



Water for What, Where and How?

Our favourite spots along the river have changed over the years, and unfortunately it has mostly been for the worst. Have you seen more stressed or dying trees, but less waterbirds? When was the last time you heard frogs there or caught a fish? Together we can do practical things to help improve the health of our River Murray.

This factsheet forms part of the [My Healthy River Toolkit](#) which provides information to interested wetland owners, community people, and organisations about what environmental watering is and how you can help to improve the health of our river. The Toolkit is an initiative of [Nature Foundation SA's Water For Nature program](#).

Commonwealth environmental water is recovered by the Australian Government under the [Basin Plan](#). Water For Nature supports community-driven watering projects along the South Australian River Murray at wetland and floodplain sites that are not receiving water from other sources.

We are a non-government organisation and have worked with the Commonwealth Environmental Water Office, the South Australian Government, irrigators, local councils, community groups, and landholders, to deliver 6.22 gigalitres (that's 6.22 billion litres!) to 80 sites in the SA River Murray valley... **but there are many more sites that need water.**



Photo: Anne Jensen



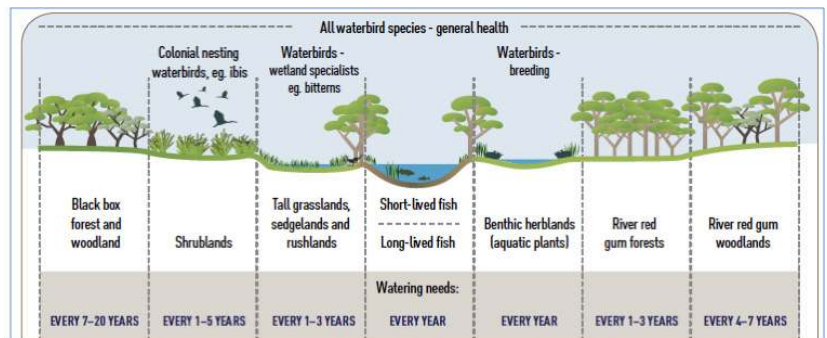
Photo: Natalie Stalenberg

Environmental water refers to
 “water used to improve the health of our rivers, floodplains and wetlands”

Why do we need environmental watering?

Regulation of the River (see [Factsheet #1](#)) has altered the natural functioning of this system. The Murray-Darling Basin Plan contains a series of environmental targets which helps the Water For Nature program choose which sites need water. The CSIRO has developed the image (opposite) which summarises all the habitats, animals and plants along the river that need environmental water and how often they need it. The Water For Nature program takes these things into account, along with the priorities of the Commonwealth Environmental Water Holder, as well as local issues, when it makes its plans each year.

For more information on how environmental water is allocated and who manages it – check out The Murray-Darling Basin Authority's [publication, Managing Water in the Murray-Darling Basin: Who Does What?](#), which is available as a hard copy or downloadable booklet.



The watering needs of different river habitats, animals and plants.

Do you know a site that needs a “watering” hand?

Water For Nature can help you or your group with environmental watering projects by:

- identifying what needs watering and when (including trees, waterbirds, frogs, turtles and fish);
- government approvals to deliver environmental water;
- accessing an environmental water allocation;
- lending you pumps and equipment; and
- advice on how to tell if it's working.





Photo: Matt Turner

How do you know if a site needs water?



You may be able to choose a potential site that needs a drink by looking at these indicators:

- native trees such as black box or river red gum that are losing canopy (leaves at the top);
- lignum shrubs that appear to be dead;
- red gum or black box seedlings and saplings that appear weak, have few leaves or have failed to grow much over the years;
- creeks or depressions on floodplains that used to hold water, but have been dry for many years;
- places that used to attract waterbirds, and frogs or where you used to be able to catch native fish but cannot now; and/or
- places that used to be connected (even if only seasonally or temporarily) but have been disconnected for a long time i.e. wetlands, flood-runners, inlets, and/or creeks.

For more information check out the [My Healthy River Toolkit Factsheet #3](#), [Factsheet #5](#), and [Factsheet #6](#).

How do you do the watering?

The physical delivery of environmental water to sites can be achieved in a number of ways.

For example:

- [Water For Nature](#) may use irrigation sprinklers on a floodplain during spring and early summer to mimic the intensity and frequency of natural rainfall events, particularly where young seedlings and saplings occur;
- Irrigation pumps may pump water from the river to flood wetland sites where the natural flow from the river into the wetland has been cut-off; or
- We have had success with volunteer landholders using small pumps to run hoses directly from an irrigation channel to a group of trees.

Nature Foundation SA can loan equipment for delivering water and provide assistance and advice on how much and how often to water to get results.

Feel free to check out Nature Foundation SA's [Five Year Watering Strategy](#) and [Annual Watering Plan](#) – or just ask Nature Foundation for some help to work it out!



Photo: Natalie Stalenberg



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Photo: Natalie Stalenberg



Photo: Matt Turner

Do I need permission to use environmental water?

Yes.



The Commonwealth Environmental Water Holder holds environmental water recovered under the Basin Plan. It has agreements with State governments, irrigation trusts, and non-government organisations to enable delivery of environmental water to improve the health of the river. Nature Foundation SA is one of these delivery partners. We can work with you to get water to SA wetlands and floodplains.



Photo: Anne Jensen

Selecting a watering site – the Water For Nature checklist

| STEPS | TIPS | CHECK |
|--|---|-------|
| 1. Choose a potential watering site | <p>Identify a local wetland that looks like it needs a drink. See some tips above and check out our other factsheets and tutorials in the My Healthy River Toolkit.</p> <p>It's a good idea to draw a map of the site and take some photos. This will be useful for getting permission to water it.</p> | |
| 2. Get permission from the landholder | <p>Do you own the land? If not, you'll need permission from the landholder whether that is your neighbour, the local council or the State government. Don't be put off if it is not your land, many people are open to the idea and government agencies or Nature Foundation SA may be able to help.</p> | |
| 3. Investigate the site | <p>Once you have permission from the landholder, think about these questions:</p> <ul style="list-style-type: none"> • What is the most important thing that needs watering? e.g. filling the wetland • How large of an area needs water? e.g. 2 hectares • Are there signs of salinity issues? • When was the last time the site received water, either naturally or with environmental watering? • What is the river expected to do this year? e.g. flood or not flood • Where will you put a pump? • What sort of pump will you need? • Does the landholder have any preferences for when the project will take place? | |
| 4. Let's talk | <p>Talking to and listening to the ideas and concerns of neighbours or the community is important, particularly if the project is on public land. They may be interested in:</p> <ul style="list-style-type: none"> • What you are trying to do; • How it will impact them (e.g. noise or access to the site); and • How long the project will take. <p>So get chatting - you never know, you may also find some new volunteers to help you!</p> | |



Photo: Matt Turner

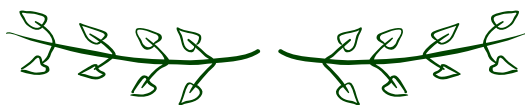
| STEPS | TIPS | CHECK |
|--|---|-------|
| <p>5. Get permission to use water</p> | <p>Before you start, you not only need permission from the landholder, but also from the Commonwealth Environmental Water Office (CEWO) and the Department for Environment and Water (DEW).</p> <p>Contact Nature Foundation SA for:</p> <ul style="list-style-type: none"> • an allocation of environmental water; • a Site and Work Use approval; • Crown Lands approval (depending on whose land it is); and • possibly a Water Affecting Activity Permit (depending on how you are delivering the water). | |
| <p>6. Get watering!</p> | <p>You can only start watering once you have all the approvals in place.</p> <p>This step can involve:</p> <ul style="list-style-type: none"> • getting a group of volunteers to help you set up and run the project; • setting up the pump, pipes and water meter; • making a note of when you started watering; and • keeping track of how much water you use and reporting on meter readings throughout the project. <p>Depending on how big the site is and what sort of equipment you have, this step could take a few days or a few months.</p> | |



Photo: Anne Jensen



| STEPS | TIPS | CHECK |
|--------------------------------------|--|-------|
| <p>7. Record what happens</p> | <p>Whenever environmental water is used, it is important to report on how much is used and what the results are for nature. This could include:</p> <ul style="list-style-type: none"> • setting up photo points to record the impact that the water has over time (e.g. changes in tree health); • using wooden stakes to record the movement of water over time to work out how long it takes to, for example, fill a wetland; and • recording the numbers and types of different animals and plants that you observe and sharing this information with Nature Foundation SA and others. | |
| <p>8. Job done!</p> | <p>You've finished your first watering project – congratulations!</p> <p>This is a good time to reflect on what worked and what didn't. For example:</p> <ul style="list-style-type: none"> • did the wetland need as much water as you thought, or did it need more or less? • did you have the right pump for the job? • how much work was it – will you need more volunteers next time? and • did you get the results you wanted (e.g. more waterbirds, frogs, or healthier trees)? <p>We would love to hear how you went and see lots of photos, so make sure you let us know what happened.</p> <p>Finally, it's time to celebrate your achievement. You could think about telling the local newspaper or having a BBQ with your neighbours. Let them know that environmental watering is working – it's great to share this when you see it for yourself.</p> | |

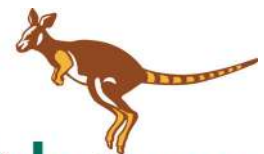


Further information

Anyone can help to deliver environmental water and improve nature along the River Murray...every drop counts! Are you concerned about the health of the River? Or do you want to register your interest in lending a "watering" hand?

CONTACT: Nature Foundation SA on 8340 2880, or email Natalie at natalie.stalenberg@nfsa.org.au

VISIT: the [My Healthy River Toolkit Facebook page](#) for all factsheets and tutorials.



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Founded 1981 Nature Foundation SA
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