

FOREST MANAGEMENT PLAN 2014–2023 — SOIL SEED BANKS

3194. Hon Diane Evers to the Minister for Environment:

I refer to the South-West forest regions covered by the *Forest Management Plan 2014–2023*, and I ask:

- (a) which species of flora take more than five years to achieve a competent and resilient soil seed bank following a fire to ensure absolute reinstatement of the species in the event of a subsequent fire;
- (b) for each of the species in (a), following a fire, how many years does it take for a competent soil seed bank to be re-established to ensure the species is resilient to a subsequent fire; and
- (c) what is the minimum fire frequency for each of the species in (a), if they are to survive under expected increases in warming and drying of the climate?

**Hon Stephen Dawson replied:**

- (a)–(c) There are 4035 plant species in the south-west forest regions. Some species rely on a soil seed bank, others on a canopy stored seed bank, others have no seed bank. Site specific information on soil seed banks for the majority of these species is not known. However, research on replenishment of the soil seed bank at a community level shows recovery of the seed bank from three years after fire for species with short time to flowering. Flowering and seed set following fire is influenced by a range of interacting environmental factors. The minimum fire frequency for species in the south-west forests in response to projected changes in climate is unknown, although many plant species that occur in the area have evolved in a fire prone environment.