

Community Land & Water Coalition

P.O. Box 1699

Plymouth, MA 02362

www.communitylandandwater.org

774-260-7864

Carver Concerned Citizens

carverconcernedcitizens@gmail.com

Carver, MA

Save Massachusetts Forests

www.savemassforests.org

savemassforests@gmail.com

RESTORE: The North Woods

P.O. Box 1099

Concord, MA 01742

www.restore.org

restore@restore.org

January 8, 2024

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

% Nicholas Morena
MEPA Analyst
nicholas.moreno@mass.gov

Re: Plymouth: Comments on MEPA EEA # 16692, Draft NEPA Environmental Assessment and MEPA Draft Environmental Impact Report

Dear Secretary Tepper and Regional Administrator Cash:

Thank you for the opportunity to comment on the October 31, 2023 Draft NEPA EA and MEPA EIR and the supplemental package of December 13, 2023 for the Plymouth Airport Runway 6 extension and other capital improvements (the Project).

These comments are submitted by Community Land & Water Coalition (a project of Save the Pine Barrens, Inc.), Carver Concerned Citizens of Carver, Massachusetts, Save Massachusetts Forests (Save Mass Forests) and RESTORE: The North Woods (RESTORE).

Community Land and Water Coalition (CLWC) is a non-profit community group with members that live, work and/or recreate in the Plymouth area and who are impacted by the Project. The missions of Carver Concerned Citizens, Save Mass Forests and RESTORE include protecting and preserving Massachusetts forests and ecosystems including the public forests in Myles Standish State Forest abutting the Project site.

CLCW's mission includes the protection and stewardship of lands and waters and community members in the Plymouth area. This includes protecting the drinking water in the Sole Source Aquifer. *55 Federal Register 32137. See, Safe Drinking Water Act, 42 USC section 300h-3(e)*. The Aquifer covers 199 square miles and is the sole drinking water source for about 200,000 people. The Aquifer is designated under the Safe Drinking Water Act, a federal law, due to its sandy soils, high transmissivity, and its vulnerability to contamination. The Project is in the federally protected Aquifer. The Aquifer is shallow and intercepted by wetlands, streams and ponds that also may be impacted.

The DEIR does not comply with the Scope set forth in the Secretary's May 26, 2023 Certificate on the Environmental Notification Form (Certificate) and is defective in material respects.

We urge the Secretary to find that the DEIR and EA do not adequately and properly comply with MEPA and 301 CMR 11.00 and request that you require the Proponent to file a supplemental draft EIR in accordance with 301 CMR 11.07.

I. Cumulative impacts of land use changes, including unregulated sand and gravel mining surrounding the Site not addressed

This is the second large capital project CLWC and its allies have commented on to MEPA in the last six weeks. On December 1, 2023 our coalition submitted comments on MEPA EEA #16758 for the expansion of the Plymouth Wastewater Treatment Facility (WWTF) located in Camelot Park. The Town seeks to divert the 90% of the wastewater currently discharged to Plymouth Harbor to discharge into the Plymouth Carver Sole Source Aquifer by increasing the volume at the WWTF Site to a total of 3 million gallons per day and diverting the discharge to the Eel River watershed.

In addition to these projects under environmental review, there are innumerable unregulated and uncontrolled industrial scale sand and gravel mining operations stripping forests, vegetation and topsoil from thousands of acres in Plymouth County, including adjacent to the Airport site. All of these projects overlay the Sole Source Aquifer. As set forth below in these comments, the Draft

EIR and EA fail to adequately address impacts to the Aquifer. Not one of these sand and gravel mining operations has undergone environmental review under MEPA. Numerous groups and individuals have brought this failure of the MEPA regulatory process to the attention of you as Secretary and your predecessor Secretary Theohardies as well as to Governor Healy and Climate Chief Hoffer. To date, the Governor and EEA have refused to require these projects to be reviewed by MEPA, citing legal loopholes and technicalities that make a mockery of MEPA.

The scope and scale of the unregulated sand and gravel mining operations causing a silent environmental crisis in our 85-page report, *Sand Wars Southeastern Massachusetts: the money, politics and corruption behind sand and gravel mining in Southeastern Massachusetts*. It can be found on our interactive website, www.sandwarssoutheasternma.org. A documentary film explains the disaster underway and is found on YouTube. These projects include illegal dredging for sand and gravel in the Aquifer in violation of the Clean Water Act. The projects are permanently removing the natural filtration for the Aquifer, exposing it to increased contamination including pollution from nitrates and nitrogen. Immediately adjacent to the Airport are several unregulated sites where the environmental impacts have never been addressed.

Sand and gravel mining, in combination with the Airport expansion and the Plymouth WWTF requires your urgent attention. We request that you take leadership and order a comprehensive, cumulative evaluation and environmental study for every environmental aspect of these projects as a whole, cumulatively. Not once, to our knowledge, has EEA brought to the attention of the EPA, or even acknowledged itself, the mandates of the Safe Drinking Water Act with regard to the Sole Source Aquifer. The 1990 designation, 55 Federal Register 32137 requires “Project Review” by federal agencies with the state and project developer, for any project with federal financial assistance for projects that requires special review....to determine whether they may contaminate aquifer, and if so identify the “ground water protection measures” that will be implemented. Has that review ever been done? It should be done for the Airport expansion at a minimum.

II. The DEIR/EA use inconsistent and conflicting descriptions of the “Study Area” and “Project Site”

The DEIR and EA define the “Study Area” and “Project Site” differently for different purposes. See Section 4.1. When it talks about impacts, it's a small area; when it wants to use the area outside that for mitigation, it uses the larger 748 acre site. Which is it? The failure to use a consistent description for the Study Area and Project Site makes it impossible to compare alternatives, evaluate impacts, and assess the effectiveness of mitigation. There should be one uniform description for the Study Area and Project Site.

The use of these conflicting descriptions seems to contradict the MEPA Certificate that says:

“As discussed above, the ENF was filed as to the Runway 6 project only, even though it is part of a larger master plan (TMPU) that governs work at the Airport over a common time frame. Consistent with prior reviews of other airport master plans (EEA #15964, 16128, 16640), the DEIR should reframe the project under review as the TMPU (the

“project” will be re-named in the DEIR), and provide a description of all projects proposed under the TMPU. All impacts calculations should be updated to reflect the full master plan. To the extent full details are not known of future projects, the DEIR should provide a conceptual description sufficient to estimate cumulative impacts associated with all projects. The DEIR should also describe a mechanism for conducting more detailed reviews of future projects through the filing of NPCs,” (page 10).

The DEIR and EA fail to follow this directive from the Secretary in the MEPA Certificate, and this failure, when combined with conflicting descriptions of the area under review, renders the DEIR and EA wholly inadequate.

The DEIR and EA do not provide an adequate “overview of the Airport’s functions and activities related to general aviation and commercial services, with a focus on the role each of the project components plays in the operation of the Airport.” Certificate, p. 10. They do not provide an adequate description of the current air traffic, types of planes, types of fuels used and purpose of the flights.

According to the FAA, lead is still used in some aviation fuels.

[https://www.faa.gov/about/initiatives/avgas#:~:text=Aviation%20gasoline%20\(avgas\)%20is%20the,can%20operate%20on%20leaded%20avgas.](https://www.faa.gov/about/initiatives/avgas#:~:text=Aviation%20gasoline%20(avgas)%20is%20the,can%20operate%20on%20leaded%20avgas.)

Are these lead-containing fuels used at the Airport?

What are the potential routes of exposure of the public and the drinking water to lead contamination?

III. Inadequate description of the “Affected Environment”

This section has numerous egregious defects, gaps and inaccuracies. A few of these are addressed below.

Section 4: Affected Environment, 4.2, “Resources Not Affected.”

This section concludes water resources are not affected and do not require study. This is unsupported by the facts and is unacceptable for many reasons, most notably the project overlays a federally designated Sole Source Aquifer, where many public water supplies are already contaminated and being treated for various chemicals, including manganese. The region has some of the highest manganese contamination levels in all public water supplies in the region. A new study addressed this in other parts of the state.

<https://www.bu.edu/sph/news/articles/2023/mass-drinking-water-may-contain-unsafe-levels-of-manganese/>

All water resources should be studied, most importantly the Sole Source Aquifer.

4.2.7 Water Resources: Floodplains and Floodways. These should be studied, not ignored.

4.2.8. Water Resources: Groundwater. Section 4.2 of the study says drinking water wells are “not affected.” The study does not give enough information about this conclusion.

As a whole, this section is totally inadequate. See for example, page 32 of the DEIR. It ignores private and public water supply wells and the new Weathervane development directly across the street. This was the site of a massive sand and gravel mining operation in the last few years. What is the impact of this on water flow below and above the ground? Has it changed the groundwater flow direction around the Airport or caused groundwater mounding and increases in baseflows of the surrounding rivers that impacts the wetlands on the Airport site, contributing to potential flooding?

The DEIR states, “Hydrologic studies indicate that groundwater in the PCA generally moves in a north to south direction from Middleborough toward Wareham, and in an east to west direction, toward Plymouth Harbor.” What is the year of this study and who was it done by? Does it take into account the massive changes in topography in the Aquifer area over the last 2, 5, 10, 20 years, caused by unregulated sand and gravel mining that has leveled hills and stripped off the vegetation, and sand and gravel mining that impacts groundwater flow direction and infiltration? Have changes in evapotranspiration been taken into account?

The DEIR states, “As shown on **Figure 4-11**, there are no Interim Wellhead Protection Areas nor Zone II Protection areas as mapped by MassDEP on Airport property.” This does not account for the private drinking water wells in the area. How many are there? How many people rely on private wells? Is the new development using private wells? Our maps of wells show additional wells not documented in the DEIR.

“Data from December 2014 through August 2023 indicate that the water levels are fairly consistent with monthly and seasonal fluctuations that show similar trends (**Figure 4-12**).” This conclusion is inaccurate. First, it is too short of a period to give any indication of the levels over time and impact of climate change and land alterations including topography. Second, the Figure 4-12 actually shows **an upward trend of higher groundwater elevations, not “water levels [that are] fairly consistent.”** The conclusions in this section about water resources do not pass scientific muster.

What are the impacts of surrounding land use changes on the monthly and seasonal fluctuations? What are future trends based on the dramatic land use alterations occurring? Does this raise more concerns about flooding?

The Town of Plymouth 2019 draft water plan states:

The Airport “is located adjacent to the Zone II area [protection area] for the **Federal Furnace Well and could be a potential source for per and polyfluoroalkyl substances (PFAS).**”

Considering how susceptible the [Town’s] sources are to contamination; it is recommended that a more stringent groundwater protection district be developed.

The Town of Plymouth has taken no steps whatsoever to implement a “more stringent groundwater protection district” around the Federal Furnace Well to protect it from contamination by PFAS and other chemicals used at the Airport. The DEIR must:

- Provide and document all groundwater quality testing results for the Federal Furnace Well and the West Plymouth Zone for the last 20 years and report on all contamination results, trends and mitigation measures.
- Identify the “more stringent groundwater protection district” measures that the Town of Plymouth plans to undertake to protect the Federal Furnace Well.

The Airport Expansion project **should not move ahead without the potential impact on the Federal Furnace Well being fully addressed. This includes a complete update study of contaminants, plumes, and an updated hydrological study.** To ignore this drinking water well and potential impacts from the Airport threatens the public safety by potentially exposing residents of Plymouth to more PFAS contamination and recklessly exposing the public (and private) drinking water wells to risk of contamination.

The MEPA Certificate states:

“Any project impacts that could materially exacerbate such conditions should be analyzed. To the extent any required Permits for the project contain performance standards intended to protect public health, the DEIR should contain specific discussion of such standards and how the project intends to meet or exceed them. The DEIR should discuss whether Per- and Polyfluorinated Substances (PFAS) remediation will be included as part of any projects proposed under the TMPU, and describe any ongoing efforts to address PFAS releases that may have been identified during Airport operations.”

“The DEIR should identify all measures that will be employed to protect the water quality of the SSA, provide a description of the proposed stormwater management system for each project/phase and identify BMPs that will be incorporated into its design,” (Page 13).

The impacts to drinking water wells and the Aquifer are required to be addressed by the Certificate but the DEIR just completely ignores them.

IV. Stormwater Pollution Prevention.

Where is the Stormwater Pollution Prevention Plan (SWPPP)? It should be included and made part of the data base for the Project. The DEIR states it was updated, but where is it? Where are the mandatory quarterly inspections done? Where is the documentation of proper record keeping for inspections and operation and maintenance as required by MassDEP’s stormwater regulations and policies?

There should be more water quality data to get a baseline before the Airport can discharge more contamination to the Aquifer.

V. Inadequate Study of Impact, Mitigation and Alternative Regarding Priority Habitat/MESA/ESA Species

In general, the DEIR and EA are completely incomprehensible on this issue. They fail to provide an adequate description of the impacts to ESA-NHESP interests and fail to provide, in **Plain English for the public and EJ communities to understand**, what the impacts are. Instead, they rely on NHESP techo-jargon, such as referring to a number of Conservation Management Permits, without providing an adequate description of what these are, their purpose, or the status of compliance, etc.

The Airport contains about 352 acres of mapped Estimated Habitat of Rare Wildlife and/or Habitat of Rare Species. Of this 60 are “managed pursuant to a NHESP-approved Grassland Management Plan for grassland bird species,” May 26, 2023 ENF Certificate, page 4.

Appendix P states,

The Airport’s Grassland Habitat Management Plan (GHMP), updated September, 2018, and associated Conservation Management Permit (CMP) provides a rare species management strategy that sets forth how the Airport will manage future impacts and provide mitigation within the scope of the Massachusetts Endangered Species Act (MESA) and its implementing regulations. The Airport will continue to coordinate with NHESP to provide an amendment to the GHMP demonstrating a net-benefit to listed grassland bird species and identify mitigation areas (including the use of “banked” surplus areas) for the following habitat alterations:

- Temporary Impact (Grading): 4.18 acres total
- Permanent Impact (Pavement): 2.49 acres total
- Change from Infrequently to Frequently Mown of 3.06 acres
- To minimize impacts, the temporarily impacted areas will be restored to existing conditions and seeded with an airport-approved grass seed mix.

What does this actually mean?

The DEIR-EA do not provide the CMPs or a clear identification of where the properties are. They contain various references to “MESA CMP # 005-049.DFW, # 014-240.DFW, and # 018-329”. Where are these permits? What do they do? Who is enforcing them? How is the public informed? Where are the parcels located that they pertain to? Where are all their appendices? Is the Airport in compliance? What was the public input on allowing the Airport to get these permits in the first place?

- Where is the current scientific data to show that the “Grassland Management Plan” is actually preserving the habitat for the species? Where is the baseline/before information, current information, and future information that the state’s plan for mowing, burning, and logging to provide habitat for these species is actually resulting in their “recovery?”

- What are the GHMP and the associated CMP and are they anywhere in the documents?
- What is the efficacy of either plan in terms of documentation of species identified as indicators of the GH?
- What species were there before the Plan was implemented?
- What are the studies done to document species populations over time?
- Which species are susceptible to increased fragmentation of the area?
- How is the protected grasslands and species affected by the ongoing increased noise from the airports increased air traffic?
- What state listed species are documented in MSSF, and how are they affected by increased local traffic and land disturbance?
- What are "banked surplus areas?"
- What are proposed locations?
- What are the goals for these areas?
- What is their scientifically proven efficacy to achieve those goals?
- If there is a need for more banked surplus areas, what would be the area in acres of what would produce a factually documented mitigation.
- Should there be a mitigation plan for MSSF?
- As Motzkin and Foster (2002) note (excerpt below), "the pre- and early-historical distribution and abundance of uncommon plant and animal species that are characteristic of open habitats today are almost completely unknown." What is the documentation used to determine which species are targeted for management and whether this is appropriate habitat for these species?
- What scientific analysis has the Airport done which shows that the habitat it is "restoring" will be equivalent to the habitat that will be paved over and/or "temporarily impacted"?
- This plan apparently includes "frequently" mowing 3.6 acres, on an indefinite basis. What is the Airport's plan for monitoring and assessing the ecological status of the habitat? How will the Airport ensure that the resources will be available to monitor, assess, and maintain this habitat now and in the foreseeable future?

- What species of grass will be included in the "airport-approved grass seed mix," where will the seed be obtained, and how does the Airport know which species are appropriate for this habitat?
- How will the Airport prevent the spread of invasive plant and animal species on disturbed lands and "restored" habitats?
- What are the expected impacts of grading and pavement on the species now living in these "impacted areas," including plants, animals, insects, microorganisms, fungi, and other non-target species?

Reference:

Motzkin, G., and Foster, D. R. 2002. Grasslands, heathlands and shrublands in coastal New England: historical interpretations and approaches to conservation. *Journal of Biogeography*, 29(10-11), 1569–1590. doi:10.1046/j.1365-2699.2002.00769.x

Federally protected species: ESA

Two of these state-protected species are also protected under the federal Endangered Species Act, the Northern Long Eared Bat and the Plymouth Redbelly Turtle. Section 5.5.2. The Report concludes, with no credible scientific data, that the Project "will not negatively affect these federally-listed species."

CLWC on behalf of the public demands complete and open public participation in the NHESP "coordination" of the impacts. See, 4.3.2.2. It is not acceptable for project proponents, especially a public body using public funds, to negotiate behind closed doors with NHESP to discuss the destruction of MESA listed species. We demand: 60 day notice of all meetings between the project proponent and NHESP-MassWildlife agencies, written notice of all draft decisions and proposed changes to existing CMPs and the chance to comment on new CMPs. The current manner in which NHESP handles CMPs and public notice is contrary to the state's Environmental Justice policy and MEPA. It is exclusionary, biased and allows NHESP to operate behind a veil of secrecy and with no accountability and transparency. In this situation, given the public funds involved, this is unacceptable. Further, the Project abuts Myles Standish State Forest which is ignored throughout the DEIR. The wildlife habitat corridors at the Airport are interconnected with MSSF and cannot be ignored.

VI. Air Quality

4.3.1 Air Quality.

The DEIR - EA used an air station in Boston to conclude that air pollution is not a problem. That is unacceptable. Local residents who live, work and recreate near the Airport have reported directly to Airport staff that the levels of fumes and air pollution on the ground around the Airport are overwhelming and make it difficult to breathe. The Airport must conduct a thorough air pollution study to obtain baseline, current air pollution levels and future impacts, including

wind rose modeling and setting up air monitoring stations. The Airport must provide reliable, science based evidence documenting local conditions and provide evidence that the fumes from the Airport are not harming people now or in the future.

VII. Recreational Resources

The Site abuts Myles Standish State Forest and flight paths go over the forest. Yet, the DEIR and EA just treat MSSF as a blank spot on the map without identifying any potentially impacted resources at all. MSSF is the state's largest state forest. Potential impacts include air, noise, light pollution and aesthetic impacts to the tens of thousands of visitors to the Forest annually and potential impacts to wildlife. Page 3 states, "The approach to Runway 33 contains open space, Myles Standish State Park, and Southers Marsh Golf Club, which are considered to be compatible with the Airport development and operations....These open spaces are considered to be compatible land uses with the Airport development and operations."

Using a public forest for a runway approach is not a compatible use, but substantially interferes with the ability of the visitors to the Forest to enjoy nature's quiet, peace and tranquility and to be free from noise, light pollution and low flying aircraft. This is a fundamentally flawed premise in the DEIR and EA and completely undermines the credibility and conclusions of these studies.

How is the large state designated reserve that is Myles Standish State Forest affected by aircraft noise, light pollution and air pollution?

In conclusion, the DEIR and EA do not adequately and properly comply with MEPA and 301 CMR 11.00 and should require the Proponent to file a supplemental draft EIR in accordance with 301 CMR 11.07.

Please feel free to contact the undersigned if you have any questions.

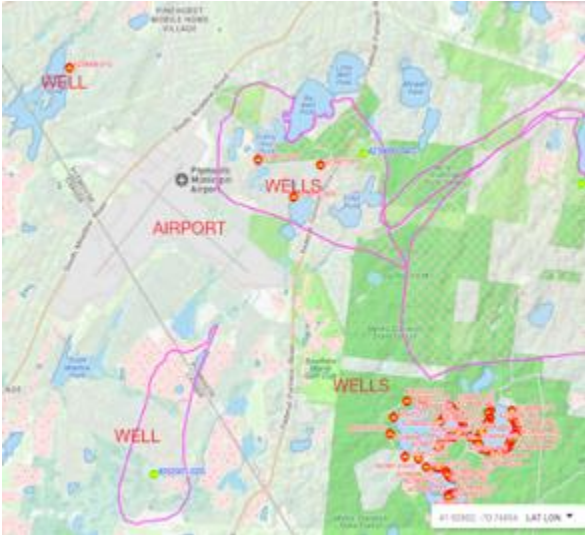
Very truly yours,

Margaret E. Sheehan, Esq.

For:
Community Land & Water Coalition
Carver Concerned Citizens, Mary Dormer Co-Chair
Save Massachusetts Forests, Janet Sinclair
RESTORE: The North Woods, Micheal Kellett

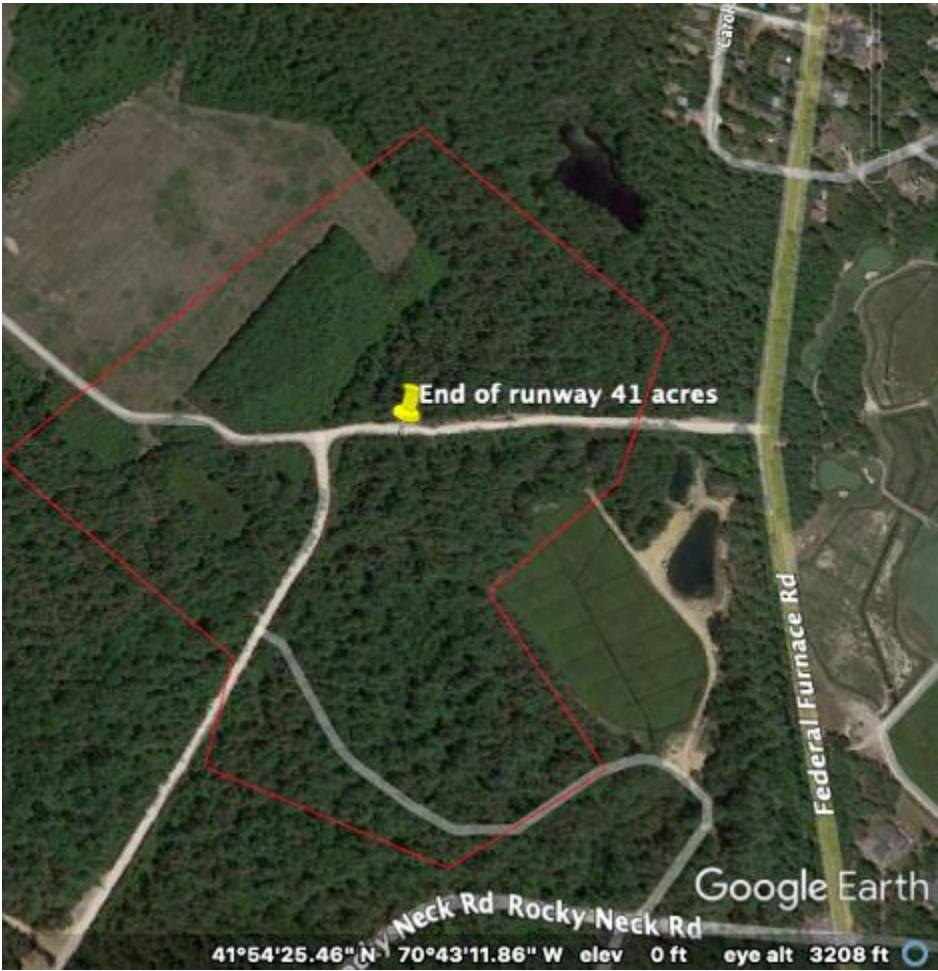
cc:
Southeastern Massachusetts Pine Barrens Alliance
Friends of Myles Standish State Forest

Exhibit 1: Map of wells not shown in the DEIR-EA.



**Exhibit 2: Examples of land use change around/on the Airport
2015 to 2023**

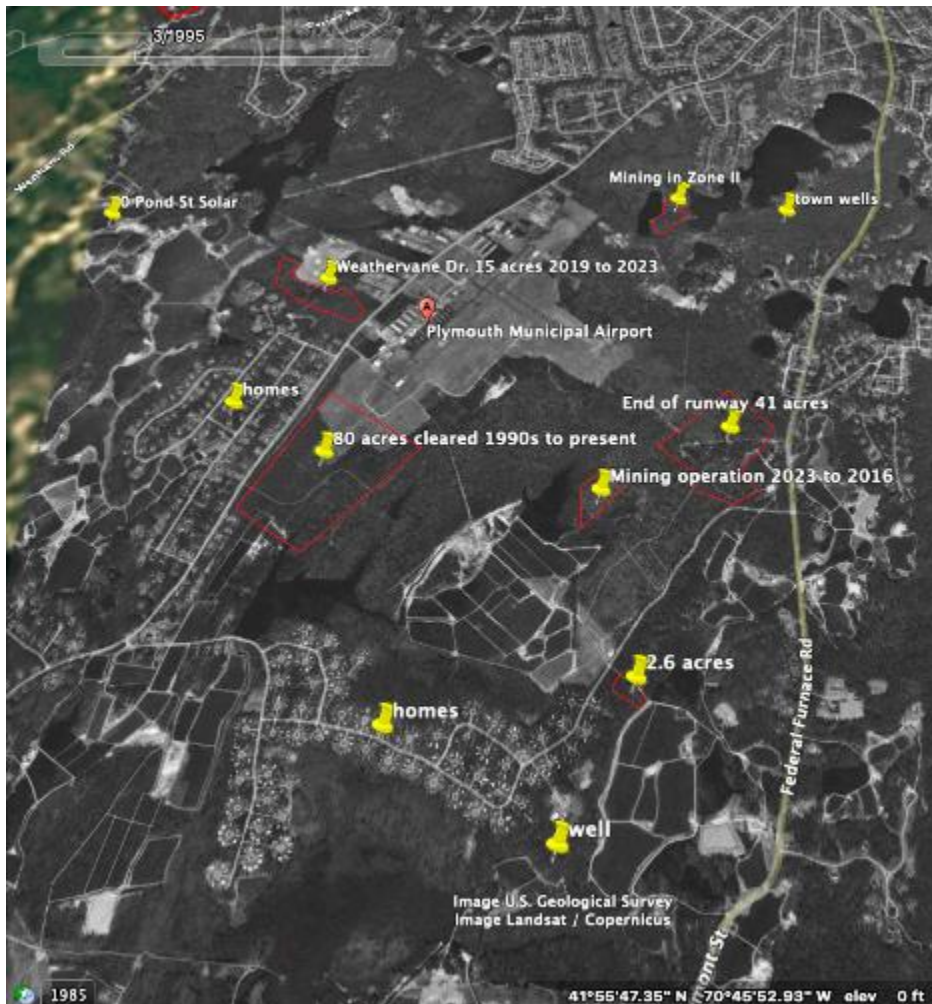
Before:



After: 2023



Exhibit 3: Some sand and gravel mines around the Airport, 1995 to 2023
Before: 1995



After: 2023:

Directly across the road: Weathervane Dr. 15 acres stripped 2019 to 2023

