# **Theme: Seed and Plant Production Areas & Genetic Issues (Seed Sourcing)**

To complete this worksheet you will need to

* Watch the ‘Seed Sourcing’ themed videos on [regenTV](http://www.aabr.org.au/regentv/), including the [Mt Annan Seed Production Area](http://www.aabr.org.au/portfolio-items/mount-annan-cumberland-plain-seed-production-area-australian-botanic-garden-peter-cuneo-jordan-smith-and-gavin-phillips-field-day-2015/) and Greening Australia’s [Cumberland Plain Seed Production Area](http://www.aabr.org.au/portfolio-items/cumberland-plain-seed-production-facility-greening-australia-paul-gibson-roy-field-day-2015/)
* Read the regenTV information sheet on Seed and Plant Production Areas & Genetic Issues
* Refer to the [National Standards for the Practice of Ecological Restoration in Australia-](http://www.seraustralasia.com/standards/contents.html)
	+ [Seed Production Areas for Ecological Restoration](http://www.seraustralasia.com/standards/egseedproduction.html) and
	+ [Principle 1-Ecological restoration practice is based on an appropriate local indigenous reference ecosystem](http://seraustralasia.com/standards/principle1.html)

## Activity 1

**Seed Production Areas (SPA) can be established for a variety of reasons.**

Provide 4 reasons the SPAs were established at the Mt Annan Botanic Gardens and Greening Australia’s (GA) University of Western Sydney site?

| **Botanic Gardens-Mt Annan** | **Greening Australia- Cumberland Plain** |
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## Activity 2

**There are several standards listed on the SERA website for SPAs to ensure genetically diverse, vigorous, healthy, viable and resilient seed for restoration works.**

2a: From which stratum (trees, shrubs, groundcovers) are the main species produced in the seed production areas at Mt Annan and GA’s Cumberland Plain facility derived - and why?

2b: Name two species and the density at which they are being sown in the SPA at Mt Annan.

2c:At Mt Annan, what information does their germination testing provide?

2d: What was preventing the *Hibbertia* setting seed at GA’s Cumberland Plain facility and how was it remedied?

2e: How has GA ensured maximum production at their SPA and list their harvesting techniques?

2f: List three techniques GA uses to ensure healthy and vigorous seedlings/crops?

1.

2.

3.

## Question 3

**Seed Production Areas require secure land tenure and significant investment in infrastructure, machinery and labour.**

List four (4) costs that were associated with setting up the SPA at Mt Annan?

1.

2.

3.

4.