

Understanding and managing the impacts of deer on riparian vegetation

Project D2:
Deer

This project will improve understanding of the impacts of deer and support the develop of a comprehensive deer control strategy consistent with the new Healthy Waterways Strategy .

Deer impacts on Victoria's waterways are becoming increasing well documented. Inventory of values and threats surveys along many of MW's waterways have consistently found the impacts of deer to be a significant a threat to river health (multiple MW commissioned surveys) and water quality. This is particularly the case along high-value waterways that comprise the water supply catchments for Melbourne and Gippsland. Despite this, the threat posed by deer has largely gone unaddressed.

For the threat posed by deer to be effectively managed into the future, Melbourne Water, working in collaboration with other key stakeholders, needs a better understanding of deer abundance, impacts, and effective management options. Using the methods listed below, this project will identify priority areas and potential mechanisms for deer control activities and impact mitigation strategies.

This project, in collaboration with key stakeholders, will develop understanding necessary to develop a comprehensive deer management strategy consistent with MW's Healthy Waterways Strategy.

Methods

This project will be delivered by completing the follwong steps:

1. Collate and curate all available data from various projects within Melbourne Water, as well from other land management agencies and from the scientific literature on deer abundance and im-

pacts within the Melbourne Water region.

2. Using the collated data, and relevant spatial data (elevation, slope, aspect, EVCs), develop a spatial model to map waterways at potential greatest risk from deer impacts;

3. Assess the predictive capacity of the model via ground-truthing of deer abundance and impacts on riparian vegetation values, i.e. targeted surveys to test model predictions, particularly at high-risk, high-value sites

Outcomes

This project will:

1. quantify the threats posed by deer to waterway vegetation values, revegetation projects and water quality; and
2. map waterways at 'high risk' and inform management to reduce their impacts.

Project Team:

University of Melbourne

Joe Greet

Fiona Ede

Ami Bennett

Melbourne Water

Dan Robertson

Mark Scida

Paul Rees

Adam Barber

Ryan Van Den Hove

Al Danger

Tim Sanders

Shane Haydon

Finn Taylor

Rhys Coleman