National Irrigators' Council

Media Release

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Northern Basin Review Recommendations – Enough is Enough

Today's release of the Murray Darling Basin Authority (MDBA) recommendations from the Northern Basin Review makes it clear that the promised 'triple bottom line' outcomes under the Murray Darling Basin Plan cannot be realised with the 'just add water' methodology currently in place.

The National Irrigators' Council CEO, Tom Chesson said the MDBA's own research reveals the devastating impact on Northern Basin communities from water recovered to date. The research, completed as part of the Northern Basin Review, shows agriculture job losses as high as 35% in some Northern Basin communities. With further water to be recovered in communities, further job losses and broader impacts are expected. The research is damning and the outcome is unacceptable.

"We have a very simple message for our Nation's Parliament, enough is enough; economically harmful water acquisition must cease across the Northern Basin and innovative and pragmatic solutions must be adopted."

"The social and economic damage occurring in communities like St George, Dirranbandi, Moree, Wee Waa, Collarenebri and Warren is clear."

"Continuation of the current approach, with the knowledge of the damage that will occur as a result would be an irresponsible and reckless policy approach."

"For our communities, the Basin Plan isn't a model. For them it is real and it is having a very real world impact."

"It is now time for the MDBA and the Parliament to apply the Western Sydney/Adelaide key seats test to the Murray Darling Basin Plan."

Mr Chesson said if a Government policy was to result in the loss of up to 17% of the EFT jobs in Western Sydney or Adelaide it simply wouldn't go ahead.

"We welcome the fact that the sole focus is moving away from simply acquiring more water for questionable environmental benefits, and towards achieving better ecological outcomes through a range of complimentary measures. This will deliver the basin plan objectives and outcomes for ecosystem assets with the least collateral damage to regional communities," Mr Chesson said

There must be a genuine focus on examining a suite of non-flow measures, including:

a) carp control through the release of the Carp Herpes virus
b) appropriate management of cold water pollution
c) improvement of fish migration through fish-ways
d) restoration of native fish habitat
e) feral animal and weed control in wetlands and riparian areas
f) increased ability for CEWH to trade water to achieve environmental outcomes

"To this end, we welcome the Deputy Prime Minister's announcement that he'll establish a taskforce in the Department of Agriculture and Water Resources to ensure further water recovery in the Northern Basin managed in a way that avoids putting further strain on Basin communities already doing it tough.

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Background Information on Complimentary Measures

a) Carp control through the release of the Carp Herpes virus

Carp make up around 80% of the fish biomass in the Murray Darling Basin, and cost up to $500 million annually. Studies have demonstrated that Carp impact on water quality, plankton levels, algal bloom incidence, native fish, macrophytes and water birds

Research has shown that a carp specific virus known as Cyprinid herpesvirus 3 is highly effective on carp present in Australia. International case studies indicate the virus will kill 70-100% of carp in a naïve population within a very short time. The virus also has been shown to only affect Common carp and Koi carp (same species), thought will not cause disease in other fish species, birds, reptiles, amphibians, mammals or crustacea.

Environmental flows deliver benefits to some desirable ecosystem components, but are well known to increase carp breeding efficacy if delivered onto floodplain habitat during warmer months.

The Australian Government's announcement of a $15 million investment to undertake the necessary work with a plan to release a carp-specific herpes virus into waterways.

In order to ensure that carp numbers do not rebuild after release it will be necessary to employ additional measures to supress carp and promote recovery of native fish communities. Carp impact significantly on aquatic ecosystems, but are not the only factor contributing to the decline of native species. Additional threats include:

- Degradation of habitat and water quality;
- Historical overfishing;
- Thermal pollution; and,
- Barriers to migration

Significant social and economic benefit derived from improved inland fish resources are likely to occur as a result of this single measure.

To ensure the legacy of outcomes delivered through the carp biocontrol program, and environmental flow delivery it is recommended that a program of complimentary measures be employed to promote recovery of native fish recovery, including:

- Re-establish populations of locally extinct native fish species through re-stocking following carp removal
- Mitigation of cold water pollution at four priority dams
- Restoration of native fish habitat along river reaches within priority river valleys throughout the MD Basin
- Re-connect fish migration along the full length of the Barwon Darling River system in the northern MD Basin.

b) appropriate management of cold water pollution

The importance of water temperature for breeding, feeding, growth and larval survival in native fish species has been well understood now for over a decade, as is the impact of cold water pollution on aquatic organisms and river health in the Murray Darling Basin. A recent study noted that mortality levels in Murray cod eggs can reach 100% at 13 degrees Celsius, and that low water temperatures can dramatically reduce growth rates in species including Freshwater catfish and Murray cod, and can cause up to 30% mortality in Silver perch. All of these species are listed under either national or state environmental legislation. Over 2700km of riverine environment is now understood to be affected by thermal pollution in the Murray-Darling Basin.

Fortunately, off-the-shelf solutions such as installation of a thermal curtain as done in Lake Burrendong, have been shown to rapidly correct thermal pollution and are cost effective.

c) improvement of fish migration through fishways along the Barwon-Darling

Many native fish species are now known to migrate during various life stages, and barriers to migration are now listed as a key threatening process in state and Commonwealth threatened species legislation.

Reinstatement of fish passage at 13 barriers in the main stem Darling, Barwon, Paroo and Warrego Rivers would reinstate continuous access to over 5180 km. This outcome would exceed the Sea to Hume program, which is lauded as one of the largest ecological rehabilitation projects undertaken in Australia.

d) **restoration of native fish habitat**

Healthy habitat is vital to the health of native fish communities. Numerous studies throughout Australia have demonstrated the value of restoring fish habitat for native fish communities. In the Condamine River, habitat improvement along the Dewfish Demonstration Reach resulted in significant increases in Golden perch (5 x increase), Murray cod (from absent to captured every survey), Spangled perch, Bony bream (11 x increase), Carp gudgeon (1200 x increase), and Murray-Darling Rainbowfish (60 x increase).

Re-snagging in the lower Murray resulted in a threefold increase in Murray cod, and was estimated to significantly increase overall population size

e) **feral animal control in wetlands such as the Narran Lakes, Gwydir Wetlands and Macquarie Marshes.**

Feral pigs are one of Australia's most successful and widespread invasive species. Their success is largely due to their omnivorous diet, comprising mostly green grasses and herbs. They also eat a variety of native vertebrate species including reptiles, amphibians, birds and mammals.

Feral pigs have occurred in the Macquarie Marshes since 1896. Important wildlife species that may be susceptible to predation by feral pigs also occur in the marshes, including snipe, stork and ibis.
Studies undertaken on the stomach content of feral pigs in the Macquarie Marshes show that feral pig diet includes grasses, roots, ferns, fruits, crops, frogs, lizards, snakes, turtles, birds, mammals, invertebrates and carrion. Five different vertebrate species were found including eastern bearded dragon, barking mash frog, green tree frog, spotted marsh frog and De Vis banded snake.

In recent years' pig populations in the Gwydir and Macquarie Marshes have exploded. Partly due to the delivery of environmental water to wetland areas during dry-sequences, which is believed to be providing beneficial opportunity for feral animals to survive during drought.

f) **Weeds**

Weeds are well known as a significant threat to Australia's natural environment and primary production industries. They displace native species, contribute significantly to land degradation, and reduce farm productivity. Aquatic weeds continue to spread through flooding, moving the plants to other waterways. Many aquatic weeds have been introduced or have colonised new waterways.

Invasive species, including weeds, animal pests and diseases, represent the biggest threat to biodiversity after habitat loss. Weed invasions change the natural diversity and balance of ecological communities, threatening the survival of many plants and animals as the weeds compete with native plants for space, nutrients and sunlight.

Simply adding water is not the solution to the complex environmental issues facing the Murray Darling Basin and with limited resources available focus must shift from the simplistic approach of removing water from productive use which is not delivering the environmental outcomes sort but is turning once thriving communities into ghost towns to adopting complementary measures which deliver real outcomes. If the complementary measures advocated by the National Irrigators' Council and our Members are not adopted then many of the environmental outcomes being sort will never eventuate.