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**Sent:** Wednesday, 14 June 2023 2:20 pm  
**To:** Infrastructure Resilience [DPMC] <[InfrastructureResilience@dpmc.govt.nz](mailto:InfrastructureResilience@dpmc.govt.nz)>  
**Cc:** Iain Dawe <[iain.dawe@gw.govt.nz](mailto:iain.dawe@gw.govt.nz)>  
**Subject:** Require critical infrastructure to have a resilience standard

Kia ora

I work for the Bay of Plenty Regional council as a natural hazards planner. We have a natural hazard risk assessment methodology in our regional policy statement that includes critical infrastructure (lifeline utilities) / buildings / and risk to life and is required to be undertaken for all new land use change (e.g. greenfield development). <https://atlas.boprc.govt.nz/api/v1/edms/document/A3890652/content>

Although there is a requirement to assess natural hazard risk for critical infrastructure, there is no requirement to meet a minimum resilience standard or low risk threshold under this RMA tool. Whereas we can require low risk for buildings and risk to life under the RMA (i.e. floor levels above the 1%AEP + CC). Standards for infrastructure are often loosely described in Development Codes and or reference the Building Act, which are often out of date and not consistent across the region, let alone the country. And in almost all cases, these existing “standards” have no allowance for climate change impacts like rising sea levels and high ground water in coastal locations.

Therefore, I strongly support the proposal to create minimum resilience standards for critical infrastructure. Because it is no use having resilience standards for buildings and subdivisions under the RMA, and not for the infrastructure required to support these communities.

These standards should consider whether some infrastructure require higher resilience standards than residential buildings. For example, waste water pump stations may require a greater liquefaction resilience standard (e.g. 1000 year seismic event) compared to a single residential dwelling (e.g. 500 year seismic event). This is particularly important for new greenfield development where it may be difficult to achieve the minimum standard or too costly (due to high groundwater or poor ground) and this should be considered up front before the land use change occurs. This type of assessment would be valuable as part of the Spatial Planning process, where rather than the status quo approach of assuming we can create/engineer resilient infrastructure anywhere, we may be best to avoid some areas.

Kind regards,

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