

# Tasmanian Inland Recreational Fishery Management Plan

## 2008-18



© Inland Fisheries Service, July 2008.

*Citation*

Inland Fisheries Service (2008) Tasmanian Inland Recreational Fishery Management Plan. Inland Fisheries Service, New Norfolk.

ISBN (Paperback): 9780724664559

ISBN (Electronic): 9780724664566

For further information:

Inland Fisheries Service  
PO Box 575  
New Norfolk  
Tasmania 7140

Telephone	(03) 6261 8050
Fax	(03) 6261 8051
Email	<a href="mailto:infish@ifs.tas.gov.au">infish@ifs.tas.gov.au</a>
Website	<a href="http://www.ifs.tas.gov.au">www.ifs.tas.gov.au</a>

*Copyright*

All material published in this report by the Inland Fisheries Service, as an agent of the Crown, is protected by the provisions of the *Copyright Act 1968* (Commonwealth). Other than in accordance with the provisions of the Act, or as otherwise expressly provided, a person must not reproduce, store in a retrieval system, or transmit any such material without first obtaining the written permission of the Inland Fisheries Service.

*Disclaimer*

Whilst the Service makes every attempt to ensure the accuracy and reliability of information published in this report, it should not be relied upon as a substitute for formal advice from the originating bodies or departments. The IFS, its employees and other agents of the Crown, will not be responsible for any loss, however arising, from the use of, or reliance on, this information.

*Cover photography*

Top row - Neil Grose, Middle row - Brad Harris, Neil Grose, Bottom row - Peter Hayes, Neil Grose, Neil Grose.

# Contents

	Page Number
<b>Executive Summary</b>	3
<b>Preamble</b>	5
<b>Glossary</b>	8
<b>Introduction</b>	10
<b>Stakeholder Engagement</b>	14
Engagement of Stakeholders	14
<b>Fishery Management Planning</b>	16
Fishery Management Planning	16
Fishery Management Regions	17
<b>Recreational Salmonid Stocking</b>	19
Status and Performance of Stocked Fisheries	20
Salmonid Stocking Planning	21
Transfer of Adult Brown Trout and Salmonids	21
Farm Dam Fish Stockings	22
Trout Stocking Threats to Salmonid Fisheries	23
Trout Stocking Threats to Native Fish and Aquatic Fauna	23
Stocking in Reserves and Conservation Areas	24
Trout Stocking Translocation Risks	24
<b>Development and Enhancement</b>	26
Access to Fisheries	26
Fishery Infrastructure	27
Wild Rainbow Trout River Fisheries	28
Wild Rainbow and Brook Trout Lake Fisheries	29
Wild Brown Trout River Fisheries	30
Fisheries Under Pressure	30
Potential Development Opportunities for New Fisheries	31
Diversity of Fisheries	32
Triploid Trout Stocking in Non-recruiting Waters	33
All Year Trout Waters	33
<b>Conservation and Protection</b>	36
Galaxiidae Recovery Plan and Fisheries Management Plans	36
Maintenance of Trout Free Waters	37
Biosecurity	37
Co-management Conservation Measures	38
<b>Figure, Tables and Appendix</b>	
Figure 1 State Fishery Management Regions	18
Table 1 Origins of Fish Used in Stocking Tasmania's Trout Fisheries	20
Table 2 Marketing Products for the Tasmanian Inland Recreational Fishery	35
Appendix 1(a-e) Guide to Trout Stocking in Inland Waters	41

## Executive Summary

The Tasmanian Inland Recreational Fishery Management Plan (the Plan) establishes a vision for the State's inland recreational fishery (the Fishery) with the goals of nurturing, developing and managing the inland recreational fisheries in harmony with the natural environment and realising it's full potential for the Tasmanian community and future generations.

Key issues to managing the State's Fishery identified within the Plan are stakeholder engagement, fisheries management and planning, recreational salmonid stocking, development and enhancement, biosecurity and aspects of conservation and protection

To meet the overarching goals of the Plan, the Inland Fisheries Service (the Service) has identified the engagement of stakeholders as being of primary importance. A strategy will be developed to guide engagement including formal communications with key government agencies. Current communication avenues to the angling community will be reviewed to ensure all anglers are informed about the Fishery. Media exposure of the recreational fishery and the Service will be promoted and marketed in a strategic manner.

A primary goal for the Service is to adopt a fisheries management and planning framework that provides a basis for stakeholders, including the angling community, to input to the management of the Fishery. The State will be partitioned into six regions (South, Central, East, West, North and North-West) for the purpose of management and planning. A structured approach to planning will be taken and will involve the production of several types of management plans. This Plan will be the overarching planning instrument under which water specific fishery management plans will be developed. Additionally in restricted circumstances there may be a need to develop plans specific to particular issues or problems (eg issue management plans and fishery investigation plans).

Many of Tasmania's waters require stocking to maintain sustainable fisheries. Any stocking will be carefully managed so not to impact significantly on recognised ecological values such as threatened species. Clear risk management assessments and evaluations will occur where stocking of salmonids may have an impact on threatened aquatic fauna. Farm dam trout stocking will be managed according to strict procedures to prevent the illegal spread of trout. These procedures will be reviewed every five years to ensure their effectiveness in preventing illegal stockings. The use of triploid salmonids will be used to minimise the establishment of salmonid species in specific circumstances and to maximise their growth potential in waters where natural recruitment is unlikely.

The Service will stock fisheries in accordance with management plans and the performance of these fisheries will be evaluated to ensure stockings are effective. Consultation with key angling groups will continue to be a part of the development process in the annual stocking program. A three year rolling stocking plan will be developed that will also form the basis of the Service hatchery production schedule. All stockings of public waters will be published in newsletters and on the IFS's website.

Presently the Service uses both wild and domestic salmonids to meet annual stocking requirements. Dependence on commercial fish farms for the supply of domestic stock has and will continue to be important for maintaining specific fisheries, particularly lowland fisheries. However, the general policy is to manage public fisheries in the highland area as wild trout fisheries. Only wild rainbow trout will be used to stock Great Lake, Penstock Lagoon and Bronte Lagoon with this policy extending to other waters in the highlands when practicable. The use of wild adult brown trout will continue to be an important tool for the Service to supplement fisheries where there is little or no recruitment and to provide immediate angling opportunities. The spawning run at the Liawenee Canal, Great Lake, will be the predominant source of adult brown trout.

The Service has a responsibility to protect and manage native fish particularly threatened species. This is addressed in the Plan with respect to the stocking of salmonids and the

potential threats to native fish and other aquatic fauna as well as stockings within reserves and other conservation areas. A number of measures are proposed to alleviate further decline in the status of threatened species whilst maintaining a healthy recreational fishery.

The Service has a role in the provision and facilitation of access and infrastructure for the Fishery. The recent development of the Access Plan as part of the Tasmanian Sport Fishing Tourism Development and Marketing Plan has provided a platform for the Service to contribute to providing access and infrastructure. Infrastructure improvement in the form of signage, boat ramps and camping areas are important to develop the Fishery as a whole and strategies to improve in their delivery are identified in the Plan.

Areas of development in the Fishery are focused on fishery products established within the Plan. These products include wild rainbow trout river fisheries, wild rainbow and wild brook trout lake fisheries and wild brown trout river fisheries. Management will be focused on maintaining and enhancing these products.

Some of the State's river fisheries are recognised as being under environmental and angling pressure. Measures will be implemented to address these issues in these fisheries.

The Plan recognises the variety of fisheries that Tasmania has to offer and the potential market for these various types of fisheries. The development of fishery types as marketable products which meet the need of the broad angling community is recommended as the key to enhancement of the Fishery as a whole.

## Preamble

The Tasmanian Inland Recreational Fishery (the Fishery) is a highly valued resource of national and international significance. It attracts over 25 000 anglers each year, injecting some \$40 M into the State's economy through tourism alone and is a vital asset for regional communities where other recreational, social and economic opportunities are limited.

A major factor in the success of the Fishery is the suitability of Tasmania's natural environment with its cool temperate climate, rugged topography and abundance of inland waters; and its subsequent development as a recreational trout fishery for nearly 150 years. Add to this, the State's unique environmental values, including the areas reserved for conservation and World Heritage, which gives the Fishery a raw, natural appeal to anglers.

A key feature is Tasmania's world-class wild trout fishery, typically promoted as the experience of 'wilderness fly fishing' for challenging wild brown trout in pristine, remote highland waters. This gives the State a significant competitive advantage for the growth of a niche recreational/tourism industry. Importantly, trout fishing produces a high yield product, supports a range of business types and promotes regional development by decentralising spending away from major population centres.

Tasmania's unique angling history strengthens the appeal of the Fishery and adds to the State's marketing potential. Prime examples of this heritage are preserved at the Salmon Ponds, Plenty, which was built in the mid 1800s and became the 'birthplace of trout in the Southern Hemisphere' in 1864. Most of the brown trout now found in Tasmania, the Australian mainland and New Zealand, came from this original stock of 133 trout hatched at the Salmon Ponds from a batch of live ova shipped from England.

As with its historic values, the social value of the Fishery should not be underestimated. The Fishery was built on the vision and determined efforts of the early European settlers, and dependent on the practical support given by past generations of anglers. A strong angling culture developed amongst the Tasmanian community, which is reflected today in the well-established network of angling clubs and associations throughout the State.

Around 20 000 resident Tasmanian anglers purchase a full season licence each year and this group represents a high priority for the Service. Many resident anglers, whether from traditional angling families or relatively new to the sport, and irrespective of their preferred style of fishing, share a passion for trout fishing, portray a sense of ownership of the Fishery and have a vested interest in its ongoing management.

The challenge for the Service is to manage and develop the Fishery for the benefit of all its stakeholders, including anglers and key interest groups from industry and government organisations. A further complication is the fact that the Service is one of several management authorities with responsibility for the freshwater resource where it's own legal jurisdiction encompasses the fish rather than the water in which they live.

The Service must strive to achieve these management goals using funds primarily generated through angling licence sales. Growing the number of licensed anglers and maximising revenue from licence sales, is therefore a primary focus of the Service. In order to satisfy anglers and meet the needs of a broader market the Service must provide an appropriate range and quality of fishing experiences.

The Service considers the current number of anglers participating in the Fishery is well below the Fishery's natural carrying capacity and there is room for increased participation without any loss in the fundamental angling experience. Many waters are under-utilised, some are under-performing, and fishing effort has not been distributed evenly throughout the State, with a small number of waters receiving the majority of fishing pressure.

The focus of the Service is on increasing and sustaining the number of licensed anglers to a modest level, while spreading the fishing effort more evenly across the State. In so doing, the Service recognises the importance of caring for its existing customer base while striving to meet the needs of a broader and developing angling market. The key is to identify specific target groups within the angling market and to match their needs against individual fishery types and associated fishing experiences. These fishery types (the physical products) can be further developed to satisfy the needs of these specific target groups and promoted more effectively so as to encourage greater participation in trout fishing.

This philosophy underpins the Plan and has led to several management strategies recently implemented by the Service. Examples include the increased emphasis on the Service's annual stocking program, particularly the stocking of certain waters with a diversity of species and of waters close to population centres with adult, easier to catch and/or trophy sized fish and angling related infrastructure and facilities. The Service has also developed individual species fisheries and measures to improve under-utilised and under-performing fisheries. The Plan galvanises these activities within a strategic planning framework aimed at directing the development and management of a comprehensive range of fishery products for an expanding angling market.

While planning for the development of these fishery products is within the control of the Service, the ability to deliver the planning and management outcomes contained within the Plan may be limited by factors outside the control of the Service. It is important, therefore, to acknowledge the potential limitations of the Service and the challenges these external factors present to fishery management, providing a context for the Plan.

The core functions and legal responsibilities of the Service are contained within the *Inland Fisheries Act 1995*, which establishes it as the statutory authority charged with the management of the public Fishery, including commercial freshwater fisheries and native fish conservation. Its jurisdiction covers all inland waters (down to the seaward limit), freshwater fisheries and fish species.

The Act defines the statutory limitations of the Service in its goal to ensure the sustainable management of the Fishery. While this goal underpins the Plan (and all work undertaken by the Service), its ultimate achievement involves other regulatory authorities that have key responsibility for various resource management roles. In this regard, the aim of the Service is to encourage coordination and collaboration with these other authorities, and to achieve a balanced approach for the long term management of Tasmania's inland waters.

For instance, the Service does not have statutory responsibility for the management of other aquatic flora and fauna besides freshwater fish, nor the prevention of the introduction of unwanted flora and fauna into Tasmania, which may threaten freshwater systems. Similarly, the maintenance of water quality and quantity, and the management of land practices that impinge on these values, as well as the conservation of freshwater ecology, fall outside the legal responsibility of the Service.

Furthermore, there are multiple users of the freshwater resource, which may lead to conflicting priorities for the separate management entities, particularly as water becomes scarce. The Service does not own the rights to the freshwater resource, nor the majority of land surrounding public waters. To achieve outcomes in favour of the Fishery, therefore, it must negotiate with a range of stakeholders, including private, corporate and government landholders and management bodies, regarding a range of management issues such as fishery access and public liability, land use practices, environmental improvements and water usage.

Through the Plan, the Service seeks to enhance the Fishery in keeping with its environmental, social and economic values and to maximise its potential as a world-class fishery. To achieve this, the Service recognises the importance of establishing an agreed, clear and well-understood management direction for its staff and key stakeholders. It acknowledges the need to strengthen its alignment with the angling community and encompass the needs of specific industry groups; and it aims to maintain and develop

strategic partnerships with other government agencies responsible for the sustainable management of the freshwater resource. This Plan provides a mechanism for the Service to communicate with all key stakeholders, to articulate its vision for the Fishery, and harness their contribution to the management of the Fishery over the next 10 years.

## Glossary

4WD	four wheel drive
adults	fish that have reached maturity or are exceed 200 g
AAT	Anglers Alliance Tasmania
ACDC	Assessment Committee for Dam Construction
AFTA	Australian Fishing Trade Association
AQIS	Australian Quarantine Inspection Service
commercial hatchery	a registered fish farm under the <i>Inland Fisheries Act 1995</i>
DEWR	Department of Environment and Water Resources (Commonwealth)
DIER	Department of Infrastructure, Energy and Resources (State)
DPIW	Department of Primary Industries and Water (State)
DTAE	Department of Tourism, Arts and the Environment (State)
diploid	fish that are fertile and which have a normal (unaltered) set of genetic material (chromosomes)
domestic	fish reared from multi-generational hatchery brood stock
electrofishing	a method of sampling fish populations using an electric current
fingerlings	juvenile fish that are 5–50 g
Fishery	Tasmanian Inland Recreational Fishery
FMP	Fisheries Management Plan
fry	a stage of development in young salmon or trout – the fry is usually less than one year old, has absorbed its yolk sac and is about 1–5 g
FT	Forestry Tasmania
Galaxiidae	a Family within the Order Salmoniformes
HT	Hydro Tasmania
hybrid	a strain of fish from genetically dissimilar parents or stock resulting in infertile offspring
IFAC	Inland Fisheries Advisory Council
IFS	Inland Fisheries Service
MAST	Marine and Safety Tasmania
NWFA	North West Fisheries Association
Prototroctidae	a Family within the Order Salmoniformes

PWS	Parks and Wildlife Service (DTAE)
RAMSAR	a wetland conservation area
rearing unit	a facility that rears hatched fish to a larger size prior to release
salmonid(s)	belonging to the family Salmonidae, which includes the salmon and trout.
STLAA	Southern Tasmanian Licensed Anglers Association
TCT	Tasmanian Conservation Trust
TFFA	Tasmanian Fly Fishing Association
TSN	Threatened Species Network
tiger trout	a hybrid strain of trout derived by fertilising brown trout eggs with brook trout milt
translocation	the movement of fish from one area to another
TGALT	Trout Guides and Lodges Tasmania Inc
triploid	fish that are infertile and which have an additional set of genetic (chromosomal) material in the nucleus of their cells
UTAS	University of Tasmania
wild fish	any fish that occurs, grows, or is living in a natural state produced from wild parental genetic stock
WHA	World Heritage Area
yearling	fish that are typically one year old or between 50 – 200 g

## Introduction

### ***The Plan and its Goals***

The primary aims of the Tasmanian Inland Recreational Fishery Management Plan (the Plan), are to establish a clear direction for the Fishery, a range of fundamental principles for the long-term sustainability of the Fishery and a management framework to achieve these principles. Sometimes this will mean extending the reach of the Plan into the wider environs that surround the Fishery.

The Plan also gives anglers and relevant stakeholders an opportunity to contribute to the management framework so that general agreement is reached for the maintenance and development of the Fishery.

The Goals of the Plan are:

---

To nurture, develop and manage the Fishery in harmony with the natural environment.

---

To fully realise the potential of the Fishery for the Tasmanian community and future generations.

---

### ***Vision***

Once implemented the Plan will achieve a vision for a healthy, vibrant and exciting Fishery that is the envy of Australia and the world.

### ***Values***

The Service recognises a wide suite of values for the Fishery encompassing its unique wilderness, wild brown trout, diverse fishing opportunities and trophy fisheries. It is important that these values are maintained and enhanced so the Fishery can meet the expectations of anglers and grow its market position against other competing recreational activities.

These values are:

---

A fishery that offers a variety of angling opportunities in relation to the different species, the size, catchability and quality of fish, and the environment in which fishing occurs.

---

Local fishing opportunities – serviced impoundment fisheries and healthy river fisheries.

---

Wilderness angling for wild brown trout.

---

Trophy fish waters.

---

A Fishery that provides a range of angling methods and fishery types.

---

A highly valued fishery that attracts interstate and international visitors to the State.

---

A fishery that contributes to the economic health of the State and its regions.

---

### ***Structure of the Plan***

This Plan maps out a direction for the Fishery. It also identifies issues and challenges that must be addressed to achieve specific goals and objectives for the Fishery.

The direction for the future management of the Fishery is supported by a suite of actions, that are defined as management responses in each section addressing specific fishery management issues or challenges. The Service will implement these actions in a prioritised manner and within the resources available.

This Plan will support the Inland Fisheries Corporate Plan 2006–09, which sets the strategic business directions for the Service. The Plan is also aligned with the aims and goals of the Tasmanian Sport Fishing Tourism Development and Marketing Plan, which independently

defines the Fishery from the perspective of primary stakeholders (eg. fishing clubs and associations, trout guides).

### **Primary Objectives**

To realise the goals for the Fishery, the Plan has several objectives that will focus on specific issues and challenges. These will guide planning and activities at an operational level.

The Objectives of the Plan are:

---

To manage the Fishery based on a system of fishery management plans that establish clear management goals and objectives for specific fisheries.

---

To provide a Fishery that maintains a healthy level of participation and entices new participants.

---

To optimise the performance of the Fishery based on survey information collected by the Service.

---

To sensitively manage the Fishery to preserve or enhance other biotic values.

---

To encourage and promote the ownership of the Fishery by the Tasmanian community, leading to opportunities for the angling community to participate in the management of the Fishery and for the wider community to adopt sustainable practices.

---

To foster protection of the Fishery from pest flora and fauna threats.

---

To develop and strengthen strategic partnerships with key stakeholder groups for the sustainable development of the Fishery.

---

To improve angler access to lake and river fisheries and participate in the provision of infrastructure that benefits anglers.

---

### **Planning Outcomes**

The Outcomes are:

---

Easily accessible local fisheries.

---

Angling infrastructure development.

---

Community oriented fisheries.

---

Wild rainbow trout fisheries in the Central Highlands.

---

Improved access.

---

Development of the wild brown trout fishery in the Central Highlands.

---

Improvements in poorly performing fisheries.

---

Sustainable and integrated fisheries management.

---

Reduced threats from aquatic pests and diseases.

---

Sustainable fisheries planning.

---

Diversity of fishing opportunities in terms of species, method and other attributes.

---

Improved extension and communication.

---

Development and maintenance of high catch rate rainbow trout fisheries.

---

Development and maintenance of Junior and Disabled Access Waters that contain an abundance of fish ready to catch, in an environment that is safe, accessible and with family-orientated facilities.

---

On-site interpretation and information about fisheries.

---

Improvement of access to the Fishery.

---

### ***Key Planning Issues***

The Service is constantly presented with the challenge of managing a myriad of issues that influence or impact the status, performance and amenity of the Fishery. The Plan identifies these important issues and challenges, and proposes a response. These issues and challenges are outlined here.

#### ***1. Stakeholder engagement***

There are numerous stakeholders with interests in the Fishery. Identifying these stakeholders and understanding their interests, is necessary for the cooperative delivery of benefits for the Fishery.

#### ***2. Fishery management planning***

Sound, clear and focused fisheries management, requires considered planning. Fisheries management plans provide an opportunity to engage stakeholders in the management of the Fishery, to identify issues and to determine actions, management responses and evaluation methods.

#### ***3. Stocking of salmonids***

Fish stocking is an important management tool for the Fishery. However, it can impact on native fish, threatened fish and other aquatic biota (eg. frogs, invertebrates) as well as lead to other impacts arising from fishing pressure. It is important to recognise these impacts and manage the planning and evaluation process to achieve sustainable management outcomes.

#### ***4. Fish translocation***

There can be risks associated with translocating fish from one water body to another, or from hatchery or fish farm to the Fishery. The introduction of pest fish to waters as well as the potential transfer of other pests and diseases can result in significant environmental problems. The introduction or over-stocking of salmonids can also cause similar issues in sensitive circumstances involving threatened native fish.

#### ***5. Fishery performance***

Optimising the performance of each fishery is an important strategy to achieve satisfaction amongst anglers and increase participation in trout angling in the State. Establishing fishery benchmarks and measuring the performance of fisheries enables fisheries management to be altered or fine-tuned. Various sources of information are required to evaluate fishery performance, ranging from fish population assessment to surveying anglers.

#### ***6. Development and enhancement***

The Fishery needs continual attention and refinement to meet the demands of the angling community and compete effectively in the recreational sport market. As management of the Fishery largely depends on licence revenue derived from angling licence sales, any decline in participation generally results in a reduction in revenue and diminished resources for the management of the Fishery. Consequently, it is critical that the Fishery is constantly developed and enhanced with new initiatives to maintain and grow the number of licensed anglers.

#### ***7. Fishery infrastructure***

The provision of infrastructure for anglers and others is becoming more important as community expectations for basic amenities and facilities increase. Angling infrastructure and basic facilities are required to increase participation levels and improve satisfaction with the fishing experience.

#### *8. Fishery access*

Increasingly, access is being restricted or denied, departing from the free roaming access enjoyed and expected by anglers in years past. Strong partnerships and leadership are required to Maintain and improve access to fisheries.

#### *9. Management of salmonid fisheries, native fish and threatened fish*

The Service has Commonwealth and State statutory obligations in regard to threatened fish species. It strives to manage native fish (including threatened fish and other species) in an integrated manner so the respective legislated objectives and goals are addressed.

#### *10. Biosecurity*

The threat of introductions and the impact of aquatic pests and diseases are recognised and will be addressed to maintain the present quality of Tasmania's inland waters and the Fishery. A cooperative approach with other stakeholders is necessary to reduce the risks and achieve biosecurity objectives.

## Stakeholder Engagement

### GOAL To engage with stakeholders in the Fishery.

The number of stakeholder groups with an interest in the Fishery is significant and diverse. Stakeholders and groups that the Service regularly engages are: Inland Fisheries Advisory Council (IFAC), Anglers Alliance Tasmania (AAT), Southern Tasmanian Licensed Anglers Association (STLAA), North West Fisheries Association (NWFA), Tasmanian Fly Fishing Association (TFFA), Australian Fishing Trade Association (AFTA), Hydro Tasmania (HT), Parks and Wildlife Service (PWS), Marine and Safety Tasmania (MAST), Australian Quarantine Inspection Service (AQIS), local councils, Department of Tourism, Arts and the Environment (DTAE), Department of Infrastructure, Energy and Resources (DIER), Department of Primary Industries and Water (DPIW), IFS licence agents, tackle stores, Trout Guides and Lodges Tasmania (TGALT), Tasmanian Conservation Trust (TCT), Forestry Tasmania (FT), Threatened Species Network (TSN), Department of Environment and Water Resources (DEWR), University of Tasmania (UTAS), Minister, commercial fish farms, private fisheries and anglers.

The Service engages these stakeholders in a variety of ways. Partnerships are formed when there is an identified need for constant engagement and dialogue, or the relationships are historic. The influence these groups can exert on fishery issues and management also varies, but may be substantial in determining the direction of fishery management and subsequent outcomes. Providing current information, communicating regularly and promoting aspects of the fishery management, are critical to engaging stakeholders. This is sometimes achieved by regular contact through peak bodies, angling clubs or directly. The primary avenues for the Service to communicate with the general public and the angling community are through the regular electronic publications via the newsletter, Anglers News, and the IFS website, as well as regular newspaper fishing columns and fishing magazines.

### **Engagement of Stakeholders**

There is an obvious need for the Service to engage and maintain effective working relationships with its stakeholders so that cooperative approaches can be adopted to achieve beneficial outcomes for the Fishery. For example, the formation of the peak angling body, AAT, provides an opportunity to forge clear and regular engagement pathways with anglers. The Inland Fisheries Advisory Council (IFAC) also provides a statutory forum for consultation and advice for stakeholders, the Minister and the Service.

### Policy Statement

Policy Number	Policy Statement
P1	The Service will attend all IFAC and AAT general meetings.

### Management Response

Response Number	Response
R1	Develop a strategy to guide engagement and communication with stakeholders. This should include arrangements to establish clear avenues of engagement between the Service and AAT and to review how information is provided to non-club anglers.
R2	As part of the above strategy, formalise regular communications with key government stakeholders by ensuring formal management meetings are held at least twice per year with key stakeholders – Hydro Tasmania, Forestry Tasmania, MAST and Tourism Tasmania.
R3	Review communications with the general angling community, who may not have internet access, and the function and suitability of <i>Angler News</i> to provide this communication.
R4	Improve media exposure for the Fishery and associated issues.

---

R5	Maintain the Service website as a key provider of information to key stakeholders, including the angling community.
R6	Promote and market the Service and the Fishery to the general public.

---

## Fishery Management Planning

**GOAL** To provide a fisheries planning framework for the management of the Fishery.

The Service manages recreational fisheries in inland waters on behalf of the Government for the Tasmanian community, anglers and stakeholders. The management of the Fishery should encompass the aspirations of these stakeholders. Fishery management plans allow the Service to inform stakeholders about fishery management and provide a focus for stakeholder input and consultation.

### ***Fishery Management Planning***

The Service will establish a structured planning approach for fishery management that drives fisheries performance within the principles of environmental sustainability. The planning framework involves several types of fishery management plans.

#### Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P2	The following fishery management plans will be referred to IFAC for comment and advice: Tasmanian Inland Recreational Fishery Management Plan Major Water Specific Fishery Management Plans Minor Water Specific Fishery Management Plans Fishery Specific Management Plans

#### Management Response

<b>Response Number</b>	<b>Response</b>
R7	<p>The Service will adopt the following planning framework featuring several different types of plans:</p> <p><b>Tasmanian Inland Recreational Fishery Management Plan (TIRFMP)</b> This Plan provides the over-arching planning instrument for the Fishery, giving guidance on fishery management issues and establishing policy direction, frameworks and processes.</p> <p><b>Water Specific Fishery Management Plans (FMP)</b> Three levels of water specific fishery management plans have been established. Fisheries will be subject to a level of planning depending on the types of issues that exist for that fishery. For example, important fisheries will be subject to a more robust and substantial planning process and suit a Major Water Specific FMP.</p> <p><b>1 Major Water Specific FMP</b> This type of plan addresses issues such as the management of threatened fish-salmonid interactions, and major environmental issues such as turbidity, water level management, aquatic macrophytes and pest fish.</p> <p><b>2 Minor Water Specific FMP</b> This plan addresses specific fishery management issues such as regulations, trout stocking and infrastructure in a concise format that is simple to prepare, produce and distribute.</p> <p><b>3 Fishery Specific Management Plan</b> This plan focuses on specific fishery types such as the recreational whitebait fishery. The plan provides information on issues, policy and management of the fishery.</p>

Two other types of plans will be utilised when required:

**Issue Management Plan**

This plan addresses a specific issue in a holistic and strategic manner. For example, the provision of boat ramps across inland waters may be better addressed in a single plan rather than through several individual water specific fishery management plans. In this way, the State's inland boat ramp requirements can be dealt with collectively and the planning for the provision of, or improvements to, boat ramps can be conducted strategically, on a considered priority basis. This will provide better advice for agencies making funding decisions on boating infrastructure.

**Fishery Investigation Plan**

This plan addresses specific fishery problems that hinder or retard the performance of the fishery. Often the cause for this non-performance is unknown and requires further research and investigation prior to the establishment and imposition of any routine fisheries management. The plan aims to clearly define areas of research and investigation to renew and improve the performance of the fishery and bring it to a satisfactory state from which it can be managed.

---

***Fishery Management Regions***

Fisheries management, planning and reporting will be conducted based on a regional spatial framework. The framework will guide the implementation of fisheries management initiatives and aid in the planning for the equitable distribution of fishery resources across the State. Examples include the provision of community support fisheries (eg disabled fisheries) or waters stocked with trophy sized Atlantic salmon. The fishery management regions are shown in Figure 1.

Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P3	The Service will use a regional approach, where possible and feasible, to distribute fishery initiatives and products, and to conduct evaluation and reporting.

Management Response

<b>Response Number</b>	<b>Response</b>
R8	Establish six fisheries management regions (South, Central, East, West, North and North-West).
R9	Adopt a regional focus for the implementation of fisheries management in respect to fisheries planning, provision of initiatives, fish stocking, fishery opportunities and activity reporting.



## Recreational Salmonid Stocking

**GOAL To supplement the Fishery in balance with ecological values.**

The Service is responsible for the management and regulation of all salmonid stockings conducted to support the Fishery in inland waters. Several species of salmonids are reared or harvested to sustain and develop the Fishery. Eels and blackfish are also caught for recreational purposes, however, the level of participation is extremely low and the stocking of these fish is not considered in this Plan.

One of the primary issues that must be considered when stocking is the impact on native fish and particularly threatened fish. It is important that strategies to support recreational fisheries do not hinder fish conservation actions and are consistent with native fish recovery plans and other relevant conservation plans and policies.

The stocking of trout into Tasmanian inland waters to support the Fishery, has been an integral part of fisheries management since the acclimatisation of trout in 1864. Recent stocking has focussed on still water fisheries such as small dams, lagoons, natural lakes and man-made impoundments. However, there were times when considerable focus was on the stocking of rivers and streams. This interest in river stocking and requests for active management of trout stocks in rivers has increased in recent years due to perceptions of poor trout stocks in certain river fisheries.

### Receiving Fisheries

Lake fisheries receive the majority of salmonid fish stocked into Tasmania's waterways. This is either to supplement natural recruitment or to provide specific types of fish for targeted angling opportunities.

Four species of salmonid: brown trout (*Salmo trutta*), rainbow trout (*Oncorhynchus mykiss*), brook trout (*Salvelinus fontinalis*) and Atlantic salmon (*Salmo salar*) are stocked. Hybrid strains (ie tiger trout) have also been used for stocking specific waters but their numbers have always been low.

Stocked fish are obtained from a number of different sources within the State (see Table 1) ranging from the new Service hatchery, the Salmon Ponds, commercial hatcheries, rearing units, as well as harvesting from the wild. The characteristics of the fish, such as size, progeny of wild or domestic brood-stock, fertile or sterile, can vary depending on the origin of the fish.

Generally, the Service does not stock salmonids in rivers, although there are a few exceptions such as the River Leven (rainbow trout) and the Mersey River (adult brown trout – fry and adults) where stockings have occurred recently. The Service currently does not have the resources to support both the intensive stocking of lake and river fisheries and it is important to support those fisheries where stocking will have the greatest success.

The stocking of farm dams with trout is widely conducted across the State, especially in the rural areas of the North and North-West, where about 60% of all farm dam fishing occurs. Within the context of the Fishery, the number of anglers fishing in farm dams is significant, with an estimated 10% of anglers fishing in farm dams during the 2003–04 season.

### Sources of Fish for Stocking

Commercial fish hatcheries have supported the Service significantly by providing primarily Atlantic salmon, rainbow trout and more recently, brook trout, for public stocking purposes. Some of these farms have also been contracted to produce wild rainbow trout and brown trout for the Service. In this way the industry has delivered a suite of important benefits to the Fishery and it is critical that this relationship between the commercial hatcheries and the Service is nurtured.

**Table 1 Origins of Fish Used in Stocking Tasmania's Trout Fisheries**

Species	Source of fish			
	Wild transfers	Rearing units	IFS	Commercial hatcheries
Brown trout - wild <sup>1,2</sup>	√	√	√	
Rainbow trout - wild <sup>1</sup>			√	
Rainbow trout – domestic <sup>2</sup>		√		√
Brook trout <sup>1,2</sup>			√	√
Atlantic salmon <sup>1</sup>				√
Tiger trout (hybrid) <sup>1</sup>			√	

Note: <sup>1</sup> diploid, <sup>2</sup> triploid

### **Status and Performance of Stocked Fisheries**

The stocking of salmonids is fundamental to the sustainable management of many fisheries in Tasmania.

These stocked fisheries may receive wild and domesticated salmonids with the relative contribution of each type of stock dependant largely on supply. Generally, the Service aims to manage public fisheries in the highland areas as wild fisheries and wild trout are used for stocking. In intensively managed lowland fisheries, a mixture of wild and domestic trout is used. It is a common and plausible perception that waters maintained with wild salmonids generally provide a more challenging experience, however, the Service also seeks to provide other types of experiences.

To maintain the desired performance of stocked waters, some waters are stocked annually (or at other intervals) with hatchery reared or translocated wild fish. This is particularly important for high catch rate fisheries, including waters near large population centres. Fishing regulations will be altered when necessary to achieve fishery outcomes and guide harvest by anglers, to ensure sustainability.

### **Policy Statement**

<b>Policy Number</b>	<b>Policy Statement</b>
P4	In some fisheries (generally near population centres), the Service aims to provide fisheries that can sustain reasonably high levels of exploitation (ie catch rates). To maintain harvests of salmonids from these fisheries it is necessary to conduct regular fish stockings.
P5	Stockings will be planned and conducted to achieve specific objectives.
P6	All stocking information will be made publicly available through Service publications.
P7	Regulations will be formulated to take into account fishing pressure and angling behaviour as a result of fish stocking to aid in achieving management objectives.

### **Management Response**

<b>Response Number</b>	<b>Response</b>
R10	Ensure all fish stockings follow prescriptions in fishery management plans and are consistent with fish conservation strategies.
R11	Conduct evaluations to ensure stockings are effective in contributing to fishery performance.
R12	Ensure that stocking requirements form the basis of production planning for hatcheries managed by the Service and supply from commercial fish farms.
R13	Publish stocking information in <i>Angler News</i> , annual reports and the IFS website.

R14	A five fish bag limit with all fish to exceed a minimum length of 300 mm and only two fish exceeding 600 mm to apply at Four Springs Lake, Curries River Reservoir, Brushy Lagoon, Lake Barrington, Pet Dam, Guide Dam, Craighourne Dam, Meadowbank Lake, Lake Binney, Bradys Lake, Tungatinah Lagoon, Tooms Lake and Lake Leake.
-----	---

### **Salmonid Stocking Planning**

The planning of stocking fish is critical to ensure resources are used effectively, efficiently, sustainably and meet fishery specific objectives and goals. Even in the absence of fishery management plans, the immediate stocking needs and future requirements of all fisheries can be determined.

#### Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P8	Plan trout stockings to ensure that fisheries are sustainable and meet the objectives of fisheries management plans.
P9	Stocking planning will involve input from Service staff and take into account suggestions put forward by angling groups and relevant stakeholders.

#### Management Response

<b>Response Number</b>	<b>Response</b>
R15	Develop a three year rolling stocking plan which establishes stocking requirements for trout fisheries (including fisheries where fishery management plans do not exist).
R16	Consult key angling groups about trout stocking planning and provide the community with information about annual trout stocking plans.
R17	Implement trout stocking according to appropriate policies (eg Service policy on translocation of freshwater fish) and protocols.
R18	Integrate conservation risk management evaluations into stocking planning and implementation phases of the stocking program.

### **Transfer of Adult Brown Trout and Salmonids**

Traditionally, the Service has harvested spawning trout from highland spawning runs and released them in a variety of fisheries. This action has addressed a number of fishery management issues and provided immediate angling opportunities. Most fish have been brown trout from lakes in the Central Highlands (eg Great Lake and Arthurs Lake) although trout have also been collected from Lake Leake.

For some fisheries, fish stocks from 'nursery streams' have been used to augment trout populations elsewhere. These fish are collected by electrofishing, predominantly during summer months. Blackmans Lagoon is an example of such a fishery, where fish from nearby streams have been collected and released at larger sizes compared to trout from the Service's hatcheries.

During spawning periods, adult wild brown trout and rainbow trout populations are harvested from a limited number of waters and used as brood-stock for the production of wild strain of fish or to supplement other fisheries. Great Lake has predominantly (but not exclusively) been the source of fish for broodstock and/or transfer of adults. Recent upgrades in the infrastructure at Liawenee (Great Lake) have occurred, making the process of collection and transfer of fish from the spawning runs less labour intensive and more efficient. Other potential sources of fish for transfer do not have associated infrastructure, making them less desirable for harvesting.

Recently, there has been a significant increase in the provision of spawning adult trout transfers from Great Lake to other fisheries. This is to either mitigate against recruitment failure or to provide some instant fishing opportunities and rejuvenation of fishing in local areas (eg Bradys Lake).

#### Policy Statement

Policy Number	Policy Statement
P10	Adult brown trout will be transferred to fisheries that are managed as predominantly 'put and take' and where there is poor or no natural recruitment.

#### Management Response

Response Number	Response
R19	The transfer of adult brown trout will be part of the annual stocking program to provide immediate angling opportunities in waters where there is little or no natural recruitment.
R20	The spawning run at the Liawenee canal, Great Lake, will be the predominant source for the collection and transfer of adult brown trout.

### ***Farm Dam Fish Stockings***

Farm dam fisheries are important local waters around the State, particularly in the North-West region. Fish stockings in farm dams must address two critical issues: threatened species management and the illegal re-direction of fish.

Farm dam stockings must be authorised by the Service. Generally, most farm dams are stocked with triploid rainbow trout supplied by commercial fish farms. The fish are purchased at commercial rates with the cost being dependent on fish size. However, there are between 15 to 20 farm dams that receive stocks of brown trout supplied by the Service. These are either stocked directly by the Service or from the North Motton rearing unit operated by the Ulverstone Anglers Club. These dams also require a permit to be stocked, but the brown trout are provided free. The owner of any farm dam that receives brown trout must ensure that reasonable public access is provided to anglers and the location of the dam is made publicly available. These dams may also receive stockings of rainbow trout to supplement the brown trout fishery, but all rainbow trout must be purchased from a commercial fish farm and the relevant authorisation and associated fee is applicable.

The Service has a strict policy and a clear administrative process for the application and approval of farm dam stockings.

#### Policy Statement

Policy Number	Policy Statement
P11	The Service will approve the stocking of all trout under permit, providing that threatened species values are not compromised and the cost of administration, delivery and fish associated with the stocking are borne by the applicant.
P12	The Service will approve the stocking of brown trout and provide the fish and delivery of the stock only where reasonable free public access is provided for the lifespan of the fish and the public has access to the details of such stockings.
P13	Persons fishing farm dams must hold a current angling licence, including the owner of the property. Charging a fee to fish farm dams and the feeding or propagation of these fish, is not permitted.
P14	Only triploid trout will be permitted for the stocking of all types of farm dams.

## Management Response

Response Number	Response
R21	The Service will maintain strict administrative controls and assessment procedures for farm dam trout stocking.
R22	The Service will reaffirm its policy on farm dam stockings and administrative processes, with specific emphasis on providing a clear understanding of the farm dam fish stocking application and approval process and associated obligations.
R23	The Service will review the administrative processes and overarching policies in five years.
R24	The assessment process will be reviewed every five years to ensure efficiency and effectiveness in reducing the risk of illegal use of salmonids.
R25	The Service will finalise and implement recommendations from the translocation of freshwater fish policy.
R26	Farm dam trout stocking applications will be refused when farm dams contain threatened species, or where threatened species exist in the catchment and the proposed stocking poses an undue risk to threatened species values.

## ***Trout Stocking Threats to Salmonid Fisheries***

Stocking activities pose several risks to salmonid fisheries, including the dilution or contamination of genetic heritage and the spread of diseases or parasites. Great Lake is the main source of wild brown trout and wild rainbow trout stock for most of the Fishery. It is critical to protect this wild population by ensuring domestic fish are not released into this water.

## Policy Statement

Policy Number	Policy Statement
P15	The Great Lake Fishery Management Plan prescribes that domestic rainbow trout must not be stocked into Great Lake or in-flowing waters. This principle of not stocking domesticated rainbow trout will also apply to Penstock Lagoon and Bronte Lagoon.
P16	The value and integrity of wild trout populations will be protected.

## Management Response

Response Number	Response
R27	Apply a formal quality assurance approach to Service hatchery practices to eliminate risk of contamination of wild fish stocks from cultured fish.
R28	Examine and review quality assurance processes and protocols in commercial fish farms or, if necessary, regulate for the adoption of such quality assurance systems to protect recreational fishery values.
R29	Ensure stocking activities do not diminish the value or integrity of wild stocks of salmonids by adhering to relevant fishery management plan prescriptions, adopting clear planning and implementing appropriate operational guidelines and protocols.

## ***Trout Stocking Threats to Native Fish and Aquatic Fauna***

The Service has a statutory responsibility to protect and manage native fish and salmonid fisheries. The stocking of salmonids has the potential to threaten native fish populations in several ways. Direct ecological impacts include competition for food, predation on native fish and the transfer of diseases and parasites.

The distribution and abundance of some native fish species particularly galaxiids (eg Swan galaxias), have been reduced since the introduction of salmonids and other fish into Tasmania. Other native species appear to co-exist with salmonids (eg jollytail).

Additionally, Tasmania has some freshwater ecosystems that contain unique faunal assemblages including threatened fauna. These bio-conservation values, such as community assemblages or threatened aquatic fauna other than fish, must be considered in any planning for fish stocking.

#### Policy Statement

Policy Number	Policy Statement
P17	Recreational trout stocking will be conducted consistent with native fish conservation policies, recovery plans and in accordance with the IFS translocation of freshwater fish policy.

#### Management Response

Response Number	Response
R30	Undertake clear risk management assessments and evaluations when planning for the stocking of salmonids in waters where threatened fish or other relevant conservation issues are identified and determine whether stockings are appropriate.

### ***Stocking in Reserves and Conservation Areas***

Waters within regions that have been reserved due to their significant environmental values, such as the World Heritage Area, RAMSAR wetlands, national parks, conservation areas and town water supply reservoirs, require special consideration in terms of fish translocation activities. The Service works closely with the managers of these areas to ensure that sustainable management practices are adopted.

#### Policy Statement

Policy Number	Policy Statement
P18	Any stocking in World Heritage Areas, RAMSAR wetlands, national parks, reserves and conservation areas, will be planned and conducted in accordance with statutory plans to ensure natural values are protected.

#### Management Response

Response Number	Response
R31	Consult with relevant land management agencies regarding any stocking within reserves and conservation areas.
R32	Identify all the fisheries that reside within World Heritage Areas, RAMSAR wetlands, national parks, conservation areas and water supply reservoirs, and summarise restrictions on recreational fishery management activities.
R33	Engage relevant managers of the Threatened Species Unit (DPIW) and PWS (DTAE) about stocking of salmonids in regulated jurisdictions (ie land, fauna, or other values) and negotiate agreements for continuation of salmonid stockings based on clear stocking plans and risk management systems (eg translocation protocols).

### ***Trout Stocking Translocation Risks***

The Service obtains fish for stocking from a variety of sources that have specific issues for risk management. The primary issues arising from commercial hatcheries are genetic contamination, pest fish contamination and the spread of fish disease. The disease issue is well managed across the industry and all hatcheries participate in a salmonid health

monitoring program. Whilst outbreaks of disease have occurred in commercial fish farms on occasion, there has been no detectable impact on the State fisheries. The role of the Service in monitoring industry activities and ensuring compliance with government policies and regulations is important to ensure that a disease-free status is maintained.

The Service addresses translocation issues and risks associated with each hatchery so the risks can be managed appropriately. Operational protocols will be established and implemented inside the hatchery/fish farm gate to ensure the prevention of translocation and release of unwanted fish species. Alternatively, planning rules need to be formulated to manage the releases of fish in accordance with the characteristics of the fish assemblage in the receiving water/catchment. For instance, if redfin perch are a contamination risk from a hatchery, then the Service ensures that fish produced there, in the absence of any other risk management strategies, are only released in waters that contain redfin perch.

The commercial hatcheries/fish farms that provide the Service with salmonids, generally have the appropriate level of quality assurance to guide their operations and minimise issues of disease and poor production. Of particular concern is the contamination of hatchery reared stock with other species of fish and/or aquatic biota and the transfer of diseases and pathogens to the natural environment.

It is important that anglers and the general community recognise and accept that there are many risks associated with unauthorised and/or incidental translocations of fish and other aquatic organisms. To build and reinforce this recognition, an education and awareness program will be implemented to reduce the risks of unwanted introductions.

#### Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P19	The Service will ensure that the risks of unwanted fish and/or disease transferred through translocation are eliminated through the application of appropriate risk management protocols.
P20	The Service will participate in a disease monitoring program of wild salmonid and hatchery stocks.

#### Management Response

<b>Response Number</b>	<b>Response</b>
R34	The Service will continue to develop community awareness programs to educate the wider community about the risks of introducing and releasing fish in the State's waterways.
R35	The Service will develop and implement risk management measures to ensure that undesirable fish or diseases are not translocated with stockings of recreational salmonids, sourced from the wild, it's hatcheries or commercial hatcheries.

## Development and Enhancement

### **GOAL To develop and enhance the Fishery.**

A key to the development and enhancement of the fishery is the recognition of the natural advantages and values of the Fishery. This enables management to be aligned and directed to these elements so they are maintained, developed and enhanced.

The Service has implemented initiatives to create a vibrant and interesting fishery that grows participation. These initiatives need to be evaluated within the context of past history, our awareness of experiences and research arising from other fisheries.

Recent initiatives, for example such as the popular waters program and the stocking of large Atlantic salmon have proven popular with the angling community. There is an opportunity to refine and formalise these initiatives and to further develop the wild brown trout fishery, which is recognised as the keystone of the Fishery.

This section of the Plan also identifies and assesses potential new fisheries or fishery programs, initiatives and activities that may enhance the Fishery, along with opportunities to develop new or under-utilised waters or fish species.

The State's river fisheries are a rich, widespread resource that provides angling opportunities primarily in rural and remote locations. The performance of river fisheries may vary and anglers perceive that certain river fisheries suffer from inadequate fish stocks. The angling community regularly advocate for the supplementation of riverine trout stocks.

Although river trout fisheries are not generally subjected to any routine fisheries management, there are exceptions. Several selected rivers reaches are stocked annually with trout fry (rainbow and brown trout) or receive stockings of adult brown trout transferred from spawning runs in highland waters.

### **Access to Fisheries**

A major issue in maintaining public access to the fishery has been the need for access over private freehold or government managed property (State and local governments). Unfortunately, poor angler behaviour and the indiscriminate use of 4WDs has at times dissolved goodwill and made it difficult for the Government to maintain access.

TGALT, in conjunction with AAT, have developed an Access Plan for the Tasmanian trout fishery, as part of the Tasmanian Sport Fishing Tourism Development and Marketing Plan. This offers recommendations for implementation, funding and partnership arrangements. It is logical that the Access Plan be incorporated into an Angler Access Program for Tasmania, to be delivered by the Service.

Public liability is increasingly being used as the primary reason for excluding anglers from what have been traditional points of access. There are a growing number of private landowners and public organisations that now severely restrict or totally exclude access to anglers. This action can have a very real impact on the overall presentation of the Fishery.

An angler access program is fundamental to the maintenance and development of the Fishery. The provision of access and infrastructure needs to keep step with the desires and expectations of the angling community, to ensure that angler participation grows.

Providing access to the Fishery is a key element in expanding the number of waters available to the public while preserving the overall angling experience.

The *Inland Fisheries Act 1995* prescribes that the Service does have a role and responsibility in relation to the provision and management of access and infrastructure.

This Plan supports the main elements of the Angler Access Plan (Tasmanian Sport Fishing Tourism Development and Marketing Plan – Phase 1) and the Service will endeavour to support and implement appropriate elements of the plan, so that access to fisheries is strategically developed, maintained and managed.

To establish and maintain a successful access program, the local angling community must be involved in the development, implementation and evaluation of access projects. Anglers from outside the local area must also support these projects and abide by local access requirements. To help gain the support of all anglers and interested parties, access projects need to be evaluated and reported upon as a part of routine management.

### Policy Statement

Policy Number	Policy Statement
P21	Access to public fisheries must be maintained, improved and protected.
P22	Angling related infrastructure will be developed at key fisheries in partnership with other key stakeholders.

### Management Response

Response Number	Response
R36	The Service will endeavour to provide angling infrastructure (eg interpretative signs, boat ramps, and roads) in partnership with private land owners, councils and other government agencies, including seeking external funding for infrastructure and encouraging industry partners to support angler access projects.
R37	Facilitate, advocate and provide access to public waterways for angling on the subdivision of strategically important land.
R38	Educate anglers of their obligations while accessing fisheries on private property, to support local landowners and land managers.
R39	Provide resources and support the signage strategies defined in the Tasmanian Sport Fishing Tourism Development and Marketing Plan – Phase 1 Access Plan May 2006.
R40	Access projects will be evaluated based on angler response, participation and support. Further evaluation, including monitoring, will be undertaken for projects where increased angling pressure may impact trout populations. Appropriate internal report(s) will be prepared.

### ***Fishery Infrastructure***

A variety of infrastructure is needed to support angling and to promote and encourage participation. This infrastructure is used by other recreational users although most usage of facilities at inland waters is by anglers. It includes boat ramps, car parks, signage, navigation hazard warnings, tracks, roads, stiles, amenity blocks and moorings.

The provision of recreational related infrastructure is considered important in contributing to angler satisfaction and a positive angling experience. Often, infrastructure like boat ramps is fundamental to allow users to access the water and/or the fishery.

Presently, there is a range of infrastructure around the State that support anglers and other water users. This includes access tracks, boat ramps and associated car parking, signage and camping facilities, including toilet and shower facilities. In some locations this is adequate but other areas need improvement. Recently, through the MAST Recreational Boating Fund, there have been numerous improvements to boat ramps and boating structures throughout Tasmania. This is undertaken through direct consultation with stakeholders.

Responsibility for other infrastructure is vested in various agencies such as local councils, Parks and Wildlife Service and Hydro Tasmania. At times this responsibility is ill-defined. Public liability presents a problem for infrastructure owners and managers and is a significant

consideration in determining the nature, quality and number of facilities provided, along with the cost of construction and maintenance.

The Service will advocate and assist in the provision of a range of infrastructure including formal camping facilities where possible.

#### Policy Statement

Policy Number	Policy Statement
P23	Facilitate the development and improvement of angling related infrastructure.

#### Management Response

Response Number	Response
R41	Seek funding to develop and maintain formal camping facilities where possible.
R42	Develop, improve and maintain boat ramp and car parking infrastructure through MAST and other funding bodies.
R43	Develop and implement a signage plan.
R44	Develop a suite of basic angling related infrastructure at Family Fisheries and other key fisheries.

### **Wild Rainbow Trout River Fisheries**

River fisheries in Tasmania are generally based on brown trout, with the exception of a small number of rivers that support self-sustaining rainbow trout populations (ie upper Mersey, Florentine, Leven, Arve and Lawrence Rivulet and Weld rivers – in the North and South). Some other rivers (eg Plenty River, Tyenna River and Brumbys Creek) contain rainbow trout escapees from commercial salmonid fish farms. Limited numbers of rainbow trout may also occur in some river and creek systems, resulting from spilling farm dams stocked with domestic rainbow trout. Compared to domestic triploid stock, wild rainbow trout offer a greater angling challenge, have a greater resilience to disease, and are better placed to adapt to changing environmental conditions.

The low number of self-sustaining wild rainbow trout river fisheries within the State, provides a basis for highlighting their unique value within the Fishery and extending special management attention and protection to ensure their maintenance into the future. They offer an important fishing alternative for anglers and need to be formalised and managed accordingly to preserve these limited opportunities.

To recognise the value of these fisheries and to focus development, regulatory, fishery management and marketing opportunities, these fisheries will be defined and managed as discrete fisheries.

#### Policy Statement

Policy Number	Policy Statement
P24	The Service recognises the special importance of wild rainbow trout populations and will establish Wild Rainbow Trout River Fisheries.
P25	Manage, regulate, support and develop sections of rivers designated as Wild Rainbow Trout River Fisheries.
P26	Only wild rainbow trout will be used to supplement designated Wild Rainbow Trout River.

## Management Response

Response Number	Response
R45	Identify sections of rivers that merit a Wild Rainbow Trout River Fisheries designation and investigate their management including enhancement initiatives.
R46	The Mersey, Leven and Weld (in the North and South) rivers will have sections designated as a Wild Rainbow Trout River Fishery.
R47	The following regulations will apply to designated Wild Rainbow Trout River Fisheries. Season - Normal rainbow trout season Bag limit - 5 rainbow trout Size limit - 220 mm

## **Wild Rainbow and Brook Trout Lake Fisheries**

Lake fisheries in Tasmania are generally based on brown trout, but there are several lakes that maintain self-sustaining rainbow trout (eg Great Lake, Bronte Lagoon, Lake Burbury and Lake Meston) or brook trout fisheries (eg Clarence Lagoon, Lake Plimsoll, Lake Rolleston and Lake Selina). Whilst there are other popular waters that are stocked with rainbow and brook trout, it is the highly valued and limited numbers of self-sustaining wild rainbow and brook trout lake fisheries that need to be formally recognised and managed.

These fisheries often provide the wild brood stock for hatchery reared rainbow trout and brook trout. This stock is used to supplement the wild fisheries and to provide fry, fingerlings and yearlings to stock some of the more popular waters (eg Bradys chain of lakes, Brushy Lagoon and Lake Leake).

As with wild rainbow trout river fisheries, the low number of self-sustaining wild rainbow trout and brook trout lake fisheries provides a basis to highlight their unique value within Tasmania and to extend special management to these waters to ensure their protection.

Opportunities for anglers to fish for brook trout in different waters around the State have been increased in recent years. The expansion of fisheries with brook trout offer the angler a unique experience that was not readily available in the past. These stocked brook trout fisheries are still in their infancy and specific management prescriptions to help ensure their success need to be implemented.

## Policy Statement

Policy Number	Policy Statement
P27	The Service recognises the special importance of wild lake rainbow and brook trout populations and will manage, regulate, support and develop these lakes as recognised wild rainbow or brook trout fisheries.  The following waters will be recognised as having wild rainbow trout fisheries: Great Lake, Bronte Lagoon, Junction Lake, Lake Sorell, Lake Burbury, Lake Augusta, Lake Gordon and Lake Meston.  The following waters will be recognised as having wild brook trout fisheries: Clarence Lagoon, Lake Plimsoll, Lake Rolleston and Lake Selina.
P28	Only wild rainbow or brook trout will be used to supplement recognised wild rainbow or brook trout fisheries, respectively.

## Management Response

Response Number	Response
R48	Monitoring will be undertaken in recognised wild rainbow and brook trout lakes to help manage and maintain these fisheries.
R49	A daily bag limit of five brook trout will apply to all inland waters.

## **Wild Brown Trout River Fisheries**

The management of river trout fisheries is generally more difficult than trout fisheries in lakes. This is particularly the case where rivers are open to the sea, subjected to various human activities along their course, where free water flow can be obstructed, or which contain dense populations of predatory fish.

Many popular angling rivers in Tasmania are subject to various pressures ranging from low water flows to habitat degradation. When coupled with climatic variation, this can result in noticeable performance problems with river fisheries.

Research has indicated that stocking rivers with juvenile salmonids is relatively ineffective, as stocked fish do not contribute to catches in the short or long term. The factors that depress natural populations may also act on supplemented fish stocks.

Most river fisheries are based on wild brown trout. There are several self-sustaining populations of wild rainbow trout and also populations (or incidental fish) derived from domestic triploid stock that have escaped from farm dams. The Service is committed to maintaining wild stocks of brown trout and rainbow trout through natural processes unless fisheries are proven to require some form of intervention to improve their performance.

### **Policy Statement**

<b>Policy Number</b>	<b>Policy Statement</b>
P29	Maintain Tasmania's river fisheries as wild trout fisheries.
P30	Only wild hatchery reared brown trout juveniles and adult brown trout transferred from highland spawning runs and local nursery streams will be used to stock rivers.

### **Management Response**

<b>Response Number</b>	<b>Response</b>
R50	An evaluation of the effectiveness of specific river fish stockings will be undertaken when the scale, cost and the wider implementation of that specific stocking strategy warrants a cost/benefit analysis.
R51	The restricted use of adult brown trout transfers to key rivers will be continued when required.

## **Fisheries Under Pressure**

Whilst Tasmania is generally regarded as having an abundance of water, this water does not always precipitate in the regions that need it most. Recent and widespread successive droughts have reduced water levels in many still water fisheries (ie lakes, dams and reservoirs) around the State and river flows have also suffered markedly.

This impact on river flows has become more pronounced in recent years and is reflected across the State. Rivers generally hardest hit, occur in the drier parts of the State. It is also apparent that while some rivers may still receive their average yearly flow, the timing of these flows has changed such that during periods of trout spawning and egg incubation, flows are sometimes insufficient to maintain adequate trout recruitment.

These changes, coupled with a general increase in water demand and an often-degraded habitat, have significantly impacted on some of the State's previously well recognised river fisheries, to a point where these rivers can now only maintain a reduced head of trout. The Macquarie River is currently the only river managed as such a fishery with a reduced bag limit of five fish per day imposed to help maintain existing trout stocks.

Tasmania's lake and reservoir fisheries are also under extreme pressure as water resources are being acutely reduced. Great Lake, Arthurs Lake, Lake Sorell, Woods Lake, Tooms Lake, Lake Leake, Craighourne Dam and Lake Echo have struggled to be recharged to meet recurrent water demands. This has resulted in challenges to these fisheries including from

reduced access by anglers and changes in the behaviour of the fishery. These situations need to be managed with appropriate responses to address issues of concern. Sometimes this will mean altering infrastructure or changing regulations to meet these changed circumstances or pressures.

Special consideration will be given to imposing angling regulations that support the recovery and sustainability of stressed fisheries. These fisheries may have depressed trout populations or be subjected to heavy angling pressure. Regulations will also be reviewed for river fisheries where infrastructure developments, such as tracks and fishing focal points, are expected to increase angling pressure.

### Policy Statement

Policy Number	Policy Statement
P31	Fisheries showing obvious signs of environmental stress or with depressed trout populations will be managed and regulated to address specific issues to ensure their sustainability.

### Management Response

Response Number	Response
R52	The Service will compile a list of recognised river fisheries along with appropriate environmental, fisheries management and anecdotal indicators, to evaluate their performance.
R53	Continue to maintain the daily bag limit for the Macquarie River at five fish per day.
R54	The following rivers will have a reduced bag limit imposed of five fish per day: Clyde River, Coal River, Little Swanport River, Break O'Day River, Rubicon River and the Flowerdale River. This list will be reviewed and altered annually if necessary.
R55	Fishery regulations will be reviewed in response to increased fishing pressure arising from improved angler access.
R56	A five fish bag limit, with all fish to exceed a minimum length of 300 mm and only two fish exceeding 600 mm, is to apply at Woods Lake.

### **Potential Development Opportunities for New Fisheries**

Fishery has traditionally been based on brown trout, with limited additional angling opportunities for rainbow trout and to a lesser extent, brook trout.

The bream (*Acanthopagrus butcheri*) fishery is now recognised as a significant recreational angling resource and is growing rapidly in popularity. It is developing into a mainstream sports fishery and may present some management challenges in the future. This is an excellent example of how fisheries can grow and develop. This growth and development means the Service must continually adapt and review its management and regulation. In respect to the bream fishery, one issue to be addressed is a review of bream boundaries, since there remains considerable confusion amongst anglers over boundaries, licensing and regulations.

Specific rivers in the State have populations of estuary perch (*Macquaria colonorum*) that provide anglers with opportunities to target a highly valued but lesser known angling species. This fishery is largely unexploited by recreational fishers although there is evidence of illegal netting. A thorough assessment is needed to understand the status of estuary perch across its range and future management should be directed at supporting and developing the fishery. Given the present lack of knowledge, the implementation of protective measures to maintain recreational fishing opportunities for estuary perch, but to prevent the harvest of fish, is prudent.

## Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P32	The Service recognises the future importance of the bream fishery. Bream fishery regulations will be reviewed to promote the development of the fishery and facilitate a clear understanding of regulatory compliance.
P33	Other fisheries (eg. estuary perch fishery) will be developed if: <ul style="list-style-type: none"><li>▪ the fishery is sustainable;</li><li>▪ it provides cost effective outcomes; and</li><li>▪ public benefits are derived.</li></ul>

## Management Response

<b>Response Number</b>	<b>Response</b>
R57	Undertake an assessment of estuary perch stocks and evaluate the feasibility of developing, enhancing, licensing and promoting the estuary perch fishery.
R58	Implement the following regulations for estuary perch: <ul style="list-style-type: none"><li>▪ Catch and release;</li><li>▪ Minimum size limit not applicable – remove 230 mm minimum length size limit;</li><li>▪ Bag limit not applicable – remove 12 bag limit so all fish must be released.</li></ul>
R59	Review bream boundaries, particularly in the River Derwent and Browns River.

## ***Diversity of Fisheries***

Tasmania offers a variety of recreational trout fisheries. Each fishery has its own special feature or quality that is valued by anglers. This can be a natural environmental attribute (eg landscape, clear water, shallow shorelines), a natural feature of the fishery (fish quality, fish abundance or fish size) or a management value (eg regulation, fish stocking). Some fisheries are recognised for several values, others for a single value.

The most highly recognised and accepted value of the Fishery is the distinct nature of the wildness of Tasmania's brown trout and the environmental landscape of the Fishery. Not only does this provide a unique focal point for marketing and promotion, it is an attribute that is highly valued by the Tasmanian angling community. It is critical therefore that the iconic wild brown trout status of the Fishery is protected, maintained and enhanced. The overwhelming majority of anglers value this aspect passionately, and it is a key element for marketing the Fishery interstate and overseas.

The strengths of the Fishery are based on its natural values and attributes that contribute to unique fishery products. The Service's fishery management will be based around protecting and enhancing these core products which are: Premium Wild Trout Lake Fisheries, Wilderness Fisheries, Trophy Fisheries and Premium River Fisheries. In addition, the Service will endeavour to enhance Family Fisheries and Specially Regulated Fisheries (All Year Round Waters, Disabled Access Waters, Junior Waters, Event Waters) generally through management initiatives (eg fish stocking, and regulation) and infrastructure.

## Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P34	To provide a diversity of fisheries that offer a range of angling opportunities across the State.
P35	Protect and enhance the value and brand of wild brown trout in Tasmania.
P36	The following fishery products – Premium Wild Trout Lake Fisheries, Wilderness Fisheries, Trophy Fisheries, Premium River

Fisheries, Family Fisheries and Specially Regulated Fisheries – will be used as a foundation for marketing trout angling.

P37	Fisheries management will be directed at sustaining or developing these fishery products.
-----	---

#### Management Response

Response Number	Response
R60	Provide and promote fisheries that are suitable for family angling experiences and supported by infrastructure such as picnic areas and toilets.
R61	Expand the number of fisheries managed exclusively for young anglers, or create areas for young anglers at other fisheries.
R62	Expand the number of fisheries managed exclusively for anglers with a disability and/or provide suitable infrastructure for these anglers at other fisheries.
R63	Ensure fish stocking is appropriately planned and implemented to support fishery diversity and fishery products consistent with the values of each water.
R64	Apply product names consistently in marketing and promotional initiatives.

### ***Triploid Trout Stocking in Non-recruiting Waters***

Presently, diploid brown trout are stocked into public fisheries where trout recruitment is limited. Farm dams also generally require regular stocking (where public access is granted), as most do not have adequate spawning streams or habitat. In fisheries where natural spawning does not occur, trout can become stressed and egg-bound. This can be avoided through the use of triploid brown and rainbow trout. Triploid trout are sterile, so energy that is normally used in reproductive development is re-directed to body growth and spawning behaviour is absent. Generally, triploid trout growth rates are higher than normal diploid trout, and they do not experience the stresses related to spawning.

#### Policy Statement

Policy Number	Policy Statement
P38	Triploid trout will be used to supplement fisheries with limited spawning habitat (especially designated fisheries and farm dams) or to enhance fisheries (eg Lake Dudley, Lake Chipman and Little Blue Lagoon, Four Springs Lake).

#### Management Response

Response Number	Response
R65	Triploid brown trout (when available) will be stocked into Lake Crescent, Penstock Lagoon, Curries River Reservoir, Four Springs Lake, Blackmans Lagoon, Big Lagoon, Big Waterhouse Lake, Little Waterhouse Lake, Lake Dudley, Lake Chipman, Tooms Lake and triploid rainbow trout (when available) in Lake Dudley, Lake Chipman, Little Blue Lagoon and Four Springs Lake.
R66	Undertake appropriate hatchery production planning to meet the needs of triploid trout stockings.

### ***All Year Trout Waters***

Several lake fisheries are open all year to trout angling. Presently, these are Brushy Lagoon, Meadowbank Lake, Lake Pedder, Lake Gordon, Great Lake, Lake Burbury, Lake Barrington and Craighourne Dam. A number of rivers could also be opened year-round to provide extended licensed fishing opportunities after the season closes. Some interest has been expressed in extending the year-round angling season to the lower reaches of major rivers, which can sustain increased angling pressure. Opportunities also exist in larger river

estuaries near urban centres and in more remote estuaries. Any extension of this initiative needs to be accompanied by clear regulations, particularly in regard to boundaries.

#### Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P39	Maintain and expand all year trout angling opportunities, with special consideration to fisheries near population centres and the provision of equitable regional access.
P40	Year-round fishing will be capped at eight lakes and the lower reaches of four rivers.

#### Management Response

<b>Response Number</b>	<b>Response</b>
R67	Open the lower reaches of the Derwent, Huon, Tamar, and Leven rivers to all year angling on a trial basis.
R68	Ensure all year-round river angling boundaries are clearly defined.

**Table 2 Marketing Products for the Tasmanian Inland Recreational Fishery**

<b>FISHERY PRODUCTS</b>	<b>DEFINITION</b>	<b>FUTURE DIRECTION</b>	<b>NOMINATED FISHERIES</b>
<b>Premium Wild Trout Lake Fisheries</b>	Important cornerstone lake fisheries that are highly valued by the angling community.	Protect the values and sustainability of each premium lake fishery.	Arthurs Lake, Great Lake, Little Pine Lagoon, Penstock Lagoon, Bronte Lagoon, Huntsman Lake, Dee Lagoon, Lake Echo, Lake St Clair and Lake Sorell (upon rehabilitation).
<b>Wilderness Fisheries</b>	Fisheries located in remote areas, generally accessible only by trekking and subjected to low angling pressure.	Maintain and protect values of wilderness fisheries. Maintain prohibition on helicopter access to wilderness fisheries.	Western Lakes and Mt Field lakes.
<b>Trophy Fisheries</b>	Fisheries renowned for large trophy sized trout.	Continue to support present natural and artificial trophy fisheries. Rehabilitate non-performing trophy fisheries.	Natural trophy fisheries – East Rocky Lagoon, First Lagoon, Blackmans Lagoon, Lake Crescent, Tin Hut Lagoon, Curries River Reservoir, Four Springs Lake, Pleman River and Huon River. Artificial trophy fisheries – Craighourne Dam, Lake Barrington, Lake Meadowbank and Bradys Lake.
<b>Premium River Fisheries</b>	River fisheries renowned for specific fishery values and prime fishing.	Manage and regulate premium rivers to ensure sustainability and fishery quality.	River Leven, Upper Mersey River, South Esk River, Macquarie River, Brumbys Creek, Break O’Day River, Tyenna River, River Derwent, St Patricks River and Weld River (in the North and South).
<b>Family Fisheries</b>	Well stocked fisheries, generally with a diversity of salmonids of various sizes, including trophy sized Atlantic salmon.	Maintain the quality of family fisheries through enhanced stocking regimes, provision of angling infrastructure, and family friendly regulation.	Craighourne Dam, Meadowbank Lake, Brushy Lagoon, Lake Barrington and Bradys Lake.
<b>Specially Regulated Fisheries</b>			
<b>All Year Round Waters</b>	Fisheries that can be fished all year round.	Continue limited provision of fisheries in lakes and rivers open all year round.	Craighourne Dam, Meadowbank Lake, Brushy Lagoon, Lake Barrington, Trevallyn Lake, Great Lake, Lake Pedder, Lake Burbury, Lake Gordon; and the lower Derwent, Huon, Tamar and Leven rivers.
<b>Disabled Access Waters</b>	Fisheries regulated for exclusive use by disabled anglers, and with disabled person friendly facilities.	Expand and improve the fisheries available for disabled anglers.	Risdon Brook Dam, Plenty River, Middle Myrtle Pond and an area of Four Springs Lake.
<b>Junior Waters</b>	Fisheries that are generally regulated for exclusive use by junior anglers.	Expand the number of waters used as junior fisheries.	Lake Waverley.
<b>Event waters</b>	Fisheries used in promotional events and managed to meet specific goals of the event.	Provide specially managed waters that meet the needs of the event.	Fromberg’s Dam, Pawleena Dam, Taylor’s Dam (Eiderslie), Robertson’s Dam (Yolla), Lake Waverly, Lake Dulverton, Brumbys Creek and Waratah Dams.

## Conservation and Protection

**GOAL To manage and develop the Fishery whilst maintaining biodiversity.**

Of the 12 listed threatened freshwater fish species in Tasmania, eight of these species maintain populations that co-exist to some extent with salmonids (*Galaxias tanycephalus*, *G. parvus*, *G. auratus*, *Paragalaxias julianus*, *P. electroides*, *P. dissimilis*, *P. mesotes* and one Prototroctidae - *Prototroctes maraena*). However, it would be misleading to imply that there are no impacts because these species co-exist. Impacts may be reflected as a changed fauna community, containing a reduced abundance of species. Some species are able to co-exist with salmonids due to their particular life history characteristics or reproductive strategies.

The remaining four species (*G. pedderensis*, *G. fontanus*, *G. johnstoni* and *Galaxiella pusilla*), may be the most susceptible to the impacts of salmonids. There are no records of any of these four species co-existing with brown trout. Brook trout co-exists with *G. johnstoni* in Clarence Lagoon.

All 11 threatened galaxiid species spend their entire life cycle in freshwater and have naturally limited distributions. They have been listed as threatened due to their limited distributions, declining populations, or because they are at risk of decline due to introduced species and/or habitat degradation. These threats apply in different ways to different species.

A 'Recovery Plan: Tasmanian Galaxiidae 2006–2010', that outlines conservation measures for the 11 threatened species of Galaxiidae in Tasmania, has recently been endorsed by the Commonwealth and State governments.

A national recovery plan for Australian grayling is currently being prepared by the Department of Sustainability and Environment in Victoria. This will define conservation measures for the species.

Also, a number of biosecurity pests and diseases such as Didymo (*Didymosphenia geminata*), Chytrid frog fungus and platypus fungal disease need to be considered and managed so they are diminished as a threat to aquatic biodiversity. It is important that risks through angling are reduced and anglers are engaged and recruited to assist in biosecurity actions and strategies.

### **Galaxiidae Recovery Plan and Fisheries Management Plans**

The 'Recovery Plan: Tasmanian Galaxiidae 2006-2010' provides the over-arching monitoring and recovery objectives of the State's listed freshwater threatened galaxiid species. This document provides recovery objectives, actions and management prescriptions and is integral to the co-management of galaxiids and salmonids.

Existing fishery management plans such as those for the Western Lakes Wilderness Fishery, Great Lake and Penstock Lagoon provide further direction and objectives to protect and manage the threatened freshwater fauna that exist in these recreational fisheries.

Future fisheries management plans will also need to consider mitigation strategies to manage significant potential risk(s) to threatened fish. An obvious strategy is the manipulation of salmonid numbers, biomass and/or species. This could be achieved by a number of different mechanisms (spawning manipulation, stocking regimes, salmonid removal etc.) to minimise risks.

#### Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P41	The Service will implement actions in the Recovery Plan: Tasmanian Galaxiidae 2006–2010 as funding becomes available.

P42	The Service will ensure that fisheries management plans are consistent with all threatened fish species recovery plans.
-----	---

### Management Response

Response Number	Response
R69	The Service will continue to apply for funding and implement the 'Recovery Plan: Tasmanian Galaxiidae 2006–2010'.
R70	The conservation orientated actions contained within the existing FMP's need to be prioritised based on threats to threatened aquatic fauna and funding.
R71	The preparation of future FMP's will be prioritised considering the presence of threatened fish species.
R72	Where appropriate future FMP's will include relevant strategies to mitigate against potential significant impacts of salmonids on threatened fish.

### **Maintenance of Trout Free Waters**

Since salmonids were introduced into the State, they have become widely distributed either by human introduction or their own ability to colonise new waters. Waters remaining trout free generally exist due to instream barriers and where the catchments are isolated and remote.

The maintenance of trout free waters is important in maintaining both threatened fish species that may be present and other important natural freshwater faunal assemblages.

### Policy Statement

Policy Number	Policy Statement
P43	Waters identified as trout free will not be stocked with salmonids.
P44	Where feasible, salmonids will be eradicated or removed from inland waters to protect high priority conservation or other special values.

### Management Response

Response Number	Response
R73	The Service will identify and prepare a list of waters that are currently trout free and determine factors that have contributed to the maintenance of this status. If a risk of trout encroachment is determined, the Service will employ measures to minimise this risk.

### **Biosecurity**

In respect to this Plan, biosecurity means the protection of Tasmania's natural aquatic resources from biological invasion and threats. Presently, Tasmania is managing several aquatic diseases and pests (eg Chytrid frog fungus, Canadian pondweed and European carp) as well as addressing potential threats (eg Didymo) to inland waters. A Didymo promotional campaign is under way to increase awareness amongst anglers and visitors to the State to take measures to reduce the risks of bringing Didymo into Tasmania and Australia.

The Service will take measures to address these issues and engage other stakeholders (eg AAT, Hydro and DPIW) to assist in reducing the risks of pests and diseases. The Service will develop policies to support biosecurity strategies and to implement any necessary fish specific protocols and practices to reduce risks.

## Policy Statement

<b>Policy Number</b>	<b>Policy Statement</b>
P45	Develop policies and strategies to address aquatic biosecurity issues with priority given to pest fish, fish translocation and Didymo.
P46	The Service will adopt, implement and promote policies and practices to support aquatic biosecurity strategies and address threats as they arise and/or identified (eg Check, Clean and Dry – Didymo strategy).

## Management Response

<b>Response Number</b>	<b>Response</b>
R74	Engage with IFAC, AAT, angling groups and other stakeholders to develop biosecurity policies and practices.
R75	Facilitate and promote the adoption of biosecurity policies and practices.
R76	Develop plans to address biosecurity issues such as fish translocation, Didymo and pest fish.

## ***Co-management Conservation Measures***

Many popular trout waters are also home to some of the State's listed threatened fish species. In most cases these waters have maintained co-existing populations for over 100 years. These generally large waters either maintain self-sustaining trout populations or are at times supplemented with additional trout stockings.

Maintaining or improving the current population balance in favour of threatened fish species, where they co-exist with salmonids, is important for ensuring the continued co-existence of all species. Impacts should be minimised by not exceeding historical stocking levels and linking these stocking levels with water level management.

Many of these waters are regulated for either hydro power generation or irrigation requirements. The resulting water level fluctuations can affect available habitat for all species present (ie shelter, spawning habitat, food supply etc.). The timing of these draw-downs and resulting water levels should be managed with these factors in mind.

Other measures include ensuring that any trout stocking is regulated and conducted as authorised. Any proposed new stockings into farm dams are investigated, where appropriate, for potential impacts on existing native fish. New dam applications also have the potential to impact on native fish passage and are currently assessed for potential impacts through the DPIW dam approvals process.

In several of the popular recreational fishing waters that contain co-existing populations of salmonids and threatened fish, there is limited opportunity for trout spawning. These waters are currently stocked with diploid fish that under favourable conditions may maintain marginal self-sustaining populations. By stocking these waters into the future with triploid fish, the salmonid population will, in time, become wholly dependent on stocking, providing a mechanism to better manipulate trout numbers if significant impacts on threatened fish are identified.

There are examples where one salmonid species is better suited to maintain co-existing populations with threatened species than other salmonids (eg. Clarence galaxias and brook trout in Clarence Lagoon). The predatory relationship between the different species of salmonids and threatened fish is poorly understood, but there is potential to manage some waters to minimise direct impacts.

## Policy Statement

Policy Number	Policy Statement
P47	Salmonid stockings will remain at or below historical levels in waters that contain listed threatened fish.
P48	Stocking rates will reflect current and projected water levels in regard to threatened fish habitat availability.
P49	The Service will provide advocacy, advice and input into the establishment of water management plans where threatened fish exist.
P50	Farm dam stocking applications must be approved by the Director of Inland Fisheries prior to stocking and any stockings must be conducted by a person authorised by the Director of Inland Fisheries.
P51	Fish passage issues will continue to be assessed under the DPIW Assessment Committee for Dam Construction approvals process.
P52	Salmonid stocking requests will be refused for farm dams in waterways that pose a risk to populations of threatened species, specific values, or that threaten trout free waters.
P53	Identified waters will be stocked with triploid salmonids to provide a mechanism of controlling salmonid numbers.
P54	Relevant research into the interactions between salmonids and threatened fish will be encouraged and supported.

## Management Response

Response Number	Response		
	Water	Species	
R77	Lake Sorell Lake Crescent	Golden galaxias	<ul style="list-style-type: none"> <li>▪ Maintain salmonid populations within historical abundance levels.</li> <li>▪ Any eel stocking will be managed within historical levels.</li> <li>▪ Salmonid stocking rates will be linked to water levels and consequent habitat availability for golden galaxias.</li> <li>▪ Spawning brown trout will be harvested to limit their abundance if required.<sup>1</sup></li> <li>▪ Maintain input into the water level management of these waters.</li> </ul>
R78	Clarence Lagoon	Clarence galaxias	<ul style="list-style-type: none"> <li>▪ Maintain Clarence Lagoon as a wild brook trout only water.</li> <li>▪ Any brook trout supplementation in Clarence Lagoon will be limited to historical abundance levels to minimise risk to Clarence galaxias.</li> <li>▪ Ensure there is no salmonid stocking in other waters that harbour populations of Clarence galaxias.<sup>1</sup></li> <li>▪ Eradicate or control any salmonids detected in waters (other than Clarence Lagoon) that harbour Clarence galaxias.</li> </ul>

R79	Woods Lake Arthurs Lake	Saddled galaxias Arthurs paragalaxias	<ul style="list-style-type: none"> <li>▪ Salmonids will not be stocked into Woods or Arthurs lakes.</li> <li>▪ Natural salmonid recruitment in Woods Lake will be limited if saddled galaxias abundance starts to significantly decline, or in response to low water levels and habitat availability.<sup>1</sup></li> <li>▪ Maintain input into the water level management of these waters.</li> </ul>
R80	Great Lake Shannon Lagoon Penstock Lagoon	Great Lake paragalaxias Shannon paragalaxias	<ul style="list-style-type: none"> <li>▪ Maintain salmonid populations within historical abundance levels.</li> <li>▪ Ensure that any salmonid stocking does not have unsustainable impacts on either the Great Lake or the Shannon paragalaxias.<sup>1</sup></li> <li>▪ Maintain input into the water level management of these waters.</li> </ul>
R81	Big Waterhouse Lake <sup>2</sup> Blackmans Lagoon <sup>2</sup>	Dwarf galaxias	<ul style="list-style-type: none"> <li>▪ Salmonid stockings will take account of potential dwarf galaxias populations and will not exceed historical levels.</li> <li>▪ Salmonid stocking rates will be linked to water levels and consequent habitat availability for dwarf galaxias.</li> <li>▪ When possible triploid trout will be used to stock these waters.</li> </ul>

<sup>1</sup> Monitoring to detect threatened species population abundance changes and/or trout introductions, will be conducted as part of the monitoring detailed in the 'Recovery Plan: Tasmanian Galaxiidae 2006–2010'.

<sup>2</sup> These waters are within the known distribution range of this species (may or may not be present).

**Appendix 1(a) Guide to Trout Stocking in Inland Waters – Annual Frequency**

Fishery Management Region	Water	Brown trout				Rainbow trout				Brook trout				Atlantic salmon		
		Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate	Strain	Rate	Strain	Stage	Rate	Stage	Rate
Central	Bradys Chain	adult	high	wild	fingerling	high	domestic	yearling	high	domestic	adult	medium				
Central	Bradys Chain	fingerling	medium	wild												
Central	Bronte Lagoon				fingerling	medium	wild	fingerling	medium	domestic						
Central	Bruisers Lagoon	adult	low	wild												
Central	Camerons Lagoon	adult	low	wild												
Central	Carters Lake	adult	medium	wild												
Central	Carters Lake	fingerling	medium	wild												
Central	Clarence Lagoon				fingerling	medium	wild	fingerling	medium	wild						
Central	Dee Lagoon				fingerling	medium	wild	yearling	medium	domestic						
Central	Emma Tarns	fry <sup>1</sup>	low	wild												
Central	Great Lake				fingerling	high	wild									
Central	Lake Botsford	adult	low	wild												
Central	Lake Botsford	fingerling	medium	wild												
Central	Lake Chipman	fry <sup>1</sup>	low	wild	fingerling	medium	wild									
Central	Lake Duncan	adult	low	wild												
Central	Lake Echo				fingerling	high	wild									
Central	Lake Lynch	adult	low	wild												
Central	Lake Paget	adult	low	wild												
Central	Penstock Lagoon	adult	medium	wild	fry <sup>1</sup>	medium	wild									
Central	Penstock Lagoon	fry <sup>1</sup>	medium	wild												
Central	Rocky Lagoon	adult	low	wild												
Central	Second Lagoon	adult	low	wild												
East	Lake Dulverton				adult <sup>1</sup>	low	domestic									
East	Lake Leake				fingerling	medium	domestic	yearling	high	domestic						
North	Beaconsfield dams	fry <sup>1</sup>	low	wild	fingerling <sup>1</sup>	low	domestic									
North	Big Waterhouse Lake				fingerling <sup>1</sup>	medium	domestic									
North	Blackmans Lagoon	fingerling <sup>1</sup>	low	wild	fingerling <sup>1</sup>	medium	domestic									
North	Curries River Reservoir	adult	medium	wild	fingerling <sup>1</sup>	medium	domestic									
North	Curries River Reservoir	fingerling <sup>1</sup>	medium	wild	fingerling <sup>1</sup>	medium	domestic									
North	Lake Trevallyn													adult	medium	
North	Lake Waverly				adult <sup>1</sup>	low	domestic									
North	Lauriston Lake				fry <sup>1</sup>	low	domestic									
North	Little Waterhouse Lake	fingerling <sup>1</sup>	low	wild	fingerling <sup>1</sup>	low	domestic									
North	St Helens waters	fry <sup>2</sup>	low	wild	fingerling <sup>1</sup>	low	domestic									

Note: <sup>1</sup> triploid, <sup>2</sup> diploid and triploid; all Atlantic salmon are domestic fish.

**Appendix 1(a) Guide to Trout Stocking in Inland Waters – Annual Frequency (Continued)**

Fishery Management Region	Water	Brown trout			Rainbow trout			Brook trout			Atlantic salmon		
		Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate	
North-West	Brushy Lagoon	fingerling <sup>1</sup>	medium	wild	fingerling <sup>1</sup>	medium	domestic	yearling	medium	domestic	adult	medium	
North-West	Brushy Lagoon	adult	medium	wild									
North-West	Four Springs Lake	adult	medium	wild	fingerling <sup>1</sup>	medium	domestic						
North-West	Four Springs Lake	fingerling <sup>1</sup>	medium	wild									
North-West	Lake Barrington				fingerling	medium	domestic				adult	medium	
North-West	Lake Isandulla				fry <sup>1</sup>	low	domestic						
North-West	Lake Kara	adult	low	wild				yearling	low	domestic			
North-West	Lake Mikany				yearling	medium	domestic						
North-West	Lake Rowallan				fingerling <sup>2</sup>	high	domestic						
North-West	Mersey River	adult	medium	wild									
North-West	North Motton (Ulverstone RU)	fry <sup>2</sup>	high	wild	fry <sup>2</sup>	high	domestic						
North-West	River Leven				fingerling	medium	wild						
South	Big Lagoon (Bruny Island)	fry <sup>1</sup>	low	wild									
South	Cluny Lagoon				fingerling <sup>2</sup>	medium	domestic						
South	Lake Repulse				fingerling <sup>2</sup>	medium	domestic						
South	Meadowbank Lake	adult	high	wild	yearling <sup>2</sup>	high	domestic				adult	medium	
South	Meadowbank Lake	fingerling	medium	wild									
South	Pawleena Dam	adult	low	wild	adult <sup>1</sup>	low	domestic						
South	Pawleena Dam	fry	low	wild									

Note: <sup>1</sup> triploid, <sup>2</sup> diploid and triploid; all Atlantic salmon are domestic fish.

**Appendix 1(b) Guide to Trout Stocking in Inland Waters – Biennial Frequency**

Fishery Management	Brown trout			Rainbow trout			Brook trout			Atlantic salmon		
	Water	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate
Central	Little Blue Lagoon				fry <sup>1</sup>	low	wild					
Central	Third Lagoon	fry	low	wild								
East	Lake Rostrevor	fry <sup>1</sup>	low	wild								
North	Pioneer Mine Hole				fingerling <sup>1</sup>	low	domestic					
North-West	Guide Dam				fingerling	medium	domestic					
North-West	Pet Dam				fingerling <sup>2</sup>	medium	domestic					
South	Lake Skinner				fry <sup>1</sup>	low	wild					
South	Risdon Brook Dam				fingerling <sup>1</sup>	medium	domestic					
West	Lake Mackintosh				fingerling	high	domestic					
West	Lake Plimsoll							fry	high	wild		
West	Lake Rolleston							fry	low	wild		
West	Lake Rosebery				fingerling <sup>1</sup>	high	domestic					
West	Lake Selina							fry	low	wild		
West	Waratah Bishcoff Reservoir				fingerling <sup>2</sup>	medium	domestic					
West	Waratah Reservoir				fingerling <sup>2</sup>	medium	domestic					

Note: <sup>1</sup> triploid, <sup>2</sup> diploid and triploid; all Atlantic salmon are domestic fish.

**Appendix 1(c) Guide to Trout Stocking in Inland Waters – Farm Dam Trout Stocking – Annual Frequency**

Fishery Management	Brown trout			Rainbow trout			Brook trout			Atlantic salmon		
	Water	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate
North-West	Bishopsbourne dams	fingerling <sup>2</sup>	low	wild								
North-West	Frombergs Dam				fingerling <sup>2</sup>	low	domestic				adult	low
North-West	Mitchelsons Dam	fingerling <sup>1</sup>	low	wild	fingerling <sup>2</sup>	low	domestic					
North-West	Robertsons Dam				fingerling <sup>2</sup>	low	domestic					
North-West	Yolla Dam				fingerling <sup>2</sup>	low	domestic					
North	Legge's Dam	fingerling <sup>1</sup>	medium	wild								
South	Taylor's Dam (Elderslie)				adult	low	domestic					

Note: <sup>1</sup> triploid, <sup>2</sup> diploid and triploid; all Atlantic salmon are domestic fish.

**Appendix 1(d) Guide to Trout Stocking in Inland Waters – Quadriennial Frequency**

Fishery Management	Brown trout			Rainbow trout			Brook trout			Atlantic salmon		
Region	Water	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate
North	Rossarden				fingerling <sup>1</sup>	medium	domestic					
Central	Lake Dudley	fry <sup>1</sup>	low	wild	fry <sup>1</sup>	low	wild					
Central	First Lagoon	fry <sup>1</sup>	low	wild								

Note: <sup>1</sup> triploid, <sup>2</sup> diploid and triploid; all Atlantic salmon are domestic fish.

**Appendix 1(e) Guide to Trout Stocking in Inland Waters – Moratorium Until Issues Resolved**

Fishery Management	Brown trout			Rainbow trout			Brook trout			Atlantic salmon		
Region	Water	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate	Strain	Stage	Rate
Central	Lagoon of Islands				fingerling	medium	wild					
Central	Shannon Lagoon	fingerling <sup>2</sup>	low	wild								
East	Tooms Lake	fingerling <sup>2</sup>	high	wild	fingerling <sup>1</sup>	high	domestic					
South	Craigbourne Dam	adult	low	wild	fingerling	medium	domestic	yearling	medium	domestic	adult	high
South	Craigbourne Dam	fingerling	medium	wild								
South	Lake Crescent	adult	low	wild	fingerling <sup>2</sup>	medium	domestic					
South	Lake Crescent	fingerling <sup>1</sup>	low	wild								
South	Lake Sorell				fingerling	medium	wild					

Note: <sup>1</sup> triploid, <sup>2</sup> diploid and triploid; all Atlantic salmon are domestic fish.

**Legend Fish Stocking Rate and Fish Size Matrix Guide**

Stocking Rate (Numbers of fish)	Stage			
	Fry (1–5 g)	Fingerling (5–50 g)	Yearling (50–200 g)	Adults (200 g)
Low	less than 5 000	less than 5 000	less than 1 000	less than 300
Medium	5 000–20 000	5 000–20 000	1 000–9 000	300–1 000
High	greater than 20 000	greater than 20 000	greater than 9 000	greater than 1 000



Tasmania

Explore the possibilities

**CONTACT DETAILS**

Inland Fisheries Service  
17 Back River Road,  
New Norfolk, 7140  
Ph: 1300 INFISH  
[www.infish.tas.gov.au](http://www.infish.tas.gov.au)