



Strategic Environmental Assessment

Bryce Skarratt

BHP Billiton Iron Ore Environmental Approvals



Overview

- **What is a Strategic Assessment?**
- **What is the scope of this SEA?**
- **Why do a Strategic Assessment?**
- **Process and outcomes**
- **Timing**

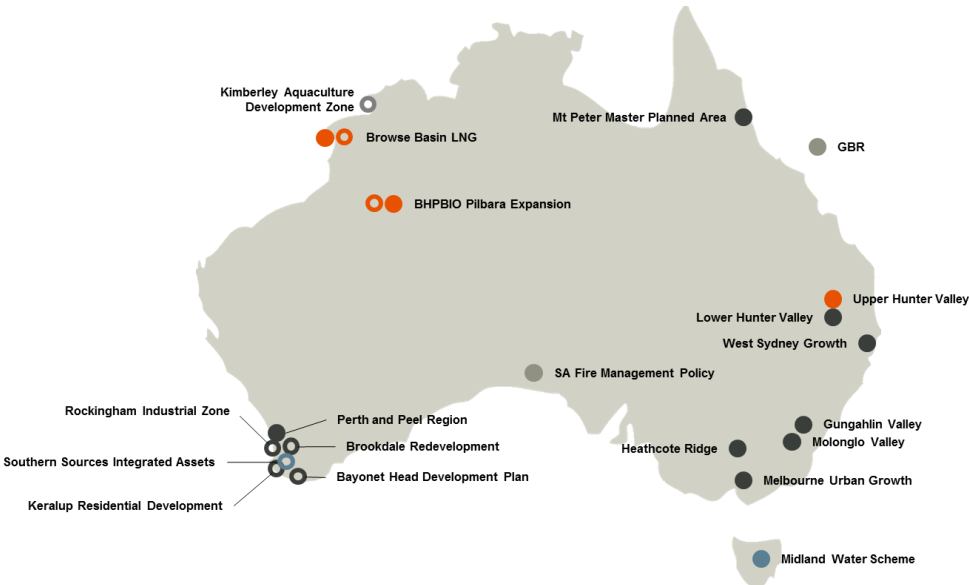
Copies of the assessment documents can be found at:

<http://www.bhpbilliton.com/society/regulatory>

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Strategic Assessments Overview

Examples



- Resource project
- Urban development
- Infrastructure project
- Natural resource management
- Federal strategic assessments
- WA strategic assessments

What is it?



1



2



Strategic Environmental Assessment scope

Development of future mine hubs for the next 30 to 100+ years

- All mining and associated infrastructure
- Central Pilbara focus
- Allows for acquisitions/divestments

Considers cumulative impacts (BHP Billiton Iron Ore and others) of current and proposed developments

Excludes:

Existing approved operations - Yandi, Area C and Newman

Recently referred South Flank project

North Pilbara operations – Yarrie

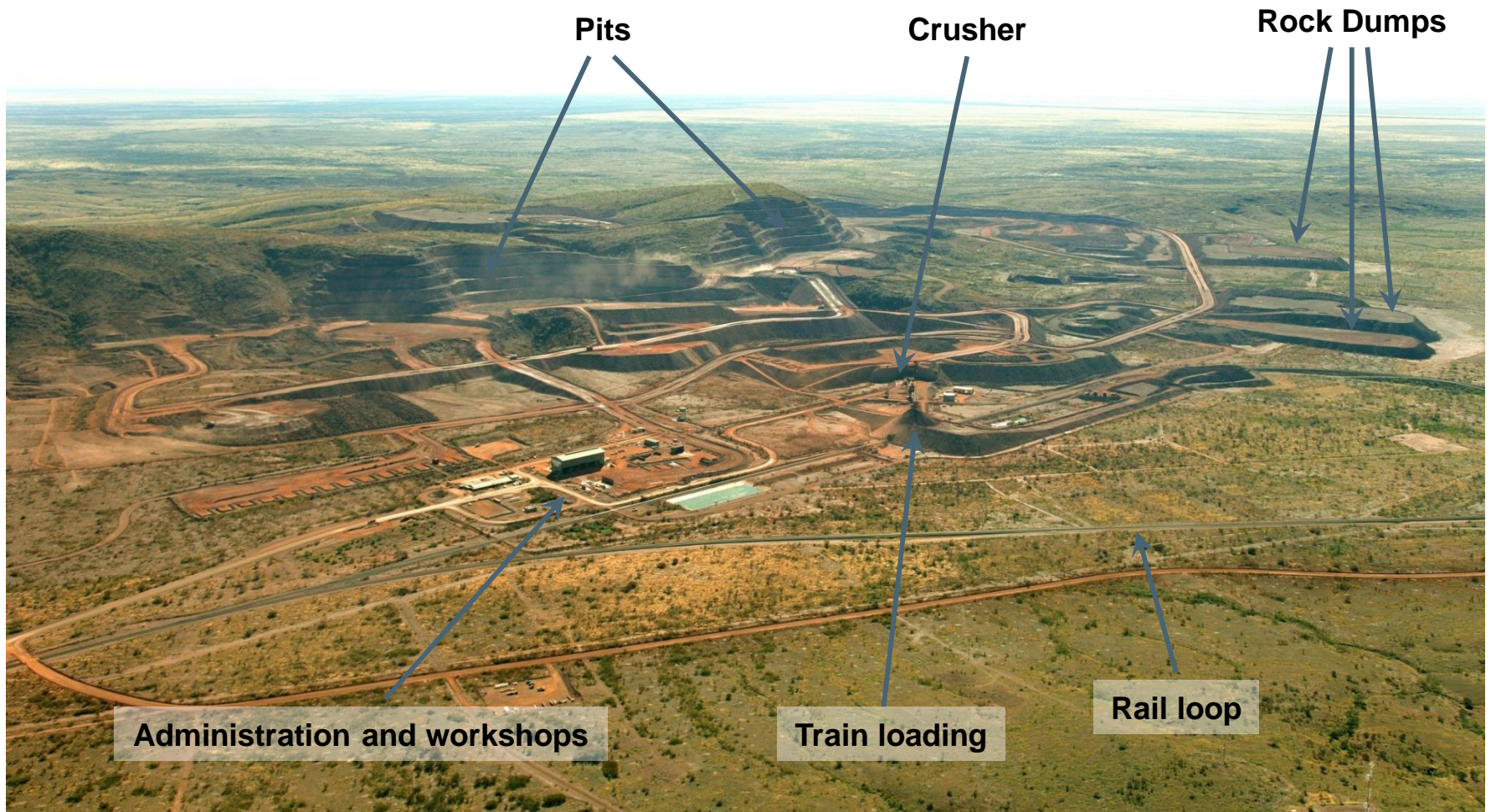
Port operations



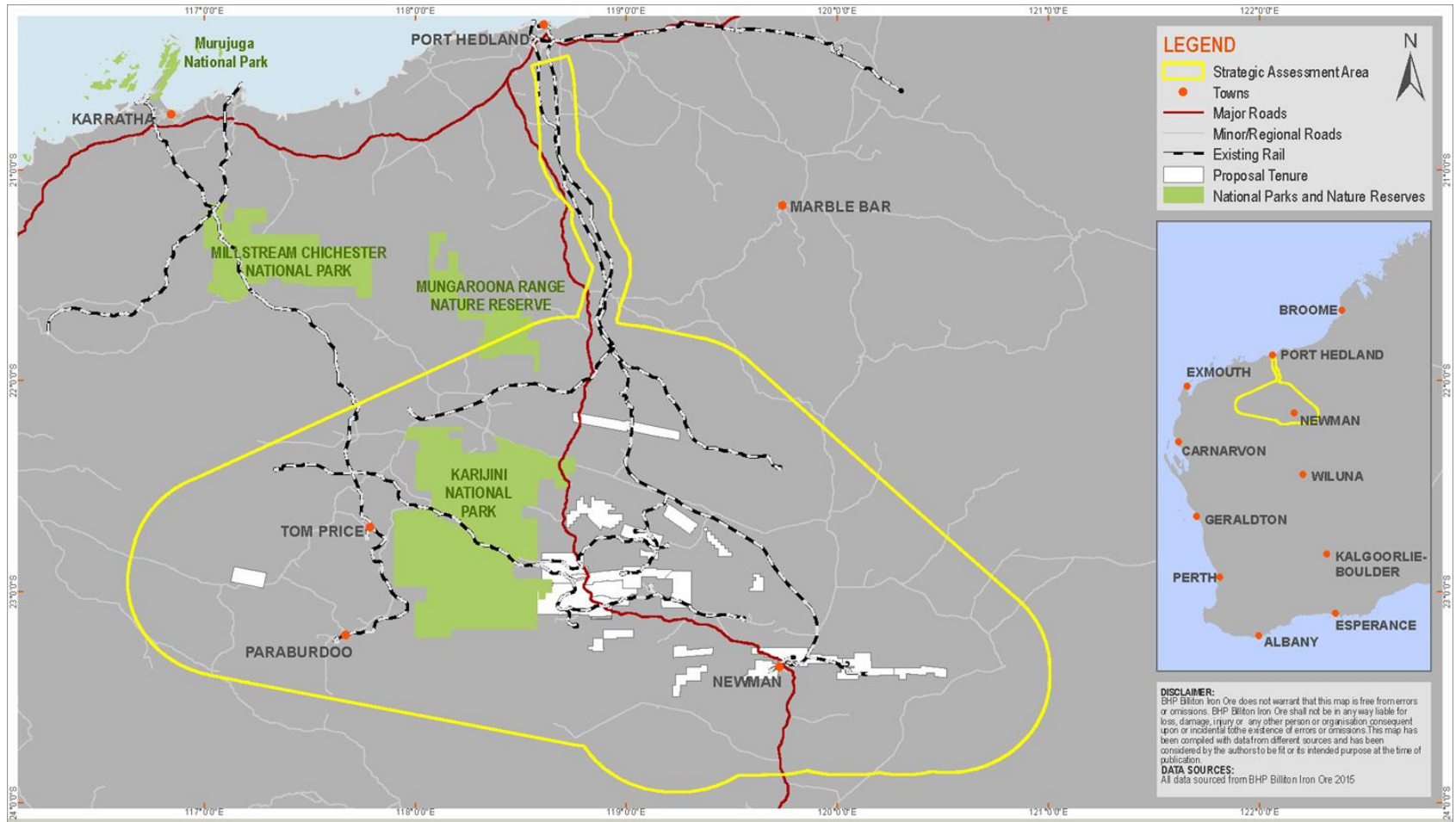




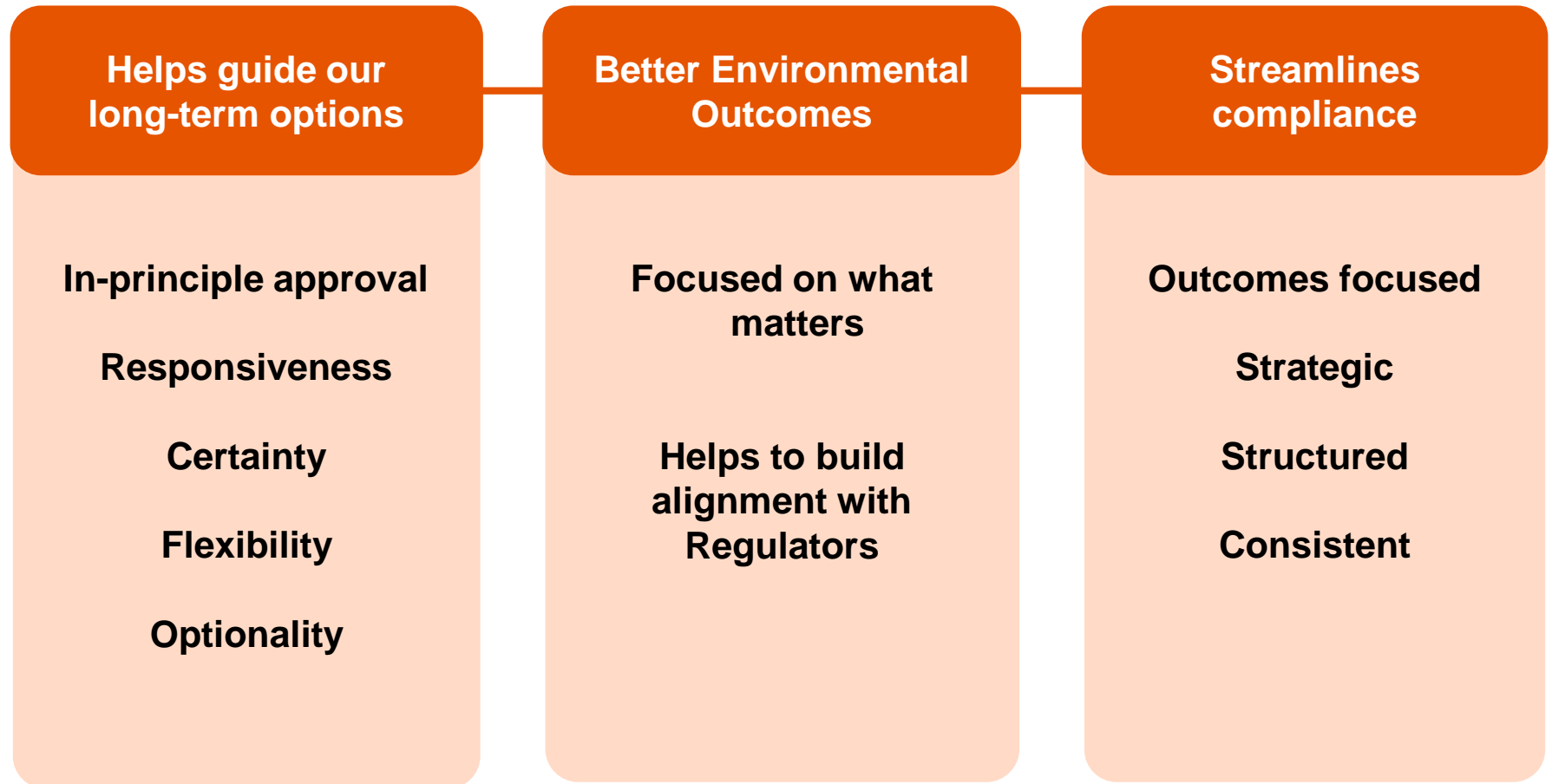
A typical iron ore mine



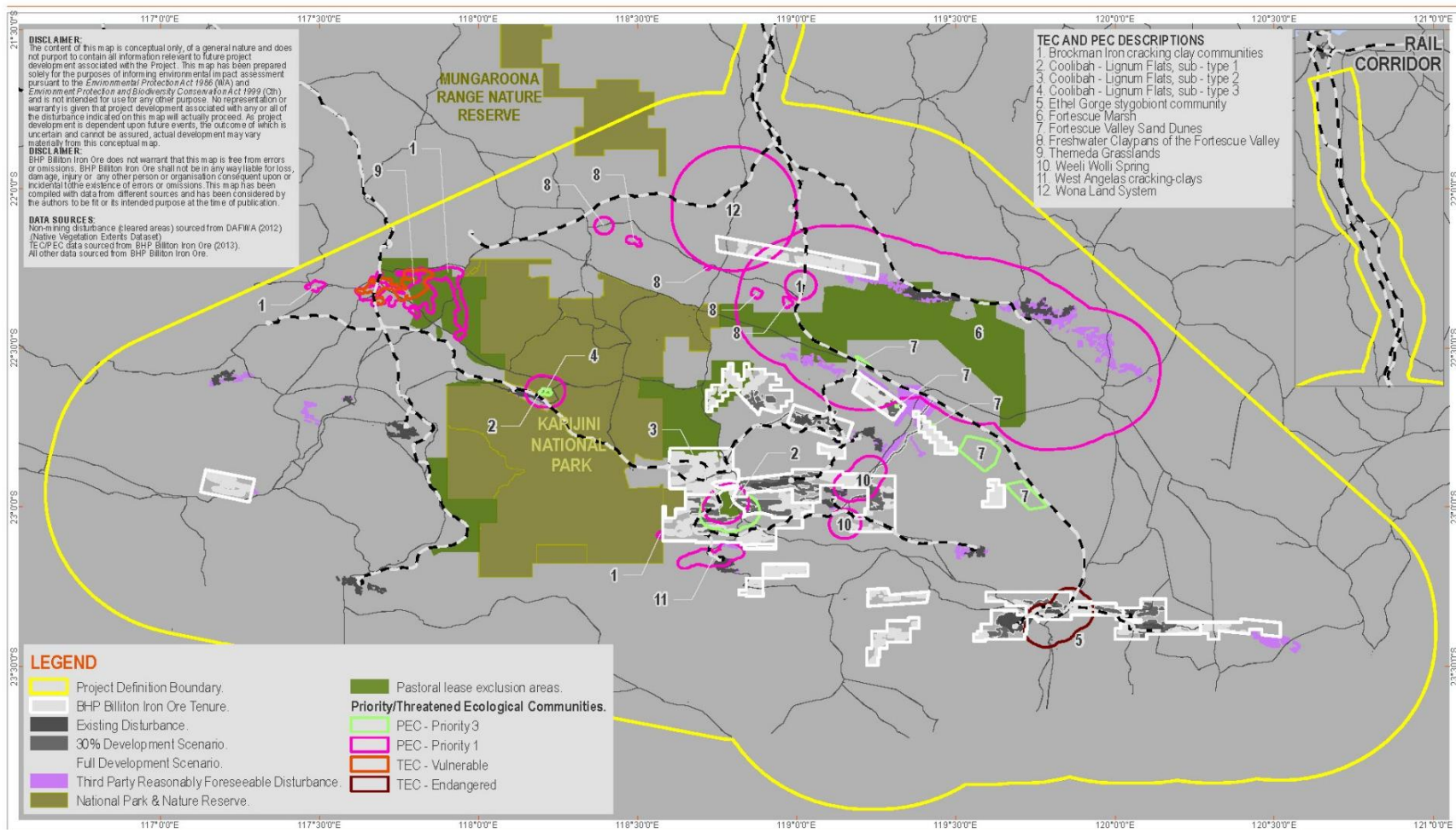
Strategic Environmental Assessment area



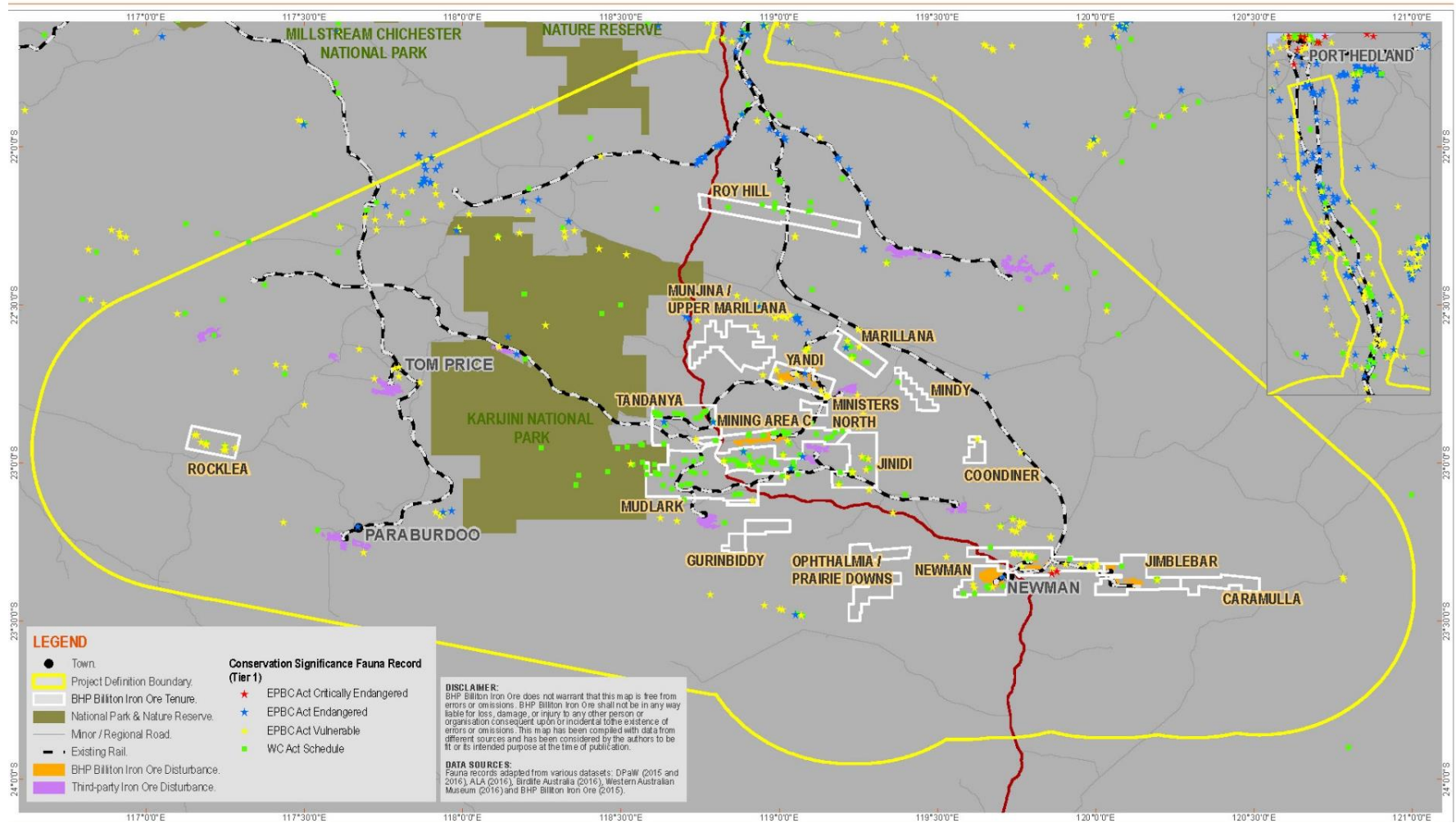
Why a strategic assessment?



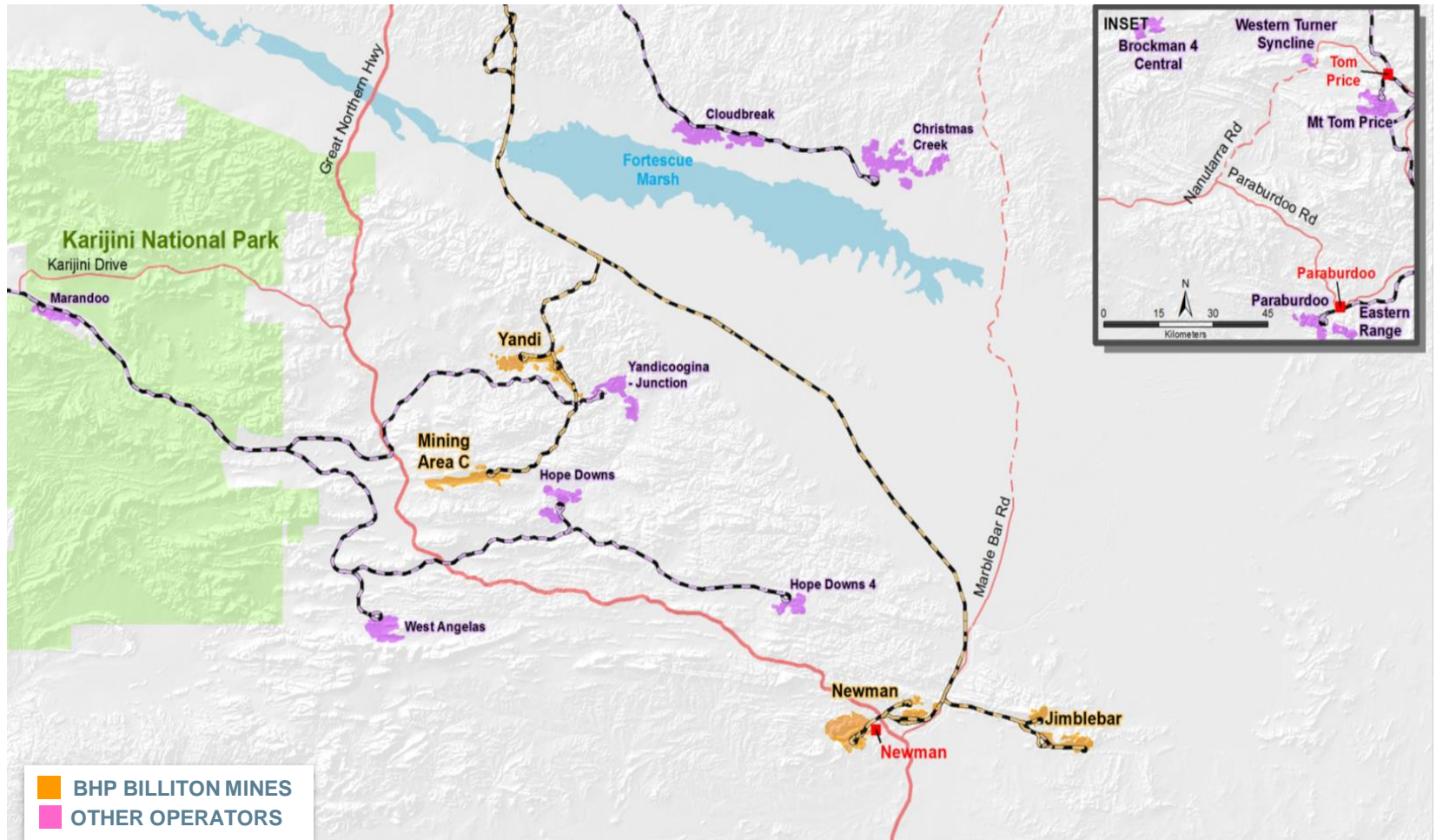
Key environmental features



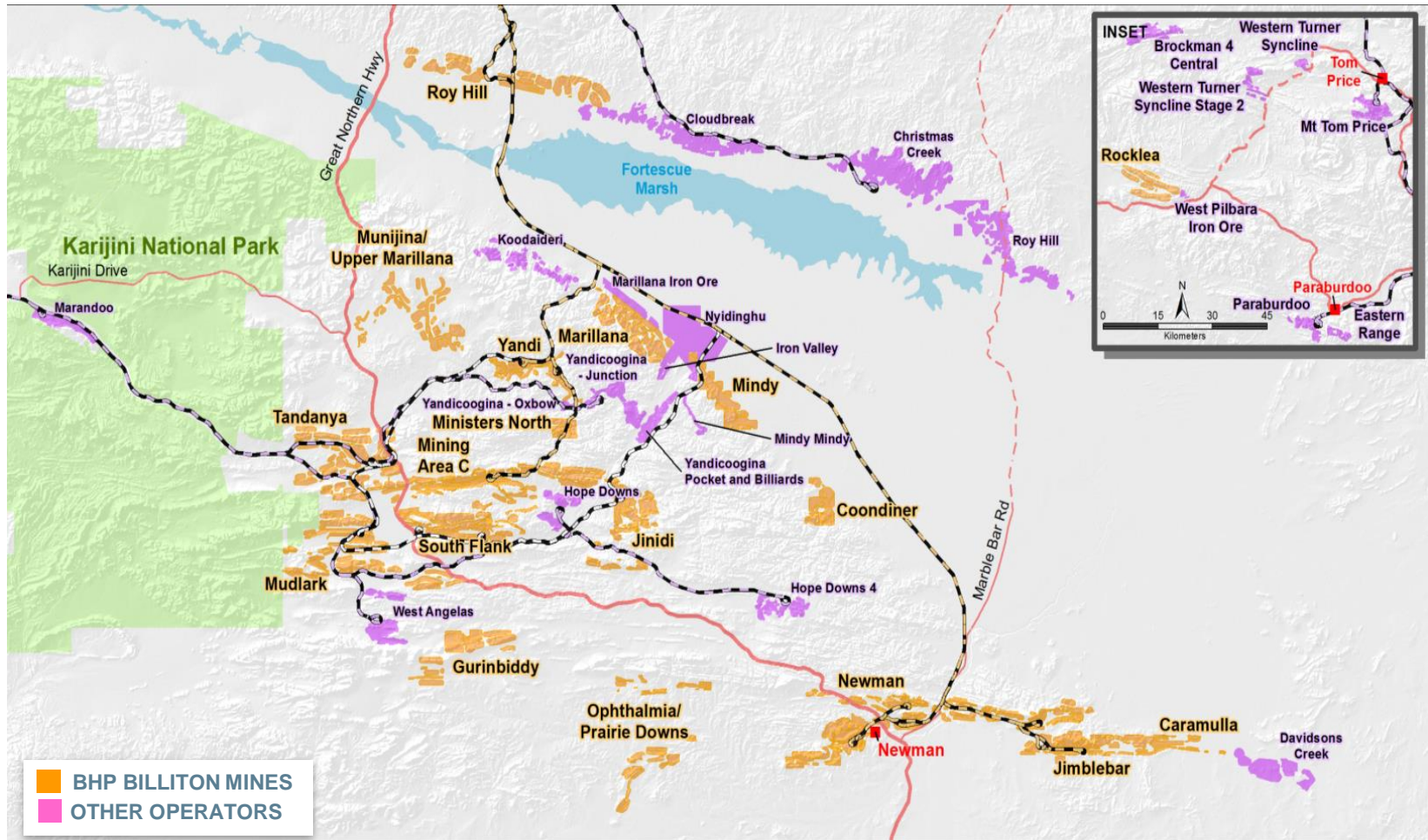
Conservation significant fauna



Current Pilbara operations



100 year plus development in the Pilbara



A two-step assessment – water example

Regional Strategic Proposal

Existing Environment

Understand regional
water systems

- Groundwater
- Surface water

Environmental Assessment

Hydrological
change

Cumulative effects

Environmental Management

Regional Water
Strategy

Local Derived Proposal

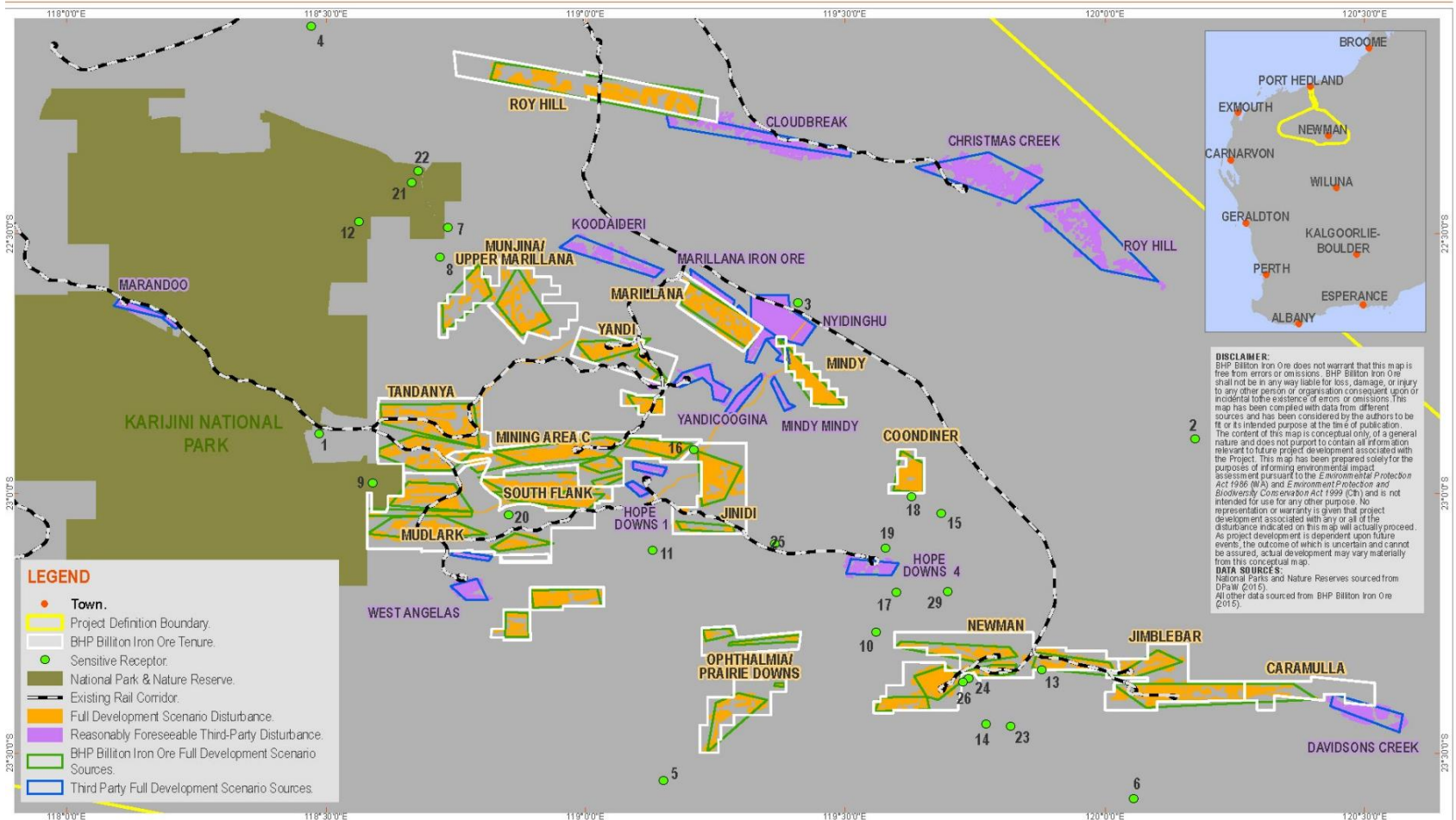
Closer look at local
water systems
around a project
area

Confirm we can
meet conditions set
in the Strategic
Proposal

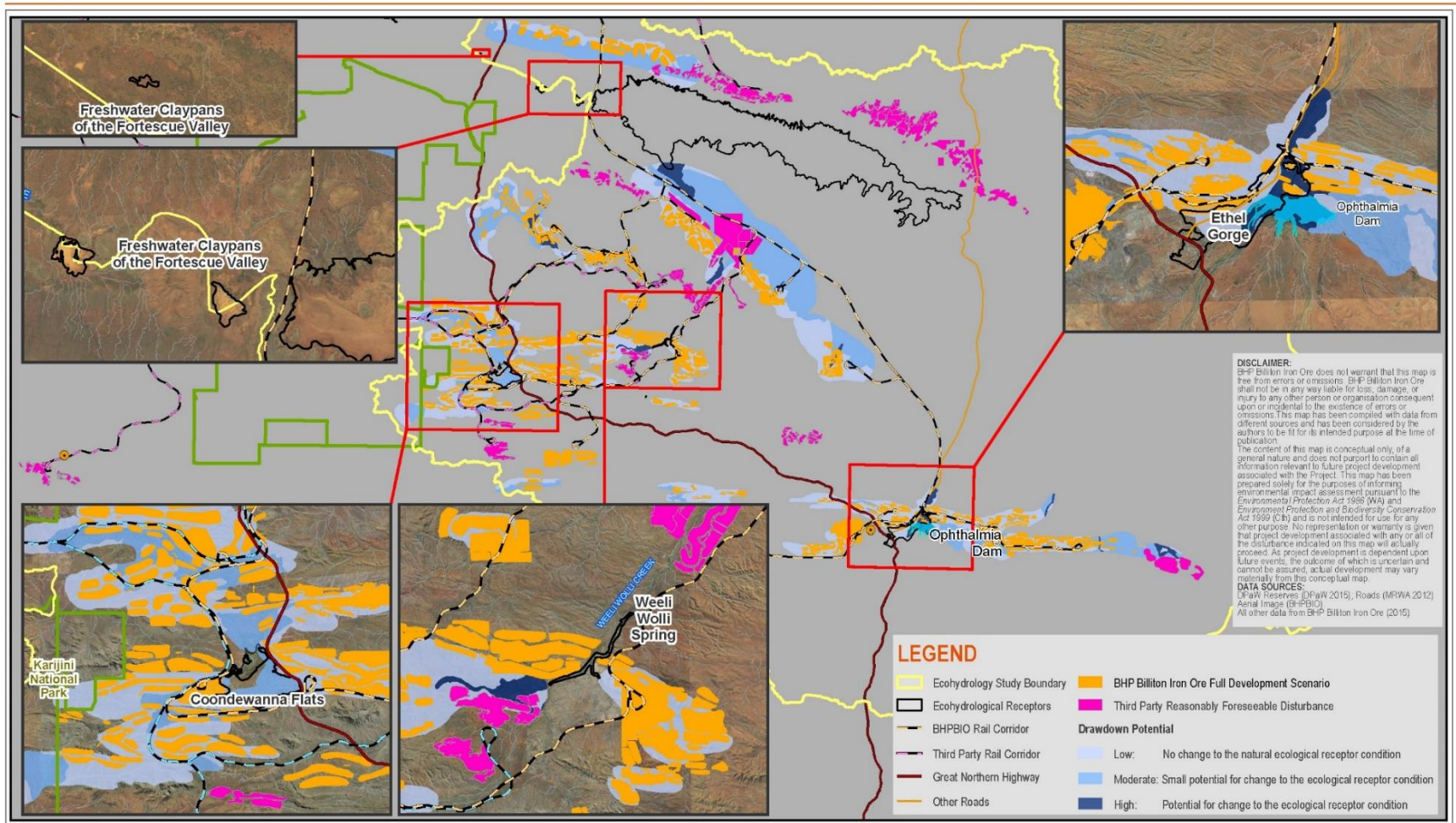
Catchment water
management plans

Asset outcomes,
indicators and
thresholds

Sensitive receptors – air quality

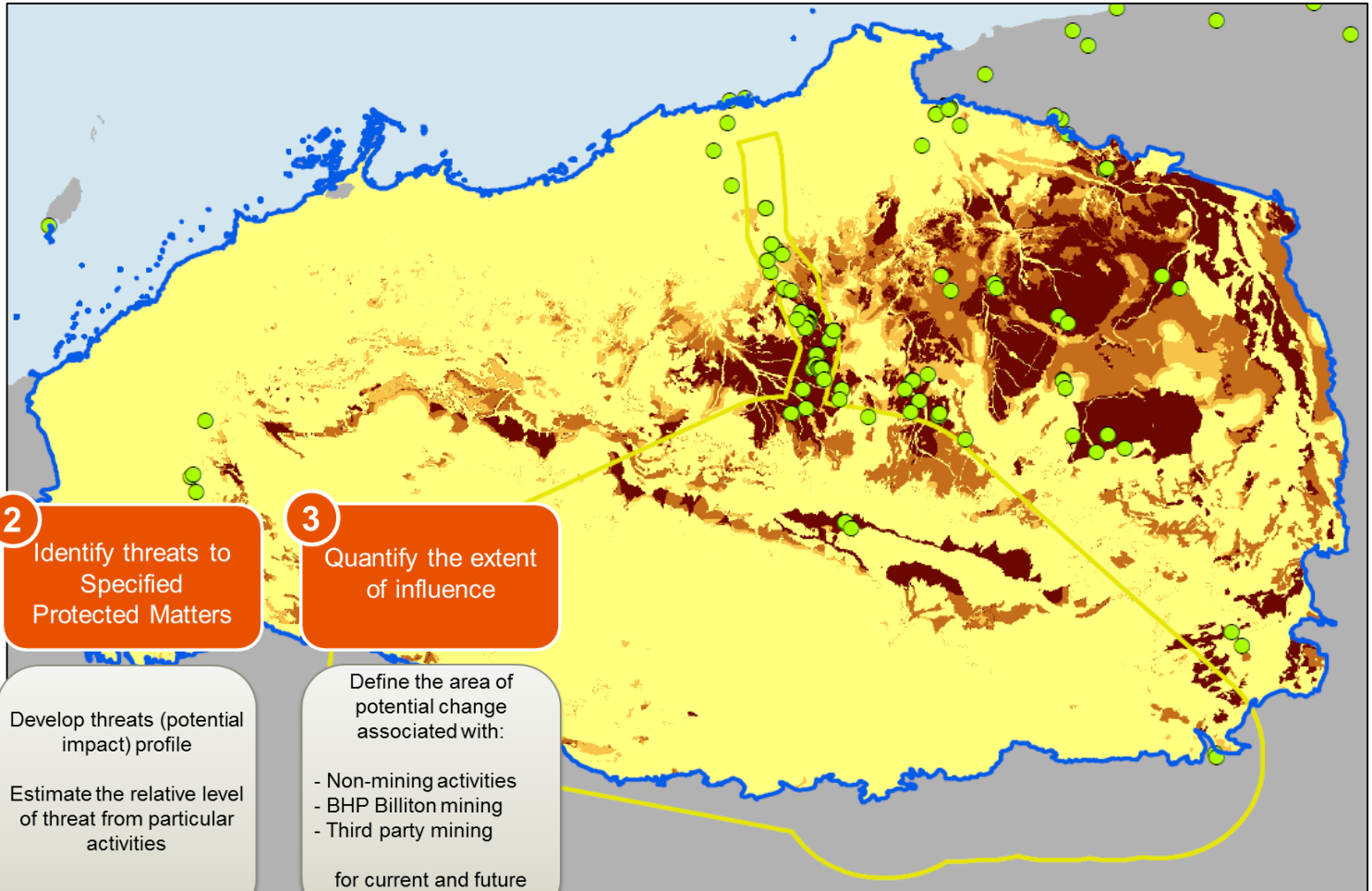


Groundwater change potential



Species landscape scale cumulative evaluation

Habitat suitability modelling – Greater Bilby



1 Predict habitat suitability for Specified Protected Matters

Establish Specified Protected Matters base layer by modeling suitable habitat using recent observations

Rank potential habitat suitability

2 Identify threats to Specified Protected Matters

Develop threats (potential impact) profile

Estimate the relative level of threat from particular activities

3 Quantify the extent of influence

Define the area of potential change associated with:

- Non-mining activities
- BHP Billiton mining
- Third party mining

for current and future scenarios

Impacts can be managed to meet EPA Factor Objectives

Business as usual management:

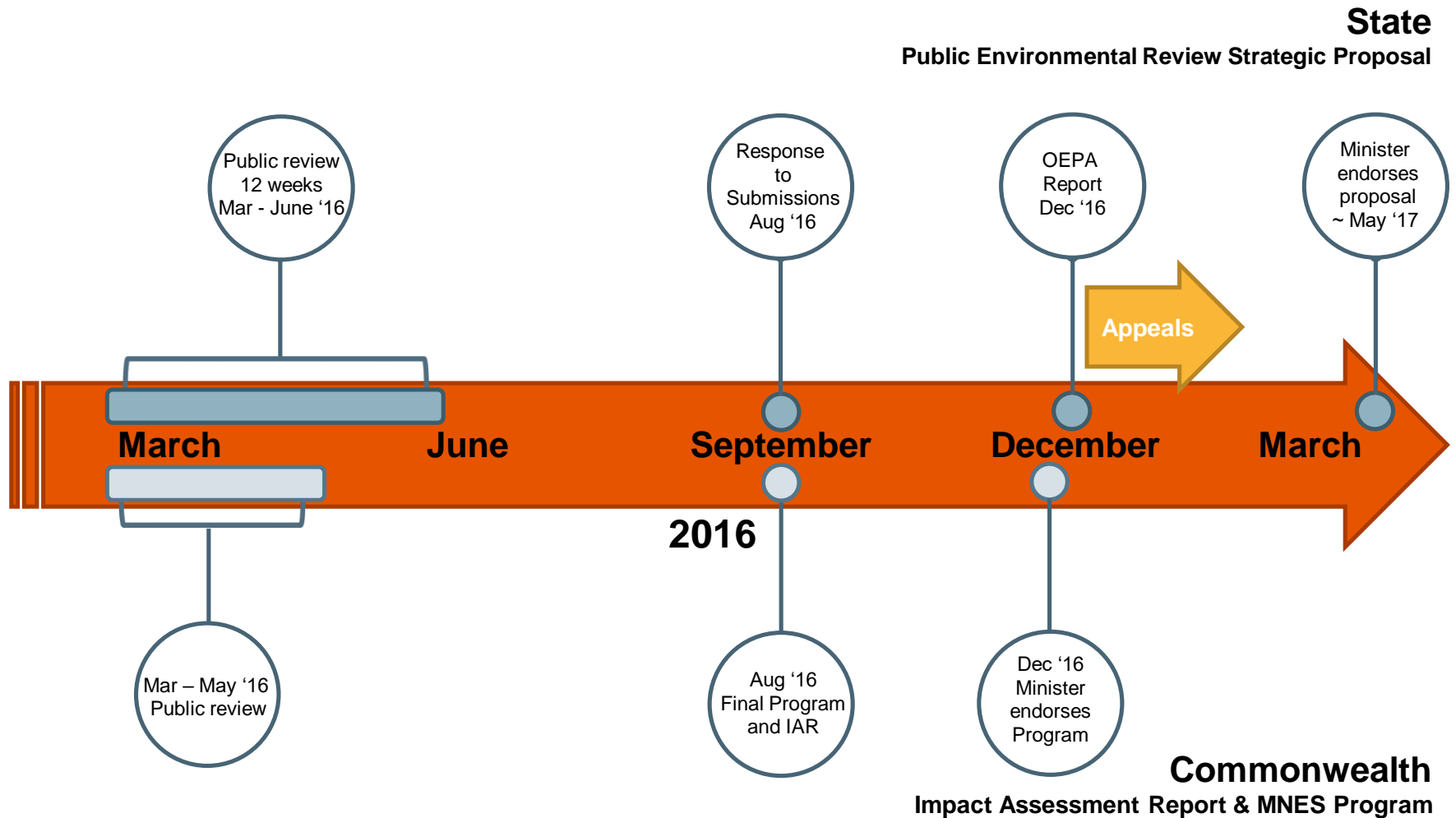
- Heritage
- Amenity (visual and noise)

Targeted management in addition to business as usual management:

- Flora and vegetation
- Terrestrial fauna (including short range endemics and subterranean fauna)
- Hydrological processes and inland waters environmental quality
- Terrestrial environmental quality
- Rehabilitation and decommissioning
- Air quality



Delivery timeline





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