Revegetation Plan for Clearing Offset Purposes

Shire of Northam - Northam Airport Expansion Project

1. Project Overview

1.1 Background

This revegetation plan is prepared to offset the clearing of **0.84 hectares** of native vegetation at **Northam Airport (Lot 1 on Plan 10174, 105 Withers Street, Northam)**, required for the expansion of airport infrastructure.

The offset area is located within **Crown Reserve 3203 (Jennapullin Reserve)**, which has been designated for conservation to counterbalance biodiversity loss and maintain habitat for native flora and fauna, particularly **Carnaby's Black Cockatoo**.

Reserve 3203 was identified as a suitable location for offsets and as such, Council resolved to support a Change of Purpose for Reserve 3203 from "Sand and Gravel Quarry" to "Recreation/Conservation" for the purpose of vegetation offsets.

The case was referred to DPLH for consideration with the determination made that Reserve 3203 was exhausted as a BRM supply. The Shire's future Scheme Amendment will be required to reflect Change of Purpose.

1.2 Objectives

- Restore and enhance native vegetation within the **Jennapullin Reserve offset** site.
- Improve habitat connectivity and biodiversity values.
- Ensure long-term sustainability through effective revegetation and management.

2. Site Assessment

2.1 Current Conditions

The Jennapullin Reserve offset site comprises the following habitat types:

- **Open Eucalyptus Woodland** Provides foraging and nesting habitat for Carnaby's Black Cockatoo.
- Allocasuarina/Acacia/Banksia Low Woodland Important for bird species and insect pollinators.

• Existing Carnaby's Black Cockatoo Foraging Habitat – 11.1 hectares of documented foraging trees.

The site also contains **251 potential habitat trees**, with **33 trees containing large hollows suitable for breeding**.

3. Revegetation Strategy

3.1 Plant Species Selection

To maintain ecological function, species selection will prioritize **native vegetation aligned with pre-clearing vegetation types** at Northam Airport. The selected species include:

- Eucalyptus loxophleba (York Gum) Key canopy tree.
- Eucalyptus wandoo (Wandoo) Provides hollows for bird nesting.
- Acacia acuminata (Jam Wattle) Mid-storey species.
- Allocasuarina huegeliana (Rock Sheoak) Essential for Black Cockatoo foraging.
- **Banksia prionotes (Acorn Banksia)** High-value food source for birds and pollinators.

3.2 Planting Methods

- Tube stock planting at a density of 1,500 stems per hectare.
- **Direct seeding** to complement tube stock planting in designated areas.
- Staggered planting to enhance diversity and natural succession.

3.3 Soil Preparation and Weed Management

- **Pre-planting weed control**: Targeting invasive species using selective herbicides.
- **Soil amendments**: Light ripping and mulching to improve soil structure and moisture retention.
- **Post-planting weed suppression**: Mulching and manual removal as required.

3.4 Irrigation and Maintenance

- Initial supplementary watering during first two summers if needed.
- Monitoring for pest and disease management, particularly dieback.

• Replanting if survival rate falls below 80% within first two years.

4. Monitoring and Reporting

4.1 Performance Indicators

- Survival rate of at least 80% after two years.
- Canopy cover establishment over five years.
- Fauna return, particularly Carnaby's Black Cockatoo sightings.

4.2 Monitoring Schedule

- 6 months post-planting: Initial survival assessment.
- 1 year post-planting: Growth rate measurements.
- **5 years post-planting**: Final evaluation of revegetation success.

4.3 Reporting Requirements

- **Annual progress reports** to the Department of Water and Environmental Regulation (DWER).
- Final offset compliance report after the five-year monitoring period.

5. Long-Term Management and Protection

- Permanent conservation designation of Jennapullin Reserve.
- Ongoing weed and pest control to maintain ecosystem integrity.
- **Restrictions on public access** to protect regenerating vegetation.

6. Offset Costs

- Tube Stock Planting: \$3,864
- Direct Seeding: \$1,260
- Site Preparation: \$1,680
- Post-Planting Maintenance: \$840
- Project Management: \$1,500

Total cost: **\$9,144**

Conclusion

This revegetation plan ensures that biodiversity loss at **Northam Airport** is effectively offset through the restoration and conservation of native habitat at **Jennapullin Reserve**, providing long-term ecological benefits to the region.