Implementation Plan for the City of Greater Geraldton Stormwater Harvesting and Efficiency Project

NATIONAL PARTNERSHIP AGREEMENT ON WATER FOR THE FUTURE

PRELIMINARIES

- 1. This Implementation Plan is created subject to the provisions of the National Partnership Agreement on Water for the Future and should be read in conjunction with that Agreement.
- 2. As part of the Water for the Future initiative, the Commonwealth has committed \$3 million to the City of Greater Geraldton Stormwater Harvesting and Efficiency Project. The project will implement a number of measures to direct stormwater into local surficial aquifers to recharge natural systems and associated wetlands, and to improve the quality and quantity of water available for irrigation of community parks and infrastructure.
- 3. The City of Greater Geraldton has agreed to cost share with the Commonwealth the Stormwater Harvesting and Efficiency Project consistent with the Commonwealth's project funding approval of 19 July 2011, on the basis set out in this Implementation Plan.
- 4. The City of Geraldton-Greenough will become the City of Greater Geraldton from 1 July 2011 and will assume the responsibilities of the City of Greater Geraldton under this Implementation Plan from that date.

TERMS OF THIS IMPLEMENTATION PLAN

- 5. This Implementation Plan will commence as soon as it is agreed between the Commonwealth of Australia, represented by the Parliamentary Secretary for Sustainability and Urban Water, and the State of Western Australia (the State), represented by the Minister responsible for Water (the Parties).
- 6. This Implementation Plan will cease on completion of the project (expected by 30 September 2013), including the acceptance of final performance reporting and processing of final payments against project milestones specified in this Implementation Plan.
- This Implementation Plan may be varied by written agreement between the Ministers or their delegates.
- The Project Management Plan is a flexible document that may be varied over time to accommodate changed circumstances. However, variations to the Project Management Plan that directly affect milestones and their achievement (Table 1), and therefore the implementation of the Stormwater

- Harvesting and Efficiency Project, are subject to written agreement between the Ministers or their delegates.
- 9. Either Party may terminate this agreement by providing 30 days notice in writing. Where this Implementation Plan is terminated, the Commonwealth of Australia's liability to make payments to the State is limited to payments associated with project milestones achieved by the State by the date of effect of termination of this IP.
- 10. The Parties to this Implementation Plan do not intend any of the provisions to be legally enforceable. However, that does not lessen the Parties' commitment to this Implementation Plan.

PROJECT OBJECTIVE

- 11. The Project Objective is to contribute to the long term security of water supply for the community of Geraldton-Greenough in Western Australia.
- 12. The Project consists of four separate sub-projects. These are listed below and detailed in the Schedule to this Plan:
 - a) Central Business District (CBD) Retrofit;
 - b) Aquifer Recharge;
 - c) Stormwater Harvesting; and
 - d) Water Efficiency Plan.

ROLES AND RESPONSIBILITIES

Role of the Commonwealth

- 13. The Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) is responsible for reviewing the City of Greater Geraldton 's performance against the Project milestones specified in this Implementation Plan and providing any consequential financial contribution to the State for that performance.
- 14. The Commonwealth, at its option, may be an observer to a Project Management Committee the City of Greater Geraldton establishes to monitor and oversee the implementation of the Project.

Role of the State

- 15. The State is responsible for:
 - a) on-forwarding funding to the City of Greater Geraldton provided through this Implementation Plan and related schedules, and in accordance with *Schedule D Payment Arrangements* outlined in of the Intergovernmental Agreement on Federal Financial Relations; and
 - b) coordinating with the Commonwealth and the City of Greater Geraldton on the execution of this plan (the City of Greater Geraldton is the delivery agent).

Role of the City of Greater Geraldton

- 16. The City of Greater Geraldton is responsible for:
 - a) working with the State in ensuring completion of the Project in a timely and professional manner in accordance with this Implementation Plan; and

- b) ensuring all conditions including provision of reports, in accordance with this Implementation Plan, are met and provided to the Commonwealth through the State in a timely manner.
- 17. The City of Greater Geraldton agrees to allow, at all reasonable times, appropriate Commonwealth representatives access to all sites where Project works are being or have been undertaken.
- 18. The City of Greater Geraldton agrees that the Commonwealth will be consulted on the nature and content of major events, announcements, promotional material or publicity relating to the activity under this Implementation Plan and roles of both the Commonwealth and the City of Greater Geraldton will be acknowledged and recognised appropriately.
- 19. The City of Greater Geraldton agrees to have in place a Project Management Plan for the overall project and for each sub-project. Agreed project milestones will be attached to this Implementation Plan.

PROJECT MILESTONES AND PAYMENTS

- 20. The maximum funding to be provided by the Commonwealth of Australia for the Project is \$3 million, payable in accordance with milestones as set out in Table 1.
- 21. Project milestones will be identified and agreed to by the parties in the Project Management Plan required under Paragraph 16 of this Implementation Plan.

Table 1 – Project Milestones

Milestone Number	Progress Report date	For period	Milestone	Payment
1	14 April 2011	1 January 2011 - 31 March 2011	Submission of a Project Management Plan, that includes each sub-project, to the satisfaction of the Commonwealth;	\$220,000
			Provision of a Monitoring, Evaluation and Reporting Plan;	
			Establishment of a Project Management Committee; and	
			Submission of Progress Report to the satisfaction of the Commonwealth.	
2	14 January 2012	1 April 2011 – 31 December 2011	 Completion of the Design Plan including updating the Project Management Plan, and receipt of all relevant approvals, with regard to the following sub- projects, CBD Retrofit, Aquifer Recharge, and Water Efficiency Plan; 	\$602,500

Milestone Number	Progress Report date	For period	Milestone	Payment
			 Storm water harvesting; Confirmation of proposed potable water savings and new water generated by each sub-project and how these will be reported; Completion of CBD Retrofit sub-project milestones 3-4; Completion of Aquifer Recharge sub-project milestones 3-4; Completion of Stormwater Harvesting sub-project milestones 3-4 of the sub-project; Completion of Water Efficiency Plan sub-project milestones 3-4; and Submission of Progress 	
2	14 lulu 2012	11	Report to the satisfaction of the Commonwealth.	¢ (02 F00
3	14 July 2012	1 January 2012 – 29 June 2012	 Completion of the Water Efficiency Plan sub-project milestones 5-6; 	\$602,500
			 Completion of Aquifer Recharge sub-project milestones 5-6; 	
			Completion of Stormwater Harvesting sub-project milestones 5-6;	
			Completion of CBD Retrofit sub-project milestones 5-6; and	
			Submission of Progress Report to the satisfaction of the Commonwealth	
4	31 December 2012	30 June 2012 – 15 December 2012	Completion of Aquifer Recharge sub-project milestones 7-8;	\$665,000
			Completion of Stormwater Harvesting sub-project milestones 7-8;	
			Completion of CBD Retrofit	

Milestone Number	Progress Report date	For period	Milestone	Payment
			sub-project milestones 7-8;	
			 Completion of Water Efficiency Plan sub-project milestones 7-8; and 	
			Submission of Progress Report to the satisfaction of the Commonwealth.	
5	14 July 2013	1 January 2012 – 30 June 2013	Completion of Aquifer Recharge sub-project milestones 9-11;	\$810,000
			Completion of Stormwater Harvesting sub-project milestones 9-11;	
			 Completion of CBD Retrofit sub-project milestones 9- 11; 	
			Completion of Water Efficiency Plan sub-project milestones 9-11; and	
			Submission of Progress Report to the satisfaction of the Commonwealth.	
6	30 September 2014		Acceptance of Final Project Report to the satisfaction of the Commonwealth.	\$100,000

Payment Schedule

22. Any Commonwealth financial contribution payable will be processed by the Commonwealth Treasury and paid to the State Treasury in accordance with the payment arrangements set out in Schedule D of the *Intergovernmental Agreement on Federal Financial Relations*.

BUDGET

23. The estimated overall Project Budget for each component of the project is set out in Table 2. GST is not payable on amounts paid by the Commonwealth under this implementation plan.

Table 2 – Project Budget

Expenditure Item	Total Cost				
(i) CBD Retrofit	2,520,000				
(ii) Aquifer Recharge	1,020,000				
(iii) Stormwater harvesting	2,020,000				
(iv) Water Efficiency Plan	515,000				
Total estimated project budget 6,075,000					
less estimated Commonwealth contribution 3,000,000					
equals estimated contribution from non-Commonwealth sources	3,075,000				

24. Having regard to the estimated costs of projects specified in the overall Project budget, the State will not be required to pay a refund to the Commonwealth if the actual cost of the Project is less than the agreed estimated cost of the Project. Similarly, the State bears all risk should the costs of a project exceed the estimated costs. The Parties acknowledge that this arrangement provides the maximum incentive for the State to deliver projects cost-effectively and efficiently.

REPORTING ARRANGEMENTS

- 25. The City of Greater Geraldton will provide performance reports through the State to demonstrate its achievement of the Project milestones set out in Table 1. Each Progress Report is to contain the following information:
 - a) a description of actual performance of the Project to date against the Project milestone/s listed in Schedule A, including a statement as to whether the Project is proceeding in accordance with the milestone activity schedule as set out in this Implementation Plan and if it is not, an explanation as to why and the action that the State proposes to take to address the matter/s;
 - b) promotional activities undertaken in relation to, and media coverage of, the Project during the last reporting period; and
 - c) a description of the work that will be undertaken to complete the remaining Project milestone(s), and any expected promotional opportunities, during the next reporting period for the Project.
- 26. The final Project Report is due within 60 business days of the completion of the Project (or upon termination of this Implementation Plan or the Project) and will be a stand-alone document that can be used for public information dissemination purposes regarding the Project. The final Project Report must:
 - a) describe the conduct, benefits and outcomes of the Project as a whole;
 - b) evaluate the Project, including assessing the extent to which the objective has been achieved and explaining why any aspect were not achieved; and
 - c) provide a plan for the ongoing operation, monitoring and evaluation of the infrastructure arising from this Implementation Plan; and
 - d) include a discussion of any other matters relating to the Project, which SEWPaC notifies the City of Greater Geraldton should include in this final Project Report, at least 60 days before it is due.

27. The City of Greater Geraldton will provide addition implementation information through the State to the Commonwealth on request provided that the City of Greater Geraldton agrees that the information request is reasonable.

NOTICE OF DETAILS FOR THIS PROJECT

- 28. A notice relating to this Project, rather than the Agreement generally, is to be in writing and dealt with as follows:
 - a) if given by the State to the Commonwealth:

Assistant Secretary
Urban Water Security Branch
Water Governance Division
Department of Sustainability, Environment, Water, Population and Communities
GPO Box 787
Canberra ACT 2600

or

b) if given by the Commonwealth to the State:

Manager Drainage and Waterways Department of Water PO Box K822 Perth WA 6842

Schedule A

City of Greater Geraldton Stormwater Harvesting and Efficiency Project

BACKGROUND

This Schedule A provides additional information on the deliverables for the sub-projects under the City of Greater Geraldton Stormwater Harvesting and Efficiency Project and should be read in conjunction with the Implementation Plan and Project Management Plan. The project aims to contribute to the long term security of water supply for the community of Greater Geraldton in Western Australia.

The Schedule outlines activity details for each of the four separate sub-projects:

- 1. Central Business District (CBD) Retrofit;
- 2. Aquifer Recharge;
- 3. Stormwater Harvesting; and
- 4. Water Efficiency Plan.

Sub-project milestones will be identified and confirmed by the parties in the project management plan required under Paragraph 15 of this Implementation Plan.

1. CED RETROFIT SUB-PROJECT

Project Description

The existing drainage system in the Geraldton CBD is discharging all of the stormwater runoff from 78 hectares directly into the ocean via a piped drainage system. Along the route of the pipelines are several recreational parks and sports fields currently irrigated with potable water due to the high salinity of the underground water sources.

The project work will involve diverting stormwater runoff through pipelines or by pumping back from the outfalls. The stormwater will be used to irrigate urban parks and sports fields. The project will directly reduce potable water use, decrease the salinity of the shallow aquifer, reduce peak flow rates on the piped system and increase the lifetime of the current infrastructure. Table 3 outlines activity details for this subproject.

Table 3 - CBD Retrofit sub-project milestones

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)
1	1 December 2010 – 28 February 2011	 Commence preliminary Concept Design Plan. Consult with relevant agencies on options. 	\$75,000
2	1 March 2011 - 31 May 2011	 Complete preliminary Concept Design Plan. Commence Design Plan Identify potential storage aquifers. 	\$50,000

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)
3	1 June 2011 -31 August 2011	 Engage consultant to develop the project scope drafts. Complete designs. Develop Risk Management and OH&S Plans (Incl. matrix). 	\$175,000
4	1 September 2011 – 30 November 2011	Release Request for services as identified through discussion with consultants.	\$25,000
5	1 December 2011 – 29 February 2012	Commence project construction and implementation.	\$125,000
6	1 March 2012 – 31 May 2012	Ongoing construction in accordance with the schedule of works set out in the Project Management Plan.	\$125,000
7	1 June 2012 -31 August 2012	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$150,000
8	1 September 2012 – 30 November 2012	Ongoing construction and project implementation in accordance with the milestone activities and schedule of works set out in the Project Management Plan.	\$150,000
9	1 December 2012 – 28 February 2013	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$150,000
10	1 March 2013 – 31 May 2013	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$150,000
11	1 June 2013– 31 August 2013	 Complete project construction and implementation in accordance with the schedule of works set out in the Project Management Plan. Public release of the Project. 	\$50,000
12	1 September 2013 – September 2014	Commence defects and liability period.Submission of Final Project Report.	\$25,000

Table 4 CBD Retrofit project Milestone payments

				2010-2011	2011-2012	2012-2013	2013-2014
Commonwealth financial year	milestone	payments	per	\$125,000	\$450,000	\$600,000	\$75,000

2. AQUIFER RECHARGE SUB-PROJECT

Project Description

This sub-project aims to increase the recharge of the groundwater aquifer in the Greater Geraldton region. The increased recharge will be achieved through the conversion of sumps where poor infiltration, due to impermeable soil conditions has been experienced. Of the approximately 115 officially noted sumps, 50 are in areas with poor soil conditions with respect to infiltration.

This project will investigate and, if practical to do so, convert large non-performing sumps by retrofitting the sump floor to provide a more direct (though filtered) link between the sump floor and the underground aquifer through impermeable soil. This will be achieved through the creation of a sand filter at the base of the sump, and the drilling of bores to provide a link via gravity to the aquifer below. Outcomes sought are lower losses to evaporation and increased aquifer recharge.

The City can then draw from this aquifer for use on public open spaces to maintain service levels, e.g. at Eighth St to supply recreation centre, playing grounds, golf course etc. Table 4 outlines activity details for this sub-project.

Table 5 - Aquifer Recharge sub-project milestones

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)
1	1 December 2010 – 28 February 2011	 Commence preliminary Concept Design Plan. Including: Consult with relevant agencies on options, Identify potential recharge sumps. 	\$50,000
2	1 March 2011 - 31 May 2011	 Complete preliminary Concept Design Plan. Commence Design Plan: Engage a consultant to develop the project scope drafts, Review existing stormwater sumps (key issues soil permeability, access, location. 	\$50,000

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)
3	1 June 2011 -31 August 2011	Complete Design Plan, including:	\$37,500
	August 2011	 Preliminary monitoring plan. 	
		• Work with relevant agencies to determine final recharge sites.	
		 Develop Risk Management and OH&S Plans including matrix. 	
4	1 September 2011 – 30 November 2011	Complete procurement phase.	\$12,500
5	1 December 2011 – 29 February 2012	Commence project construction and implementation.	\$50,000
6	1 March 2012 – 31 May 2012	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$50,000
7	1 June 2012 -31 August 2012	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$50,000
		Complete monitoring plan.	
8	1 September 2012 – 30 November 2012	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$50,000
9	1 December 2012 – 28 February 2013	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$50,000
10	1 March 2013 – 31 May 2013	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$50,000
11	1 June 2013– 31 August 2013	Complete construction in accordance with the schedule of works set out in the Project Management Plan.	\$25,000
		Public release of Project.	
12	1 September	Commence defects and liability period.	\$25,000
	2013 - September 2014	Submission of Final Project Report.	

Table 6 - Aquifer Recharge project Milestone payments

				2010-2011	2011-2012	2012-2013	2013-2014
Commonwealth financial year	milestone	payments	per	\$100,000	\$150,000	\$200,000	\$50,000

3. STORMMTER HARVESTING SUB-PROJECT

Project Description

This sub-project aims to implement improvements to the existing stormwater outlets within the Geraldton-Greenough region, including:

- a) Creating a wetland by diverting ocean outfalls at Mahomets Beach the City's most popular surf beach. The water would also be used for local irrigation.
- b) Similar techniques applied to other smaller outfalls, such as Forrest St, Mark St and Chapman Rd, where water could be re-used locally on parks and gardens, or for rain-gardens for passive recreation. Table 5, outlines activity details for this sub-project.

Table 7 - Stormwater Harvesting sub-project milestones

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)
1	1 December 2010 – 28 February 2011	 Commence preliminary Concept Design Plan. Consult with relevant agencies on options. Submission of Progress Report to the satisfaction of the Commonwealth. 	\$75,000
2	1 March 2011 - 31 May 2011	Complete preliminary Concept Design Plan.Commence Design Plan.	\$50,000
3	1 June 2011 -31 August 2011	 Engage consultant to develop the project design plans. Complete Design Plans. Develop Risk Management and OH&S Plans including matrix. 	\$137,500
4	1 September 2011 – 30 November 2011	Release Request for services as identified through discussion with consultants.	\$12,500
5	1 December 2011 – 29 February 2012	Commence project construction and implementation.	\$100,000

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)
6	1 March 2012 – 31 May 2012	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$100,000
7	1 June 2012 -31 August 2012	Ongoing construction in accordance with the schedule of works set out in the Project Management Plan.	\$112,500
8	1 September 2012 – 30 November 2012	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$112,500
9	1 December 2012 – 28 February 2013	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$112,500
10	1 March 2013 – 31 May 2013	Ongoing construction and project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$112,500
11	1 June 2013–31 August 2013	 Complete construction in accordance with schedule of works set out in the Project Management Plan. Public release of project. 	\$50,000
12	1 September 2013 - September 2014	Commence defects and liability period.Submission of Final Project Report.	\$25,000

Table 8 - CBD Retrofit project Milestone payments

				2010-2011	2011-2012	2012-2013	2013-2014
Commonwealth financial year	milestone	payments	per	\$125,000	\$350,000	\$450,000	\$75,000

4. WATER EFFICIENCY SUB-PROJECT

This sub-project aims to implement the City of Greater Geraldton Water Conservation Plan. It will investigate, design and implement strategies to improve the quality of groundwater being sourced for irrigation purposes at priority major public open space reserves where groundwater salinity is very high. At the current irrigation rates for these reserves we will soon be forced to use potable water for irrigation due to rapidly rising salinity.

This project involves changes to bore placement and shift to more sustainable extraction rates to manage groundwater quality. This, in conjunction with replacement of old irrigation systems with efficient systems, the introduction of hydro-zoning, and incorporation of soil conditioners will reduce the demand on ground water systems while delivering quality turf for sports.

Other water conservation measures will also be investigated to conserve and sustain potable water supplies. Such measures may include capture of stormwater from surface catchments and from buildings. Table 6 outlines activity details for this sub-project.

Table 9 - Water Efficiency sub-project milestones

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)	
1	1 December 2010 - 28 February 2011	Commence preliminary Concept Design Plan, including the development of a list of potential project initiatives.	\$20,000	
2	1 March 2011 - 31 May 2011	 Complete preliminary Concept Design Plan, including stakeholder engagement to refine project initiatives. Commence Design Plan. 	\$20,000	
3	1 June 2011 -31 August 2011	 Complete Design Plan. Develop Risk Management and OH&S Plans (Incl. Matrix. 	\$20,000	
4	1 September 2011 – 30 November 2011	Engage consultants as required.	\$12,500	
5	1 December 2011 - 29 February 2012	Implementation of projects.	\$32,500	
6	1 March 2012 – 31 May 2012	Ongoing project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$20,000	
7	1 June 2012 -31 August 2012	Ongoing project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$20,000	
8	1 September 2012 – 30 November 2012	Ongoing project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$20,000	
9	1 December 2012 - 28 February 2013	Ongoing project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$20,000	

Activity Number	For period	Sub-project milestones	Activity budget for reporting period (Cwth Contribution)
10	1 March 2013 – 31 May 2013	Ongoing project implementation in accordance with the schedule of works set out in the Project Management Plan.	\$20,000
11	1 June 2013–31 August 2013	 Complete project implementation in accordance with the schedule of works set out in the Project Management Plan. Public release of project. 	\$20,000
12	1 September 2013 - September 2014	Commence defects and liability period.Submission of Final Project Report.	\$25,000

Table 10 - Water Efficiency project Milestone payments

				2010-2011	2011-2012	2012-2013	2013-2014
Commonwealth financial year	milestone	payments	per	\$40,000	\$85,000	\$80,000	\$45,000