

2016 NRM Education Program

Lower Murray

What's New:

FREE
Professional
Development
for YOUR
School!

NEW
Resources to
download &
borrow!

"Local Places
to Visit" list to
inspire your
connection
with nature!



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

Contents

NRM Education Program Overview	Page 3
NRM Education Team	Page 4
Curriculum Links	Page 5-7
Young Environmental Leaders (YEL)	Page 8
River Murray Youth Council (RMYC)	Page 9
Waterwatch	Page 10
Swamp Savers	Page 11
Weekly Email Update	Page 12
Professional Development	Page 13
NRM Education Steering Committee	Page 14
Teacher Resources & More	Page 15
Resources to Borrow	Page 16-19
Supporting Your School	Page 20
Contact Details	Page 21
Registration Page	Page 22





#NextGenNRM

NRM Education Program 2016

In line with the hashtag-happy kids we work with, our theme for 2016 is **#NextGenNRM**

The children of today are the next generation of natural resource managers.

We provide the youth in our region with knowledge, skills, tools and hands-on opportunities to manage our natural resources into the future whilst at the same time developing a love and respect for their local environment and an appreciation for the importance of connecting with nature.

Follow the link below to our 2016 registration form to receive email updates or to register for our programs and events, or contact your NRM Education Coordinator (see over page for contact details). You can also register by filling in the form at the end of this document.

And don't forget to use our hashtag when promoting events or activities you are involved with!



For more information or to register please follow this link:

<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

NRM Education Team

Meet the NRM Education Team who are excited to bring you the 2016 program and look forward to working with you this year.



Back L-R: Bec Stevens, Pippa Cattanach, Jodie Sommerville, Harry Beauchamp. Front L-R Cindy Kakoschke, Angela Breeding

Team Leader NRM Education

Pippa Cattanach
Ph 8391 7515
Email pippa.cattanach@sa.gov.au

Upper Murray

Cindy Kakoschke
Ph 8580 1837
Email cindy.kakoschke@sa.gov.au

Bec Stevens
Ph 8580 1820
Email bec.stevens@sa.gov.au

Lower Murray

Harry Beauchamp
Ph 8532 9134
Email harry.beauchamp@sa.gov.au

Jodie Sommerville
Ph 8536 5624
Email jodie.sommerville2@sa.gov.au

Angela Breeding
Ph 8391 7514
Email angela.breeding@sa.gov.au



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

Curriculum Links

The NRM Education Program promotes the concept of Education for Sustainability (EFS). Education for Sustainability develops the knowledge, skills, values and world views necessary for people to act in ways that contribute to more sustainable patterns of living.

The Australian Curriculum identifies sustainability as a cross-curriculum priority, which means it is embedded in all learning areas.

The services and resources offered by the NRM Education Program enable teachers to address sustainability within their programs. All resources are linked to the Australian Curriculum. Below are a few examples of links to some subject areas but please contact your NRM Education Coordinator to find out about links in other learning areas.

Geography

Students examine the effects of human activities on environments, including how human use of resources affects ecosystems. They consider challenges to sustainability, strategies to address these and how they vary from place to place.

NRM Education programs and resources:

- Young Environmental Leaders Program and River Murray Youth Council
- Gutter Guardians
- Aboriginal culture sessions



Science

Students investigate the relationships between systems, how systems respond to change, and develop an appreciation for the interconnectedness of Earth's biosphere, geosphere, hydrosphere and atmosphere. They understand the importance of using science to predict possible effects of human and other activity and to develop management plans or alternative technologies that minimise these effects.

NRM Education programs and resources:

- Waterwatch water quality monitoring
- Education sessions such as Critters Galore, A Frog's Life and Saline Solutions
- Environmental auditing
- School food gardens



Curriculum Links

Maths

Maths provides opportunities for students to develop the proficiencies of problem solving and reasoning essential for the exploration of sustainability issues and their solutions. Mathematical understanding and skills are necessary to measure, monitor and quantify change in social, economic and ecological systems over time.

- Waterwatch water quality monitoring
- Environmental auditing
- Addressing Your Classroom's Carbon Footprint



Design and Technologies

Actively engages students in creating quality designed solutions for identified needs and opportunities across a range of technological contexts. Students consider the economic, environmental and social impacts of technological change and how the choice and use of technologies contributes to a sustainable future.

- School food gardens
- Insect Hotels
- Soil Kit



Health and Physical Education

In Health and Physical Education, students develop a deeper understanding of the relationship between the health and wellbeing of the individual and the environment. They develop this understanding through a range of activities including learning in, and about, the outdoors.

- Young Environmental Leaders Program and River Murray Youth Council
- School food gardens



Curriculum Links

History

History provides content that supports the development of students' world views, particularly in relation to judgments about past social and economic systems, and access to and use of the Earth's resources. It provides opportunities for students to develop an historical perspective on sustainability.

- River Boy teacher resource pack
- Saline Solutions
- Aboriginal culture sessions



English

English assists students to develop the skills necessary to investigate, analyse and communicate ideas and information related to sustainability, and to advocate, generate and evaluate actions for sustainable futures.

- Youth voice opportunities through the Young Environmental Leaders Program and River Murray Youth Council
- Hairy Nose Itchy Butt teacher resource pack
- River Boy teacher resource pack



Civics and Citizenship

Civics and Citizenship prepares students to be informed consumers, to act in enterprising and innovative ways and to perceive business opportunities in changing local, regional and global economic environments.

- Carbon Footprint resource
- Youth voice opportunities through the Young Environmental Leaders Program and River Murray Youth Council





NRM Education

Supporting environmental sustainability in schools.

Young Environmental Leaders Program (YEL)

The 2016 region-wide YOUNG ENVIRONMENTAL LEADERS (YEL) PROGRAM is open to Yr 5-7 students and will provide students with fantastic outcomes. Don't miss out! We want YOUR SCHOOL to be involved.

- Students will develop a connection to the natural environment and grow as leaders in NRM with skills in public speaking, leadership, peer teaching and much more.
- Four students from each school attend one forum per term.
- Teachers will receive PD recognition, training and relevant activities, lessons and resources to share at school.
- Strong and direct curriculum links - these are not add-on projects! It is learning in authentic context.
- The program is supported by DECD. Schools will develop relationships with local partnership schools and outside agencies including Local Action Planning Associations and more.



To register for this program please follow this link:

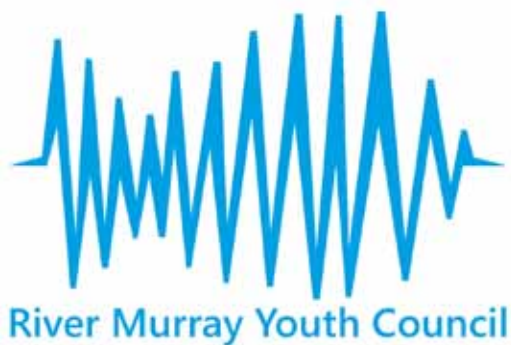
<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin



NRM Education

Supporting environmental sustainability in schools.

River Murray Youth Council

The River Murray Youth Council (RMYC) is FREE and is a fantastic opportunity for high school students (Year 8-12). Students who are interested in the environment come together to meet new people, learn new skills and have input into what should be done to protect our natural resources.

Our goal is to empower young people to make decisions about their local places and contribute to a healthier local environment.

RMYC students will:

- Take part in four full-day forums (once per term) which will involve hands-on activities, guest speakers and the opportunity to work on local projects
- Discuss ideas and concerns about the local environment.
- Plan and participate in local environmental projects.
- Create and take part in workshops, conferences and presentations.



Students will develop skills in:

- Problem solving
- Critical thinking
- Collaboration
- Public speaking
- Working as a team
- Practical skills in NRM
- Leadership
- Goal setting
- Career pathways

SACE recognition can be gained by being a member of the River Murray Youth Council program through SELF-DIRECTED COMMUNITY LEARNING.

Volunteering, leadership role in community Landcare and conservation.

If you would like more information for your students, please follow the link below.

To register for this program please follow this link:

<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

Monitor your local waterways regularly OR book a session with us to link in with your unit of work!

Waterwatch

Waterwatch is one of our longest running and most popular programs. It provides hands-on and outdoor learning for students.

Waterwatch is a water quality monitoring and catchment education program that provides you with an opportunity to make a difference to your local creek, river, dam or wetland.

Teachers and students are trained to collect and test water samples and then undertake four "Snapshots" throughout the year (once per term).

The data collected is entered into the Waterwatch database and all participants are provided with feedback about their information.

There are also many units of work across the ages where water quality monitoring and catchment education can be a useful way to increase student's knowledge of the topic. You could book in for a Waterwatch session when doing these units.



To register for this program please follow this link:

<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

**Your school can
get involved with
learning about
the unique and
endangered Fleurieu
Swamps!**

Swamp Savers

Fleurieu Swamps Education Program

An exciting opportunity exists for students from Fleurieu Peninsula schools to learn about biodiversity through the unique and endangered Fleurieu Swamps!

While financial support is only available for Fleurieu schools, all other schools in the SA Murray-Darling Basin are invited to participate in the activities.

Fleurieu Swamps Excursion Guide

The Fleurieu Swamps Excursion Guide includes a collection of activities that can be undertaken at the Mount Compass Swamp or any other natural area - a local wetland, creek, or even the school yard!

Activities include:

- Water monitoring
- Plant identification
- Setting up photopoints
- Connecting with nature
- Geocaching

Incorporates Australian Curriculum links and resources.



To register for this information session please follow this link:

<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

This year the Early Years Connecting With Nature Forum will be merged into the weekly email!

Weekly Email Update

Receive weekly email updates from your NRM Education Coordinator highlighting resources, grants and opportunities for your school.

Once a week, members will receive an email from NRM Education with information about grants & awards, resources (web, apps & more), special projects, good news & inspiration, events and opportunities.

We search for and stumble across so many good things...then filter out the junk and send you the best info!

To avoid doubling-up on information, our Early Years Connecting With Nature Forum fortnightly email will now be an Early Years snippet or feature of suitable activities in each weekly email.



To register for this please follow this link:

<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

PD will be different this year! WE WILL COME TO YOUR SCHOOL! Get in early as there will be limited bookings across the year.

Professional Development

The NRM Education Program offers FREE Professional Development sessions to all educators.

In 2016 NRM Education will come to your school site and run FREE professional development sessions chosen by you! You choose what you want to learn about!

Topics include:

- Embedding Sustainability Across All Curriculum Areas
- Waste And Recycling
- Environmental Auditing And Action
- Citizen Science
- Connecting With Nature
- Food And Farm Production (Including International Year Of Pulses)
- Environmental Art
- Developing A School Environmental Management Plan
- Get The Dirt On Soils
- Bush Tucker And Indigenous Plant Use
- School Food Gardens
- Local Places To Visit

Our aim is to target MORE educators and MORE schools in a MORE efficient way.

The sessions aim to provide:

- Concise and current information on environmental or sustainability topics.
- Opportunity for whole-school planning.
- Hands-on activities and take-home resources.
- PD certificates for attendees.
- Examples of projects from schools in your local area, and much more.

For further information or to register interest, click on the link below or contact Harry Beauchamp:

harry.beauchamp@sa.gov.au

Please note we need a minimum of 5 participants to run a session. Smaller schools can be negotiated



To register interest in having a professional development session at your school please follow this link:

<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

Be part of the group
who come together
to share ideas and
help improve the
NRM Education
Program!

NRM Education Steering Committee

The NRM Education Steering Committee includes teachers, NRM Education staff, Department for Education and Child Development (DECD) representatives and NRM professionals.

The purpose of the NRM Education Steering Committee is:

- To provide direction, advice and recommendations for the direction and delivery of the NRM Education Program, in particular teacher professional development workshops and educational materials.
- To provide guidance and support to the NRM Education Team.
- To be a sounding board on project issues, dilemmas, innovative ideas and opportunities.
- To provide an opportunity for networking and sharing ideas between educators and service providers.



To register interest in the steering committee please follow this link:
<https://nrmeducation.wufoo.eu/forms/2016-lower-murray-teacher-registration/>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin



We now have
a separate
EDUCATION tab on
our website with
loads of resources
and information
for you!

NRM Education Teacher Resources & More

The Natural Resources SA Murray-Darling Basin website now includes a separate “Education” section. This is where you can download a whole heap of amazing and simple resources.

We are always adding new resources and helpful snippets to our site so please take the time to check out the four sections regularly:

- **For Kids:** Information about what we offer and what is available to students.
- **School Programs:** Find out what programs are available to your school, download our info packs and register for newsletters etc.
- **Work Experience and Career Pathways:** Students can find out about volunteering opportunities, work experience and how to get to the NRM career they are dreaming of!

- **Teacher Resources:** We have so many resources to help you, it's impossible to list them all - but the website has them all organised into these handy topics:

Water
School Sustainability Planner
Plants And Animals
Food Gardens
Australian Curriculum Links
Soils
Colouring Sheets
Waste And Recycling
Energy And Climate Change
Online Sharing And Learning

Check out our new NRM Education section on our website:

<http://www.naturalresources.sa.gov.au/samurraydarlingbasin/education>



Government of
South Australia



Natural Resources
SA Murray-Darling Basin

Resources to Borrow

The following items are available for you to borrow. If you would like to access any of these please contact your NRM Education Coordinator. You will need to arrange pick-up and drop-off unless otherwise arranged with them.



Fantastic Fabric Fish and Frogs

This wonderful set of life-size and life-like fabric fish are available to borrow for up to a week at a time. The set includes: Murray cod, golden perch, carp, silver perch, catfish and 3 x purple spotted gudgeon. We will also send you our life-size and super-sized southern bell frogs!

Perfect to hang in the classroom if you are learning about the river or fish!



Frog and Butterfly Life Cycle Models

A set of frog and butterfly life cycle plastic models as well as a large magnetic frog life cycle set. Available for a week at a time.



Perspex Cages

Traditionally used for our Weed Warriors program - we have several of these large perspex box/cages available to borrow. They include mesh window seals to allow airflow - suitable for things like stick insects, silk worms or other classroom critters. Available for a term or the year!



Resources to Borrow

Nude Food Sample Kit and Resources

This new kit contains many great alternatives to plastic bags and wrap (snack boxes, sandwich wraps etc). Use the kit for teacher or parent workshops or to show students how to reduce packaging in their lunch.

Kit includes many resources and facts/figures about Nude Food and waste. Available for a week at a time.



Home Energy Toolkit

If you have downloaded our Energy Auditing resources, this kit would be the perfect addition to your school or class auditing unit.

The Home Energy Toolkit contains items and information to help you find out what is using energy and how you can start saving. These kits can also be borrowed from local libraries.



GPS Units - Garmen eTrex 10

We have 10 Garmen eTrex10 GPS units available (5 x Upper Murray and 5 x Lower Murray).

Available for a week at a time these units are simple to use and suitable for geocaching or marking/locating sites.



Water Testing Kits

These kits contain all the equipment needed for simple water quality testing including turbidity, pH, salinity, nitrate and phosphate.

Kits also include bug viewers, macro ID sheets and data recording sheets. All instructions included. Kits available for a week at a time.



Resources to Borrow

Soil Testing Kits

These simple CSIRO soil testing kits are available for a week at a time (5 x Upper Murray and 5 x Lower Murray).

Suitable for simple soil analysis.



Soil Resource Kit

New to the collection - the Soil Kit contains equipment, resources and ideas to assist you in creating some amazing soil lessons and experiences for your students.

Students can bring soil samples from home or collect from the school yard and carry out many different tests and experiments whilst learning about the importance of soil.



NRM Education Library

We have a growing library of books and DVDs on a range of NRM topics including:

- Nature play
- Food gardens
- Arts and crafts
- Water, waste, biodiversity, sustainability and weeds

If we don't have a book you would like, let us know and we might be able to add it to our collection.



5 Senses Connecting with Nature Display

This collection of natural materials is perfect for environmental expos, libraries, school open days, or engaging younger students with nature. The collection contains items to appeal to all the senses including touch (possum skins, pine cones, shells), smell (native plants, soil), sound (listen to bird calls), look (magnifying glass with light, macroinvertebrates etc) as well as ideas for tasting nature.



Resources to Borrow

What Grain/Seed Is That?

Exploring seeds and grains is easy with this simple kit containing:

- A3 laminated picture-posters featuring 11 different kinds of grains & seeds, what the crops look like and what they are made into.
- Sample bags of each kind of grain and seed to touch and feel!

Set the posters up in your classroom with the seeds in the bags below for the students to explore and examine up close.



Frog Monitoring Kit

The kit contains a recorder and microphone for recording frogs in your area. The data can then be downloaded to assist with ongoing monitoring of frog populations.



Supporting Your School

Our team can also provide the following support/assistance to your school:

One on One Support

- Assist with providing contacts and technical advice about local on-ground projects that students can be involved with.
- Attend staff or Governing Council meetings
- Working with student environmental groups
- Assist with developing nature play areas
- Connect students with nature
- Develop sustainable food gardens
- Develop bush tucker gardens

Work experience

- Natural Resources SA Murray-Darling Basin provides work experience placements to students who are considering careers in Natural Resources Management.

Assistance to Students With Research Projects

- Provide links to contacts and information on environmental topics.
- Provide links to community groups/members with knowledge and examples of on-ground projects.
- Assist with topic selection based on local environmental issues.

Facilitate Class Field Trips

- Assist teachers with identifying suitable locations for class field trips.
- Provide information and initiate contact with environmental professionals who can assist with topic specific field trips.

On-ground Projects

- Assist with providing contacts and technical advice about local on-ground projects that students can be involved with.

Guest Speakers

- Assist with identifying and contacting suitable guest speakers (for in-class or on-site presentations) on environmental topics (e.g. wetland monitoring/health, pest plant and animal control, sustainable farming).

SRC & School Environment Groups

- Assist/provide support to SRC in developing environmental projects for the school.
- Assist/provide information on how to develop a school environment group.

VET Program Support

- Assist/support students who are completing VET programs on environmental topics (e.g. conservation land management).

Information

eNews

Quarterly e-newsletter outlining NRM Education achievements and upcoming events.

Weekly Email Update

Weekly updates on new resources, events, opportunities for funding and much more.



Contact Details

Upper Murray

Bec Stevens

NRM Education Coordinator

Natural Resources Centre

**2 Wade Street, Berri
SA 5343**

Ph 08 8580 1820

Fax 08 8582 4488

Email bec.stevens@sa.gov.au

Lower Murray

Harry Beauchamp

NRM Education Coordinator

Natural Resources Centre

**110A Mannum Road, Murray
Bridge SA 5253**

Ph 08 8532 9134

Fax 08 8531 1843

Email harry.beauchamp@sa.gov.au

www.naturalresources.sa.gov.au/samurraydarlingbasin/home

The NRM Education Program is funded by the NRM levy, enabling landholders and the community to play an active role in our region's future.



**Government of
South Australia**



**Natural Resources
SA Murray-Darling Basin**

2016 NRM Education Registration

Please fax to Harry: 8531 1843

School:

Your Name:

Ph:

Email address:

Please add me to (please only tick if you are NOT already receiving our updates):

☐ Weekly Email Update/Quarterly eNews

I would like to register for the following 2016 NRM Education programs and services (once registered, your NRM Education Coordinator will send you more information):

☐ Young Environmental Leaders Program (for students in year 5-7)

☐ Waterwatch

☐ NRM Education Steering Committee

☐ Support with School Sustainability Planner

☐ Information about Work Experience opportunities for high school students

☐ Information about the River Murray Youth Council program

I would like to register for a Teacher PD Session to be run at my school. (please note we need a minimum of 5 participants to run a session - small schools can be negotiated). Please provide detail/select topic(s):

☐ Embedding Sustainability Across All Curriculum Areas

☐ Waste And Recycling

☐ Environmental Auditing And Taking Action

☐ Citizen Science

☐ Connecting With Nature

☐ Food & Farm Production (Including International Year Of Pulses)

☐ Environmental Art

☐ Developing A School Environmental Management Plan (SEMP)

☐ Get The Dirt On Soils

☐ Bush Tucker and Indigenous Plant Use

☐ School Food Gardens

☐ Local Places to Visit

☐ Other:

☐ Unsure - would just like to register for now

Preferred Dates for PD Session (please provide at least three):

Preferred Time & Length of PD Session:



Government of
South Australia



Natural Resources
SA Murray-Darling Basin