

Hobart Airspace Design Post Implementation Review (PIR) Recommendations Delivery

Recommendation 6 Options Assessment Report

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1.0 Purpose

This report documents the assessment of flight path options developed in response to the recommendations of the Hobart Airspace Design Review Post Implementation Review (Hobart PIR). The Final PIR Report recommendations can be viewed [here](#).

This document records the options developed and assesses them against criteria established based on the intent of the recommendation, including community and industry engagement response. This assessment considers the option's performance against current operations to determine if a net overall improvement might be achieved through the option/s.

2.0 Background

The Hobart PIR was completed in April 2022, identifying 11 recommendations. Following the release of the final Hobart PIR report, flight path design work commenced to develop safe and feasible design options that meet the intent of the recommendations. This report focuses on recommendation 6.

Recommended action 6: Airservices will undertake further investigation of the community suggested flight path change to move RWY30 arrivals to the east coast (over water) to determine an appropriate Standard Arrival Route (STAR) starting waypoint and validate the track miles assessment.

The option to move this STAR over water had been reviewed and found to be not feasible in 2018. This was due to the inability to commence the over water STAR inside controlled airspace, which was a requirement if it was to be moved. During the PIR, the suggestion was made to revisit moving the RWY30 arrival STAR to the east over water (east coast arrival), this time seeking to find a suitable starting point within controlled airspace, that might enable this option to progress. The PIR found that this action was safe and notionally feasible, and included a recommendation to further investigate it.

A design option was developed that commenced the STAR over land from the same waypoint at which aircraft travelling from the north currently commence the STAR, with aircraft tracking from that point directly east and over water rather than south per the current arrival path. Due to the starting waypoint, only aircraft travelling directly from the north would be shifted, with aircraft arriving from the north-west remaining on the current STAR. Due to the proposed location arrival route over water, it would also only be proposed to be used for longer RNAV arrivals, with short approach (RNP-AR) arrivals remaining on the current STAR (noting the RNP-AR alignment is subject to Recommendation 4 of the PIR).

This design option was presented to the community and industry in November 2024. Feedback received during the consultation period resulted in three variations of this option being proposed, all of which involved taking the STAR even further east over water. These are also addressed in this report.

Details of the engagement completed can be found in Appendix A.

3.0 Assessment of flight path options

The safety of Australia's airspace and the aircraft that operate within it, will always be Airservices' highest priority. The design and operation of flight paths must meet the following CASA regulations and standards, as well as International Civil Aviation Organization (ICAO) standards and recommended practices that have been adopted by CASA for application in Australia. These documents include:

- Air Services Act 1995 (Cth)
- Airports (Protection of Airspace) Regulations 1996 (Cth)

- Civil Aviation Safety Regulations 1998 (Cth) (CASR) Part 173 – Instrument flight procedure design
- CASR Manual of Standards Part 173 – Standards Applicable to Instrument Flight Procedures Design
- ICAO DOC 8168 Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS)
- ICAO DOC 9613 Performance-based Navigation (PBN) Manual

Airservices' seeks through any flight path changes, to minimise the impact of aircraft operations on the environment, including communities, wherever practicable. When developing options in response to PIR recommendations, the following metrics are used to compare the options developed with current operations to identify the benefits and disbenefits:

- Population overflow – using a 2km wide corridor, runway end to waypoint
- Population within the 60dB noise contour
- Population within the 70dB noise contour
- Altitude of aircraft over populations
- CO₂ emissions.

Impacts on any new communities are also considered, along with any increase in air traffic control complexity and impacts on the natural environment including Matters of National Environmental Significance.

2018 investigated east coast arrival to Runway 30

Figure 1 shows the design initially investigated in 2018. The starting point for the STAR was designed to connect to the enroute arrival paths from the north over water, in keeping with the community suggestion to have the operations east of mainland Tasmania.



Figure 1 2018 investigated option to facilitate arrivals to RWY 30 over water. The existing STARs to RWY 30 are shown in light orange and suggested over-water option in yellow. The final approach procedures are shown in dark orange and Hobart Airport is shown with a purple star. The pink areas indicate population density.

In reviewing this suggestion it was found:

- The existing aircraft surveillance coverage in Tasmania does not extend far enough to include the proposed over water STAR.

- The issues identified above with the initial option, became the focus in developing a new option in response to Recommendation 6. The aim was to develop a design that addressed these issues so that an option feasible for implementation could be engaged on with community and industry.

The need to maintain the STAR within the existing surveillance coverage area and the requirement to also connect to both runway ends were the key drivers of developing the new option.

Figure 2 shows the existing STARs to Runway 30 in light orange and proposed east coast IPLET STAR option in yellow.



Aircraft arriving from the northwest via waypoint MORGO are not proposed to use the new over water arrival path, as this would require a redesign of the entire airspace to the north of the airport due to the operation of departing aircraft in this area when Runway 30 is in use. These aircraft would continue to operate per the current design. The shorter RNP-AR approach would also not shift to this proposed new alignment, meaning the existing IPLET STAR would remain in place for use by aircraft travelling from Melbourne, Sydney and Brisbane using the RNP-AR approach procedure. This is because the proposed option is not able to connect to the commencement point of the RNP-AR procedure while remaining over water.

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Assessment of proposed option

The proposed option has been assessed against the current design giving regard to population overflow, population affected by noise levels at or above 60/70 decibels and CO₂ emissions. Matters of National Environmental Significance have also been investigated. Community and industry feedback on the proposed option has also been considered in the assessment.

Given the proposed option is not able to completely replace the use of the current flight path, the assessment will give regard to any change in population/noise/emissions for the portion of flights that could shift to the proposed option, as well as total arrival operations to Runway 30, to understand both the stand alone and net noise benefit that might be possible.

Assessment of proposed option compared to current design

Table 1 below shows the assessment of the proposed option compared to the current design.

A 2km corridor is used to assess population overflow by the proposed and current design. This is used to provide a measure of direct overflight and does not suggest a limit of noise impact which can extend beyond this corridor. It is also noted that aircraft from time to time can operate outside of this notional 2km wide corridor.

The population impacted at 60 and 70 decibels is used to indicate impact at higher noise levels. Altitude is used also to indicate potential noise improvements as well as changes to the visual impact of aircraft operations. CO₂ emissions relate to changes in track miles and are an indicator of natural environmental impact.

CRITERIA	YES/NO	REASON
Does the option reduce the total population overflow?	Stand-alone Yes	Reduces population overflow in the proposed change area between waypoint IPLET and Runway 30 from 148 to 26. The 26 people overflowed by the proposed option are newly overflowed.
	Net No	Increased total population overflow from arrival operations from waypoint IPLET to Runway 30 from 148 to 174. The 26 people overflowed by the proposed option are newly overflowed.
Does the option reduce the total population impacted at 60dB?	Stand-alone Yes	Reduces population subject to 60 decibel plus noise events between waypoint IPLET and Runway 30 from 113 to 23 people. The 23 people in the proposed option 60dBA contour are newly overflowed.
	Net No	Increases total population subject to 60 decibel plus noise events for arrivals from waypoint IPLET to Runway 30 from 113 to 136. The 23 people in the proposed option 60dBA contour are newly overflowed.
Does the option reduce the total population impacted at 70dB?	No change	Does not change the population within the 70dBA contour.
Does the option increase the altitude of aircraft over communities?	Stand-alone No	Different communities are overflowed. The altitude of aircraft are lower where tracking over new communities compared with existing locations.

CRITERIA	YES/NO	REASON
	Net No	No change for current operations IPLET to Runway 30. Lower altitude for new locations.
Does the option decrease CO₂ emissions?	Stand-alone & Net No	Increase in 174kg CO ₂ / flight due to additional 10NM (18km) flight distance. This equates to approximately 177,480kg additional CO ₂ per year based on the 17 percent of flights that would use the proposed option.

Table 1 Assessment of Recommendation 6 - East coast IPLET option against intent of community suggested improvement

The proposed option would result in a reduction in the number of people overflowed and the number of people affected at higher noise levels for the flights that shift to the proposed new arrival path, noting those who are affected by these movements would be newly overflowed.

- The number of flights and noise events experienced by communities between waypoint IPLET and waypoint PIDOS (Buckland, Nugent etc) would reduce.
- New communities, such as Triabunna, Marion Bay and Dunalley would be subject to new overflight, with some new communities to the south subject to new noise at 60 decibel plus levels.

Holistically, the proposed option would increase the total number of people overflowed by arrivals from the north to Runway 30 and also increase the total number of people subject to higher noise levels from these operations.

- The number of flights and noise events experienced by communities between waypoint IPLET and waypoint BAVUR and the RNP-AR approach will not change.
- The number of flights and noise events experienced by communities between waypoint MORGO and waypoint PIDOS will not change.

The change both in isolation and when considered across all arrival operations to Runway 30, increases track miles and associated CO₂ emissions quite substantially, by over 170,000kg per year.

Matters of National Environmental Significance (MNES)

During engagement, communities in the areas that would potentially be subject to new operations as aircraft tracked from waypoint IPLET to the east coast, and those further south where aircraft would track between Maria Island and mainland Tasmania, raised concerns about the potential impact of the new flight path on the natural environment, and particularly the highly valued Maria Island ecosystem. Airservices conducts environmental assessments of proposed flight path changes, including a review of Matters of National Environmental Significance (MNES). Given the interest expressed by community members, a preliminary review has been conducted to support assessment of this proposed option.

Table 2 below shows the summary of MNES assessment outcomes within a 2km area of the proposed changes using the Commonwealth Department of Climate Change, Energy, the Environment and Water Protected Matters Search Tool. The Species Profile and Threats Database (<http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>) was utilised to consider any potential impacts upon these species.

		Existing RNAV flight path	Proposed east coast option
Matters of National Environmental Significance (MNES)	Wetlands of International Importance	1	1
	Nationally Important Wetlands	None	None
	Commonwealth Marine Area	None	None

		Existing RNAV flight path	Proposed east coast option
	World Heritage Places	None	None
	National Heritage Places	None	None
	Listed Threatened Ecological Communities	3	5
	Listed Threatened Species	81	86
	Listed Migratory Species	49	50
	Commonwealth Heritage Places	None	None

Table 2 Recommendation 6 MNES findings

It can be seen in Table 2 above that proposed east coast option has a slightly higher number of MNES considerations than the existing flight path. Whilst there is no mention of aviation threats in the listed conservation advice at this time, there is advice for noise disturbance to habitat and fauna from recreational vehicles on the land.

In relation specifically to Maria Island, we note that throughout the recovery plans and conservation advice for endangered or critically endangered species that occur in/around Maria Island there is minimal mention of threat from aviation activities. The Gould's Petrel (*Pterodroma leucoptera*) has been noted in other locations to exhibit distress at low flying jet aircraft which can increase their susceptibility to predators, however, this has been managed in other locations by establishing no fly-zones below 2000ft within 2 nautical miles. In this case, the jet aircraft will be at far higher altitudes when passing Maria Island, with level restrictions in place and descent below 2000ft not occurring until on final approach into Hobart.

Whale species have also been identified as sensitive to aircraft noise, however conservation management plans suggest the focus is on low-level whale watching and sight-seeing activities, rather than higher level aircraft, and that aircraft noise is considered to have far lower impact to the species than other sources of noise - likely of minor or no long-term effect.

The White-Bellied Sea Eagle is also known to nest at a number of sites around Tasmania (see Figure 3), including Maria Island. There is fly neighbourly advice published for nesting sites at other locations and aircraft on the proposed path are expected to be significantly above the levels suggested at those other locations.

The Maria Island National Park and Ile Des Phoques Nature Reserve Management Plan 1998 were also reviewed, and the proposed change remains in line with minimising impact of low flying aircraft on the recreational experiences of park visitors given the altitude and proposed path around the Island.

The proposed change is not anticipated to be of significant environmental impact to Maria Island.

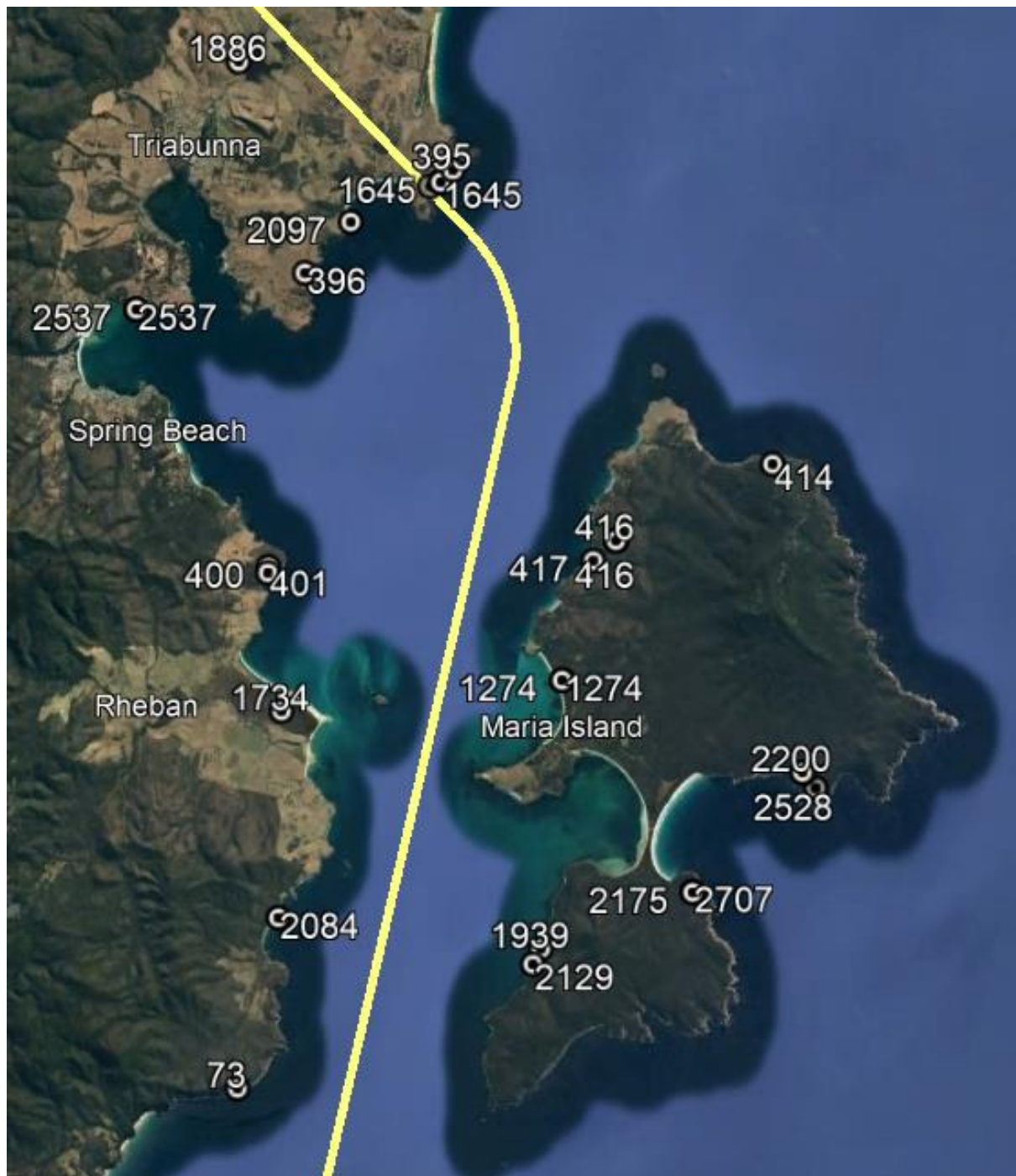


Figure 3 Known nesting sites of White-Bellied Sea Eagles.

Community engagement

Community engagement was conducted between 5 November and 20 December 2024. A total of 98 community members attended the face-to-face and online community engagement sessions, with a total of 192 submissions received during the consultation period.

Engagement findings

Several themes were identified through community feedback. The most notable themes were:

- The feedback showed consistent concern regarding the east coast region's reputation as a tranquil, natural escape that relies on eco-tourism that would be negatively impacted by the introduction of aircraft noise to an area that has little overflight, and very low ambient noise.
- The option was previously investigated and rejected at the time. Much of the feedback contained strong, negative reactions to the option being considered again.

- Avoid overflight of Maria Island and do not introduce a new flight path that will impact new communities.
- Destination Southern Tasmania, East Coast Tasmania Tourism and Tourism Industry Council Tasmania noted that the proposal has previously been rejected in 2018 after consultation. The bodies raised concern regarding Tasmania's heavy reliance on the visitor economy which may be impacted by the change, requesting that the proposal not be resurrected given the potential negative impacts to the tourism and the potential shift noise impacts from one community to another. One body raised the concern regarding prioritising convenience for some at the expense of one of Tasmania's most cherished tourist destinations
- The South East Coast Lifestyle Association (SECLA) representing residents across Bream Creek, Marion Bay, Boomer Bay, Dunalley, Murdunna and Connellys Marsh submitted that the recent implementation of the PIR Recommendation 5 (Noise Abatement Procedure to share noise between the long and short arrivals to RWY30) makes the need to implement the east coast route unnecessary
- A submission by the residents of Forcett, Carlton River and Primrose Sands stated that there would be a benefit for all communities if the RWY30 RNP-AR (short approach) was closed permanently and the east coast IPLET option utilised as the second approach to RWY30.

Figure 4 shows the community responses according to their suburb. This is primarily based on selection of a dropdown menu option on our survey as opposed to subjective assessment of submissions.

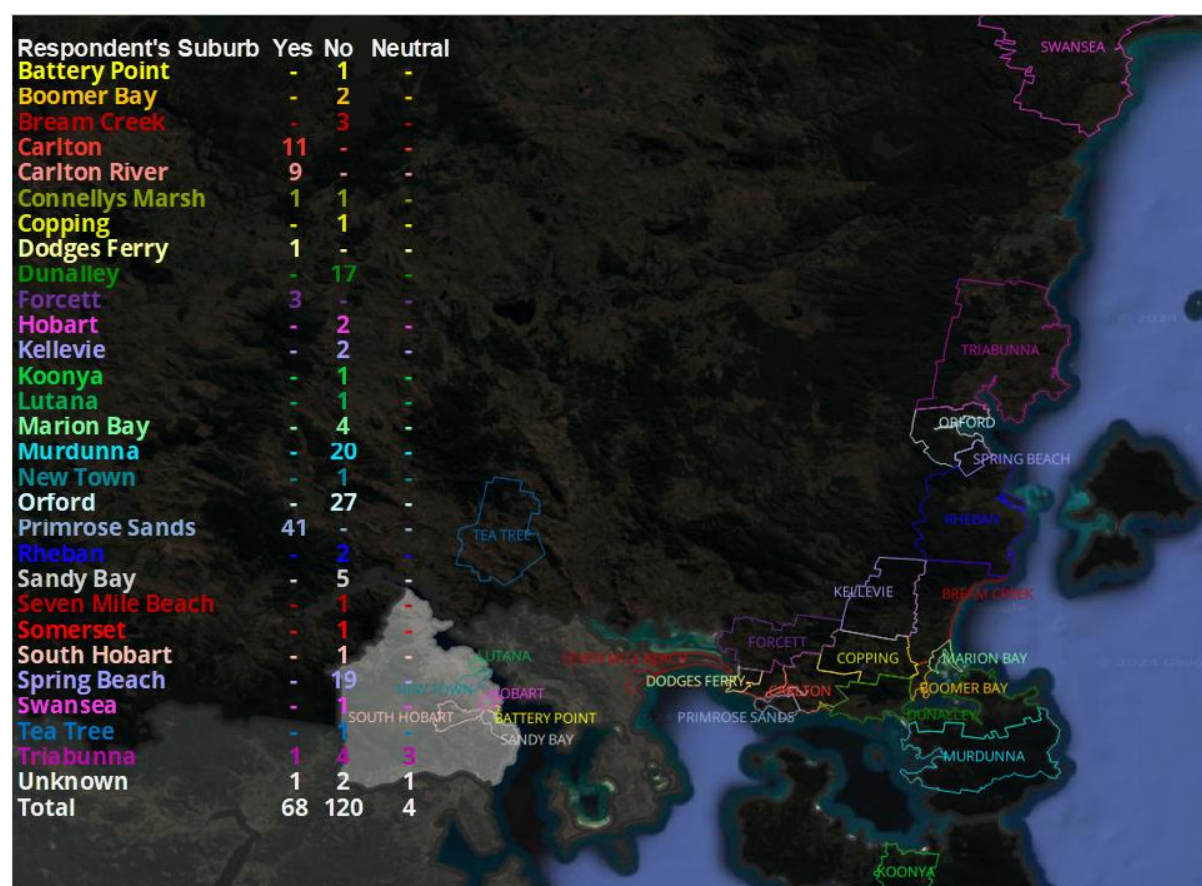


Figure 4 Summary of community feedback by suburb - Recommendation 6

In response to the question, do you support the change – yes, no or neutral – approximately 35 percent of all respondents were in favour of the change. Nearly all of the respondents in support of the change are located in Carlton, Carlton River, Dodges Ferry, Primrose Sands or Forcett. One respondent in support of the change was located in Triabunna.

Conversely, around 63 percent of total respondents did not support the change. The highest proportion of these respondents were from Orford, Murdunna, Spring Beach and Dunalley.

Two percent of respondents stated they were neutral, noting the comments provided from some of these respondents indicate a preference for no change in operations as opposed to neutrality. These neutral responses include:

“Given the importance of tourism to the East Coast of Tasmania, and in particular Triabunna/Orford, I am concerned that routing aircraft in the vicinity of Maria Island (also a World Heritage site) will create unnecessary negative noise/visual impacts”

“I don’t want unwanted air traffic noise over our town, or water ways.”

“Triabunna and Orford serve as key gateways to Maria Island and other east coast attractions. Increased aircraft noise and activity could impact the region's reputation as a tranquil, natural escape, potentially affecting local businesses that rely on eco-tourism. Maria Island is a wildlife haven, World Heritage-listed historic convict site, has a rich Aboriginal history, is a bushwalking paradise, and has some of the loveliest, and the most secluded beaches. Careful consideration is needed to ensure that increased overflight activity does not detract from the island's serene and historical ambiance. The effect of increased aircraft activity may disturb local wildlife, migratory birds and marine species and needs further expert research.”

“As an owner of property across the Region, neither of which are let for short-term accommodation, a split of perhaps 80% suburban and 20% rural/remote would seem to be far more appropriate, given, as stated above, the East Coast is used by a significant proportion of the population for rest and recreation at some point during the year.”

In assessing the community response, it is important to understand the perspectives of those who would notice a change, positive or negative, as a result of the proposal. This is particularly important in this case, as we engaged on two different proposals (recommendation 4 and 6) in parallel and noticed responses supporting or opposing both options from communities that were only affected by one.

To ensure our assessment considers the views of those who would be affected by the change, we have applied the rural 40-decibel noticeability noise contour to the existing and proposed design in the area of change to identify the communities within each (see Figures 5 and 6) and the feedback requiring this consideration.

The flight paths do not change between waypoint PIDOS and the airport, and as such communities in this area will not experience any change in operations from the proposed option. Communities to the east of waypoint PIDOS fall within the 40-decibel noticeability contour (shaded in red) and would likely notice the new aircraft operations. This includes Murdunna, Dunalley, Boomer Bay and Marion Bay (noting Dunalley is also within the current operation 40-decibel contour).

Communities to the north, at the starting point for the proposed option, do not fall within the 40-decibel contour due the altitude aircraft would be at during this stage of flight, however aircraft noise is likely to be audible, but at a low level, due to low ambient noise levels in these communities. As this location would be newly overflowed this would increase the noticeability of the operations, regardless of the noise level. These communities include Triabunna, Spring Beach, Orford, Rheban and Maria Island.

Figures 5 and 6 also identify some areas that will likely experience a reduction in the frequency of noticeable aircraft noise events (shaded in light blue) through the proposed option. This includes Nugent, Copping, Kelleve and Bream Creek.

The locations that will therefore form the focus area for further feedback assessment includes the communities of Boomer Bay, Marion Bay, Murdunna, some parts of Dunalley, Nugent, Copping, Kellivie, Bream Creek, Triabunna, Spring Beach, Orford, Rheban and Maria Island.



Figure 5 Proposed option 40 decibel noise contour (yellow outline). The existing RWY 30 STARs are shown in light orange with the final approach procedures in dark orange, and the existing 40 decibel noticeability contours in purple. Areas shaded in light blue will experience a reduction in the rural 40 decibel noticeability contours, whilst areas shaded in red will experience an increase in noticeability. The airport is shown as a purple star, and the pink areas indicate population density.

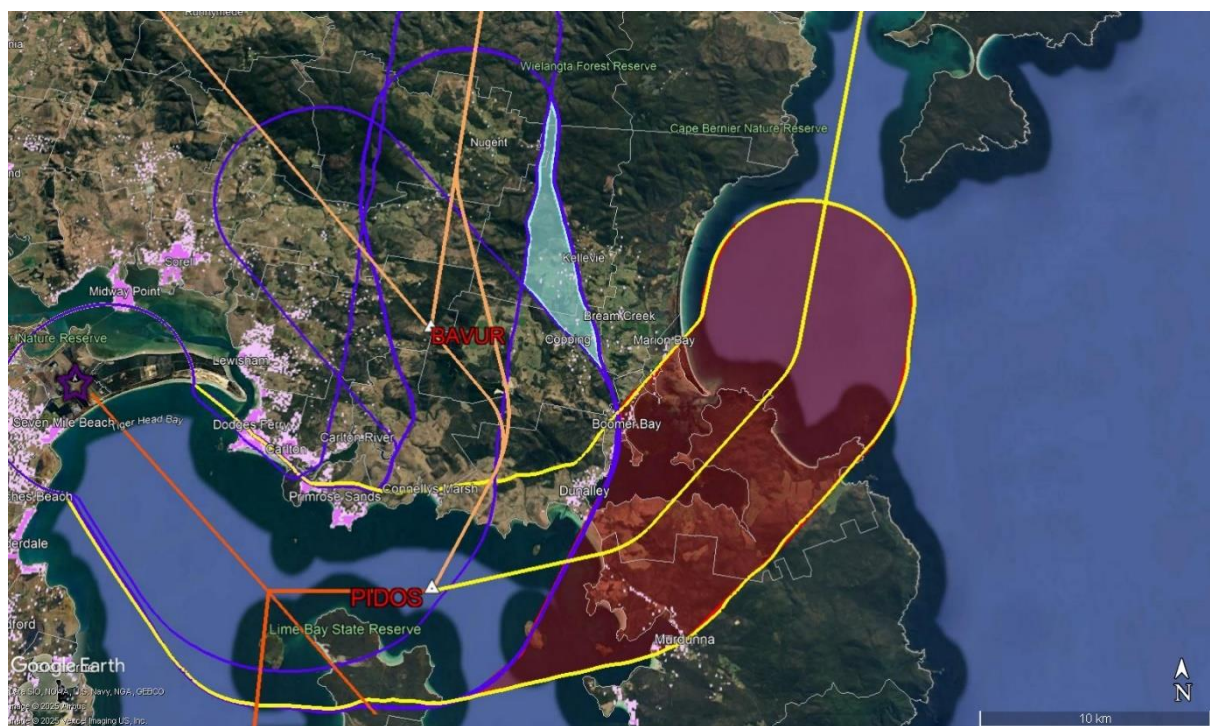


Figure 6 Zoomed in version of Figure 5.

Of the 192 responses received, 141 did not live in the focus area.

When comparing responses within the focus areas, there was almost unanimous response against the change, with 1 respondent in support of the change and 51 not in favour of the change.

Industry engagement

Industry engagement commenced with the high-level options on 19 July 2024, with further engagement on the proposed option occurring between 11 November and 1 December 2024. Industry engagement included a workshop in July 2024 and invitation to comment on the proposed option in November. One submission was subsequently received from industry.

One main theme emerged from the feedback as follows:

“Due to the substantial increase in track miles associated with the option presented (in direct opposition to industry sustainability targets) and also the potential to impact new communities, the option is not supported by the airline industry”.

Further investigation

Given feedback on the tranquillity and natural amenity of the Triabunna and Maria Island areas which indicated that the area relies heavily on tourism for its economic sustainability, Airservices used 2021 census data to better understand this area in comparison with other Local Government Areas (LGAs).

Table 3 shows the largest industry by occupation for the areas of greater Hobart, Sorrell, Glamorgan-Spring Bay, Tasman and the Rest of Tasmania, with the area of focus being Glamorgan-Spring Bay & Tasman.

	Greater Hobart	Sorrell	Glamorgan-Spring Bay	Tasman	Rest of Tasmania
Largest industry	17.38% (Health)	14.88% (Retail)	28.95% (Arts, Recreation, Accommodation & Food Services)	30.15% (Arts, Recreation, Accommodation & Food Services)	16.00% (Health)
Next largest industry	10.80% (Education)	11.84% (Health)	15.43% (Agriculture, forestry & Fishing)	16.59% (Agriculture, forestry & Fishing)	10.29% (Retail)
Arts, Recreation, Accommodation & Food Services	10.07%	10.27%	28.95%	30.15%	9.64%

Table 3 Tasmania occupation by industry – Source:2021 Census data

Arts, Recreation, Accommodation & Food Services represents nearly 30 percent of jobs in the LGAs of Glamorgan-Spring Bay and Tasman respectively. This is almost triple the reliance on these industries for the Rest of Tasmania, Sorrell and Greater Hobart.

This supports the feedback received in relation to these locations, which would be subject to new aircraft operations as a result of the proposed option.

4.0 Assessment outcome and next steps

The proposed option developed in response to recommendation 6 of the Hobart Airspace Design Review PIR, successfully identified a starting point that would enable an arrival path to be designed to track over water east of the Tasmanian coast. The proposed option made use of the existing starting point for the arrival path, tracking immediately east over new communities to cross the coastline to then travel south over water between the mainland and Maria Island, crossing over new communities to the south east of the airport to join the long approach procedure to Runway 30.

The starting point, while ensuring operations were retained inside the existing surveillance area, could not facilitate the shifting of all arrivals over water. Aircraft arriving from the northwest could not be connected to the new arrival path without a full redesign of the airspace to the north of the airport to maintain separation of aircraft on this path with those departing the aircraft into the same area of airspace.

The proposed option was able to connect into the existing long approach (RNAV) procedure which is located over water to the south of the airport, however it could not connect into the existing short approach (RNP-AR) procedure, which commences over land to the north east of the airport. As a result, the existing arrival path would need to be retained to support RNP-AR operations, with only RNAV traffic shifting to the proposed new arrival path over water.

In assessing the merit of the proposed option, changes to population overflow, populations affected at higher noise levels and emissions were considered, with the aim of identifying if the option would provide a net overall improvement. The assessment found:

- When comparing the proposed option to the existing operation it would replace, the total population impacted by overflight and at higher noise levels would be reduced, from 100+ to around 20.
- The population that would be affected by overflight and higher noise levels would be newly impacted communities, that do not experience these operations currently.
- Given the existing flight path would need to be retained to support RNP-AR operations and that arrivals from the northwest would not be able to join the proposed arrival path, existing overflight and noise impacts would not be removed through the introduction of this proposed option.
- Given the above, the introduction of the proposed option would have the net effect of increasing the total population subject to aircraft overflight and noise impacts at a higher level in Hobart by approximately 15 percent.
- The newly overflowed areas to the northeast of the airport where the proposed option would initially track to cross the coastline have a higher than state or Hobart city average reliance on tourism business for their economic activity. Concerns were also raised in relation to the potential impact on Maria Island which is a recognised place of quiet natural enjoyment with high tourism and ecological value.
- The proposed option would increase CO₂ emissions by approximately 174kg per flight, adding 177,480 kg of CO₂ emissions per year.
- Community support overall did not support the introduction of the proposed option, with much of the support driven by communities that would not benefit or be impacted by the change. When the communities who would notice a change as a result of the proposed option were considered, a substantial proportion were located in areas that would be newly overflowed or where there would be an increase the noticeability of the operations.
- The airline industry was not supportive of the change due to the increased track miles, which would result in additional fuel use and CO₂ emissions that would not support their emissions reductions targets.

Having given regard to these findings, Airservices has determined that this proposed option does not present a net positive benefit for the Hobart community and Hobart Airport operations. As a result, it is not recommended to be progressed to preferred design.

5.0 Additional east coast route options

During the community engagement session in Dunalley, feedback was received requesting that Airservices explore additional east coast route options to avoid flying close to Maria Island given its natural environmental values and that would track further south to avoid new community impacts in these locations.

Figure 7 below shows three additional options, overlaid on the current arrival path location and proposed option assessed above. Hobart Airport is shown with a purple star and population density is shown in pink.

These options include:

- Green – Track east of Maria Island, turning to join the RNAV procedure on the right (northernmost arm), similar to the Airservices' developed proposed option over the vacant land between Dunalley and Murdunna.
- White – Track east of Maria Island, turning slightly later to track over the vacant land between Murdunna and Eaglehawk Neck before joining the centre of the RNAV procedure.
- Blue – Track east of Maria Island, continuing further south around Port Arthur to join the left arm of the RNAV procedure, avoiding overflight of all communities.

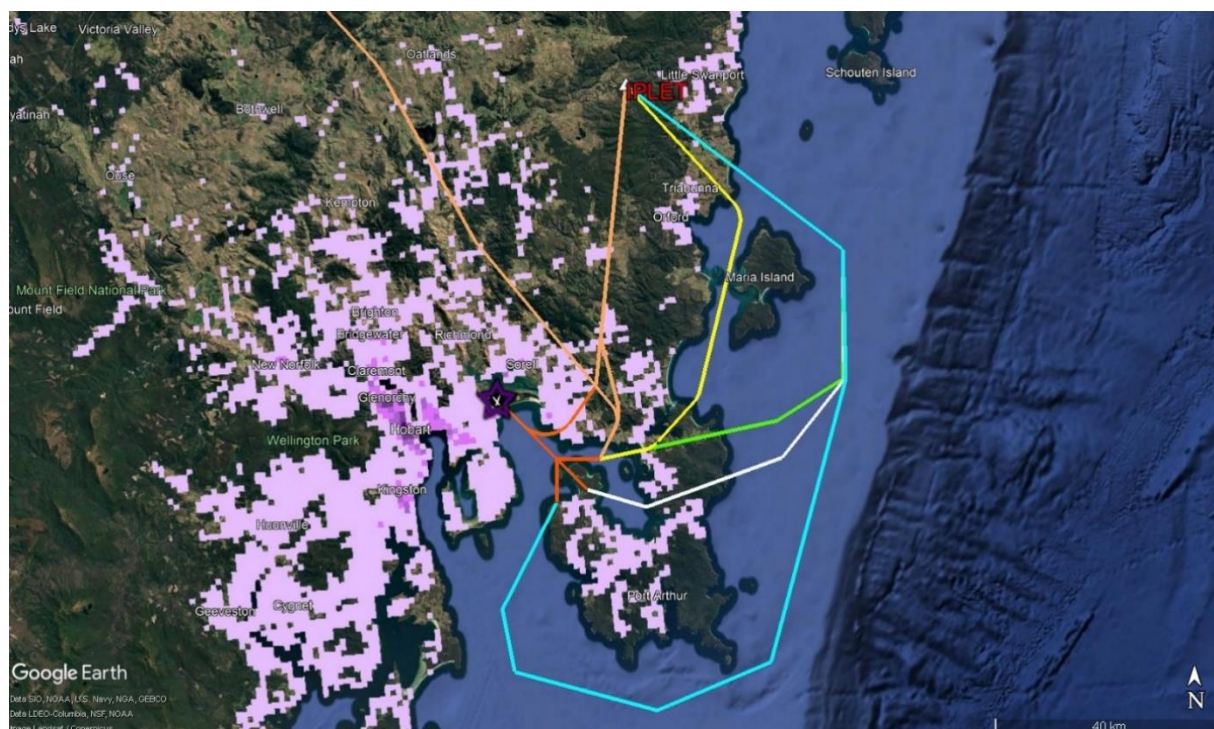


Figure 7 RWY30 Additional east coast route options with current arrival paths in light orange. The yellow line represents Airservices' proposed option, with the additional options indicated in green, white and blue. Hobart Airport is shown with a purple star.

Assessment of suggested additional options

Table 4 below provides a comparative assessment of each suggested option with the current flight path and the Airservices's developed proposed option in relation to the population overflown and population affected by noise levels at or above 60/70 decibels.

		Existing RNAV flight path (light orange)	Airservices developed proposed east coast route (Yellow)	East of Maria Island over vacant land between Dunalley and Murdunna (Green)	East of Maria Island over vacant land between Murdunna and Eaglehawk Neck (White)	East of Maria Island tracking south of Port Arthur (Blue)
Population	2km buffer	148	26	31	30	27
	70dBA	9	9	9	9	9
	60dBA	113	23	28	26	24

Table 4 Assessment of Recommendation 6 additional east coast variant population counts

Table 5 below provides a similar assessment of track miles and CO₂ emissions for each suggested option. It can be seen that the additional options increase track miles and CO₂ emissions commensurate with the additional distance they travel away from their destination before making the final approach.

	Existing RNAV flight path (light orange)	Airservices developed proposed east coast route (Yellow)	East of Maria Island over vacant land between Dunalley and Murdunna (Green)	East of Maria Island over vacant land between Murdunna and Eaglehawk Neck (White)	East of Maria Island tracking south of Port Arthur (Blue)
Track miles	46.80NM (86.67km)	+9.52NM (17.64km) 20.3% increase	+25.8NM (47.78km) 55.1% increase	+30.8NM (57.05km) 65.8% increase	+67.89NM (125.73km) 145.1% increase
CO ₂ emissions/flight		+174kg CO ₂ / flight	+472kg CO ₂ / flight	+564kg CO ₂ / flight	+1243kg / CO ₂ flight
CO ₂ emissions/month		+14,790kg CO ₂ / month	+40,120kg CO ₂ / month	+47,940kg CO ₂ / month	+105,655kg CO ₂ / month
Figures based on 85 RWY 30 RNAV (RNP-Z) arrivals from East Coast for November 2024 using calculations based off ICAO Carbon Emissions Methodology for B738.					

Table 5 Recommendation 6 variant track mile and CO₂ assessment

Figures 8 through to 11 show the noise modelling results for each of the suggested options above, to provide a visual reference to the location that would be subject to higher levels of noise under each suggested option.

The 70-decibel contours, where noise levels of 70 decibels and above would be experienced, are shown in red. The 60-decibel contour, where noise levels of 60 decibel and above would be experienced, are shown in light blue.

For all variations of longer east coast routes, the 60 decibel contours extend along the proposed flight paths over land, affecting new communities.

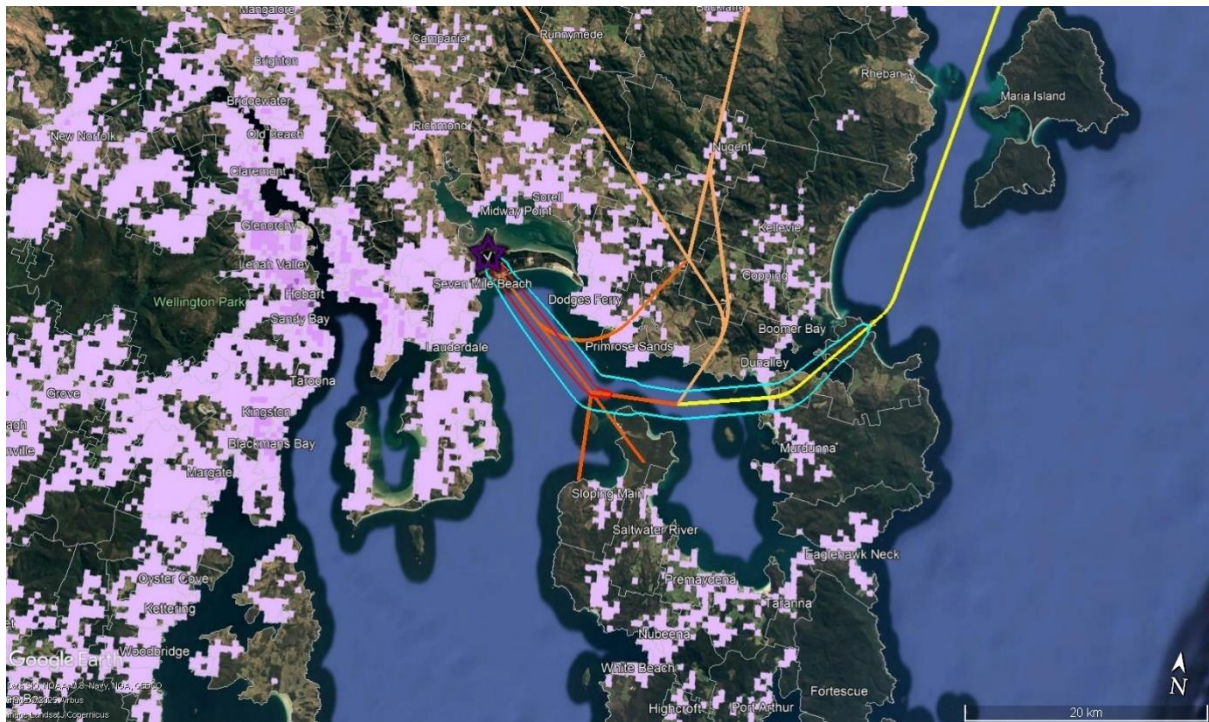


Figure 8 Airservices' developed proposed option (yellow). The 70 decibel noise contour is shown in red and 60 decibel contour shown in light blue.

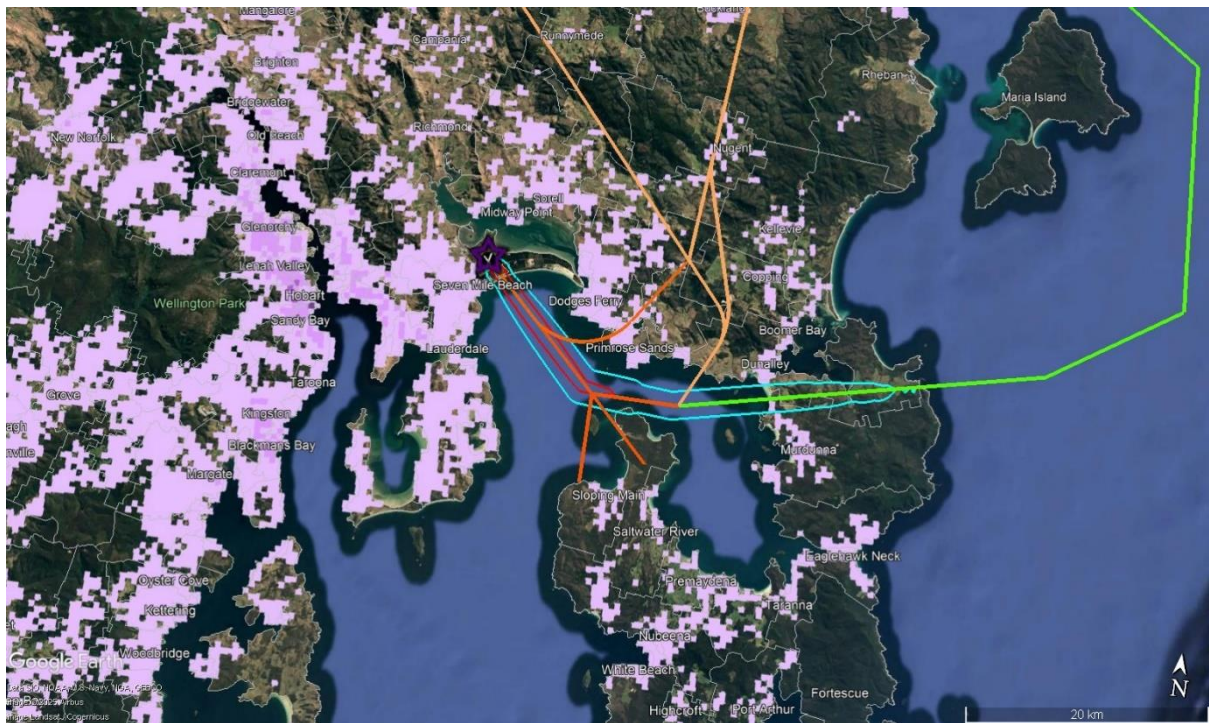


Figure 9 Proposed east of Maria Island (green). The 70 decibel noise contour is shown in red and 60 decibel contour shown in light blue.

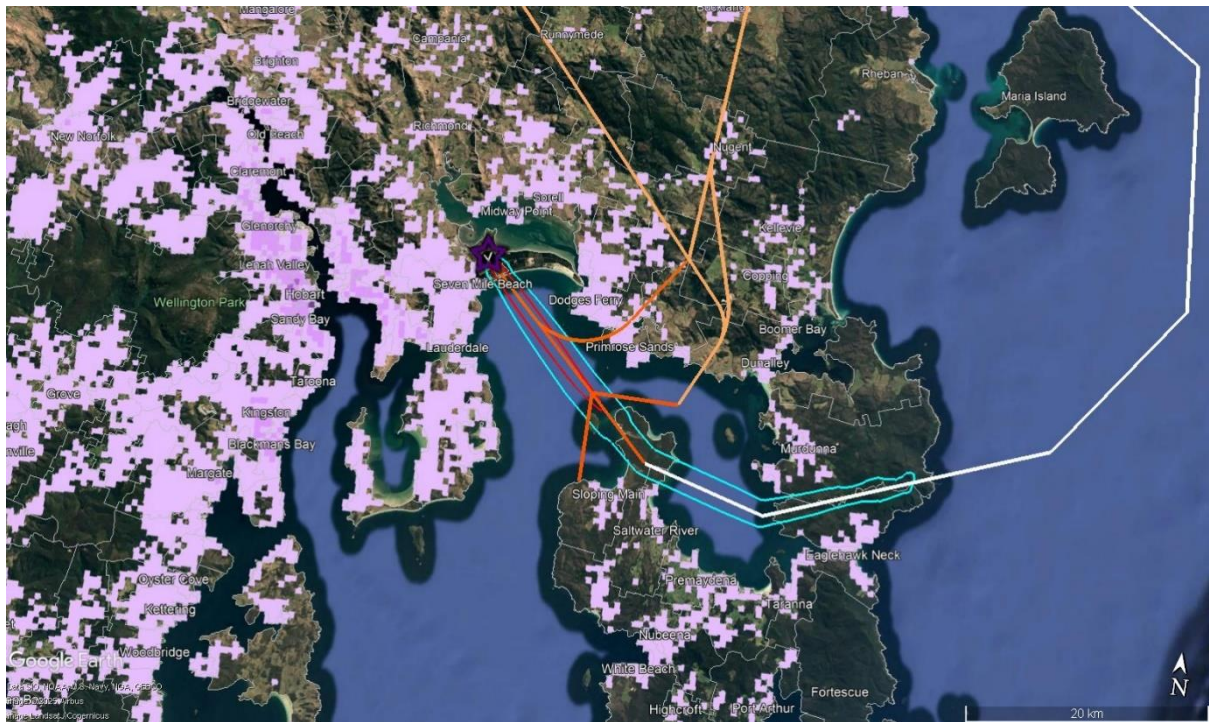


Figure 10 Proposed east of Maria Island (white). The 70 decibel noise contour is shown in red and 60 decibel contour shown in light blue.

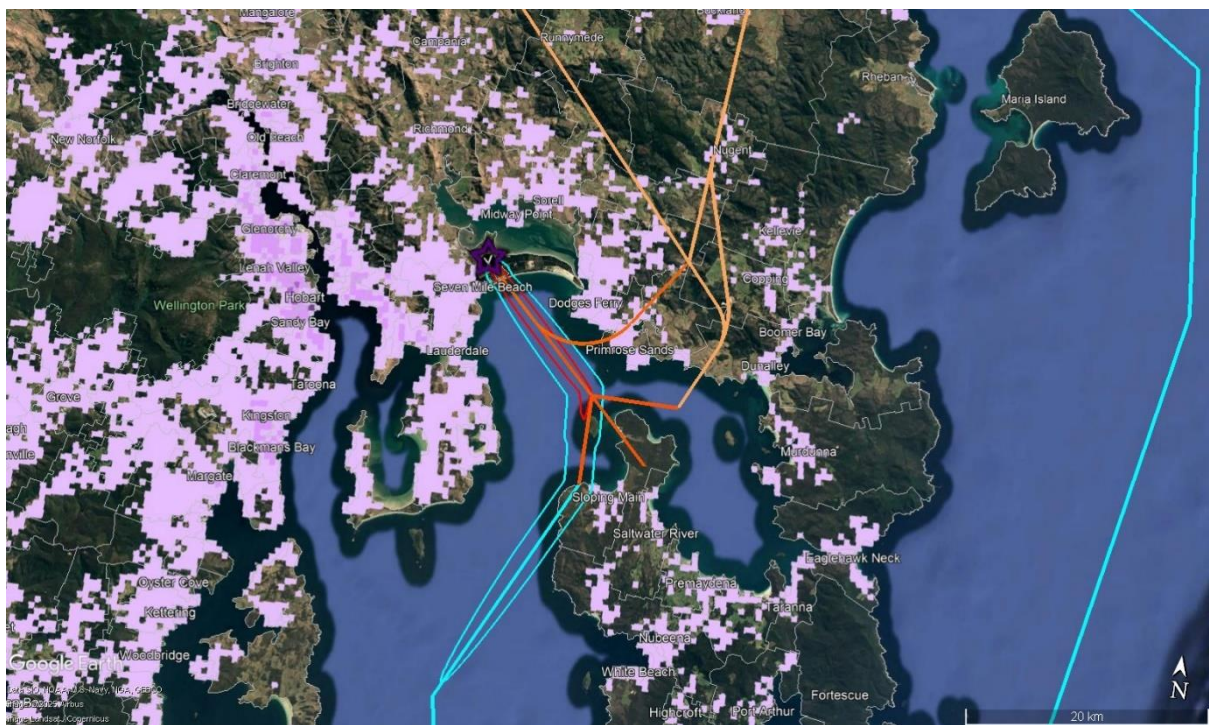


Figure 11 Proposed east of Maria Island tracking south of Port Arthur. The 70 decibel noise contour is shown in red and 60 decibel contour shown in light blue.

Outcome of consideration

Having considered both the population data, which indicates no significant benefit for the suggested routes east of Maria Island, and the significant increase track miles resulting in far greater CO₂ emissions, these additional suggestions are not recommended to be pursued further. They do not present a lower impact or greater benefit solution compared to the proposed option engaged on with the community.

It is important to recognise that the aviation industry has targets to achieve more sustainable operations, including reducing CO₂ emissions. Adding track miles of the order proposed through these suggestions and increasing CO₂ but tens of thousands of kilograms per month is not consistent

with these targets. Any consideration of increases of this nature, would need to provide a substantial noise reduction benefit to communities either in terms of total noise experience or total population affected.

Airservices has determined that these additional east coast options do not present a net positive benefit for the Hobart community and Hobart Airport operations and that they present a negative environmental outcome in terms of emissions. As a result, they are not recommended to be progressed to preferred design.

Appendix A – Hobart PIR Engagement Activities

Date	Activity	Messaging/Details
12 Aug 2024	Engage: newsfeed update	Update on PIR recommended actions Airservices will soon announce next round of engagement on PIR recommended actions
12 Aug 2024	Engage: newsletter	Notification of update. Sent to 178 subscribers, opened by 156 (87.6%), clicked on by 34 (19.1%)
9 Sep 2024	Engage: newsfeed update	Update on recommended actions 4 and 6 Assessment complete. Airservices expect to undertake community engagement from mid-October 2024
9 Sep 2024	Engage: newsletter	Notification of update. Sent to 179 subscribers, opened by 116 (64.8%), clicked on by 22 (12.3%)
28 Oct 2024	Engage: newsletter	Email: registrations for online and in person community information sessions open commencing 12 November 2024. Sent to 181 subscribers, opened by 176 (96.2%), clicked on by 70 (38.3%)
28 Oct - 1 Nov	Letter drop	30km radius from Carlton River with some exclusions to the west where changes do not apply. Additions were made to the north to ensure areas south of Triabunna and around Buckland received the letter. Some residents from Carlton Bluff Road, Wedgetail, Frogmouth, Midden and Petrel, and Kestrel St Primrose Sands have reported non-delivery of the CE flyer. Australia Post confirmed all flyers delivered by week ending 16 November 2024
30 Oct 2024 – 13 Nov 2024	Advertising: social media	Location targeted: 30km radius from Carlton River
30 Oct 2024	Advertising: newsprint media	Hobart Mercury
02 Nov 2024	Advertising: newsprint media	Hobart Mercury
03 Nov 2024	Advertising: newsprint media	Sunday Tasmanian, Hobart Observer,
Nov 2024	Advertising: newsprint media	East Coast View, The Sorrell Times, The Tasmanian Gazette
5 Nov 2024 - 20 Dec 2024	Have Your Say feedback surveys	Tell us your preference for Recommendation 4 and 6 of the Hobart PIR

Date	Activity	Messaging/Details
05 Nov 2024	Engage: newsletter	Release of Design Option Fact Sheets for Recommendation 4 & 6 Sent to 226 subscribers, opened by 220 (96.1%), clicked on by 94 (41%)
12 – 14 Nov 2024	In person community information sessions	Drop-in style sessions where community members can have one-on-one and small group conversations with Airservices staff to further understand the outcomes of the assessments
20 Nov 2024	online community information session held	33 registrations received with 13 attendees
3 Dec 2024	Engage: newsfeed update	Community Motion from Dunalley, Boomer Bay, Marion Bay, Murdunna and Bream Creek
10 Dec 2024	Engage: newsfeed update	Community motion and extension of feedback period