

MNES	Threatened species
Objective	<p>A. Demonstrate whether the extent and condition of threatened species habitat changes as a result of the MWS such that a significant impact is occurring or likely to occur.</p> <p>B. Demonstrate whether the population dynamics of selected focal species changes as a result of the MWS such that a significant impact is occurring or likely to occur.</p> <p>C. Demonstrate whether associated species are having an impact on selected focal species such that a significant impact is occurring or likely to occur.</p> <p>D. Demonstrate whether the reservation status and security of species is changing over time.</p>

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
Selected Focal Species	Presence/absence	B	<p>Tasmanian Galaxiidae Recovery Plan monitoring results will be used to determine the presence/absence and population health.</p> <p><u>Swan galaxias</u></p> <p>Known populations within the strategic assessment area (ie at the time of publication of the Recovery Plan 2006-2010) and other vulnerable populations will be monitored annually via electro fishing to determine status of population health, surveillance for pest fish and integrity of physical pest incursion barriers.</p> <p><u>Saddled galaxias</u></p> <p>The recruitment of fish and the health of the Saddled galaxias population in Arthurs Lake will be monitored on an annual basis with fyke nets and ichthyoplankton nets.</p> <p><u>Arthurs paragalaxias</u></p>

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
			<p>The recruitment of fish and the health of the Arthurs paragalaxias population in Arthurs Lake will be monitored on an annual basis with fyke nets and ichthyoplankton nets.</p> <p>NVA records</p>
	Population monitoring	B	<p>Tasmanian Galaxiidae Recovery Plan monitoring results (as above)</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005)</p> <p>The extent of <i>Callitris oblonga subsp. oblonga</i> within the MWS will be monitored over time using the EPBC listed community as an indicator of extent for the species within the MWS.</p> <p>TASVEG</p> <p>1:25,000 scale mapping of vegetation extent and community type (EPBCA listed communities) at a State wide level (<i>Eucalyptus ovata/C.oblonga subsp. oblonga</i> area of extent)</p>
Associated Species (for selected focal species)	Predator/competitor	C	<p>Tasmanian Galaxiidae Recovery Plan monitoring results will be used to determine pest species status and integrity of barriers (as above)</p>
	Pathogen/disease	C	<p>Chytrid Fungus Monitoring will occur within the MWS to determine the status of this fungus which can infect Green and Gold Frogs.</p> <p>The suitability of the receiving environment for Green and Gold Frog will be assessed. If suitable habitat is present, then the extent of occurrence of Chytrid in the receiving environment will be determined.</p> <p>If there is suitable habitat and no disease currently present then the risk of the disease being present in the supply region will be assessed. If there is a high</p>

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			<p>risk of disease being transferred from source areas to supply areas, then mitigation measures will be put in place in accordance with the Threat Abatement Plan for the Infection of Amphibians with Chytrid Fungus resulting in Chytridiomycosis (DEH, 2006).</p> <p>These mitigation measures will be monitored in accordance with a protocol agreed to by DPIPWE.</p>
Habitat	Habitat quantity	A	<p>TASVEG 1:25,000 scale mapping of vegetation extent and community type (EPBCA listed communities) at a State wide level</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005)</p> <p>MVEP will be repeated at 5 yearly intervals to provide change in vegetation extent information</p> <p>1:25,000 Lowland Grassland Review Data</p>
	Trends in habitat quantity	A	<p>FWAP</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent repeats)</p>
	Habitat quality	A	<p>TASVEG 1:25,000 scale mapping of vegetation extent and community type (EPBCA listed communities) at a State wide level</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent repeats)</p> <p>1:25,000 Lowland Grassland Review Data</p>
	Trends in habitat quality	A	<p>FWAP</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent repeats)</p>

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
			repeats) 1:25,000 Lowland Grassland Review Data
Threatening Processes	Pathogen/disease	C	See above
	Salinity in the landscape	A	Groundwater depth and quality monitoring. Groundwater bores across the MWS will be used to identify ground water depth, and salinity. FWAP
	Water quality	A	Stream gauging stations Stream Gauging Stations will be used across the MWS to monitor electrical conductivity, temperature and turbidity on a continuous basis. "Spot" samples of these parameters as well as pH and dissolved oxygen will be measured during any site visit. Volume & timing of releases will be measured by stream gauging stations and by meters required at each connection point. End of Pipe Quality Assays End of pipe quality assays will be undertaken to measure temperature, conductivity and turbidity.
Security	Reservation status	D	NVA records Tasmanian Reserve Estate Layer
	Trends in reservation status	D	NVA records Tasmanian Reserve Estate Layer

MNES	Threatened communities
Objective	<p>A. Demonstrate whether the extent and condition of threatened communities changes as a result of the MWS such that a significant impact is occurring or likely to occur.</p> <p>B. Demonstrate whether the reservation status and security of threatened communities is changing over time.</p>

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
Selected Focal Threatened Communities	Quality	A	<p>TASVEG 1:25,000 scale mapping of vegetation extent and community type (EPBCA listed communities) at a State wide level</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005)</p> <p>1:25,000 Lowland Grassland Review Data</p>
	Trends in quality	A	<p>FWAP</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent repeats)</p>
Threatening Processes	Salinity in the landscape	A	<p>Groundwater depth and quality monitoring.</p> <p>Groundwater bores across the MWS will be used to identify ground water depth, and salinity.</p>
	Land clearance - Quantity	A	<p>TASVEG 1:25,000 scale mapping of vegetation extent and community type (EPBCA listed communities) at a State wide level</p> <p>MVEP (Monitoring Vegetation Extent Program) (2005)</p> <p>1:25,000 Lowland Grassland Review Data</p>
	Land clearance -	A	FWAP

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
	Trends in quantity		MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent repeats) 1:25,000 Lowland Grassland Review Data
	Water quality	A	Stream gauging stations Stream Gauging Stations will be used across the MWS to monitor electrical conductivity, temperature and turbidity on a continuous basis. "Spot" samples of these parameters as well as pH and dissolved oxygen will be measured during any site visit. Volume & timing of releases will be measured by stream gauging stations and by meters required at each connection point. End of Pipe Quality Assays End of pipe quality assays will be undertaken to measure temperature, conductivity and turbidity.
Security	Reservation status	D	NVA FWAP MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent repeats) Tasmanian Reserve Estate Layer 1:25,000 Lowland Grassland Review Data
	Trends in reservation status	D	NVA FWAP MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent repeats)

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
			1:25,000 Lowland Grassland Review Data repeats) Tasmanian Reserve Estate Layer

MNES	Migratory Bird Species
Objective	<p>A. Demonstrate whether the extent and condition of migratory species habitat changes as a result of the MWS such that a significant impact is occurring or likely to occur.</p> <p>B. Demonstrate whether the reservation status and security of migratory species habitat is changing over time.</p>

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
Threatening Processes	Salinity in the landscape	A	Groundwater depth and quality monitoring. Groundwater bores across the MWS will be used to identify ground water depth, and salinity. FWAP
	Land clearance - Quantity	A	TASVEG 1:25,000 scale mapping of vegetation extent and community type (EPBCA listed communities) at a State wide level MVEP (Monitoring Vegetation Extent Program) (2005) 1:25,000 Lowland Grassland Review Data
	Land clearance - Trends in quantity	A	FWAP MVEP (Monitoring Vegetation Extent Program) (2005) (and subsequent

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
			updates)
	Water quality	A	<p>Stream gauging stations</p> <p>Stream Gauging Stations will be used across the MWS to monitor electrical conductivity, temperature and turbidity on a continuous basis. “Spot” samples of these parameters as well as pH and dissolved oxygen will be measured during any site visit. Volume & timing of releases will be measured by stream gauging stations and by meters required at each connection point.</p> <p>End of Pipe Quality Assays</p> <p>End of pipe quality assays will be undertaken to measure temperature, conductivity and turbidity.</p>
Security	Reservation status	D	<p>NVA</p> <p>Tasmanian Reserve Estate Layer</p>
	Trends in reservation status	D	<p>NVA</p> <p>Tasmanian Reserve Estate Layer</p>

MNES	Wetlands
Objective	A. Demonstrate whether the extent of Ramsar wetlands increases within the MWS

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
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Wetlands	Ramsar extent within MWS	A	EPBC Search Tool NVA
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MNES	National Heritage		
Objective	A. Demonstrate whether the extent of National Heritage increases within the MWS		

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
National Heritage	National Heritage extent within MWS	A	EPBC Search Tool

MNES	World Heritage Properties		
Objective	B. Demonstrate whether the extent of World Heritage Properties increases within the MWS		

Subject of Monitoring	Criteria being Monitored	Objective being Met	Mechanism
National Heritage	World Heritage Properties extent within MWS	A	EPBC Search Tool