



The Lake Burley Griffin Guardians welcome the opportunity to comment on the National Capital Authority's discussion paper regarding potential seaplane operations on Lake Burley Griffin.

"The NCA requires sufficient information to allow a full assessment of the activity, its impact on other users, and so that heritage values and environmental issues can be determined. In assessing seaplane operations, key issues such as safety, lake users, infrastructure and refuelling requirements, heritage, noise, visibility, and impacts on the natural environment will be considered". Quote from the Discussion Paper.

Response to questions raised in the paper

Statement of initial response to the idea of seaplanes operating on Lake Burley Griffin

This is an inappropriate activity for our Lake for the many reasons detailed below.

The Lake Burley Griffin Guardians are **strongly** opposed to the concept due to the probable, negative impacts on noise levels, the safety of other lake users, wildlife and the Lake waters from seaplane operations. The introduction of seaplanes to the Lake could radically transform the accepted role and function of the Lake by the licence it gives to other, potential, future adverse uses of a similar or worse type.

Referring to the Lake in his inauguration speech the Prime Minister, Robert Menzies said, "This is the heart of the city, and I hope it will be a heart that will be quietly beating, not noisy, not uproarious – a quietly beating, restful heart for the rest of our lives." He added, "I see this lake ultimately not as something purely artificial in its surrounding but as a haunt of birds, as a haunt of wild life. Indeed, I am optimistic enough to think the day will come when tourists coming through will be able to feed the swans and this will be quite a feature of the city."

The idea of allowing seaplanes to operate on the Lake is not a single, self-contained proposal as the NCA implies. It may lead to a qualitative change in the uses and abuses of the Lake by many prospective users. Many of them potentially noisy and destructive, since it might be said that all other peaceful, harmless uses have already been allowed. We are at a tipping point.

Once the norms and customs of the past have been breached, especially regarding the requirement of peace and tranquillity, observed since the filling of the Lake, there is no return. The peaceful heart of Canberra will have been destroyed to the detriment of Canberra residents and visitors, and the local wildlife. To add to this calamity, any financial benefits from the operation will largely accrue to a few interstate businesses.

We believe that the service/s will be utilised by a few affluent clients, politicians and business commuters, who could otherwise use other modes of transport, and therefore will not bring much

additional benefit to the ACT economy. We do not want to see the Lake turned into a runway for a wealthy few whilst detrimentally affecting water birds and other wildlife, and impinging on the amenity of many Canberrans and other Lake users who value the tranquillity of the Lake and its surroundings.

The Discussion Paper does not provide sufficient information on the implications of the new, larger proposal of up to four flights per day at least as compared to that tested in the December 2020 trial flight. Whilst the 2020 demonstration flight may have been useful in publicising the concept, a single flight by a small aircraft was not representative of the potential cumulative impact of two operators with more aircraft, one larger, with more flights.

We also believe that the questions raised by the NCA appear, perhaps unintentionally, to assume that the seaplanes proposal is to be adopted. To avoid any misunderstanding, our analysis below generally follows the headings of the NCA, but as a means of explaining the LBG's opposition to the plan, rather than to help facilitate a possible 'fait accompli'.

1. Movement and noise impact on higher priority users, including people and wildlife The noise and disruption caused by landing seaplanes on the lake is completely incompatible with the activities of other higher priority Lake uses, mostly active recreation, including sailing, rowing, dragon boating, ballooning, ferry and pleasure boating, canoeing, swimming, triathlon, paddle boarding, low impact tourism, lakeside walking and cycling, and also the more passive recreation of listening to Carillon recitals (the latter an identified aesthetic heritage value). It is difficult to see how the NCA could require operators to minimise the impact of flight operations on these uses.

As quoted above, the NCA requires "*sufficient information to allow a full assessment*" etc.

Regular air services will affect the quietness and tranquillity, and use of the Lake, formal occasions, quiet visitor enjoyment and low impact recreation and sport. These purposes contribute to the listed, heritage aesthetic value of the Lake.

In summary, seaplanes on the Lake will reduce the general tranquillity and quiet appreciation of the Lake most days (multiple times), it will likely disturb wildlife in, on and around the Lake, increase water turbidity and wave action so adding to foreshore erosion and vegetation impact, and create a potential for both Lake pollution (fuel) and increase the risk of accidents and interference with the activities of existing Lake users. The lack of a formal natural environment impact report is worrying in terms of, at least, the EPBC Act's 'precautionary principle'.

Likewise, the impacts on wildlife and habitat cannot be determined from observations during one demonstration. This impact applies particularly to the grey headed flying fox colony, the Wetlands generally, and to migratory birds, but also to the resident swans and other bird populations. Suggesting flights at times to coincide with low activity periods of flying foxes or birds may seem strategically less disturbing and safer but more flights with larger aircraft clearly have a greater potential for disturbance of these resting wildlife, also giving rise to the possibility of bird/flying fox strike. Most problematically, there is no, provided, comprehensive, natural environment impact study to assist the community or the NCA as decision-makers to a sensible understanding of the proposals' implications in that sphere.

The December 2020 trial was inadequate in assessing the proposals made in the Discussion Paper as there is a significant discrepancy between the trial flight and that now proposed where there will be

two planes, including a larger, twin-engined plane, more flights/day, and potentially taking-off/landing in different locations than indicated, given the different craft and certainly taxiing/docking in a different location. The proposals clearly will have a bigger impact in terms of aircraft size and frequency of wake, noise, general disturbance, and risk. This has not been taken into account, except, partially, in the heritage study with an expectation of likely greater impact and required further studies.

Further, more detailed, up to date, relevant, trial/s and studies are indicated if this proposal is to proceed further than this Discussion Paper, given the more probable, increased adverse impacts that could arise, so as to inform and provide for proper, evidence-based decision-making. But on the precautionary principle, and based on current information, it should not proceed further.

2. Problem of safety This encompasses not only the safety of passengers but also that of other Lake and airspace users; bystanders including motorists and pedestrians on bridges; emergency responders; wildlife; and the environment. It includes the safety of birds in flight, the ability of bats to care for their young, non-interference with sail-boat users or not polluting the waterway from spills or leaks.

What is the safety record of seaplanes internationally and nationally, on inland waterbodies? Safety is such an important factor it needs to be comprehensively understood and transparent while the practices put in place need to be of the highest standard. There is no shortcut.

3. Seaplanes would offer a precedent for other powered craft Approval of seaplane operations will inevitably lead to approval of water skiing and/or powerboat operations in the main basins of the Lake. Except for tourist ferries, the water police, safety boats and electric-powered Scandinavian picnic boats, motor boats are generally banned on the Lake. The NCA could be open to legal challenge or political pressure should it try to prevent other noise and disturbance activities should combustion engine, powered seaplane operations become normalised.

4. Failure of the NCA appropriately to cover the range of issues requiring consideration before making a decision concerning seaplane operations on Lake Burley Griffin

a. Context of the National City and the Lake: The Discussion Paper compares this venture with operating out of Rose Bay. There is no comparison with a regular operation in a comparatively small, shallow, water body central to a city. The studies seem to be limited to a small or moderate sized seaplane but the impact of the operation in a comparatively small lake area, central to a city, depends largely on the size of the vessel. Once small seaplanes are permitted, the operator is likely to press for larger, more powerful aircraft and increase in flights, to raise their return on investment. Comparative examples of other seaplanes permitted in sensitive locations are used in the Discussion Paper. However, none of the comparative seaplane operating areas cited have the same environmental and competing user profile in such a constrained space as Lake Burley Griffin.

There is no impact assessment of the newly proposed arrangements in the vicinity of the easterly landing and westerly take-off scenario, plus taxiing and docking zones, for example, on the National Museum or other occupants/residents/users of Acton Peninsula, and prospective West Basin users and residents. Why is consideration of the latter not provided given the proximity of the proposed plane activities here and the establishment of a docking and refuelling facility on the Peninsula within West Basin?

b. Physical impact on the Lake: We believe such a proposal will affect the natural values of the Lake, such as wash damage to foreshores and walls, and wake impacts on wildlife habitat, all in the current context of additional impacts on existing impacts from Lake use.

An example of a partial and inadequate attempt at impact assessment relates to wave wake generation. This is a very complex matter and too readily dismissed in the Discussion Paper by citing the estimated wake wave height based on one instance provided by a one-engined plane, when a twin-engined, larger plane possibly in a different location, landing more frequently, year round, is proposed. Detailed consideration of what are the current wake heights experienced on the Lake by various existing generators, compared to the maximum wake height permissible to ensure minimised impact on natural foreshore erosion, minimal turbidity/sediment suspension, no or little foreshore vegetation, nest disturbance, and shore erosion is missing from the Discussion Paper to assist in decision-making. Whilst one occasional wave of small size is unlikely to be an issue, the waves generated by two seaplanes, with multiple landing times per day, added to other waves generated by other Lake activities in other instances, may, in fact, be significant, cumulatively. This needs to be assessed in the context of location and also as an additional wave generation factor with increased impact over time. (This is especially worrying if motorboat use is to be added to the range of permitted Lake activities in the future.)

These issues arise because of cumulative impact from increased frequency of wake wave generation on top of existing wake wave generation and the speed of this new wake generator. Other relevant factors that need to be taken into account for impact assessment are water depth, bank profile/geometry, bank vegetation and resistance, nature and extent of shoreline, proximity of shore, degree of re-suspension given sediment particle size, and any wave reflection from another shore.

Repeated and frequent seaplane presence, exacerbated by the related wake and noise levels, is likely to also have an adverse impact on terrestrial wildlife, such as rakali and platypus, the latter recorded in recent times in the region of the National Museum foreshore where seaplane docking is proposed.

It should also be recognised, and the Discussion Paper does not, that the Lake is naturalising and any issues that arise from the introduction of seaplanes that adversely affects this process needs to be identified and managed.

c. Transfer of pests and pathogens: It is possible that seaplane operations will transfer pest species (e.g. aquatic plants, bacteria and algae) between Lake Burley Griffin and other waterways and the reverse. There may also be a currently, unrecognised impact of seaplane operations on the frequency and intensity of Blue-green Algae blooms.

d. Flight operations and air traffic control: There are at least 60 registered organisations and individuals licensed to operate drones in the ACT, for services including photography, survey and food delivery. We ask that the NCA also consider the potential conflict between aircraft and regulated and unregulated pilotless vehicles.

e. Noise: The NCA has not provided information about the impact of regular and ongoing aircraft noise on people and wildlife, including Canberrans, migrating and resident bird species and particularly on the colony of grey-headed flying foxes. Nor has it provided information about

acoustic and other impacts on the current users/residents of Acton Peninsula and future users/residents of West Basin, as this proposal is closer to these locations.

In terms of the past NCA noise abatement context, it should be remembered that boat repair was banned at Kingston because of the potential noise risk.

f. Safety: Questions arise about the capacity of other Lake users, particularly regarding boat users, to avoid aircraft during take-off and landing. The demonstration flight did not include a pre-landing circuit, and the take-off length was quite long due to the still conditions on the day. As noted at the time, and in the media subsequently, school-aged sailors were given no advance warning, and were unable to be warned immediately as the plane took-off. We believe the NCA needs to give far more attention to how the operators would, in effect, safeguard other Lake users, if the Lake is to be used as a runway, as some of the users might not be able to avoid conflict/interference with a faster-moving flying craft. Insufficient reassurance is given in the Paper about this aspect of user safety, particularly as up to four flights per day will dramatically increase this issue on the access of other Lake users.

g. We are concerned about what would happen when things went wrong: We question the adequacy with which first response agencies would be able to deal with a ditching or crash. Do the ACT Emergency Services Agency (SES and fire and rescue) and police have the skills and resources to firstly respond, and secondly clean up, after a such an on-water incident. The aircraft will be operating in proximity to Parliament House, Government House, the City, diplomatic residences, public buildings, offices, and private residences.

h. Facilities required: It is unclear, regarding the larger proposal than originally considered, whether there is a need to duplicate facilities allowing for the two operators. Would this mean, for instance, a larger jetty and terminal arrangements, and two fuel tanks with a greater possibility of spills/leaks?

5. The effect of seaplane operations on the reputation of Canberra as the National Capital

Allowing commercial combustion engine air operations on the Lake would not raise awareness of the role of the national capital any more than operation of the coal port of Gladstone raises awareness about climate change. These operations are much more likely to detract significantly from people's quiet appreciation, enjoyment of the Lake and its amenity, having a negative effect.

The flights could, however, raise awareness among international visitors and well-heeled tourists of the poor environmental state of the Lake (Blue-green Algae blooms are visible from space); to more clearly see the folly of allowing the ACT to fill in part of West Basin lakebed as well as giving a closer view of the poorly-maintained, senescent trees that dominate the foreshore.

Conclusion

1. There has been no comprehensive, professional, natural environment impact study with proper regard to impacts based on the actual, proposed parameters of the seaplane project and the real/likely location zones of impact including for:
 - increased turbidity/suspended particle activation, including underwater, natural environment impacts;

- wake wave impact on foreshore erosion and wildlife and vegetation disturbance considering cumulative impacts, not just one-off events or that seaplanes are the only wake wave generators;
 - other wildlife disturbance from noise and aircraft presence (localised and more general), particularly, potential bird/flying fox strike issues and the sensitive zones of the Commonwealth Park flying fox colony and the Jerrabomberra Wetlands; and
 - any proposed mitigating factors.
2. The impacts of noise and heritage (etc) are not assessed using the parameters of the larger proposal to replicate. This would take into account current and future zones of use (such as Acton Peninsula users and the proposed West Basin apartments), and include any proposed mitigating factors if required (eg 'no go' flying areas or times and limits to sight-seeing flights in the Lake vicinity and elsewhere as necessary).
 3. A safety and risk assessment is not provided for the new parameters that would take into account the issues raised above, of spillages, leaks, contingency decontamination planning, risks from introduced pests and pathogens; safety records of the proponents, and any new, special, ACT seaplane regulation required.
 4. An adequate reappraisal of conflicts with other Lake users is not provided that would possibly include fuller consultation with this varied group, given the indicated reaction from them to the proposal.
 5. A clear assessment is not provided of the overall, long term, environmental (including heritage) sustainability of the proposal consistent with the full raft of NCA obligations, for this primarily commercial proposal, and which should include a statement made on whether this is a suitable Lake use.
 6. Also omitted from 'Next Steps' is a stage of further public comment before a final decision is made.

The Guardians are strongly opposed to the concept of seaplanes on the Lake. The NCA would, under other circumstances, ask some hard questions of the potential operators and gain sufficient information to make a valid, full assessment, because like so many things, once it is approved there is no going back. On the basis of the current inadequate information, supposed to underpin an NCA decision, our strong conclusion, considering the required precautionary principle, is that this proposal should not proceed.



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