Executive Summary

Energy Farms Limited (EFL) is proposing to develop 193 Hectares of land on 1618 Wellington Road in Rangitikei, Manawatū-Whanganui Region for solar farm generation. Beca Limited (Beca) have been commissioned by EFL to prepare an Ecological Impact Assessment (EcIA) to support the resource consent application for the proposed works which include works within, and earthworks within 10 m of, intermittent streams, as well as vegetation clearance.

The property is currently used for dairy farming with paddocks comprised of typical pasture species, and a 0.91 hectare vegetation patch consisting of mature exotic trees at the southern end of the property. The initial site walkover in January 2022 identified a potential wetland in the northern end of the property, adjacent to a watercourse. This area was assessed as having a low likelihood of meeting the definition of a 'natural wetland' under the National Environmental Standards for Freshwater NES-F (2020). During the site investigation in April 2022 this was confirmed to be a non-wetland area under the NES-F (2020).

The property also contains three ephemeral and three intermittent watercourses. Ecological features within the property may provide habitat for native fauna including common native bird species, native skinks, and native bats. Native fish species may also be present at certain times of the year in available aquatic habitat.

The completion of a preliminary ecological constraints assessment has ensured that the ecological effects of installing solar panels and associated infrastructure on the site have been avoided and minimised where possible through design.

Remaining potential construction phase and operational adverse effects as a result of the proposal include:

- Potential injury and/or mortality of fauna;
- Vegetation clearance and loss of terrestrial habitat;
- Earth disturbance leading to potential deposition of suspended sediments into watercourses.
- Increased impervious surface landcover and potential alterations to hydrology;
- Alteration to intermittent watercourses;
- Loss of potential ecological value.

Proposed measures to address these effects include:

- Timing of construction to avoid bird nesting season (Sept Feb) or pre-clearance nest surveys;
- Completion of a lizard risk assessment prior to the commencement of work and the development and implementation of a lizard management plan if native lizards are present.
- Completion of a bat survey prior to the commencement of work and the development and implementation of a bat management plan if native bats are present;
- Terrestrial and/or riparian planting to increase indigenous dominance of vegetation;
- Implementation of robust erosion and sediment control measures to avoid sediment runoff into the wetland and watercourses;
- Implementation of good practice watercourse and stormwater management.

The overall ecological effect of the proposal is considered to be **Very Low-Low** assuming the recommended mitigation measures are implemented.

