwater controls from previous phases, should assure no discharge in excess of predevelopment conditions of stormwater to the streams, Lake Nippenicket and ultimately the phosphorus impaired Town River which the Town of Bridgewater is being required to install advanced treatment phosphorus controls to address. Pervious walkways, infiltration best management practices (BMPs) such as gravel wetlands and infiltration galleries, minimization of impervious cover in project design, collection of roof runoff and storage for landscape irrigation and other measures are needed and should be used. Recent studies have shown the high effectiveness of weekly vacuum sweeping of impervious roadways and parking areas to remove sediment and phosphorus deposition. Given the size of both the existing and proposed development this should be specifically included in the Stormwater Operation and Maintenance Plan outlined in Section 7.3.10 of the Draft EIR along with regular BMP inspection, cleaning and repair.

The proponent intends to use the Massachusetts 2008 Stormwater Management Standards and Handbook which are 15 years old. Stormwater management both in treatment technology and quantification of flows and pollution loads (TP, nitrogen, bacteria, metals, TSS, etc.) have improved. Because of the sensitivity of the Lake Nippenicket area, higher standards should be in effect and periodic testing of best management practices (i.e., roadway/parking lot vacuum sweeping efficiency, deep sump catch basins, oil/grit separators, sediment forebays, infiltration system effectiveness and final effluent volume and pollutant load annual estimation). The location of where the proponent intends to install BMPs should be subject to review to assess the impact on wetland buffers. Rather than provide the necessary information to evaluate the stormwater system impacts in the DEIR, the Draft report pushes much of it off to future Conservation Commission consideration. This is unacceptable since stormwater management is crucial to evaluating the environmental impact of the various components of the Phase 4 Draft Plan.

Area of Critical Environmental Concern (ACEC)

In TRWA's letter of June 14, 2022 we commented that "as far back as 1978, in a report titled Route 495 Areawide Approach to Growth, Part II, the Southeastern Regional Planning and Economic Development District (SRPEDD) identified the necessity to provide guaranteed protection of the Hockomock and Ticut Swamps, Lake Nippenicket, and the adjoining wetlands from the potential impacts of development (this document was in fact submitted with the original Hockomock Area of Critical Environmental Concern – ACEC - nomination in June of 1989). The area of the proposed development lies in the ACEC of the Hockomock Swamp as well as inside the Zone II aquifer for Town of Raynham drinking water wells. It requires special protection, not the additional creation of up to 13 acres of impervious surface, some of which is on the additional parcel located on the north side of Pleasant Street where a restaurant and parking lot is proposed immediately adjacent to Lake Nippenicket. This is antithetic to an ACEC especially on a Lake and bordering wetlands which feed the Town River, a headwater of the Wild and Scenic Taunton River. This area should not be developed but instead be utilized as open space. The "no build alternative" is the best alternative in this case. Loss of pervious surfaces and vegetation does in fact create susceptibility to climate change in opposition to proponents' argument." The Draft EIR inappropriately dismisses this comment saying in effect that ACEC designation doesn't affect the proponent's ability to do whatever they want. It ignores the fact that this is the fourth phase of development in a sensitive area and that cumulative effects do matter. In evaluating whether this Draft EIR provides sufficient analysis of environmental impact the MEPA Office must consider whether the applicant has properly considered the sensitivity of the project area and the area's assimilative ability to absorb additional impacts in light of the development that has already occurred. Until the Draft EIR provides this information it's incomplete.

Fill Material Contamination Concerns

TRWA asked that any fill material trucked in from off-site sources should be tested at a 1/200-ton ratio and included with clean certifications of the fill material's origin. The Draft EIR response states that "All fill material will be handled in accordance with applicable regulations." The Draft EIR should describe in more detail how the applicable regulations are sufficiently protective or what additional measures will be used.

Archaeological Resources and Tribal Consultation

Section 9.0 of the Draft EIR describes archaeological studies and consultation with the federally recognized Wampanoag Tribe. The Taunton River Stewardship Council also recognizes and respects the culture and heritage landscapes of all indigenous peoples in the watershed, including the Massachuset Tribe, who also populated areas in the Bridgewater; the Sagamore should at the very least be notified of this proposed development. The Draft EIR simply says "Comment noted." The Draft EIR is deficient in the area of tribal consultation until the Massachuset Tribe is consulted.

Buffer Zone Protection

TRWA noted that because of the damage that has been done from existing development in the Nippenicket Lake watershed, no exceptions to state recommended buffer requirements should be approved for any part of the proposed phases. The Draft EIR says an Order of Conditions from the Bridgewater Conservation Commission will be sought for the proposed work within the Buffer Zone. TRWA believes that the impact of proposed work in the Buffer Zone should be evaluated in the Draft EIR so that its impact along with past Buffer Zone impacts from previous development may be evaluated as part of the MEPA review.

Restaurant Proposed on the Lake Nippenicket Shoreline

TRWA stated in our June 14, 2022 comment letter that the restaurant project on Lake Nippenicket shoreline on the North side of 104 should be abandoned. The existing structures on this location should be removed and the land deeded to the Town of Bridgewater for a park or conservation land as mitigation for the harm from both the current development and adverse effects from the new proposed phases. This site despite the fact that stormwater infiltration galleries are proposed is the most damaging component of the Phase 4 development. Any stormwater infiltration design constructed will still require a bypass for large storm events. Landscaping such as lawns and shrubs will be fertilized. Trash and litter will find their way to the Lake. This portion of the project has generated a great deal of public concern.

There are ample options for a 179-seat restaurant on the South side of Route 104 adjacent to the already developed areas that would eliminate this environmental damage. The Draft EIR simply says the proponent chooses to develop a restaurant here. We think additional options should be evaluated in the DEIR and this component deferred pending analysis and monitoring of the impacts of the existing and any new development South of Route 104.

Monitoring Program

In TRWA's letter of June 14, 2022 we commented that the applicant should be required to conduct a monitoring program (2/month, April through October) of any streamflow to the Lake from its development and of the Town River at 2 locations between the Lake outlet and the Bridgewater wastewater treatment plant for total phosphorus, chlorophyll-a, blue green algae, nitrate-N, E. coli bacteria, temperature, pH, specific conductivity and chlorides.

A sampling program for Lake Nippenicket should be developed in consultation with the MassDEP Watershed Planning Program. Representative locations recommended by MassDEP such as near route 104, the Lake outlet, and several locations in the lake should be sampled 2 times per month for transparency (Secchi Disk), dissolved oxygen, total phosphorus, nitrate-N, chlorophyll-a, blue green algae, temperature, pH, and specific conductivity at depths and final locations recommended by MassDEP. The applicant should consult with the MassDEP Watershed Planning Program and obtain a Quality Assurance Project Plan (QAPP) approval for this monitoring program.

Each year a summary report with data interpretation and analysis should be submitted to the Town or Bridgewater, MassDEP Planning Program and placed on a website for citizen access. Monitoring is necessary to support evaluation of the impact of both existing and new development at this site as well as support quantification of the ability of this area to assimilate pollution and determine what refinements in pollution measures may be necessary.

The Draft EIR simply states “Comment noted. The Proponent will file a Notice of Intent with the Bridgewater Conservation Commission and comply with all requirements of the Order of Conditions once issued.” The adequacy of post project monitoring is critical to evaluating the environmental impact of this project. The Draft EIR should not be approved until a MassDEP approved monitoring plan is agreed to, and the proponent commits to include it in the stormwater O&M covenant recorded with the Plymouth Registry of Deeds.

Perennial vs Intermittent Streams

The maps submitted with the DEIR show three streams draining the western, central and eastern wetlands on site. The applicant has attached an August 1999 (23-year-old) evaluation to the DEIR which claims these streams are intermittent. Considering the amount of development and stormwater runoff from the site today recharging these wetlands, it is unlikely that these streams are intermittent currently even if they ever were decades ago. We believe these streams should be treated as perennial streams for water quality review and protection measure purposes because they flow directly to Lake Nippenicket across the street (Route 104) and do in fact carry year round flow.

Impact on Drinking Water

As mentioned above the project site is inside the Zone II aquifer for Town of Raynham drinking water wells. The Town’s Center Water District has recently found both coliform bacteria and PFAS levels in excess of state criteria in its raw water supply. This begs the question of how much additional development this small headwaters aquifer can support. Property rights are not a license to pollute. Nor are they a grant of free reign to over develop a sensitive site. The proponent knew the area of the proposed development lies in the ACEC of the Hockomock Swamp as well as inside the Zone II aquifer for Town of Raynham drinking water wells when it purchased the land and should realize that there is a limit to the development carrying capacity of the site.

For the reasons stated above Taunton River Watershed Alliance, Inc. (TRWA) and the Wild & Scenic Taunton River Stewardship Council (TRSC) request that a MEPA approval either be denied or not granted until more information is available concerning this project.

Sincerely,

Joseph Callahan

Joseph Callahan
President, Taunton River Watershed Alliance¹

Donna Desrosiers

Co-Chair, Taunton River Stewardship Council (TRSC)²

cc: via email to,

Rebecca L. Tepper, Secretary EOEEA
Harry Bailey, Bridgewater Conservation Commission
Pat Neary, Lake Nippenicket Action Focus Team
Thelma Murphy, EPA Region 1
Mark Voorhees, EPA Region 1
Laura Schifman, MassDEP
Richard Carey, MassDEP
Dan Arsenault, EPA Region 1
Helen Zinavage, Southeastern Regional Planning & Economic Development District
Kate McPherson, Save the Bay
Sarah Bower, Massachusetts Rivers Alliance
Heidi Ricci, Massachusetts Audubon
Danielle Perry, Massachusetts Audubon
Jamie Fosburgh, National Park Service, Wild and Scenic River Program
Paul M. Maniccia U.S. Army Corps of Engineers
Edward Reiner, EPA Region 1
Emily Holt, Mass Wildlife
Jonathan Patton DCR Archeology
Massachusetts Historical Commission

¹ Since 1988, TRWA has been a voice for the 562-square-mile Taunton River watershed, as an advocate for environmental protection, sustainable development, and responsible stewardship of our precious water resources.

² The Taunton River Stewardship Council (TRSC) is dedicated to promoting the long-term protection of the Wild and Scenic Taunton River and its tributaries.