

NAMN Forum: Improving the Water Quality of Waterways and Wetlands



Date: Friday, 3 November 2017
Time: 10:30am – 3:00pm (Registration from 10:00am)
Venue: Shire of Collie, Synergy Building, 2 Lefroy Street, Collie (cnr Lefroy St and Forrest St)
Cost: \$66.00 (Incl GST)

ABOUT THE FORUM

Please join us for this fantastic opportunity to hear about initiatives that aim to improve the water quality of riverine, estuarine and wetland environments at the local and catchment scale. Expert speakers include representatives from the Shire of Collie, City of Busselton, Department of Water and Environmental Regulation, Department of Primary Industries and Regional Development, Water Corporation, South West Catchments Council, South East Regional Centre for Urban Landcare and WALGA Preferred Suppliers. The event will include morning tea and a lunch break where attendees can network with others in their field, and question sessions with all presenters.

PROGRAM

- 10:00am Registration and morning tea
- 10:30am Welcome and introduction**
Melanie Davies, Biodiversity and Sustainability Project Officer, WALGA
- 10:35am Regional Estuaries Initiative: a program to improve the health of six south west estuaries**
Jennifer Stritzke, Regional Estuaries Initiative Coordinator, DWER
- 11:05am Soil nutrient mapping: targeting best practice fertiliser application in rural areas**
Dr Robert Summers, Senior Research Officer, DPIRD
- 11:35am Climate resilient water supply for the great southern region**
John Janssen, South West Regional Manager, Water Corporation
- 12:05pm Revitalisation of the Collie River**
Andrew Dover, Director Development Services, Shire of Collie
- 12:30pm Site visit to Collie River**
Andrew Dover, Director Development Services, Shire of Collie
- 12:45pm Lunch
- 1:30pm Urban and rural community natural resource management initiatives for water quality improvement**
Dr Emily Hugues dit Ciles, Biodiversity Program Manager and Nerilee Boshammer, Community Engagement Program Manager, SWCC
- 2:00pm Successes and failures of bioretention systems – lessons for practitioners**
Brendan Oversby, Manager Water and Environment, Calibre Consulting



- 2:30pm** **New River Wetland Walk enhancement project**
Will Oldfield, Senior Natural Resource Management Officer, City of Busselton
- 3:00pm** **Mozzie Wise Program: reducing mosquito populations in wetlands and around the home**
Dr Rose Weerasinghe, Ecologist, SERCUL
- 3:30pm** **Close of Event**

PRESENTATION OVERVIEW

Jennifer Stritzke, Regional Estuaries Initiative Coordinator, Department of Water and Environmental Regulation (DWER), will discuss the Regional Estuaries Initiative, a \$20 million Royalties for Regions funded State Government program to restore the function and improve the health of six estuaries in the south-west region, extending from Mandurah to Albany. Jennifer will discuss the range of on-ground works underway, including soil and water testing, farm effluent management, revegetation and drainage, as well as scientific research and modelling, regional capacity, employment and training. Jennifer will also outline the partnerships with Local Government, regional landcare groups, catchment councils, and peak agriculture industry bodies to promote best practice and improve water quality.

Dr Robert Summers, Senior Research Officer, Department of Primary Industries and Regional Development (DPIRD), will discuss the Whole Farm Nutrient Mapping project, which uses an evidence based approach to reduce nutrient inputs from agricultural lands. The project has soil tested and nutrient mapped more than 600 farms and covered 170,000 hectares in Western Australia, extending from Gingin to the south coast. The mapping is designed to lead to improved fertiliser use efficiency, which is a major input cost on farms, and reduce the movement of nutrients off-farm. Robert will discuss why the project is popular with landholders, how soil test data on nutrient surpluses and deficiencies are communicated in a meaningful way to assist landholders in fertiliser decision making, and the importance of engaging with rural landholders to reduce nutrient enrichment of estuaries and waterways.

John Janssen, South West Regional Manager, Water Corporation, will discuss the challenges of providing drinking water to a growing population in the south west of Western Australia under the pressures of a drying climate and multiple stakeholder needs. John will outline the long-term planning and significant infrastructure investments occurring in the region, to ensure the variety of uses and values are met in a sustainable way for the next 50 years. John will discuss several project examples, including the Warren Blackwood Water Supply Scheme and the linking of the State's Integrated Water Supply Scheme to Collie and 44 other towns in the great southern region.



Andrew Dover, Director Development Services, Shire of Collie will discuss the revitalisation of the Collie River. The Collie River is an important part of Collie's identity, economy and way of life. However, there are significant challenges facing the river which required urgent attention. These include excess nutrients, low water levels, salinity, and in particular aquatic weeds and weeds along the river bank. The Shire has spearheaded strategies to tackle these challenges and has seen dramatic improvements in the amenity and environmental condition of the river and surrounds. Andrew will discuss the lessons learned, the successful strategies involved in the revitalisation so far, and further work needed.

Dr Emily Hugues dit Ciles, Biodiversity Program Manager and Nerilee Boshammer, Community Engagement Program Manager, South West Catchments Council (SWCC), will provide an overview of SWCC's program working in partnership with landholders, regional partners, local governments and agencies, to reduce nutrients entering waterways. The program targets both the urban and rural landscape to complement other works delivered across the region. Emily and Nerille will discuss rivercare work and the restoration of riparian vegetation and linkages between conservation estate and private land along the Lower Blackwood River system for the recovery of the endangered Geocrinia Frog (Orange Bellied and White Bellied Frogs). They will also discuss the methodology and lessons learnt from the Home River Ocean behavioural change media campaign, to enable real traction in reducing fertiliser application in urban gardens.

Brendan Oversby, Manager Water and Environment, Calibre Consulting, will provide an overview of the bioretention gardens and associated water management infrastructures that have been installed across Western Australia over the past 15 years. These systems have had a variety of success and failures related to the three phases of a bioretention system; namely the design, construction and long-term maintenance. Using local case studies and research outcomes, Brendan will highlight the ways in which bioretention systems can enhance water quality and the urban environment. Brendan will also provide key learnings for designers and operators of these systems.

Will Oldfield, Senior Natural Resource Management Officer, City of Busselton, will discuss the development of the New River Wetland Walk, situated on low lying land designated as public open space following a development sub-division on the edge of the Busselton town site. Will will provide an overview of the process that lead to the enhancement of this previously degraded area of land, to improve wetland function and increase community awareness of wetland values.

Dr Rose Weerasinghe, Ecologist, South East Regional Centre for Urban Landcare (SERCUL), will discuss how keeping a balance between healthy wetland function and risk to public health due to mosquito breeding is a challenging task for wetland managers. While people often assume that all wetlands produce mosquitoes, healthy wetlands support a diverse array of wildlife that prey on mosquito larvae and produce very few adult mosquitoes. In contrast, stormwater networks and home backyards often contain shallow, low oxygen pools of water that become breeding grounds for mosquitoes. Rose will discuss SERCUL's ecologically sound mosquito management project, and Mozzie Wise education program, developed in partnership with the Department of Health. Rose will provide an overview of long-term mosquito control methods to limit the use of chemicals, and education programs available for Local Government, schools and community members across Western Australia.