Recreational fishing is an important part of Australian culture and provides significant social, cultural, wellbeing and economic benefits. It is vital that continuing research, development and extension is undertaken to support the estimated 740,000 people in Western Australia that go fishing every year.

The key research priority areas contained in this document are reflective of Recfishwest’s vision and strongly correlate with Recfishwest’s strategic plan. This document should help researchers to develop new projects, fisheries managers to guide planning and research funding bodies such as the FRDC can use this information to assist in future planning of national research priorities.

In addition this document provides fishing clubs / associations, industry, NGO’s, individual fishers and the general public to be informed of the recreational fishing community’s research priorities.

Recfishwest encourages and supports research projects which undertake a collaborative approach and include components which directly engage recreational fishers. Any organisations seeking research support from Recfishwest should consider the key research priorities areas outlined in this document.

**Key Research Priorities:**

- Stocking and stock enhancement of recreationally important species;
- Habitat protection and/or enhancement;
- Improving recreational fishing safety;
- People development/capacity building / succession planning;
- Management, Access, Data Collection and Governance of Recreational fishing;
- Biology and Ecology of important recreational species;
- Extension, Communications and Promotion of recreational fishing;
Stocking and Stock Enhancement of Recreationally Important Species

The practice of releasing hatchery reared fish into existing populations to augment fishing (stock enhancement) or restore depleted spawning biomass (restocking) has occurred around the world for decades. The underlying concept is to produce and release fish to increase their abundance, catch rates, fishery yields, control feral populations and/or increase fishing opportunities.

With a growing population, changing environmental conditions and continued competition for a limited resource Recfishwest strongly believe responsible stocking and stock enhancement provide a valuable fisheries management tool.

RD&E Priorities

- Future and emerging environmental and social needs or requirements;
- Future proofing key species such as WA’s iconic Marron fishery;
- Monitoring and evaluation of trout stocking strategies;
- Restocking and enhancement program for key recreational fishing species;
- Investigate the creation of an impoundment barramundi fishery on Lake Argyle and potential carbon sequestration opportunities.

Habitat Protection and/or Enhancement

Healthy and productive aquatic habitats underpin healthy fish stocks for which recreational fishing depends. The effective protection, restoration and enhancement of fish habitat have significant benefits for recreational fishing and the aquatic environment in general. Investment in this area is very well received and supported by the recreational fishing community as it generally produces tangible outcomes that benefit fishing experiences.

RD&E Priorities

- Identify measures to project, restore and enhance key habitats that support all life cycle stages of important recreational species;
- Research to underpin habitat enhancement initiatives in Western Australia to optimise recreational fishing opportunities;
- Investigate the applications and benefits of artificial reefs in Western Australia;
- Development effective regulatory management and governance for aquatic habitat in WA with particular emphasis on temperate estuaries.
Management, Access, Data Collection and Governance of Recreational Fishing

The values and drivers of recreational fishers differ significantly from commercial fishers and their needs must be better defined. The social, economic and wellbeing benefits of recreational fishing also need to be better quantified. Once these values have been determined management measures can be developed for recreational fisheries based on Optimising Recreational Experiences (ORE) rather than Maximum Economic Yield (MEY).

Obtaining reliable social, economic and wellbeing data related to recreational fishing can also be used to arrest the recent closures of jetties, wharves, and other platforms and ensure access is maintained and expanded for fishers of all abilities.

Recreational fishers can also play a greater role in the collection of this catch and effort data which should be used by fisheries managers and researchers.

RD&E Priorities

- Define the values and drivers for the recreational fishing community and develop management measures based on ORE;
- Quantify the social, economic and wellbeing value of recreational fishing in WA;
- Develop spatial/temporal separation models for key recreational fisheries;
- Develop a 20yr Blue-print for recreational fishing in Western Australia;
- Investigate arrangements to support recreational fishing access rights under WA’s new Aquatic Resources Management Bill;
- Develop management options for Marine Protected Areas that minimise the impact on recreational fishing;
- Investigate opportunities for freshwater impoundment fisheries;
- Develop cost effective methods for collecting recreational catch and effort data;
- Collect and catalogue historic recreational fishing information;
- Develop a sustainable co-management model of aquatic resources in WA and harvest strategies focussed on the needs of recreational fishers.

People Development / Capacity Building / Succession Planning

The many and varied views of recreational fishers make the tasks of advocacy and representation challenging. Leadership development has been recognised as a significant challenge that the recreational fishing community must overcome in order to meet its future goals and needs.

RD&E Priorities

- Delivery of regular development programs for young leaders and develop pathways for the ongoing development of these leaders.
Improving Recreational Fishing Safety

Since 2002 there have been 76 fishing related drowning deaths in Western Australia. Increasing safety awareness as well as improving access to safety equipment requires a change in attitudes and behaviours towards safety and will reduce preventable injuries and/or deaths associated with recreational fishing.

RD&E Priorities

- Improve methods to reduce risk taking behaviour;
- Improved communication with high risk groups;
- Develop strategies to reduce recreational fishing fatalities;

Biology and Ecology of Important Recreational Species

Western Australian recreational fishers are lucky to be able to catch a large diversity of fish species ranging in size, habitat and abundance. It is important to research recreationally important fish in order to better manage these stocks, reduce recreational fishing mortality and to close the lifecycle for future stock enhancement activities should the need arise.

RD&E Priorities

- Development of innovative culture techniques for important recreational species;
- Improve post release survival of important recreational species;
- Investigate the use of Black Bream as a biological control for feral fish species.

Extension, Communications and Promotion of Recreational Fishing

This priority area looks at ways in which recreational fishing knowledge and information can be shared. Educating people about recreational fishing is vital in protecting fish stocks and the environment.

RD&E Priorities

- Enhance communication of important recreational fishing information.
- Promote recreational fishing participation;
- Host important recreational fishing conferences including National and World Recreational Fishing conferences;
- Develop and promote best practice and code of conducts for recreational fishing;

For more information on Recfishwests research priorities or current and past projects that Recfishwest has been involved with call the Recfishwest office on 92463366 or visit the Recfishwest website at http://recfishwest.org.au/