

# Western Sydney Strategic Plan – Threatened Species Habitat Mapping

*Ascelin Gordon*

*Vira Koshkina*

*RMIT University*

## Contents

0.1	Predictor layers used in the first step of the analysis . . . . .	3
0.2	A . . . . .	4
0.3	B . . . . .	5
0.4	C . . . . .	6

## 0.1 Predictor layers used in the first step of the analysis

ce\_radann - Annual Mean Radiation ce\_radhp - Highest Period Radiation ce\_radlp - Lowest Period Radiation ct\_frostdays\_lt2deg\_1 - Number of days/annum with minimum temperature less than 2 degrees ct\_tempann\_1 - Mean annual temperature ct\_tempseas\_1 - Temperature of Seasonality: Coefficient of Variation cw\_precipseas - Precipitation of Seasonality: Coefficient of Variation DEM\_c - The altitude of a cell above sea level (25m DEM of Hunter Valley) dl\_lat\_grid - Latitude (surrogate for location, dispersal, isolation) dl\_strmdstge2 - Euclidean distance to 2nd order streams and above dl\_strmdstge4 - Euclidean distance to 4th order streams and above dl\_strmdstge6 - Euclidean distance to 6th order streams and above gp\_k\_fillspl - filtered potassium (K), gaps filled in using geographically weighted regression model and spline function lf\_aspect\_tr - Beer's Aspect-transformation of aspect to a continuous scaled variable. Changed for the southern hemisphere by setting maximum value (2) to SE slopes (coolest) and minimum (0) to NW slopes (warmest). lf\_cti - Compound topographic index lf\_rough0100 - Neighbourhood topographical roughness based on the standard deviation of elevation in a circular 100 m neighbourhood. lf\_tpi0120 - Topographic position index using neighbourhood of 120m radius sfc\_aut\_b\_95 - Seasonal Fractional Cover representing proportions of green (g), bare (b), and non-green or senescent (b). Derived from Landsat imagery over the period of 1998 to 2012, for the season of autumn and for 95th percentile. soil - Soil type vegetation\_pct\_b - Native vegetation (PCT)

**0.2 A**

**0.3 B**

0.4 C