Coorong, Lower Lakes and Murray Mouth Recovery

Community update July 2014

Work being done by the Department of Environment, Water and Natural Resources (DEWNR) to secure the future of the Coorong, Lower Lakes and Murray Mouth (CLLMM) region as a healthy, productive and resilient wetland of international importance.

This newsletter is published by DEWNR to provide updates about the various projects happening across the CLLMM region.

The CLLMM Recovery Project is funded by the Australian and the South Australian governments Murray Futures program.

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Minister Hunter visit for World Fish Migration Day

Speaking at Goolwa on 24 May 2014, World Fish Migration Day, Minister for Sustainability, Environment and Conservation The Hon Ian Hunter MLC announced new funding for a fishways project.

A series of new fishways will be built at the River Murray barrages, enabling fish to move freely between the Coorong and Lower Lakes as part of their breeding and feeding cycle.

At the moment the barrages and spillways form a barrier that obstructs fish movement. New fishways will create a passage through the barrages so fish can move between the freshwater lakes and the Coorong estuary. This will provide greater access to breeding areas and different feeding grounds while facilitating the spread of threatened native species in the Coorong and Lower Lakes.

The project will help to ensure sustainability of more than 30 species of native fish and restore Murray-Darling Basin fish populations.

Minister Hunter acknowledged the work of Henry Jones, a passionate advocate for the health and sustainability of the Murray, particularly the Lower Lakes, and a fourth-generation



commercial fisherman in the region. Henry's wife Gloria, their two daughters and their families also attended.



Minister Hunter at the barrages at Goolwa with Gloria Jones

Announcement of the South East Flows Restoration Project

The \$60 million South East Flows Restoration Project has been jointly announced by the Hon Senator Simon Birmingham, and Minister for Water and the River Murray, the Hon Ian Hunter MLC.

A new \$60 million project funded by the Australian and South Australian Governments will help reduce salinity levels in the Coorong.

"The South East Flows Restoration Project will use a combination of watercourses and existing drains to re-direct freshwater into the Coorong South Lagoon from the South East drainage system," said Senator Simon Birmingham, Parliamentary Secretary for the Environment.





"The project will also enable additional water to be diverted into South East wetlands en route to the Coorong, addressing priority local environmental needs along the way," Senator Birmingham said.

"The Australian Government is providing \$54 million in funding as part of our \$123 million contribution to improving the Coorong, Lower Lakes and Murray Mouth. We are committed to working to maintain the Lakes as a healthy and resilient wetland of international importance.

"This includes supporting on-ground actions to restore lakeshore and estuarine habitats, reintroducing native fish and constructing fish passages to allow movement between the lakes and the Coorong.

"A proportion of freshwater from the South East drainage system currently diverted into the ocean, which historically flowed into the South Lagoon, will be restored to the South Lagoon.

"By diverting this water into the Coorong South Lagoon, salinity levels in the Coorong will be better managed and improve conditions for native aquatic plants and animal species.

"The existing South East drainage system already delivers on average 30 GL per year to the Coorong at Salt Creek. The project will provide an additional 26 GL per year on average, providing long-term environmental outcomes for the Coorong," said Senator Birmingham.

South Australia's Minister for Water and the River Murray Ian Hunter said the South Australian Government will provide an additional \$6 million in funding for the South East Flows Restoration Project.

"The Coorong suffered significant ecological degradation as a result of the recent drought in the Murray-Darling Basin," Minister Hunter said.

"This project will help restore the Coorong by reducing salinity levels. By reinstating the flow path, the project will also deliver additional environmental water to wetlands in the South East, and will help improve seagrass beds near Kingston that currently receive excessive freshwater from the drainage system," he said.

Baseline monitoring of the en-route wetlands and the Coorong has already been undertaken during the project investigation, and will continue during project delivery. Additional funding will also be provided for comprehensive investigations which will include hydrological modelling, engineering and ecological studies.

South East Natural Resources Management (NRM) Board Presiding Member Frank Brennan said the Project will be managed by a Steering Committee including representation from the South East NRM Board and the South Eastern Water Conservation and Drainage Board.

"It's vital that the South East community, through community Board representation, is involved to ensure the best outcomes for the community and the environment," says Mr Brennan.

The CLLMM Community Advisory Panel will also be involved in the project through the representation of Mr Gary Hera-Singh, a Coorong fisherman with a long history in the region.

The Australian Government funding for the Project includes budgets for landholder consultation, broader community and Aboriginal engagement programs, and an environmental management program to support monitoring and understanding of the South East drainage system and Coorong.



John Million

This project will also be subject to environmental approvals under national and State environment legislation.

The South East Flows Restoration Project is part of the Coorong, Lower Lakes and Murray Mouth Recovery Project.

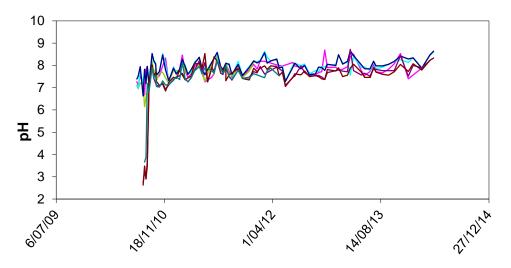
For a series of frequently asked questions please go to this link: www.senrm.sa.gov.au/Water/SouthEastFlowsRestoration.aspx

Water quality and acid sulfate soils monitoring update

The Environment Protection Authority is continuing to monitor several sites in the Coorong, Lower Lakes and Murray Mouth to assess the risk and recovery of acid sulfate soils.

In a comprehensive monitoring program, EPA staff carry out monthly and quarterly tests on surface water quality, and quarterly tests on groundwater quality. The results are examined against Australian and New Zealand Environment and Conservation Council water quality guidelines.

The team has found that low levels of acidity are persisting in the surface waters of two creeks on Hindmarsh Island (Boggy and Hunters creeks), and in sections of Currency Creek, Finniss River and Goolwa Channel. This is despite the presence of neutral pH and alkalinity. The EPA believe these trends are being driven by diffusive fluxes and groundwater movement during wetter seasons.

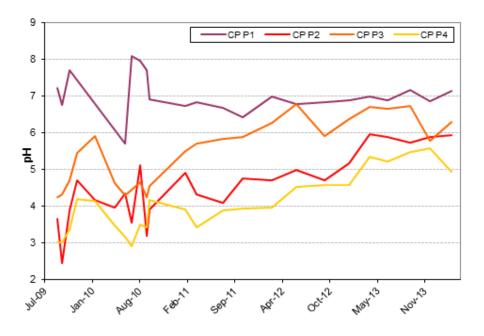


Boggy Creek, Hindmarsh Island surface water pH levels (Source EPA 2014)

Acidity levels in groundwater under previously exposed and acidified lake margins are slowly recovering although acidity remains in three other groundwater monitoring locations around the lakes.







Point Sturt groundwater pH levels (Source EPA 2014)

Spatial and temporal monitoring by CSIRO of acid sulfate soil recovery in the Lower Lakes is continuing. Sampling was undertaken in December 2013 and an analysis of past monitoring data is also under way to quantify the degree and extent of acid sulfate soil recovery and/or neutralisation around the margins of the Lower Lakes following the prolonged drought.

The information from monitoring is being used to inform water-level management and the restoration of wetland function through an adaptive management process. You can access monitoring locations and reports at <u>www.environment.sa.gov.au/managing-natural-</u>resources/river-murray/river-restoration-and-environmental-water/monitoring-river-health





Thank you to Anne Hartnett from the CLLMM Recovery Project

Since 2007, Anne Hartnett has been heavily involved in the management of the CLLMM environment. Her membership in the Lower River Murray Drought Reference Group, CLLMM Long-Term Plan Reference Group, and the CLLMM Community Advisory Panel has been marked by her dedication to social and environmental outcomes.

Anne's passion for the region and creative approach to environmental stewardship have been valuable assets to all of her endeavours to promote and influence management of the CLLMM and will be greatly missed.

Anne's interests and community involvement have been vast and varied and will continue through her many networks. Anne now intends to enjoy her time singing, dancing and learning to play the keyboard.

We wish Anne every success for her continuing vital work supporting the community.



Anne with her dog Ebony at Point Sturt



Government of South Australia Department of Environment, Water and Natural Resources



Sedge Planting Program promoted on Channel 9

By James Thiessen

It was great to have a commercial TV station interested in an environmental program. Channel 9 reporter Kim Robertson wanted to know the history of the sedge planting project and what our plans are for the future.

Kim and her team were enthusiastic and not afraid to get into the water and interact with not only DEWNR staff but landholders and community members including Anne Hartnett, Ken Strother, and the Milang and District Community Association planters Deb Melville and her team of planters.

It was a perfect day for filming; no wind, sunny and the beautiful back drop of Lake Alexandrina with the *Schoenoplectus validus* sedges in the foreground.

We met in the morning on-site at Point Sturt (on the edge of Lake Alexandrina) on Anne Hartnett's property. Anne, Ken and I were interviewed to get the different perspectives of the project. This provided a full picture of what we are trying to achieve, how we are trying to achieve it and the historical background about why we are planting sedges around the lakes' edge. After watching the planting technique used for *S. validus* we travelled to Murray Bridge to see how the plants are propagated (grown). This allowed the journalist to see the full picture and the combined effort required in undertaking a revegetation program of this scale.

You can view the clip at 9adelaide.com.au/?page_id=111#prettyPhoto[gallery]/2/.



Photo taken at Point Sturt on edge of Lake Alexandrina



Government of South Australia Department of Environment, Water and Natural Resources



Important works give Lower Lakes a boost

Sustainability, Environment and Conservation Minister the Hon Ian Hunter MLC, recently visited the Lower Lakes region to see firsthand the conservation activities being undertaken by the local community.

The tour was coordinated by the Lakes Hub, who work in partnership with local communities to help the wetland recover from the effects of the drought, and to ensure that it is more resilient in the future.

It visited the Hindmarsh Island Community Nursery and a planting site known locally as Grey's Paddock.

Minister Hunter said this year would see the millionth plant put in the ground by community groups under the Recovery Project.

"The community reaching their one millionth planting is an impressive milestone for a project that will achieve both ecological and social outcomes for the region," he said.

"It's a massive achievement. Local native plants are used to restore healthy ecosystems at important sites around the Lower Lakes and Coorong. The mix of species provides habitat and food for local wildlife, particularly birds."

The Minister's tour demonstrated the importance of community, local organisations and government working together to protect livelihoods and the environment.

"The coordination efforts of the Goolwa to Wellington Local Action Planning Association, and the support and activities of the Coorong and Tatiara Local Action Plan, the Milang and District Community Association and the Community Nursery Network have been fantastic," he said.

"More than 75,000 volunteer hours have been spent throughout this planting program, with more than 200 individuals involved during the process."

To further promote the good work that has been carried out, DEWNR has launched a new interactive web-mapping tool to improve the availability of environmental monitoring information on the Coorong, Lakes Alexandrina and Albert Ramsar site to the public.

"The mapping tool provides easy access to locations where ecological, acid sulfate soils and water quality monitoring is undertaken, providing links to reports, images and other information.

"The monitoring is undertaken to improve knowledge and understanding of the unique ecology of the site and to see how the CLLMM region is responding to flow conditions and recovering from the impacts of the recent drought."

The mapping tool can be accessed here: <u>www.environment.sa.gov.au/managing-natural-</u>resources/river-murray/river-restoration-and-environmental-water/monitoring-river-health





Meet the Seasonal Operation Crew

If you see some new faces around Meningie over the next few months, you may be looking at some of the nine Seasonal Operation Crew that have joined the Major Projects Vegetation Team again this year over the winter period.

The crew come from DEWNR's Fire Management Program and will be working in the region for the next two months to support the Vegetation Program.

A portion of the crew will be managing the planting hold stations at Noonameena Coorong National Park Office and Poltalloch Station. Hold Station crews will be responsible for coordinating, tracking and dispatching 500,000 plants to planting contractors at 18 planting sites across the region.

The rest of the crew will deliver environmental pest management activities and other restoration related projects throughout the region to boost work already being undertaken by the local community and contractors. The team will focus on projects such as environmental woody weed control in remnant vegetation and site preparation for revegetation sites which includes undertaking controlled burns to remove weeds prior to planting.



From left to right: Adam Aitken, Attila Martin, Anna Coates, Tony Thomas.

The Seasonal Operation Crew will provide a significant boost to the existing restoration activities in the region and come with a wealth of experience, knowledge and the equipment needed to effectively deliver these projects.

The crew will be staying at Meningie during the Commercial Planting Program, so say hello if you see them around. For more information please contact Kym Uppill on 0457 529 107.



