



Residents Against Western Sydney Airport Incorporated

Blaxland NSW

Email: rawsaconnect@bigpond.com

5th November, 2021

Submission to Environmental Impact Statement process for the Warragamba Dam Raising Project

Introduction

This submission to the Warragamba Dam Raising Project (WDR) EIS is made on behalf of the community based group called Residents Against Western Sydney Airport (RAWSA).

We bring to the attention of the NSW Government and the EIS assessment team a number of risk issues concerning the dam raising project, that have not been appropriately addressed in the EIS. These issues include the:

- Western Sydney Airport's (WSA) close proximity to the dam,
- Prediction of flight paths over Lake Burragorang and in close proximity to the dam structure,
- Unpredictability of aircraft flight 'tracks' going over the dam structure itself, and
- Lack of appropriate levels of threat assessment in the EIS relating to risks associated with aircraft,

While the building and operation of the WSA is a Federal Government responsibility, the NSW Government has provided the opportunity for this airport project to proceed through the provision of roads, rail and other essential services. In so doing, the NSW Government has created an additional and unnecessary risk to the safe operation of Warragamba Dam, the provision of a reliable water supply to Sydney and the maintenance of water infrastructure.

Having supported the WSA project the NSW Government must also now accept the responsibility to consider the aviation risks that this nearby infrastructure, poses on the Dam raising project.

Yours sincerely,

A handwritten signature in black ink that reads "Neal".

Trevor Neal
Secretary RAWSA
Residents Against Western Sydney Airport

Contact can be made with Residents Against Western Sydney Airport by email to:
rawsaconnect@bigpond.com - marked Attention – Trevor Neal

Submission

The WDR Environmental Impact Statement is obliged to assess the impacts of other major facilities in the surrounding area. As the Warragamba Dam is situated less than 9klms from the proposed airport, the operations of WSA should be included in the EIS process. In particular, aircraft movements into and out of WSA pose a realistic threat to the Warragamba Dam and the Sydney's water supply by way of aircraft accidents, jettisoning of fuel during emergencies, aircraft used in terrorism and the ever increasing likelihood of Geo-Political military incursion, whether war is declared or not.

Aircraft Accidents

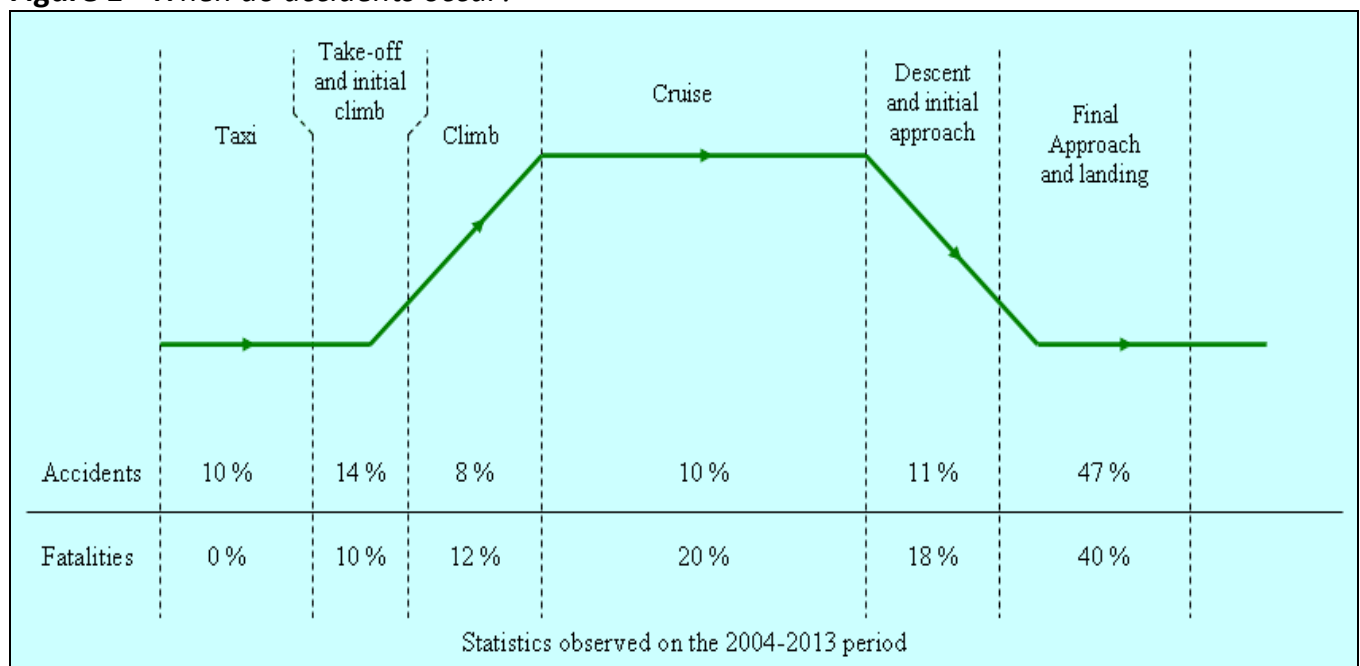
In regard to commercial aviation, statistical evidence shows that up to 80% of aircraft accidents occur around the geographical location of the airport (see Figure 1). The following passages are from a research paper titled "Lessons learnt for aviation safety"¹

*"Between the time a passenger boards an airplane and the time they disembark, there are 6 distinct phases: **Taxi; Take off and initial climb; Climb; Cruise; Descent and initial approach; and Final approach and landing.**"*

Almost half of all accidents occurs during the final approach and landing stages. These are also the most devastating accidents. Fatal accidents are also likely to occur during the climb stage.

Most accidents and fatalities take place during the departure (take off / climb) and arrival (approach/ landing) stages. During these phases aircraft are close to the ground and in a more vulnerable configuration than during other flight phases: the crew have to deal with a high workload and reduced manoeuvre margins."

Figure 1 - When do accidents occur?

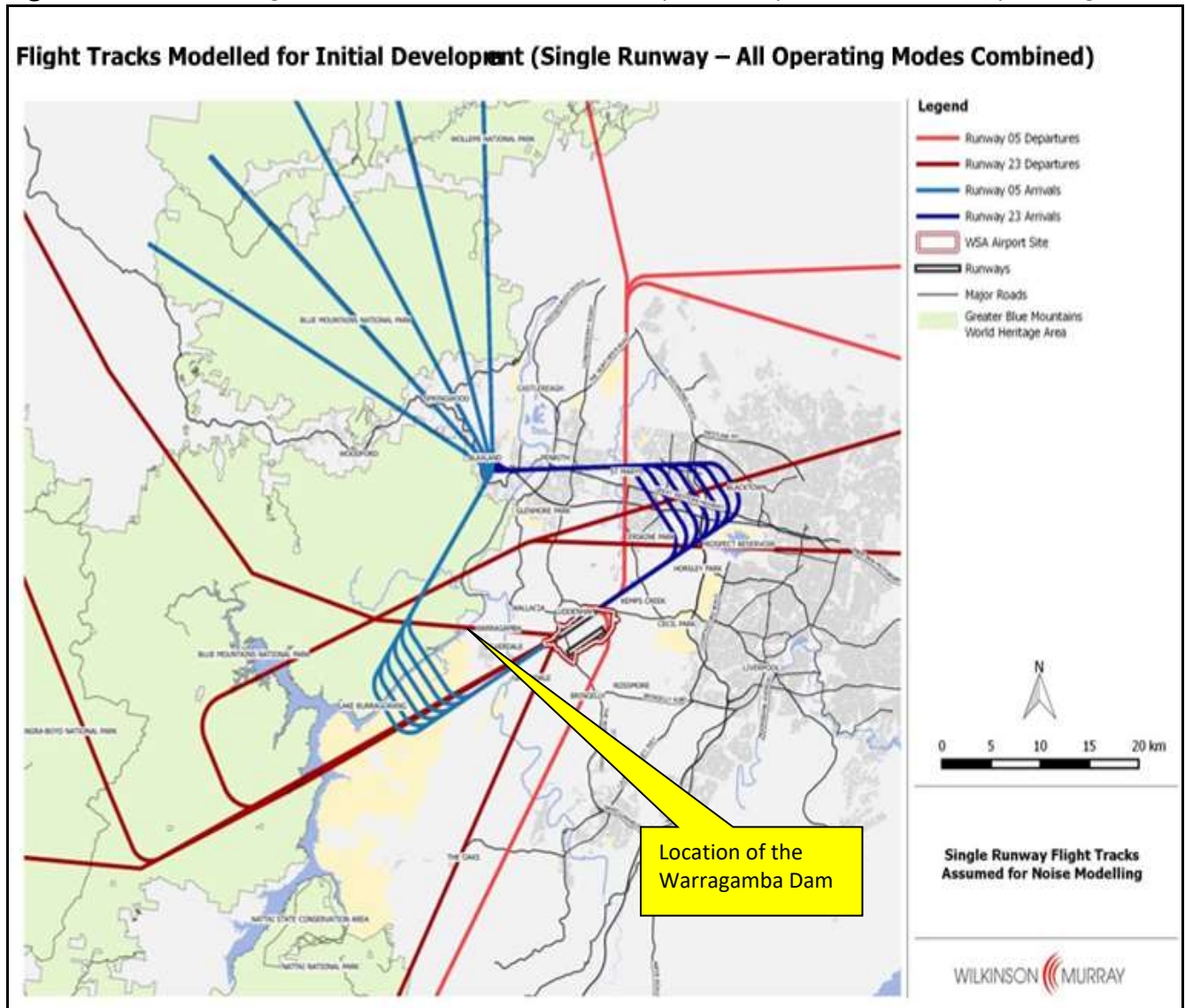


¹ <https://www.1001crash.com/index-page-statistique-lg-2-numpage-3.html>

Emergency jettisoning of fuel

The close proximity of inflight aircraft following designated flight paths which transverse Lake Burragorang, together with Airservices priorities to enhance airline profits and efficiency will see increasing aircraft flight tracks over Sydney's water supply and the likely increase in the overflight of the Dam structure itself (see Figure 2).

Figure 2 - Source of diagram below - WSA-EIS-Volume-1-Chapter-7-Airspace-architecture(3).pdf – Page 43



While there are established protocols that attempt to prevent fuel dumping over sensitive areas, the nature of the emergency will dictate the need for fuel dumping, not necessarily the protocols. Even the protocols acknowledge that in emergent circumstances, the priority will be the aircraft's safety and this may necessitate immediate fuel dumping processes – regardless of the over-flight location.

Any dumping of aircraft fuel over Lake Burragorang or within the Dam's catchment area, will cause unacceptable risks to the water supply, flora and fauna.

7.11.4 Emergency fuel jettison (fuel dumping)

Emergency fuel jettison for civilian aircraft, commonly referred to as fuel dumping, is a rare procedure used in certain emergency situations to reduce an aircraft's weight to allow it to land safely. Aircraft do not jettison fuel as a standard procedure when landing. Indeed, most aircraft are unable to jettison fuel. Fuel jettisoning may occur if an aircraft is required to undertake an emergency landing before reaching its destination airport, or if it needs to return to its origin airport shortly after take-off (for example due to a mechanical problem or a passenger medical issue).

The procedure for jettisoning fuel is specified in the En Route supplement of the Aeronautical Information Package published by Airservices Australia. When fuel jettisoning is required, the pilot in command requests authority from air traffic control before commencing the operation and must:

- take **reasonable** precautions to ensure the safety of persons or property in the air and on the ground;
- **where possible**, conduct a controlled jettison in clear air at an altitude of above 6,000 feet (approximately 1.8 kilometres) and in an area nominated by air traffic control; and
- notify air traffic control immediately after **an emergency jettison**.

Aircraft used in Terrorism

We only have to look at the effectiveness of the 2001 '911' attacks to understand how aircraft can be used as a weapons of terror.

With WSA flight paths and flight tracks in such close proximity to the Warragamba Dam and the planned overflying of Lake Burragorang, it would be impossible to prevent an attack on the water supply or the dam structure itself, by a terrorist controlled aircraft.

With just a slight deviation from the established flight paths, a terrorist controlled aircraft could be crashed into the Dam structure, well before air traffic controllers even realised the target and certainly long before any military aircraft (even if immediately available to scramble) could take any preventative action.

This scenario and the possibility of a resultant total dam collapse, has not been adequately addressed in the EIS process.

As with all other aviation operational impacts, the cost of those impacts, (whether, social, environmental, health related or indeed to water supply infrastructure), are not borne by the aviation sector but are externalised by the automatic transferral to the public purse, via the responsibilities of various governments, Local, State and Federal.

Geo-Political military incursion

Since the 1980s, there has been relative stability within the Asia-Pacific region. However, for some years now and particularly in recent months Australia has witnessed a growing 'power play' in the region where Australia (rightly or wrongly) is being drawn toward military conflict between two great nations who are posturing for dominance in the Asia-Pacific.

Even considering the Warragamba Dam in isolation, we can see this facility becoming a possible target of any military action or geo-political push back whether war is declared on Australia, or not. The social, environmental and financial impacts of damage to the Dam or water supply would be horrendous, for local, state and national residents. The planned nearby WSA exponentially increases the chance that both the Dam and the Airport could be jointly exposed to military incursions. The WDR EIS does not address these aspects and is a less than prudent assessment of realistic threats.

Conclusions

Much of the WDR documentation stresses the project as being important to ensuring the safety and resilience of downstream communities. The terms resilience and sustainability have become throw-away headlines for much of the planning processes carried out by Federal and State Govt. It is used as a propaganda focus that hides the fact that a plan does anything but increase the level of community resilience and sustainability.

Note: (SEARS, p15/31. Part 16 sustainability) states, *"The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised. Consideration of sustainable populations and commerce is not in the EIS remit. There is also a problem in that you cannot maximise natural resources if you are making them extinct."*

The EIS processes for the WDR project and the Western Sydney Airport project are both flawed, in that neither EIS adequately addresses the close proximity of the projects or the substantial threats that both projects pose to each other.

The Federal Govt. has promoted the WSA project as a bonus for Western Sydney residents when the real underlying reason for the project, is to neutralise pressure on lifting the curfew at Sydney Airport. This has promoted great suspicion and scepticism within the community.

Likewise, this State Govt. WDR project is seen as a similar ruse, which uses flood mitigation as an upfront reason for extending the storage capacity of the Dam – when with a future 'stroke of a Legislative pen', the promoted function of flood mitigation and the temporary increased water level could be made redundant by legislation to permanently increased storage.

RAWSA contends that the WDR EIS does not adequately address the threats posed by operations of the nearby airport and far from enhancing it, community resilience and sustainability are actually undermined by both projects. It is therefore prudent that the EIS examines, analyses and documents the aviation threats to the raising of Warragamba Dam.