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1. FRDC FINAL REPORT

A VISION OF TASMANIA'S AQUACULTURE AND FISHING INDUSTRY BY 2005 AND INDUSTRY DEVELOPMENT PLANS TO ACHIEVE IT

Colin D Buxton

December 2001

FRDC Project No. 1995/160

FISHERIES RESEARCH & DEVELOPMENT CORPORATION

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Tasmanian Aquaculture & Fisheries Institute
University of Tasmania

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4. Project Summary

1995/160 A vision of Tasmania's aquaculture and fishing industry by 2005 and industry development plans to achieve it

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NON TECHNICAL SUMMARY

The Tasmanian Fisheries Research Advisory Board (TasFRAB), established in 1992, recognised a need for industry-wide strategic development plans to assist the Fisheries Research and Development Corporation (FRDC) in the selection of projects suitable for funding. To facilitate this process there was also a need to foster a greater collaboration between research institutions, industry and government.

The objectives of this study were to:

– develop a ten year vision for Tasmania's aquaculture and fishing industries;

– identify the strategic developments and pathways required for that vision; and

– develop strategic plans for realising that vision through R&D, regulatory changes and better links between the public and private sectors.

Several workshops were conducted in each of the Aquaculture and Wild Harvest sectors to establish a vision and industry development plans and an action plan to achieve them. A range of stakeholders from industry, government and research providers in Tasmania attended the workshops.

These workshops gave rise to four tactical planning working groups aimed at progressing specific issues including:

- industry profitability
- sustainability and security
- R&D, and
- innovation and leadership.

The outputs of the workshops included a separate Industry Action Plan and Strategic Plan for both the Aquaculture and Wild Harvest sectors in Tasmania.

Arising out of the heightened discussion between stakeholders, the State Government of Tasmania and the University of Tasmania entered into a joint venture partnership agreement in July 1998, forming the Tasmanian Aquaculture and Fisheries Institute (TAFI). Industry peak bodies, such as the Tasmanian Aquaculture Council saw this development as a direct and outcome of this project, one that recognised the opportunity and benefits that would flow from partnership.

A key component of the TAFI partnership was to build on the communication and linkage between stakeholders. This was achieved through a number of Research Advisory Groups (RAGs). Each RAG has a broad representation including Government (DPIWE), Industry (all recreational and commercial sectors), Community (local government and NGOs) and Research Providers (TAFI, CSIRO, AMC). The deliberations and outputs are therefore representative of all Tasmania stakeholders.

In turn a major task of the RAGs under the auspices of this project was the development of a Tasmanian Fisheries and Aquaculture Strategic Research Plan (1999-2003) to assist the State in the prioritisation of R&D in all sectors.

To summarise, the project has been a catalyst for improving industry and government communication and raising the awareness of the priorities within different sectors. The beneficiaries include the aquaculture and wild harvest industry sectors, recreational fishing, state and local government, research providers and the general community. The strategic plans served to focus resources on high priority issues and assisted the various stakeholders to co-ordinate their activities and promote collaborative linkages. In particular the R&D plan served to identify priorities, partnerships and potential funding sources, and has resulted in significantly increased levels of funding especially from Federal initiatives.

KEYWORDS:

Research plans, aquaculture, fisheries, marine environment, Tasmania, strategic plans

5. Background

The Tasmanian Fisheries Research Advisory Board (TasFRAB) was established in 1992 to assist the Fisheries Research and Development Corporation (FRDC) in the selection of projects suitable for funding either the FRDC Trust or the 'TasFRAB Trust Fund'. The projects considered by the Board are those which have some direct benefit to the State. TasFRAB also seeks to promote collaborative research opportunities between the various research providers and to encourage industry to participate in research. TasFRAB seeks to raise the profile of marine research in Tasmania and encourage the communication of research activities and findings to the wider community.

At the time of the establishment of this project, strategic research planning on a sector by sector basis was accomplished by Research Advisory Groups (RAGs) convened by

the then Department of Primary Industry and Fisheries. Separate RAGs included Scalefish, Abalone, Jack Mackerel and Rock Lobster and each had broad stakeholder representation with membership drawn from industry and all major public- and private-sector research providers.

6. Need

The TasFRAB believed that the development of the industry in Tasmania would be well served by broad industry development plans. Given that R&D resources were limited, it was critical that resources were allocated to areas of highest priority and that the research effort of the major institutions was coordinated. This could only really be facilitated by the production of industry-wide development plans that were capable of examining the relative priority of issues between sectors.

The Board believed that its work in assessing projects and fostering collaboration would be greatly enhanced by industry development plans. Such plans would influence the types of research projects developed by institutions and would give a clear background against which the Board could assess the desirability of projects. Development plans would identify current capability and gaps, and so would help institutions to plan how they should position themselves to best assist industry development.

There was also a need to foster collaboration between research institutions and industry, and development plans should address strategies for involving industry through partnering, syndication, etc.

7. Objectives

1. To develop a ten year vision for Tasmania's aquaculture and fishing industries.
2. To identify the strategic developments and pathways required for that vision.
3. To develop strategic plans for realising that vision through R&D, regulatory changes and better links between the public and private sectors.

8. Methods

The vision and industry development plans were developed through workshops that were followed by *ad hoc* groups to develop strategies and action plans. These were to be followed by a further workshop to finalise strategies and followed by an implementation phase. It was proposed that two successive industry development plans were to be developed over the course of 1995/1996. The following schedule was proposed:

AQUACULTURE

Initial workshop	January/February 1996
Second workshop (finalise and sign-off)	May/June 1996

FISHING AND PROCESSING INDUSTRY

Initial workshop	May 1996
Second workshop (finalise and sign-off)	October 1996

Each workshop to have around 20 participants with the following composition:

Industry - Tasmanian Aquaculture Council/Fishing Industry Council industry leaders from each major sector (10).

Government - DPIF Corporate (1), DPIF Wild Fishery Management/Marine Farm Management (1).

Service Providers - DPIF Research (2), DPIF Export Market and Industry Development (1), University of Tasmania (2), CSIRO Division of Fisheries (1).

Other - TasFRAB Chair (1), Facilitator (1).

Each workshop would have a similar program. For the initial workshops the format was:

Day 1

6.30-7.30 pm	Introduction and expectations. Workshop objectives.
8.00-9.30 pm	Identify potential and barriers for the industry.

Day 2

8.30-12.00 am	Identify vision of the industry in the next decade.
1.00-4.00 pm	Identify and prioritise the strategy and pathways to achieve that vision.
4.30-6.00 pm	Identify the implementation process and the people responsible.

The workshops were to be followed by a number of small *ad hoc* working groups charged with developing detailed action plans for each aspect of the strategy for achieving the vision. This in turn was concluded by a one day workshop to finalise plans and to cement on-going commitment to the process.

These workshops would have the following agenda:

9.30-10.00 am	Confirmation of vision and strategy.
10.00-12.00 am	Presentation of action plans by convenors of working groups.
1.00-4.00 pm	Prioritise and ratify action plans. Plan implementation and determine on-going commitment.

The outputs from the workshop were to develop a set of simple vision statements and prioritised development plans covering the R&D, planning and strategic linkages that need to be developed to support the vision.

9. Results and Discussion

9.1 Aquaculture Strategic Plan

The first workshop to develop a vision and industry development plan for the Tasmanian aquaculture industry was held in February 1996. Thirteen industry leaders and 5 senior state government officials attended this workshop. The outcome of this workshop is summarised in Attachment 1 – TASMANIAN AQUACULTURE INDUSTRY STRATEGIC PLAN 1996-2006.

The workshop gave rise to four tactical planning working groups aimed at progressing specific issues including:

- industry profitability
- sustainability and security
- R&D, and
- innovation and leadership.

This was followed by a second workshop to develop an industry development plan in April 1996. The outcome of this workshop is summarised in Attachment 2 - TASMANIAN AQUACULTURE INDUSTRY ACTION PLAN 1996-2006.

9.2 Wild Harvest Fishing Industry Strategic Plan

The first workshop to develop a vision and industry development plan for the Tasmanian wildfisheries industry was held over two days in March 1997. Eleven industry leaders and 8 senior state government officials attended this workshop. The outcome of this workshop is summarised in Attachment 3 – TASMANIA'S WILD HARVEST FISHING INDUSTRY STRATEGIC PLAN 1996-2006.

The workshop gave rise to three tactical planning working groups aimed at progressing specific issues for the second workshop including:

- industry profitability,
- industry development, and
- resource sustainability.

This was followed by a second workshop to develop an industry development plan in June 1996. The outcome of this workshop is summarised in Attachment 4 – TASMANIA'S WILD HARVEST FISHING INDUSTRY ACTION PLAN 1996-2006.

9.3 Tasmanian Fisheries and Aquaculture Five Year Strategic Research Plans 1999-2004

In July1998 the State Government of Tasmania and the University of Tasmania entered into a joint venture partnership agreement to form the Tasmanian Aquaculture and Fisheries Institute (TAFI). Industry peak bodies, such as the Tasmanian Aquaculture Council saw this development as a direct outcome of the discussions developed though

the Vision project, recognising the opportunity and benefits that would flow from the partnership.

A key component of the TAFI partnership was the formal inclusion of the RAG structure into the research planning and review process. Two additional RAGs were developed including Marine Environment and Aquaculture. In addition, the Rock Lobster RAG was expanded to include giant crab and renamed the Crustacean RAG and the Jack Mackerel RAG was discontinued as a result of the OCS.

An important aspect of the RAGs is the fact that they have a broad representation including Government (DPIWE), Industry (all sectors), Community (Local Government and NGOs) and Research Providers (TAFI, CSIRO, AMC). The deliberations and outputs are therefore representative of all Tasmanian stakeholders.

The terms of reference of the RAGs are:

1. To compile a list of research and investigation needs required to improve understanding and management of the resource.
2. To develop research plans (strategic and tactical) to meet the needs identified.
3. To facilitate industry participation in the formulation and execution of research plans.
4. To foster the co-ordination and collaboration of the research effort of the various research institutions in meeting research plans.
5. To provide advice to the Tasmanian Fisheries Research Advisory Board with regard to:
   - the evaluation of relevant proposals,
   - the priority of individual research projects assessed against the research plans, and
   - the work of the Group over the past year and the progress of research towards the objectives of the research plans.
6. To assist in the dissemination of research findings.
7. To respond to requests from the respective management liaison committee on matters relating to the need for further research.

Following the formation of TAFI the FRDC agreed that a Tasmanian Fisheries and Aquaculture Strategic Research Plan be developed through the RAG process. Plans were produced for each of the following 6 areas:

- Abalone Fisheries
- Crustacean Fisheries
- Scalefishery
- Aquaculture
- Marine Environment
- Recreational Fisheries

The plan covers a period of 5 years and it is intended to review the plans on an annual basis to assess the priorities, but to also undertake a major review in 2003.

The outcome of this process is provided in Attachment 5.

10. Benefits

The beneficiaries of the project include the aquaculture and wild harvest industry sectors, recreational fishing, state government, research providers and the general community. The project was a catalyst for improving industry and government communication, and raised the awareness of the priorities within different sectors.

The strategic plans served to focus resources on high priority issues and assisted the various stakeholders to co-ordinate their activities and promote collaborative linkages. In particular the R&D plan served to identify priorities, partnerships and potential funding sources, and has resulted in significantly increased levels of funding especially from Federal initiatives.

The Action plans helped to focus the issues in the aquaculture and wild harvest sectors and in many cases this work has been continued well after the completion of the specified tasks. For example, transport issues for the fresh and live fish export industry was progressed through Tasmanian Department of State Development input. Clarification of legislative and regulatory issues is currently being progressed through a number of consultative processes via the DPIWE.

11. Further Development

The Research Advisory Groups convened by TAFI review strategic research needs on an annual basis. A major review of the R&D Plan will be conducted in 2003.

12. Planned Outcomes

The project outputs, Strategic and Action Plans for the Aquaculture and Wild Harvest Sectors, provided the impetus for a greater collaboration between all stakeholders. In the opinion of Industry the development of TAFI was a direct outcome of this heightened discussion. In turn, the formation of Research Advisory Groups, bringing together all stakeholders to review and plan research, has continued the participation of all groups in the strategic research development of both sectors.

13. Conclusion

In summary the project addressed and met all of its objectives. These included:

- the development a ten year vision for Tasmania's aquaculture and fishing industries,

- the identification of strategic developments and pathways required for that vision, and

- the development of strategic plans for realising the vision through R&D, regulatory changes and better links between the public and private sectors.

These were all articulated in documentation that was circulated to Industry. Unfortunately, the committee structures set up to progress the key issues associated with Industry development were discontinued.

On a more positive note, the establishment of a major collaborative research partnership between the State Government and the University of Tasmania provided a forum through which the third objective was realised. This has seen a greater participation by Industry, Government, Community and Research Providers in the strategic planning and review of research in Tasmania. The key outcome of this is a greater focus on Industry needs in the research program.

14. Intellectual Property

The distribution of the IP associated with this project is as follows:

1. FRDC – 52%
2. University of Tasmania – 48%

15. Staff

The project staff and duration included:

Principal Investigators:

Mr Ken Lawrie – TasFRAB Chair (1996)

Dr Howell Williams – Manager Research and Assessment DPIF (1996-98)

Prof Colin Buxton – Director TAFI (1998-2000)

Co-investigators:

Dr Howel Williams – Manager Research and Assessment DPIF (1996)

Mr Geoff Pickard – TasFRAB Chair (1997-98) and Tasmanian Aquaculture Council (1997-2000)

16. Appendices

Appendix 1 – Tasmanian Aquaculture Industry Action Plan 1996-

Appendix 2 – Tasmanian Aquaculture Industry Strategic Plan 1996-2006

Appendix 3 – Tasmania's Wild Harvest Fishing Industry Action Plan 1997

Appendix 4 – Tasmania's Wild Harvest Fishing Industry Strategic Plan 1997-2006

Appendix 5 – Tasmanian Fisheries and Aquaculture Strategic Research Plan 1999 – 2004

Appendix 1

TASMANIAN AQUACULTURE INDUSTRY

ACTION PLAN

TASMANIAN AQUACULTURE INDUSTRY

ACTION PLAN

1996-2006

TASMANIAN AQUACULTURE INDUSTRY

ACTION PLAN

1996

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LIST OF PARTICIPANTS

PARTICIPANT	SECTOR
Barry Ryan	Oysters
Nick Bally	Mussels
Derek Cropp	Abalone Farming
Trevor Dix	Salmon
Michael Cameron	Flounder
Richard Roff	Scallops
Ross Heather	Other finfish
Colin Dyke	Other species
Peter Shelley	Product development and marketing
Geoff Pickard	Marine farm planning legislation
Ken Lawrie	Chairman, TasFRAB
Pheroze Jungalwalla	TasFRAB
Howel Williams	TasFRAB
Ian Neeland	Tasmania development and resources
Kim Evans	A/Secretary, DPIF
Alex Schaap	Marine Resources Division, DPIF
Hayden Hodges	Export Market and Industry Development Division, DPIF
Richard McLoughlin	Marine Resources Division, DPIF
Assistants:	
Peter Banks	Export Market and Industry Development Division, DPIF
Kathy Brown	DPIF
Gaye Oldham	DPIF
Apologies:	
Colin Sumner	Research & Development
Owen Carrington-Smith	Other finfish

INTRODUCTION

The Aquaculture Industry Development Planning Steering Committee has ratified a Strategic Plan for the period 1996-2006.

This plan identifies:

- a **Vision** for the industry;
- a number of **Goals**, which, if achieved, will contribute to that Vision; and
- a set of **Strategies** to pursue these Goals.

This document summarises the **Action** developed by the Working Groups and considered by the Steering Committee. It also highlights those actions which were of the highest priority.

The Working Groups will drive the priority actions to completion. The Working Groups will report to an Executive Group with the following terms of reference.

- To oversee operations of the Working Groups.
- To keep the Steering Committee informed of progress towards the implementation of the Strategic Plan.
- To communicate with industry stakeholders.
- To secure financial and human resources necessary for the implementation of the Strategic Plan.
- To ensure that the Working Group and the strategic planning process meet relevant time frames and deadlines.
- To make the necessary horizontal industry connections eg. To the wild fisheries industry development plan etc.
- To work with the Working Groups to set their objectives, terms of reference etc. – subject to the endorsement of the Steering Committee.

Mr Richard McLoughlin agreed to be the Convenor

ACTION PLANNING WORKING GROUPS

TERMS OF REFERENCE:

Develop tactical plans to implement the strategies and achieve outcomes.

Tactical plans should address what will be done, who will do it, what physical and financial resources are required.

INDUSTRY PROFITABILITY

Growth consistent with maximising returns to stakeholders	**World competitive in product cost and quality**	**Development of new profitable products and opportunities**

Convenor:	Peter Shelley
Support:	TDR
Core Membership	Michael Cameron, Ian Neeland, Hayden Hodges, Peter Shelley, Ken Lawrie
Recommendations:	• Industry growth plan targets • Benchmarking • Research market trends and product development • GAP analysis and strategies development • Market research for new species • Implementation of opportunities identified in GAP analysis • Off-shore expansion (interstate and overseas investment) • Networking

SUSTAINABILITY AND SECURITY

Sensitive & sustainable use of the coastal environment	**Simple, secure, legislative framework for industry management development**	**Favourable community acceptance of aquaculture**

Convenor:	Colin Dyke
Support:	DPIF
Core Membership	Colin Dyke, Geoff Pickard, Trevor Dix, Richard McLoughlin, Alex Schaap
Recommendations:	• Legislative and Administrative Review Committee. • Technical Environmental Group. • Public Relations Group.

R&D

An R & D capability directed to developing and sustaining aquaculture industries	
Convenor:	Pheroze Jungalwalla
Support:	SALTAS
Core Membership	Pheroze Jungalwalla, Derek Cropp, Howel Williams
Recommendations:	• Collaboration issues to be resolved. • Composition of research guidance body (strategic and advocacy role). • Develop rigorous priority setting process. • Agenda to include R&D into "non-production" issues. • Commitment by Government (etc.) providers to put resources and effort "on the table". • Industry steering and investing in R&D. • R&D will require real dollars.

INNOVATION AND LEADERSHIP

Industry culture of innovation and leadership	
Convenor:	Barry Ryan
Support:	DPIF
Core Membership	Barry Ryan, Kim Evans, Nick Bailey, Richard Roff, Ross Heather
Recommendations:	• Conduct review into industry representation structures, functions and funding. • Establish a body to seek and capture funding opportunities.

AGREED PRIORITY ACTIONS AND IMPLEMENTATION GROUPS

The Aquaculture Industry Development Steering Committee determined that the following activities were the most strategic, and therefore worthy of priority attention at this time.

GOAL GROUP	**ENTRY POINT ACTIONS**	**SUPPLEMENTARY ACTIONS**	**WORKING GROUP CORE MEMBERS (others may contribute**
Industry Profitability	Benchmarking	Industry growth plan targets. GAP analysis and strategies development. Research market trends and product development	Peter Shelley (Convenor) Ian Neeland Michael Cameron Hayden Hodges
Sustainability and Security	Technical Environmental Group	Public relations Group. Legislative and Administrative Review Committee.	Colin Dyke (Convenor) Trevor Dix Geoff Pickard Richard McLoughlin Simon Stanley Nick Bailey
Research & Development	Composition of research guidance body	Develop rigorous priority setting process	Pheroze Jungalwalla (Convenor) Howell Williams Derek Cropp Andrew Osborne Peter Montague Peter Rothlisberg
Innovation & Leadership	Conduct review into industry representation structures, functions and funding		Barry Ryan (Convenor) Alex Schaap Bob Lister David Forest Owen Carrington Smith or Richard Doedens

Appendix 2

TASMANIAN AQUACULTURE INDUSTRY

STRATEGIC PLAN

1996-2006

TASMANIAN AQUACULTURE INDUSTRY

STRATEGIC PLAN

1996-2006

TASMANIAN AQUACULTURE INDUSTRY

STRATEGIC PLAN

1996-

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INTRODUCTION

A strategic planning forum for the Tasmanian Aquaculture Industry was held at the Pines Resort, Hobart, on 19-20 February 1996. The aims of the forum were:

- To allow the major stakeholders to map out their desired future for the industry over the next 10 years.

- To set in motion a framework for action implementation to ensure that future is achieved.

The planning forum followed a Workshop Technique to:

- Identify the events and trends impacting upon the aquaculture industry;

- Identify the key outcomes desired for the aquaculture industry in the next ten years;

- Identify and prioritise the key strategies needed to achieve the outcomes desired; and

- Identify the implementation process and organisational arrangements necessary to implement the Strategic Plan.

Working Groups were formed to achieve the strategies identified at the forum. These groups reported to a second planning forum, which was conducted at Rydges Hotel, Hobart on 18 April 1996.

The planning forum assessed the actions, ranked them according to their strategic priority ad assigned tasks to Working Groups to progress.

A small Executive Group was formed to oversee the implementation of the actions.

This report details the strategic plan developed and ratified at the planning forums.

LIST OF CONTRIBUTORS

PARTICIPANT	SECTOR
Barry Ryan	Oysters
Nick Bally	Mussels
Derek Cropp	Abalone Farming
Trevor Dix	Salmon
Michael Cameron	Flounder
Richard Roff	Scallops
Ross Heather	Other finfish
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Richard McLoughlin	Marine Resources Division, DPIF
Assistants:	
Peter Banks	Export Market and Industry Development Division, DPIF
Kethy Brown	DPIF
Gaye Oldham	DPIF

THE VISION

- Effective aquaculture is predicted on the sensitive and sustainable use of the coastal environment.

- The future depends on:

  – A proper identification and understanding of the role of aquaculture and its place in the sustainable use of coastal water;

  – A legislative and administrative framework that balances aquaculture's need for security of tenure with appropriate community confidence in the industry's commitment to sustainable development.

- Tasmanian aquaculture will be world competitive in product, cost and quality.

- The profitability of the industry requires a commitment to continuous improvement in standards of training, management, production, marketing and distribution.

- This commitment will ensure the reliable delivery of a quality product in quantities which match the needs of the world market.

- The aquaculture industry will be supported by an R&D capability directed at marketing and management as well as production.

- The real needs of industry will determine the research undertaken and maximum possible funding will be sought from both industry and government sources.

- A vibrant aquaculture industry will foster cooperation and leadership, and encourage innovation to promote continuing improvement.

- Enterprise and initiative will be nurtured to produce a climate which is focussed on the future.

KEY HISTORIC EVENTS IMPACTING ON THE AQUACULTURE INDUSTRY

1975	1980	1985	1990	1996
Ban of imports of salmonoids into Australia for quarantine reasons	Longline culture of pacific oysters	TFDA imports into Tasmania (1984)	Marine farming legislation "bogged down" 1989	Formation of Tasmanian Aquaculture Council
Spat failures in the Tamar River – oysters	Oyster hatcheries dream to reality 79-85	TFDA to Dept Sea Fisheries. Change form development to administration	Salmon industry falters 1989	Formation of CRC for Aquaculture
Aquaculture industry virtually non existent	Hatchery development for oysters		Salmon production in Tasmania increases fivefold. Price crash	Hatchery spawning of mussles
	Establishment of shellfish culture	Structured training programs in Uni for aquaculture 1985	Emergence and recognition of competing interests	Court decision on wider range of objections to marine farming leases
	Progression of mussel culture from rafts to longlines	Establishment of Saltas	"Production driven" to "market driven"	Development of a new Marine Farming Act
	Norwegian interests in salmon industry of Tasmania	Biotoxics detected followed by other exotic diseases	Moratorium of new aquaculture laws	Establishment of TAC
	Entrepreneurs – financial investment in aquaculture	Self sufficiency of Tasmanian salmon industry	Implications of GATT on overseas exports	Saltas monopolies ends in terms of smolt production
	Marine farming legislation (1983)	Closure of wild scallop fisheries	Emergence of greens as political farce	Harvesting of reseeded spat
	Inefficiency in management of industry	Salmon production in Tasmania increased fivefold	Moratorium of aquaculture	Development of new Act
		Development of Tasmanian QA program for shellfish	First commercial hatchery produced abalone	Market access to Japan for oysters
		Reduction of Wild Fisheries offset by	Air freight problems	Value of MF product exceeds wild

		aquaculture		fisheries
		Australian stock market collapse	Industrial awards for shellfish and finfish	
		Establishment of 1st aquaculture section to SFDA – Marine Farming Section	Early 90's small fish competing in big pond	
		Internal Government budget for aquaculture exceeds wild fisheries	Interest in new finfish species	
		Joint OFCF Tasmanian government scallop reseeding program	Reconstruction of nearly bankrupt salmon industry biology in commercial review	
			Quarantine threats – ballast water	
			Concerns re *Listeria* in marine farmed products	
			Ecologically sustainable development a legislative requirement in 1994	

KEY TURNING POINTS, LEVERAGES AND TRENDS IN THE AQUACULTURE INDUSTRY

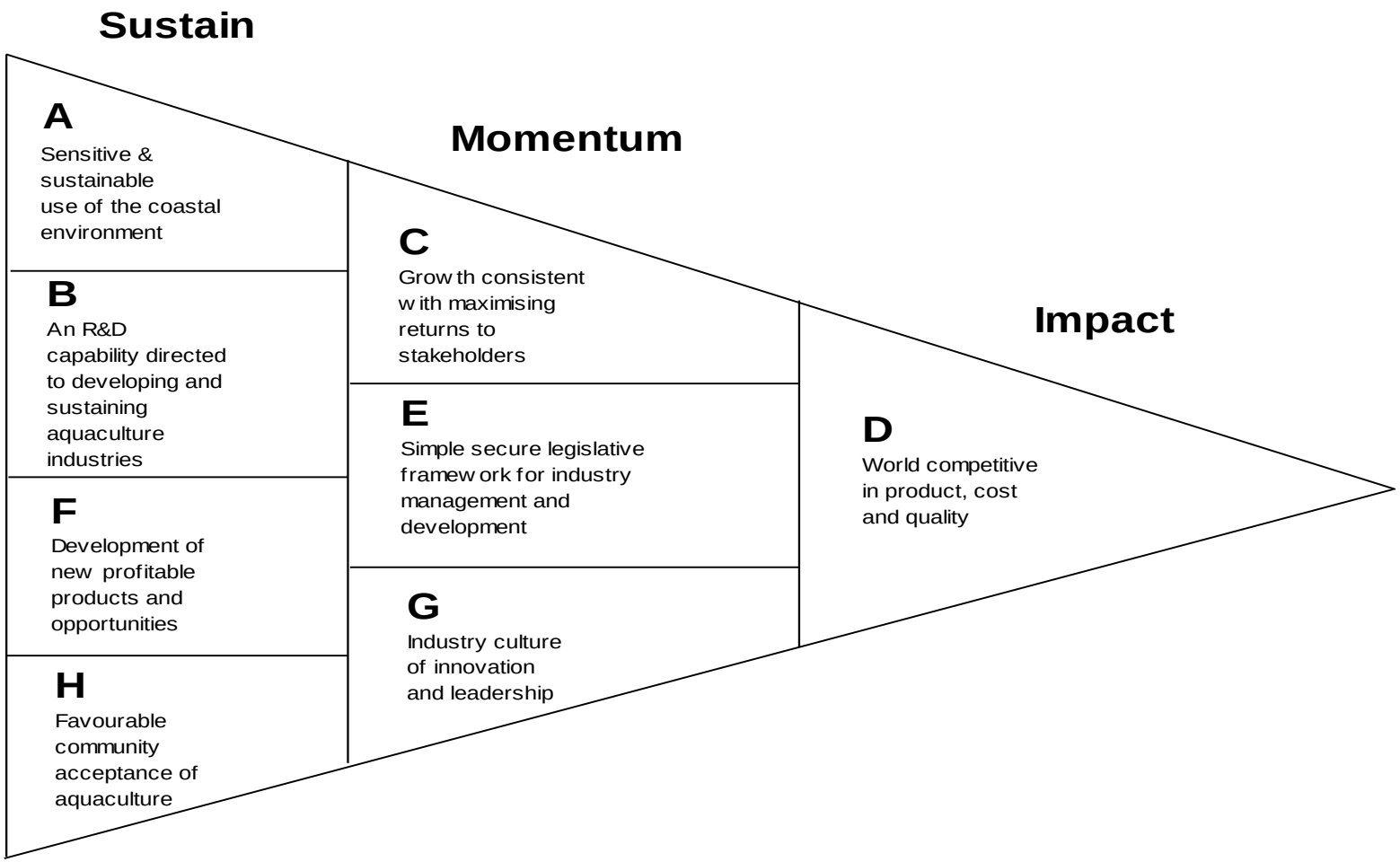
KEY TURNING POINTS	LEVERAGE POINTS	TRENDS TOWARDS…
Sustainable production of juveniles in farm hatcheries in commercial terms	Refinement of industry representation	Increased production
Legislative structure for the industry community attitudes	Technological development	More Government involvement regulation
Development of industry bodies	Secure investment climate	Opposition to the industry (community attitudes)
Recognition of quality produced in Tasmanian market acceptance	Security and tenure	Increased organisation within industry
Interest in and provision of Research and Development	Cooperation both within industry and with Government	Development of new products/species
Industry funded research and development	Return on funds employed	Diminishing returns on capital investment
Innovation creates commercial viability	Single regulatory responsibility	Need to diversify into other native species
		Clean pure image recognition of quality
		Globalisation of Industry -Market access -Technology
		More people and/or groups wanting to have a say

THE KEY OUTCOMES DESIRED FOR THE NEXT TEN YEARS

A: **SENSITIVE & SUSTAINABLE USE OF THE COASTAL ENVIRONMENT**	**B:** **AN R&D CAPABILITY DIRECTED TO DEVELOPING AND SUSTAINING AQUACULTURE INDUSTRIES**	**C:** **GROWTH CONSISTENT WITH MAXIMISING RETURNS TO STAKEHOLDERS**	**D:** **WORLD COMPETITIVE IN PRODUCT, COST AND QUALITY**	**E:** **SIMPLE, SECURE LEGISLATIVE FRAMEWORK FOR INDUSTRY MANAGEMENT AND DEVELOPMENT**	**F:** **DEVELOPMENT OF NEW PROFITABLE PRODUCTS AND OPPORTUNITIES**	**G:** **INDUSTRY CULTURE OF INNOVATION AND LEADERSHIP**	**H:** **FAVOURABLE COMMUNITY ACCEPTANCE OF AQUACULTURE**
Identify/understanding of needs and benefits of aquaculture in coastal management	Appropriate capability for R&D meeting the needs of industry	Climate in which 10% after tax return expected	Cost efficient production and marketing (Best Practice) to meet competition	Legislative base for industry development with community support	Value added product representing 50% of all marine farm input	Maintain a philosophy of innovation and continuous improvement	Acceptance of industry as good corporate citizen
Sustainable use of coastal environment	Govt/industry research funding of $20M/annum in present day money terms	Maximise growth consistent with commercial reality	Recognition and production of high quality product based on QM systems	Single Government body with total development authority to achieve sustainable development of aquaculture	New food products and concepts	I ndustry Leadership	
Improved marine habitats	Research focus on reliable juvenile production in line with species market wants	Output value of $300M per annum at farm gate in present day money terms	Educate workforce in Best Practice and technology				

Industry committed to ecological sustained development as a principle	Research focus on reliable production in line with species market wants	80% utilisation of water available under marine farm zoning process	Freight system to permit satisfactory product distribution
		More diverse range of viable aquaculture species	Appropriate methods for dealing/prevention of disease
			Reliable/profitable world markets based on consistent supply

RELATIONSHIP OF KEY OUTCOMES



THE STRATEGIES NEEDED TO ACHIEVE THE OUTCOMES

INDUSTRY PROFITABILITY

Growth consistent with maximising returns to stakeholders	**World competitive in product cost and quality**	**Development of new profitable products and opportunities**
• Industry growth plan and investment attraction strategy reviewed yearly (S) • Benchmarking (by segment; quality, costs, competitor strategies, outlook, skills) (S) • Research market trends and product development (S) • Market strategy development and establish R&D priorities (S) • GAP analysis and strategies development to overcome weaknesses and maximise strengths (S) • Market research for new species in line with opportunities identified eg. squid, ice pearls (M) • Implementation of opportunities identified in GAP analysis eg. expansion, further value-adding, cost efficiencies, distribution systems etc. (M) • Off-shore expansion utilising high tech and skills developed in Tasmania eg. mainland, o/s, different species (L) • Network for processing, value-adding, marketing, distribution other food products from Tasmania (L)		

SUSTAINABILITY AND SECURITY

Sensitive & sustainable use of the coastal environment	**Simple, secure, legislative framework for industry management development**	**Favourable community acceptance of aquaculture**
• Environmental management systems to be established by DPIF and industry sectors (S) • Environmental systems to be "sold" to stakeholders, this is to include information kits (S-M) • Environmental management systems subject to process of continuous review (M) • Environmental systems to be used as a marketing point to customers (M) • Industry and DPIF to promote the concept of one management authority (M-L) • Relevant legislation to be subject to regular review (M-L) • Information and expertise to be collected sufficient to provide a predictive capability if likely environmental effects of aquaculture (L) • Industry and DPIF develop an information kit too help promote understanding of aquaculture • Rationalise information fro coastal water quality monitoring systems, appropriate cost sharing and reduced the occurrence of extraneous pollution		

R&D

An R & D capability directed to developing and sustaining aquaculture industries
• Developing, across all Tasmanian aquaculture industries, the process of: - Setting priorities - Funding - Collaboration - Proprietorship

INNOVATION AND LEADERSHIP

Industry culture of innovation and leadership
• * Review and rationalise industry representative groups (state and federal) (S) • Repeat industry strategic planning regularly, review goals and strategies and ensure implementation • Formalise industry inputs (eg. create advisory/management bodies) to policy, management and R&D priority setting • Develop award systems for achievement in leadership/innovation • Develop communication and information sharing systems eg. Newsletters, aquaculture conference access to Internet, local search conferences, workshops • Ensure training opportunities match industry needs • Actively pursue funding for training/development of potential industry leaders and innovators eg. agribusiness marketing, rural industry leaders scholarship, exchange programs • Provide policy legal and financial environment which provides incentives for experimentation innovation

KEY

* These strategies are PIVOTAL to the attainment of the goal

(S) Short-term 1-2 years (M) Medium term 3-5 years (L) Long term 5-7 years

RESOLUTIONS:

The participants in the Industry Strategic Planning Forum resolves to formalise the group as the **Industry Development Planning Steering Committee** for the aquaculture industry.

Mr Ken Lawrie agreed to act as Chairperson.

Executive support will be provided by DPIF, Export Market & Industry Development Division.

The Industry Development Planning Steering Committee resolved to form an **Executive Group**:

- to oversee operations of the Working Groups;
- to keep the Steering Committee informed of progress towards the implementation of the Strategic Plan;
- to communicate with industry stakeholders;
- to secure financial and human resources necessary for the implementation of the Strategic Plan;
- to ensure that the Working Group and the strategic planning process meets relevant time frames and deadlines;
- to make the necessary horizontal industry connections eg. to the wild fisheries industry development plan etc.; and
- to work with the Working Groups to set their objectives, terms of reference etc.- subject to the endorsement of the Steering Committee.

Mr Richard McLoughlin agreed to be the Convenor.

Appendix 3

TASMANIAN'S WILD HARVEST FISHING INDUSTRY

ACTION PLAN

1997

TASMANIA'S

WILD HARVEST FISHING INDUSTRY

ACTION PLAN

1997

TASMANIAN WILD HARVEST FISHING INDUSTRY

ACTION PLAN

1997

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Mr Bob Lister	Industry (TFIC)
Mr Rob Milner	Scalefish - General
Mr George Mure	Retail
Mr Geoff Pickard	Research (TasFRAB)
Mr Greg Reynolds	Commercial Dive
Mr Alex Schaap	Mgt/Devel Policy (DPIF)
Mr Gary Sheedy	Administration (DPIF)
Mr Neil Stump	Rock Lobster
Dr Keith Sainsbury	Research (CSIRO)
Dr Howel Williams	Research (DPIF)
Mr Dennis Witt	Resource Mgt (DPIF)
APOLOGIES	
Mr Les Scott	Retail
Mr John Hammond	Scallops
Mr Stuart Richey	Scalefish - Pelagic
FACILITATORS	
Mr Kevin Balm	Integra Pty Ltd

Mr Peter Banks	Integra Pty Ltd

ASSISTANT

Ms Rosie Duggan	DPIF

KEY ACTION PROJECTS/STRATEGIES TO ACHIEVE THE DESIRED OUTCOMES

The 10 outcomes were grouped into three categories, with working groups formed to facilitate the development of action projects and strategies. These are detailed on the following pages.

The facilitator pointed out Einstein's thoughts that:

> the problems we are facing today cannot be solved by the same level of thinking that generated them.

He challenged the participants to address the action categories with this frame of mind, while ensuring that the projects they proposed were targeted at addressing the key outcomes the industry wanted to achieve over the next ten years.

PROFITABILITY	**A:** Maximised Market Opportunities	**C:** Cost Effective Fisheries Administration	**E:** Optimised Returns consistent with sustainability	**D:** Security of Access to Sustainable Resources

TASK GROUP:	**ACTION PROJECTS:**
Greg Reynolds **Alex Schaap** **Brian Bailey** **Al Hansen** **Dean Lisson - Convenor** **Brian Franklin**	***1.** Meaningful management plans and effective admin of plans through advisory committees leads to sustainable fishery ***2.** Advisory committees trained to assist them to carry out their functions ***3.** Advisory committees ensuring that decisions on management take account of cost impacts **4.** Industry body running market development co-ordination and industry awareness project including identifying trends in domestic fish consumption **5.** Quality Assurance

George Mure	- regulation and enforcement - industry awareness codes of practice
ADMIN SUPPORT:	- buyers hard nosed
Mures Fish Centre	***6**. Advisory committees ensuring that government expenditure is transparent and accountable
NEXT MEETING DATE:	**7.** TDR to investigate responsibility of attracting commercial (passenger) carrier to provide wide body freight service to export destinations **8.** TDR facilitating identification of joint venture opportunities and potential joint venture partners

*** Pivotal Action Projects**

RESOURCE SUSTAINABILITY	**J:** Ecologically & Economically sustainable fisheries	**B:** Research characterised by: timely, co-operative, relevant, adequate

TASK GROUP:	**ACTION PROJECTS**
Howel Williams	***1.** Developing and agreeing ways that assessment results will be used in management to achieve objectives
Dennis Witt	- managers, industry, researchers

Geoff Pickard - Convenor	- eg use of trigger points
Neil Stump	- define adequate
Keith Sainsbury	***2.** Identifying and collecting adequate data - fishery data and biological data
Rob Milner	***3.** Doing adequate stock assessment
Gary Sheedy	***4.** Evaluating ecosystem context of stock and fishery (eg habitat, by-catch, environment, other users)
	5. Developing adequate review processes for stock assessment, industry stakeholder initiated review
ADMIN SUPPORT:	**6.** Develop an effective verification method for data collection
DPIF Taroona	**7.** Develop effective teams of ensuring compliance with management measures - including education
	8. Developing transparent, cooperative and timely process to deal with each of the above.
NEXT MEETING DATE:	**9.** Choose 2 fishery examples (one with lots of information and focussed issues, and one with little data and diffuse issues) to 'test run' the above process

*** Pivotal Action Projects**

INDUSTRY DEVELOPMENT	**G:** Responsibilities Stewardship Image and Practice	**H:** Unified, involved, Proactive Industry	**I:** Highly skilled committed informed industry participants	**F:** Effective partnerships b/w industry and govt which recognises other users

TASK GROUP:

Kim Evans

Bob Lister

Steve Gasparinatos - Conv.

Rory Byrne

Alan Garcia

ADMIN SUPPORT:

TFIC

NEXT MEETING DATE:

ACTION PROJECTS

***1:** Designing or reviewing an industry structure which is broadly representative of industry taking into account:

- Funding issues (eg levies, subscriptions etc)
- Facilities
- Communications
- Human resources/expertise

…having regard to current sectoral structures and representation

***2:** Canvassing merits and disadvantages of developing peak body:

- Purpose/direction
- Advantages/disadvantages
- Sectoral differences (we are doing OK on our own)

3. Developing a series of measures to improve the "image" of the industry

- eg. Code of practice
- safety at sea - short mandatory course
- fisherman certification
- development of leadership skills

4. Highlighting good news issues

- eg. Strapless bait box
- manager of resource
- innovative techniques/practices

5. Identifying potential industry leaders, training requirements, other program to motivate involvement

6. Investigating mechanisms/forums/communication channels which can bring commercial and other fisheries users closer.

7. Practising sustainability

8. Partnerships with industry and government

*** Pivotal Action Projects**

TERMS OF REFERENCE FOR THE ACTION GROUPS

1. Action groups are to meet on approximately 2 occasions for approx 4 hours each over the next 2-3 months.

2. Detail how the action projects will be undertaken, who will do the actions and some milestones and deadlines for the projects.

3. Establish estimates of the costs of implementing the priority actions and the sources of funds.

4. Identify the role of industry, government and others in implementing the priority actions.

5. Prepare a report on the action project for presentation to the next meeting of the strategic planning forum.

Appendix 4

TASMANIAN'S WILD HARVEST FISHING INDUSTRY

STRATEGIC PLAN

1997-2006

TASMANIA'S

WILD HARVEST FISHING INDUSTRY

STRATEGIC PLAN

1997 - 2007

TASMANIA'S WILD HARVEST FISHING INDUSTRY

STRATEGIC PLAN

1997 - 2007

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ASSISTANT

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KEY EVENTS IMPACTING ON THE INDUSTRY

Pre 60's	60 - 70's	Early 80's	Mid 80's	Late 80's	Early 90's	Mid 90's
Management measures introduced late 1800's	Fishing changes from, lifestyle change to commercial enterprises	Development of global markets	****Collapse of fisheries Aust & international**	Limit entry (Show cause)	Over capitalisation in trawl fishery	**** New fisheries legislation**
Development of reliable airfreight of seafood	Globalization of markets	Overfishing the resource	Intro of abalone quotas	Collapse of scallop fishery	Ecological sustainable development	Development of live markets
Transportation and storage of live and fresh produce	Increasing technology	****Technology incl. GPS plotters & sounders**	Exclusive economic zone	Diversification philosophy dead	**** New markets**	Wallis lakes
	Computerisation information evolution		Latent effort	Market access transport	Premium prices for quality fish	Tradeable nature of access rights
	Technology improvement		Value of access rights rising		New ranges of quality fish (freshness)	Quality marketing Uniformity of product nature
	Entry costs		****Transport/ airfreight**		User pays	Health food gym culture

	Interaction between fishing and environmental issues		Real research results		**** Owner operators to investors**	
			**** Spin-offs from aquaculture**		Fresh is best perception	
			Intro of GPS		Loss of access rights to SBT	

**Key Events of Significance to the Future of the Industry

TRENDS OF CHANGE INFLUENCING THE INDUSTRY

This identifies the underlying patterns which are shaping the events that are seen on the surface of the industry.

FROM	TO
Cottage Industry	Commercial business
Satisfying domestic markets	Satisfying dom & international markets
Local	Globalisation
Frozen Product	Fresh and live product
Fish as food	Fish as tradeable commodity
Intuition	Science and technology
Under utilisation	Over utilisation
Rape and pillage	ESD
High volume, low value, quantity	Maximising yield and return
Little regulation	More regulation
Low access cost	High access cost
Open slather	Restricted entry
Limited ad hoc crisis research	Managed strategic research
Exclusive use	Increasing role/conflict of user groups
Consolidated revenue funding of services	Cost recovery from users

LEVERAGE POINTS

This identifies those planks on which the industry is standing which can be adjusted to have a significant impact on the future of the industry. It asks: "Which are the most effective buttons to push?"

Unity - within industry, between industry and government open transparent decision making process.

(Government politics, legislation) gaining stability in fisheries management.

PR - public perception re wild fisheries

Fisheries management planning process

Uniform Australia wide approach to health, (harvesting, processing, handling and transport)

Co operation between State and Commonwealth governments on management and enforcement

Transportation, including wide body freight aircraft

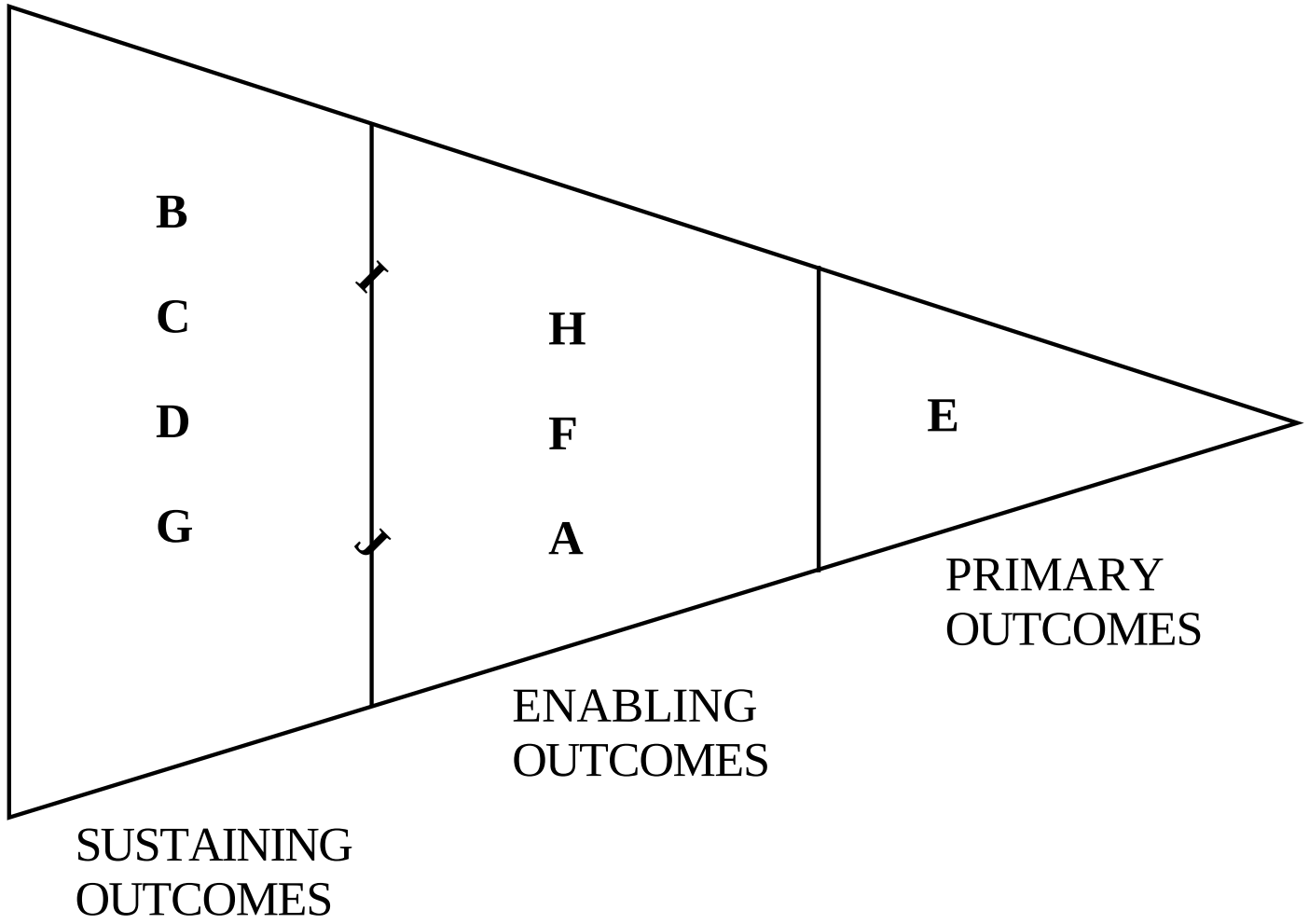
Money

KEY INDUSTRY OUTCOMES DESIRED OVER THE NEXT 10 YEARS

A **Maximised market opportunities**	B **Research Characterised by : Timely, co-operative, relevant, adequate**	C **Cost Effective Fisheries Administration**	D **Security of Access to Sustainable Resources**	E **Optimised Returns Consistent with Sustainability**	F **Effective Partnerships between Industry & Govt which recognises other users**	G **Responsible Stewardship Image and Practice**	H **Unified, Involved Proactive Industry**	I **Highly Skilled, Committed Informed Industry Participants**	J **Ecologically & Economically Sustainable Fisheries**
Stable, secure and expanding markets	Ownership of Research	Good management practices	Security of industry investment	Maximising of returns for/in effort/capital	Effective partnership between govt and industry in management	Industry seen as a steward of the resource	Being proactive less apathetic	HR Develop on-going	Control of aquatic pests
Aggressive marketing - retention and new	Focussed/relevant research	Reduced overhead costs & administration	Legislative framework providing for security of access to resource (managing sovereign risk)	Economical efficient industry		Improve public profile - broader community appreciation of the fishing industry's commitment to ESD	Greater co-operation by all sectors		Marine environment habitat management
Stream-lined access to markets	Industry driven research and development	Economic management of unified govt policy	Security of access/stability	Maximisation of production within constraints of sustainability		Tasmania as a world leader in fisheries			Managing species sustainably

Develop high quality, high priced markets	Fisheries development under-utilised species & stock enhancement		Secure Access Rights			Capacity to measure & demonstrate world best practice			Predictable harvest levels
Integration of catching and processing into the market				Sustain efficient employment levels					Recognition of social issues in fisheries mgt
More co-operative marketing and generic promotion				Fisheries development - under utilised species & stock enhancement					

RELATIONSHIPS BETWEEN KEY OUTCOMES



The preceding graphic demonstrates that the industry sees that its main objective (its Primary Outcome) is to create an industry that, in ten years time, will have:

"optimised its returns, consistent with sustainability".

Achieving this objective is dependent upon the creation of a:

"unified, involved and proactive industry",

which is built on

"effective partnerships between industry and government, which recognises other users",

and which

"maximises market opportunities".

The structure and momentum of the industry in that form will be sustained by:

"highly skilled, committed and informed industry participants",

"ecologically and economically sustainable fisheries",

"research, characterised by being timely, co-operative, relevant and adequate",

"cost effective fisheries administration",

"security of access to sustainable resources"

"responsible stewardship in both image and practice"

Appendix 5

Tasmanian Fisheries and Aquaculture Five Year Strategic Research Plan 1999-2004