

Community Land & Water Coalition www.communitylandandwater.org

Jones River Watershed Association www.jonesriver.org

Save Massachusetts Forests

Carver Concerned Citizens

Rebecca Tepper, Secretary Executive Office of Energy and Environmental Affairs Commonwealth of Massachusetts 100 Cambridge Street Boston MA 02108

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December 9, 2024

RE: EEA 16692: Comments on Final Environmental Impact Report/Environmental Impact Study: Plymouth Municipal Airport Runway 6 Expansion Project & 5 Year CIP Improvements

Dear Secretary Tepper,

Thank you for the opportunity to comment on the above-referenced Final Environmental Impact Report ("FEIR").

These comments are submitted by Community Land and Water Coalition (CLWC), Jones River Watershed Association, Carver Concerned Citizens and Save Massachusetts Forests (the "Groups") on behalf of their organizations and members who live, work and recreate in the area surrounding the Plymouth Municipal Airport and will be affected by the Project. CLWC is a project of Save the Pine Barrens, Inc.

The Groups and others commented on the Draft Environmental Impact Report ("DEIR") on January 8, 2024.

The FEIR does not adequately address the issues identified in the Scope outlined in the Secretary's January 18, 2024 Certificate on the DEIR. We request that the Secretary determine pursuant to 301 CMR 11.08(c)(2) that the FEIR is inadequate and require the Proponent to file a supplemental FEIR in accordance with 301 CMR 11.07.

Background

The Airport's current operations have created conditions that cause daily harm to the health and well being of residents due to noise, vibration, air pollution and hours of operation.

The FEIR does not address the public concerns raised in comments on the DEIR about the current Airport operations and the ongoing daily harm to residents from noise, vibration, air pollution and hours of operation of non-essential aircraft.

The Plymouth Airport is a municipal airport established under Mass. Gen. Laws c. 90, § 51D. It is operated by a 7-member Airport Commissioners appointed by the Town's Selectboard. As a municipal airport it is authorized to make rules and regulations for the airport's operation subject to approval by the state aeronautics board yet the Commissioners allow the Airport to operate causing daily harm to residents and the environment.

The General Laws of Massachusetts prohibit aircraft from flying so low that it interferes with residents' use of their homes or that is a manner that is "imminently dangerous" to people in their homes and on their property. The state law, Mass. General Laws, c. 90, § 46 provides:

Flight of aircraft over the lands and waters of this commonwealth, within the navigable airspace as defined in section thirty-five, shall be lawful unless at such a low altitude as to interfere with the then existing use to which the land or water or space over the land or water is put by the owner or occupant, or unless so conducted as to be imminently dangerous to persons or property lawfully on the land or water beneath.

Yet, residents are documenting the regular, ongoing harm they suffer from the Airport's operations. This includes incessant "circling" by flight schools over their homes, including flights that are imminently dangerous to people and property and cause ear splitting noise and homes to shake and windows to rattle. Examples of excessive circling aircraft are shown below of flight school planes "buzzing" residents in their homes. These are taken by flight trackers on Apps. Despite calls and complaints to the Airport under its "voluntary noise abatement" policy, the intolerable conditions continue harming both elderly residents in the over 55 mobile home parks around the Airport and the very young children who reside directly under the jets, planes and helicopters flight paths.

Exhibit 1: Screenshots from Apps of planes buzzing overhead at the Plymouth Municipal Airport, 2024. More details on request.





PYM Plymouth Muni Plymouth, MA



The Airport's noise levels violate the FAA standards identified in the DEIR.

The Airport's noise levels currently violate FAA standards identified in the DEIR. This is also being tracked by residents using Apps. The January 2024 Certificate states,

Noise in accordance with the Scope, the DEIR includes an assessment of noise levels associated with existing airport operations, as well as potential changes as a result of the Project. The DEIR states that the FAA has determined that the cumulative noise exposure of individuals to noise resulting from aviation activities must be established in terms of the day-night average sound level (DNL), which is a 24-hour average sound level in decibels (dB). While the FAA does not typically require noise studies for GA airports, as they do for commercial airports, a noise analysis incorporating the Project was performed, as part of the TMPU, because the number of existing jet operations at the Airport exceeds the FAA threshold for a noise analysis (of 700 annual jet operations).

Noise modeling using the FAA-approved Aviation Environmental Design Tool (AEDT) system was completed using 2021 data (baseline data used for the TMPU), where the Airport experienced an annual total of 61,021 operations, of which 4,271 were jets. Because the Project proposes an extension of Runway 6, the noise modeling was presented to show the change in extent of the **65dB and 70dB noise contours**. **According to the DEIR, an increase in sound levels of 1.5dB or more in an area already exposed to a DML of 65dB or greater, constitutes a significant impact under FAA regulations (FAA Order 1050.1F).** (Emphasis supplied)

The Airport's operations regularly expose residents to decibels above 70. Below are a series of screenshots of decibel measurements ranging from71 to 81.7, taken by a resident at their home near the Airport. This is a regular and routine occurrence. This appears to be a "significant impact under FAA regulations (FAA Order 10.50.1F)" as stated in the DEIR. Clearly, the Airport should not expand to accommodate more private jets like the Falcon 2000 until it comes into compliance with FAA standards.

Exhibit 2: Decibel readings at a home in Plymouth MA near the Plymouth Municipal Airport, 2024. More details on request.

12:39	Sound leve	I meter	२ ■,	12:42	Sound level	meter	
Ins	stantaneous le	evel [dB(A)]		Ins	tantaneous le	evel [dB(A)]	
_	78	.4			73	.4	
					_		
Total Run T	ime		00:00:08	Total Run Ti	me		00:00:04
Instantaneo	ous level		78.4 dB(A)	Instantaneo	us level		73.4 dB(A)
LAeq			72.6 dB	LAeq			73.2 dB
Lmax			78.4 dB	Lmax			75.3 dB
LCpeak			95.9 dB	LCpeak			95.6 dB
TWA			dB	TWA			dB
Dose			%	Dose			%
	•	1	Û			1	Ċ
dB Sound level meter	Saved	Noise Info	Settings	dB Sound level meter	Saved	Noise Info	Settings

12:44 Sound let	vel meter ?	12:45 Sou	• • • • • • • • • • • • • • • • • • •	२ ■ ⁰	12:49 Sound le	evel meter ?
Instantaneous 78	8.5	Instanta	1.7		Instantaneou 72	2.5
Total Run Time	00:00:02	Total Run Time		00:00:02	Total Run Time	00:00:09
Instantaneous level	78.5 dB(A)	Instantaneous lev	rel	81.7 dB(A)	Instantaneous level	72.5 dB(A)
LAeq	76.2 dB	LAeq		76.8 dB	LAeq	70.0 dB
Lmax	79.5 dB	Lmax		80.9 dB	Lmax	75.0 dB
LCpeak	95.0 dB	LCpeak		97.0 dB	LCpeak	96.6 dB
TWA	dB	TWA		dB	TWA	dB
Dose	%	Dose		%	Dose	%
dB Sound level meter	A C C C C C C C C C C C C C C C C C C C	dB Sound level meter	c L	t ک Settings	dB Sound level meter Saved	Image: Noise Info Image: Settings
12:52 Sound leven	vel meter (?)	12:53 Sound	level meter hus level [dB(A)]	⑦		
Total Run Time	00:00:08	Total Run Time	00:00	:08		
Instantaneous level	75.1 dB(A)	Instantaneous level	71.0 dB	(A)		
LAeq	68.1 dB	LAeq	61.7	dB		
Lmax	73.4 dB	L Cneak	70.5	dB		
тууд	90.7 dB	TWA	00.0	dB		
Dose	%	Dose		%		
dB Sound level meter	Li Contraction of the section of the	dB Sound level meter	CONTRACTOR	35		

Noise is a health hazard. See, e.g., <u>Noise and Health, Noise pollution is more than a nuisance.</u> <u>It's a health risk.</u> Harvard Magazine, Spring 2022.

The Airport is required to comply with FAA rules and regulations because it has accepted federal funding through the Airport Improvement Program (AIP). While this is in effect a contractual obligation between the Town of Plymouth as the owner of the Airport and the United States government, the FAA does not preempt the Town's obligation to the safety and well-being of its residents. It does not give the Airport the right to operate or expand the Airport in a manner that harms residents.

Comments on FEIR Section 1.0 Project Description

It bears repeating that the Airport is a municipal airport that should put its residents first before the private commercial interests of private jet companies and their private customers. While the Airport serves public services like Boston MedFlight Helicopters and provides emergency helicopter services these only average between four and six flights per day according to the FEIR. The Airport is also the headquarters of the Massachusetts State Police Air Wing that has three helicopters and one airplane that serves air search, air rescue, and antiterrorism activities. These limited functions are not the problem: it is the expansion of private commercial aircraft use and private jets that causes most of the damage to the environment at issue. Further, the Airport acts as a parking lot for private jets from Nantucket, Martha's Vineyard and Cape Cod when those airports are full to capacity during peak summer vacation times. This is unacceptable.

The FEIR does not justify the Purpose and Need for the Airport Expansion. Section 1.2 states,

The Airport is not seeking to increase airfield capacity nor expand the Airport but rather, meet airfield geometry standards, recommendations for runway length, and address current FAA safety and design criteria standards for the current family of aircraft operating at the Airport. As aircraft, technology, FAA safety and design criteria change, so must the Airport.

This is an assumption that does not stand up to scrutiny. The Airport can change, but it does not need to expand to accommodate private jet traffic. The entire premise of the FEIR and expansion plan is that the Airport needs to expand to accommodate private companies who serve private air travelers. It does not. Moreover, while the FEIR and the Airport Technical Master Plan Update (TMPU) state that expansion is to be implementing projects to improve "runway safety" for the private jets, neither the DEIR or FEIR give any calculations or specific figures for the additional

"safety margin" that would be provided by extending the runway. What is the actual "safety margin" that will be achieved, even if it is only to accommodate private jets?

The Airport has designated the Falcon 2000 as its "critical aircraft" meaning for the FEIR as it is the "most demanding aircraft having regular use of the airport." As a B-II category aircraft, the Falcon 2000 has certain runway length requirements for the Falcon 2000 to take off with its maximum certified takeoff weight. This is because a longer runway is required for an aircraft to reach a safe takeoff speed when it is carrying a heavier load. The Falcon 2000 can still operate at Plymouth, but to operate at its "full capacity" in terms of the amount of fuel and/or passengers it can carry it needs the runway expansion. But this comes at the expense of the residents.

Figures in the FEIR are inconsistent

The Figures in the FEIR Section 1 have the following inconsistencies/inaccuracies:

Figure 1-2A: What is the encroachment on the Plymouth Airport CR in the Northeast part of the Airport? This appears to be land clearing and deforestation.

Was the land use alteration to the west in and around wetlands covered by an Order of Conditions?

Figure 1-2B: Map of Priority Habitat - the entire airport is still a priority habitat? When was the latest survey? How can species possibly survive on an airport runway?

Figure 1-2G: Does not show the second day care; it only shows Southshore Childcare as shown below. Thus, the FEIR does not address the location of the additional daycare in the area, immediately adjacent to the Airport and shows an inaccurate location of the daycare. See Figure 1-2 G from the FEIR below that does not include the second daycare and has the wrong location of South Shore Daycare which does not appear to exist.



The red stars to the top of the page show the location of the following two daycares/preschools.

- South Shore Early Education 196 South Meadow Road, Plymouth, MA 02360
- 2. Ms. Joanne's Bright Beginnings 200R South Meadow Rd Plymouth, MA, 02360

One of them is on the actual Airport property.

Inaccurate information about economics

The Project description states that "the Airport is home to 21 private businesses, employing more than 175 people. These businesses provide services such as flight instruction, aircraft maintenance, aircraft sales, and corporate flights." There is no documentation to support this claim and it seems implausible. In contrast, the Master Plan states the airport directly employs nine people. These positions include an airport manager, an assistant manager, an office

manager, and six airport operations/maintenance personnel. It states approximately 250 people are employed by the many businesses operating at the airport, a difference of about 75 people. The SEIR should address this with an accurate economic analysis of the justification for the Airport.

Failure to account for "touch and go" operations

The FEIR appears to exclude "touch and go" operations in its calculations. It states,

The Falcon 2000 is the critical aircraft, which it defines as "the most demanding aircraft type, or grouping of aircraft [families of aircraft] with similar characteristics, that make regular use of the airport. Regular use is 500 annual operations, including both itinerant and local operations but excluding touch-and-go operations.

The FEIR does not describe what a "touch and go operation" is, but it appears this is the most problematic type of operation at the airport. Generally a touch and go is a flight maneuver where a pilot lands an aircraft on a runway, but immediately takes off again without coming to a complete stop, essentially performing a landing and takeoff sequence in one continuous motion. This is a common training exercise for pilots to practice landing and takeoff techniques repeatedly without needing to taxi off the runway between each landing.

The FEIR should include ALL touch and go operations in the calculations. Figure 1 above shows the flight schools that circle endlessly. Combined with touch and goes this is the most problematic aspect of the operations.

Comments on FEIR Section 2.0 Alternatives Analysis

The FEIR conducted alternatives analyses for three components: Runway 6 extension and resulting Taxiways A and E extensions, the wastewater line installation, and the proposed new hangars.

2.1 Runway Extension

The FEIR identifies Alternative 2, the 351 foot extension as the preferred alternative. The Secretary should reject this alternative. First, accommodating private jet traffic (the Falcon 2000 or similar) is not the community's preferred use of the airport or alternative. It was chosen by the Airport commissioners, appointed by the Selectboard. Hundreds of people have signed petitions and comment letters opposing Alternative 2, the runway expansion. Second, the Commissioner's primary justification for Alternative 2 is "safety margin" for the Falcon 2000. As noted above, the FEIR is completely devoid of any details on what constitutes this "safety margin". The Airport current operations are "safe" according to any number of sources. The FEIR does not

provide any accident records or identify incidents that threatened people or property or presented a risk from operations Therefore there is no justification for the runway expansion – other than to accommodate private jets. The FEIR does not justify adding more noise, vibration, air pollution and other impacts from the expansion for private jets.

Section 2.1.2

The FEIR rejects Alternative 1, the No Build Alternative for the runway state it does not fulfill the minimum runway length required for the critical aircraft as analyzed in the Technical MPU. In other words, the FEIR choses Alternative 2 to accommodate the "critical aircraft" which is the private jet of the Falcon 2000 type. For the reasons stated in these comments and those of other members of the public, Alternative 1 is the only alternative that meets MEPA criteria.

The Federal Aviation Administration does not require a specific minimum runway length but rather relies on design standards based on the "critical aircraft" that will be used. The airport commission has stated repeatedly that they do not expect an increase in aircrafts or in size of aircrafts. Yet, runway extensions are often a way to accommodate larger aircrafts and to allow larger, heavier planes to operate at the location.

Table 2-1 States,

The 351' extension was presented as the Preferred Alternative in the TMPU based on all factors that include public engagement and environmental concerns. This EA/EIR presents the 351' as the "Proposed Action" for RW 6 Approach based on ultimate Airport Commission determination that resulted from those same factors with additional cost, stakeholder outreach, and future growth considerations; total lengths given for TW A and E include total length of asphalt to include the extension to meet RW 6 extension length + stub/turn.

Since the 2022 TMPU and wider understanding by the public of what the Airport is actually proposing and why, this is no longer a valid justification for choosing Alternative 2. The public opposes the 351-foot extension.

2.2 Wastewater Analysis

The wastewater expansion is clearly stated to be for future airport expansion. The FEIR notes that these projects are in the conceptual phase and that their exact locations and sizes are approximated and lack adequate information. The sole reason given is expansion of the Airport as the FEIR states, "the need for a gravity sewer main is critical to provide sewer service for additional development."

Section 2.3 New Hanger Alternatives

The FEIR rejects the "no build" alternative for hangers because "This would not meet the demand for new hangars identified by the Airport."

Additionally, this alternatives analysis is also biased toward Airport growth, which is not the public's preferred option. The analysis takes into consideration the evolution of aircraft and that future hangar development and longer wingspans, a feature of modern single-and multiengine- aircraft that means expansion of the Airport.

The FEIR recommends two new hangers. See, Alternative 3. Expanded hangar space is clearly only being pursued for the airport to expand. This expansion is likely to increase air traffic, which in turn contributes to environmental damage, including noise and carbon emissions. As noted, 'Runway expansion often leads to increased air traffic, which directly contributes to carbon emissions' (Summers, Michael. "Runway Construction and Expansion.", 29 Nov. 2024, mapilots.org/runway-construction-and-expansion")

The FEIR acknowledges the projected long-term increase in airport operations but maintains that the Runway 6 extension itself is not expected to cause a substantial surge in operations. This does not directly address concerns about the impact of new hangars on attracting more jet traffic. See, page 22 of the FEIR.

The FEIR also states that "The Proposed Actions are anticipated to have little effect on air traffic volume over the next 5-7 years." (page 139 FEIR) However, by providing more hangar space and making it more cost effective for Falcon 2000s type jets to come to the airport because they can go further and carry more customers, it is likely that the Airport will expand operations. The FEIR gives conflicting information and statements about expansion v. non expansion. This should be clarified.

Section 3 Groundwater

This section of the FEIR suffers from many fundamental defects. Despite citing the importance of the 1990 federally designated Plymouth-Carver Sole Source Aquifer, the FEIR gives no updated information about it or a plan to provide baseline data, monitoring or a serious protection other than complying with stormwater standards.

Section 3.1.2 Construction Period Groundwater Protection Measures

It is not possible to determine if the spill containment plan is adequate without knowing the expected fill needs or the potential hazards in the event of a spill. An on-site, empty 5-gallon bucket seems insufficient for a spill of any significant size, especially if absorbent pads are used. Larger spills, such as those occurring while filling tanks or heavy equipment, may require more

capacity, possibly even vacuum equipment. The designated area 'outside ecologically sensitive' areas should be mapped and approved by appropriate town and emergency response personnel. Additionally, a site map should clearly label all designated refueling aprons, fuel storage areas, and the locations of spill kits and equipment.

Monitoring Plan

The Certificate states:

The FEIR should include a monitoring plan that describes how and when soil and groundwater will be monitored for potential contaminants of concern and how baseline soil and groundwater contaminant conditions will be established. The monitoring plan should detail the frequency of sampling and how the sampling results, along with needed and executed response actions, will be shared with appropriate water department officials in the project area.

The FEIR does not provide a monitoring plan for soil and groundwater as required by the FEIR. The FEIR obfuscates and refers to past monitoring and monitoring obligations for regulatory requirements such as the WWTP, but never responds directly to the Certificate. Clearly, the answer is "NO" the Airport is not including a groundwater and soil monitoring plan.

The FEIR Ignores EPA's Recommendations For Monitoring The Groundwater

The FEIR admits that the airport does not currently have an active, existing **groundwater monitoring plan.** The FEIR states:

The Airport has conducted groundwater monitoring periodically for prior projects but does not maintain any actively sampled wells at this time. The most recent monitoring conducted in 2012 was groundwater monitoring associated with the wastewater treatment plant at the Airport which included testing levels of VOCs in the water. The Town of Plymouth, Sewer Division determined that there were no violations to the accompanying Groundwater Discharge Permit.

The FEIR cites monitoring conducted in 2012 for wastewater treatment plant at the Airport which included testing levels of VOCs in the water. In Table 3-4 the Airport attempts to pass off this 32-year old water analytical data as somehow relevant to the FEIR in 2024. The FEIR provides no information about the **current** status of the Groundwater Discharge Permit for the Airport wastewater treatment plant or any current sampling by the Plymouth Sewer Division. The relevant permit appears to be W018813 which does not appear to be updated on EEA's Data Portal. The attempt to use 32-year-old data is actually quite surprising for a municipal facility such as the Airport.

Public comments asked the Airport to identify the number of private wells in the area and their location. The FEIR fails to do this. The consultants do not appear to understand that all residents

of Carver have private wells except for those served by the North Carver Water District. That means all the residents near the airport have private wells or public water supplies at their planned communities. Carver does not have a municipal water supply around the Airport. In addition, the North Carver Water District has been shut down due to neglect and poor management by the Town of Carver. The homes with contaminated wells in North Carver that should be utilizing the water at the North Carver Water District are now receiving water from Middleboro that is known to contain contaminants such as PFAS.

Per federal and state guidelines, there currently exist no drinking water testing or monitoring programs for the private wells at individual homes in Plymouth and Carver unless a private homeowner pays for private testing. At that time, if the private well is contaminated the DEP will look to identify the source of the contamination and will facilitate mitigation under Chapter 21E. The FEIR shows that the Project area includes Environmental Justice neighborhoods based on income. The cost of private water testing is out of reach for many residents. Therefore, they could be exposed to contaminated water without knowing it.

As far as PFAS contamination, the FEIR is blatantly misleading. On June 24, 2024 the EPA filed the final enforceable maximum contaminant limits for 6 PFAS to ensure public health and safety. They are:

Compound	Final MCLG	Final MCL (enforceable levels) ¹
PFOA	Zero	4.0 parts per trillion (ppt) (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA (commonly known as GenX Chemicals)	10 ppt	10 ppt
	1 (unitless)	1 (unitless)
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	Hazard Index	Hazard Index

In 2021, MassDEP required testing for PFAS in all their Public Water Systems; these Public Water Systems have ample time (until June 2029) to comply with the new regulations to implement mitigation practices to protect drinking water. Additionally, Massachusetts is currently working towards setting their new maximum contaminant levels from 20 ppt to ones that are "no less stringent" than those of the EPA.

The FEIR uses 2021 well testing data but cherry picks only the municipal wells to claim that "all wells in Plymouth were tested a total of four times and no PFAS was detected for almost all of the wells." This appears to mean that the municipal wells were tested. The actual 2021 data is attached as Exhibit 2 and shows the many wells in Plymouth required to be tested under the SDWA and those showing contamination with PFAS.

The statement within the FEIR that "No history of use of PFAS" does not reflect a comprehensive investigation into the potential presence of PFAS on the site. PFAS has been a hidden contaminant for many years, with over ten thousand formulations used and distributed. This issue was highlighted in recent years, such as in the case of challenges to aerial and widespread pesticide applications for mosquito control. In 2019, planes departing from Plymouth Airport sprayed Anvil 10+10, which was contaminated with PFAS. The PFAS was introduced into the pesticide from 55-gallon fluoridated barrels, leading to widespread contamination across millions of acres in Massachusetts. In October 2020, the MA DEP established PFAS thresholds for drinking water wells and mandated treatment for numerous public wells contaminated by these substances. However, the applicant has not conducted an investigation for PFAS contaminant. Additionally, the applicant references the town's water quality report for municipal wells, which is not sufficient to safeguard the extensive natural resources surrounding the site.

The more recent municipal well testing for Plymouth shows PFAS present in 3 wells, not just the Wannos Well as the FEIR mistakenly states.

Exhibit 3 below: Source: Town of Plymouth, accessed 12/7/2024. <u>https://www.plymouth-ma.gov/1317/PFAS</u>

Compound	Current MassDEP Standard	EPA Standard	Wannos Pond Well	North Plymouth Well	Lout Pond Well	PWS Meets Standard?
PFOA	Combined 20 ppt	4 ppt	2 ppt	1.7 ppt	1.2 ppt	Yes
PFOS	Combined 20 ppt	4 ppt	1.3 ppt	1.6 ppt	Non Detect	Yes
PFNA	Combined 20 ppt	10 ppt / Hazard Index (HI) ≤ 1	Non Detect HI = 0.0007	Non Detect HI = 0.0014	Non Detect	Yes
PFHxS	Combined 20 ppt	10 ppt / Hazard Index (HI) ≤ 1	Non Detect HI = 0.0007	Non Detect HI = 0.0014	Non Detect	Yes
PFHpA	Combined 20 ppt	No EPA Standard	Non Detect	Non Detect	Non Detect	Yes
PFDA	Combined 20 ppt	No EPA Standard	Non Detect	Non Detect	Non Detect	Yes
PFBS	No MA Standard	Hazard Index (Hl) ≤ 1	HI = 0.0007	HI = 0.0014	Non Detect	Yes
HFPO-DA (GenX Chemicals)	No MA Standard	10 ppt / Hazard Index (HI) ≤ 1	Non Detect HI = 0.0007	Non Detect HI = 0.0014	Non Detect	Yes

While the 2023 results comply with current standards as the Town website acknowledges, EPA is setting stricter standards as stated above and the state has 2 years to come into compliance and lower the MCLs to "not less stringent" than the EPA's.

The point is that the Airport has used outdated and misleading data by failing to provide sampling results from all of the municipal and public water supply wells in Carver and Plymouth to show the current baseline of water quality. It has completely disregarded the private drinking water wells and any risk to those from Airport expansion.

EPA's drinking water standards have not been updated in almost 20 years so the FEIR results do not mean the water is safe. A simple search of the Environmental Working Group Tap Water Database shows that Plymouth Water Department water exceeds health guidelines for 11 out of 23 contaminants.

Exhibit 5: Tap Water Database https://www.ewg.org/tapwater/system.php?pws=MA4239000



Menu	EWG's Tap Water Data	abase — 2021 UPDATE	EWG Home		
Detected contaminants EPA data					
Presented career career P. 2000 EWG'S HEALTH GUIDELINE THIS UTILITY EWG HEALTH GUIDELINE NO LEGAL LIMIT DETAILS	Control Effect date	THIS UTILITY 0.148 ppb EWG HEALTH GUIDELINE 0.02 ppb NO LEGAL LIMIT	LUCHAR ERCE 200X EWG'S HEALTH GUIDELINE THIS UTILITY 0.803 ppb EWG HEALTH GUIDELINE 0.04 ppb NO LEGAL LIMIT DETAILS		
Dibromochloromethane Potential Effect: cancer 111x	Haloacetic acids (HAA5)† Potential Effect: cancer 6.7x	Haloacetic acids (HAA9)† Potential Effect: cancer 222x	Nitrate Potential Effect: cancer 3.3X		
EWG'S HEALTH GUIDELINE THIS UTILITY 1.09 ppb EWG HEALTH GUIDELINE 0.1 ppb NO LEGAL LIMIT	EWG'S HEALTH GUIDELINE THIS UTILITY 0.673 ppb EWG HEALTH GUIDELINE 0.1 ppb LEGAL LIMIT 60 ppb	EWG'S HEALTH GUIDELINE THIS UTILITY 1.33 ppb EWG HEALTH GUIDELINE 0.06 ppb NO LEGAL LIMIT	EWG'S HEALTH GUIDELINE THIS UTILITY 0.464 ppm EWG HEALTH GUIDELINE 0.14 ppm LEGAL LIMIT 10 ppm		
DETAILS Radium, combined (-226 -228) Potential Effect: cancer	& Tetrachloroe (perchloroet Potential Effect	thylene Total hylene) t: cancer Pot	Total trihalomethanes (TTHMs)† Potential Effect: cancer		
6.9X EWG'S HEALTH GUIDELINE THIS UTILITY 0.35 EWG HEALTH GUIDELINE 0.05	PCI/L THIS UTILITY EWG HEALTH GUIDEL	UIDELINE EWG" 0.499 ppb THIS UTILI INE 0.06 ppb EWG HEAL	500X S HEALTH GUIDELINE TY 7.44 ppb TH GUIDELINE 0.15 ppb		
LEGAL LIMIT 5	pCi/L LEGAL LIMIT	5 ppb LEGAL LIM	IT 80 ppb		

The FEIR does not outline a specific monitoring or mitigation plan for PFAS or other contaminates such as 1,4 Dioxane that are historically found at airports, that require targeted management. The EPA has taken stringent measures to ensure that airports and military facilities where aircraft are housed and training regularly occurs, such as Otis Air Force base on Cape Cod, which sits a federally designated sole source aquifer, as well, take the necessary steps required to test for and remediate any contamination whose plume may be leaching into the groundwater. For example, in 2014, the Air Force, based on recommendations from the Five

Year Review Report began investigations for emerging contaminants PFOA and PFOS and 1,4 Dixoane. PFAS are ingredients in aqueous film forming foams such as fire-fighting foam (but is not limited to fire-fighting foam). 1,4-dioxane is a stabilizer in fuel. The Town of Carver has been dealing with a 1,4-dioxane plume in North Carver since approximately 2013. Not surprisingly, both contaminants were found at Otis. In response to these long-reaching plumes, the Air Force has taken remedial actions to eliminate residential exposures to PFAS and 1,4 dioxane by providing bottled water where private well samples were found to have concentrations which exceed State and Federal MCL limits (which limits were higher than they are now).

At the very least, the Plymouth Airport Commissioners should use the clean-up at Otis Airport Force Base and their investigative and remedial activities as a guide. There should be a robust monitoring program, including regular PFAS and 1,4 Dioxane testing of groundwater and potential source areas, as is required to assess the effectiveness of the airport's mitigation efforts and detect any emerging PFAS and 1,4-dioxane contamination. Such testing should include the private wells within the vicinity of the Plymouth Airport.

Overall, the FEIR acknowledges the potential risks associated with PFAS and emphasizes the importance of protecting the Plymouth-Carver Sole Source Aquifer. However, a more proactive and targeted approach to PFAS monitoring and mitigation would enhance the airport's commitment to safeguarding this critical water resource.

Hydrological data and groundwater flow and elevations

The FEIR lacks essential hydrogeological data and a comprehensive groundwater flow map. FEIR is rather misleading in that it states, "This section details information about groundwater depth, contours, and flow directions to better describe the context, existing location, and subsurface environment for areas potentially affected by the project." However, again it does not actually give accurate or current data. The FEIR refers to and relies on another 32 year old report, the 1992 IEP groundwater study and a 23-year old 2001 study for groundwater soil testing and groundwater contours and flow. The Certificate and the EPA's comment letter emphasize that understanding groundwater flow patterns is crucial for assessing potential risks to drinking water.

The FEIR indicates that groundwater generally flows south and west in the vicinity of the airport. However, localized variations in groundwater flow can occur, influenced by factors such as topography, soil composition, and pumping activities.

The Proponent indicates that it is primarily concerned with water flowing south, west, and east of the airport relative to potential impacts on the Plymouth-Carver Sole Source Aquifer. However, this is an airport. Not only is the applicant intending to expand its runway, add hangars, and increase operations, but it is also anticipating a rise in air traffic. Planes taking off and landing at the airport travel from all directions and emit by-products from burning fuel, and may even dump fuel in certain emergency situations. It is insufficient to consider air quality emissions based solely on data from a monitoring station in Boston. Each geographical area has unique characteristics. Plymouth, for example, has different air quality and weather patterns compared

to Boston, and each entity must take responsibility for minimizing climate impacts. Plymouth Airport has more takeoffs and landings than reported, primarily due to its flight school, and it is likely that there are greater emission impacts in the local area.

Pollution entering any part of the aquifer could have shared impacts, whether from direct contamination or changes in land use or management practices. Exhaust from fuel-burning takeoffs, landings, and flights overhead certainly impacts the larger aquifer, much like salt dispersed on local roadways affects groundwater quality, either from direct contamination or through stormwater systems infiltrating the ground. While the October FEIR submission cites the number of planned trips, it does not account for practice flights, particularly takeoffs and landings, which are especially fuel-intensive and contribute to significant rubber buildup on the tarmac.

This complexity highlights the need for site-specific assessments to accurately determine the potential migration pathways of contaminants and their potential to reach drinking water wells.

The FEIR states it "has been updated to include preliminary results from a conceptual stormwater analysis to determine the measures that will be employed to protect the water quality of the sole source aquifer." This is insufficient because the actual stormwater management systems should be designed not conceptual in order to assess discharges.

The FEIR lacks a complete list of potential contaminants expected to enter the groundwater, including those from aviation fuel, construction materials, and past contamination incidents. Establishing baseline contaminant data, particularly for volatile organic compounds (VOCs), metals, and polyaromatic hydrocarbons.

The FEIR states that a stormwater pollution prevention plan will be created for expansion, and lists what it will include, but does not present a fully developed SWPP that can be reviewed or evaluated to date. A SWPP is crucial to get right on this project since the Airport stores, handles, and uses fuels, oils and other potentially hazardous materials. The FEIR does not confirm whether the airport's SPCC plan has been updated to reflect the proposed construction and operations, as recommended by the EPA.

This is significant because the Airport was the source of unlawfully shipped hazardous waste in 2024. A defense contractor that was a tenant at the Airport was penalized \$10,000. Press Release, MassDEP, *Massachusetts and Rhode Island Environmental Agencies Join to Investigate and Penalize Company for Hazardous Waste Violations*, 3/14/2024. This raises serious questions about the Airport's oversight and management of the tenants in its hangers and buildings.

The FEIR notes that a detailed Stormwater Report has not been provided. While the FEIR acknowledges the EPA's suggestion to use advanced stormwater BMPs and monitoring wells the FEIR fails to show the BMPs (or any LID systems it commits to) or how they will be implemented.

The SEIR should provide a robust monitoring program for public and private drinking water wells in the vicinity of the airport. There should be funding for this program and mandates for remediation.

Section 4 Environmental Justice/ Public Health

The FEIR lists mitigation strategies for construction-related traffic, noise, and air quality impacts but does not give a clear plan of how these impacts will be monitored. The strategies also lack information on what impacts there will be to water sources during construction.

The FEIR does not sufficiently consider the project's impacts on Environmental Justice (EJ) populations and public health. Similar critiques were raised in the Hanscom Airport DEIR, where a limited study area and reliance on broad data sources failed to capture the true scope of impacts.

The Plymouth FEIR overlooks the cumulative burdens of emissions, noise, and pollutants on vulnerable communities and fails to assess how these compounded effects might exacerbate existing health disparities. There is a lack of localized air quality monitoring data and consideration of ultrafine particles (UFPs), which are emitted by aircraft and have been identified as significant health hazards.

The FEIR does not provide soil testing for lead and PFAs at West Recreation field and local daycares and schools as requested in comments on the DEIR.

Section 5 Wetlands, Stormwater, Wastewater, and Climate Resiliency

The FEIR acknowledges the need for stormwater management but lacks specifics on:

- Detailed BMPs.
- Implementation timeline.
- Criteria for LID feasibility.
- Monitoring well installation.

To fully evaluate this project the FEIR would have needed to include a detailed Stormwater Report that was asked to be done during the DEIR process. The FEIR has failed to provide that report and defers the report to a future date.

The FEIR relies on a conceptual stormwater analysis to protect water quality and the aquifer as noted. With only a conceptual analysis the FEIR fails to fully evaluate the effectiveness of such a plan or address all concerns established by the public. FEIR p.75.

Leaching basins proposed further risk of groundwater contamination. FEIR p. 76. Basins need to be properly managed to avoid contamination risks, the FEIR does not clearly lay out a plan to

monitor these basins or potential impacts they could have to the groundwater that they will flow into.

An erosion and sediment control program has not yet been described and will be put off to a future design phase.

As with other projects, such as Hanscom Airport DEIR, deferring stormwater and erosion management strategies to later phases creates uncertainty about compliance with Massachusetts standards. Proposed measures are conceptual at best and lack the specificity needed to ensure the protection of water resources, including wetlands and the aquifer.

Section 6 Rare Species

The Airport identified areas for stormwater management are located within existing grassland areas. Proposed stormwater management measures include subsurface systems within hangar footprints (such as under-pavement infiltration chambers), infiltration basins, grass channels, and filter strips. The GHMP is considered data-sensitive and not a public document, which limits the available details about how the plan is implemented. These are problematic aspects of the FEIR.

Conservation Management Permits (CMPs)

The FEIR should outline the Grassland Habitat Management Plan (GHMP) effectiveness, include baseline species data, and provide a plan for long-term net benefits to state-listed species. The FEIR states that "The Airport intends to file for a CMP or CMP amendment after the current planning phase of the Projects."

The DEIR states that "the Airport maintains land in a 'mitigation bank'...to meet the performance standards for a CMP."

Although there is mention of CMP intentions, the FEIR lacks:

- Specifics on long-term benefits for state-listed species.
- An assessment of GHMP's effectiveness.
- Baseline species data.
- Lack of Transparency and Enforcement: The FEIR does not provide specific details regarding the location of CMP-covered parcels, public access to these permits, or the enforcement mechanisms in place. It also does not address concerns about the lack of public input during the initial granting of CMPs to the airport.

The FEIR focuses on limiting mowing frequency to limit disruption of these species but does not evaluate impacts from potential contamination sources, runoff, impacts to soil or air quality, or habitat loss that may impact these species.

The FEIR also states that "The Runway 6 extension, taxiway extension, and hangar project, as proposed, will likely result in a Take (321 CMR 10.18 (2)(b)) of state-listed species." (Pg94 of the FEIR)

The proposed mitigation strategies for habitat disruption are vague and do not include sufficient plans for habitat restoration or long-term monitoring. Moreover, the FEIR does not outline protocols to minimize construction impacts during sensitive periods for these species.

Section 7 Mitigation and Draft Section 61 Findings

The mitigation measures and Draft Section 61 Findings outlined in the FEIR are inadequate and lack enforceability. Restoration plans for disrupted habitats and stormwater upgrades are vague, without clear commitments or timelines.

Mitigation measures must be specific, enforceable, and aligned with essential state and federal environmental standards. Without clear commitments, the risks posed by this expansion remain unaddressed, further exacerbating the potential for long-term harm to Plymouth's environment and public health.

Section 8 Response to Comments

The FEIR Fails to Provide a Direct Response to Many Public Comments

The FEIR fails to directly address the environmental impacts of sand and gravel mining operations in the vicinity of the Airport. These operations, as highlighted by CLWC pose significant risks to the surrounding environment. In addition, the operations generate significant truck traffic and diesel emissions that are totally unaccounted for by local municipal bodies in the state. There are multiple sand and gravel mines operating around the airport each of which generates thousands of truck trips monthly; one operation Read Custom Soils in Carver generates 500 truck trips daily for sand and gravel operations. This is cumulative air pollution, noise, dust and that is totally unaccounted for by the FEIR's calculation of air pollution.

The FEIR disregards the alterations of natural water flow and the risk of groundwater contamination associated with sand and gravel mining. The removal of sand and gravel can alter both surface and groundwater flow patterns, potentially leading to contamination of the local aquifer as the mining process disrupts vegetation and soil, which normally help filter contaminants. These issues, particularly the potential degradation of groundwater and topography, are not adequately addressed in the FEIR. This is particularly concerning since the FEIR groundwater data is about 30 years old and does not therefore account for the land use changes by sand and gravel mining, or even rapid growth in the area. Plymouth has had one of the highest growth rates in Massachusetts the last 20 years and this impacts water and the environment — yet the Airport uses 30-year-old data that does not reflect these changes.

The FEIR fails to include a cumulative impact analysis of the combined effects of the airport expansion project alongside the ongoing sand and gravel mining operations in the area and on the Airport property itself. While the airport acknowledges the existence of these mining activities, it maintains that they are beyond their control. It asserts the operations are "regulated." Documentation shows the majority are not. However, the DEIR and FEIR do not comprehensively assess the potential cumulative impacts of these operations in the broader context of land use changes and development surrounding the airport, thus limiting the understanding of the full environmental consequences. Further, the FEIR suggests that these issues would be more appropriately reviewed and permitted during the local and state permitting processes for those activities. This deferral to local and state permitting implies a fragmented approach, leaving cumulative impacts unaddressed at a broader environmental assessment level.

The FEIR fails to indicate any plans for implementing real-time noise monitoring in residential areas, leaving the question of validating modeled noise levels and addressing residents' lived experiences unanswered. The DEIR claimed the "Airport typically has fewer than 20 noise complaints per year (TMPU, 2022; Chapter 2.1). Issues are handled promptly and brought to resolution. The Airport works to identify the nature of all noise complaints and works diligently to minimize noise impacts whenever possible." This is inaccurate as personal testimonials establish.

While contour maps in the FEIR indicate decibel areas the measurements shown above in Figure 2 using the NIOSH SLM app show most planes exceeding 70 to 80 dB, with flights occurring every minute or every other minute. The claim on page 142 of the FEIR stating there are "no significant impacts on noise and noise-compatible land use beyond the existing condition" as a result of the proposed action is not accurate.

Neighbors have reported a significant increase in air traffic over the past two years, a concern they feel is being ignored by the airport manager and commission. In August 2024, Matt Cardillo noted that the volume of noise complaints the airport used to receive annually is now being reported on a regular basis.

Conclusion

The FEIR is inadequate and the Groups request that the require a Supplemental EIR.

Very truly yours,

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