## ATTACHMENT 1: 2011-12 ANNUAL REVIEW OF YELLAGONGA INTEGRATED CATCHMENT MANAGEMENT PLAN 2009-2014

Project	Objectives	Timeframe	Progress	Comments
Management Framework and Memorandum of Understanding	Develop a Yellagonga Integrated Catchment Management (YICM) Memorandum of Understanding (MoU) endorsed by both the Cities of Joondalup and Wanneroo to ensure ongoing commitment to the YICM Plan implementation.	2010/11	Completed	The YICM MoU and Management Framework have been completed and endorsed by both the Cities of Joondalup (6 April 2011) and Wanneroo and (6 May 2011).
	Develop a co-ordinated Management Framework identifying joint and individual projects of the YICM Plan 2009-2014 to be implemented by both Cities.			The Management Framework will continue to be used for the term of the YICM Plan until June 2014.
Water Quality Mapping and Monitoring	Develop scientific monitoring and investigations of groundwater and surface water in the Yellagonga Catchment and Park and collate, analyse and share data between authorities.	2010/11 – 2013/14	In progress	The City of Joondalup engaged the Edith Cowan University (ECU) Centre of Ecosystem Management to undertake the following projects in 2010/11:  • Water Quality Monitoring (surface) Program for the Yellagonga Wetlands. • Acid Sulphate Soil (ASS) Investigation (Lake Goollelal site).  The City of Joondalup engaged the Edith Cowan University (ECU) Centre of Ecosystem Management to undertake the following projects in 2011/12:  • Surface Water Quality Monitoring Program for the Yellagonga Wetlands. • Review of Yellagonga Regional Park Groundwater Data.  Through the surface water quality monitoring Edith Cowan University identified elevated levels of metal and nutrients in the Yellagonga Wetlands. The findings of the water quality investigations highlight the importance of ongoing monitoring.  Two new groundwater bores were established in 2011/12 and the Department of Water has provided the City with access to monitoring bores to enable the commencement of the Yellagonga Groundwater Monitoring Program in 2012/13.

Project	Objectives	Timeframe	Progress	Comments
Scientific Investigations	Undertake scientific investigations into ameliorating problems associated with poor water quality.	2010/11 – 2013/14	In Progress	The research project <i>Quantification of Nutrients Entering and Leaving Beenyup Swamp over the Periods of Water Flow,</i> developed as part of the Midge Management Strategy Partnership Agreement, was finalised during the 2011/12 period. The report contained recommendations relating to further studies, as well as possible actions that can be implemented to improve water quality.  The recommendations contained within the report are under consideration by the Midge Steering Group, and will provide direction for 2012/13.
Yellagonga Community Awareness Program (each City will run their Program individually)	Develop education initiatives, targeting schools, residents, and the broader community, to address key environmental issues for the Yellagonga Catchment and encourage greater environmental stewardship by the community.	2010/11 – 2013/14	In Progress	The Yellagonga Community Awareness Program  The Yellagonga Community Awareness Program  The drain stencilling Program  The drain stencilling has been completed with support from Friends of Yellagonga and educational handouts have been distributed.  The educational component of the Program has been implemented in partnership with the Department of Environment and Conservation's Ribbons of Blue Program which included water quality sampling and analysis with school students through excursions and with teachers through a curriculum planning workshop. A catchment model and displays have been utilised to educate the general community e.g. at the Joondalup Festival.  YICM School Ecology Program  Free excursions have been offered to schools within the City. The tours held at Neil Hawkins Park included Bird Watching and FaunaTours (with Birdlife WA and local ecologists) and Water Quality / Wetland Ecology activities (with Ribbons of Blue). Twelve classes ranging from Years four to nine, from five schools took part in the activities held between February and June 2012.  An information package on the Yellagonga Wetlands was also distributed to all schools within the City.

Project	Objectives	Timeframe	Progress	Comments
Yellagonga Community Awareness Program (each City will run their Program individually)	Develop education initiatives, targeting schools, residents, and the broader community, to address key environmental issues for the Yellagonga Catchment and encourage greater environmental stewardship by the community.	2010/11 – 2013/14	In Progress	<ul> <li>Fauna Awareness Campaign comprising of:         <ul> <li>Prevention of Hand Feeding Wildlife Campaign</li></ul></li></ul>
				Two new interpretive signs have been installed at Picnic Cove which detail the catchment, ecology and the conservation of local wildlife.

Project	Objectives	Timeframe	Progress	Progress
Yellagonga EcoTourism and Events Plan (each City will run their Plans individually)	Identify key tourism features of Yellagonga Regional Park and develop an EcoTourism Strategy and Marketing Strategy. Promote Aboriginal culture through events and guided tours.	2012/13- 2013/14	Not Started (Due to commence 2012/13)	An EcoTourism and Events Calendar and Park trail map is proposed to be developed in 2012/13. A number of Yellagonga ecotourism initiatives have been provided by the City during 2011/12 through the Environmental Education Program and have included:  Nightstalk tours. Aboriginal Bushtucker tours. Yellagonga School Ecology Activities (fauna tours and birdwatching).
Yellagonga Environment Centre – Phase 2	Review the Yellagonga Environment Centre Feasibility Study. Review the location, scale, size and seek funding and partnership opportunities for the development of the Yellagonga Environment Centre -Phase 2.	2011/12- 2013/14	Not Started	The Environment Centre has been removed from the 20 Year Strategic Financial Plan 2011/12 – 2030/31 due to the priority of a number of other new facilities and infrastructure approved by Council for the period of the Plan.  The Plan will be reviewed and updated on an annual basis, and such reviews will provide an opportunity to reassess the viability of the Project.  The Council endorsed the projections and proposals of the draft 20 Year Strategic Financial Plan 2011/12 – 2030/31 at its meeting of 24 July 2012 (Item CJ138-07/12 refers).
Yellagonga Resource Allocation Strategy (Joint) (formerly Yellagonga Lobbying Strategy)	Investigate strategies to maximise efficient allocation of resources in the Yellagonga Regional Park to support the Department of Environment and Conservation achieve their planned initiatives.	2010/11 – 2013/14	In Progress	The background and intent of the <i>Yellagonga Resource Allocation Strategy</i> was discussed with the Department of Environment and Conservation and a collaborative approach rather than a 'lobbying approach' was agreed upon to achieve desired conservation outcomes for the Yellagonga Regional Park.  The City prepared a 'gap analysis' document which compared the list of initiatives for implementation noted under the Yellagonga Lobbying Strategy project of the <i>YICM Plan</i> , against the corresponding strategies noted in the Yellagonga Regional Park Management Plan 2003-2013. These initiatives and strategies were discussed with the Department of Environment and Conservation.  The City has prepared a Draft <i>Yellagonga Resource Allocation Strategy</i> . The key initiatives include partnership projects on fauna surveys, bushland assessments, wildlife injury protection and flora and fauna disease protection. The draft Strategy will be provided to the City of Wanneroo for review.

Project	Objectives	Timeframe	Progress	Comments
Stormwater Management Plans	Develop Stormwater Management Plans including identification of priority sub-catchments for upgrade.	2010/11 – 2013/14	In Progress	As part of the implementation of the Landscape Master Plan, the City has completed retrofitting of stormwater outfalls into the City's Lakes. The upgrade of sumps will occur through the City Sump Improvement Program 2010-2020. The first sump adjacent to Yellagonga Regional Park to be upgraded in this Program is Kingsley Drive, Kingsley, planned for 2013/14.  A new Stormwater Management Policy was adopted by Council in August 2012.
Local Biodiversity	To reduce water consumption via native sustainable gardens; introduce and showcase original local endemic species; raise community awareness of local biodiversity and water wise gardening and create biodiversity linkages between the wetlands and coast.	2009/10 – 2013/14	In Progress	Biodiversity linkages reflecting plant communities and soil types between the Yellagonga Wetlands and the coast are being created through the Iconic Landscaping Project.  Planting has commenced on the Burns Beach median planting. Local native plant species have been planted in the median commencing west of Marmion Avenue and finishing at the Mitchell Freeway. Hard landscaping, tree planting and the application of mulch has been completed between the Freeway and the roundabout on Joondalup Drive. This planting, including shrubs and groundcovers will be finalised in 2013.  Community education of native sustainable gardening has also been delivered via Great Gardens Workshops through the City's Environmental Education Program.
District Planning Scheme Review	To develop and implement a new planning scheme for the City which sets a high standard of quality for future development.	2010/11 – 2013/14	In Progress	The City's <i>Draft Local Planning Strategy</i> and <i>Draft Local Housing Strategy</i> have been adopted by Council and are being reviewed following feedback from the Department of Planning. Research on the development of the <i>District Planning Scheme 3</i> is continuing.  The development of the <i>District Planning Scheme 3</i> will continue during 2012/13, with a draft document anticipated by mid 2013.
Acid Sulphate Soils	Identify extent of acid sulphate soils in the Yellagonga Catchment and develop strategies to manage impact of any disturbed acid sulphate soils.	2013/14 - 2013/14	In Progress	Edith Cowan University identified acid sulphate soil disturbance as being related to elevated metal levels in the Yellagonga Wetlands (through the Water Quality Mapping and Monitoring Program). Low water levels at Lake Goollelal have also been identified as a risk that could lead to the occurrence of acid sulphate soil exposure.  The Acid Sulphate Soil Investigation (north of Lake Goollelal) identified indicators of acid sulphate soils. A Stage 2 component of this Project (identified within the Water Quality Mapping and Monitoring Project) is due to commence late 2012 to undertake more detailed investigation.  An Acid Sulphate Soils project is to be developed seeking collaboration from the City of Wanneroo and the Department of Environment and Conservation to undertake further mapping and identification 'on the ground' of acid sulphate soils in the Yellagonga Wetlands.

Project	Objectives	Timeframe	Progress	Comments
Conservation Maintenance Schedule	Ensure natural areas are maintained within urban expansion, habitats maintained for wildlife and unique and diverse flora is protected.	2010/11 – 2013/14	Ongoing	The area of bushland (managed by the City of Joondalup) south of Neil Hawkins Park has been managed to eradicate grassy weeds. The thick accumulation of weeds and tree branches made it difficult for Long-necked Turtles to nest in the bushland west of the limestone pathway.  Weed management has also been implemented at Lakeside Park (abutting Yellagonga Regional Park) for the control of grasses that can shed seed into the Yellagonga Regional Park.  The City of Joondalup in association with the City of Wanneroo and the Department of Environment and Conservation has been very successful in the ongoing fox control program within Yellagonga Regional Park. Over 30 foxes have been trapped since the start of the initiative.
Water Conservation Plan	Maintain public open spaces while using groundwater more efficiently.	2009/10 – 2013/14	In Progress	The <i>City Water Plan</i> was endorsed by Council on 26 June 2012, following community consultation. The City Water Plan supersedes the <i>Water Conservation Plan 2009/10</i> .  Key projects within the City Water Plan that link with the <i>YICM Plan</i> include: Water Quality Monitoring and Mapping Project; Yellagonga Acid Sulphate Soils Project; Review of Nutrient Management Practices; Yellagonga Community Awareness Program and the Scientific Investigations Project.  Implementation of the <i>City Water Plan</i> commenced 1 July 2012.

In Progress / Ongoing

Completed

Not started