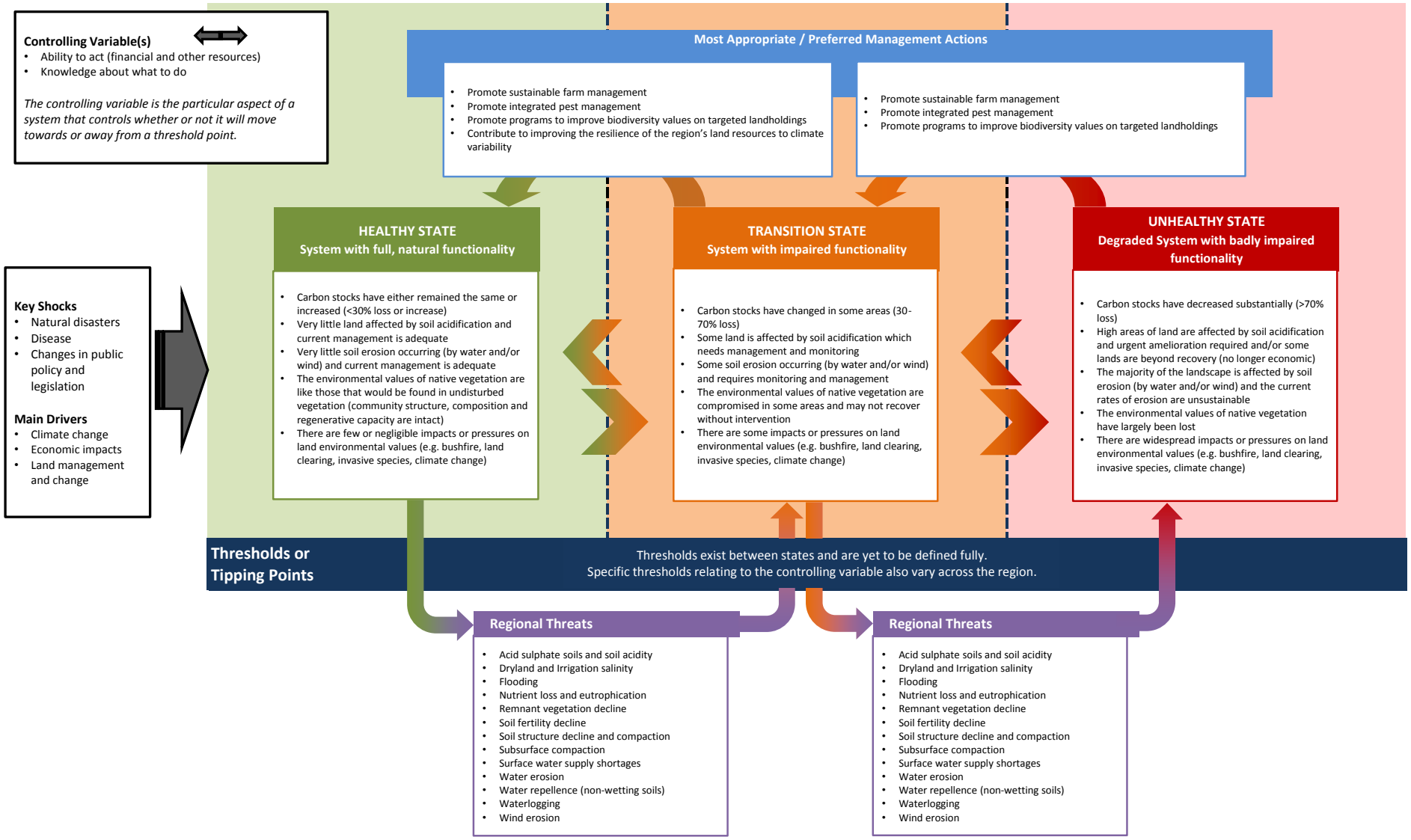
Controlling Variable(s)
Ability to act (financial and other resources)
Knowledge about what to do
The controlling variable is the particular aspect of a system that controls whether or not it will move towards or away from a threshold point.
Most Appropriate / Preferred Management Actions
Promote sustainable farm management
Promote integrated pest management
Promote programs to improve biodiversity values on targeted landholdings
Contribute to improving the resilience of the region's land resources to climate variability
Promote sustainable farm management
Promote integrated pest management
Promote programs to improve biodiversity values on targeted landholdings
Key Shocks
Natural disasters
Disease
Changes in public policy and legislation
Main Drivers
Climate change
Economic impacts
Land management and change
HEALTHY STATE
System with full, natural functionality
Carbon stocks have either remained the same or increased (<30% loss or increase)
Very little land affected by soil acidification and current management is adequate
Very little soil erosion occurring (by water and/or wind) and current management is adequate
The environmental values of native vegetation are like those that would be found in undisturbed vegetation (community structure, composition and regenerative capacity are intact)
There are few or negligible impacts or pressures on land environmental values (e.g. bushfire, land clearing, invasive species, climate change)
TRANSITION STATE
System with impaired functionality
Carbon stocks have changed in some areas (30-70% loss)
Some land is affected by soil acidification which needs management and monitoring
Some soil erosion occurring (by water and/or wind) and requires monitoring and management
The environmental values of native vegetation are compromised in some areas and may not recover without intervention
There are some impacts or pressures on land environmental values (e.g. bushfire, land clearing, invasive species, climate change)
UNHEALTHY STATE
Degraded System with badly impaired functionality
Carbon stocks have decreased substantially (>70% loss)
High areas of land are affected by soil acidification and urgent amelioration required and/or some lands are beyond recovery (no longer economic)
The majority of the landscape is affected by soil erosion (by water and/or wind) and the current rates of erosion are unsustainable
The environmental values of native vegetation have largely been lost
There are widespread impacts or pressures on land environmental values (e.g. bushfire, land clearing, invasive species, climate change)
Thresholds or Tipping Points
Thresholds exist between states and are yet to be defined fully.
Specific thresholds relating to the controlling variable also vary across the region.
Regional Threats
Acid sulphate soils and soil acidity
Dryland and Irrigation salinity
Flooding
Nutrient loss and eutrophication
Remnant vegetation decline
Soil fertility decline
Soil structure decline and compaction
Subsurface compaction
Surface water supply shortages
Water erosion
Water repellence (non-wetting soils)
Waterlogging
Wind erosion
Regional Threats
Acid sulphate soils and soil acidity
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