



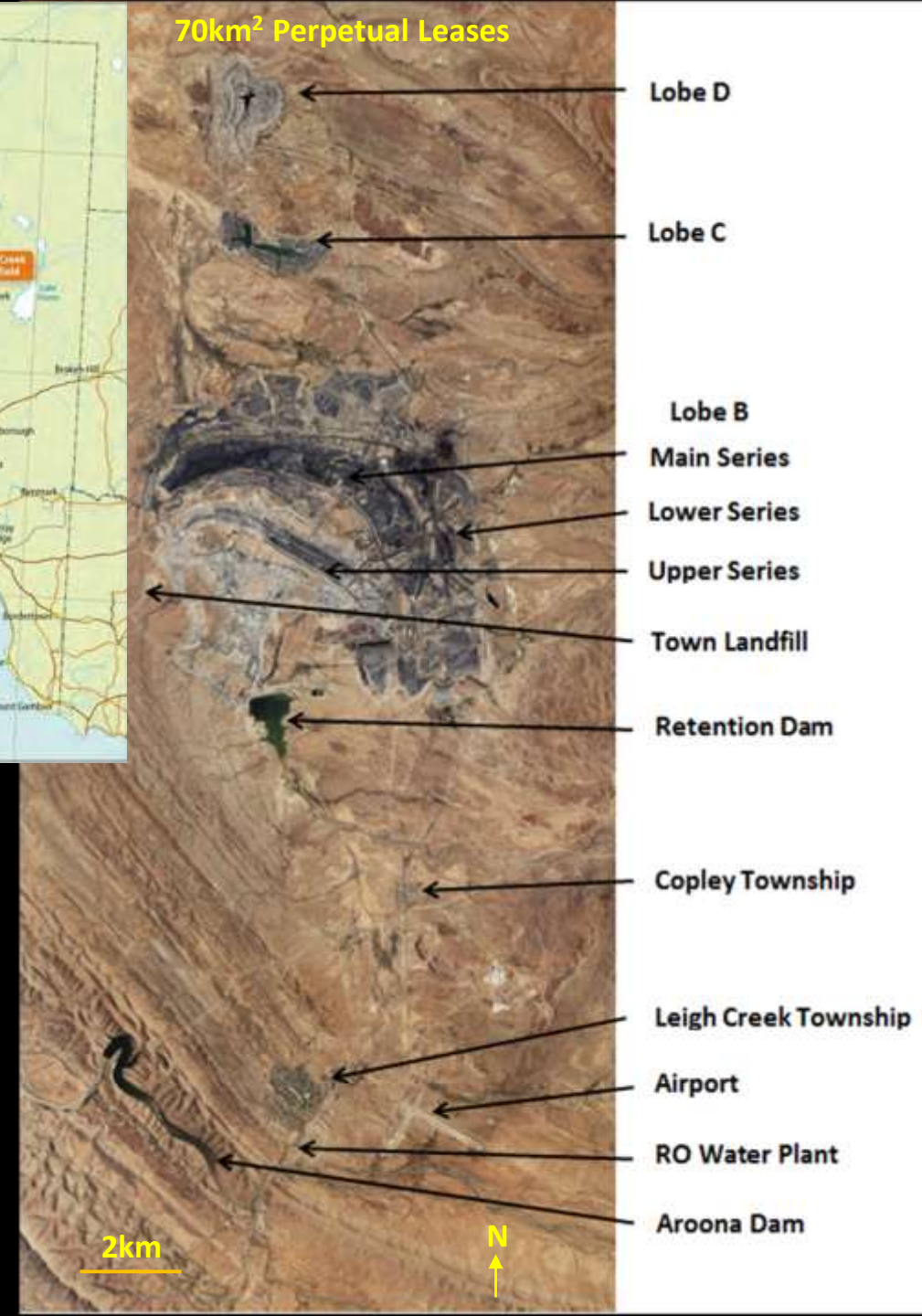
Lessons from the closure of the Leigh Creek Coalfield, South Australia

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Introduction

- Actively mined >100 years
- Circa 3.5Mtpa – 24M bcm overburden
- Privatised in 2000
- Previous ADP from 2000
- June 2015 decision to close
- 17 Nov 2015 last day of coal mining

Forewarning for closure is ideal, but not always possible



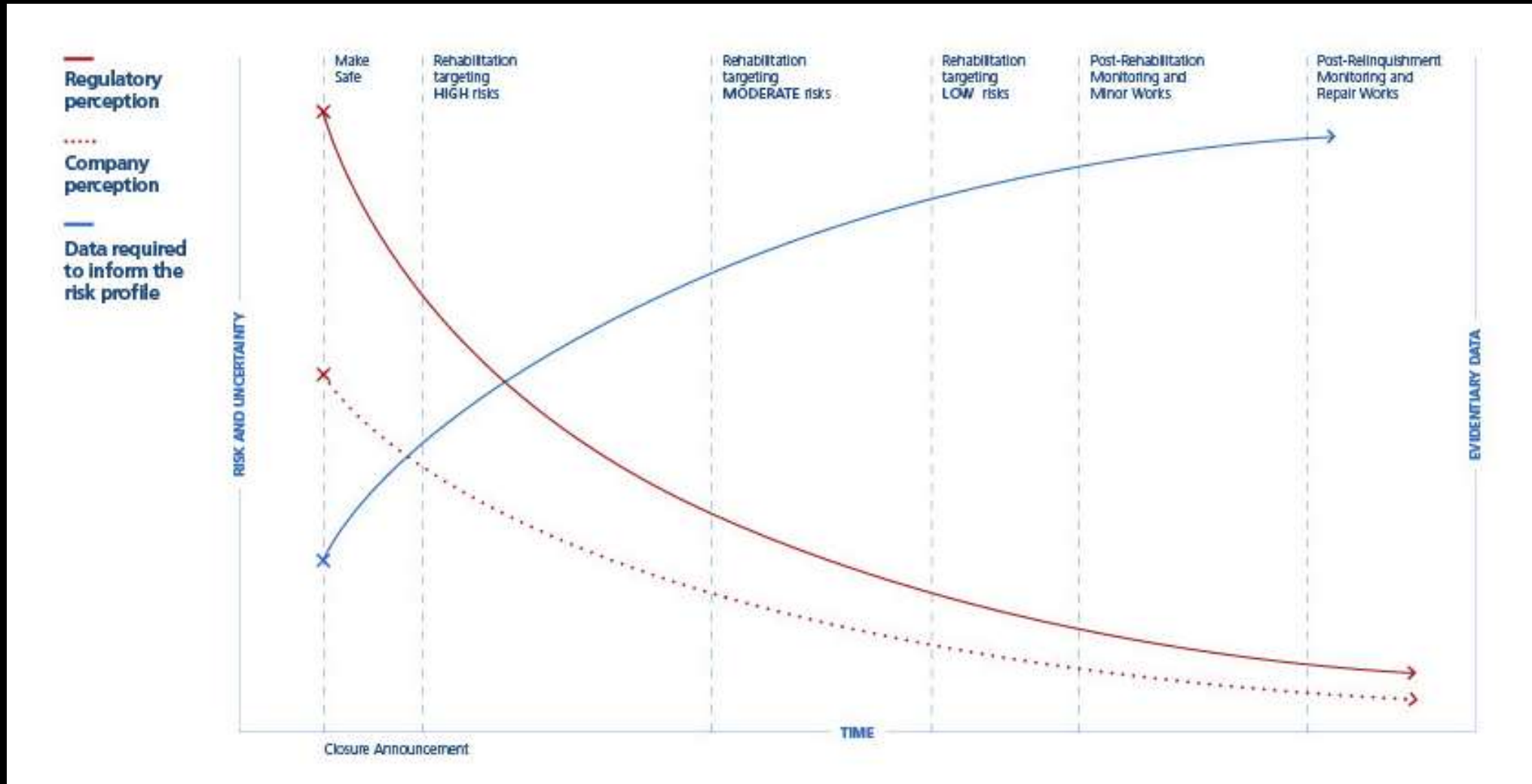
A Gap in Closure Expectations

	Flinders	Government Regulator
Risk	Known knowns	Unknown unknowns
Systems	Operational focus	Closure outcomes focus
Culture	Swift decisions	Evidence based decisions
Expectations	Tweak to existing Program	Re-assessment of Program
Timeline	6 months	Process to follow
Data	Operational history	Risk/Uncertainty focus

- Progress only made when:
 1. Needs & expectations understood,
 2. Source-pathway-receptor risk framework by geographic domain, and
 3. Key assumptions (closure objectives and final land use) articulated

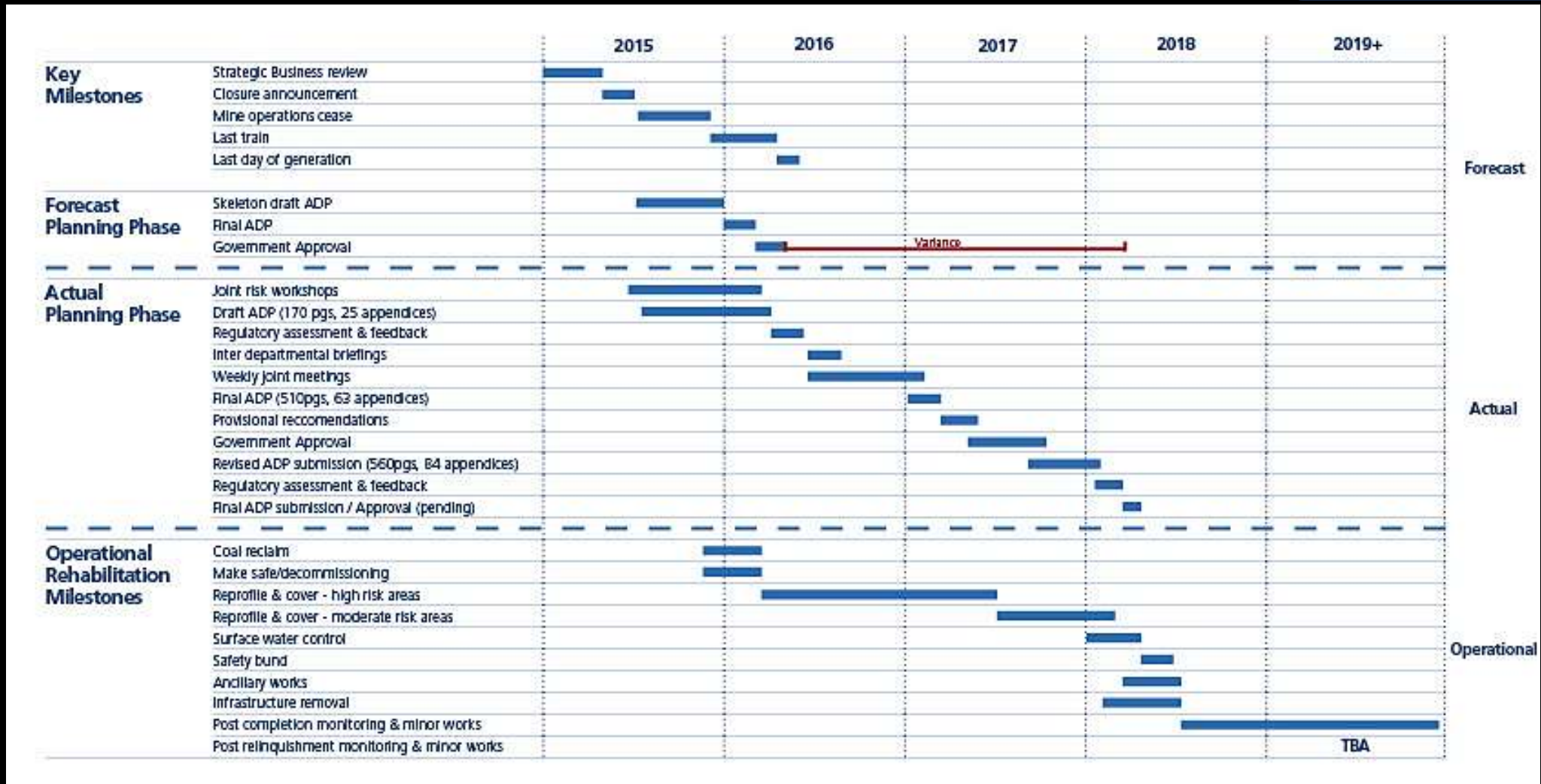
Effective communication, consideration, understanding and leadership is critical

Uncertainty in the closure process



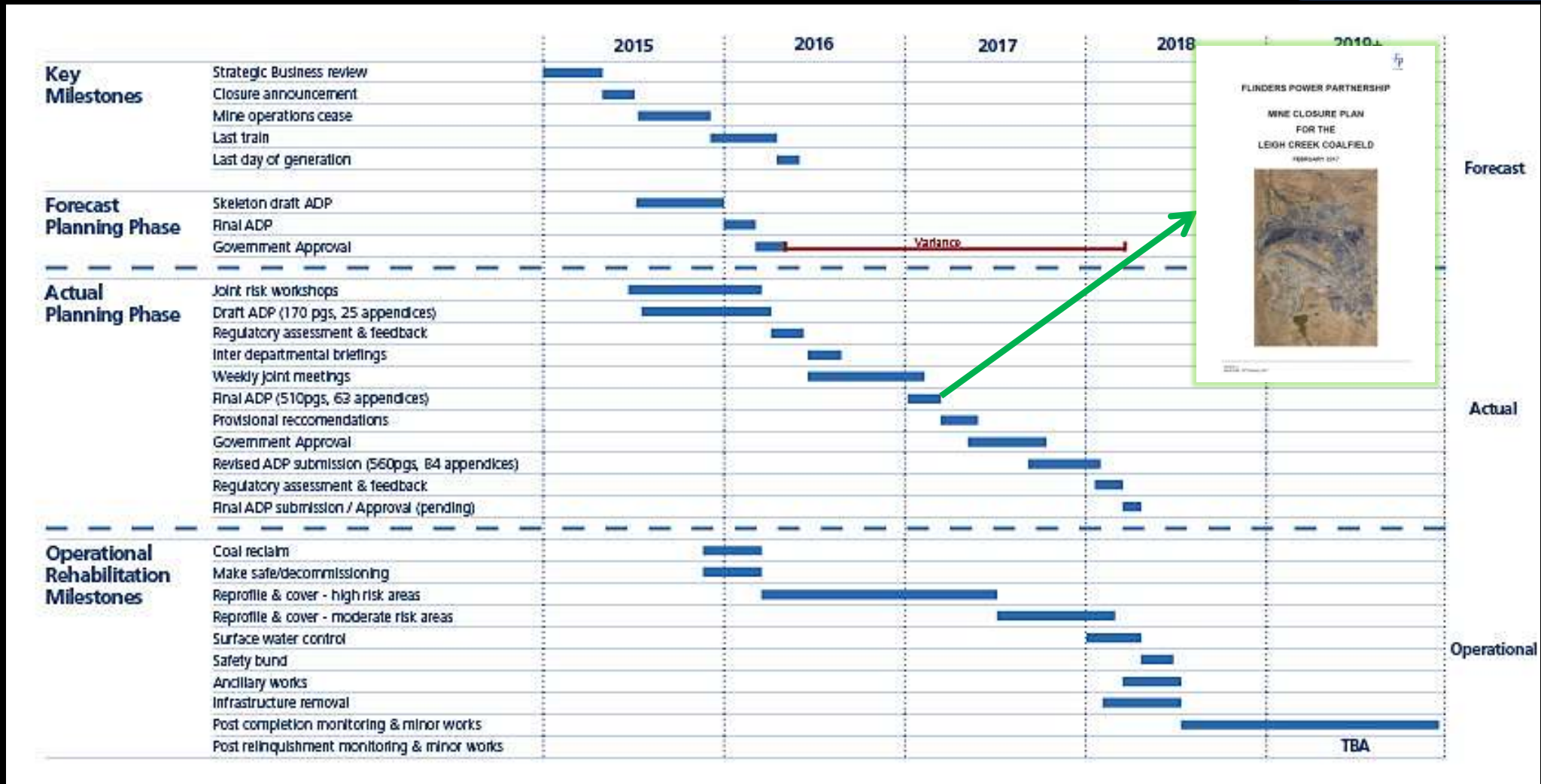
Uncertainty is only reduced by mutual behaviours and the risk assessment process

Timeline



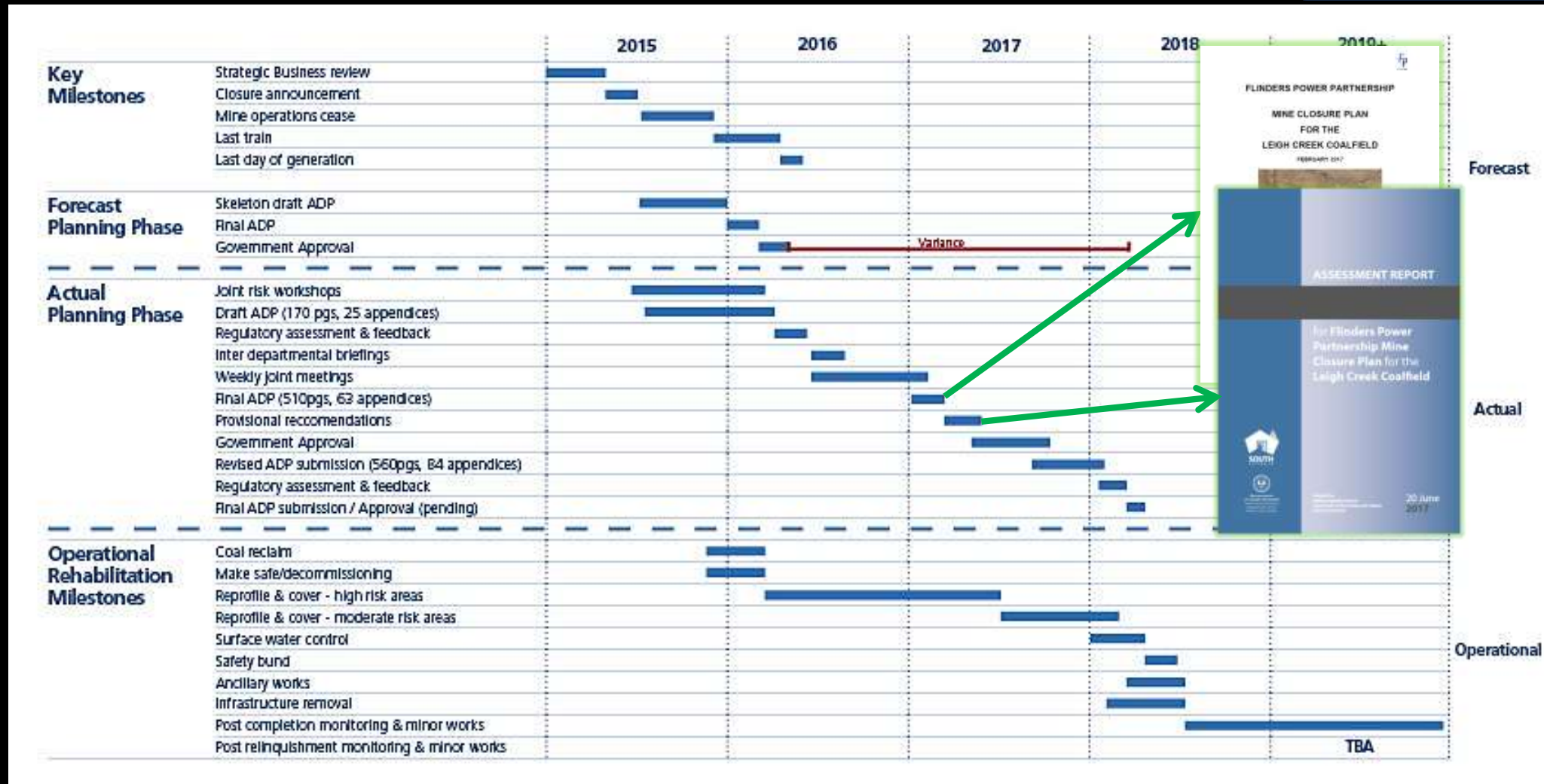
Concurrent planning and delivery requires a mature approach

Timeline



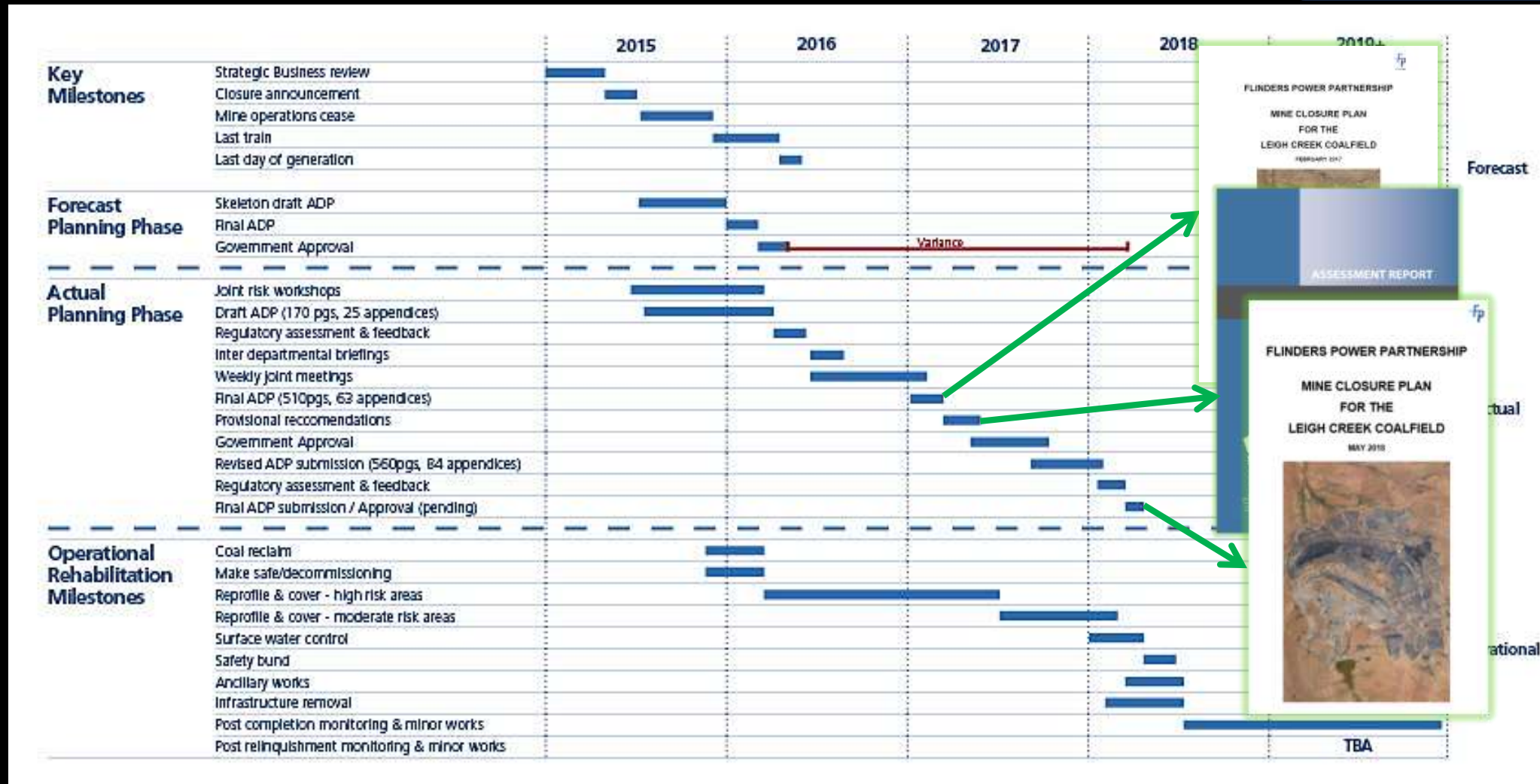
Concurrent planning and delivery requires a mature approach

Timeline



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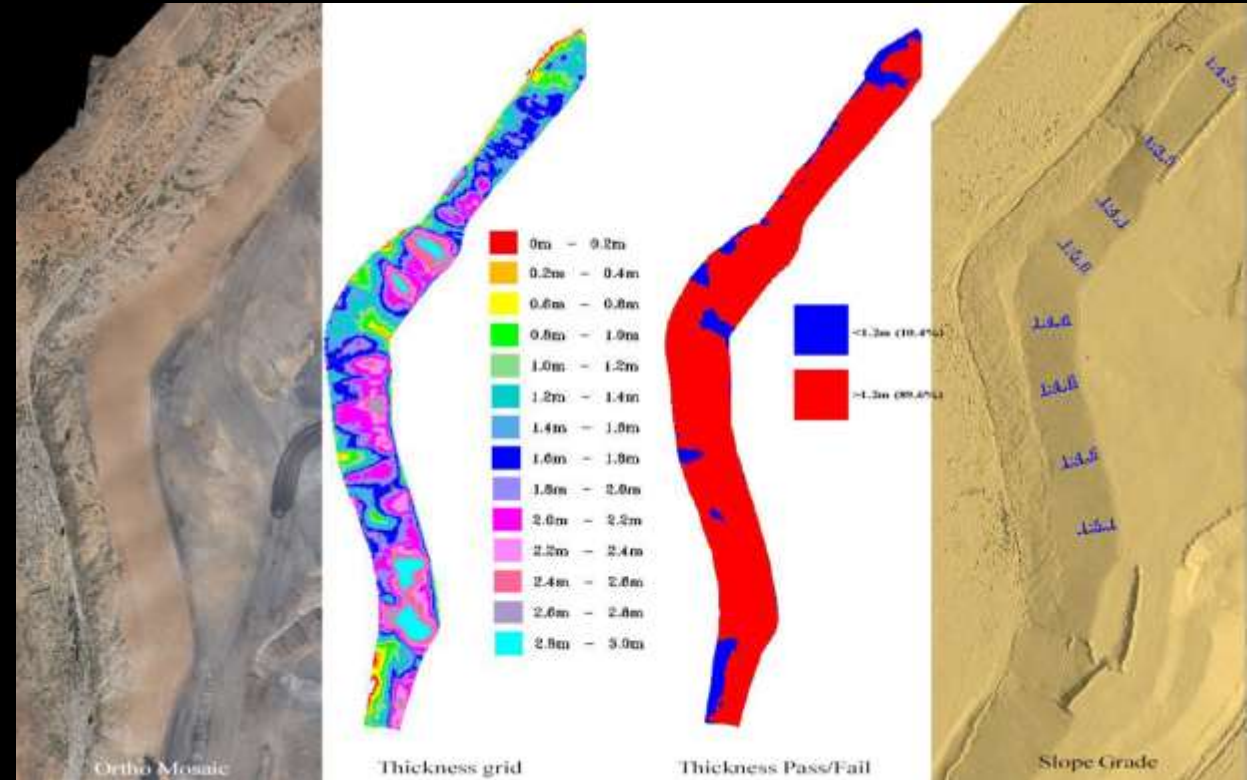
The Risk Assessment Process

- Closure outcomes with clear end-state
- Objective science-based evidence
- Focus on high residual risk
- Completion criteria linked to key risks, effective treatment strategies and measurement.
- Path to relinquishment



Rehabilitation status

- Conducted over a 3 year period with a workforce of approx. 60 personnel
- 14 million lcm of earthworks
- 4 million lcm of inert cover placement
- Over 70km of surface water bunds constructed
- 65000 hours of machine hours
- 117 UAV flights to date covering a distance of 2925km



Conclusion

- Effective Communication
- Risk based
- Outcomes focused
- Start Closure planning Early!

