Sullivans creek revegetation documentary rational



In late 2017, SEE-Change received an ACT Environment Grant to revegetate sections of urban open spaces adjacent to Sullivans Creek with understory shrub cover to assist with the creation of wildlife corridors and attract small insectivorous birds and butterflies to suburban areas in Canberra's inner north. SEE (Society, the Environment and the Economy) -Change is a community, not-for-profit organisation with a mission to inspire, inform and support action to reduce Canberra's ecological footprint, improve the resilience of the ecosystem and improve the well-being of all individuals. I plan to produce a documentary outlining the process of conservation management involved in the revegetation effort that will draw particular attention to the complexity of the procedure with the message that it involves far ' more than just planting trees'.

Numerous studies (Greening Australia, (N. D); Munro, N. et al, 2011; and Bennett, Andrew, 1999) have shown that restoring groundcovers and shrub layers (in which small birds can nest, forage and hide) considerably increases the abundance of small native birds in that region. Vulnerable bird species in particular will benefit from the recreation of this type of habitat.

SEE-Change plans to plant 2800 locally-native groundcovers, shrubs and trees, as native species are adapted to local soils and climate, are frosty-hardy and drought tolerant, and have evolved with the local native fauna. The plants have also been selected to be diverse and structurally complex, as many studies (Daniels, G. and Kirkpatrick, J., 2006; and Munro, N. et al, 2011) have demonstrated that ecologically complex habitats not only provide for the broadest range of bird species but also assist in reducing the invasion of exotic and destructive bird species such as the Indian myna.

Habitat complexity also ensures birds are provided with the food, shelter and nesting materials and sites that they require. Ensuring multiple canopy layers as well as understory and groundcovers will provide shelter for a diverse range of birds and diversity among plant families will ensure the presence of seeds and nectar as well as insects for the birds to feed on. SEE-Change also intends to include logs in the plantings to increase the range of invertebrates, including beetles, butterflies, moths and bees which many birds feed on.

SEE-Change's revegetation project is an interesting case study of an in-situ, ecosystem conservation effort. In-situ conservation is incredibly important as it is a long term solution which addresses root of problem, and conserving an entire ecosystem ensures the protection of both known and unknown species and maintains ecosystem diversity. The project also highlights the importance and benefits of community engagement with multiple community consultation sessions conducted and four working bees occurring throughout the year. The site will also be consistently monitored for plant health as well as native bird abundance before, during and after the revegetation.

However, in late February of this year, Canberra experienced what the Bureau of Meteorology (2018) described as a "one-in-a-100-year weather event" with record February rainfalls recorded across Canberra in what had previously been the driest February since 1986. According to BoM, Canberra Airport and Charnwood recorded their highest ever rainfall totals for a February day with 64mm and 70mm respectively while the Sullivans Creek weather station recorded 97mm of rain on 26 February. According to World

Meteorological Organization (2018) figures, the Canberra area would normally see around 54 mm of rain for the whole of February. This immense volume of water resulted in major flash flooding, particularly across Canberra's inner north, the proposed site of the revegetation. This raised the concern that the proposed mulched garden beds may cause damage downstream in the case of future flooding events. As humanity continue to intensify global climate change, extreme weather events such as these will occur in greater frequency and magnitude. While we can and must continue to combat climate change locally to avoid climatic extremes such as these, it is also vital to take measures that prevent the localised damage that is caused from these extremes. Therefore, SEE-Change has been in consultation with the ACT government to adjust the landscape design of the project and the plantings have been postponed.

While this is an unfortunate setback it does draw to light the complexity of conservation management. In my documentary I will interview some of the conveners of the project about the process of undertaking a conservation effort such as this, asking them questions concerning the initiatives for the project; how certain decisions were made (particularly those concerning the location and nature of the plantings); the most challenging aspects of the revegetation; the value of community engagement and monitoring; and the importance of flexibility and creativity in developing solutions that allow the project to continue despite the variety of setbacks. This broad range of questions and first hand experience will allow the viewer to gain a deeper insight into the complexity I am attempting to convey through my documentary.

I will also film birds in my backyard and the Australian National Botanic Gardens, visiting flora of the same species that SEE-Change intend to plant to provide visuals of the project's intentions and to demonstrate the effectiveness of native flora in attracting birds. Personal footage of the flash flood in the proposed planting location and evidence of its occurrence that is still visible will also be included as visual footage as it is the most effective way to convey the magnitude of the event and the necessity of further planning.