Vegwatch Monitoring Program

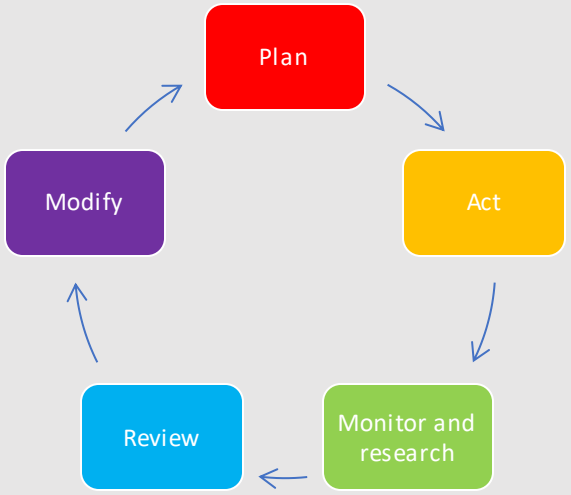
Practice and findings 2011 to 2018

Report to the Molonglo Catchment Group

Supported by the ACT Environment NRM program and
Capital Region Landkeepers

The role of monitoring

- Implementation of adaptive management.
- Monitoring measures changes over time of condition.
- Linked with research to justify remedial actions.
- Citizen science programs are integral.



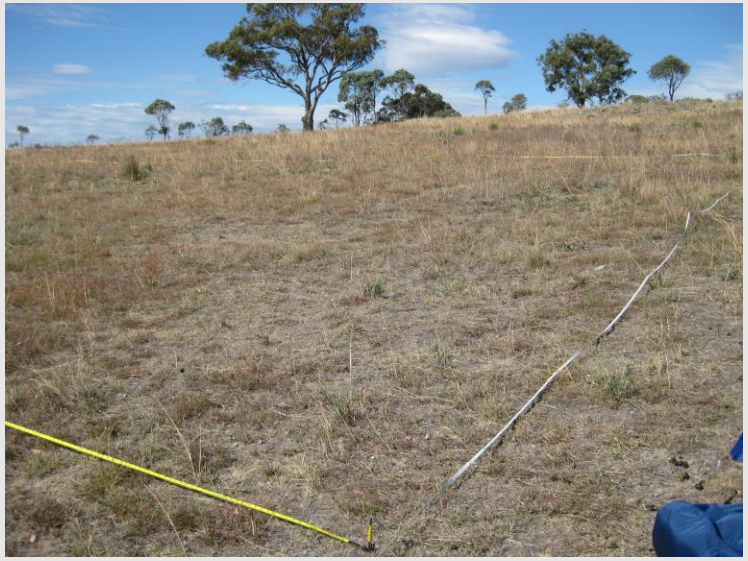
The Vegwatch monitoring program

- A citizen science monitoring program to measure change in condition of vegetation and habitat.

Is management achieving desired outcomes in my site?

- Link in with other programs to provide data for more complex analyses.

Is management achieving desired outcomes across the landscape?

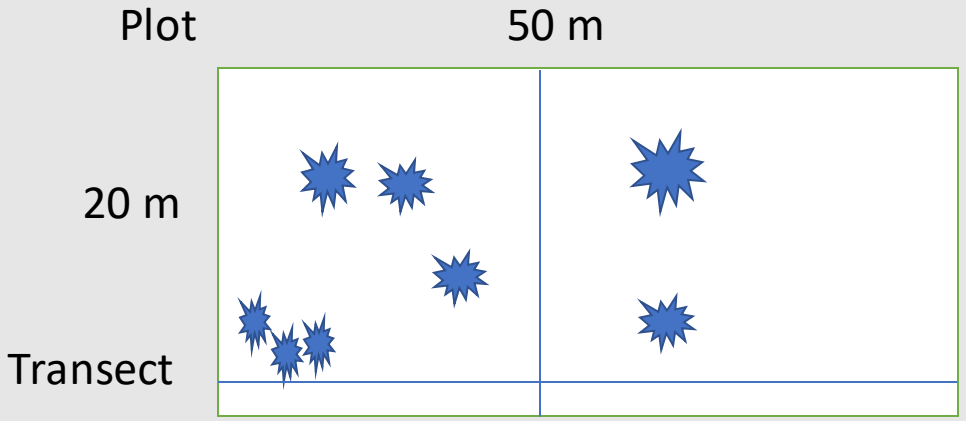


Wandiyali, pre-burn

Post-burn, higher diversity than the adjacent unburnt plot

Vegwatch implementation 2011 to 2018

- Data are collected in a plot and along transects.
- The data are used to calculate indices of condition.



Quantitative data collected:

1. Species richness and abundance
2. Species cover
3. Structural diversity
4. Habitat diversity

+ Photomonitoring

+ Observations of condition and management applied

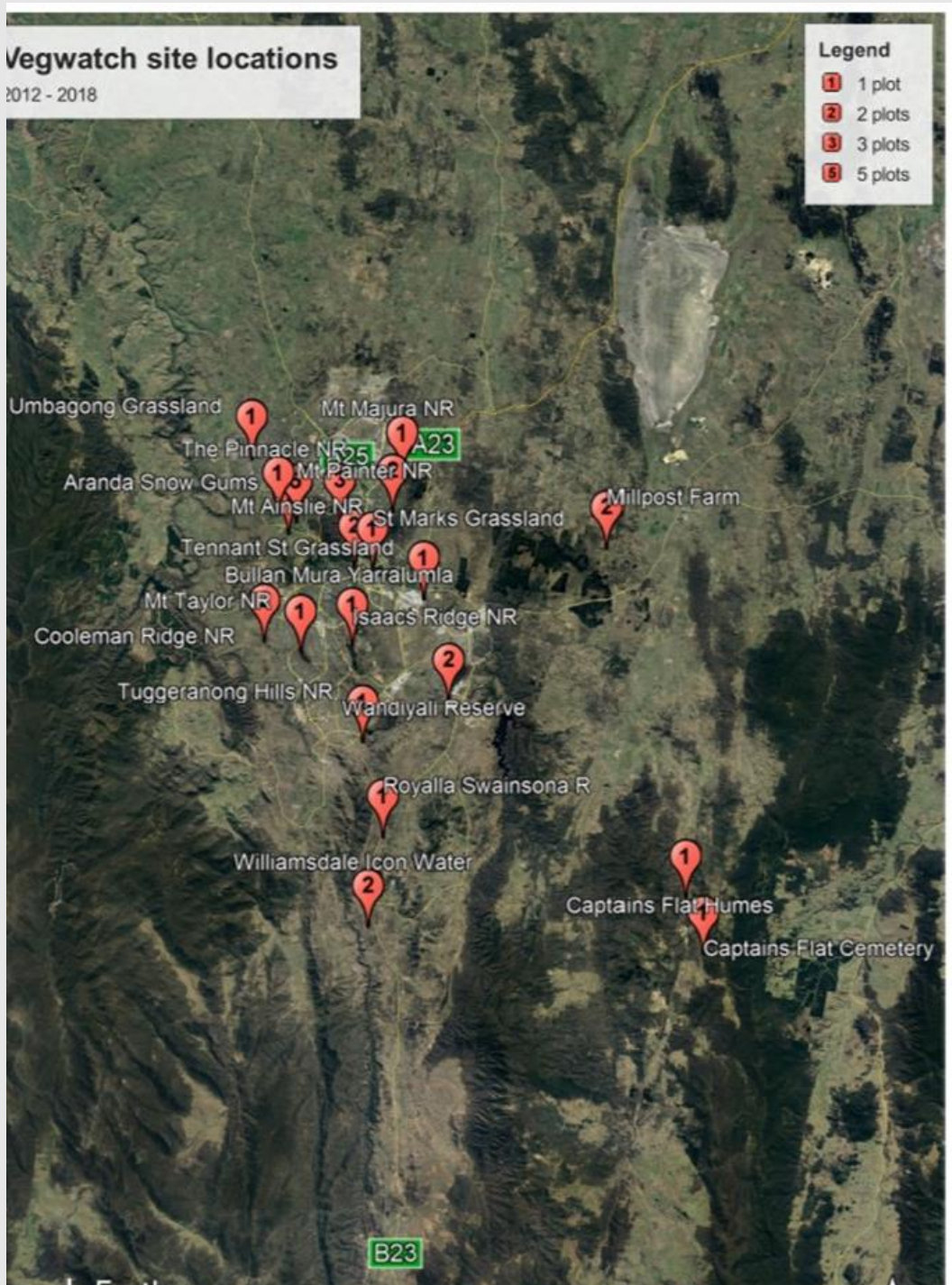
Characteristics of the plots

Since 2011, 33 plots have been established in 21 sites in the ACT region.

15 groups have been involved.

Management applied includes burning, woody weed control, herbaceous weed control and revegetation.

All but one are managed for conservation.



Vegetation structure

Vegetation association	Vegetation structure	Vegwatch plots (sites)
Natural Temperate Grassland	Grassland	5 (4)
Derived grasslands (Yellow Box – Red Gum woodland)		4 (3)
Other derived native grassland		4 (4)
Yellow Box- Blakely's Red Gum +/- White Box tall grassy woodland	Grassy woodland	8 (6)
Snow Gum mid-high grassy woodland		1 (1)
Mealy Bundy – Broad-leaved Peppermint shrubby mid-high open forest	Shrubby woodland	2 (2)
Brittle Gum-Scribbly Gum shrubby tall dry open forest		2 (1)
Environmental native plantings		3 (2)
Red Stringybark – Scribbly Gum – Red-anthered Wallaby Grass tall grass-shrub dry sclerophyll open forest	Forest	3 (1)
Snow Gum – Candlebark tall grassy woodland in frost hollows and gullies		1 (1)

The review of the Vegwatch program

The review was implemented to provide feedback to the participants and others,

To identify information to guide adaptive management,

Provide the data to incorporate into metadata sets and

Identify how Vegwatch can be effectively utilised in the future to guide adaptive management.

Identification of drivers that could compromise the data

1. Were the methods robust?

2. Were the data collected by citizen scientists robust and comparable to those collected by ecologists?

3. Were data significantly influenced by seasonal condition?

2013

2014

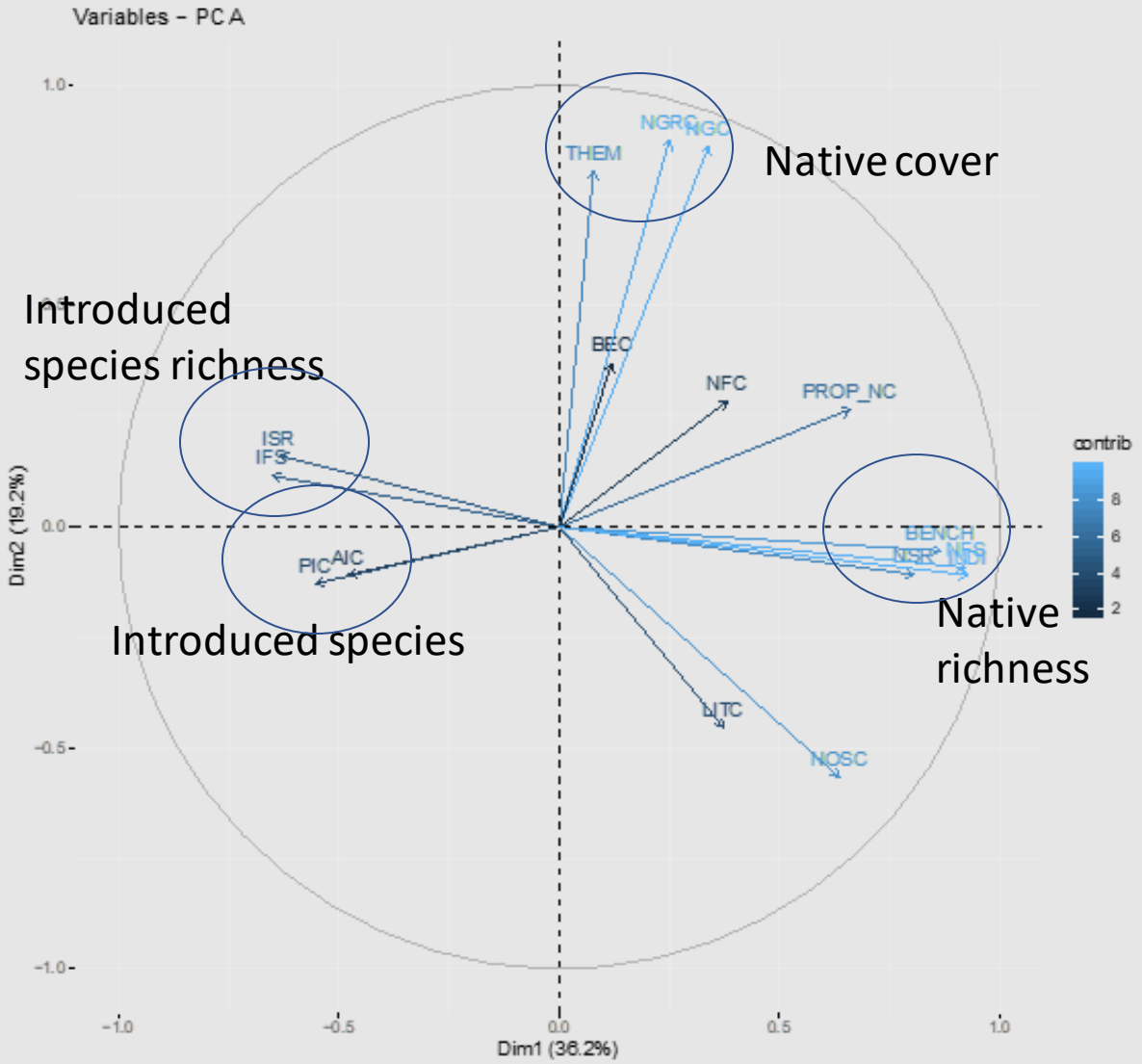
2015

2016

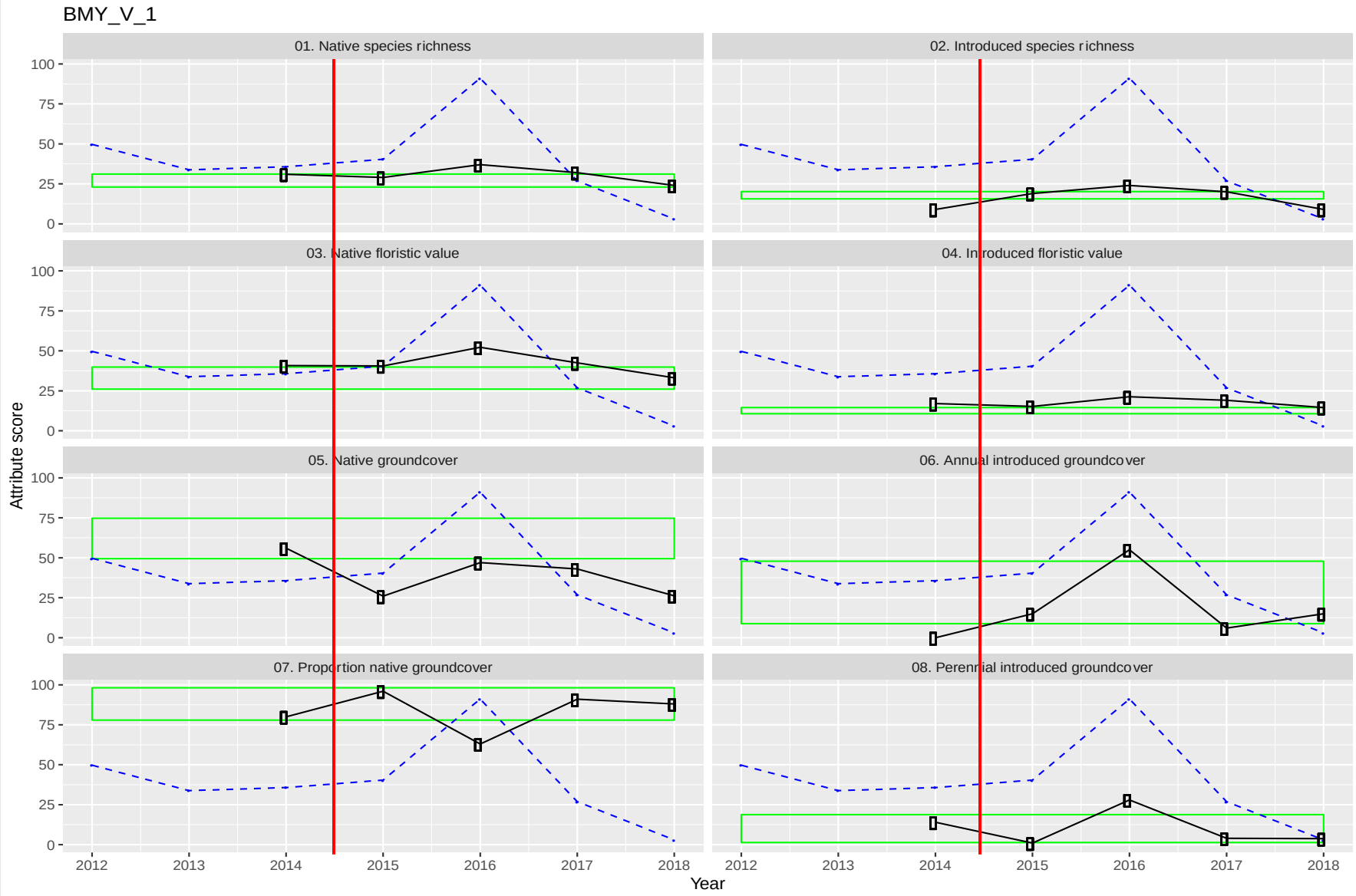
Factors related to the identified changes in condition

Primary drivers	Secondary drivers (applied actions)	Ecosystem stressors
Vegetation structure Past land uses and disturbance Seasonal variation	Biomass manipulation Revegetation	Invasive weeds Soil moisture availability

Indices that provided the most useful information about change in condition



2. Change in condition of the plots, 2011 to 2018



Condition	No. plots	Trend	No plots
Good	7	Improving: ↑	6
Good with some concerns	15	Stable or variable: ↔	14
Moderate	7	Declining: ↓	0
Poor	4	Unknown: ?	2

Management	Improving	Stable or variable
Burnt plots	3 + 2?	2 + 5?
Woody weed control		2
Herbaceous weed control	1	2
Revegetation: herbaceous species		2
Revegetation: woody species		3
No management	4 + 4?	

3. What value was the monitoring to the participants?

- 12 plots have been monitored five or more times
- 4 were only monitored once and then ceased
- 12 plots were only included from 2017

Those with good expertise in group or where expertise was provided were more likely to find it valuable.

Training and on-going support was vital to maintain interest and ensure data were collected consistently.

4. The future of Vegwatch

1. Changes to methodology

Simplified

Maintain consistency

More information collated on management applied

Information on disturbance to be provided to land managers

2. Implementation and continuity

Link with other programs: sharing data and resources

Feedback of information for reporting eg State of Environment

Funding: consistent project management is vital

Training and updating training

Contacts and more information

Citation: Sharp S., Vegwatch Monitoring Program: practice and findings 2011 to 2018. Molonglo Catchment Group, Canberra

For more information on the Vegwatch program: sarahsharp@molonglo.org.au

For copies of the report: Molonglo Conservation Group website: https://molonglo.org.au/VegwatchReview ()

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