No. 14-71180

IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

MICHELLE BARNES, PATRICK CONRY, BLAINE ACKLEY, JIM LUBISCHER, DAVID BARNES, AND OREGON AVIATION WATCH,
Petitioners,

v.

FEDERAL AVIATION ADMINISTRATION,
Respondent

and

PORT OF PORTLAND,
Intervenor-Respondent

PETITIONERS' REPLY BRIEF

Sean T. Malone OSB # 084060
Attorney at Law
259 E. 5th Ave, Suite 200-G
Eugene, OR 97401
Tel. (303) 859-0403
Fax (650) 471-7366
seanmalone8@hotmail.com

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Statutes

Rules

Regulations

ARGUMENT

I. PRELIMINARY ISSUES

Because several arguments arise with recurring frequency in the FAA's and the Port of Portland's (the Port) (collectively, Respondents) response briefs, Petitioners address those issues upfront.

A. The Remand Forecast includes the Unconstrained Forecast

An oft-repeated refrain from Respondents is that Petitioners only challenge the Remand Forecast and not the Unconstrained Forecast. This argument is misplaced for several reasons. First, the Remand Forecast includes the Unconstrained Forecast, and the Remand Forecast specifically captures the induced demand not captured by the Unconstrained Forecasts:

> the 9th Circuit required clearer evidence that induced demand, if any, was considered in the analysis. Out of an abundance of caution and to specifically address this court's decision, the FAA prepared a Remand Forecast that incorporated additional activity attributable to the new runway based on the results of the pilots' survey into the Unconstrained Forecast.

ER-33, n. 9. In other words, the Remand Forecast was prepared to account for induced demand that is not accounted for in the Unconstrained Forecasts: "the Remand Forecasts explore the effects on total airport operations that may not be included in the Unconstrained forecasts." ER-35 (emphasis added). Here, the FAA concedes that additional induced demand could occur that was not captured

in the Unconstrained Forecasts: "[b]ased on the survey of aviation users, it was estimated that 11,350 additional aircraft operations per year (see Table 3-2) could result from both a potential reallocation of demand in the region and the potential for growth exceeding the organic growth forecast in the Unconstrained Forecasts." ER-35. By challenging the adequacy of the Remand Forecast, it is implicit that the Unconstrained Forecast does not capture the induced demand, as conceded by the FAA's analysis. It would be unnecessarily redundant to further argue that the Unconstrained Forecast does not capture induced demand when Petitioners focus on the forecast that concedes that the Unconstrained Forecast does not capture the induced demand. Respondents' arguments are thus mistaken.

Second, the Remand Forecast is the only forecast that responds to this Court's remand:

> It strains credulity to claim that increasing HIO's capacity significantly, which in turn would decrease congestion and delay, would have no bearing on the decision of the flight schools, the military, emergency medical services, and businesses and private owners over whether to locate their aircraft at HIO or at other considerably less busy GA airports in the area.

Barnes v. Dep't of Transp., 655 F.3d 1124, 1137 (9th Cir. 2011) (Barnes I). Because the FAA is "increasing HIO's capacity significantly," the FAA must account for induced growth, and the FAA chose to do so through the Remand Forecast. See ER-33 (the Remand forecasts "were prepared specifically in

response to the Ninth Circuit's finding that the standard FAA forecasting methodology might not include increases in airport activity caused (induced) by the addition of a new runway."). Indeed, as the FAA concedes, "[t]he 2010 EA also included an Unconstrained Forecast." FAA Br. at 24. If the FAA were to include only another Unconstrained Forecast, then the FAA would have repeated the same mistakes that occurred in Barnes I.

Third, the notion that the Unconstrained Forecast is somehow the best forecast was already put to rest by this Court in Barnes I, and, therefore need not be revisited. Specifically, this Court found that:

> The agencies contend that whether the project will result in increased demand is, in any event, irrelevant. Relying on two cases involving airport improvements – neither of which involved a new runway – they contend that the case law holds that an EA need not account for the growth-inducing effects of a project designed to alleviate current congestion ….
>
> …
>
> Unlike the flight patterns and the flight arrival path at issue in Morongo Band of Mission Indians and Seattle Community Council Federation, this case involves a major ground capacity expansion project. In the words of the FAA itself, a new runway is "the most effective capacity-enhancing feature an airfield can provide." Accordingly, our cases have consistently noted that a new runway has a unique potential to spur demand, which sets it apart from other airport improvements, like changing flight patterns, improving a terminal, or adding a taxiway, which increase demand only marginally, if at all.
>
> In light of this unique potential to create demand, the analysis in Morongo Band of Mission Indians and Seattle Community Council Federation … is

> completely inadequate for cases involving the construction of additional runways. For such cases, a case-by-case approach is needed. Thus, even if the stated purpose of the project is to increase safety and efficiency, the agencies must analyze the impacts of the increased demand attributable to the additional runway as growth-inducing effects falling under the purview of 40 C.F.R. § 1508.8(b).

Barnes I, 655 F.3d at 1138-39. With their argument about the Unconstrained Forecasts, Respondents are simply trying to re-litigate a settled matter. The FAA prepared the Remand Forecast, which includes the Unconstrained Forecast, specifically to respond to the unique circumstances of an additional runway – an issue that case law had not previously addressed. See id. (citing cases where induced demand was raised but not where an additional runway was at issue).

Finally, the Remand Forecast does not represent a "worst-case scenario analysis" as argued by Respondents, FAA Br. 26, 47, but, instead, it is an assessment of environmental impacts specifically requested by this Court based on the unique circumstances of constructing an additional runway. The FAA cites to Robertson v. Methow Valley Citizens Council, 490 U.S. 353, 354 (1989), a case that stands for the proposition that a "worst-case scenario" is not required under NEPA.[1] The FAA did not prepare the Remand Forecast as a worst case scenario;

[1] The FAA's argument that the Remand Forecast is a worst-case analysis under NEPA is a classic straw man argument, where the agency would have prepared the Remand Forecast only to dismiss it as not required under NEPA. Clearly, this was not the intent of preparing the Remand Forecast.

instead, it was prepared specifically in response to this Court's remand. As such, the Remand Forecast is not a worst-case scenario presented under a standard that does not exist, but rather specifically in response to this Court's remand.

B. The Conformity Determination and the Alleged *de minimis* Threshold

Another oft-repeated argument of Respondents is that because the increase in aircraft operations will not result in emissions over 25 tons (or 50,000 pounds) of lead, the predicted lead emissions are *de minimis*. See FAA Br. at 14-15, 36, 43-44, 47; Port Br. at 6, 13-15, 19, 23- 27, 29. As noted by the FAA at pages 43-44 of their brief, the issue surrounds the "conformity determination" found at 40 C.F.R. § 93.153 (b), (c)(1), (c)(2). The only reference to "*de minmis*" in all of 40 C.F.R. § § 93.153 or § 152 (definitions) is contained in 40 C.F.R. § 93.153(c)(2), which provides that a conformity determination is not required for "[a]ctions which would result in no emissions or increase in emissions that is clearly de minimis: [listing 22 examples of actions that are clearly de minimis actions]." Construction of a new runway is not included in those examples, and the definitions do not further articulate what is "*de minimis*." See 40 C.F.R. § 93.152. Therefore, there is no presumption that the increase in emissions here is *de minimis*, and there is simply nothing in 40 C.F.R. § 93.153(b), either explicitly or implicitly, that equates failure to require a "conformity determination" with a finding that a project's

emissions are *de minimis*. Failure to satisfy the threshold in 40 C.F.R. § 93.153(c)(2) simply means that a conformity analysis is not required. Petitioners have not argued that the FAA was required to make a conformity determination. Instead, Petitioners maintain that the agency must satisfy its "hard look" requirement under NEPA, a requirement that is not obviated in the absence of a conformity determination. Thus, there is no presumption that the project's emissions are *de minimus*.

C. National Ambient Air Quality Standards (NAAQS)

Though the conformity determination addressed above is distinct from the NAAQS, Respondents appear to conflate the two in their briefs by repeatedly referring to "NAAQS" and "*de minimis*" in either the same sentence or consecutive sentences. See e.g., Port Br. at15, 24-25, 27. The NAAQS for lead is set at 0.15 $\mu g/m^3$ (i.e., micrograms (or one-millionth of a gram) per cubic meter air). ER-64. In other words, the Respondents concede that the project could emit 200 pounds of lead in addition to the 1600 pounds of lead emitted annually by 2016 for a pollutant that is measured in millionths of a gram per cubic meter over urban and residential areas. Here, the SEA concedes that HIO activity results in a lead air concentration of 0.06567 $\mu g/m^3$, ER-64, just under half of the NAAQS for lead. Significantly, this measurement, which Petitioners contest the accuracy of, was

based on 0.622 tons of lead emitted per year. ER-64. Here, however, the FAA concedes that, in 2016, the airport will be emitting 0.8 tons of lead per year, ER-55 (Table 6-3), and, according to the Remand Forecasts, will emit an additional 0.1 tons of lead per year for a total of 0.9 tons of lead per year in 2016. This increase in lead pollution from the project necessarily means that the modeled lead concentrations would exceed 0.06567 $\mu g/m^3$ under the Remand Forecasts, and, therefore, approach the NAAQS of 0.15 $\mu g/m^3$. Contrary to the Port's argument, see Port Br. at 13, 200 pounds of lead is "meaningful" and "measurable," and, under no circumstances, could 200 pounds of a neurotoxin measured in millionths of a gram be considered *de minimis*, especially in light of the negative and disproportionate effects on children. See ER-721, 744-756, 778-783, 784-787.

II. THE FAA VIOLATED THE NATIONAL ENVIRONMENTAL POLICY ACT

A. The FAA failed to take a hard look at the indirect environmental impacts of significantly increasing the capacity of the Hillsboro Airport

1. Failure to disclose baseline pollution data

As a result of this Court's remand, the FAA is required, for the first time ever, to describe the environmental impacts of aircraft operations at HIO. Despite general aviation aircraft emitting lead for over 8 decades at HIO and above the City of Hillsboro, the FAA has never disclosed the environmental effects from

aircraft operations. For that reason, disclosing the baseline for lead is essential to determining the total impact of indirect effects of lead dispersion and deposition in and around HIO and the City of Hillsboro, and this Court has required that agencies adequately disclose the baseline. See N. Plains Res. Council v. Surface Transp. Board, 668 F.3d 1067, 1084-85 (9th Cir. 2011) (baseline necessary "to meet [agency's] NEPA obligations to determine the projected extent of the environmental harm to enumerated resources before a project is approved."). Here, however, the FAA has entirely failed to disclose the baseline as it relates to lead pollution for any resource. See Ctr. for Biological Diversity v. Nat'l Hwy Traffic Safety Admin., 538 F.3d 1172, 1193 (9th Cir. 2008) (action is arbitrary and capricious if agency "entirely failed to consider an important aspect of the problem"). In other words, the FAA has disclosed indirect effects of lead pollution in complete isolation.

The FAA mischaracterizes Petitioners argument, stating that "[t]he FAA was not required to conduct soil sampling in order to establish a baseline for lead." FAA Br. at 37. The issue is not that the FAA was required to conduct sampling. Instead, the issue is whether the FAA was required to provide a baseline of environmental impacts from which to measure the effects of lead deposition and dispersion – whether that is through a model (which the Port has employed for

measuring lead emissions), proxy, see N. Plains, 668 F.3d at 1083,[2] or otherwise. The determination for this Court is whether the agency entirely failed to consider this important aspect of the problem.

The FAA also argues that Petitioners "do not identify any baseline data that the FAA has that the agency failed to disclose." FAA Br. at 37.[3] The agency, however, cannot simply avoid its burden to disclose environmental impacts by alleging the burden is with Petitioners. Under NEPA, in the context of cumulative impacts, this Court previously determined that the burden is on the agency:

> Although we have not yet precisely articulated the burden that a plaintiff must bear to demonstrate that an agency should have analyzed the cumulative impacts of a proposed project along with other projects, our case law suggests that the burden is not an onerous one. In City of Carmel-By-The-Sea v. United States Department of Transportation, 123 F.3d 1142 (9th Cir. 1997), we observed that the plaintiffs met their burden in raising a cumulative impacts claim under NEPA, despite failing to specify a particular project that would cumulatively impact the environment along with the proposed project. Id. at 1161. We declined to impose a greater burden, noting that "the [Defendants] failed first; they did not properly describe the other area projects or detail the cumulative impacts of the project."

[2] While it appears a proxy could be used to account for the baseline, N. Plains makes it clear that mitigation measures alone as a proxy are insufficient to satisfy NEPA. See 668 F.3d at 1084-1085; Pet. Br. at 23.

[3] If, as the FAA argues, that Petitioners need only demonstrate that the FAA has the information within its possession, then Petitioners are successful on their claim that the FAA failed to account for indirect effects up to 2031, see Opening Br. at 32-33, because it is undisputed that the FAA has that information within its possession, see id. at 33 ("The agency has, in its possession, information related to lead and other emissions from 2021 through 2031, but refuses to use that information to better inform the public and the decision-maker.").

> …
> To hold otherwise would require the public, rather than the agency, to ascertain the cumulative effects of a proposed action. [ ]. Such a requirement would thwart one of the "twin aims" of NEPA – to ensure[ ] that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process.

Te-Moak Tribe of Western Shoshone v. U.S. Department of the Interior, 608 F.3d 592, 605 (9th Cir. 2010) (emphasis in original). The Supreme Court agreed in Dep't of Transp. v. Public Citizen, 541 U.S. 752, 765 (2004), when Justice Clarence Thomas opined that "[a]dmittedly, the agency bears the primary responsibility to ensure that it complies with NEPA, …." Thus, the FAA's attempt to turn the burden of proof on Petitioners is contrary to case law, and the FAA's attempt to shirk its "primary responsibility" is unavailing.

Respondents argue that NEPA does not require new studies when the potential impact is not significant or there would be virtually no effect. See FAA Br. at 37; Port Br. at 12. First, as noted supra, the issue is not whether the agency is required to perform new studies, but whether the agency must disclose environmental impacts. How the agency goes about that is up to the discretion of the agency, but it is undisputed that the agency must, indeed, disclose those impacts. Second, the FAA cannot accurately identify impacts from the project until the agency discloses the baseline, which it has not yet done. To do otherwise would be to put the cart before the horse. The indirect effects thus far disclosed are

seen only in isolation in the absence of any baseline for affected resources from 8 decades of lead deposition and dispersion over HIO and the City of Hillsboro. The FAA's rationale appears to be that there have been no effects whatsoever from almost a century of dispersing and depositing a neurotoxin that does not breakdown in the environment and that disproportionately affects children. This, however, is contradicted by common sense and the record. See ER-741 ("Lead concentrations in air increase with proximity to airports where piston-engine aircraft operate"); ER-742 ("There is no identified safe level of lead in the body."); ER-716 ("Once lead falls onto soil, it sticks strongly to soil particles and remains in the upper layer of soil."); ER-717 ("Lead may remain stuck to soil particles or sediment in water for many years."); ER-721 ("Children are more sensitive to the health effects of lead than adults. No safe level in children has been determined.").

The FAA argues that it "did disclose and consider the 'baseline' for air emissions at Hillsboro Airport." FAA Br. at 39. If this were the case, then the FAA would point to where the baseline for affected resources was disclosed. The FAA has not done so, and, therefore, the FAA's bare conclusion, unsupported by the record, must be rejected.

The Port widely misses the mark when citing Northwest Environmental Advocates v. National Marine Fisheries, 460 F.3d 1125, 1140 (9th Cir. 2006),

which addressed a cumulative effects claim, whereas Petitioners here challenge the complete failure to provide a lead baseline for affected resources. The Port's attempt to couch the cumulative effects claim in Northwest Environmental Advocates as a baseline claim is misleading. Cumulative effects and baseline claims are distinct. For example, in N. Plains, this Court faulted the agency for failing to adequately disclose the baseline, 668 F.3d at 1083-85, but rejected the petitioners' cumulative effects argument, id. at 1076-83. The Port's error is that it conflates these distinct claims, and, here, Petitioners have not brought a cumulative effects claim, yet the Port relies on cumulative effects case law. Regardless, as noted above, 200 pounds of lead per year in addition to 1600 pounds of lead per year, moves the FAA toward violating NAAQS, which is far from having "virtually no effect."[4]

Finally, the Port further errs by conflating the baseline requirement in N. Plains with the general requirement under NEPA to analyze a No Action Alternative. See Port Br. at 12. The requirement that the No Action Alternative represents the basis from which the effects of other action alternatives can be considered is distinct from the requirement that the baseline be disclosed for

[4] In addition, because the FAA refused to disclose the effects consistent with the timeframe of its forecasts, the likelihood of violating the NAAQS standard past 2021 is yet to be seen.

affected resources. Again, as Judge Milan Smith noted in N. Plains, 668 F.3d at 1083, the adequacy of the baseline implicates "NEPA's require[ment] that the agency provide the data on which it bases its environmental analysis," citing Lands Council v. McNair, 537 F.3d 981, 994 (9th Cir. 2008) (en banc), and that "[s]uch analyses must occur before the proposed action is approved, not afterward," citing LaFlamme v. F.E.R.C., 852 F.2d 389, 400 (9th Cir. 1988). Disclosing the baseline for affected resources and the requirement to analyze a No Action alternative are distinct.

2. Failure to account for the single largest operator at the HIO

Here, the issue is whether the Pilot Survey and, as a result, the Remand Forecast captured the number of operations from Hillsboro Aviation, the largest flight training school at HIO. Respondents ignore the flaws in the Pilot Survey identified by Petitioners at ER-606. See Opening Br. at 15 (citing ER-606 (explaining the flaws in the pilot survey))[5]. Pursuant to this Court's remand, the FAA prepared the Remand Forecast, which predicted an increase of 0.1 tons per year in lead emissions by 2016 as a result of the new runway. ER-55. The accuracy of that figure is contingent upon the accuracy of the Pilot Survey, but the Pilot Survey does not "capture the number of operations" from Hillsboro Aviation.

[5] Notably, the FAA criticizes Petitioners for "cit[ing] to their own comment," FAA Br. at 26, but that comment demonstrates the flaws in the survey.

According to the original EA, pilot training operations represent 68% of the total operations. Further Excerpts of Record (FER)-1. There were 220,213 total operations at HIO in 2010. ER-138. For ease, Petitioners will reduce that figure to 220,000 total operations, which accounts for 149,600 flight training operations.[6] A single "HIO/TTD/PDX" contact responded that it would "very likely" increase their existing operations if a new runway was constructed, with an estimated increase of 21-50%. See ER-219 ("very likely"), ER-222 (21-50%). If Hillsboro Aviation's total flight operations account for 149,600 operations, then that would result in an increase in 31,416-74,800 flight training operations for Hillsboro Aviation[7], which is far in excess of the 11,350 operations predicted under the Remand Forecast, ER-11.

The Survey, however, fails to capture these figures. For example, the table for question 5(a) includes information from 270 "participants." ER-208. Of those, the table for question 5(a) indicates that the 255 "pilots" average 70 operations per month at HIO, id., which equals 214,200 operations per year just from "pilots."[8] Just looking at the pilots, the survey has almost reached the conservative number of operations at the airport. The table for question 5(a) also shows responses from

[6] 0.68 x 220,000 = 149,600
[7] 0.21 x 149,600 = 31, 416; 0.50 x 149,600 = 74,800
[8] (255 pilots) x (70 operations per month) x (12 months per year) = 214,200 operations

7 "HIO/TTD/PDX Contacts" that average 36 operations per month, which equals 3,024 operations per year.[9] Id. Therefore, the Remand Forecast is fundamentally flawed because it presents, at most, an increase of 11,350 operations when the actual figure is roughly 3 to 7 times higher (i.e., 31,416-74,800 operations).

The FAA has failed to capture the actual operations and proposed increase in operations from Hillsboro Aviation, and, in fact, Respondents refused to present Petitioners with information about flight training details because Respondents "do not believe that the information requested by [Petitioners] about flight training details or data about specific companies is necessary to prepare forecasts for the Supplemental Environmental Assessment." ER-443, 571. This information, however, is of the utmost importance because flight training accounts for the vast majority of operations at the airport.

3. Failure to adequately or accurately disclose lead pollution from leaded aviation gasoline

First, the Port generally argues that Petitioners failed to raise the deficiencies in the Port's Airport Lead study below, but Petitioners explained that the Airport Lead Study was submitted only after Petitioners could no longer comment. See Opening Br. at 28-29; Port Br. at 18 ("It was entirely appropriate for the FAA to respond to Barnes' public comment by including the Port's study"). Under City of

[9] (7 contacts) x (36 operations per month) x (12 months per year) = 3,024

Las Vegas v. FAA, 570 F.3d 1109, 1114 (9th Cir. 2009), and 49 U.S.C. § 46110(d), when the Final SEA and FONSI/ROD issued on the same day, as was the case here, Petitioners raise "a reasonable ground for not making the objection in the proceeding." Nothing the Port cites overcomes this specific statutory allowance, and the Respondents fail to distinguish City of Las Vegas. The Port's Lead study does not represent a passing reference in the EA; to the contrary, the Respondents extensively relied on the Port's study in the Final SEA, ROD, FONSI, and their briefing in an attempt to belittle the increase in lead emissions from the project. See ER-64 (addressing Port Study in relation to NAAQS), 271-296 (Lead Study); Port Br. at 6, 14-15, 18, 23-24, 27-31, 33-34; FAA Br. at 32-33, 36, 38-39, 44-46.

With regard to the "16 minute taxi-in/taxi-out time," the issue hinges on whether the agency explained its rationale for using a shorter timeframe. The FAA points to ER-64 for their rationale, but no such rationale is found at that page. The FAA also points to ER-262 & n.1, but these citations provide no explanation other than a conclusory statement that taxi-in/taxi-out times vary with Annual Service Volume. This, however, fails to provide a basis for using the specific times in Table 3; instead, Table 3 does not present a rationale deviating from the EPA's standard, only conclusions.

As with the taxi-in/taxi-out timing, the FAA similarly failed to explain its rationale for relying on a cruise phase that differs from the EPA's standard, as explained in Petitioners' opening brief at pages 30-31, and the FAA's response fails to point this Court to an explanation in the record, see FAA Br. at 35.

The FAA concedes that "Petitioners are correct that the Port's study does not include a separate category for the time spent in 'run-up,'" Pet. Br. at 36, but attempts to excuse this omission because "[t]here is currently no accepted methodology for modeling this phase," id. As indicated by the lack of a citation to the SEA, this argument is not based in the SEA or administrative record. The EPA explicitly stated that "pre-flight run-up checks" are "one of the important factors in piston aircraft operation … emission estimates…." Malone Decl., Ex. A at 19. Not only has the FAA "entirely failed to consider an important aspect of the problem," see Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co., 463 U.S. 29, 43 (1983), but, while this Court generally refers to an agency's methodology, this court "cannot defer to a void," as the FAA admits here. ONDA v. BLM, 625 F.3d 1092, 1121 (9th Cir. 2010). The FAA points to various documents for its EDMS model and other aspects of its analysis, but fails to point this Court to where the "run-up" phase was considered.

4. Failure to use the standard demand planning horizon to estimate indirect effects

The FAA prepared annual forecasts for 2016, 2021, 2026, and 2031 because "the standard FAA aviation demand planning horizon is the base/current year (2011) plus 20 years." ER-31; ER-125 ("Using calendar year 2011 as the base year, annual forecasts were prepared for four future demand years – 2016, 2021, 2026, 2031."). While the agency has the information on forecasts for 2031 in its possession, it refused to disclose that information to the public. The problem with this omission is that, in the words of counsel for the FAA, for the Constrained Forecast, "before 2021, there will be no difference in demand for aviation when compared to the Unconstrained Forecast." FAA Br. at 12. Under the Remand Forecast, the FAA acknowledged that there would be an increase of 11,350 yearly operations by 2021, but this begs the question: what would be the increase by the year 2031? In other words, the FAA argues that aviation demand and pollution from indirect effects will further increase in 2021, but, conveniently, the FAA refuses to disclose those effects, essentially hiding the ball from the public.

Respondents point to Town of Cave Creek v. FAA, 325 F.3d 320, 331 (D.C. Cir. 2003), Village of Bensenville v. FAA, 457 F.3d 52, (9th Cir. 2006), and Selkirk Conservation Alliance v. Forsgren, 336 F.3d 944 (9th Cir. 2003), to support their arguments, but in none of those cases does it state that the agency has,

within its possession, the forecasts for the timeframe requested by Petitioners. Here, the FAA is in possession of the forecasts to the year 2031, to which it vociferously argues it deserves deference[10], but when it comes to relying on those forecasts to demonstrate indirect effects, the FAA apparently discredits is own expertise. If the agency's forecasts are the result of its expertise, then the agency should not be heard to argue that using those forecasts to demonstrate environmental impacts – the very purpose of NEPA – amounts to "uncertainty." FAA Br. at 30. The FAA cannot simply avoid its obligations under NEPA by "labeling any and all discussion of future environmental effects as 'crystal ball inquiry.'" City of Davis v. Coleman, 521 F.2d 661, 676 (9th Cir. 1975) (quoting Scientists' Institute for Public Information, Inc. Atomic Energy Comm'n, 481 F.2d 1079, 1092 (D.C. Cir. 1973)). Indeed, this Court has determined that "[w]hile 'foreseeing the unforeseeable' is not required, an agency must use its best efforts to find out all that it reasonably can." City of Davis, 521 F.2d at 676. The FAA has used its "best efforts," but when it comes to disclosing the increased demand and indirect effects, the agency refuses to rely on those "best efforts." The FAA also

[10] The same is true of Respondents' argument that that the 20-year timeframe already prepared is only "possible," not "likely to occur" or "probable." See FAA Br. at 28; Port Br. at 20. If the FAA is due deference in these forecasts because of its expertise, then it follows that the FAA's expertise can also be relied upon to utilize the 20-year timeline that it has already prepared to inform the indirect effects analysis.

points to FAA Advisory Circular No. 150/5070-6B, Airport Master Plans (July 29, 2005), but that Circular does not prohibit a longer timeframe, especially when the information has already been prepared pursuant to this Court's remand order.

5. Failure to disclose off-airport impacts and impacts to children from induced demand

The record demonstrates that lead disproportionately affects children, see ER-721 ("Children are more sensitive to the health effects of lead than adults"), and that "[n]o safe blood lead level in children has been determined," id. More importantly, "it is now understood that there is no safe level of lead exposure." ER-758. Because HIO is surrounded on three sides by residential neighborhoods, Petitioners submitted studies showing that children living in close proximity to general aviation airports have higher levels of blood in their system than those that do not. See ER-784; ER-778 (study showing those same children have consistently lower academic performances); ER-744-756 ("Neurodevelopmental effects of postnatal lead exposure at very low levels"). Despite these recent studies and information about impacts to children, the FAA states that there would be "no off-airport effects."

The FAA argues these concessions in the SEA were for "direct effects of the project i.e., potential for relocation of business," but there is nothing on pages 47-48 to demonstrate that this section purports to address only direct effects for

businesses. The portion of the SEA where the FAA's statements are located is entitled "Children's Health and Safety Risks," as well as the statement that "no significant … risks to children's health and safety were anticipated due to construction and operation of the proposed project." ER-48. The FAA relies on the NAAQS to displace its obligation to analyze indirect effects to children from lead pollution. In doing so, the FAA cites to a portion of the SEA that purports to identify impacts from construction of the project, which implicates direct effects: "It concluded that 'as the proposed project would result in either no increase in lead emissions, or an increase in lead emissions of 0.1 ton … no violation of the NAAQS is expected to result from the proposed runway construction.'" FAA Br. at 41. The issue is operation of the runway (i.e., indirect effects), not construction of the runway.

Regardless of this error, the studies submitted by the Petitioners (ER-744-756, 778-783, 784-787) are not contingent upon violating the NAAQS. For example, one study states that "there is no apparent lower bound threshold for postnatal lead exposure." See ER-744 ("Neurodevelopmental effects of postnatal lead exposure at very low levels"). While the EPA and Centers for Disease Control "recommend [for children] that lead levels above 10 µg/dl [micrograms per deciliter] be avoided," id., negative associations were found at 5 and 3 µg/dl:

> negative associations with lead exposure were found as low as 3 µg/dl in the areas of behavior problems both on the teacher-reported attention and withdrawn subscales, as well as on reaction time and auditory attention. At 5 µg/dl deficits were identified in several domains of IQ [ ], visual-motor integration, and attention.

ER-754. Thus, lead exposure at extremely low levels negatively affects children, and the "public safety" threshold under the NAAQS does not account for these extremely low levels.

6. Failure to disclose indirect environmental impacts to water quality

The FAA argues that Petitioners waived its argument with regard to taking a hard look at the environmental impacts to water quality because, amongst other reasons, "[l]ead may remain stuck to soil particles or sediment in water for many years." ER-717. This issue was clearly raised at ER-560 (comments on Draft SEA; "The EA fails to identify the past impacts to water bodies and watersheds as it relates to the lead dispersion and settling, and fails to disclose the environmental impact of adding more lead to water bodies."). After Petitioners no longer had the opportunity to respond, the FAA responded to this comment, arguing that they have a "National Pollution Discharge Elimination System (NPDES) permit [i.e., 1200-z permit], which is unrelated to the proposed project." ER-576. For this reason, Petitioners argued that a NPDES permit does not obviate the need to take a hard look at environmental impacts associated with lead deposition.

The FAA argues that it "included a lengthy discussion of potential impacts to water quality" in Chapter 6. FAA Br. at 42-43 (citing ER-68-69)."[11] None of these citations address the impact of lead, however. Turning to ER-68-69, the first paragraph under "Water Quality" refers to impervious surface area, and the next paragraph, which contains bulleted points, conclusorily states that "water quality in Glencoe Swale would continue to meet applicable water quality criteria"; that the Port would prepare a "temporary aircraft deicing bath and collect discharge from" de-icing; and that future projects "would be required to meet applicable water quality standards as a condition for obtaining the required water quality permits." ER-68-69. The final paragraph under "Water Quality" at ER-69 addresses continued "urbanization" and "likely increase[s] in impervious surface areas." Furthermore, under the heading "Wetlands" (ER-69), there is no discussion of the impacts of lead pollution on water quality. Thus, the FAA's citation to ER-68-69 is misplaced because it contains no information about the further deposition of lead on the many waters on and surrounding HIO.

Finally, the FAA argues, as it does with almost every issue, that "the NAAQS are protective of water quality and that consideration of potential impacts of lead dispersion are properly analyzed with reference to the NAAQS standard."

[11] Notably, ER-68-69 falls under the issue of "cumulative effects," not "indirect effects," which are at issue here.

FAA Br. at 43. The FAA, however, overstates the reach of the NAAQS because the SEA at ER-64, when describing the NAAQS, does not include "water quality," though it does include "damage to animals, crops, vegetation, and buildings." ER-64. Thus, even assuming the NAAQS could stand in place for assessment of water quality under NEPA, the NAAQS does not purport to do so.

B. The Project will have significant environmental impacts

1. Significant effect on public health and safety

The FAA points to WildEarth Guardians v. Jewell, 738 F.3d 298, 311 (D.C. Cir. 2013), for the proposition that an agency takes a "'hard look' under NEPA where the agency relied on NAAQS to assess emissions," but, in that case, the court simply deferred to the agency's modeling of NOx, see id. at 312. For example, the court did not say that compliance with the NAAQS precludes a finding of significance; instead, the court held that "[i]t may have been possible or even prudent for the BLM to separately model future ozone levels but we think that, given the limitations on such modeling and the critical role NOx plays in ozone formation, the BLM's projections and extensive discussion of NOx and NO2 emissions suffice." As such, compliance with the NAAQS does not categorically obviate a finding of significance.

The FAA also cites to Hillsdale Envtl. Loss Prevention, Inc. v. U.S. Army

Corps of Eng'rs, 702 F.3d 1156, 1175 (10th Cir. 2012), for the proposition that "there was no significant impact where mitigation measures ensured that pollution would stay below NAAQS levels." FAA Br. at 45. Here, however, the agency arbitrarily refused to disclose the indirect effects for the full timeframe forecasted, which necessarily skews the full scope of the impacts, and, in Hillsdale, the record demonstrated that "locomotive emissions are expected to decrease significantly over the next 20 years," 702 F.3d at 1175. Here, no such decrease is expected. To the contrary, aircraft operations and emissions are expected to increase in 2021, but the FAA refuses to disclose the environmental impacts of that increase. The Port argues that "the FAA and EPA are on track to find a complete replacement for lead-based aviation fuel by 2018." Port Br. at 22. This pie-in-the-sky aspiration is speculative at best and unsupported by any documentation, phase-out plan, or otherwise in the record. Indeed, the FAA admits that "[m]uch research in the past two decades has been focused on finding an operationally safe replacement for 100LL [i.e., a type of leaded aviation gasoline]. At present, there is no viable drop-in replacement fuel for 100LL." ER-407 (emphasis added).

The FAA points to DEQ's modified analysis (FAA Br. at 46), before which DEQ found lead concentrations "60 times greater" than the model subsequently used by the Port, ER-277, but, as Respondents acknowledge, DEQ's modified

model "contain[ed] no more than ten emission sources," whereas the EDMS model "will typically create several hundred or thousand emissions sources for an airport." ER-278. As such, the DEQ's modified model, which stands in stark contrast to its initial model, was "simplified" and did not follow the appropriate parameters for using the EDMS model. This explains DEQ's dramatically low finding of lead concentrations in its modified study – concentrations far below the lead concentrations found by the Port's study (i.e., 0.06567 $\mu g/m^3$).[12]

The FAA argues Petitioners' argument related to the Oregon Administrative Rules (OARs) was "waived" because it "was not presented in [Petitioners'] comments on the draft EA." FAA Br. at 46. Petitioners clearly raised the issue of whether the project would have a significant effect on public health and safety. See ER-556. Petitioners' argument regarding significance under the OARs is simply an argument in support of their claim of significance, which was clearly raised. "The Supreme Court has made clear [that] it is claims that are deemed waived, not arguments." United States v. Pallares, 359 F.3d 1088, 1095 (9th Cir. 2004).

[12] As explained above, the Port's study was based on 0.622 tons of lead emitted per year, but the SEA concedes that, in the year 2016, 0.8 tons of lead per year would be emitted, ER-55, in addition to the 0.1 tons of lead per year from the increase in aircraft operations, id. As such, the Port's lead concentration is necessarily on the low-end of the spectrum.

The FAA argues that the definitions at OAR 340-200-0020 only apply to the "Oregon Title V Operating Permit program sources," FAA Br. at 46, but the definitions at OAR 340-200-0020 also apply to chapter 340, division 202, for "ambient air quality standards." See OAR 340-202-0010 ("The definitions in OAR 340-200-0020 and this rule apply to this division"). Thus, the FAA is mistaken.

2. The effects involve unique risks and there are unique characteristics of the geographic area

The FAA dismisses the unique risks to "children and the urban characteristics of Hillsboro." FAA Br. at 48. The FAA also argues that "the impact of lead in urban areas and on children are far from unknown," FAA Br. at 48, but the scientific literature, submitted by Petitioners, is finding that even at infinitesimal levels, lead exposure in children leads to neurological, behavioral, and adverse effects. See ER- ER-778-783, 784-787, 744-756. Simply put, these impacts, which disproportionately affect neurological development in children, are not insignificant.

3. Effects of the Project are highly controversial

Petitioners rely on their opening brief and arguments at other points in this brief for their reply to this claim.

III. THE FAA VIOLATED 49 U.S.C. § 47106(a)(1)

Petitioners have explained that the Draft SEA, the only document that Petitioners had the opportunity to comment on, did not contain the certification at ER-12-13; Opening Br. at 28-29, 51 n.9; see City of Las Vegas, 570 F.3d at 1114. Neither Respondent contests that this is the case. Therefore, the issue was not precluded.

The FAA argues that Petitioners have not "identified any conflict," FAA Br. at 51, but Petitioners have demonstrated that the only two ordinances the FAA relied upon in the Final SEA, ROD, and FONSI were invalidated on constitutional grounds. See Opening Br. at 51-53; Barnes I, 655 F.3d at 1141. Reliance on two invalidated ordinances for consistency is neither a "hyper-technical distinction," nor is it "reasonable," as argued by the FAA. See FAA Br. at 52. The Port argues that these ordinances were "existing" at the time the funding occurred, Port Br. at 35, but the Port's argument ignores that the certification was made on February 21, 2014, See ER-15 (FAA signatory for AAIA certifications), almost four years after the Land Use Board of Appeals and the Oregon Court of Appeals found those ordinances unconstitutional. See Barnes v. City of Hillsboro, 243 P.3d 19 (Or. Ct. App. 2010). Citing to ER-736 and 736-737, Respondents argue that HIO has been in the same zone since the current zoning code was adopted. Port Br. at 35; FAA

Br. at 52. ER-736-737 is a citation to the FAA's response to Petitioners request for stay, a prerequisite to moving for an injunction pending appeal under FRAP 27-3(b)(4). That request for stay occurred roughly four months after the FAA issued its SEA, ROD, and FONSI. See ER-3-15 (FONSI and ROD, dated February 21, 2014 (ER-3, 15); ER-728-739 (response to request for stay issued four months later on June 30, 2014). As such, Respondents' argument and citation to ER-736-737 is a textbook example of a post-hoc rationalization of agency action. See SEC v. Chenery, 332 U.S. 194, 196 (1947) ("emphasiz[ing] a simple but fundamental rule of administrative law": "in dealing with a determination or judgment which an administrative agency alone is authorized to make, [courts] must judge the propriety of such action solely by the grounds invoked by the agency"); see also Motor Vehicle Mfrs Ass'n, Inc. , 463 U.S. at 50 (courts may not accept counsel's "post hoc rationalizations for agency action").

IV. CONCLUSION

For the foregoing reasons, Petitioners respectfully request that this Court find that the SEA is legally deficient, reverse the agency's decision, vacate the SEA, and remand to the agency.

Respectfully submitted this 2nd day of December, 2014.

/s/ Sean Malone
Sean T. Malone (OSB # 084060)

Attorney at Law
259 E. 5th Ave, Suite 200-G
Eugene, OR 97401
Tel. (303) 859-0403
Fax. (650) 471-7366
seanmalone8@hotmail.com

STATEMENT OF RELATED CASES

No other cases currently before the Ninth Circuit Court of Appeals are related to this case.

Ninth Circuit Case No. 14-71180
Certificate of Compliance Pursuant to Federal Rule of Appellate Procedure 32(a)(7)(B) and (C) and Ninth Circuit Rule 32-1

I, Sean Malone, certify that:

1. This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B) because this brief contains 6,995 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(a)(7)(B)(iii).
2. This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word version 2007, font size 14, and Times New Roman type style.

/s/ Sean T. Malone
Attorney for Petitioner
Date: December 2, 2014

Ninth Circuit Case No. 14-71180

Certificate of Service

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on December 2, 2014. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

/s/ Sean T. Malone
Sean T. Malone
Attorney for Petitioner