Works begin to clear seaweed from foreshores

Thursday, 8 December 2011

The Swan River Trust has begun work to remove macroalgae from heavily affected parts of the Swan Canning Riverpark foreshores.

Macroalgae, commonly called seaweed or wrack, is a natural part of the river ecosystem. Increasing water temperature combined with nutrients washed down from the catchment with seasonal rains can cause it to grow rapidly and accumulate in large amounts during spring and summer.

The Trust removes up to 150 tonnes of seaweed from the Riverpark every year.

Trust Riverpark Manager Chris Mather said he was expecting a busy season following heavy winter and spring rainfall and high temperatures in November and December.

"This seaweed or macroalgae is non-toxic, however in some areas there are large quantities, which are washing up on the foreshore," he said.

"The seaweed can affect the aesthetics and public perception of the Riverpark swimming beaches and can create odour issues as it decomposes.

"The Trust removes seaweed from high-use beaches but leaves it in other areas where it can provide an important habitat and food source while also assisting in foreshore stabilisation.

"By removing seaweed, we are undertaking proactive work to protect the useability of the Swan Canning Riverpark for the community."

Seaweed removal began last week to remove close to 21 tonnes of seaweed from Point Dundas and Waylen Bay in Applecross where it had built up to about half a metre thick.

Other work will be carried out in coming weeks at Matilda Bay, Claremont foreshore at Freshwater Bay, Mosman Bay, Point Walter, Como and near the Nedlands jetty.

As part of its Healthy Rivers Action Plan, the Swan River Trust and its partner organisations work in the catchments to reduce nutrients entering our waterways and contributing to algal blooms.

Proposed Riverpark changes released

Thursday, 1 December 2011

- Swan Canning Riverpark Aquatic Use review released
- Proposed changes to speed limits, water ski use to preserve Riverpark

Speed restrictions, changes to water ski operations and closing some areas to motorised vessels are features of a proposed new management plan for the Swan Canning Riverpark.

Releasing the plan for a three-month comment period today, Transport Minister Troy Buswell and Environment Minister Bill Marmion encouraged river users to provide feedback. Mr Buswell said Sharing the Rivers - Swan Canning Riverpark Aquatic Use Review and Management Framework Draft Report followed an 18-month consultation with user groups.

"Vessel activity has increased significantly since many of the existing management arrangements came into effect, with the number of registered private vessels in the metropolitan area growing from 36,000 to 53,000 in the last decade alone," Mr Buswell said.

"This growth is expected to continue, placing further demands on the waterways. The new plan will help ensure future use does not jeopardise the health and amenity of the Riverpark."

Key changes proposed as part of the Riverpark's management plan include:

- 5-knot speed restriction area upstream of the Fremantle Rail Bridge, Mosman Bay, Freshwater Bay, Mt Pleasant, Matilda Bay, Maylands and inshore sections
- 30-knot maximum speed limit (sunrise to sunset) in areas not subject to a 5-knot limit
- realignment of the water ski areas at Belmont, Mt Pleasant and Point Walter
- prohibit personal water craft from operating or transiting on the Swan, upstream of Windan Bridge and on the Canning, upstream of Canning Bridge
- introduction of closed waters motorised vessels at Preston Point, Freshwater Bay, upstream of Riverton Bridge and the southern passage between Ron Courtney and Garvey Park at Redcliffe

Environment Minister Bill Marmion said the new plan and improved management framework promoted the safe, equitable and sustainable use of the Riverpark into the future.

"Feedback received in relation to the Sharing the Rivers plan will be considered ahead of the introduction of the proposed changes for the 2012-13 boating season," Mr Marmion said.

"The Riverpark is a highly valued community asset and is enjoyed in many different ways including boating, swimming, paddling and fishing. The implementation of a comprehensive management plan which has been developed in partnership with the community is vital in ensuring the future of this wonderful asset."

Fact File

For a copy of the full draft management plan or a summary document visithttp://www.transport.wa.gov.au/sharingtherivers or contact 9216 8200

Community the key to protecting our rivers

Thursday, 3 November 2011

Engaging the community to help protect Perth's Swan Canning Riverpark was a strong theme of the Swan River Trust's River Forum 2011 held at the Perth Convention and Exhibition Centre.

The forum titled Sharing Knowledge, Use, Responsibility, united scientists, community user groups, researchers, local government, industry representatives and key government agencies.

Key speakers were Western Australia's Chief Scientist Professor Lyn Beazley and the Minister for Environment; Water Bill Marmion who both stressed the importance of working with all community groups to meet the challenges ahead.

Prof Beazley said the Trust's Dolphin Watch program, which now has over 200 volunteers, was directly involving the community in research.

"Citizen science is going to be increasingly important and this is one of the best examples of getting people to work together," Professor Beazley said.

Mr Marmion said responsibility not only rests with the State Government but its partners - to monitor, measure, assess and educate others about the Swan Canning Riverpark's importance.

He said a good example of community co-operation was the Anvil Way Compensation Restoration and Living Stream in the Canning catchment which has involved the Water Corporation, the City of Canning, the South East Regional Centre for Urban Landcare, the Public Transport Authority and the Swan River Trust.

Professor Beazley said the community, individuals and groups would all have to play their part as population and development pressures increase throughout the Riverpark.

"Eighty percent of people live within councils that border the Swan and Canning Rivers so it's very important to most of us," she said.

Participants also heard from Dr Chris Hallett of Murdoch University, who presented his work on Australia's first fish-based indices for assessing the health of the Swan Canning Estuary. His colleague Dr Fiona Valesini discussed her work on fish fauna in the shallow and deep waters of the Swan Canning Estuary, which she said had changed markedly since the late 1970s.

For a list of speakers and their relevant topics, download the Swan River Trust River Forum 2011 event program [521 kB].

You can also view photos from the even on the <u>Trust's Facebook page</u>, and highlights from the panel discussion on the <u>Trust's YouTube channel</u>.

Among the panel and speakers:

Bureau of Meteorology Supervising Chief Hydrologist Climate and Water Division Dr Mohammed Bari,

City of Canning Executive City Futures Dr Mike Mouritz,

Chief Scientist of Western Australia Professor Lyn Beazley,

Tourism WA Board Chairman Kate Lamont, Committee for Perth Chief Executive Marion Fulker,

Murdoch University Senior Lecturer and former Swan River Trust Board Deputy Chair Dr Jane Chambers, and

Swan River Trust General Manager Rod Hughes.

Get wise to river health with River Guardians training Wednesday, 2 November 2011

A love of Perth's rivers, active membership with the Swan River Trust's River Guardians program, and many volunteer hours restoring the foreshores may make Jim and Madeleine Kirkham seem like experts when it comes to the city's iconic waterways.

But the Victoria Park couple are believers that there is always more to learn. This is why they are urging everyone who cares about the rivers to take part in the Trust's River Wise training program.

The free workshop series aims to show participants how making positive changes in their environment, home and garden can help Perth's precious rivers.

The couple, who took part in the first River Science session in early October, were advocates of sustainable living long before the concept came into fashion. Their garden is bursting with native plants, birdlife and frogs. High-nutrient fertilisers have been replaced with compost and mulch, and water, which used to be carried by hand from the washing machine and now comes from a bore, is applied sparingly. But even with this wealth of knowledge and experience, Madeleine says they picked up plenty of tips and new information from the session. Like the fact the catchment for the Swan Canning river system is twice the size of Tasmania, and a drain stencilling project to educate the community about the impacts of letting waste products enter stormwater drains.

"We're always learning," Madeleine said. "The sessions are really interesting and really comprehensive. Anyone who has any interest in the rivers needs to go."

On Saturday November 5, two workshops at the South East Regional Centre for Urban Landcare (SERCUL) in Beckenham will show participants how to be "river wise" at home and in the garden.

In the morning, the Great Gardens team will share their tips for creating a river friendly garden by improving soil, planting native species and reducing fertiliser use. SERCUL will be transformed into a native garden, and kids will create their own mini worm farms. In the afternoon, participants will learn what they can do to live a river-friendly life at home by visiting historic Yule Brook homestead -a living example of how small changes can make a sustainable home.

For Madeleine, the biggest drawcard is the chance to learn more about the rivers and what can be done to help them.

"They are a huge icon for Perth. When I first arrived, I looked up and down the river and it was magical. I just couldn't believe this was the Swan River I'd heard so much about," she said.

"It helps people realise it's what we can all do as individuals that can make a difference. It's something we really believe in and it's the way we're going to live."

Belmont foreshore project kicks off

Wednesday, 2 November 2011

Revitalisation works to stabilise the foreshore have begun at Garvey Park in Belmont. Earthworks, erosion control and bioengineering began on 19 October 2011 after the City of Belmont received funding through the Swan River Trust's Riverbank Program and the state government's Natural Resource Management Program.

Much of the \$275,000 project is expected to be completed in December 2011, with dryland planting commencing in May 2012.

City of Belmont Mayor Cr Phil Marks said the project would stabilise and prevent further erosion of the Garvey Park riverbank. Cr Marks said the project would increase wildlife habitat, protect infrastructure and fringing vegetation, and allow recreational activities to continue in the area.

Reports track sediment health at drainage sites

Wednesday, 12 October 2011

The Department of Water today released two reports commissioned by the Swan River Trust.

The reports, produced during the second stage of the Trust's non-nutrient contaminants program, focus on the ecological impacts of contaminants found in the estuary at Claisebrook and Bull Creek.

The types of contaminants found include polycyclic aromatic hydrocarbons (PAHs), organochlorine (OC) pesticides and metals (zinc, lead and copper) which are common in most urbanised estuaries, but can be toxic in high concentrations.

Sediments collected in the vicinity of Claisebrook and Bull Creek drain outfalls were tested for contaminants and impacts on four organisms.

The findings showed that concentrations of contaminants in filter feeding shellfish did not exceed the Australian and New Zealand Food Standard code.

The Department of Health has reviewed the findings and advised there is no risk to human health and that fish caught in the Swan River estuary are safe to eat.

The Swan River Trust and the Department of Water continue to undertake routine sampling - with a focus on nutrients and algal activity - to ensure the health of the Swan and Canning river system.

The reports are available on the Department of Water website:

<u>Ecotoxicological and Bioaccumulation Investigations of the Swan Estuary in the Vicinity of Claisebrook, and</u>

A Preliminary Ecotoxicological Investigation of Bull Creek

Minister welcomes dolphin and estuary report

Monday, 10 October 2011

- Recommendations include the appointment of an internationally recognised marine mammal expert
- Report finds that dolphin and estuary health should be looked at separately

Environment and Water Minister Bill Marmion has welcomed the findings and recommendations of the expert group established last year to investigate the state of dolphin and estuarine health in Western Australia.

Mr Marmion said the Dolphin and Estuarine Health Working Group Report had set out a range of recommendations, including the appointment of an internationally recognised marine mammal expert to lead a science team to develop sound management practices for dolphin populations in south-west estuaries.

The 11-member Dolphin and Estuarine Health Working Group, chaired by WA's chief scientist Professor Lyn Beazley, was formed after an investigation into dolphin deaths in the Swan Canning Riverpark in 2007 and 2009.

"While a detailed assessment of the size and structure of the dolphin population in the Riverpark began last year, it is clear from the findings of the working group that we need more information about dolphin populations and about the estuaries they live in," the Minister said.

"Our aim is to ensure the survival of these dolphins and the report has identified the need to look at the issues of dolphin health and estuary health separately. These two factors are not necessarily linked; a healthy dolphin population is not always a reliable indicator of a healthy estuary. The report has highlighted the need to look for more cohesive science arrangements to underpin estuary health in WA."

Mr Marmion said he had asked his environment and water departments to work together to further consider and advise on how to best address the report's recommendations.

"I would like to thank Professor Beazley for her unwavering commitment and enthusiasm, and the members of the working group for their contributions to this report which will guide future action on these important issues that is so close to the heart of so many Western Australians," he said.

Fact File

The Dolphin and Estuarine Health Working Group Report is available from DEC's websitehttp://www.dec.wa.gov.au

The group was formed after an investigation into dolphin deaths in the Swan Canning Riverpark in 2007 and 2009

The 11-member Dolphin and Estuarine Health Working Group is chaired by WA's chief scientist Professor Lyn Beazley

World Rivers Day 2011

Monday, 3 October 2011

The Minister for Environment and Water Bill Marmion donned a wetsuit on World Rivers Day on September 25 to observe seagrass habitats off Point Walter in Bicton.

Mr Marmion, accompanied by scientists from the Swan River Trust and Department of Water, announced a new seagrass health assessment project being carried out by the two agencies.

The seagrass health assessment project will use the expertise of Dr Jeff Cosgrove, Dr Kieryn Kilminster and Dr Vanessa Forbes over the next 12 months to select and monitor *Halophila ovalis* habitats at six sites on the Swan and Canning rivers.

From there, the project officers will introduce a regime of testing and observation over a longer period so we have a better understanding of the importance of seagrass to the rivers and the health of the rivers overall.

While the Department of Water has previously mapped the location of the seagrass, it has not been assessed over any length of time for it suitability as an indicator of estuarine health.

Seagrass is a food source for various animals including the Black Swan and helps to stabilise sediments and strip nutrients and other pollutants from the water. The Minister for Environment; Water Bill Marmion donned a wetsuit on World Rivers Day on September 25 to observe seagrass habitats off Point Walter in Bicton.

Mr Marmion, accompanied by scientists from the Swan River Trust and Department of Water, announced a new seagrass health assessment project being carried out by the two agencies.

The seagrass health assessment project will use the expertise of Dr Jeff Cosgrove, Dr Kieryn Kilminster and Dr Vanessa Forbes over the next 12 months to select and monitor *Halophila ovalis* habitats at six sites on the Swan and Canning rivers.

From there, the project officers will introduce a regime of testing and observation over a longer period so we have a better understanding of the importance of seagrass to the rivers and the health of the rivers overall.

While the Department of Water has previously mapped the location of the seagrass, it has not been assessed over any length of time for it suitability as an indicator of estuarine health.

Seagrass is a food source for various animals including the Black Swan and helps to stabilise sediments and strip nutrients and other pollutants from the water.

Winners - "It's Everyone's Riverpark" video competition

Sunday, 2 October 2011

School students across Perth turned their hands to film making as part of the latest schools educational project run by the Swan River Trust.

The "It's Everyone's Riverpark" video competition aimed to highlight the impact that our daily activities have on the health of the Swan and Canning Rivers and revealed a great depth of talent in three categories - years K-3, 4-7 and 8-10.

» View the students' videos on the Trust's YouTube channel

Students were asked to make videos inspiring their peers to do at least one thing to improve the health of the rivers. They could choose from topics such as picking up your rubbish, not feeding birds, picking up dog poo, keeping pet fish out of the river system, and washing cars on the lawn instead of the driveway with non-phosphorus cleaning products.

Students from Ardross Primary School took out first prize in the K-3 and 4-7 categories and runner-up in the K-3 sections, with Wesley College taking out the 8-10 category first prize and runner-up.

"The aim of the competition was to encourage everyone in the catchment to think about doing one thing to help improve the health of the Riverpark," Ribbons of Blue officer Liz Oversby said.

"We want to raise awareness in the community of the fact that everyone is connected to the rivers. If everyone is aware of the impact of their actions, then river health will, in time, improve.

"Thanks to all the schools who took part and entered. The results were fun, informative and inspirational for everyone."

K-3 Category

Winners

Sofia Casotti, Bianca Arthur, Ning Wong, J.J. Toh from Ardross Primary

Runners-up

Brandon Wong, Osian Robertson, Jade Cairns, Sam Collins from Ardross Primary School

Years 4-7

Winners

Abbey Woodman, Zali Nash, Charlotte Barron from Ardross Primary

Runners-up

Brianna Sinclair, Nicole Rindel from St Hilda's School for Girls

Years 8-10

Winners

Joseph Chan, William Sutherland, Quinton Narkle, Reynard Hudson from Wesley College

Runners-up

Luke Masiello, Josh Morcombe, Cameron Gee, Liam Varga from Wesley College

Seagrass mapping project could shed new light on river health Sunday, 25 September 2011

- Minister examines seagrass on World Rivers Day
- Could be used as key indicator of river health

A new seagrass monitoring project could hold the key to providing valuable data to scientists about the health of the Swan and Canning rivers.

On World Rivers Day, scientists from the Swan River Trust took Environment Minister Bill Marmion snorkelling in the waters off Point Walter in Bicton to examine seagrass and investigate its suitability as an indicator of estuarine health.

"Halophila ovalis plays a number of important ecological roles in the Riverpark, including being a food source for the Black Swan. Its growth is thought to be influenced by water quality," Mr Marmion said.

"Work is being carried out to determine whether seagrass could be used as an ongoing indicator of estuary condition, in the same way nitrogen and phosphorus are used to give us a picture of river health."

The Minister said if the project was successful, ongoing monitoring of seagrass at key locations in the Swan and Canning estuary would provide the science to more effectively manage the estuary in the future.

"The State Government has done a lot of work trying to help develop and encourage inter-agency collaboration in the science field," he said.

"Good environmental management comes from good science. This new project to assess seagrass health, with current knowledge of seagrass extent, will enhance our ability to manage the Swan-Canning estuary effectively."

Fact File

The Swan River Trust is collaborating with Department of Water (DoW) to develop a seagrass assessment protocol that may be applied to indicate estuarine condition

It will encompass a range of metrics describing the health of Halophila ovalis

It will help the trust understand the natural variability of seagrass over time and sensitivity to water quality conditions and sediment stress

River Guardians get taste of traditional Noongar life Sunday, 25 September 2011

River Guardians have been given a taste of traditional Noongar life along Perth's rivers.

Ten members of the Swan River Trust's River Guardians program made jewellery from native sedges and wildflowers, constructed tools using roo poo, resin, charcoal and quartz, learnt traditional fishing and hunting methods, and were shown bush tucker by local Noongar elder Leonard Thorn.

River Guardians Program Manager Marnie Giroud said the event, which was held at the Canning River Eco Education Centre on Saturday September 24, enabled the Noongar community to share traditional life along the Swan and Canning rivers.

"Our members loved it, and learnt a lot about how local Noongar people lived in harmony with the environment to survive," she said.

The event was one of many free activities River Guardian members are offered each year.

More information

For more information or to join:

- visit the River Guardians website
- email the team, or
- call the Trust at 9278 0900.

Teaching the ways of the river

Tuesday, 13 September 2011

In a first of its kind, the Swan River Trust is hosting a free, four-part River Wise event designed to help all members of the public make a positive change in their home, garden and local environment.

River Wise is a dynamic training course developed under the Trust's River Guardian program and will take place over three Saturdays in spring.

It incorporates presentations, discussion groups, field trips and hands-on activities about river science and river-friendly living, and includes a separate program for the children so all the family can take part.

Rivers Guardians program manager Marnie Giroud said the course has been tailored to give participants a fun and practical insight into the Swan Canning river system.

"There'll be canoeing in the Canning River, sustainable garden demonstrations by Great Gardens, trips to planting sites and even a walk through a 100-year-old house with a creek nearby to demonstrate the impact of fertiliser runoff," Marnie said.

"It's fully interactive with lots of useful tips for the home and garden. It's about helping people understand their role in keeping our rivers healthy forever."

The program is free and fully catered for, with presentations from some of the Trust's leading environmental scientists.

The sessions include River Science, River Wise out there, River Wise in the garden and River Wise at home. Participants who sign up and attend all four will go into the draw to win a Great Gardens sustainable garden makeover valued at \$2,500.

"We really encourage people to take part in as many of the workshops as possible because together they give a great breadth of information," Marnie said.

"Parents with kids aged four and up can leave them entirely with us as children's sessions run concurrently with the main sessions. There'll be lots of fun activities for them designed by our Ribbons of Blue program, as well as visits from Jon the Swan, Faerie Cara and Captain Clean-Up."

The River Wise workshops take place at the Canning River Eco Centre in Wilson on October 8 and 22, and the South East Regional Centre for Urban Landcare in Beckenham on November 5. For more information or to register, visit the River Guardians website.

Little Highnitch makes a show

Thursday, 8 September 2011

A dolphin calf thought to be just weeks old, has been caught on camera playing with its mum and friends in the Swan River at East Fremantle.

The calf is the offspring of mother Highnitch, so named for the markings on mum's fin.

A group of up to seven dolphins, including the baby, were frolicking near the Leeuwin boat ramp in front of a crew from Channel Seven who were filming them from the Swan River Trust and Murdoch University research boats.

Trust Principal Scientist, Kerry Trayler, said little Highnitch, who is yet to be formally named, needed to be closely monitored as cetacean calves were susceptible to many pressures and information on its movement and behaviour will add to a growing understanding of the Swan River dolphins.

"If anyone spots the calf and its mother in their travels over the next few weeks, it would be great to hear about it," Dr Trayler said.

"We now have more than 200 volunteers signed up to the Trust's Dolphin Watch program, and their sightings help the universities collect data on dolphin movements and habits.

"It's always great to add more information, so anyone who sees little Highnitch out and about should observe the calf from a good distance, so as not to disturb it and then get in touch with the River Guardians to tell us what they saw."

The River Guardians website is: http://www.riverguardians.com. Click on Contact Us to send an email about your dolphin observation.

More information about the Coastal and Estuarine Dolphin Project can be found at the Murdoch University Cetecean Research Unit and Curtin University websites.

Students come face to face with water creatures

Wednesday, 7 September 2011

Primary school students in the Perth hills took part in the 2011 Macroinvertebrate Snapshot to learn about water-dwelling macroinvertebrates this week.

Macroinvertebrates are tiny animals without backbones which live in or near water bodies and can be seen with the naked eye.

Ribbons of Blue coordinator Lisabeth Oversby said the Macroinvertebrate Snapshot helped students understand the role these living creatures play in the ecology of river systems and catchment areas.

"Macroinvertebrates are a vital part of a river system as they can help to give us an overall picture of river health," Ms Oversby said.

"The Snapshot program teaches students how animals and the environment interact."

Students carried out activities that included:

Testing of the physical parameters of water such as pH, temperature and turbidity

The food chain and habits of macroinvertebrate populations and how they are classified

Visual site assessments and macroinvertebrate sampling

Exercises to learn about macroinvertebrates before and after an excursion to a river or wetland

"The Macroinvertebrate Snapshot is a great hands-on way for students to make a contribution to the future of their local waterways," Ms Oversby said.

"It helps to promote an awareness of the science behind our precious river system and ensures that education has a part to play in its longevity."

The snapshot is run annually in the Swan Canning Catchment as part of the Swan River Trust's Ribbons of Blue program. This year programs are being run from 29 August to 16 September.

The Perth hills schools which have taken part in the last week include:

Swan View Primary School - Years 5-7

Gooseberry Hill Primary School - Years 2-3

Caversham Primary School - Years 4-5

Swan River Trust River Forum 2011

Wednesday, 7 September 2011

The Swan River Trust is a strong advocate for river research and science communication. The Trust is hosting a showcase Forum to facilitate the sharing of research supporting better understanding and management of the Swan and Canning River System.

The Swan River Trust River Forum 2011

Wednesday, 2nd November 2011

Perth Convention & Exhibition Centre

8:30am - 5:00pm: River Forum

5:00pm - 6:30pm: Post Forum Networking Function

The River Forum aims to promote the communication of research outcomes relevant to the Swan and Canning river systems, generate discussion on future research needs and opportunities, and support greater collaboration between river managers and researchers.

Guided by the theme "Sharing Knowledge - Use - Responsibility", the conference will:

- Provide a forum to exchange information and to forge new partnerships to improve riverfocused research:
- Present the latest river-related research on ecological and social systems;
- Discuss collaborations and foundations for working together, with communities, researchers, government and industry;
- Showcase innovation and new directions for catchment and in-river works.

Papers and presentations will focus on one or more of the following streams:

- UNDERSTANDING: the river, the ecosystems, the pressures and cycles, the uses, our community, or values;
- INTERVENTIONS AND OUTCOMES: behavioural management programs, on-ground works and interventions, new approaches to water sensitive urban design, what works and what doesn't to support management actions
- COLLABORATIONS: examples of shared management approaches, working with communities, researchers and industry working together. We look forward to your involvement in what promises to be diverse and rewarding Forum focused on the iconic Swan Canning river systems.

We look forward to your involvement in what promises to be diverse and rewarding Forum focused on the iconic Swan Canning river systems.

Dolphin Watchers come on down!

Sunday, 28 August 2011

The Swan River Trust's River Guardians program is looking for more Dolphin Watch volunteers to train up and take part in a joint research involving Curtin and Murdoch Universities.

Volunteers will learn to record and upload their sighting information on the River Guardian's website so that researchers on the Coastal and Estuarine Dolphin Project can get a better long term picture of the population's habits.

The State Government last year provided additional funding to the Swan River Trust to monitor and record the Riverpark's permanent dolphin population – which lives and breeds in the Swan and Canning Rivers.

A two-hour evening training session will teach participants how to look out for and monitor dolphin behaviour from the land, kayaks, rowing boats, or other vantage points on the Swan and Canning Rivers.

Dolphin Watch volunteer and South Perth resident Jennie Hunt says she finds the experience incredibly rewarding.

"I just love it when I'm out on the kayak of a morning and I happen to come across a few frolicking nearby," Jennie said.

"One of the things we learnt at training was to never approach dolphins if you see them, as you may disturb their natural movements and habits.

"I look out for several patterns of behaviour, such as whether the dolphins seem be socialising, feeding, leaping out of the water or travelling up and down the river.

"The information is then collated and entered on to a database at the Swan River Trust and forwarded to the researchers. This helps to give them a clearer picture of dolphin activities built by 200 volunteers."

River Guardians Manager Marnie Giroud said dolphin watching can be done at any time or day and there is no requirement to do daily, weekly or even monthly sightings.

"What makes this project appealing is that Dolphin Watch volunteers can carry out their observations as often or as infrequently as they like," Ms Giroud said.

"As the data is collated and compared with other sightings at the same time of the year, just one entry or observation can help researchers build up pictures of this population's movements and habits."

Those attending the training at Perth Zoo will be taught how to record the time, date, location of dolphin sightings, number of dolphins sighted, presence of a calf, direction of dolphin travelling, and any noticeable behaviour.

The Training is on Wednesday evening 14 September at Perth Zoo. <u>Email the Trust's River Guardians</u> or call 9278 0900 for more details. RSVP is essential.

For more information about River Guardians, log on to www.riverguardians.com or contact the Swan River Trust on 9278 0900.

More information about the Coastal and Estuarine Dolphin Project can be found on the following websites:

Murdoch University and Cretecean Research Unit, and

Curtin University - the Coastal and Estuarine Dolphin Project

Swimming warning for the Upper Swan River Sunday, 28 August 2011

The Department of Health is warning people to avoid swimming, water-skiing, jet-skiing, diving and other primary contact recreational activities, in the upper parts of the Swan River, including the Belmont Park, Cracknell Park and Garvey Park sites.

Environmental Health Acting Director Richard Theobald said higher than normal bacterial levels had been detected which had the potential to increase the risk of people becoming sick.

Visit the **Department of Health's website** for more information on the media release.

Students acquire positive river values

Thursday, 25 August 2011

Students from across the Bayswater Catchment Area learnt about their role in keeping the Swan River healthy at an Activity Day hosted by the Swan River Trust and City of Bayswater.

More than 300 primary school students spent one of two days at the Bayswater Riverside Gardens testing water quality, identifying macroinvertebrates and taking part in a range of other activities designed to teach them about the Bayswater Catchment and its relationship to the river.

Swan River Trust Ribbons of Blue officer Lisabeth Oversby said the event was about making young people understand the wider, environmental impact of their daily actions.

"They learnt about the importance of limiting household waste and fertiliser use, about picking up dog poo when they go for walks – all these little things that contribute to nutrients entering the river system," she said.

"It's about influencing behavioural change, getting young people into good habits early so they can carry these environmental values throughout their lives."

As well as learning how to help protect the river ecosystem, the students received an insight into some of the local Indigenous experiences of the land. They also planted more than 1000 trees over the two days.

"It was a really enriching experience for the students," Lisabeth said. "They took home with them new skills and a new appreciation for their local environment.

"And it wasn't only young people who learnt about the catchments – parent helpers who attended the day said they also discovered new facts about their area and how to care for the river."

The Bayswater Catchment Activity Day took place on August 10 and 11.

Freshwater mussels successfully relocated

Thursday, 25 August 2011

Scientists have relocated 1,200 freshwater mussels from the Helena reservoir to save the population from drying out while infrastructure works were carried out.

Carter's Freshwater Mussel or Westralunio carteri, is the only freshwater mussel native to the South-West and is listed as "vulnerable" with the International Union for the Conservation of Nature's Red List of Threatened Species.

Swan River Trust Senior Environmental Officer Shaun Meredith said the mussels, some of which are estimated to be up to 20 years old, may hold important information about water quality in that part of the Helena River.

"Mussels are great biological filters and can tell us a lot about the health of the waterways in which they live," Dr Meredith said.

"Their burrowing habits help to oxygenate the river's sediment, provide structure to stream banks and sediments and create a refuge for other freshwater life including juvenile crayfishes."

"This was probably the first time that a comprehensive study was done of the response of W. carteri to drying within a reservoir in Western Australia."

"As this species of mussel has recently declined, keeping records of their survival in the new habitat is important."

The new habitat for the population 300 metres downstream will be monitored over the summer months.

The research is a joint project between the Swan River Trust and the Freshwater Fish Group & Fish Health Unit at Murdoch University.

For more information about mussels please visit:

Mussel Watch

Freshwater Fish Group & Fish Health Unit

Major works on river wall completed

Friday, 19 August 2011

Environment Minister Bill Marmion and Transport Minister Troy Buswell today announced the completion of almost \$6million in restoration works to the river wall along Mounts Bay Road.

"This has been a major effort by State Government agencies and the City of Perth to repair and replace about 1,200 linear metres of a river wall which is vital to public amenity and safety," Mr Marmion said.

"Some sections of the gabion wall had failed and were unable to be repaired which meant the whole wall had to be replaced.

"The Government is committed to foreshore protection maintaining river walls and improving the amenity of the Swan Canning Riverpark, particularly in areas of high public and recreational use."

Transport Minister Troy Buswell said the planning and works for the project were extensive because of the importance of the area to Perth's recreational and transport needs.

"This is a narrow section of foreshore with busy traffic movements along the road, river and cycle path. It is a vital piece of infrastructure as it abuts the landscape of Mt Eliza and helps to protect a main arterial transport link into the city centre," Mr Buswell said.

The walls have been built to engineering standards with a life expectancy of 80 years and are designed to withstand the impacts of weather events and tidal variations.

The Swan River Trust, Main Roads and City of Perth co-funded the three-year restoration project, which included two main sections west of the Old Swan Brewery and east of the Narrows Bridge.

The river wall reconstruction of Section 3 was 470m, and Sections 6 and 7 in front of the Old Brewery and west to Car Park No. 1 was 620m.

Planning for the works began in 2008 with construction starting in 2009.

Bull Sharks sighted in Canning River Sunday, 14 August 2011

The Swan River Trust today advised there have been unconfirmed sightings of Bull Sharks (*Carcharhinus leucas*) in the upper reaches of the Canning River.

At least three sightings have been reported in the past week as far upstream as the Kent Street Weir, one near Castledare.

"Bull Sharks can occur in fresh water areas and it is possible that they could move up the river this far at this time of the year," Principal Scientist Dr Kerry Trayler said today.

"So it is advisable in this instance that the Swan River Trust alerts the public.

"Parents with children or pets who are playing near the shallows or people recreating on the water in the Canning and other areas of the Swan Canning Riverpark need to be reminded that we share our river with this species."

Shark sightings should be reported to the Water Police on 9442 8600. The number is manned 24 hours a day, seven days a week.

Shark safety tips are available on the Department of Fisheries website.

Kent Street Weir boards removed

Monday, 1 August 2011

After staying in for the first time on record last year, the Kent Street Weir boards have been removed thanks to adequate stream flows in the Canning River.

The likelihood of continued rainfall during winter means there should enough freshwater flowing from the upper Canning to flush the 4.5 kilometre weir pool and keep salty water downstream at bay.

Trust Senior Environmental Officer Dr Shaun Meredith said the decision to remove the boards came after a complicated summer, where unusually high tides frequently pushed salt water into the weir pool.

"The river downstream of the weir is tidally influenced, so when tides are much higher than average, salty water can be pushed over the weir into the freshwater system upstream," Dr Meredith said. "When there's enough flow in the river, it keeps the salty water downstream.

"After consulting a range of agencies and checking tides, river flows and long-term rainfall predictions, we made a decision to lift the boards."

The Weir was built in 1927 to stop salt water moving upstream. Several species of aquatic biota and vegetation now rely on the freshwater environment it created.

Dr Meredith said the boards would be reinserted when winter flows in the river subside.

"Generally, this happens in October/November, but it really does depend on how much rainfall we receive. Obviously, the more rain we get, the longer we can keep the weir boards out," he said.

"As the flow from the catchment starts to abate, and we can see the salt water moving back up, we know it's time to replace the boards."

The Trust is currently working with the Department of Water to look at options for modifying the weir to stop the salt water moving upstream when the boards are in place.

"Because we've had such high tides and so much salt water coming over the top this year, we're looking at options to upgrade the weir to stop this happening so much in the future," Dr Meredith said.

River Rangers celebrate

Monday, 1 August 2011

The Trust's River Rangers celebrated their first semester in the cadet program with a day of canoeing and snake awareness activities at the Canning River Eco Education Centre.

Ten upper primary students were selected from the five participating schools to share what they had learnt as River Ranger cadets, while gaining a positive and practical understanding of the local environment.

Trust Education Officer Joselyn Fissioli said the cadets put their teamwork skills to use as they paddled approximately one kilometre up the Canning River.

"Many of them had never canoed before so they were helping each other raft the canoes and get out of some tricky situations," Ms Fissioli said.

"They got to see waterbirds, cormorant nests, cockatoos nesting, all the local vegetation, plus some of the flooding in the banks because of the high rainfall recently."

The cadets enjoyed lunch at the Kent Street Weir Park before spending the afternoon in the Eco Centre learning about snake behaviour.

"We had a guided presentation from West Aussie Reptiles with three venomous snakes – a dugite, a tiger snake and a brown snake – and five pythons ranging up to three metres long," Ms Fissioli said. "It was about removing the fear attached to snakes. The students got to handle them, and learn why snakes bite and how they can avoid getting bitten.

"To illustrate, the instructor tipped a dugite from a cylinder in the middle of the room and watched as it steered around looking for the pipe to hide in. The cadets learnt that the danger was minimal if they stayed calm and didn't provoke it."

The celebration event marks the end of two terms trialling the River Rangers program, which seeks to reinforce the importance of protecting the Swan Canning Riverpark among primary school students.

Changes to the noxious fish species list in Western Australia

Friday, 22 July 2011

The Swan River Trust is urging fish-keepers to abide by new regulations banning fish species that pose a significant risk to Western Australia's aquatic environment.

A number of fish species, including ornamental fishes, have been added to the Noxious Species List and became prohibited in WA on 23 July 2010.

» View the noxious fish list on the Department of Fisheries website

Trust Senior Environmental Officer Steeg Hoeksema reminded hobbyists to never release exotic fish into drains or waterways.

"Exotic fish, many of which are tropical freshwater species, can survive and breed in our local waterways and threaten native species," Dr Hoeksema said.

"Recent studies indicated that despite the Pearl Cichlid, a popular ornamental fish, being a tropical freshwater species, it is able to survive in salinities equivalent to full-strength seawater and has established a self-sustaining population in the cool, temperate waters of the Swan Canning Riverpark.

"The Trust recognises that most fish keepers are responsible but strongly encourages everyone to abide by the new regulations and to dispose of prohibited or unwanted fish responsibly."

The changes follow a review by the National Ornamental Fish Management Implementation Group as part of the national strategy to protect our aquatic environments endorsed by the Natural Resource Management Ministerial Council.

Fish can be disposed of humanely by placing them in a plastic bag filled with aquarium water in the fridge. When the fish stops moving, the bag should be placed in the freezer overnight, before being discarded (recommended by RSPCA WA Inc).

Prohibited fish can also be turned over to the Department of Fisheries, Western Australia, at drop-off points at the Marine and Freshwater Research Laboratories, Hillarys and the Fish Health Laboratories at the Department of Agriculture building in South Perth.

The Trust urges anyone who witnesses the release of exotic species into our waterways to contact the Department of Fisheries' FishWatch service on 1800 815 507 or to contact the Trust directly.

Trust confirms reduced immune function in 2009 dolphin deaths Wednesday, 29 June 2011

The cause of multiple dolphin deaths in the Swan Canning Riverpark in 2009 has become clearer, with the Swan River Trust confirming the presence of the morbillivirus in two of three dolphins tested.

This is the first time the morbillivirus has been found in Western Australian marine mammals and is only the second confirmed case in marine mammals in Australia.

The tests were carried out in Ireland on the dolphin samples in 2010 following a report on the dolphin deaths by the state's Chief Scientist Lyn Beazley.

A collaborative agreement between the Swan River Trust and Murdoch University enabled further investigations to be carried out.

Trust Principal Scientist Kerry Trayler said while only two Swan River dolphins tested positive for morbillivirus, the presence of the virus in other dolphins that died cannot be ruled out.

"Two of the dolphins found in Swan River were so badly decomposed that they were not able to be tested, but results from another Swan River dolphin are pending," Dr Trayler said.

"It is difficult to detect this pathogen in post-mortem analysis."

"Samples sent to Ireland were taken from dolphins that all showed some sign of reduced immune function, which typically occurs when the morbillivirus is present."

"The presence of morbillivirus could explain why there was so much variation in the symptoms that have been observed among the dead dolphins. Some had ulcerative skin disease, one had encephalitis and others had succumbed to pneumonia."

"Urban estuaries are challenging environments in which to live and we cannot rule out morbillivirus acting in concert with a range of environmental stressors."

The state's Chief Scientist Lyn Beazley said morbillivirus affects a dolphin's immune system and its ability to resist other stressors and fight off infection. As a consequence animals may be more vulnerable to infections such as pneumonia and encephalitis.

"It is however reassuring that morbillivirus infection seems not to have recurred given that we have not had another spike in dolphin deaths in the Swan Canning Riverpark," Prof Beazley said.

"However, should this occur again, mechanisms are now in place to test for the virus in an Australian laboratory and thus provide results more quickly in future."

"Community awareness of dolphins in the rivers has increased with reporting of their activities helping us to better understand the population and threats to them."

"Programs such as the Swan River Trust's Dolphin Watch are vitally important because they involve the community in monitoring dolphin activities."

Dr Trayler said while it was not known exactly how the Swan River dolphins contracted the virus, one possibility was through contact with offshore cetacean populations.

"Cetacean morbillivirus has been associated with a number of large-scale mortality events of marine mammals in other parts of the world," Dr Trayler said.

"The disease is not transmissible to humans."

Samples taken from Bunbury dolphins were also analysed and tested negative for morbillivirus.

Brother and sister duo 999th and 1000th River Guardian

Tuesday, 28 June 2011

Brother and sister duo, Akshay and Amber Gomez-Jackson are the Swan River Trust's 999th and 1000th River Guardians.

For the Wanneroo family who love the outdoors and David Attenborough documentaries, joining a program that allows volunteers to get active in the Swan Canning Riverpark was a perfect match.

Amber, 16 said she hoped to gain a greater understanding of issues facing the river system.

"I want to learn about marine life and help contribute to keeping our rivers and the environment healthy," she said.

Fourteen year old Akshay, who aspires to be an environmentalist or a vet, says becoming the 1000th member is a great honour to uphold.

"I found out about River Guardians while we were participating in a Clean Up Australia Day site with my family at Pelican Point," he said.

"Knowing I will be helping the environment while having fun is a great feeling, and I'm looking forward to joining more outdoor activities and helping preserve our natural wildlife."

While Akshay often gets a gentle ribbing from his mates at Chisholm Catholic College for his environmental leanings, he says he doesn't mind and is looking forward to his first major mission to help preserve the Riverpark.

"I will be contributing to keeping our rivers clean and safe for the survival of water animals and plants - something that will live on in future generations to come," he said.

"I hope to convince more people to participate in activities beneficial to our natural environment."

It is free to become a River Guardian. Members can also become involved in Dolphin Watch, joining volunteers like Ashkay and Amber to help unlock the secrets of one of Perth's most iconic species.

More information on the Swan River Trust's <u>River Guardians program</u> is available from the website. Alternatively <u>send us an email</u> or call 9278 0900.

Karlodinium monitored in Canning

Tuesday, 28 June 2011

The Swan River Trust is monitoring elevated levels of *Karlodinium veneficum* along a stretch of the Canning River between Riverton Bridge and Bacon Street.

This follows a warning issued last week on elevated levels of the algae Gymnodinium.

Karlodinium veneficum is a free-floating microalgae found in most Western Australian waterways and typically increases in density between mid-summer and autumn.

Swan River Trust principal scientist Dr Kerry Trayler said that water in the affected area may appear reddish brown and exhibit an oily surface scum. There is no evidence the algae affects humans but it can be toxic to fish.

"How Karlo affects fish is not fully understood, but we suspect their gills become damaged, impacting on their ability to extract oxygen from the water," Dr Trayler said.

"Trust officers will conduct visual inspections and increase water sampling over the next week, and report back to the public.

"We encourage the community to report any dead or lethargic fish to the Swan River Trust on 9278 0900 or after hours 0419 192 845."

As a long-standing precaution, the Department of Health advises people not to eat mussels, cockles, or oysters from the Swan and Canning rivers.

New name chosen for Riverpark dolphin Monday, 6 June 2011

Choosing a name for one of Perth's river dolphins is a huge honour, says Kate Dzienis.

Kate's suggestion of Akuna, an Aboriginal word meaning flowing water, was chosen from more than 300 entries in a competition run by the Swan River Trust and hosted by the Sunday Times.

"For me, just knowing one of these animals which I absolutely adore is living wild and free – that's the prize for me," said Kate, a social media strategist and animal lover.

Akuna, who previously went by Unk (unknown) 32, is one of approximately 25 dolphins who call the Swan Canning Riverpark home and are the focus of a research project to learn more about these iconic animals.

In a joint project between the Trust's River Guardians Program and Murdoch and Curtin universities, Dolphin Watch volunteers are trained to report sightings to help scientists build comprehensive data about the dolphin population in the Riverpark.

The naming competition coincided with the release of FinBook, a photographic catalogue of Riverpark dolphins, and Dolphin Watch Day, an event to celebrate the work of Dolphin Watch volunteers.

River Guardians Program Manager Marnie Giroud said the name was particularly appropriate for the dolphin, who has often been spotted playing in the flowing water of boat bow waves.

"We really want everyone to keep an eye on Akuna so we can learn more about this animal," she said.

"Community knowledge plays a vital role in this project and identifying individual dolphins means we can better understand the relationships between individuals that make up the resident Riverpark community."

To become involved in Dolphin Watch, volunteers must join the Trust's free River Guardians program and complete training in dolphin observation techniques.

To become a River Guardian member, visit the River Guardians website or call 9278 0927.

State Budget 2011-12: Building the State - New wetlands to help reduce Swan River pollution Wednesday, 1 June 2011

The State Government has allocated the Swan River Trust \$3.2million in a bid to boost the health of the Swan and Canning rivers by building two new nutrient-stripping wetlands.

The wetlands will be built in Ellenbrook and Bayswater between 2011 and 2015 and will help strip nutrients from catchment sites, reducing the amount of nitrogen and phosphorus entering Perth's major urban waterways.

The project forms part of the State Government's program to target investments toward projects that will make real changes and ensure environmental sustainability.

Environment Minister Bill Marmion said the funding complemented the Swan Canning Water Quality Improvement Plan - one of the State Government's key strategies for improving the health of the Swan Canning Riverpark.

"This is targeted spending that supports the community and will deliver improvements for all Western Australians through a healthier Swan Canning Riverpark," Mr Marmion said.

Excess nutrients, salinity, wind and water erosion, water logging and flooding are major land management issues, some of which are a concern in the Ellenbrook and Bayswater catchments.

"Nutrients enter our catchments through streams, drains and groundwater and can feed algal blooms. Artificial wetlands can reduce these levels immediately after they are constructed and planted.

"They will also help reduce the levels of sediment and contaminants and improve habitat and amenity so all Western Australians can enjoy healthy rivers."

The Ellenbrook and Bayswater wetlands project is expected to remove about 10.8 and 0.7 tonnes of nitrogen and 2.5 and 0.1 tonne of phosphorus respectively from the Swan River, which combined currently accounts for 4.6 per cent of the nitrogen and 10 per cent of the phosphorus deposited in the Swan and Canning rivers every year.

Dolphin Watch volunteers recognised

Sunday, 29 May 2011

Two dedicated volunteers have been awarded for their efforts to boost scientific understanding of dolphins in the Swan Canning Riverpark.

Wayne Kerslake and Jennie Hunt are among a team of 202 Dolphin Watch volunteers who report sightings so scientists can build data about the dolphin population in the Riverpark. Over time, the program will build a comprehensive understanding of dolphin status and the effects of human activities on these mammals.

Wayne was awarded the River Guardians 2011 Outstanding Dolphin Watch Volunteer after clocking up 189.40 hours of voluntary dolphin monitoring since joining Dolphin Watch in February this year.

Jennie was awarded the Chief Scientist's 2011 Citizen Scientist award for the quality of the information she provides in her monitoring forms, giving detailed notes on behaviour and river conditions.

More than 80 Dolphin Watch volunteers were among 100 guests celebrating the project's second anniversary at Dolphin Watch Day on Wednesday 25 May. The event included the release of research findings from the past year and the launch of FinBook, a new photo identification guide to the Riverpark's dolphins.

River Guardians Program Manager Marnie Giroud said Dolphin Watch volunteers contributed vital information to help researchers understand the dolphins in our rivers.

"Perth people love the Riverpark and they love dolphins, now the community has the chance to contribute to a research project that will help us understand them better and in turn look after the rivers they call home," she said.

To become a River Guardian member, or to download FinBook, visit the River Guardians website or call 9278 0927.

Dolphin Watch celebrates second anniversary

Monday, 23 May 2011

Perth's river dolphins have become the most watched animal species in the Swan Canning Riverpark, thanks to hundreds of trained volunteer observers.

Through the Swan River Trust's Dolphin Watch program, community volunteers are making scientific observations of the dolphins for an average of three hours a day throughout the year.

The Swan River Trust, together with Murdoch and Curtin universities developed Dolphin Watch as a collaborative social science research and education project in 2009.

Tomorrow the scientists and Dolphin Watch volunteers will celebrate Dolphin Watch Day, to mark the second anniversary of the program and celebrate volunteer contributions.

The task of the 202 Dolphin Watch volunteers is to report sightings, so that the scientists can build up comprehensive data about the dolphin population in the Riverpark. Over time, the program will build a comprehensive understanding of dolphin status and the effects of human activities on these mammals.

Researchers at Curtin and Murdoch universities have used the Dolphin Watch information to conclude that about 25 dolphins inhabit the rivers. Many have been individually identified and given names.

Program Manager Marnie Giroud said the number of dolphin observations had increased four-fold in just one year.

"Dolphin Watch volunteers now monitor an average of three hours a day," Ms Giroud said. "This makes Dolphin Watch a remarkable community scientific program."

"During the year, we had some special sightings. There were a large number of observations of mother/calf pairs in the rivers. We don't yet know how many were sightings of the same pairs. We also had sightings of 12 dolphins at a time in the lower parts of the Canning River."

As part of the celebration, the Dolphin Watch team also released FinBook, a new catalogue of dolphins observed in the Swan Canning Riverpark from 2008 to 2011.

"Community knowledge plays an important role in understanding dolphins and FinBook is a resource designed by Dr Hugh Finn of Murdoch University for everyone interested in monitoring them," Ms Giroud said.

"Anyone who is interested in participating can download FinBook from the Swan River Trust's River Guardians website. To become a member of Dolphin Watch, volunteers must join the Trust's River Guardians program and then undergo special training in dolphin observation techniques."

Visit the River Guardian website or call 9278 0900 to become a member, or to download FinBook.

Students learn about human impacts on the Swan River Monday, 23 May 2011

More than 100 students from Bindoon and Herne Hill Primary schools learnt about the effects of human activity on the Swan River at the Ellenbrook Catchment Activity Day on 18 May 2011.

The Years 5 to 7 students spent the day at Walyunga National Park and participated in a range of fun activities that taught them about the Ellen Brook sub-catchment and river ecosystem.

Swan River Trust education officer Joselyn Fissioli said the day provided hands-on learning experiences including water sampling, frog fun and the salty licorice game.

"When we told students that they needed to pretend to be a tree there were lots of giggles, and even more when we asked them to eat salty Dutch licorice," she said.

"But once they hit their salt-tolerence it became very easy for them to understand the effect of salinity and clearing vegetation on the landscape."

Unique activities like these will help the students understand why the Ellen Brook sub-catchment is identified as a high priority area as it contributes more than 30 per cent of nutrients entering the Swan River from this region.

"They learnt about the effects of nutrients entering the river system from residential and industrial practices and stormwater run-off, the need to protect and conserve the river and what they can do to help."

River dolphin identification guide released

Sunday, 22 May 2011

A photographic guide to dolphins in the Swan Canning Riverpark has been released to help the community monitor Perth's dolphin population.

FinBook is a catalogue of dorsal fin images for dolphins observed in the Swan Canning Riverpark and Fremantle Port Inner Harbour from 2008 to 2011. Dolphins are most easily identified by scars and other markings on their dorsal fins.

Dolphin Watch Project Manager Marnie Giroud said FinBook would be a valuable tool for volunteers already keeping watch over dolphins in the Riverpark.

"FinBook will help identify individual dolphins, which will aid understanding of behaviour and movements of the animals in the Riverpark," Ms Giroud said.

» Download FinBook from the River Guardians website

To become a Dolphin Watch volunteer, visit the River Guardians website to join River Guardians and find out how to attend a free Dolphin Watch training session.

Increased alga levels monitored in Canning River

Thursday, 5 May 2011

The Swan River Trust is monitoring elevated levels of alga in the Canning River from Riverton up to Bacon Street, Cannington.

Gymnodinium is a group of single-celled algae. They are a natural part of the estuarine environment but can bloom to reach high numbers under favourable conditions.

» More information about algal blooms

Swan River Trust principal scientist Kerry Trayler said the Gymnodinium species currently blooming is not known to be harmful to humans or produce toxins, but the activity of algal blooms can strip oxygen from the water column and produce foul odours.

"If oxygen levels become critical this will affect fish and other animals in the river," Dr Trayler said.

"This bloom could also move downstream significantly due to tidal movements.

"We are keeping a close watch on the algal bloom and Trust officers will conduct inspections for affected fish."

The Trust encourages the community to report any sightings of slow moving or sluggish fish by calling the office on 9278 0900, or after hours on 0419 192 845.

As a long-standing precaution, the Department of Health advises people not to eat mussels, cockles, or oysters from the Swan and Canning rivers.

The Trust reports changing river conditions to the community through the weekly <u>Algae Activity</u> Report and will continue to keep the public informed.

Global recognition for young river champion

Thursday, 28 April 2011

One of Perth's young environmental champions is among the first in the state to be recognised with a new global Scouting badge.

Liam Wardle was presented the World Scout Environment Badge earlier this month for his work with Waylen Bay Sea Scouts, where he has introduced a number of projects to protect and restore the Swan Canning Riverpark.

Partnering with Keep Australia Beautiful's Adopt-a-Spot program, Liam and his fellow Sea Scouts hold monthly clean-ups along the Applecross foreshore between Heathcote and Applecross Jetty, so far collecting more than 70kg of rubbish.

He has also introduced a planting project with four planting days scheduled between May and August.

Liam, who is also a River Guardian and registered Dolphin Watcher, said he gained a lot of personal satisfaction from his work. "It's fun and a good way to get outdoors, help the river and feel good about doing something for the environment," he said.

"The river is a big part of the city. It sustains a lot of life and it supports the city and everyone that lives in Perth."

The World Scout Environment Badge aims to create an awareness of personal responsibility for the environment, encouraging Scouts to connect with nature, and take action to protect it.

Drains to River campaign kicks off

Friday, 15 April 2011

Environment Minister Bill Marmion today joined River Guardian volunteers and staff from the Town of Vincent and the Swan River Trust in a campaign to reduce stormwater pollution.

"It's a common misconception that stormwater drains connect to a sewer or treatment system," Mr Marmion said.

"But chemicals and nutrients that we use at home or work can be carried with stormwater directly to the Swan and Canning rivers, if they enter the drainage system."

The campaign, based on similar programs across Western Australia and the world, involves stencilling the reminder message 'Drains to River' on stormwater drains and the distribution of educational material.

"Stormwater pollution can lead to algal blooms, kill wildlife and stop recreational use of our waterways, and with winter approaching it's a timely reminder that only rain should go down the drain." the Minister said.

Stormwater is engineered to quickly drain away from homes and businesses to prevent flooding. Urban development increases surface water run-off because the land is covered with hard impermeable surfaces such as roads and pavement.

"Through understanding that stormwater drains lead to the river or the nearest wetland, we can decide to make small changes to help cut down on pollution run-off," Mr Marmion said.

Simple actions outlined below can help reduce stormwater pollution:

- Wash your car on the lawn rather than on driveways or roads where detergents can run into drains
- Keep your car well-serviced to prevent oil leaks
- Use biodegradable detergents that do not contain phosphates
- Make sure all rubbish gets recycled or goes into a bin
- Reduce your fertiliser use, or do not use it at all
- Do not let grass clippings, leaves or other organic matter wash into the drain
- Never allow paint or other household chemicals to enter the stormwater system
- Report individuals or businesses that you see polluting stormwater.

Childhood by the river nets win for local photographer Sunday, 10 April 2011

A striking image of children playing on the shores of the Swan River has taken out first prize in this year's Swan River Trust photography competition.

Attracting a record 296 entries, the competition asked local photographers to capture what they love about the Swan Canning Riverpark.

"I often take my children to all the parks along the Swan," said competition winner Melinda Poor, who won a \$500 Camera Electronics voucher for her photograph Raised by the Swan – a West Australian childhood.

"On a hot summer's day there is nothing better than sitting by the calm river as it laps against the soft sandy beaches. I love the sandbar at Point Walter, Keanes Point to fish or Matilda Bay for a brilliant place to show off to visitors. The Swan is Perth, Perth is the Swan. Living in this city means you can enjoy the lifestyle the majestic river provides."

Her vision obviously resonated with competition judges, with one commenting, "I like this image because it takes me back to my youth. The memories of hours spent exploring the Swan during my early years are bliss. And this image takes me there."

Second place in the competition, which was coordinated by the Trust's River Guardians program, went to Mark Gerlach for his unique underwater view of a jellyfish in the Swan River at Point Walter. The people's choice was won by Katsufumi Shibata for Nap on the River.

Protect our rivers to accumulate karma

Sunday, 10 April 2011

With Sakyamuni Buddha's birthday celebrations tomorrow, the Swan River Trust is calling for all practitioners of the faith to refrain from releasing fish into the Swan Canning Riverpark.

The tradition known as "fangsheng" often involves the release of fish or birds into the environment to demonstrate kindness and compassion for living beings that will be rewarded with good karma or merits.

Trust Principal Scientist Dr Kerry Trayler said event organisers Buddha's Light International Association of Western Australia had no plans to include a fish release as part of the celebrations, however there were concerns individuals may still release fish.

"We recognise that the practise isn't undertaken by all Buddhists, but the Swan River Trust has received several calls from practitioners enquiring about releasing fish into the Swan River."

"While the callers we have spoken to have done the right thing by contacting the Trust and agreeing not to release fish, we still need to get the message out to individuals who might not be involved with the larger associations," she said.

"It's a practice that presents several environmental and ecological issues for the rivers, especially if the released fish are not native species," she said.

"Introduced species can affect our rivers by competing with native species for habitat and food."

"They can also alter habitats by digging in riverbeds, uprooting plants and muddying the river which may increase the level of nutrients in the water and lead to excessive algae growth."

The release of native species that have been aquarium raised can also cause problems through the introduction of parasites and diseases that may affect native fish and other freshwater animal life. Aquarium raised "native fish" may also affect natural population genetics.

"We're already dealing with at least five species of exotic fish in the Swan Canning catchment," Dr Trayler said.

"Fish from aquariums and ponds should never be released into rivers, creeks, dams or stormwater drains."

"Even artificial lakes are not a safe place to release exotic fish as they connect to our waterways through drainage networks."

The Department of Fisheries encourages the community to report any feral fish sightings to their 24 hour FISHWATCH hotline 1800 815 507.

The Trust has released an <u>information brochure on feral fish</u> [FOF 741 kB], their potential impacts on our rivers and waterways and what you can do to help.

Trust officers take on enforcement role

Sunday, 27 March 2011

Swan River Trust officers have taken on an enhanced enforcement role in the Swan Canning Riverpark with the gazettal of the Trust patrol vessel as an emergency vessel and the purchase of a laser speed gun and speed display sign.

Several officers have been authorised under the WA Marine Act, boosting the Trust's ability to enforce boating rules and regulations and complementing work by Department of Transport Marine Safety Officers and Water Police.

Trust Riverpark Operations Manager Stephen King said dedicated boating education and compliance operations during summer focused on the upper Swan River, in particular sections where speed limits were recently reduced from 8kn to 5kn.

"Boat wake is a significant concern in the upper Swan River where the shoreline is highly susceptible to erosion from boat wake," Mr King said.

"Boat wake also affects other popular activities in the upper Swan, such as rowing, canoeing, and fishing. The change of the speed limit to 5kn was implemented to address the boat wake problems, as most small to medium sized vessels produce a large wake when travelling at 8kn, but produce minimal wake at 5kn."

As well as checking speeds, officers have been checking compliance with other regulations, such as the Skippers Tickets and vessel registrations.

Mr King said he was pleased with the level of responsibility among the boating community with 171 boats stopped during eight days of compliance operations, resulting in 15 infringements, 20 cautions, and 29 notices of non-compliance.

"The officers involved have received very positive feedback from most boaties and other river users, who appreciate the additional presence on the river to deal those that are not so responsible," he said.

New wetland to help clean up Canning River

Thursday, 24 March 2011

A \$1 million State Government-funded wetland designed to reduce nutrient pollution entering the Canning River was completed today at Anvil Way.

Environment Minister Bill Marmion said the project had turned a contaminated drainage basin in Welshpool, filled with heavy metals and hydrocarbons, into a living wetland.

The Swan River Trust's Anvil Way Compensation Basin Living Stream Project remediated the contaminated basin, with the aim to improve water quality and reduce nutrients and other contaminants entering the Canning River.

"The basin is part of the Mills Street Main Drain catchment that has been identified as a key contributor of nutrients and contaminants going into the Canning River," Mr Marmion said.

"The project has created a meandering low-flow path wetland with hydraulic structures that will control water flow levels and stop sediment and other nutrients entering the river."

"Contaminated sludge has been removed, treated and is currently drying in a lined storage area prior to disposal."

"The native plants we put in today will revitalise the area and grow to provide a refuge for birds and other wildlife."

"The finishing touches will be made in June, with the remainder of the project's 48,000 plants going into the banks around the site."

The Anvil Way Compensation Basin Living Stream Project is a partnership project between the Swan River Trust, City of Canning, South East Regional Centre for Urban Landcare, Public Transport Authority, Water Corporation, Department of Environment and Conservation and Department of Water.

A large part of the State Government's funding for the project was through the <u>Swan Canning Water</u> Quality Improvement Plan, which was allocated \$3.19million in December 2009.

Mosquito management in the Swan Canning Riverpark

Wednesday, 23 March 2011

The Swan River Trust is reminding people living near the Swan and Canning rivers to take precautions to prevent mosquito bites following reports of high mosquito numbers.

Unusually high tides and high humidity have created favourable conditions for mosquito breeding and survival in the Swan Canning Riverpark and catchment. The Trust has received advice from local governments that mosquito numbers have been high and difficult to manage, affecting residents in riverside suburbs.

Landowners are responsible for mosquito management on their own land, but local authorities and the Department of Health have assumed this responsibility on Crown land. Under the Swan and Canning Rivers Management Regulations 2007, local and state government agencies have the authority to undertake day to day activities, such as mosquito control, without Trust approval.

These agencies ensure pesticide use is consistent with best management practices and liaise with the Trust if necessary.

Some forms of mosquito control can have a harmful effect on the river. Fogging (adulticiding) refers to the killing of adult mosquitoes.

However the chemicals used in adulticides are not target specific, killing other insects as well as mosquitoes.

Fogging is designed to knock down adult mosquitoes flying between breeding sites and residential areas or in residential areas to kill adult mosquito populations. It is not designed to be used in or adjacent to natural wetlands because droplets of pesticide can kill aquatic life, including fish and beneficial insects.

The effect of fogging is also temporary as droplets of pesticide only remain suspended for a couple of hours. This means new populations of adult mosquitoes will quickly move into treated areas once the chemicals have dissipated.

Local government mosquito managers are aware of these limitations. For this reason, the main approach used to manage mosquitoes in Swan Canning Riverpark wetlands is target-specific larvicides. These only affect larval mosquito populations. This work is carried out in accordance with relevant regulations and controls.

More information on preventing mosquito bites is available on the <u>Department of Health website</u>.

Tips include:

- · avoid being outdoors at dawn, dusk and at night when mosquitoes are active
- ensure insect screens are installed and use mosquito nets and mosquito-proof tents
- wear insect repellent containing diethyl toluamide (DEET) or picaridin, as well as loose, lightcoloured protective clothing when outdoors
- ensure infants and children are protected against mosquito bites, with suitable clothing, bed nets or other forms of insect screening.

Diving into Clean Up Day

Monday, 28 February 2011

Staff from the Swan River Trust and Water Police rolled up their sleeves, and pulled on wetsuits, today for Business Clean Up Australia Day.

While the Trust team collected rubbish from around Point Fraser, police divers retrieved a mix of furniture and crates from around Barrack Street Jetty.

River Guardians Manager Marnie Giroud said participating in Clean Up Day was always an eyeopener.

"We collected the usual plastic water bottles and cigarette butts, but this year we found a wetsuit, a child's crocs shoe, and a mop," she said.

"But at Barrack Street there was enough furniture underwater, you'd think someone was setting up for a dinner party."

She said Clean Up Australia Day was also a great way to remind the public to take their rubbish home when out enjoying the rivers.

"And to leave the furniture on the deck."

Bull Sharks caught in Swan River

Thursday, 24 February 2011

The Swan River Trust is advising river users of the presence of Bull Sharks (Carcharhinus leucas) in the Swan River.

Three sharks ranging in size between 70cm to 1.1metres were caught in the river on Tuesday and Wednesday nights between the Maylands Yacht Club and South Perth foreshore.

Scientists from Murdoch University, undertaking an "Estuarine Health Index Validation Project" for the Trust caught the sharks in their research nets and released the animals back into the water, after the specimens had been positively identified and measured.

Murdoch University researcher Dr Steeg Hoeksema said Bull Sharks are known to occur in parts of the Swan and that river users should be aware of this when wading or swimming in the river.

"Bull Sharks can be aggressive under certain circumstances, however these individuals were small juveniles and are likely to stay away from people," he said.

"We don't know a lot about Bull Sharks in the Swan River as there hasn't been any targeted research done on them; however anecdotal evidence would indicate they stay in the deeper waters of the Swan."

The Trust is advising river users in the Maylands area to be aware and careful if children and dogs are wading in this part of the river.

Shark sightings should be reported to the Water Police on 9442 8600. The number is manned 24 hours a day, seven days a week.

Shark safety tips are available on the Department of Fisheries website.

New Year's resolution guaranteed to stick

Wednesday, 23 February 2011

While many of this year's New Year resolutions have fallen by the wayside, more is being done to improve the health of the Swan Canning Riverpark in 2011.

Similar to the annual plan to lose weight, nutrient loads entering the Riverpark from catchments need to be cut back to improve the health of the rivers.

According to the Swan River Trust Environmental Officer Alex Hams new fertiliser regulations which came into effect on 1 January this year will do just that.

"The new regulations halved the concentration of phosphorous in domestic-use fertilisers," Mr Hams said.

"Excess phosphorous feeds algae, which causes <u>algal blooms</u>. When the blooms die, the process reduces oxygen in the water which can cause foul odours and fish deaths."

"These new river-friendly fertilisers will have a significant effect on the amount of phosphorous that finds its way into the rivers from residential sources."

"It also means we are well on our way to achieving the 50 per cent phosphorous reduction targets set in the Swan Canning Water Quality Improvement Plan."

Some new fertilisers will be available now, however retailers have six months to reduce existing stock.

Mr Hams said these regulations will complement the existing nutrient reduction work being done by the Swan River Trust and its partners, through State and Australian Government investment.

"This includes a steering committee, consisting of key government and community representatives, who will keep working on the management actions outlined in the Swan Canning Water Quality Improvement Plan."

For more information about the regulations visit <u>Department of Environment and Conservation</u> website.

For more information about how to fertilise wise and help the rivers, visit FertiliseWise.

Capturing a Perth icon – competition judge dishes out advice for photographers Monday, 14 February 2011

Making the move to the other side of the camera has had many rewards for Dan Paris. Now the former television personality is encouraging other local photographers to pick up their cameras and capture the beauty of the Swan Canning Riverpark.

Dan is one of four judges set the difficult task of sifting through entries in the second River Guardians photography competition. With the theme My Riverpark - what I love about Perth's iconic rivers, the competition asks amateur photographers to share their stories and images about makes the Riverpark so special.

Dan rose to fame in the late 90s for his portrayal of Drew Kirk in popular soap Neighbours. Nine years later, he is forging a successful career as a photographer, shooting for publications such as the West Australian, Sunday Times and Scoop magazine. A passion for capturing Western Australian landscapes has also seen him immortalise several scenes around the Riverpark.

Raised in Perth before moving to Esperance at age 7, a town he again calls home along with his partner and two-year-old son, Dan has a strong connection to Perth's rivers. Fond memories of running along the river as a teen, dodging accounting lectures at university to windsurf at Applecross and rowing with Edith Cowan University makes working around the rivers a special experience and encouraged Paris to come on board to judge the competition.

"I feel like I'm capturing my childhood," he said.

"Water is our most valuable resource and this is something that has some real substance behind it. I'm very excited about being involved."

And his advice for amateur photographers hoping to make their mark on the judges?

"I like the idea of seeing something I haven't seen before," he said.

"It doesn't have to be technically the best shot, it just has to tell a very different story."

The River Guardians photography competition closes on 15 March 2011. Prizes include a \$500 Camera Electronics voucher and entries will be on display at the Autumn River Festival on Sunday 3 April.

Tropical pest takes hold in Perth wetland, threatens Swan River Sunday, 13 February 2011

A Swan River Trust report into a feral population of the South American Pearl Cichlid (*Geophagus brasiliensis*) has revealed that this tropical fish species is present in wetlands draining into the Swan River.

<u>Feral cichlids</u>, first reported in Bennet Brook in 2006, are believed to have originated from unwanted animals dumped from aquariums into the Altone Park wetlands.

The wetlands drain into the Swan River via the Lanius Drain and Bennett Brook.

The Pearl Cichlid (pronounced sick-lid) is known to be aggressively territorial and to disturb habitat with their bottom feeding behaviour. While typically considered a tropical freshwater species, studies have shown it can survive in full-strength seawater and it appears to be coping with Perth's climate.

The study, conducted by researchers at Murdoch University, determined that this species has the biological characteristics of an invasive pest and competes with native species for food, consuming a broad range of native insects and their larvae, crustaceans and plant material.

Trust Senior Environmental Officer Dr Steeg Hoeksema said that prior to the study there was little information on this feral population of cichlids, how far it had spread or what effect it was having on the river.

"We now know that the warmer and more stable conditions of the Altone Park wetlands are providing favourable conditions for the cichlid to breed and move into Bennet Brook via the Lanius Drain," Dr Hoeksema said.

"At this stage it appears that they have not moved into the Swan River but it is important to keep monitoring their distribution and to determine the most appropriate methods to prevent their potential spread into the river or to eradicate the population."

More than 2000 Cichlids were removed from Bennett Brook and the Lanius Drain during the study.

Dr Hoeksema said that feral fish posed a real threat to native fish in the Swan Canning Riverpark.

"Feral fish compete with native species for habitat and food," he said.

"Fish from aquariums and ponds should never be released into rivers, creeks, dams or stormwater drains."

"Even artificial lakes are not a safe place to release exotic fish as they connect to our waterways through drainage networks."

"Unwanted fish can be returned to most aquarium stores and local fish societies or can be humanely euthanised."

"And if you catch feral fish while fishing, don't return them to the water. Keep the fish and contact the Department of Fisheries through FISHWATCH on 1800 815 507."

Swan River Trust Riverbank Grants Scheme open Thursday, 10 February 2011

Community and conservation groups who help protect the Swan Canning Riverpark are being invited to apply for funding through the 2011 Riverbank Grants Scheme.

Environment Minister Bill Marmion said the State-funded grants would be allocated to projects focused on shoreline protection and rehabilitation works on the Swan and Canning rivers.

Mr Marmion said the scheme, run through the Swan River Trust, offered grants to a range of projects, from tree-planting projects to larger, infrastructure developments.

"This is just one of the initiatives the State Government is taking to ensure the health and vitality of the Swan Canning Riverpark for generations to come," he said.

"Foreshore protection and rehabilitation is integral to the trust's work and riverbank funding will boost the capacity of local authorities and community groups to significantly improve shoreline condition.

"Shoreline vegetation provides food and habitat for wildlife, prevents erosion and improves water quality by filtering sediments, nutrients and pollutants before they reach the water.

"Riverbank grants also fund engineering works including riverwall and bank repair.

"Successful applicants last year included the City of Gosnells for revegetation and weed control along the Canning River; the City of Swan for foreshore stabilisation and revegetation along the Swan Riverside Regional Park, and the City of South Perth for the restoration of a 400m riverwall south of Canning Bridge."

Projects are based on a cost-sharing arrangement and must be carried out on publicly- owned land in the Swan Canning Riverpark.

Applications close 5pm on Friday, April 1. For more information on how to apply and details of past projects visit http://www.swanrivertrust.wa.gov.au or call the trust on 9278 0900.

Capture the aspect you love about the rivers

Wednesday, 12 January 2011

The Swan River Trust is asking amateur photographers to capture their favourite part of Perth's rivers for entry into the River Guardians' second annual photography competition.

The competition is open to all ages and the winner will be announced at the Autumn River Festival, Riverside Gardens Bayswater on 3 April 2011.

The competition theme, My Riverpark – what I love about Perth's iconic rivers, can include photos of the Swan and Canning rivers or any activity in the surrounding Riverpark.

Thirty photographs will be chosen to be on display in the River Guardians' marquee at the Autumn River Festival. The winning entries will also appear on the Trust and River Guardians website.

The photography competition closes 15 March 2011.

Prizes include:

First: \$500 Camera Electronics voucher

Second: \$350 Camera Electronics voucher

Entries from the 2010 competition can be viewed on the Swan River Trust's Flickr page.

For competition entry forms and Terms and Conditions please contact the River Guardians team.

Upload your entries through the River Guardians website.

The Swan River Trust's River Guardians program aims to connect people with the Swan Canning Riverpark.

The program is free to join and members enjoy events, and receive training and volunteering opportunities.

Weather conditions prime for algae growth

Tuesday, 4 January 2011

The Swan River Trust is closely monitoring the levels of algae in the Swan and Canning rivers.

Trust principal scientist Jeff Cosgrove said that algae growth has been increasing in recent weeks due to hot weather.

"The level of Karlodinium micrum, a harmful algae species, has increased in the lower Canning during the last week," Dr Cosgrove said.

"High densities of Karlodinium in the Swan and Canning have previously been associated with fish kills in the river".

"We are closely monitoring this area of water and the Trust incident response team is ready to respond if needed."

Dr Cosgrove said that while conditions have been favourable for algal growth the situation could escalate this week if predicted rains are significant.

"Rains will wash nutrients into the rivers, fuelling further algal growth," he said.

"Nutrients present in the river enter the catchment through streams, drains and groundwater and may trigger blooms".

"Flushing of the rivers throughout winter and spring has not happened because of extremely low stream inflows, which means these nutrients remain and the potential for algal blooms in summer and autumn this year is higher".

"The Trust works with local governments, industry and community groups to improve water quality but it's important to remember, the health of the Swan Canning Riverpark is the responsibility of everyone in Perth," he said.

Small changes the community can make to help reduce the severity of algal blooms are:

Remove garden wastes from around your home so they don't wash into stormwater drains. Leaves and debris are another source of nutrients.

Pick up your pet's waste and put it in the bin. Animal waste is also full of nutrients.

Use phosphorus-free detergents.

Only apply fertiliser when it's needed in spring or early autumn, and never over-water.

Use slow-release fertilisers

The Trust encourages the public to report any sightings of slow moving or sluggish fish by calling the office on 9278 0900, or after hours on 0419 192 845.

The Trust reports changing river conditions to the community through the weekly <u>Algae Activity</u> <u>Report</u> and will continue to keep the public informed.