

Evaluating direct seeding as a cost-effective revegetation technique

Project D3:
Direct Seeding

This project will provide tools and resources to guide the implementation of direct seeding for Melbourne Water and their stakeholders.

This project is transitional, with the research phase decreasing considerably over the coming year as the field trials at Cardinia Creek and Emu Creek come to an end. The ongoing project will be then managed as a 'Development Project' within Melbourne Water and led by a Melbourne Water staff member, with significant contributions from UoM staff as required.

The aims of this phase of the project are:

- 1) finalise data collection at the direct seeding trials,
- 2) synthesise the data and knowledge acquired throughout the course of the project into tools and resources for use by Melbourne Water; and subsequently
- 3) in conjunction with a Melbourne Water lead, embed direct seeding into MW business practice.

Methods

For the two field sites with ongoing trials, data collection will continue until the trials are 3 years old. At Cardinia Creek, assessments will end in November 2019, and at Emu Creek assessments will finish in July 2020. For both trials, plant numbers, survival and height will be measured.

A Melbourne Water-led team, with support from the UoM researchers, will then seek to embed direct seeding into the business by:

- ensuring direct seeding is incorporated

into all of Melbourne Water's revegetation guidance material, work instructions etc.;

- identifying and implementing solutions to any issues which may prevent the broader roll out of the program;
- communicating the opportunities and processes for direct seeding within the organisation; and
- exploring options for the sourcing of suitable seed stock to meet Melbourne Water's demand.

Outputs

- A step-by-step guide to implementing direct seeding, which will provide guidance on species selection, seed sourcing and treatment, site preparation, sowing, site maintenance and monitoring. This resource will incorporate the project findings.
- Training for Melbourne Water staff as part of the Riparian Vegetation Management Training, with more advanced training offered if required.

Three journal papers will be prepared from the existing data, with further paper/s describing data collected during this phase of the project.

Outcomes

- Increased use of direct seeding as a technique to achieve successful outcomes across MW revegetation sites

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