### MURRAY DARLING HEALTHY RIVERS PROGRAM

### COMMENTS

For over fifty years my family has owned land on both banks on the Murrumbidgee River above Burrinjuck Dam in New South Wales. We have watched conditions change through droughts and floods, massive sediment runoffs, algal blooms, the invasion of European carp and more.

I am concerned that the proposed small and large grant series, while desirable and community focused, is likely to result in more piecemeal action and cannot include the ongoing, catchment-wide programs that we need to make our rivers healthier.

### WATER QUANTITY

I am concerned that the increasing effects of climate change are going to cause more evaporation and lower flows. We are working locally to slow (but not completely interrupt) water flows and maintain local water tables in good condition to feed our creeks and river during dry periods.

In addition to direct use of river water, all local development applications should be considered for their effect on water use, including the widespread use of bores depleting water tables, destroying springs and small creeks.

I am horrified at the concept of 100 percent floodplain water harvesting and the total capture of small flows in other parts of the Murray-Darling Basin.

If there is no water, there is no river.

#### WATER QUALITY

As a part of the upper catchment of the Murray Darling, the water quality in our section of the Murrumbidgee should be "Good", but our testing shows that it rarely is so.

We test with Waterwatch as volunteers. Our local program is bare-bones, but at least exists. The organisation as a whole has been grossly underfunded for several years and such programs should be given regular, guaranteed funding for at least a decade at a time, in order to provide clear records of catchment health at the widest possible range of sites.

In particular, our water is high in nitrates, which enters the Murrumbidgee from Australian Capital Territory sewage processing facilities. The high levels from Belconnen are based on a theory that nitrates reduce the amount of algae growth. This is true, but the cost in other aspects of water health, including safety for drinking by animals (and humans) downstream, is ignored.

Since the recent drought and bushfires, water quality has deteriorated further due to sediment and ash runoff. Testing this year showed a plunge in the number of small larvae and shrimps that are the basis for many other species survival in the river.

#### **RIPARIAN CONDITIONS**

Vegetation on river banks, small streams and erosion gullies is essential for improving the filtering of water from sediment and other contaminants including diseases.

There is a massive amount of work to be done to counteract the historical and ongoing stripping of ground cover. Potentially this can be done with stock fencing and troughs, but options should also include improved methods of stock and crop management such as regenerative agriculture which maintains upland ground cover.

Rivers are massive conveyor belts for weed dispersal. Each flood brings a new crop of willows, blackberry, African lovegrass and many others. The work involved in controlling weeds is endless, and worse when upstream areas are poorly managed.

Native riparian species in our area are also under threat from climate change, so that our local Yass Area Landcare network is trialling "Climate ready" seed nurseries to help keep up with the altering environment. It's an excellent program that needs to be copied elsewhere.

# NATIVE SPECIES

The river contains many iconic Australian species, including Murray Cod, platypus, rakali, turtles and myriads of mayflys. A much larger, regular and widespread monitoring program would ensure that there are no surprise extinctions. That information needs to be made public locally and nationally, so that we are all aware of the amazing creatures we live among, and what we are in danger of losing.

Invasive species have spread throughout the river system. Carp, trout and gambusia are particularly egregious culprits in destroying native fish and their habitats. Controlling them should be a priority. A doubling of the number of State Fisheries Officers could help make this happen.

There is the potential for inland fisheries and aquaculture, if the rivers were healthier, and if support were given to fledgling local businesses. Promotion and introduction of European trout fingerlings should be ended in favour of native fish, including eels, trout cod, golden perch and others.

# RESEARCH

We don't know what we don't know. Basic and ongoing freshwater research should be a priority.

That knowledge should be conveyed back to local farmers and residents so that they can take informed action.

# CONCLUSION

1/ This grant program, while welcome, is not enough to make our rivers healthier.

2/ The local community input aspect is beneficial, but the danger is that action will be piecemeal.

# 3/ Catchment wide programs should also be supported including

 Waterwatch and other water quality monitoring programs should be consistently and properly funded

- Freshwater research through universities, CSIRO, state and federal bodies should be given increased support
- Effects of local development on water use should be studied and controlled by local governments, with additional support to do so.
- Monitoring of bore water take should start immediately, in addition to more effective control of water take throughout the Basin.
- Encouragement of the development of native fisheries and ending of European trout introduction to any of the rivers in the Murray Darling Basin
- Knowledge, both local and national, about our rich range of native species should be promoted with public education in rural communities and in our cities.

Thank you for your consideration of these issues.

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