

FORM TITLE – Project Scope Development (PSD)

	Description	Provide Comments
Title	Review stormwater module of AGWR – Phase I + Phase II	
Project Type	<input checked="" type="checkbox"/> State-of-knowledge <input type="checkbox"/> Problem Definition <input type="checkbox"/> Knowledge Generation <input checked="" type="checkbox"/> Knowledge Transfer <input type="checkbox"/> Knowledge Adoption <input type="checkbox"/> Benefit Realisation	
Problem	<p>The existing Guidelines for Stormwater, as set out in the Australian Guidelines for Water Recycling (AGWR) are over ten years old. The original stormwater module, due to significant data limitations, was based on default values calculated from sewage. There is a need for an updated review of available published and industry data on stormwater harvesting, as an evidence base upon which to develop more refined and specific guidance for the various types of stormwater which have a wide variety of water qualities. This information would facilitate the development of more source waters for recycled water schemes.</p>	
Background/Description:	<p>The Stormwater Harvesting and Reuse module is one of the three modules that comprise the second phase of the Australian Guidelines for Water Recycling, which address health and environmental risks associated with water recycling. The stormwater guidelines cover only non-potable (ie non-drinking water) potential end uses of roofwater and stormwater and extends the scope of Phase 1 of the water recycling guidelines (NRMMC– EPHC–AHMC 2006), which focuses primarily on reuse of wastewater and grey water.</p> <p>Phase 1 of the AGWR has recently been reviewed (with oversight from EnHealth) and an updated draft is currently out for public consultation. An update of the Phase 2 module for stormwater harvesting and reuse, would bring it in line with the proposed changes to the Phase 1 document. In order to do this, there is a need to gather more recent water quality data for stormwater harvesting and reuse, and develop a scientifically rigorous, peer-reviewed and published evidence base upon which to develop more refined and specific guidance for the various types of stormwater.</p> <p>Due to the limited available peer reviewed literature at the time, the Stormwater treatment criteria for public, open-space irrigation was calculated on the basis of the ratio of the mean E. coli concentrations from Table A2.4 and the corresponding concentration in raw sewage from the Phase 1 guidelines. As a result treatment requirements were determined to be less stringent than those in the Phase 1 guidelines (NRMMC–EPHC–</p>	

FORM TITLE – Project Scope Development (PSD)

	Description	Provide Comments
	<p>AHMC 2006) for wastewater irrigation. The reason for this is that levels of faecal-derived microbial indicators and pathogens in stormwater were calculated to be less than 1% of those found in sewage.</p> <p>Since the drafting of these guidelines in 2009, there has been significant improvement in the knowledge of water quality risks and variability for stormwater. It is proposed to undertake a state of knowledge review of the currently available data on stormwater quality and risks and use this new information to produce a peer-reviewed and published evidence base for a possible future update to the Phase 2 stormwater module.</p>	
Objectives:	<p>The objectives of this project are:</p> <p>To undertake a national and global industry and literature review of stormwater quality, and more specifically variability in pathogens under various conditions.</p> <p>Create a project advisory committee, who will be tasked with peer review of the evidence and support the development of the published final report. The PAC will comprise representatives from regulators, water utilities, the Stormwater Association of Australia and other key stakeholders.</p> <p>Produce a publish a final report on the collated and interpreted data, along with recommendations for translation of the evidence into the AGWR.</p>	
Scope/ Deliverables:	<ul style="list-style-type: none"> • State of knowledge of; stormwater harvesting, treatment, monitoring and risk management strategies • Final report on available data for stormwater quality and implications for update to the AGWR stormwater module. • Identify any data gaps and further research needs. 	
Stakeholders	Melbourne Water, South East Water, Sydney Water, Barwon Water (interest at Horizon workshop). State health regulators. Stormwater Association of Australia.	
Investigative or Research approach	The research is a desk top study involving investigation and collation of local and international published and industry literature. Development of a State of Knowledge report and a representative data set of stormwater quality and variability under different conditions. Project Advisory Committee (PAC) will comprise a team of subject matter experts	

FORM TITLE – Project Scope Development (PSD)

	Description	Provide Comments
Indicative Funding required:	<input type="checkbox"/> Small (<\$100k) <input checked="" type="checkbox"/> Medium (\$100-\$500k) <input type="checkbox"/> Large (>\$500k) Indication of funding requirement \$150K project cost + WaterRA Mgt fees and Knowledge Transfer costs.	
Duration/Start	<input type="checkbox"/> Short (<6 months) <input checked="" type="checkbox"/> Medium (6-18 months) <input checked="" type="checkbox"/> Long (>18 months) Start: August 2020	

DRAFT