

NATIONAL TRUST OF AUSTRALIA (WA)

LIST OF CLASSIFIED PLACES: HERITAGE ASSESSMENT



1. IDENTIFICATION / LOCATION

Current Name of Place	Mundaring Weir Forestry Settlement
Other Names	Portagabra, CALM Headquarters
Street Address of Property	Mundaring Weir Road, Mundaring
Local Government Authority	Shire of Mundaring
Title Details	Lot F7 and northern portion of P45619 Vol/Fol
Original Owner	Western Australian Government
Architect/Designer	Government Architect, Dept. Public Works
Builder	Various
Construction Date	1923 - 1978
Alteration/Additions Date	Various times between 1923 - 1979
Original Use	Office Administration and Residences
Current Use	Office Administration; Residences vacant
Extent of Assessment	See attached plan

Conservation Recommendations

Many of the buildings are currently unoccupied and therefore in danger of being vandalised. These buildings need to be secured to prevent unauthorised access. A conservation plan should be prepared for the site. As the historical research identified areas that had not been covered by the 2004 Heritage Council Assessment it is recommended that it be referred on to the Heritage Council for possible inclusion on the Heritage Register.

2. STATEMENT OF SIGNIFICANCE

Mundaring Weir Forestry Settlement has cultural heritage significance for the following reasons:

- The place was the only Forestry settlement established in the state to maintain the water quality of a water catchment system through forestry management.

- The implementation of the Working Plan No. 1 ensured that Mundaring Weir remained as a viable source of water for the communities along the Goldfields Water Supply Scheme.
- The place is associated with Charles Lane-Poole who was responsible for the development of State Forests and sustainable forestry management practises in the 1920s and 1930s.
- The place, together with the nearby Mundaring Weir, demonstrates the gradual understanding of the causes of salinity in a water supply and the best solutions for this problem.
- The place retains a large number of mature trees which provide a backdrop to many of the buildings located amongst these trees.
- The place demonstrates the Forests Department practise of erecting standard timber buildings in a forestry settlement, both new and re-located buildings.

Assessor/s: Fiona Bush,

Date: January 2009

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Committee Recommendation:

Classify Date: 2/02/2009

Classification Standing Committee Recommendation:

Classify Date: 16/02/2009

Council Resolution:

Date:

Owner Advised:

Date:

Local Government Authority Advised:

Date:

Heritage Council Advised:

Registration Date:

3. BRIEF DESCRIPTION

Mundaring Weir Forestry Settlement is located approximately 7km to the south of Mundaring and approximately 1 km to the north of Mundaring Weir. The remains of the settlement are spread through a cultural environment composed of re-growth forest and a number of exotic tree species. The area is bounded on the western side by Mundaring Weir Road and on the southern side by the former lot boundaries of the sawmill and house plots on the southern side of Allen Road. The northern and eastern boundaries follow the lot boundary of Lot F7.

The eleven buildings that remain on the site are a mixture of utilitarian structures and residences. All the buildings are constructed from timber and iron and represent the typical type of forestry buildings that were erected by the Forestry Department during the 1920s - 1960s.

The buildings, running from north to south are:

No. 234: House Type 6c Forestry Building: L shaped plan sitting on sloping site approached by a set of stairs. Gable roof form with brick chimney.

No. 315: House Type 8B Forestry Building: Rectangular plan with verandah running across the width of the building. Gable roof which extends down at the front to form the verandah. Brick chimney.

Hilltop House: (No number assigned as it is not shown on settlement plan. Typical timber forestry house relocated to site in early 1980s.

No. 103: DEC Office: Built in 1925 it has been extended on several occasions.

No. 1185: House Type 5 Forestry Building: L shaped plan gable and hipped roof.

No. 51: Single men's hut: Small rectangular building with

No. 1184: Six bay garage: Timber post construction with clad on three sides with zincalume skillion roof.

No. 1394: Shed and Oil Store: Rectangular building. Unpainted weatherboard with cgi roof.

No. 2234: Six bay garage: Timber post construction, clad on three sides, zincalume skillion roof.

No. 363: House Type 8 Forestry Building: Rectangular plan with verandah. Plan form very similar to No. 315.

No. 1819: Five bay workshop: Rectangular form with gable roof.

No. 373: House Type 8 Forestry Building: Rectangular plan with verandah running across the front. The building is used by the Kookaburra Theatre.

4. HISTORICAL OVERVIEW

European settlement first occurred around the Mundaring Weir in 1882 when Walter Jecks bought land in the area on which he established an orchard. Land sales came to a halt in 1898 when the state government decided to construct a dam on the Helena River to provide water for the eastern goldfields. To ensure adequate water run-off, 20,360 acres of land were cleared around the Helena River's catchment area prior to the completion of the dam in 1903. The Goldfields Water Scheme (GWS) became operational in 1903 with responsibility for the Helena Catchment area vested with this body. However, timber cutters were still allowed to cut in the area, although camping in the catchment area was not permitted. The felling and ring-barking of such an extensive area led to rising salinity levels and by 1909 concerns about the quality of the water were being expressed by the Western Australian Government Railway engineer based at Midland and the engineer in charge of the operation at the Weir. Whilst the GWS encouraged the regeneration of the forest, bush fires decimated the re-growth.

The Forests Department was created in 1896 and this Department managed timber licenses in Western Australia's forest areas. Charles Lane-Poole, with a forestry degree from the French National Forestry School at Nancy, was appointed Inspector General of Forests in 1916.¹ Following his appointment he toured the forests in the southern portion of the state and realised that Western Australia's forests were being exploited in an ad hoc manner with little concern for sustainability. By 1918 he had drafted the *Forests Act 1918* for the government. The Act was passed in 1919. The Act enabled Lane-Poole to set up State Forests and he divided the south-west into a number of divisions which were provided with a working plan to ensure that they were managed properly. This management included controlling saw millers and hewers' licenses, silviculture (the marking and management of trees in the district) and the establishment of fire patrols to try to minimise fire damage. The first working plan was prepared for the Helena Catchment Area (later called the Mundaring Working Circle). Four objectives were outlined in this plan:

1. Manage the forests to maintain water quality.
2. Old timber had to be cut out to make way for new trees which could be developed into marketable wood.
3. Fire breaks had to be developed and fire patrols implemented.
4. Roads constructed to assist with fire prevention.

In 1921 - 23, three experimental nurseries were set up around the Weir and planted with a variety of pine species to determine which would be most suitable. Pine was chosen as it was fast growing and would provide the timber industry with good supplies of softwood timber. The first buildings were erected at Mundaring Weir Forestry Settlement for the forestry workers

¹ Dargavel, John, *The Zealous Conservator, a life of Charles Lane-Poole*, UWA Press, Nedlands 2008, p. 9 & 4 - 41.

in 1924. Men were employed to plant the trees, manage the plantations, cut out timber and engage in fire management. As the years passed and the operation at Mundaring was enlarged, additional buildings were added to the site. The residences erected at Mundaring were standard Forestry cottages (designed by the Public Works Department) and at times buildings were re-located from other forestry settlements, a common practice of the Forestry Department. By 1932 the first pines were ready for thinning and a saw mill was erected close to the plantation area. However, by 1939 it was decided that it would be more efficient to place the mill close to the forestry settlement and the train line which ran between Mundaring and Mundaring Weir. In 1937 a siding had been constructed near the forestry settlement and named Portagabra after the nearby orchard. The sawmill operated until c.1965 after which logs were transported to Perth by truck.

In 1985, the Forests Department, National Parks Authority and the Wildlife Section of the Department of Fisheries and Wildlife were combined to form the Department of Conservation and Land Management (CALM). CALM continued to manage Mundaring Weir Forestry Settlement although in 1989 they passed control of the housing to Government Employees Housing Authority. Prior to this many of the cottages at Mundaring Weir Forestry Settlement had been removed from the site as they were no longer required.

The Department of Environment and CALM were merged together to form the Department of Environment and Conservation (DEC) in July 2006. During 2006 the Water Corporation began a community consultation process to gauge the community's response to the location of a water treatment plant at Mundaring Weir. By the end of 2007 the initial 21 sites had been reduced to 4 sites and in February 2008 Water Corp announced that they had chosen Mundaring Weir Forestry Settlement as the most suitable location for the Water Treatment plant.

5. COMPARATIVE ANALYSIS

The initial work completed by Lane-Poole, and the *Forestry Act 1918*, saw the establishment of State Forests and the appointment of trained forestry workers to oversee the management of Western Australia's forests. By the end of the 1920s nine working circles had been prepared and forestry accommodation provided for some of these. Although the Forestry Department's first working plan had been prepared for Mundaring, the first plan actually completed and implemented was for the Tuart forests, between the Capel and Sabina Rivers. A sawmill and men's accommodation was first constructed in this district, however this settlement was expressly for the operation of the saw milling operation, rather than for the actual management of the forest such as seen at Mundaring. By the end of 1925, the Forestry Department had decided to establish the practise of accommodating a resident oversee and other

forestry employees in houses in the forests. This type of accommodation was first provided at Mundaring, closely followed by accommodation for the overseer of the Tuart forest at Capel. Ten forest districts were established by 1936: Mundaring Weir, Busselton, Dwellingup, Collie, Kirup, Manjimup, Narrogin, Kelmscott and also Perth.² Dryandra, today's most intact forestry settlement, was established in the 1940s.³ None of these other settlements were established to assist in the maintenance of a water supply system.

Mundaring Weir Forestry Settlement was the first forestry district to receive a Working Plan and the first forestry settlement established in Western Australia. Whilst many of the buildings have since been removed from the settlement it still retains visible evidence of the former settlement, through the surviving buildings, and the surrounding forest bears testament to the forestry work carried out in this area.

6. OTHER LISTINGS

Shire of Mundaring Municipal Inventory 27 April 1997. Management Category 2 (Site No. 60).

Assessed by HCWA April 2005 and considered Below Threshold.

7. ASSESSMENT OF SIGNIFICANCE

Aesthetic Value

The site contains a range of mature tree species, particularly on the northern side, that presents overall as a mature forest. Vistas along some of the dirt access roads display glimpses of residences nestled amongst tall trees which are very picturesque.

The row of Plane Trees along Allen Road is a pleasant shady avenue, creating a strong contrast with the harsh environment around the junction between Mundaring Weir Village Road and Allen Road.

Historic Value

Following the *Forests Act 1918*, Mundaring Weir Forestry Settlement was the first forestry district to have a plan prepared to manage the timber resource, and more importantly, to ensure the quality of the Goldfields Water Supply Scheme.

Mundaring Weir Forestry Settlement demonstrates the Forestry Departments' practise of establishing nurseries to both rehabilitate deforested areas and provide productive timber resources for the state.

Mundaring Weir Forestry Settlement is associated with Charles Lane-Poole, a notable forestry conservator who was responsible for drafting Western Australia's Forestry Act, and for implementing forestry practises during the

² HCWA assessment: Portagabra, p. 7.

³ HCWA assessment: Dryandra Woodland Settlement

early 1920s which led to the formation of State Forests and Working Plans for the various forests districts created during his term in office.

Mundaring Working Plan No. 1 in 1921 was responsible for the development of a planting programme which saw the establishment of nurseries at Mundaring Weir, better forestry practises and the subsequent improvement to the water quality of Mundaring Weir. The various tree species that were grown in these nurseries can still be seen around the Mundaring Weir Forestry Settlement today.

The development and implementation of the Mundaring Working Plan No. 1 ensured that Mundaring Weir remained as a viable source of water for the various communities established along the water supply scheme and also for the steam trains which once ran along the Eastern Railway Line.

The buildings which remain at Mundaring Weir Forestry Settlement demonstrate the Forestry Department's practise of erecting standard timber buildings in a forest settlement, either new to that particular settlement or re-locating buildings from another forestry settlement.

Scientific Value

When Mundaring Weir was first constructed, the critical role that trees played in ensuring good water quality was not fully understood. The gradual understanding of the factors which caused water salinity, and the reforestation of the Helena Catchment area makes Portagabra and the nearby Weir an important teaching site for visitors to the area.

The various tree species surviving around Mundaring Weir Forestry Settlement demonstrate the experimental process established by the forestry workers to determine which species would be most suitable for the district.

Social Value

Mundaring Weir Forestry Settlement is held in high esteem by the Mundaring Community both as a place to obtain firewood permits from DEC and as a forest environment which can be enjoyed by walking along various walking tracks.

Rarity

The forestry settlement at Mundaring Weir was primarily established in 1921 to maintain the water quality of the Goldfields Water Supply Scheme. It was the only settlement established in the state with this goal in mind. The secondary considerations of maintaining the forest to ensure that the timber was managed in a sustainable fashion was, in this instance, a secondary consideration (although none-the-less an important one).

Condition

The buildings on site range from poor to good condition.

Integrity

The original layout of the site (including residential and non-residential buildings) can still be seen in the landscape. The house sites along the northern side of Allen Road are still clearly discernable. The site as a whole has moderate integrity.

Buildings which have been retained on site (with the exception of No. 103), have generally retained their original form and all of the non-residential buildings (numbers 1184, 1394 and 2234) have retained their original function. These buildings have high integrity. The residential buildings have moderate integrity.

Authenticity

The site as a whole has retained a number of buildings dating from the earliest period of occupancy through to the 1980s when the site continued to function as the headquarters for forestry operations in the Mundaring district. However, the majority of the residential buildings have been removed, together with the sawmill. The site has low to moderate authenticity.

Many of the buildings retained on site are in their original state (with the exception of No. 103 (DEC headquarters), with minimal alterations to their exteriors. The majority of the buildings on site have a moderate to high authenticity.

8. DESCRIPTION

Mundaring Weir Forestry Settlement) is located approximately 7 km to the south of Mundaring and approximately 1 km to the north of Mundaring Weir. The settlement lies along the south eastern side of Mundaring Weir Road near the junction with Allen Road and extends from this point to the south east along both sides of Allen Road for approximately 800m. The place comprises buildings, structures and sites associated with the Forests Department together with buildings which are now operated by the Dept. of Environment and Conservation (DEC). The buildings and structures are located within a cultural environment comprising re-growth forest and exotic plant species. The majority of the exotic species are different species of pines. The land fronting Mundaring Weir Road rises steeply to the south east before flattening out. The former house sites located along Allen Road are situated on comparatively flat land.

The structures and buildings remaining on site which either front onto, or lie close to Mundaring Weir Road include: the DEC District Office (Building 103, constructed c.1925 with later extensions); Hilltop House (re-located to the site in the early 1980s); a 1930s house; single men's quarters (Building 51: constructed c.1923); house, Type 8B (Building 315: constructed c.1935); house Type 5 (Building 1185: constructed 1950s); 2 six bay garages (Building 1394: erected c.1956 and Building 2234: constructed 1978); an oil shed and

store (Building 1394: erected 1959), a five bay workshop (Building 1819: constructed 1965) and 2 re-located houses (Building 363: 1969 and Building 234: 1971). Houses which were once located along the north eastern and south western sides of Allen Road have been removed except for one house Type D (Building 373: constructed c.1935) which remains on the north eastern side of Allen Road. The Kookaburra Theatre, an outdoor cinema operates behind this house. The house sites on the south western side of the road are now occupied by the Hills Forest Discovery Centre. Forestry buildings have been re-located to this site.

The structures are arranged in what appears to be a fairly haphazard arrangement with gravel roads providing access to buildings which do not front onto Mundaring Weir Road. The DEC Office is located directly on Mundaring Weir Road and has mature trees to the north of the building. Directly to the north of this building are two dirt roads which provide access to Building No. 51 and Building No. 1185. The access road to house No. 51 is lined with a number of mature trees which includes an oak (*quercus robur*) and two different pine species (*pinus radiata* and *pinus cariensis*). Many of the trees in the northern section of the site are different pine species whilst those to the south tend to be a variety of native trees (species that are native to the area together with introduced native species). Towards the eastern end of Allen Road (abutting the former forestry house sites), the road is lined with mature London Plane trees (*platanus x hispanica*). Along the northern side of Allen Road it is possible to determine where the houses once sat along this street. The house still standing on Allen Road (Building 373) sits squarely within its small lot and fronts onto Allen Road.

The following descriptions of the buildings on the site have been taken from the HCWA Assessment for Portagabra (the name used by the Heritage Council), which was prepared by Jacqui Sherriff and Rosemary Rosario. The site visits took place in late 2004. The house descriptions start with the most northern building (No. 234) and end with the southern most one (No. 373). For some reason Hilltop House was not included in the descriptions. Comments made concerning occupancy and condition are still relevant in January 2009.

Building 234

Building 234, a typical example of a Type 6C Forests Department cottage, was relocated to *Portagabra* in 1971. It is a single storey timber framed, weatherboard clad cottage with a corrugated iron roof with a brick chimney. It has a timber floored front verandah supported on timber posts with timber steps and timber balustrade. The verandah has been partly infilled with fibrous cement sheets. Windows are timber framed and the front doors is a typical timber triple panelled door with glazed panels at the top. There is a typical skillion roofed laundry/wc out-building to the rear of the cottage. Internally the walls are lined with plasterboard and doors are flush panel. The floor plan comprises five rooms, a front verandah, back porch, laundry, bathroom and wc. The front door opens from the verandah into an entrance hall. This leads into the front room that contains a brick fireplace. The kitchen is located behind the living room and three bedrooms are located opposite the living areas. There is

a bathroom and a sleep-out under the main roof at the back of the cottage and the wc and laundry are located in an out-building to the rear of the cottage. There are no features typical of 1930s cottages extant and it is likely that the internal wall linings were replaced when the cottage was relocated in the 1970s. Kitchen fittings are recent. Weatherboards are unpainted and the roof sheeting shows evidence of rust. At the time of inspection (December 2004) the house was not occupied.

Building 315

Building 315, built at *Portagabra* in 1935, is a typical example of a Type 8B Forests Department cottage. It is a single storey timber framed, weatherboard clad cottage with a corrugated iron roof and a brick chimney. At the back there is an area of brick paving and a timber pergola. A recent carport has been constructed to the side. There are seven stone steps to the front verandah and a steel balustrade. The back yard has recent landscaping and a steel framed shed. Windows to the front elevation are timber framed with horizontal glazing bars and the front door is an original paneled door. Windows to the side and rear elevations are recent aluminium framed. Internally the walls are lined with plasterboard with timber paneling to dado in some areas. The floor plan comprises four main rooms. The front door opens from the verandah into the living room with a simple fireplace. The kitchen is located behind the living room and two bedrooms are located opposite the living areas. There is a bathroom and a sleep-out under the main roof at the back. The weatherboard cladding is unpainted and the house is in fair condition. At the time of inspection (December 2004) the house was occupied.

Building 51

Building 51 is a singlemen's, or staff, quarters constructed at *Portagabra* [in] the 1920s. In plan it comprises two inter-connecting rooms with a partially enclosed verandah on each side. There is a stove with a metal flue on the western elevation. The building is timber framed and weatherboard clad with a gabled galvanised iron roof. The weatherboards are unpainted and the roof sheets in fair condition. The verandas are in-filled with fibrous cement sheets. The quarters are moderately intact.

Building 1185

Building 1185, built at *Portagabra* in the 1950s, is an example of a Type 5 Forests Department cottage. It is a single storey timber framed, painted weatherboard clad cottage with a corrugated iron roof and a brick chimney. At the back of the cottage is an original laundry and a timber framed garage with a recent steel roller-door. The back yard has been landscaped with lawn and shrubs including recently introduced succulents. There are four brick steps to the front verandah which is timber framed and partially enclosed with fibrous cement sheet. Windows are timber framed with horizontal glazing bars and the front door is an original panelled door. Internally the walls are lined with plasterboard. The floor plan comprises five main rooms. The front door opens from the verandah into a living room with a simple fireplace. The kitchen is located adjacent to the living room and two bedrooms are located on the opposite side of the living area. There is a bathroom and a study under the main roof at the back. The building is moderately intact, in fair condition and at the time of inspection (December 2004) was occupied.

Building 363

Building 363 is located near the entry to the vehicle yards south east of the CALM District Office. The building is a Type 8 Forests Department cottage that was relocated to *Portagabra* in 1969. The building is of the same plan as Building 315, except that the bathroom and sleep-out at the rear are reversed. The building is timber framed, unpainted weatherboard clad, with a corrugated iron roof. There are a timber framed and weatherboard clad laundry and a

garage at the back. The house is used as an office and is moderately intact. The rear yard is used as a carpark for CALM vehicles.

CALM District Office – Building 103

The CALM District Office (Building 103) comprises the original timber framed, weatherboard clad and corrugated iron roofed office built at *Portagabra* in 1925 and more recent additions. The office has been extensively altered and refurbished and is painted white. The building is in good condition but has low authenticity and is used as the CALM office.

Sheds and Outbuildings – Buildings 1184, 1394, 1819 and 2234

The various sheds and outbuildings located in the works yard date from the 1950s to the 1970s and comprise the shed and oil store (Building 1394), the two six bay garages (Buildings 1184 and 2234) and the five bay workshop (Building 1819). These buildings are located around an open yard that has a gravel surface.

Buildings 1184 and 2234 are timber post structures comprising six parallel parking bays with four timber posts supporting the roof separating each parking bay. The structures are clad on three sides with rough swan timber weatherboards that are unpainted, and have zincalume skillion roofs. The garages have sand floors and measure approximately 19m x 8m overall.

Building 1394, the oil store and shed, measures approximately 9m x 6m wide. It is a timber framed building with unpainted weatherboard walls and a corrugated galvanised iron roof. There are galvanised iron garage doors on the western elevation and two windows on each of the north and south elevations.

Building 1819 is a five bay workshop constructed in 1965. It is rectangular with a gabled roof which is clad with corrugated iron on the southern bays and zincalume on the northern bays. The walls of the northern section are clad with zincalume and galvanised iron while the southern-most portion of the building is clad with unpainted weatherboards.

Building 373

Building 373, built at *Portababra* [sic] in the 1930s, is a typical example of a Type 8 Forests Department cottage. It was not able to be inspected internally. It is timber framed and the front elevation has been restored with unpainted, oiled weatherboards. There are painted fibrous cement sheets to the sides and rear elevations. Windows to the front and sides are small paned pairs of casements and the front door is timber framed with six small panes to the top section. The timber framed skillion roofed front verandah has a recent timber balustrade with crossed timbers. At the back of the building is a skillion roofed out-building, probably a laundry. The roof is red painted corrugated iron sheets. The back garden has been adapted for use as an outdoor cinema. The building was not occupied at the time of inspection and is believed to be used for storage.

Generally, those buildings in the CALM complex at *Portagabra* that remain in use are in fair to good condition as a result of ongoing management and maintenance. Once the buildings are unoccupied however they deteriorate quickly due their age and to the extensive use of timber in their construction. The office (Building 103), workshops and garages are generally in sound condition. Building 363, used for office purposes is also in good condition. Buildings 315, 1185 and 51 are in fair to good condition and Building 324 which is vacant is in fair condition. Building 373 is managed as part of the Hills Activity Centre and was not able to be inspected internally.

Portagabra has low authenticity and very few of the settlement's buildings remain extant. While the number of buildings on the site fluctuated over time, it is evident that the majority of structures were removed by the 1970s or 80s. The site contains only four buildings constructed before World War II and of these

two are Type 8 houses, commonly constructed by the Forests Department (Buildings 315 and 373), and one is the District Office (Building 103), that has been extensively altered. The singlemen's quarters (Building 51), is of moderate to high authenticity however.

Mundaring Weir Forestry Settlement has low to moderate authenticity as more than half of the buildings have been removed from the site. Whilst forestry settlements tend to expand and contract over time it is the loss of the residences which particularly contributes to the low level of authenticity. The single men's quarters has moderate to high authenticity. The overall integrity of the site is moderate as the place is still used as the centre for forestry management in the Mundaring district.

9. HISTORY

The discovery of gold around Coolgardie and Kalgoorlie in the 1890s, led to a large influx of people into what was a comparatively arid area. Whilst the discovery of gold was welcomed by the government the development of the resource had one serious side effect which was not of the government's choosing, a lack of water on the goldfields. In addition, the Eastern Railway, which was completed between Guildford and Chidlow's Well in 1884, was also a high water user. It soon became apparent that when the government extended the line out to the goldfields, additional water supplies would have to be found.⁴ The Public Works Department, which previously had had no need to provide water to Western Australians, suddenly found itself required to supply large quantities of water for a variety of purposes and across vast distances.⁵ Many of the early solutions used were expensive and produced only poor quality water.⁶ During 1895, C. Y. O'Connor (Chief Engineer in the Department of Public Works) had been investigating possible solutions to the water problem in the eastern goldfields.⁷ Finally, through Premier Forrest's political acumen and O'Connor's technical expertise, the Coolgardie Goldfields Water Supply Scheme came into being in 1896 and a location on the Helena River, in the Darling Ranges was chosen as a dam site.⁸ The site lay to the south east of Jecks' vineyard. Once the site was chosen, a spur line from the Eastern Railway line to the reservoir site was constructed. The branch line was completed in June 1898, splitting off from the Eastern Railway line at what was to become Mundaring.⁹

Prior to this development, the locality around Mundaring Weir was first settled by Europeans in 1882. Walter Jecks, who owned the Rose and Crown in Guildford, established a vineyard and orchard on land near the Helena River, slightly to the north east of the dam site (in the area known

⁴ The Eastern Railway line reached Coolgardie in April 1896. Le Page, J. S. H., *Building a State, the story of the public works department of Western Australia 1829 – 1985.*, Water Authority of Western Australia, Leederville, 1986, p. 224.

⁵ LePage, p. 263.

⁶ LePage, p. 264.

⁷ LePage, pp 272 – 279.

⁸ LePage, pp. 280 - 282.

⁹ Quicke, E., *Mundaring Weir Among the Hills*, Mundaring & Hills Historical Society, 1996, p. 2.

today as Jacoby Park) and built a cottage.¹⁰ Jecks was soon joined by both his brother Thomas and John Allpike (Locations 964, 990, 991, 1001 and 1037), who purchased adjoining lots.¹¹ A year later, Frederick Byfield purchased Swan Loc. 1324 to the east of the dam site and also established a vineyard on this land.¹² In addition, Joseph Mann (Locations 1873 and 1099), W. H. Allsop (Location 2473) and Henry Poett (Loc. 48/2105) took up conditional purchase leases in the 1890s.¹³ By 1899, Frederick Jacoby (together with his brother Mathieson), had purchased the Jecks brothers' land, the Allsop, Poett ("San Mateo") and Byfield properties. The vineyard established by Jecks was enlarged by the Jacoby brothers and named "Portagabra", whilst Byfield's property was named "Greystone". These purchases gave the Jacoby brothers a monopoly on the freehold land in the area around the new dam site. Once the government indicated its intention to construct a dam on the Helena River, an embargo was placed on further land acquisitions near the reservoir.¹⁴

Excavation work on the dam wall commenced in April 1898 and the land in the reservoir basin was cleared of trees.¹⁵ Trees were also ringbarked in the lower reaches of the catchment area to ensure that there was good run-off into the reservoir.¹⁶ A shanty town grew up below the site of the dam wall and to the south of the river during the construction of the Weir.¹⁷ Several stores were established to supply the workers and sly grog shops also became a feature of the area. The Jacoby brothers provided the legal solution to the problem when they constructed a hotel in the area in 1898. The single storey building was called the Reservoir Hotel and remains today as the rear section of Mundaring Weir Hotel.¹⁸

As the dam wall neared completion the reservoir began to fill. In order to get the water from the dam to Kalgoorlie, 528km to the east (and 390 metres higher than Helena Valley), eight pumping stations were constructed. The first, No. 1 Pumping Station, was erected near the base of the dam wall. The No. 2 Pumping Station lay approximately 2.5km to the north-east of the dam wall, but lifted the water approximately 100 metres up from the reservoir. The next station was erected 115 km to the east. All of the stations were powered by steam engines which required huge supplies of timber to keep the boilers burning. Prior to the completion of the water supply in January 1903, fears had been held that the two main tributaries would not be able to provide sufficient water to fill the dam. Orders were given to destroy 20,360a of marri and jarrah forest to increase

¹⁰ Elliot, I., *Mundaring, a history of the Shire*, Shire of Mundaring, Mundaring, 1983, p.135.

¹¹ Elliot, p. 135; Certificate of Title Vol. 395 Fol. 145.

¹² Elliot, p. 135.

¹³ Elliot, pp. 135 - 6; Plan showing locations and names - get info on this.

¹⁴ Elliot, pp 135 - 36.

¹⁵ Quicke, E., p. 6.

¹⁶ Elliot, p. 136.

¹⁷ Elliot, p. 137.

¹⁸ Quicke, E., p. 3.

the rainwater runoff into the dam. However, their fears proved to be groundless as the dam overflowed during the first winter.¹⁹

At the time of the dam's completion, the Helena Catchment Area comprised 364,000 acres²⁰ which was controlled by the Goldfields Water Supply Scheme (GWS). A Ranger, appointed by the Woods and Forests Department, patrolled the area and in 1904 asked whether he could issue timber licenses as he had received several requests. Those people responsible for the GWS were naturally concerned with water quality. The authority was assured by a bacteriologist that timber cutting would not contaminate the area, but the disposal of human waste had to be strictly controlled. Timber cutters would be permitted to cut in the catchment area provided that their camps were located outside the area. In addition, trees could not be cut unless they were over 3' high with a girth of 72". The GWS set fees that were slightly lower than those charged by the Woods and Forestry Department and they soon came under fire from both the Woods and Forests Department and the number of requests received to cut timber in the Catchment Area. Eventually it was decided that the Woods and Forests Department would issue the licenses as long as those issued for the catchment area listed the strict terms that applied.²¹

By 1909, the Chief Engineer at Mundaring Weir (Reynoldson) noted with concern that salinity levels at the reservoir were rising, prompting the secretary for the GWS to write back asking for possible reasons for this rise. It is interesting to note in the correspondence which flowed back and forth that at this time, the reasons for rising salinity levels were not understood. Reynoldson wrote back that four factors were known to raise salinity levels:

1. Leaching from the soils into the reservoir
2. Water evaporation from the surface of the reservoir
3. Ring-barking and cultivation
4. Volume of yearly flow into the reservoir.

Regular water quality readings showed that the water flowing from the Helena River had become increasingly saline, whereas the Darkan River's²² salinity levels were fairly low and had not increased. He considered that the Helena's salinity levels were due to the fact that the water catchment in this area had been cleared of trees and the larger trees ringbarked, whereas the Darkan's catchment area remained virtually untouched. He recommended that ringbarking should cease in the Helena Catchment Area, the remaining alienated land resumed and that all cleared and

¹⁹ Working Plan No. 1 Mundaring Catchment Area, Acc 934, 1919, Item 737, State Records Office.

²⁰ To ensure historical authenticity the original imperial land areas have been retained throughout this document. 1 acre = 0.40 hectares.

²¹ Goldfields Water Supply Scheme (GWS): Helena Catchment - cutting timber. Acc 1109, 1913 Item 2849, State Records Office.

²² The two main rivers which flowed into the reservoir were (and still are) the Helena River and The Darkan River.

resumed lands should be reafforested.²³ Regular readings continued to be taken but no reforestation took place at this time.

Cutting continued in the catchment area but additional restrictions were applied: green trees could still be cut, but they had to be over 3' high with a girth of at least 72".²⁴ By February 1913 the Western Australian Government Railways' engineer based at Midland had become concerned with the salinity levels of the Goldfields Water Supply line. He noted that salinity levels at the Victoria Reservoir (which was older), were much lower than those in the Helena Reservoir and considered that the higher levels were due to the lack of vegetation in the water catchment area. He pointed out that:

1. If the salinity of the GWS water continued to rise the railway would have to use distilled water.
2. Timber cutting should not be allowed in catchment areas used for domestic water supplies.
3. Where possible, all timber along water course should be preserved.

A memo to the Under Secretary of Water from the PWD's Acting Engineer in April 1913 noted that in the last fifteen years American studies had shown that timber should not be cut in water catchment areas.²⁵ The increasing agitation from the engineers appears to have had some effect. Efforts were made to cease issuing timber licenses (although this was complicated by long leases held by some milling companies) and the Greystone and San Mateo properties were resumed. Jacoby's Portagabra property and the hotel were not resumed as the nearby watercourses entered the Helena River below the dam wall.²⁶

The Forests Department (later re-named the Woods and Forests Department) was created in 1896 by the Forrest Government. As mentioned above, the Department was responsible for the issuing of timber licenses and in addition it was also responsible for the management of the state's valuable timber resources. Charles Lane-Poole was appointed Inspector General of Forests in 1916 and immediately began developing a classification programme for the state's forests to determine which areas should be set aside for forestry purposes. He believed passionately in the sustainable development of the forests and was appalled at previous management which he viewed as a waste of the timber resource with no regard to the sustainable development of the timber industry. He drafted the *Western Australian Forests Act 1918*²⁷ which enabled large tracks of forest to be set aside into State Forests and provided a blue print for the management of these forests. The legislation

²³ GWS: Helena Reservoir - salinity, Acc 1109, 1918, Item 300, State Records Office.

²⁴ GWS: Helena Reservoir - salinity, Acc 1109, 1918, Item 300, State Records Office.

²⁵ GWS: Helena Catchment - cutting timber. Acc 1109, 1913 Item 2849, State Records Office.

²⁶ GWS: Helena Catchment - cutting timber. Acc 1109, 1913 Item 2849, State Records Office; Mundaring & Hills Historical Society files.

²⁷ The Act was proclaimed in March 1919.

saw the Woods and Forests Department restructured as the Forests Department. At the time that Lane-Poole drafted the Forests Act, it was considered to be the most progressive piece of forestry legislation for its time.²⁸ The south-west region was divided into six districts, and then further sub-divided into 50,000 acre blocks which were managed by a forestry officer.²⁹

A preliminary working plan was prepared for the Mundaring Catchment Area in 1919. This was the first working plan prepared for Western Australia's forests. The plan provided a brief history of past land usage in the area, noting that the order to denude 20,360 acres of forest to ensure adequate water runoff had seen not only the loss of valuable timber but the loss of vegetation to such a large area had led to serious consequences. The ring-barked areas had in fact regenerated well, but inadequate forestry practices had seen the newly regenerated areas badly affected by fierce bushfires which had either destroyed the young trees or rendered them useless as a timber resource. The primary consideration of this particular plan was to ensure the maintenance of a pure water supply, the forestry aspect was a secondary consideration. The objectives of the plan were:

1. To manage the forests in the water catchment area to maintain water quality.
2. The old timber had to be cut out to make way for new trees which could be developed into marketable wood
3. Fire belts had to be developed through out the area and fire patrols implemented.
4. Roads constructed to assist with fire prevention.

The replanting of the deforested areas near the Helena River and the former farm lands were given top priority and it was this area that was to be reforested first. Decisions on suitable tree species was carefully considered and narrowed down to tree species that would grow quickly and that would also provide a return. Interestingly aesthetics were also taken into account. It was noted that the reservoir formed a beautiful lake and any species chosen for this area should enhance the natural appearance of the lake. Cork oaks were planted along the shoreline with pine species chosen for the ringbarked areas.³⁰ The final plan was approved in September 1921. Headquarters were established at the Weir and an Assistant District Officer was appointed to take charge of the work. An iron hut provided temporary headquarters at Mundaring Weir and the Department also took the opportunity to use the junior clerk based in the

²⁸ Calver, Michael et al. (eds) 'Why 'A forest conscienceness'?' Proceedings 6th National Conference of the Australian Forest History Society Inc, 2005 Millpress, Rotterdam, p. xvii. Downloaded 19.1.2009: espacelibrary.uq.edu.au/eser/UQ9247/whyaf.pdf

²⁹ HCWA Assessment: Portagabra (Place No. 8541), written by Jacqui Sherriff and Rosemary Rosario, p. 5, April 2005.

³⁰ Working Plan No. 1 Mundaring Catchment Area, Acc 934, 1919, Item 737, SROWA.

Post Office at Mundaring Weir.³¹ Two experimental nurseries were established in June 1921, one at the old Greystones vineyard and another at Byfields (the south western portion of the Greystones' vineyard). In May 1923 a third nursery was developed near the Weir Wall. Two species of pines (insignis [now known as radiata] and pinaster) were planted on the denuded slopes around the Helena River. Cork oaks were planted around the reservoir. However, these plantings were unsuccessful as wild horses ate many of the acorns or rolled on the young trees.³² In later years, a nursery was established near the Divisional Headquarters. Once trees had been identified that would grow successfully in the cleared areas, planting out was done annually. ³³

During the 1920s, Working Circles, with their own individual plans, were established in eight districts throughout the south-west. Staff were assigned to the districts and accommodation provided. One of the objectives of the final Working Plan for Mundaring was to encourage rural settlement which would provide a labour force to protect the forest.³⁴

The government resumed the north east portion of Jacoby's Loc. 964 for forestry purposes in October 1923. In December 1923 the new forest district of Mundaring (comprising 120,000 acres) had been formed with Forester H. Smith placed in charge.³⁵ By June 1924 a forester's house ("House 49; standard District Forest officer plan"), workman's cottage ("singlemen's quarters", House 51, extant), stables, ("Building 52"), staff hut ("Building 55")³⁶and fencing had been erected on this land and 155 acres replanted with new trees.³⁷ According to the HCWA assessment House 54 (a type 8B house) was also built during the 1923/24 financial year.³⁸ During 1923/24, the Forests Department continued to resume land within the catchment area and replant former farm land which came from the nursery at the Weir Wall.³⁹ Two saw mills were established at Mundaring and were managed by forestry employees. Permits were supplied to cut logs, firewood, thinning of the forest, reforestation and other forestry tasks. Two saw mills were also set up and these were managed by the forestry employees. As operations in the area expanded, additional houses and buildings were added to the site:

1924/25: two houses, single man's hut and several sheds.

³¹ At this time, the Weir Post Office operated out of the Reservoir Hotel.

³² Working Plan No. 1 Mundaring Catchment Area, Acc 934, 1919, Item 737, SROWA.

³³ Butts, J.L., Mundaring Division: a brief history, unpublished manuscript, undated, pp. 24 - 25.

³⁴ Working Plan No. 1 Mundaring Working Circle, Cons. 3504 No.1, SROWA.

³⁵ Annual Report of Forests Department, 30 June 1924, p. 12 in *Votes and Proceedings of Parliament, 1923 - 24*, part 2, Perth, 1924.

³⁶ The information in the brackets has been taken directly from HCWA: Portagabra assessment, p. 7, 2005.

³⁷ Certificate of Title Vol. 429 Fol. 199; Working Plan No. 1 Mundaring Working Circle, Cons. 3504 No.1, SROWA

³⁸ HCWA Assessment: Portagabra, p. 7. The Forests Department used standard plans, developed by the PWD, for their buildings. Officer accommodation, such as the District Forestry Officer's house, was designated as DSO building, married quarters and single quarters were given a number, with variations of a given number given an additional alphabetical notation, such as 8a. This information has been obtained from plans that were held in the District Office at Mundaring in 2005.

³⁹ Annual Report of Forests Department, 30 June 1924, p. 12.

1925/26: House, office, 3 single men's huts.

1934/35: eight houses, boarding house, mess and kitchen and single men's huts.

1937: Railway siding, established to serve the growing forestry settlement, named *Portagabra*.

1939 - 49: World War II, construction work was suspended at the Weir.

1955/59: New workshop together with extensions to some of the buildings, new garages to some of the houses, addition of 3 houses, 7 single men's huts.

1956: One house

Once the pines began to grow properly the plantation needed to be thinned. A sawmill was initially set up at Greystones in 1932 but eventually it was decided that it would be more practical to locate the mill near the railway line and in 1939 it was moved into Mundaring Weir Forestry Settlement to the west of the houses on Allen Road. The mill operated until c.1965 when it was decided that it would be just as efficient to rail the raw logs to Perth for milling.⁴⁰

Jacoby's Hotel became an important component out at the Weir, catering to tourists who flocked to the area once the Weir was completed, to the families who were involved with keeping the two Pumping Stations operational and the forestry workers and their families. Fred Jacoby died in 1954 and the land and hotel passed to his daughter Elfrida Devenish. In 1956 she donated 28 acres of the Portagabra property to the Conservator of Forests "to be used as a memorial arboretum in honour of her father".⁴¹ A major planting programme was implemented between 1957 and 1958 with a mixture of native species and pines in the area which has become known as Fred Jacoby Park, whilst the remainder of the area was planted with pines.⁴²

No new houses were erected at Mundaring Weir Forestry Settlement during the 1960s and 1970s although essential maintenance was carried out. It was also during this period that there was a change in government policy towards the provision of housing in forestry settlements. Mundaring Weir Forestry Settlement was seen as an isolated area, with few facilities such as schools, shops and churches. A decision was finally made that employees would be accommodated at nearby Mundaring. However a house was re-located to Mundaring Weir Forestry Settlement from Carinyah in 1971 for use by a district officer.⁴³

The Forests Department, National Parks Authority and the Wildlife Section of the Department of Fisheries and Wildlife were combined in March 1985 to

⁴⁰ Butts, J.L., pp. 26 & 27.

⁴¹ Certificate of Title Vol. 1133 Fol. 595; HCWA Assessment: Fred Jacoby Park (Place No. 4373), written by Kris Bizzaca and Fiona Bush, p. 6, April 2004.

⁴² HCWA Assessment: Fred Jacoby Park, pp. 6 - 7.

⁴³ HCWA Assessment: Portagabra, p. 10.

form the Department of Conservation and Land Management (CALM). "The main functions of CALM were to manage land vested as State Forest and timber reserves, National Parks, Nature Reserves, Marine parks and Marine Nature Reserves."⁴⁴ During the 1980s the majority of the cottages at Mundaring Weir Forestry Settlement were removed either by demolition or removal from the site. During 1986, discussions between CALM and the Government Employees Housing Authority (GEHA) saw in principle agreement between the two departments to transfer the remaining CALM accommodation to GEHA. In January 1989 this process was completed and the care and maintenance of the remaining cottages at Mundaring Weir Forestry Settlement were transferred to GEHA. On the southern side of Allen Road (to the south east of Mundaring Weir Forestry Settlement), where forestry cottages had formerly been located, CALM constructed an education centre in 1991 and opened their first nature based information centre: the Hills Forest Discovery Centre.

Kookaburra theatre?

On the 1 July 2006, the Department of Environment and CALM were merged together to form the Department of Environment and Conservation (DEC). The Department is responsible for conserving the State's environment which includes the management of the national parks, marine parks, conservation parks, State forests, timber reserves, nature reserves, marine nature reserves and marine management areas.⁴⁵

In 2006, the Water Corporation began a process of community consultation and investigation to determine the best location for the proposed Mundaring water treatment plant. After an initial selection of 21 sites, the list was reduced down to four sites by February 2007. One of these was Mundaring Weir Forestry Settlement (referred to as the DEC site). Continued community consultation and weighting by Water Corporation staff finally led to a decision in February 2008 that Portagabra was the most acceptable site for the new water treatment plant. The use of this site would mean the removal of all the buildings which currently remain on site and extensive site works. In January 2009 the final decision is still to be made regarding the use of this site. Meanwhile, Mundaring Weir Forestry Settlement continues to function as the headquarters for DEC in the Mundaring forestry division.

10. REFERENCES

See footnotes

11. LOCATION MAP

Attached

12. SITE PLAN

⁴⁴ HCWA Assessment: Portagabra, p. 10.

⁴⁵ www.dec.wa.gov.au/about-us/index.html, information downloaded 19 January 2009.

National Trust of Australia (WA)

Attached

13. FLOOR PLANS

See Site Plan

14. PHOTOGRAPHS

Attached