

Our Ref: ID 2831  
Your Ref: DA86/2720-Mod-12 & DA3-Mod-10

19 December 2024

Chris Eldred  
Department of Planning, Housing & Infrastructure  
Locked Bag 5022  
Parramatta NSW 2124

Via email

email: Christopher.Eldred@planning.nsw.gov.au  
CC: shelly.stingmore@one.ses.nsw.gov.au

Dear Chris,

### **Development Modification for Penrith Lakes Proposed Fill**

NSW SES has become aware of the State Significant Development Modifications, DA2-Mod-12 and DA3-Mod-10 for Penrith Lakes Proposed Increased Fill. It is understood that the proposed modification involves the importation of 9.7 million tonnes of fill to the Penrith Lakes site.

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes, planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

The NSW SES recommends that consideration of flooding issues is undertaken in accordance with the requirements of NSW Government's Flood Prone Land Policy as set out in the [Flood Risk Management Manual](#) 2023 (the Manual) and supporting guidelines, including the [Support for Emergency Management Planning](#) and relevant planning directions under the *Environmental Planning and Assessment Act, 1979*. Some of the relevant issues which are of concern to the NSW SES are detailed in Attachment A.

**In summary, we:**

- **Recommend** undertaking further modelling to demonstrate the proposed fill does not impact on regional evacuation routes across all flood extents, up to and including the Probable Maximum Flood (PMF) in accordance with the SEPP which states that development should not "*adversely affect the safe occupation and efficient*

*evacuation of people or exceed the capacity of evacuation routes for the Hawkesbury-Nepean Valley floodplain”<sup>1</sup>.*

- **Recommend** demonstrating any flood impacts as a result of the modification do not impact on the ability of site users to safely evacuate the site.
- **Recommend** ensuring DPPI is satisfied the increases in flood depth in residential areas to the east of the site does not *“result(s) in detrimental increases in the potential flood affectation of other development or properties”<sup>2</sup>*
- **Recommend** further modelling is undertaken showing the flood hazard for the site in post development conditions to help better understand the risks to life and property posed by this modification.
- **Note** there are existing, know evacuation constraints in and around the Penrith Lakes area<sup>3</sup>. Any future development facilitated by this modification should not impact on evacuation capacity for the broader Hawkesbury Nepean Valley.

Please feel free to contact Kate Dawes via email at [rra@ses.nsw.gov.au](mailto:rra@ses.nsw.gov.au) should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely,



Kirra Waite  
A/ Senior Manager Emergency Risk Management  
**NSW State Emergency Service**

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<sup>1</sup> NSW Government, State Environmental Planning Policy (Precincts – Western Sydney Parkland City) 2021, Chapter 5 Penrith Lakes Scheme, Part 5.6 Miscellaneous Provisions, 5.38 Flood Planning (2)(c)

<sup>2</sup> NSW Government, State Environmental Planning Policy (Precincts – Western Sydney Parkland City) 2021, Chapter 5 Penrith Lakes Scheme, Part 5.6 Miscellaneous Provisions, 5.38 Flood Planning (2)(b)

<sup>3</sup> NSW Government. 2023. Hawkesbury Nepean Flood Evacuation Model Report.

## **ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline<sup>4</sup>**

**Principle 1 Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.**

**Principle 2 Decisions should be informed by understanding the full range of risks to the community.**

Decisions relating to future development should be risk-based and ensure Emergency Management risks to the community of the full range of floods are effectively understood and managed.

The site itself is prone to flooding as frequently as a 10% Annual Exceedance Probability (AEP) event,<sup>5</sup> and is inundated during the Probable Maximum Flood to depths in excess of 10 metres in some areas of the site.<sup>6</sup>

The State Environmental Planning Policy (Precincts – Western Sydney Parkland City) 2021 states in regard to flood planning for Penrith Lakes *“Development consent must not be granted to development on land the consent authority considers to be below the level of a probable maximum flood unless the consent authority is satisfied the development—*  
*(b) will not significantly adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties*  
*(c) will not significantly adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of evacuation routes for the Hawkesbury-Nepean Valley floodplain in the event of a flood”<sup>7</sup>*

The Flood Impact Assessment states that *“slight changes in water level occur in the 0.1%, 0.05% and 0.02% AEP design flood events. These increases in water level, which do not exceed 50 mm, typically occur to the immediate east and south-east of the site on adjacent properties”<sup>8</sup>*. These impacted areas as shown in the provided mapping include residential areas to the east of the Penrith lakes site. While the report further states *“It should be noted that the increases in water level, which range up to 31 mm during the 0.05% AEP design flood*

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<sup>4</sup> NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

<sup>5</sup> Water Technologies, 2024, Flood Impact Assessment – Western Sydney Lakes Landform, 10% AEP Existing Flood Depth, Page 45

<sup>6</sup> Water Technologies, 2024, Flood Impact Assessment – Western Sydney Lakes Landform, Probable Maximum Flood Existing Flood Depth, Page 54

<sup>7</sup> NSW Government State Environmental Planning Policy (Precincts – Western Sydney Parkland City) 2021, Chapter 5 Penrith Lakes Scheme, Part 5.6 Miscellaneous Provisions, 5.38 Flood Planning (2)(b)(c)

<sup>8</sup> Water Technologies, 2024, Flood Impact Assessment – Western Sydney Lakes Landform, Section 5 Assessment of Impacts, Page 15

*event, occur on properties subject to extreme depths of inundation greater than 2.5 m with depths ranging up to 4.5 m on properties in the 0.02% AEP design flood event”,<sup>9</sup> We recommend ensuring that DPHI are satisfied the proposal complies with the SEPP regards to the adverse effects of increased flood depth on residential property in this area.*

Further, significant regional evacuation routes including the Castlereagh Road Route and the Northern Road Route are located to the east of the site in close proximity to the mapped extent of water level changes<sup>10</sup> as a result of this modification. The Flood Impact Assessment does not clearly demonstrate that there are no impacts on regional evacuation routes across all flood extents, up to and including the PMF.

We recommend demonstrating as part of the Flood Impact and Risk Assessment that there are no impacts on regional evacuation routes and that any impacts as a result of the modification do not prevent safe evacuation of the site, by site users, as provided by the SEPP. As there are known, existing evacuation constraints in and around the Penrith Lakes Area, any future development enabled by this modification should not impact on available evacuation capacity.

We also recommend the Flood Impact Assessment is revised to include the flood hazard for the site in post development conditions to help better understand the risks to life and property posed by this modification.

**Principle 3 Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.**

Any impacts on existing regional evacuation routes as a result of the proposed modification are likely to have significant consequences for the local community.

**Principle 4 Decisions on development within the floodplain does not increase risk to life from flooding.**

**Principle 5 Risks faced by the itinerant population need to be managed.**

**Principle 6 Recognise the need for effective flood warning and associated limitations.**

**Principle 7 Ongoing community awareness of flooding is critical to assist effective emergency response.**

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<sup>9</sup> Water Technologies, 2024, Flood Impact Assessment – Western Sydney Lakes Landform, Section 5 Assessment of Impacts, Page 15

<sup>10</sup> Water Technologies, 2024, Flood Impact Assessment – Western Sydney Lakes Landform, Appendix D Impact Maps, Pages 86-96