## Introduction

Biodiversity Response Planning (BRP) is a long-term area-based planning approach to biodiversity conservation in Victoria. It is designed to strengthen alignment, engagement and participation between government, Traditional Owners, non-government agencies and the community.

DELWP Regional staff have been working with stakeholders on actions to conserve biodiversity in specific landscapes, informed by the best available science and local knowledge.

These Fact Sheets capture a point in time, reflecting data and knowledge available in 2020. They provide information for many (but not all) landscapes across Victoria, containing general information on the key values and threats in each area, as well as the priority cost-effective actions that provide the best protection of biodiversity. Fact Sheets are intended to provide useful biodiversity information for the community, non-government and government organisations during project planning and development.

Further information and the [full list of Fact Sheets](http://www.environment.vic.gov.au/biodiversity/working-together-for-biodiversity) is available on the Department’s Environment website.

## Landscape description

The Kiewa River focus landscape is about 50,235ha in size and stretches upstream from the confluence of the Kiewa and Murray Rivers to the foothills of the Victorian Alps to the south. Approximately 34%\* of the area is covered in native vegetation and public land makes up around 30%\* of the landscape. For area context, refer to the map at the end of this factsheet.

The focus landscape covers waterways of interest to the North East Catchment Management Authority and DELWP.

\* Note: this information is based on SMP data which may not be accurate due to last minute changes to the focus landscape boundaries.

## Cultural importance

We recognise that the entire landscape has high cultural value for Traditional Owners. Landscapes identified as having “notable” cultural importance are based on the density of recorded cultural heritage sites and knowledge shared by Traditional Owners. We also recognise that there are locations important to Traditional Owners not within these landscapes of interest.

## Stakeholder interest

As part of the BRP process, in October 2020 stakeholders were asked to nominate focus landscapes, values, threats and potential biodiversity actions. Representatives from DELWP, Parks Victoria, Trust for Nature, Goulburn Broken Catchment Management Authority, North East Catchment Management Authority, Taungurung Land and Waters Council, Yorta Yorta Nation Aboriginal Corporation, and the Alpine Resorts agreed on the boundaries and key aspects of this landscape.

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|  | Habitat Distribution Models identified 4 species with more than 5% of their Victorian range in this focus landscape |
| Plant | The 4 plant species of importance are:   * Hornwort (*Ceratophyllum demersum)* Poorly Known, 13% Victorian range in area * Swamp Fern (*Thelypteris confluens*) Endangered 12% Victorian range in area * Water Shield (*Brasenia schreberi*) Vulnerable, 6% Victorian range in area * Deane's wattle (*Acacia deanei subsp. deanei*) Endangered, 5% Victorian range in area   Other species and communities identified by Traditional Owners and other stakeholders include: Alpine Sphagnum Bogs and Associated Fens, remnant patches of signficant vegetation, larger older paddock trees. |
| Snake | Species identified by Traditional Owners and other stakeholders include: Alpine Water Skink, Alpine Bog Skink |
| Sparrow | Species identified by Traditional Owners and other stakeholders include: Great Eastern Egret, Azure Kingfisher, Nankeen Night Heron |
| Frog | Species identified by Traditional Owners and other stakeholders include: Alpine Tree Frog, Spotted Tree Frog |

## Strategic Management Prospects

Strategic Management Prospects (SMP) models biodiversity values such as species habitat distribution, landscape-scale threats and highlights the most cost-effective actions for specific locations. More information about SMP is available in [NatureKit](https://www.environment.vic.gov.au/biodiversity/naturekit).

## Additional threats

Threats identified through the consultation (in addition to those modelled in SMP) process are:

* Weeds, including introduced invasive species such as Willows – a continuing threat in this riparian landscape, with ongoing removal required
* Pest species, such as deer – becoming more prevalent in this landscape and are moving along the floodplain between the foothills and the Murray River corridor
* Aquatic species such as carp – these are a historic and ongoing threat to water quality and native species’ populations
* Livestock access (damaging banks of waterway and source of pathogens in water)
* Urban encroachment (buildings and roads in close proximity to riparian areas and fragmenting remnant vegetation)
* Uncontrolled recreational use of riparian areas (boating, fishing and camping),
* Historical practices (gold mining and gravel/sand extraction)
* Hydrological influences e.g. power generation, barriers to fish passage, floodplain levees and changes to wetland watering regimes
* Climate change, with associated warming and drying climate, leading to generalised ecosystem stress, impacting species’ geographic range and changes to ecological function (e.g. seasonal flowering)
* More extreme weather and increased bushfire risk including canges in fire frequency and intensity
* Overall changes to river flow and fire regimes

## Which landscape-scale actions are most cost-effective in this landscape?

Some areas of this focus landscape have highly cost-effective actions which provide significant benefit for biodiversity conservation. Unfortunately the map is not available at this time – see explanation below.

The SMP priority action\* which ranks among the top 3% for cost-effectiveness of that action across the state for much of the area (>1,000ha) is to Control feral horses. Of the top 10% of cost effective actions, controlling rabbits and weeds provide the most cost-effective biodiversity benefits when considering all flora and fauna.

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| Rabbit | Control rabbits 14,929ha |
| Grain | Control weeds 13,309ha |

**\*Please note that the SMP analysis was completed for a similar polygon, which was used as a base for discussion, but the data summary included here is not considered completely accurate. Due to last minute boundary changes of this focus landscape, the SMP modelled output is only an estimate. A further update will be provided as soon as possible – please contact the regional Natural Environment Programs team for updated biodiversity information.**

Biodiversity management activities identified (in addition to those modelled in SMP) through the consultation process included deer control, enhancement of riparian areas (revegetation, controlling grazing, understorey enhancement), providing habitat connectivity between remnant vegetation patches and linear habitat (roadsides, riparian areas and areas managed for conservation), and improving aquatic biodiversity through weed control, erosion control and creating instream habitat.

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| The most cost-effective actions for flora and fauna | |
| SnakeFrogSparrowPlant | Plants, Reptiles, Amphibians, Birds – Control rabbits |
| Rat | Mammals – Combined cat and fox control |

For a further in depth look into SMP for this landscape please refer to [NatureKit](https://www.environment.vic.gov.au/biodiversity/naturekit).

