

Molonglo Valley Plan
for the Protection of Matters of
National Environmental Significance (NES)

Annual Report 2012 - 2013



ACT
Government
Economic Development

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Annual Report 2012 - 2013

Molonglo Valley Plan for the Protection of Matters of National Environmental Significance

Economic Development Directorate

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List of Abbreviations

ACT	Australian Capital Territory
BGW	Box –Gum Woodland
CEMP	Construction Environment Management Plan (interchangeable with EMP)
EDD	Economic Development Directorate
EIS	Environmental Impact Statement
EPA	Environment Protection Agency
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cwth)
ESA	Emergency Services Agency
ESDD	Environment and Sustainable Development Directorate
LDA	Land Development Agency (under EDD)
MNES	Matters of National Environmental Significance
NSW	New South Wales
NTG	Natural Temperate Grassland
PDF	Planning and Design Framework
PTWL	Pink-tailed Worm-lizard
SEWPaC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities
TaMS	Territory and Municipal Services Directorate

Annual Report 2012 - 2013

Molonglo Valley Plan for the Protection of Matters of National Environmental Significance

Economic Development Directorate

Introduction

This Annual Report is prepared in accordance with Section 6 of the Molonglo Valley Plan for the Protection of Matters of National Environmental Significance (NES Plan) September 2011. It reports on the implementation of the NES Plan from 1 July 2012 to 30 June 2013.

Section 6 provides that the ACT Government will monitor and report annually to the public on the implementation of the NES Plan. The primary purpose of monitoring and reporting is to ensure that the conservation outcomes described in the NES Plan are achieved.

The first part of this report and Table 1 is a summary of the requirements and commitments in the NES Plan for the protection of matters of national environmental significance (MNES) in the Molonglo Valley. The second part of this report provides a summary of performance for the reporting period. Table 2 is a summary listing the outcomes against the list of requirements which were completed in the reporting period.

Part 1 NES Plan Requirements and Commitments

1.1 Overview

In 2008 the ACT recognised that the nature and scale of proposed development in the Molonglo Valley would be complex and involve multiple stakeholders. It was also apparent that environmental protection in the Molonglo Valley would be best served through high level planning. It was therefore considered that, within this context, a strategic assessment under Part 10 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) would be preferable to projects which would otherwise be assessed on a case by case basis.

The EPBC Act is the Commonwealth Government's key piece of environmental legislation. It protects matters of national environmental significance (MNES).

In September 2008, the Australian Capital Territory (ACT) and Commonwealth Governments entered into an Agreement to conduct a strategic assessment under the EPBC Act.

The strategic assessment included all of East Molonglo with the exception of the suburbs of North Weston, Wright and a portion of Coombs. These suburbs have prior approval under the EPBC Act (Reference numbers: 2009/5041, 2009/4752 and 2009/5050) and therefore were not included in the analysis or outcomes of this process. Refer Figure 1

West Molonglo is included within the scope of the strategic assessment as it includes MNES and was part of the same overall process to establish the Structure Plan.

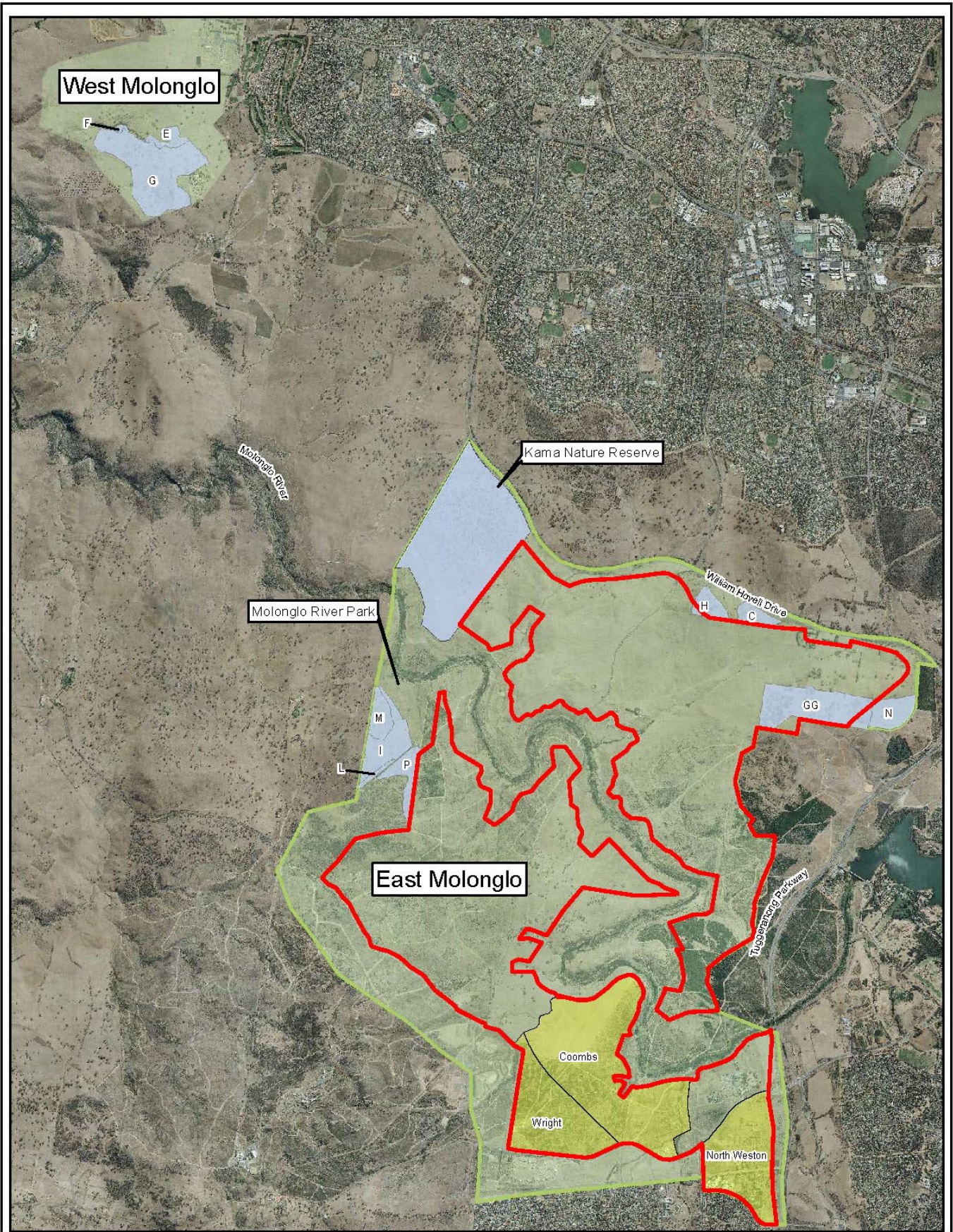
The Molonglo Valley Plan for the Protection of Matters of National Environmental Significance (NES Plan), which details the ACT Governments commitments to protect MNES in the Molonglo Valley, was strategically assessed by the Commonwealth and endorsed in October 2011. Actions associated with urban development within East Molonglo were then approved by the Commonwealth in December 2011. The West Molonglo area was not included in this approval.

In particular the NES Plan establishes a set of conservation activities to protect MNES. These are broadly based around two processes:

- avoidance and mitigation of impacts on MNES; and
- on-ground management and offsetting to provide maintenance and improvement of MNES values in important areas.

The key MNES that require commitments through the NES Plan are:

- *White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland and Derived Native Grassland* (Box-Gum Woodland).
- *Natural Temperate Grassland of the Southern Tablelands of NSW and the ACT* (Natural Temperate Grassland).
- *Aprasia parapulchella* (Pink-tailed Worm Lizard).
- *Polytelis swainsonii* (Superb Parrot)
- *Lathamus discolor* (Swift Parrot)



- Legend**
- █ East Molonglo Urban Development Area
 - █ EP BC Approved Area
 - █ Other Areas
 - █ Strategic Assessment Area

0 195 390 780 1,170 1,560 Metres

Digital Orthophoto Map based on February 2009 photography

Projection Information:
 AGD 1966 ACT Grid AGC Zone
 Projection: Transverse Mercator
 Datum: Australian 1966
 False Easting: 200,000.0000
 False Northing: 4,510,193.4939
 Central Meridian: 149.0093
 Scale Factor: 1.0001
 Latitude Of Origin: 0.0000
 Units: Metre
 Date: 03/10/2012

Figure 1: Molonglo Valley Strategic Assessment Area

Territory & Municipal Services
 PO Box 158 Canberra ACT 2601

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1.2 Implementation of the NES Plan

The ACT Government is committed to protecting MNES as part of development within the Molonglo Valley.

The Economic Development Directorate (EDD) has the responsibility for the monitoring and delivery of the NES Plan for the development of urban land within East Molonglo on behalf of the ACT Government.

The NES Plan specifies conservation outcomes that the ACT Government will deliver to protect MNES and the actions that will be undertaken to achieve those outcomes. In particular Section 4 of the NES Plan provides 44 specific Actions related to conservation outcomes for Box-Gum Woodland (BGW), Natural Temperate Grassland (NTG) and Pink-tailed Worm Lizard (PTWL).

In addition to these specific Actions the NES Plan also contains a number of requirements to be met in the implementation of the Plan.

EDD has produced a summary table of the NES Plan Requirements and Actions to monitor and report on the implementation of the Plan. The following table provides a reference to the NES Plan for each Action or requirement and a status summary as at 30 June 2013.

Table 1: Annual Report 2012 – 2013 NES PLAN REQUIREMENTS AND ACTIONS

(Endorsement Decision by Commonwealth Minister Burke on 7.10.2011, Approval Decision by Commonwealth Minister Burke on 20.12.2011)

No.	NES Plan Page Reference	Commitment	Status
1	2	<p>To ensure conservation outcomes and protect MNES adjacent to the development area in the lower Molonglo Valley, the ACT Government will make necessary amendments to the Structure Plan.</p> <p><i>(Also Items 4, 30 and 62 refer)</i></p>	<p>The relevant NES Plan actions and commitments applicable to Stage 2 have been incorporated into the Planning and Design Framework for Stage 2. The PDF was approved by the Chief Planning Executive on 17 April 2012. On 10 August 2012, Technical Amendment to the Territory Plan No. 2012-24 that includes the applicable provisions arising from the PDF (and NES Plan) came into effect. This included the re-alignment of parts of the river corridor boundary on the southern side of the Molonglo River adjacent to Stage 2.</p> <p>Further changes to the river corridor boundary will occur in the future in response to the Plan of Management and more detail planning for infrastructure and estate development.</p> <p>Planning for Stage 3 has yet to commence.</p> <p>EIS for deferred area – refer to LDA.</p>
2	3	<p>Following endorsement of the NES Plan under the EPBC Act, actions (or classes of actions) that will occur to implement the endorsed NES Plan may be approved by the Minister.</p>	<p>Endorsement Decision by Commonwealth Minister Burke on 7 July 2011, Approval Decision by Commonwealth Minister Burke on 20 December 2011</p>
3	9	<p>Infrastructure within the river corridor comprises the following activities and will be staged to be most cost effectively developed (in the following order):</p> <ul style="list-style-type: none"> • John Gorton Drive which includes the construction of dual bridges crossing the Molonglo River • East-West Arterial Road bridge crossing of the Molonglo River • Water quality control ponds; water mains; sewer mains and sewer pump stations; and • A combined sewer / pedestrian / cycle bridge. 	<p>On 27 April 2012 EDD advised the Commonwealth Department of Sustainability, Environment, Water, Population and Communities that the ACT Government may change the order of this infrastructure to effectively manage the sequencing of land release.</p>
4	10	<p>Variations to the East Molonglo development boundary to minimise the impact on MNES values. A particular focus of this is the reduction of impacts on moderate and high quality Pink-tailed Worm-lizard habitat.</p> <p><i>(Also Items 1 and 62 refers)</i></p>	<p>The Planning and Design Framework for Stage 2 Molonglo was approved on 17 April 2012.</p> <p>The brief for the statutory Plan of Management - Issues Papers to tender on 31 May 2013.</p> <p>Issue Papers are scheduled for completion in December 2013 following consultation with Community Representative Groups.</p>
5	10	<p>Designing infrastructure that will occur in the river corridor to avoid or minimise impacts to MNES. This process includes:</p> <ul style="list-style-type: none"> • re-aligning the location of the major bridges (as compared to the original location proposed in the Molonglo Structure Plan) to minimise impacts on moderate and high quality Pink-tailed Worm Lizard habitat; and • aligning other infrastructure to avoid moderate and high quality Pink-tailed Worm Lizard habitat and Box-Gum Woodland where this can be achieved. <p><i>(Also Items 6, 31 and 63 refer)</i></p>	<p>Ongoing. This design principle has been adopted by EDD and incorporated into the contracts for the design and construction projects.</p> <p>TAMS has completed contracts with specialist ecologists to prepare draft Ecological Management Guidelines for all aspects regarding managing and monitoring MNES at Molonglo. These guidelines will inform ongoing design and operational works.</p>
6	10	<p>A design principle to maintain ecological values within the East Molonglo development area where possible.</p> <p><i>(Also Items 5, 31 and 63 refer)</i></p>	<p>Complete. NES Plan values are in the process of being mapped for the Molonglo development area with infrastructure impacts to be superimposed on these areas to determine ecological budget utilisation.</p>
7	10	<p>A commitment to avoid impacts on MNES within West Molonglo.</p>	<p>Existing land management Agreements being reviewed.</p> <p>TAMS has completed contracts with specialist ecologists to prepare draft Ecological Management Guidelines for all aspects regarding managing and monitoring MNES at Molonglo. These guidelines will inform ongoing design and operational works.</p> <p>TAMS has completed contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area.</p> <p>TAMS is preparing Operational Plans to be informed by the Baseline Condition Assessment of BGW and Ecological Management Guidelines for the rural leases.</p>
8	11	<p>The ACT Government will ensure that all construction activities (whether in the urban area or in the river corridor) will be subject to construction environmental management plans (CEMPs). These CEMPs will help to ensure that unnecessary impacts from construction (eg through the uncontrolled movement of machinery) are avoided. A detailed description of the content of CEMPs is provided in Section 4.</p> <p><i>(Also Items 32 and 64 refer)</i></p>	<p>Ongoing.</p> <p>EDD has incorporated the requirement for CEMP's in all Capital Works infrastructure documentation for Molonglo.</p> <p>EDD has engaged a site surveillance officer to monitor projects in Molonglo.</p> <p>TAMS has incorporated the requirement for CEMP's in all Capital Works documentation for Molonglo River Park.</p>

No.	NES Plan Page Reference	Commitment	Status
9	11	<p>Development of the "Molonglo River Park" Concept Plan as an offset site along the East Molonglo River. This Plan will establish management zones within the Park, specifically identifying areas to be designated for conservation as well as identifying recreation areas and resolving public access. The Plan will also be complementary to the management approaches developed for the area of the river corridor adjacent to Coombs as required in relation to EPBC referral 2009/5050.</p> <p><i>(Also Items 10, 36,37, 68 and 69 refer)</i></p>	<p>The draft Concept Plan for the Molonglo River Corridor Concept Plan was considered by Cabinet on 28 August 2012. In Decision 10/0826/CAB Cabinet agreed the Molonglo River Concept Plan at Attachment A of the submission.</p> <p>Stage 1 – Coombs Riverside Landscape Design: project has commenced with PSP's circulated.</p> <p>Preliminary Risk Assessment for the Coombs interface landscape design is complete.</p> <p>Establishment of the Outer Asset Protection Zone at Coombs Riverside is underway with restoration planting to commence in May 2013.</p>
10	11	<p>Development and implementation of a management plan for the river corridor with a focus on providing long-term outcomes for Box-Gum Woodland and the Pink-tailed Worm Lizard. This management plan will then inform a statutory Plan of Management for the East Molonglo River Corridor.</p> <p><i>(Also Items 9, 36, 37,68 and 69 refer)</i></p>	<p>TAMS has commenced the process of preparing the Statutory Plan of Management with completion of the final draft scheduled for October 2014.</p> <p>TAMS has completed contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area.</p> <p>TAMS is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>
11	11	<p>Recognition of the Kama Nature reserve as an offset site and ongoing management of the area with a focus on its MNES values. This process will include the development and implementation of a management plan for the Kama Nature Reserve that will provide for adaptive management and condition improvement of the reserve. This management plan will then inform a statutory Plan of Management for Kama Nature Reserve.</p> <p><i>(Also Item 34 refers)</i></p>	<p>As above - Item 10</p>
12	11	<p>The establishment of a buffer outside of the Kama Nature Reserve on its eastern side to protect the ecological values of the reserve.</p> <p><i>(Also Items 35 and 67 refer)</i></p>	<p>TAMS has completed contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area. The previously identified BGW area in the Buffer zone east of Kama Nature Reserve is exotic pasture and does not represent a Threatened Ecological Community.</p> <p>The Buffer Zone will be included in the Operational Plan for Kama Nature Reserve. The width of the Buffer zone will be determined through the PDF for Stage 3 to be undertaken by ESDD.</p> <p>Fire activities for the purposes of protecting the urban development east of Kama Reserve will be undertaken outside Kama Nature Reserve.</p>
13	11	<p>Establishment and management of Patch GG as an offset site by incorporating the area into the National Arboretum which is directly to the east.</p> <p><i>(Also Items 39 and 40 refer)</i></p>	<p>On 22 January 2013 the ACT Government purchased 'Glenloch' from its former long term lessees.</p> <p>In April 2013 processes were initiated to transfer Patch GG to TAMS for incorporation in to the National Arboretum to enable management as an offset site.</p>
14	11	<p>Management of Box-Gum Woodland patches C, H and N to maintain and enhance their ecological values.</p> <p><i>(Also Items 42 and 43 refer)</i></p>	<p>Following the Baseline Condition Assessment of BGW patches in 2013, Patch H was considered to no longer represent a Threatened Ecological Community. Patch N was divided into 3 patches reflecting the condition and an additional area of 7.8 hectares was added. Patch N will be managed by the National Arboretum as part of Patch GG.</p> <p>TAMS is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>
15	11	<p>Management of Box-Gum Woodland patches I, L, M and P to maintain their ecological values.</p> <p><i>(Also Items 25 and 44 refer)</i></p>	<p>Following the Baseline Condition Assessment of BGW patches 2013; Patch P and M were divided into smaller units reflecting the condition. Patch P2 is regenerating Pine plantation and Patch P3 and M2 do not meet EPBC BGW definition.</p> <p>TAMS is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>

No.	NES Plan Page Reference	Commitment	Status
16	11	<p>Implementation of a number of research projects to improve the knowledge relating to the conservation of Pink-tailed Worm Lizard and Box-Gum Woodland.</p> <p><i>(Also Items 51 and 76 refer)</i></p>	<p>TAMS advised that the site selection and preliminary survey of the area currently referred to in the Molonglo River Park Concept Plan as "Barrer Hill" by ecologists as a suitable site to undertake a BGW restoration in accordance with NES requirements. Following this, the BGW project commenced 5 April 2012.</p> <p>ESDD advised on 19 April 2012 that they had received a final report by Professor Will Osborne titled: <i>Examining the long term survival of Pink-tailed Worm-lizards (Aprasia parapulchella) in Canberra Nature Park: a case study in an urbanised landscape. Habitat, distribution and abundance in the Mount Taylor Reserve – 1990 to 2011.</i></p> <p>This report responds to stage 1 of Section 4.8 of the NES for the Pink-tailed Worm Lizard Research Project.</p> <p>In April 2013 TAMS received two final reports by Dr Will Osborne titled: <i>Conservation Management for PTWL in the Lower Molonglo Corridor Reserves: Guidelines for effective restoration of Habitat</i> and the second report <i>A low impact monitoring method specifically for the Nationally vulnerable PTWL in the Molonglo River Corridor</i>. These reports respond to Section 4.8 of the NES for the Pink-tailed Worm Lizard Research Project. The research projects will be set up in the field in 2013 for ongoing monitoring.</p>
17	11	<p>Management of moderate and high quality Pink-tailed Worm Lizard habitat on the western boundary of East Molonglo to maintain and enhance their ecological values.</p>	<p>TAMS is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>
18	12	<p>Within the strategic assessment area fire management will be aimed at the protection of both built assets and MNES values. This will be achieved through the identification of appropriate asset protection zones and the application of hazard reduction techniques that will both:</p> <ul style="list-style-type: none"> • ensure that the standards for fuel loads in the SBMP are met; and • protect MNES values through the use of sympathetic management techniques. 	<p>TAMS is preparing a strategic Fire management Plan for the Molonglo River Corridor and is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>
19	17	<p>It is also important to note that under Division 3.3 of the <i>Nature Conservation Act 1980</i>, Pink-tailed Worm Lizard has been declared a vulnerable species and Natural Temperate Grassland and Box Gum Woodland are declared endangered communities. The effect of these statutory declarations is that these species and communities need to be managed in accordance with a prescribed Action Plan, prepared by the Conservator for Flora and Fauna.</p>	<p>Action Plans for MNES have been incorporated into the Ecological Management Guidelines to inform all aspects of managing MNES.</p>
20	18	<p>Construction in the Molonglo Valley stage 2 and stage 3 will not commence before completion of the respective Planning and Design Frameworks for both stages 2 and 3. The final Planning and Design Frameworks will incorporate NES actions and commitments.</p>	<p>The Planning and Design Framework for Molonglo Valley Stage 2 was approved on 17 April 2012. The Framework incorporates NES actions and commitments.</p>
21	18	<p>The ACT Government, as the proponent, will ensure that all development concerning MNES in the Strategic Assessment area is incorporated into any future development application and associated documentation to ensure any Commonwealth requirements are reflected in the decision by the Environment and Sustainable Development Directorate.</p>	<p>The Planning and Design Framework for Molonglo Valley Stage 2 was approved on 17 April 2012</p> <p>The approved version of the April 2012 PDF advises at Section 1.2 that: "As required by the NES Plan, all relevant approved actions and commitments are incorporated in this PDF."</p>
22	20	<p>Approximately 482 ha of EPBC Act listed Box-Gum Woodland occurs within the strategic assessment area. Impacts to Box-Gum Woodland will be limited to a maximum of 110ha and a range of measures will be implemented to minimise this area of impact.</p>	<p>EDD has prepared a Biodiversity Account to monitor and record impacts of development in Molonglo East.</p>
23	20	<p>Three offset sites will be established within the strategic assessment area (Kama Nature Reserve, Molonglo River Park, Patch GG) that will provide for the long term protection of 234ha of Box-Gum Woodland. The three offsite sites will be adaptively managed to maintain and enhance the ecological condition of the Box-Gum Woodland that occurs there.</p>	<p>ESDD have prepared mapping of MNES areas.</p> <p>TAMS is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>
24	20	<p>Adaptively manage 28ha of Box-Gum Woodland within the strategic assessment area to maintain and enhance its ecological condition. This will be made up of patches C, H and N (see Figure 3).</p>	<p>ESDD have prepared mapping of MNES areas.</p> <p>Existing land management Agreements being reviewed.</p> <p>TAMS is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>
25	20	<p>Adaptively manage 45.4ha of Box-Gum Woodland within the strategic assessment area to maintain its ecological condition. This will be made up of patches I, L, M, and P (see Figure 3)</p> <p><i>(Also Item 15 refers)</i></p>	<p>As above –Item 24</p>
26	20	<p>Maintenance and enhancement of the Box-Gum Woodland that occurs within the West Molonglo component of the strategic assessment area (see Figure 3).</p>	<p>TAMS is assessing whether current Land Management Agreements require amendments to strengthen provisions regarding MNES.</p> <p>TAMS is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.</p>

No.	NES Plan Page Reference	Commitment	Status
27	20	Improving and applying the knowledge about the management of Box-Gum Woodland.	TAMS advised that the site selection and preliminary survey of the area currently referred to in the Molonglo River Park Concept Plan as Barrer Hill by ecologists as a suitable site to undertake a BGW restoration in accordance with NES requirements. Following this, the BGW project commenced 5 April 2012.
28	20	"Ecological condition" for Box-Gum Woodland will be measured using a peer reviewed, repeatable and scientifically robust methodology for examining and comparing the condition of woodland and derived grassland patches over time.	TAMS has completed contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area. The Adaptive Management Strategy provides a framework for the implementation of the NES Plan. A revised Strategy was completed on 20 May 2013 and is available on the TAMS website.
29	21 BGW Conservation Outcome (a) Action 1	1. Ensure that the combined impacts on Box-Gum Woodland from development within East Molonglo and construction of infrastructure within the river corridor do not exceed 110ha.	EDD has established a Biodiversity Account to monitor and record impacts of development in Molonglo East.
30	21 BGW Conservation Outcome (a) Action 2	2. Amend the East Molonglo river corridor boundary, in stages 2 and 3 respectively with a view to reducing the impacts to Box-Gum Woodland. This process will ensure that connectivity within the river corridor is maintained.	The Planning and Design Framework for Stage 2 Molonglo was amended and approved by David Papps the Director-General of ESDD on 17 April 2012.
31	21 BGW Conservation Outcome (a) Action 3	3. Design the infrastructure that will occur in the river corridor to minimise impacts to Box-Gum Woodland. <i>(Also Item 6 refers)</i>	Ongoing by TAMS as the planning for the Molonglo River Park is progressively implemented in accordance with the Design Principle adopted and incorporated in contracts for design and construction projects. (Refer Item 6)
32	21 BGW Conservation Outcome (a) Action 4	4. Develop, implement and independently monitor Construction Environmental Management Plans (CEMPs) to ensure that unforeseen direct or indirect impacts from construction activities within the development area and the river corridor are avoided. <i>(Also Item 8 refers)</i>	Ongoing. EDD has incorporated the requirement for CEMP's in all Capital Works infrastructure documentation for Molonglo. EDD has engaged a site surveillance officer to monitor projects in Molonglo. Ongoing by TAMS as Molonglo River Park is progressively implemented.
33	22 BGW Conservation Outcome (b) Action 5	1. Develop a management plan for Kama Nature Reserve to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland within the reserve (approximately 117ha)	TAMS has completed contracts with specialist ecologists to prepare draft Ecological Management Guidelines for all aspects regarding managing and monitoring MNES at Molonglo. These guidelines will inform ongoing design and operational works. TAMS has completed contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area. TAMS is preparing Operational Plans to be informed by the Baseline Condition Assessment of BGW and Ecological Management Guidelines for the rural leases.
34	22 BGW Conservation Outcome (b) Action 6	2. Implement the management plan for the Kama Nature Reserve to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland within the reserve. <i>(Also Item 11 refers)</i>	As above – Item 33
35	22 BGW Conservation Outcome (b) Action 7	3. Establish a buffer outside the Kama Nature Reserve between the reserve and the proposed development area, and allow for appropriate uses consistent with nature conservation uses of the reserve. The buffer will be developed to ensure that fire management is undertaken outside of the Kama Nature Reserve and will provide protection against urban edge effects. <i>(Also Items 12, 55 and 67 refer)</i>	As above – Item 33

No.	NES Plan Page Reference	Commitment	Status
36	23 BGW Conservation Outcome (b) Action 8	4. Develop a park Concept Plan for the “Molonglo River Park” which will occur along the East Molonglo river corridor. This Plan will establish management zones within the Park, specifically identifying areas to be designated for conservation as well as identifying recreation areas and resolving public access. A key focus of this plan will be the protection of Box-Gum Woodland. <i>(Also Items 9, 10, 37, 68 and 69 refer)</i>	The draft Concept Plan for the Molonglo River Corridor Concept Plan was considered and agreed to by the ACT Government on on 28 August 2012. TAMS has commenced the process of preparing a Statutory Plan of Management for the Molonglo River Corridor from Scrivener Dam to the Murrumbidgee River. This plan will include Kama Nature Reserve and the Molonglo River Park areas.
37	23 BGW Conservation Outcome (b) Action 9	1. Develop a management plan for the Molonglo River Park to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland within the park (approximately 73ha). <i>(Also Items 9, 10, 36, 68 and 69 refer)</i>	TAMS has commenced the process of preparing a Statutory Plan of Management for the Molonglo River Corridor from Scrivener Dam to the Murrumbidgee River. TAMS has completed contracts with specialist ecologists to prepare draft Ecological Management Guidelines for all aspects regarding managing and monitoring MNES at Molonglo. These guidelines will inform ongoing design and operational works. TAMS has completed contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area. TAMS is preparing Operational Plans to be informed by the Baseline Condition Assessment of BGW and Ecological Management Guidelines for the rural leases.
38	23 BGW Conservation Outcome (b) Action 10	2. Implement the management plan for the Molonglo River Park to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland within the park.	As above – Item 37
39	23 BGW Conservation Outcome (b) Action 11	3. Establish Patch GG as an offset site by incorporating the area into the National Arboretum. <i>(Also Item 13 refers)</i>	On 22 January 2013 the ACT Government purchased ‘Glenloch’ from its former long term lessees. In April 2013 processes were initiated to transfer Patch GG to TAMS for incorporation in to the National Arboretum to enable management as an offset site
40	23 BGW Conservation Outcome (b) Action 12	4. Develop a management plan for Patch GG to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland (approximately 44ha) <i>(Also Item 13 refers)</i>	As above – Item 37
41	23 BGW Conservation Outcome (b) Action 13	1. Implement the management plan for Patch GG to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland.	As above – Item 37
42	24 BGW Conservation Outcome (c) Action 14	2. Develop management plans for Box-Gum Woodland patches C, H, and N (see Figure 3) to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland within these areas. <i>(Also Item 14 refers)</i>	As above – Item 37
43	24 BGW Conservation Outcome (c) Action 15	3. Implement management plans for Box-Gum Woodland patches C, H, and N (see Figure 3) to provide for the maintenance and enhancement of the ecological condition of Box-Gum Woodland within these areas.	As above – Item 37
44	25 BGW Conservation Outcome (d) Action 16	4. Develop management plans for Box-Gum Woodland patches I, L, M, and P (see Figure 3) to provide for the maintenance of the ecological condition of Box-Gum Woodland within these areas. <i>(Also Item 15 refers)</i>	Existing land management Agreements being reviewed. As above – Item 37

No.	NES Plan Page Reference	Commitment	Status
45	25 BGW Conservation Outcome (d) Action 17	5. Undertake fuel hazard management in patches I, L, M and P (see Figure 3) with the management and protection of Box-Gum Woodland as a critical consideration (within the constraints of ensuring the safety of the urban population).	As above – Item 37
46	25 BGW Conservation Outcome (d) Action 18	5. Annually monitor the condition of the Box-Gum Woodland patches I, L, M, P (total area of 45.4ha) on the western boundary of East Molonglo to ensure that fuel hazard management is not negatively impacting on the Box-Gum Woodland values.	TAMS has established contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area. As Above –Item 37
47	25 BGW Conservation Outcome (d) Action 19	6. Should the monitoring of the condition of the Box-Gum Woodland Patches I, L, M, P show that: <ul style="list-style-type: none"> • for a period of two consecutive years; • more than 30% of the combined area of patches I, L, M, P (total area of 45.4ha) no longer meets the EPBC Act listing criteria for Box-Gum Woodland; then the ACT Government will establish an offset site within two years of those monitoring results that meets the following criteria: <ul style="list-style-type: none"> • the offset will be in the Molonglo Valley; and • the offset will include a minimum of 90.8ha of EPBC Act listed Box-Gum Woodland. 	Noted.
48	25 BGW Conservation Outcome (d) Action 20	7. Should an offset site be required for Box-Gum Woodland patches I, L, M, P (in accordance with Action 19), then the offsite site will be established as a Nature Reserve and managed consistently with the other offset sites (Kama Nature Reserve, Molonglo River Park, Patch GG)	Noted.
49	26 BGW Conservation Outcome (e) Action 21	8. Manage the Box-Gum Woodland that occurs in West Molonglo in accordance with the terms of a Land Management Agreement (LMA). LMAs are required by Part 9.7 of the <i>planning and Development Act 2007</i> for all non-urban leases. The LMA covering the BGW in West Molonglo contains a Land Action Plan which ensures that: <ul style="list-style-type: none"> • the ecological functioning and integrity of BGW on the lease is retained and improved; • the extent and character of the BGW is preserved; and • there is an Action Plan which details the activities, timeframes and performance measures put in place to ensure the conservation outcomes are met. 	Ongoing monitoring of land management by TAMS.
50	26 BGW Conservation Outcome (e) Action 22	9. West Molonglo is zoned broadacre and is not part of the ACT Government’s current land release program. In the event that West Molonglo is developed in the future for broadacre uses or residential development then, subject to confirmatory ecological assessment of Box-Gum Woodland, the area of EPBC Act Box-Gum Woodland that occurs there will be set aside as a Nature Reserve.	Noted.
51	26 BGW Conservation Outcome (f) Action 23	10. Establish and manage an off-site restoration project, as an indirect offset, for Box-Gum Woodland. <i>(Also Item 16 refers)</i>	TAMS advised that the site selection and preliminary survey of the area currently referred to in the Molonglo River Park Concept Plan as Barrer Hill by ecologists as a suitable site to undertake a BGW restoration in accordance with NES requirements. Following this, the BGW project commenced 5 April 2012..
52	27 NTG Conservation Outcome (a) Action 24	1. Protection of the Natural Temperate Grassland within the Kama Nature Reserve.	TAMS has commenced the process of preparing a Statutory Plan of Management for the Molonglo River Corridor from Scrivener Dam to the Murrumbidgee River. This plan will include Kama Nature Reserve and the Molonglo River Park areas.
53	28 NTG Conservation Outcome (a) Action 25	2. Develop a management plan for the Kama Nature reserve to provide for the maintenance and enhancement of the ecological condition of Natural Temperate Grassland within the reserve.	As above – Items 37 & 52

No.	NES Plan Page Reference	Commitment	Status
54	28 NTG Conservation Outcome (a) Action 26	3. Implement the management plan for the Kama Nature Reserve to provide for the maintenance and enhancement of the ecological condition of Natural Temperate grassland within the reserve.	As above.
55	28 NTG Conservation Outcome (a) Action 27	4. Establish a buffer outside the Kama Nature Reserve between the reserve and the proposed development area, and allow for appropriate uses consistent with nature conservation uses of the reserve. The buffer will be developed to ensure that fire management is undertaken outside of the Kama Nature Reserve and will provide protection against urban edge effects. <i>(Also Items 12, 35 and 67 refer)</i>	As above – Items 37
56	29	Impacts to high and moderate quality PTWL habitat will be limited to a maximum of 27ha and a range of measures will be implemented to minimise this area of impact. <i>(Also Item 61 refers)</i>	EDD has prepared a Biodiversity Account to monitor and record impacts of development in Molonglo East.
57	29	Two offset sites will be established within the strategic assessment area (Kama Nature Reserve and the Molonglo River Park) that will provide for the long term protection of 66ha of high and moderate quality PTWL habitat (see Figure 6). These areas will be adaptively managed to maintain and enhance the ecological condition of the PTWL habitat that occurs there.	TAMS has commenced the process of preparing a Statutory Plan of Management for the Molonglo River Corridor from Scrivener Dam to the Murrumbidgee River. This plan will include Kama Nature Reserve and the Molonglo River Park areas. As above – Items 37
58	29	Continued protection of 28.1ha of high and moderate quality PTWL habitat within the Lower Molonglo Nature Reserve (see Figure 4). These areas will be adaptively managed to maintain the ecological condition of the PTWL habitat that occurs there. <i>(Also Item 73 refers)</i>	Mapping complete of the Lower Molonglo Nature Reserve PTWL habitat, by David Wong and Dr Will Osborne December 2012.
59	29	Protection of an additional 23.3ha of high and moderate quality PTWL habitat within the strategic assessment area outside of the development and offset areas (see Figure 4). These areas will be adaptively managed to maintain and enhance the ecological condition of the PTWL habitat that occurs there. <i>(Also Item 74 refers)</i>	As above_ Items 37
60	29	Improving and applying the knowledge about the management of PTWL.	Noted.
61	30 PTWL Conservation Outcome (a) Action 28	1. Ensure that the combined impacts on high and moderate quality PTWL habitat from development within east Molonglo and construction of infrastructure within the river corridor do not exceed 27ha. <i>(Also Item 56 refers)</i>	EDD has prepared a Biodiversity Account to monitor and record impacts of development in Molonglo East.
62	30 PTWL Conservation Outcome (a) Action 29	2. Amend the East Molonglo river corridor boundary in Stages 2 and 3 respectively with a view to reducing impacts to high and moderate quality PTWL habitat. This process will ensure that connectivity within the river corridor is maintained.	The Planning and Design Framework for Stage 2 Molonglo was amended and approved by David Papps the Director-General of ESDD on 17 April 2012.
63	30 PTWL Conservation Outcome (a) Action 30	3. Design the infrastructure that will occur in the river corridor to minimise impacts to high and moderate quality PTWL habitat. <i>(Also Items 5 and 6 refer)</i>	Continuing. Design principle adopted by EDD and incorporated in contracts for design and construction projects.
64	30 PTWL Conservation Outcome (a) Action 31	4. Develop, implement and independently monitor Construction Environmental Management Plans (CEMPs) to ensure that unforeseen direct or indirect impacts from construction activities within the development area and the river corridor are avoided. <i>(Also Items 8 and 32 refer)</i>	Continuing. Construction Environmental Management Plans (CEMPs) are being prepared for projects that may impact on matters of NES. A guideline has been prepared to assist consultants and agencies in the preparation of CEMPs.

No.	NES Plan Page Reference	Commitment	Status
65	31 PTWL Conservation Outcome (b) Action 32	1. Develop a management plan for the Kama Nature Reserve to provide for the maintenance and enhancement of the ecological condition of all PTWL habitat within the reserve (approximately 6ha which includes 3.33ha of high and moderate quality habitat).	TAMS has commenced the process of preparing a Statutory Plan of Management for the Molonglo River Corridor from Scrivener Dam to the Murrumbidgee River. This plan will include Kama Nature Reserve and the Molonglo River Park areas As above – Item 37
66	31 PTWL Conservation Outcome (b) Action 33	2. Implement the management plan for the Kama Nature Reserve to provide for the maintenance and enhancement of the ecological condition of all PTWL habitat within the reserve.	As above.
67	31 PTWL Conservation Outcome (b) Action 34	3. Establish a buffer outside the Kama Nature Reserve between the reserve and the proposed development area, and allow for appropriate uses consistent with nature conservation uses of the reserve. The buffer will be developed to ensure that fire management is undertaken outside of the Kama Nature Reserve and will provide protection against urban edge effects. <i>(Also Items 12, 35 and 55 refer)</i>	As above – Item 37
68	31 PTWL Conservation Outcome (b) Action 35	4. Develop a Park Concept Plan for the “Molonglo River Park” which will occur along the East Molonglo river corridor. This Plan will establish management zones within the Park, specifically identifying areas to be designated for conservation as well as identifying recreation areas and resolving public access. A key focus of this will be the protection of high and moderate quality PTWL habitat. <i>(Also Items 9, 10, 36, 37 and 69 refer)</i>	The draft Concept Plan for the Molonglo River Corridor Concept Plan was considered and agreed to by the ACT Government on 28 August 2012.
69	31 PTWL Conservation Outcome (b) Action 36	1. Develop a management plan for the Molonglo River Park to provide for the maintenance and enhancement of the ecological condition of high and moderate quality PTWL habitat within the park (approximately 62ha). <i>(Also Items 9, 10, 36, 37 and 68 refer)</i>	As above – Item 37
70	32 PTWL Conservation Outcome (b) Action 37	2. Establish a 20m buffer around high and moderate quality PTWL habitat (other than, for example the areas to be impacted by the bridge crossings and strategically placed walking tracks) within the east Molonglo river corridor. Manage these areas to ensure the maintenance of their conservation value. Management measures (as outlined in Section 3) will be incorporated into the management plan for the river corridor.	As above – Item 37
71	32 PTWL Conservation Outcome (b) Action 38	3. Implement the management plan for the Molonglo River Park to provide for the maintenance and enhancement of the ecological condition of high and moderate quality PTWL habitat within the park.	As above – Item 37
72	32 PTWL Conservation Outcome (b) Action 39	4. Register a disallowable instrument under the <i>Domestic Animals Act 2000</i> to effect a cat containment policy for the Molonglo area.	ESDD advised that a Disallowable Instrument (DI2012-113) was notified on the ACT Legislation Register on 14 June 2012 to name the suburbs “Denman Prospect” and “Molonglo”. Disallowable Instrument DI 2012-182, Domestic Animals (Cat Curfew Area) Declaration 2012 (No 1) was declared on 9 July 2012. The DI includes the declaration of the Divisions of Coombs, Wright , Denman Prospect and Molonglo.
73	32 PTWL Conservation Outcome (c) Action 40	1. Continued implementation of the Plan of Management for the Lower Molonglo Nature Reserve to provide for the maintenance of the ecological condition of the high and moderate quality PTWL habitat that occurs there (approximately 28.1ha). <i>(Also Item 58 refers)</i>	As above – Item 37
74	33 PTWL Conservation Outcome (d) Action 41	2. Develop management plans for the other areas of high and moderate quality PTWL habitat that occurs within the strategic assessment area and outside of the development and offset areas (approximately 23.3ha) to provide for the maintenance and enhancement of the ecological condition of the PTWL habitat within these areas. <i>(Also Item 59 refers)</i>	As above – Item 37

No.	NES Plan Page Reference	Commitment	Status
75	33 PTWL Conservation Outcome (d) Action 42	3. Implement management plans for the other areas of high and moderate PTWL habitat that occurs within the strategic assessment area and outside of the development and offset areas (approximately 23.3ha) to provide for the maintenance and enhancement of the ecological condition of PTWL habitat within these areas.	As above – Item 37
76	33 PTWL Conservation Outcome (e) Action 43	11. Undertake a research project examining the effects on PTWL of disturbance and proximity to urban areas. <i>(Also Item 16 refers)</i>	ESDD advised on 19 April 2012 that they had received a final report by Professor Will Osborne titled: Examining the long term survival of Pink-tailed Worm-lizards (<i>Aprasia parapulchella</i>) in Canberra Nature Park: a case study in an urbanised landscape. Habitat, distribution and abundance in the Mount Taylor Reserve – 1990 to 2011. This report responds to stage 1 of Section 4.8 of the NES for the Pink-tailed Worm Lizard Research Project. TAMS have received the final research proposal from Dr Will Osborne and University of Canberra to undertake research as identified in the NES Plan. Proposed Program: <u>Research 1 Monitoring</u> <ul style="list-style-type: none"> • Research to commence 2013 • Development of low impact monitoring method • Establish 4 trial monitoring plots in high quality habitat • Monitoring once a year over 6 years 2013-2018 • Prepare final report 2018 <u>Research 2 – Habitat Restoration</u> <ul style="list-style-type: none"> • Research to commence 2013 • Surveys and establishment of 10 research sites • Monitoring once a year over 5 years 2013-2017 • Prepare final report 2017
77	33 PTWL Conservation Outcome (e) Action 44	12. Amend the development boundary, adjacent to high and moderate quality PTWL habitat on the western edge to avoid: <ul style="list-style-type: none"> • direct impact from bushfire management – the Outer Asset Protection Zone (OAPZ) and Inner Asset Protection Zones (IAPZ) will be between the PTWL habitat and the development boundary; and • indirect impacts from urban development. 	TAMS is preparing a strategic Fire management Plan for the Molonglo River Corridor and is preparing Operational Plans for the River Corridor to be informed by the Baseline Condition Assessment of BGW and the draft Ecological Management Guidelines scheduled for completion by June 2014.
78	41	The ACT Government will monitor and report annually to the public on the implementation of the NES Plan. An annual report highlighting the conservation outcomes achieved in the previous year will be published by the ACT Government and provided to SEWPaC. The Report will include the monitoring results on the condition of the MNES, conservation outcomes (as listed in Section 4) and the outcomes of enhancement projects.	Annual report for 2011-2012 was prepared and made available on EDD website. Annual reporting requirements included in the revised Adaptive Management Strategy, May 2013.
79	41,42,43	Develop an Adaptive Management Strategy to set out the framework for achieving the NES Plan's commitments through monitoring, evaluation, experimental design, reporting, auditing and continuous improvement processes. The Strategy will inform the content and timing of specific management plans and actions to ensure a consistent, integrated and efficient application of adaptive management principles and practices to achieve long term conservation outcomes for MNES. The approved Adaptive Management Strategy will be submitted for approval by the Minister (Commonwealth) or delegate.	Revised Adaptive Management Strategy, complete 20 May 2013.
80	44	The NES Plan and its associated actions will to be audited by an independent, third party expert every five years, for a 30 year period. The audit reports are to be provided to SEWPaC for their consideration.	Incorporated as an action in the Adaptive Management Strategy May 2013.
81	44	Appoint an independent, third party auditor and develop a customised audit protocol to ensure that: <ul style="list-style-type: none"> • commitments made by the ACT Government in the NES Plan are being adhered to; and • conservation outcomes for the MNES are being achieved. 	As above – Item 81
82	44	The Treasury Directorate will ensure that commitments and actions in the NES Plan are funded.	Business cases prepared by the Directorates for projects associated with the implementation of the MNES Plan will be assessed by the Treasury Directorate and considered by the ACT Government.

Part 2

2.1 Performance in Reporting Year

The NES Plan provides some specific criteria and timeframes for the implementation of actions. The following provides a summary of performance in 2012 - 2013.

Table 2 Summary of Status:

Ref.	Achievements
1.	Action 13 required the establishment and management of Patch GG as an offset site by incorporating the area into the National Arboretum which is directly to the east. On 22 January 2013 the ACT Government purchased 'Glenloch' from its former long term lessees and Patch GG is being managed by the ACT Government as an offset site as part of the National Arboretum.
2.	<p>Construction Environmental Management Plans (CEMPs) were developed for each Capital Works project in Molonglo Stage 2. In relation to mitigation measures this is a requirement to ensure that all construction activities (whether in the urban area or in the river corridor) will be subject to CEMPs. The Environment Protection Authority (EPA) has endorsed the following Construction Environmental Management Plans for Molonglo East:</p> <ul style="list-style-type: none">• Asset Relocation Works Phase 2 – John Gorton Drive Stage 1D (August 2012)• Molonglo 2 Phase 2 ESA (August 2012)• Uriarra Road Intersections and John Gorton Drive Link Road (August 2012)• John Gorton Drive Fencing Works (September 2012)• John Gorton Drive Farmhouse Demolition (September 2012)• Coppins Crossing Pump (November 2012)• Geotechnical Investigation for Molonglo 2 Pedestrian Bridge (November 2012)• Molonglo 2 Development Area Geotechnical Investigations (November 2012)• John Gorton Drive Stage 2A Construction (November 2012)• John Gorton Drive Stage 1D & Molonglo Trunk Sewer Water Diversion (January 2013)• John Gorton Drive Stage 2A House Site Earthworks (February 2013)
3.	<p>Action 16 required the implementation of a number of research projects to improve the knowledge relating to the conservation of Pink-Tailed Work Lizard and Box-Gum Woodland. In April 2013 TAMS received two final reports by Professor Will Osborne titled: Conservation Management for PTWL in the Lower Molonglo Corridor Reserves: Guidelines for effective restoration of Habitat, and the second report titles: A Low Impact Monitoring Method Specifically for the Nationally Vulnerable PTWL in the Molonglo River Corridor. These reports respond to Section 4.8 of the NES for the Pink Tailed Worm Lizard Project.</p> <p>SMEC and Greening Australia have been engaged to undertake a restoration plan for the Misery Hill area relating to Box-Gum Woodland.</p>
4.	<p>Action 28 required that the "ecological condition" for Box-Gum Woodland will be measured using a peer reviewed, repeatable and scientifically robust methodology for examining and comparing the condition of woodland and derived grassland patches over time.</p> <p>Contracts with specialist consultants to undertake Baseline Condition Assessments of the Box-Gum Woodlands (BGW) in the Strategic Assessment Area were completed and the Adaptive Management Strategy provides a framework for the implementation of the NES Plan. A revised Strategy was completed on 20 May 2013 and is available on the TAMS website.</p>

Deviation or Non-compliance:

There were no reported incidents of deviation or non-compliance in the 2012 – 2013 reporting period.

2.2 The Molonglo Valley NES Plan Biodiversity Account 2012 – 2013

The MNES values for Box-Gum Woodland, Pink-tailed Worm Lizard and Natural Temperate Grassland in East Molonglo have been mapped and are included in the following Figures 2 to 8. Potential Superb and Swift Parrot habitat is predominantly associated with the Box-Gum Woodland and is not mapped separately. The extent and condition information presented in Figures 2 to 8 were obtained during the development of the NES Plan and the baseline condition of MNES will be established in accordance with the approved Adaptive Management Strategy.

Action 1 requires the ACT Government to ensure that the combined impacts on Box-Gum Woodland from development within East Molonglo and construction of infrastructure within the river corridor do not exceed 110ha.

Action 29 requires the ACT Government to ensure that the combined impacts on high and moderate quality PTWL habitat from development within East Molonglo and construction of infrastructure within the river corridor do not exceed 27ha.

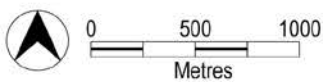
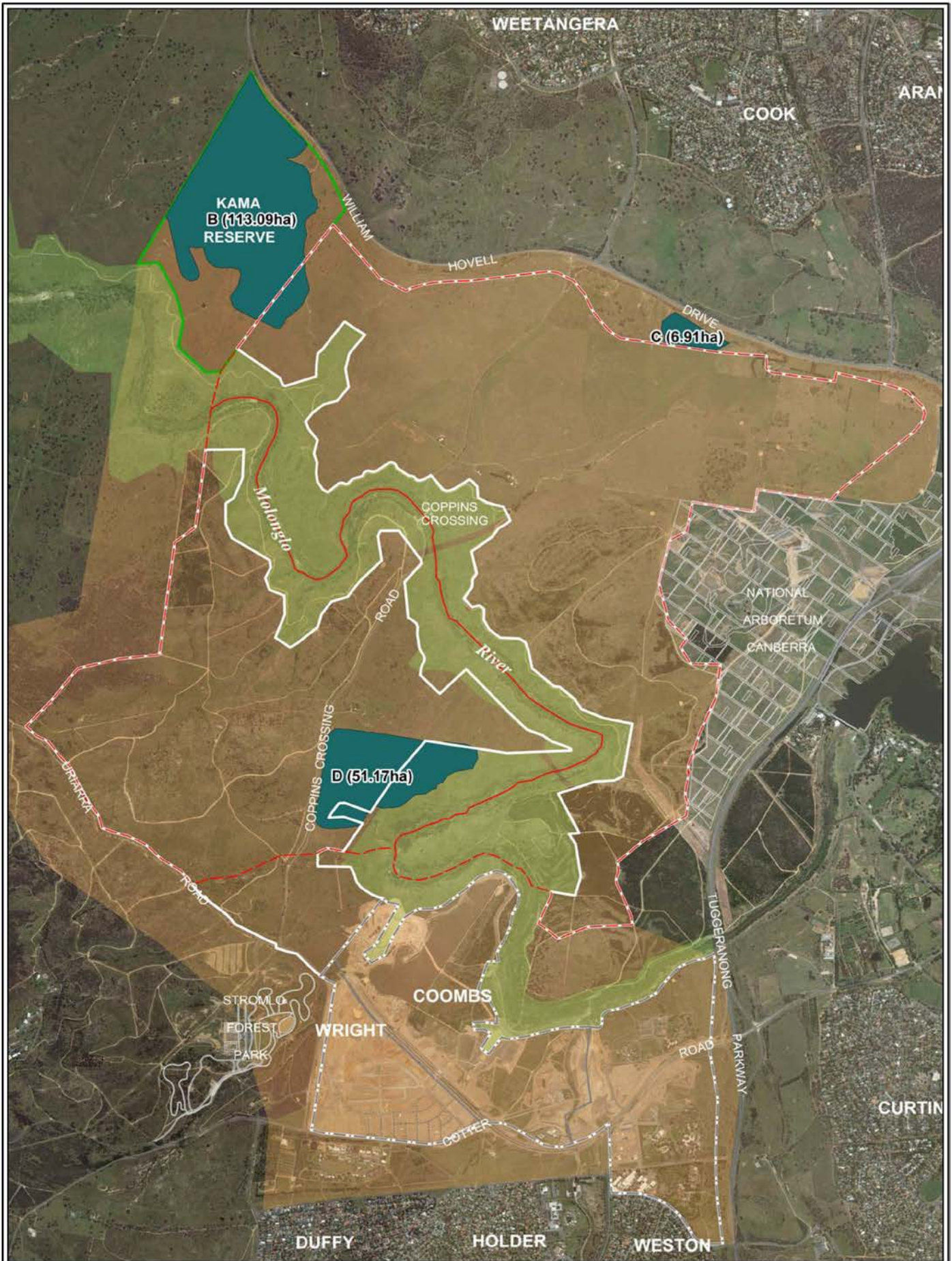


Figure 2: High Quality Box Gum Woodland

From Digital Orthophoto Map based on March 2012 photography
<http://www.environment.act.gov.au> DPMH - 16 Challis Street Dickson ACT 2601

Date 05/10/2012



Environment and Sustainable Development Ref.D120329

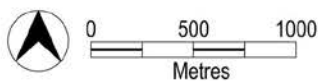
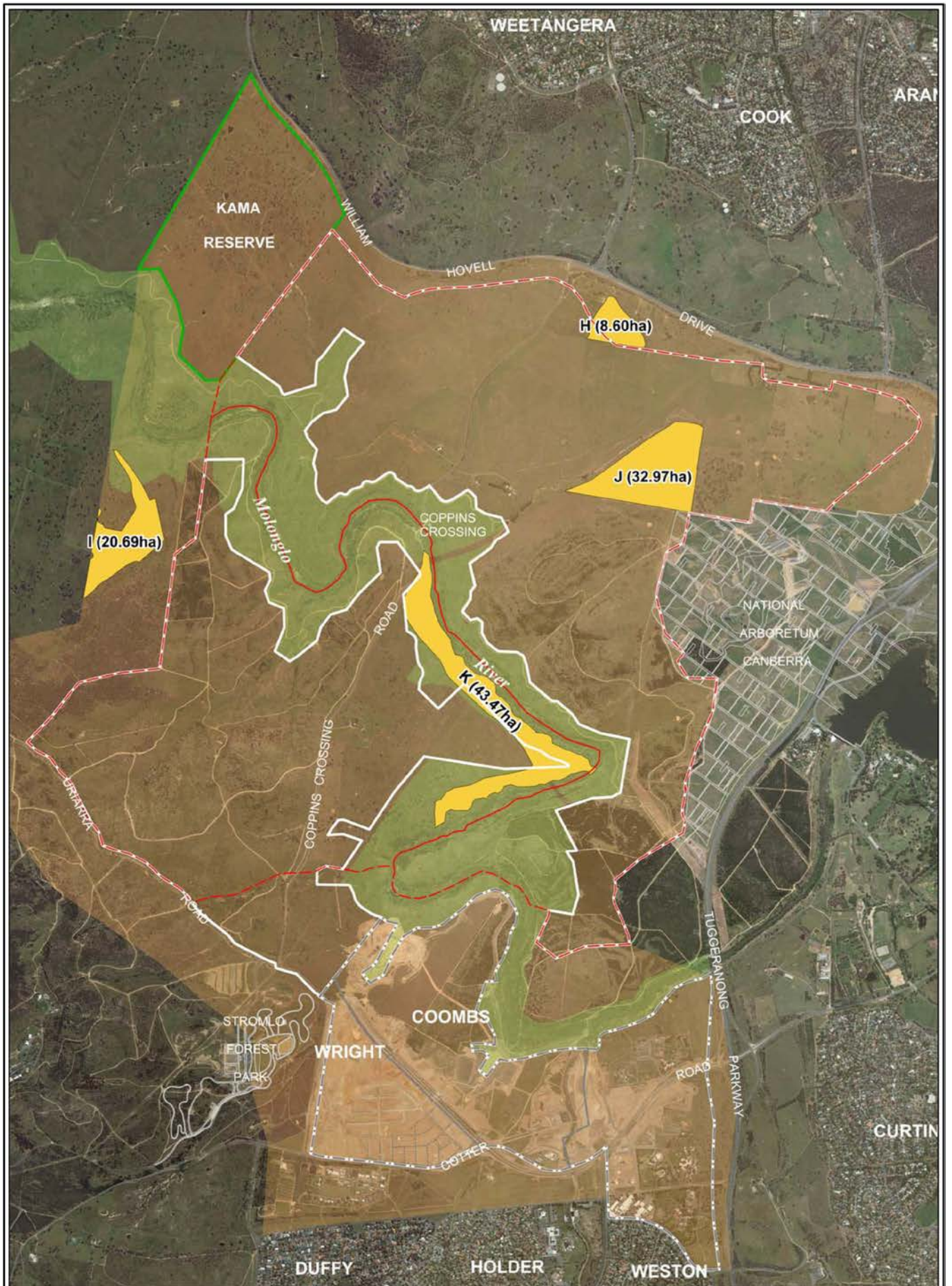


Figure 3: Medium Quality Box Gum Woodland

From Digital Orthophoto Map based on March 2012 photography
<http://www.environment.act.gov.au> DPMH - 16 Challis Street Dickson ACT 2601

Date 05/10/2012



Ref.D120329

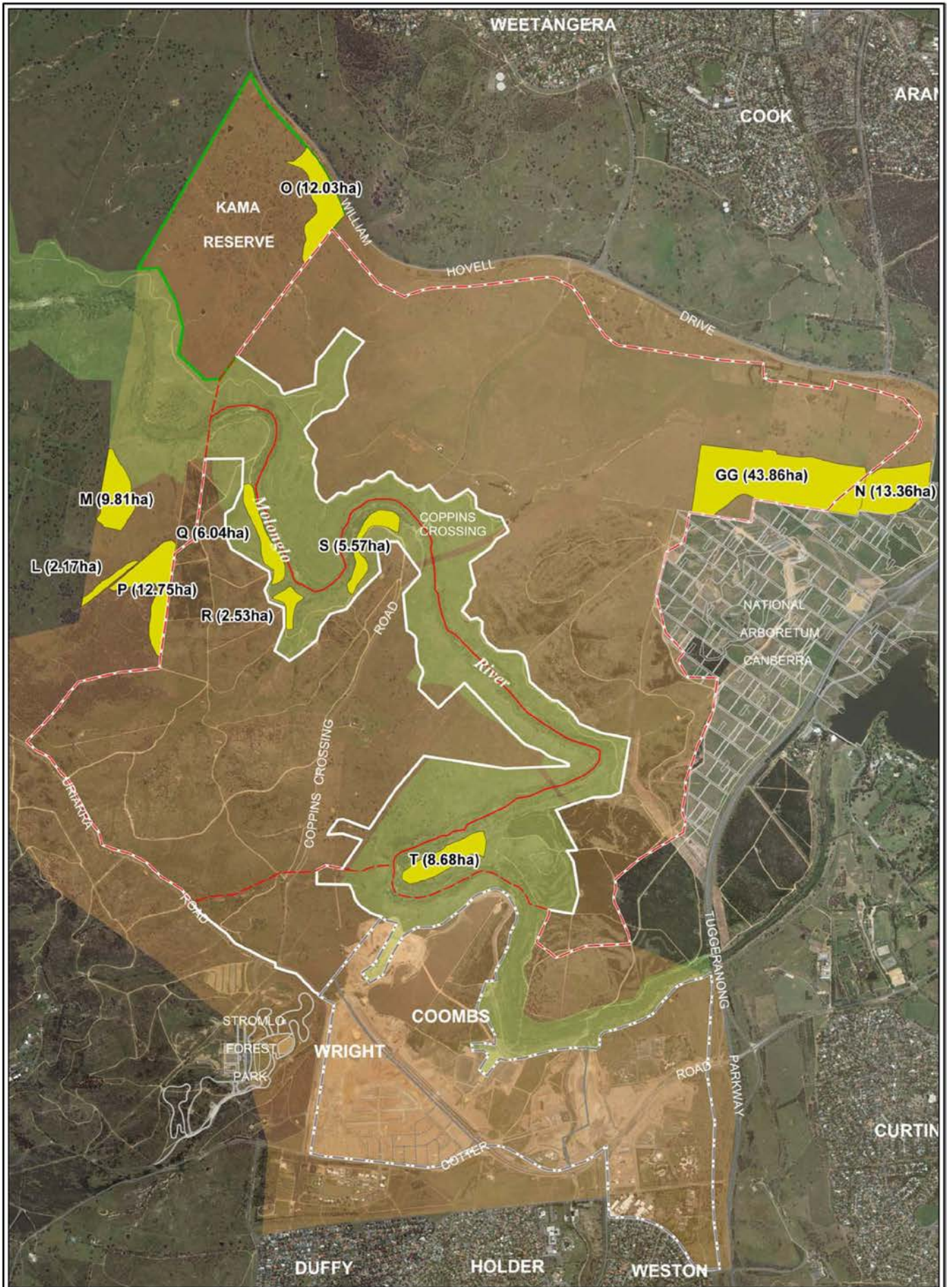
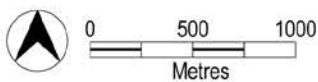


Figure 4: Low Quality Box Gum Woodland

From Digital Orthophoto Map based on March 2012 photography
<http://www.environment.act.gov.au> DPMH - 16 Challis Street Dickson ACT 2601

Date 05/10/2012



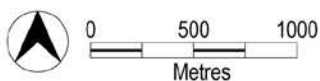
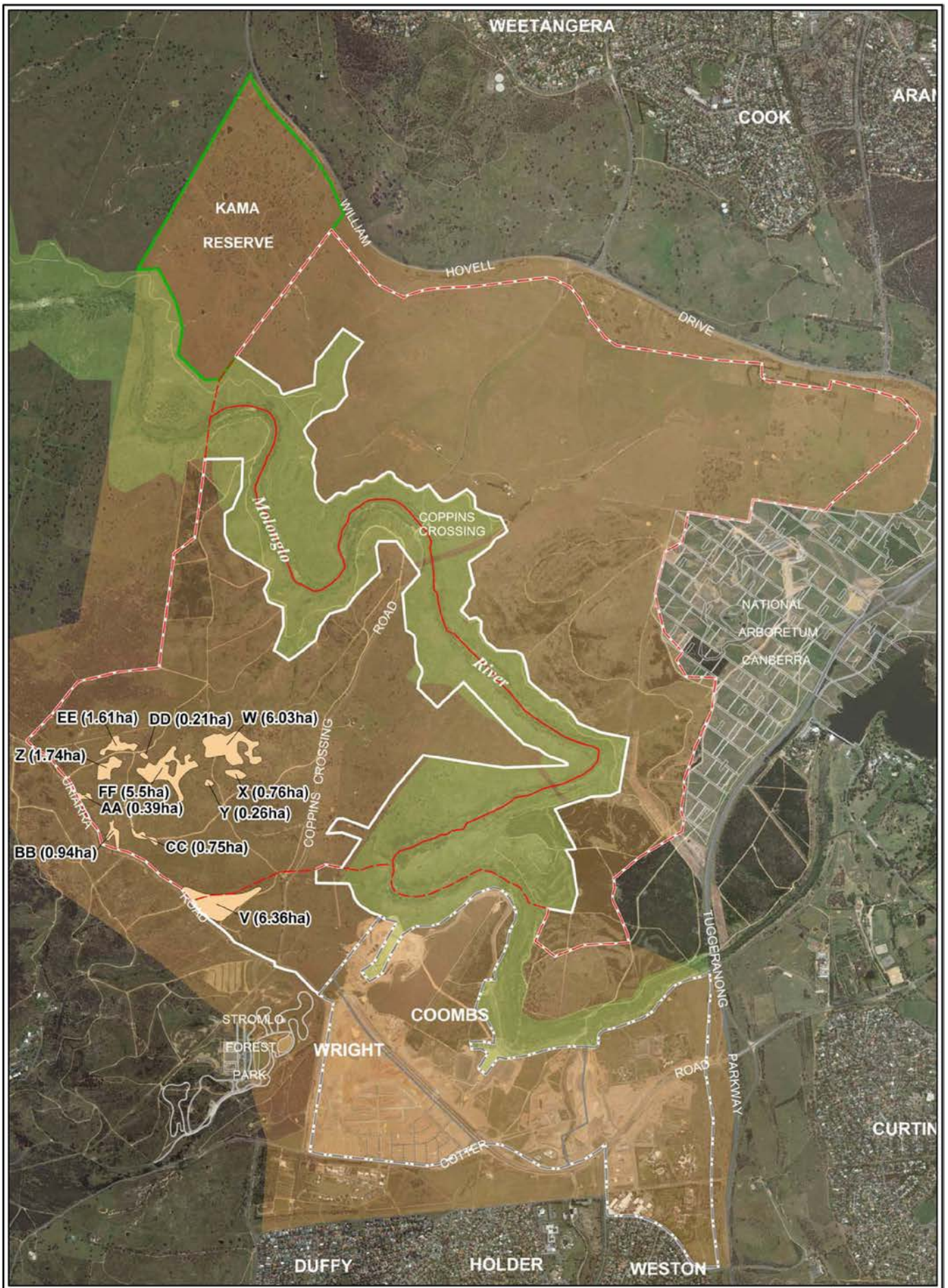
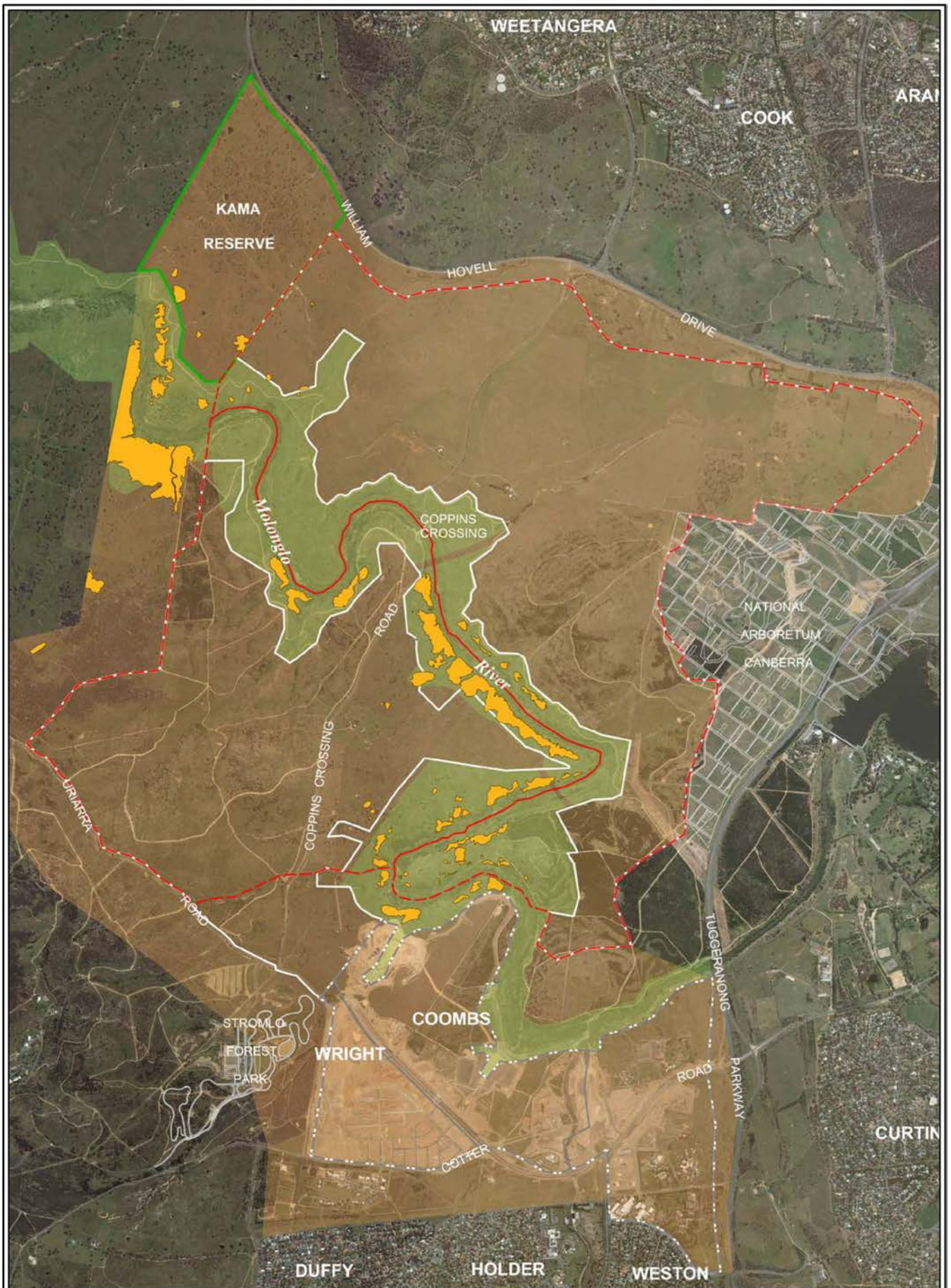


Figure 5: Very Low Quality Box Gum Woodland

From Digital Orthophoto Map based on March 2012 photography
<http://www.environment.act.gov.au> DPMH - 16 Challis Street Dickson ACT 2601

Date 05/10/2012



0 500 1000
Metres

Figure 6: High Quality PTWL Habitat

From Digital Orthophoto Map based on March 2012 photography
<http://www.environment.act.gov.au> DPMH - 16 Challis Street Dickson ACT 2601

Date 05/10/2012



ACT
Government

Environment and Sustainable Development Ref:D120329

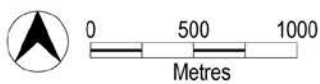
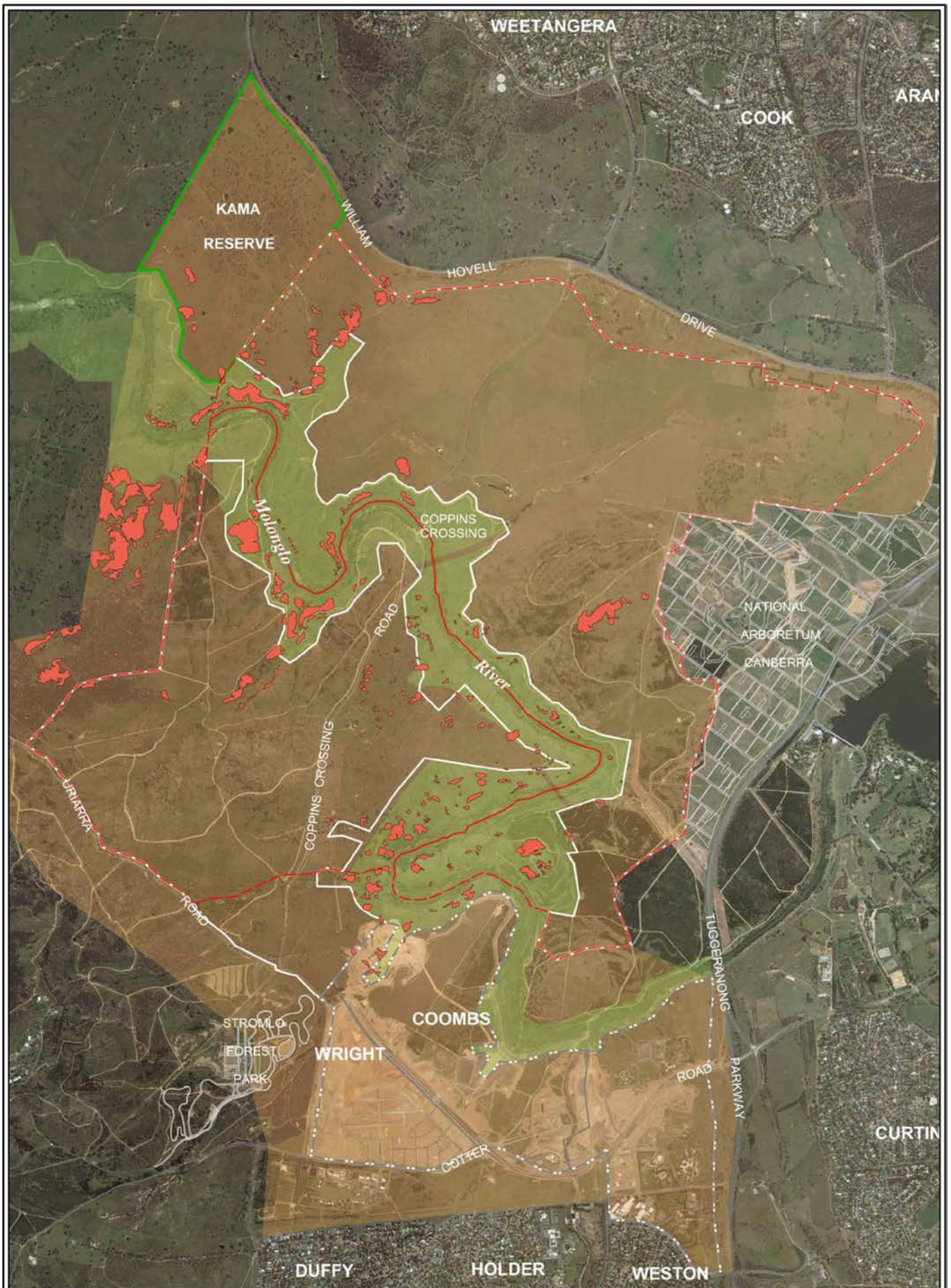


Figure 7: Moderate Quality PTWL Habitat

From Digital Orthophoto Map based on March 2012 photography
<http://www.environment.act.gov.au> DPMH - 16 Challis Street Dickson ACT 2601

Date 05/10/2012



ACT
 Government

Environment and Sustainable Development Ref:D120329

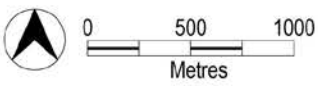
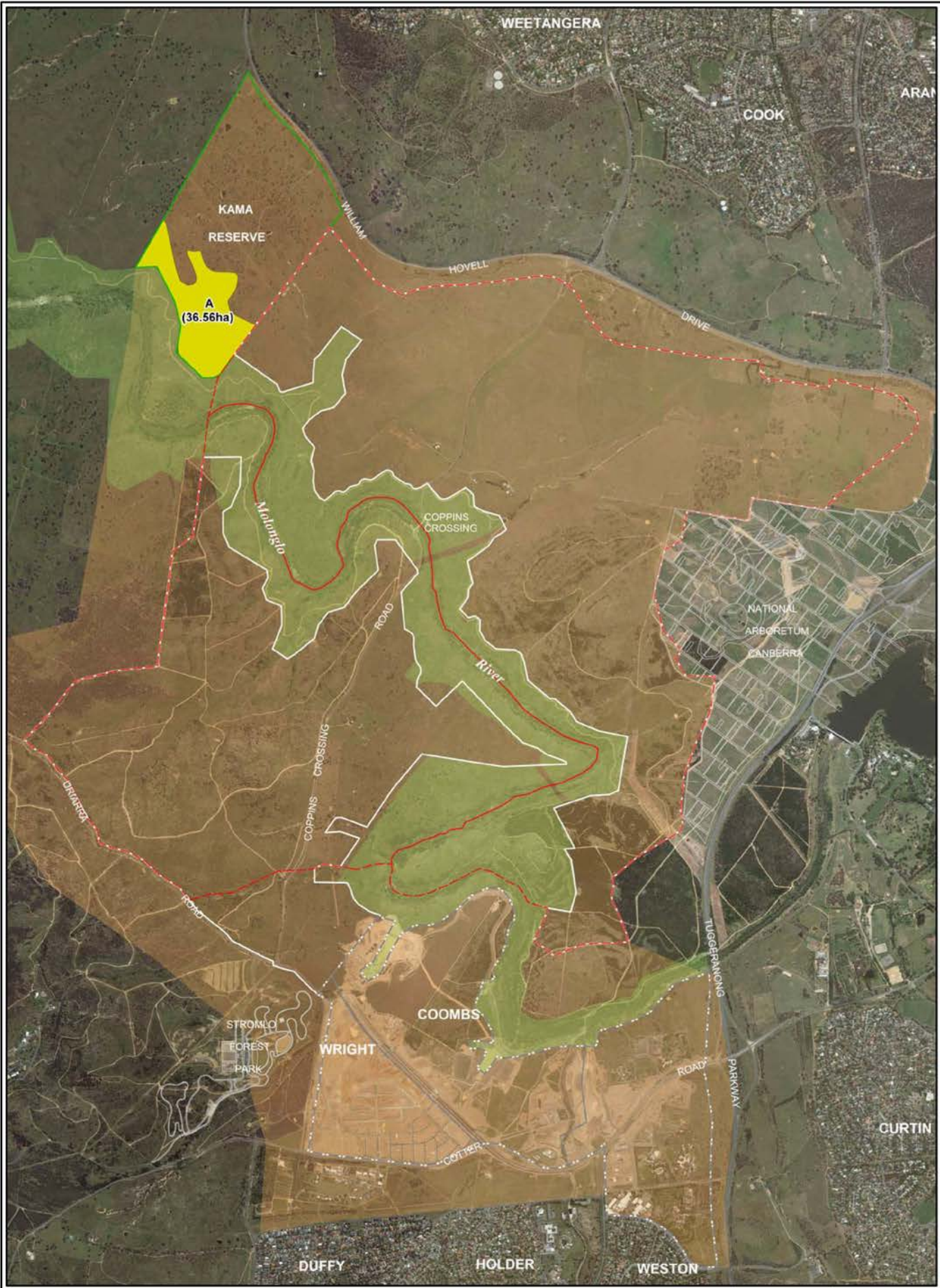


Figure 8: Natural Temperate Grassland

From Digital Orthophoto Map based on March 2012 photography
<http://www.environment.act.gov.au> DPMH - 16 Challis Street Dickson ACT 2601

Date 05/10/2012

ACT
 Government
 Environment and Sustainable Development Ref:D120329

2.3 Recorded Potential Impacts 2012 – 2013

The Economic Development Directorate (EDD) is tracking all medium Pink-tailed Worm Lizard (PTWL) and Box Gum Woodland (BGWL) within the Molonglo Strategic Assessment Area. This is achieved by overlaying the PTWL and BGWL digital shape files originally prepared for the NES Plan onto the current proposed Land Use plans for the entire Strategic Assessment Area.

Separate digital drawings have been prepared for PTWL and BGWL and each area is monitored and tracked (see Figures 9 and 10).

For PTWL, high and medium quality habitat is tracked as follows:

- “Removed” – areas within the development area or river corridor which have already been impacted, or which will definitely be impacted based on future infrastructure proposals and the Molonglo Group Centre.
- “At risk” – areas within the development area or River Corridor which may be impacted, based on likely land releases and/or possible infrastructure.
- “Retained” – areas which will definitely be retained with the development area.
- “Preserved” – areas within the River Corridor, Outer Asset Protection Zone and Kama Nature Reserve which are protected and for which there will be no impact.

In addition, within the River Corridor a 20m buffer has been established around all high and medium PTWL habitats. The potential impact area of infrastructure on this buffer is being tracked. However, the area of impacted buffer is not deducted from the total PTWL, since this is not required by the NES Plan.

All quality BGWL areas are tracked as follows:

- “Removed” – areas within the development area or River Corridor which have already been impacted, or which will definitely be impacted based on future infrastructure proposals and anticipated development areas within Molonglo Stage 2.
- “At risk” – areas within the development area or River Corridor which may be impacted, based on likely land releases within Molonglo Stage 3 and/or possible infrastructure.
- “Retained” – areas which will definitely be retained with the development area
- “Preserved” – areas within the River Corridor, Outer Asset Protection Zone, Kama Nature Reserve or Patch GG which are protected and for which there will be no impact.

The sum of the “Removed” and “At risk” areas are being monitored against the total ecological budget allowed to be impacted under the NES Plan. The tables on Figures 9 -12 illustrate that the amount potentially or actually removed remains less than the budget allowed under the NES Plan.

