QFISH FORESIGHT PROJECT

A strategic planning and futuring project designed to create a strong coordinated commitment by all fishing interest groups to an agreed vision of the fisheries of the future

Mr C Bishop and Mr P Appleton

Project No. 1999/354

QO04009
ISSN 0727-6281

Appleton, Patrick 1948
Bishop, Colin 1952

The Department of Primary Industries and Fisheries (DPI&F) seeks a better quality of life for all Queenslanders-a quality of life supported by innovative world-class food and fibre industries, and by responsible and ecologically sustainable use of natural resources.

Our business is about:

- Innovative science and commercial uptake of new technology by food and fibre industries
- Sustainable use if natural resources
- Food safety and protection against imported pests and diseases
- Market-driven and ethnical food and fibre production.

This publication provides a case study for the collection of economic data on commercial fishing linked to the “Framework for Valuing Fisheries Resource Use”

Inquiries should be addressed to:

Manager, DPI&F Publications
Department of Primary Industries and fisheries
GPO Box 46
Brisbane Qld 4001

TABLE OF CONTENTS

DIAGRAMS

ATTACHMENTS

1999/354 QFISH Foresight Project

PRINCIPAL INVESTIGATOR: Mr Col Bishop
General Manager, Policy and Sustainability

ADDRESS: Department of Primary Industries and Fisheries
GPO Box 46 BRISBANE 4001
Telephone: 07 3225 1550 Fax: 07 3229 8146

OBJECTIVES:

1 To promote cultural change in the fishing industry through scenario planning;

2 To provide an holistic framework for the development of the fishing industry in Queensland including all stakeholders eg commercial, recreational, indigenous, charter boat operators, aquaculture, service providers and the community at large; and

3 To promote both ecological and economic sustainable development through cooperative planning.

NON–TECHNICAL SUMMARY

The establishment in 1997of the Fishing Industry Development Council (FIDC), a peak fishing advisory body, set the scene for an examination of where Queensland's fisheries and the fishing industry sectors were heading in the longer term.

The FIDC is a high level consultative forum reporting directly to the Minister for Primary Industries and Fisheries. It comprises an independent Chair, and representatives from each of the commercial catching sector, marketing, recreational interests, charter fishing, environmental non-government organizations, indigenous peoples, aquaculture and State and Commonwealth agencies (collectively called the fishing sector interests).

There were many different views expressed initially within FIDC as to what the key problems were in the fishing industry but importantly there was no agreement for:

- establishing a common vision for fisheries and the fishing industry; and
- determining the role each sector would play in achieving that vision.

It is not difficult however to understand the problems faced by disparate fishing sector interests trying to focus on strategic directions without a methodology or process that could transport them out of the current pressing issues and current thinking.

By early 1998 discussions within the FIDC were initiated around the concept of "foresighting" which provides a framework for thinking about the future that you want to build. The framework includes the use and analysis of a range of scenarios or possible futures and then consultations within sectors and across different sectors or fishing interests, to develop a picture of the preferred future for the fishing industry at some point into the future, for example, 2010. The concept of foresighting had been used with considerable success in New Zealand in the fishing industry, rural industries and sectors within the New Zealand Government.

A foresighting project commenced in 1998 as a pilot study, funded by the Department of Primary Industries (DPI) to introduce foresighting techniques into the fishing industry. The success of this pilot stage of the study prompted the FIDC and DPI to approach the Fisheries Research and Development Corporation (FRDC) in 1999 to obtain funds for a more comprehensive project based on the strategies and techniques of the foresighting paradigm.

Objective 1 The public perception of the fishing industry in 1998 was one of conflict and disharmony and there was significant distrust and disrespect among the major fishing sector interests. The fishing industry was highly competitive and combative and most often emphasis was placed on sectors obtaining their way regardless of the effects on other sectors or the resource itself.

The "foresighting" process and methodology convinced the leaders of the various fishing sector interests that by focusing on the future, and a new way of thinking about current problems, changes in attitude towards more cooperation on fisheries matters and fishing industry issues could be achieved.

Cultural change in any industry, let alone one with such a diversity of participants with differing desires and objectives, would be a difficult task but to the credit of the industry leaders they saw the need for a project to attempt the task of initiating change.

The project has been responsible for getting many of the fishing industry leaders to think about what type of future their sector would want and hence their important role in taking their sector forwards to that desired future. A significant drawback to the project has been that little extension of the "foresighting" ideas to the grass roots within most sectors has occurred. There is a commitment however through the FIDC that sector leaders will promote thinking and discussion about where their sector wants to be in 2010 and the development of pathways and actions within their sector to achieve that future.

Objective 2. The project and the foresighting methodology has provided the Queensland fishing sector interests with a means of bringing all sectors together to discuss and develop a better future for all concerned. It has provided the opportunity for all sectors to meet and debate where each of their preferred futures lie and for each sector to try to understand the aspirations and concerns of other sectors. The foresighting methodology also made it possible to place into context the way the world is changing and how those changes will affect the way each of the sectors handles its business into the future.

Objective 3 The project has been extremely useful in highlighting the advantages of fishing sector interests operating cooperatively, particularly in a world that is changing quickly. In developing the Building Smart Futures in Fisheries document the fishing sector interests recognised their interdependence in terms of fisheries sustainability and future economic development of fisheries. As either active or passive users of the fisheries resource, all fishing sector interests viewed their collective future as being linked with the economic viability and sustainability of the fisheries resource and the confidence of the community who own it.

Conclusions and Recommendations

One of the rewarding aspects of the project has been the reinforcement of the strategic planning directions and the realisation by fishing sector interests that the world in the future will be a completely different place to now and that current thinking needs to

reflect that position. One of the outcomes of the project reinforced the view that there is a lot of commonalities among sectors such as environmental concerns and a need to redefine the type of business in which sectors believe they are involved

There is a realisation by sectors that the foresighting process has provided a valuable tool for refocusing on where the fishing industry is heading in the future. There is still a considerable way to go but a framework for development has been established that is creating a clearer picture of the future that will encourage greater confidence and optimism in the fishing industry. This clearer picture of where the fishing industry is heading will also assist in fostering positive community and government attitudes towards the industry.

A formal high level representative body is essential to the successful planning and implementation of this type of project. The nature of this operation, with its extended time frames for deliverables, requires continuous review and strong commitment from Government and all fishing sector interests. Without this formal structure there is no mechanism for driving the process forward.

The long-term nature of cultural change in the fishery industry will make it difficult to maintain a continuous focus, as current issues will always intrude. It is necessary to employ dedicated, resourceful people to work with fishing industry interests to achieve progress towards foresighting outcomes irrespective of the pressure of day to day problems.

A unified team effort is essential to deliver creditable outcomes from the foresighting process. The many members of the team - foresighting consultant, industry representatives, agency support staff, industry and agency leaders and champions all have important roles to effect the changes required for the fishing industry to manage the changing national and international environments.

A high level of training support from foresighting consultants, particularly early in the project, is paramount and mentoring of key support staff in a proactive mode is crucial.

Although the points made above are essential for the long-term success of any cultural change generated by the foresighting process, it will be the attitudes of the leaders of the fishing industry sectors that will be of most benefit. If these attitudes are positive and a clearer picture of the future is created then greater investment will be made by people within the fishing industry and perhaps investment by outside interests. Greater investment will generate a need to be more involved in the management of the fisheries and changes should flow in terms of co-management, deregulation and the provision of greater certainty for participants in the fishing industry.

KEYWORDS: foresighting, pathways, scenario building, fishing interest groups, fisheries, fishing industry, cooperation, preferred futures, cultural change, investment

2. BACKGROUND

At its third meeting on 26 May 1998 the (FIDC), Queensland's peak fishing industry body, agreed that greater attention should be given to the development of a strategy to develop the industry, for the benefit of all stakeholders, through the innovative foresighting process. This process is widely accepted across the world in many industry sectors. The value of foresighting was demonstrated through its successful application in the departments and agencies of the New Zealand Government and the Science and Technology Council of New Zealand.

FIDC agreed that the resources of Research and Development (R and D) and management work are not currently directed towards an optimised cross-sectoral strategy and accordingly this project is seen as being of the highest priority.

A pilot project (QFISH Foresight), utilising the foresighting method of future visioning, was conducted between July and September 1998, incorporating the interviewing of some 35 senior representatives of fishing industry groups. The overwhelming message from those fishing industry leaders interviewed was the need for a change of direction in:

- how fishing industry business among fishing industry sectors was conducted;
- an improvement in the relationship between the industry sectors and the management agencies; and
- the introduction of a set of major principles to guide the fishing industry over the next 10 years.

The success of this pilot stage of the study prompted the FIDC and DPI to approach FRDC in 1999 to obtain funds for a more comprehensive project based on the strategies and techniques of the foresighting paradigm.

Foresight Theory

The principal concept and process used in this project was foresighting, a process designed to develop a detailed vision of the future, followed by the development of a preferred position for an industry and then planning actions to achieve that future. The Principal Investigator and other Department of Primary Industries (DPI) support staff in this project collaborated with Global Foresight Australia Pty Ltd and particularly with its Director, Mr Mike McAllum, in transferring the foresighting methodology to all fishing interest sectors in Queensland.

Foresighting processes and techniques were fundamental to the planning and operations of this project. In addition, many other methods and activities were engaged in bringing the project to finalisation and these will also be described. The following background on the foresighting concept, model and methodology is sourced from documents produced by the Foresight Institute of New Zealand and Global Foresight Australia Pty Ltd. Reference to other sources is recognised individually throughout the text.

Foresight Proposition

"The new economy is all about: competing for the future, the capacity to create new products and services and the ability to transform business into new entities that yesterday couldn't be imagined and that the day after tomorrow may be obsolete" Tapscott (1996)

Concept of Foresighting

Foresight is a process of discovering a way of moving to a desirable future. It involves firstly imagining a desirable future and then elucidating strategies for creating that future. Individuals, groups, organisations and institutions can carry out foresighting.

Foresight is not centralised planning. Strategic planning can often be bound by thinking based on assumptions about how today works. Projecting assumptions formed on the past (eg lifestyles, customers, markets, etc) into the future can be risky as these lifestyles, etc change over time. But in conventional strategic planning, it can also be hard to avoid.

Two very critical components of the concept of foresighting are 'thought leadership' and 'weak signals'. They are critical in the sense that any industry or organisation requires expertise both to cope well with change and develop pathways to achieve any desired future.

Thought Leadership

'Thought leadership' means establishing one's own organisation or industry as the intellectual leader in terms of influence over the direction and shape of the future of the field or industry we want to be active in. The process of achieving this is best done with the active involvement of the maximum possible number of people in the organisation, as well as key stakeholders.

To do this well, an investment in time and research is required to construct a more insightful and accurate view of the future. Having done this there is also a need to apply the foresight process to decide on the desired future position of our organisation or industry and how it will get there.

Weak Signals

At any given point, important future trends or major changes can be identified in the present although these 'signals' are often weak because the prevailing thought patterns or mental model in an organisation or industry are not flexible enough to register their potential importance. It has been known as far back as the early 1960's that weak signals always exist but the requirement is for strategic planners to develop processes to identify them and bring them into the planning process.

Foresight is a methodology for identifying and tracking weak signals and also for demonstrating their significance. A vital challenge is that the more powerful the mental model is in the field the less likely it is that people pay attention to the weak signals that may be challenging prevailing thought patterns.

The Foresight Model

Foresight is based on the premise that it is vital to build a new 'mental model' about the future rather than plan the future within today's 'mental model' which is based on how our field or industry works today. The reason is that a whole range of ongoing trends, innovations and major discoveries are continually changing the mental model. If it is not possible to build this foresight into our planning we risk taking our organisation or industry into a future which will not be there – we consequently go out of business.

The Foresight Model is the development of a preferred future using the mental model of the future – "Mental Model 2" in Diagram 1 below. This is starkly different to a future planned on today's mental model – "Mental Model 1", which invariably results in incremental change and business as usual.

In every industry there is a "mental model" or paradigm by which those in the industry have a common understanding of such things as:

- What business or field of endeavour we are in
- What methodologies we use
- Who are our clients or customers and what do they want
- How we are funded, or how we earn profits

Global Foresight Australia contends that most strategic planning is really only a projecting of the past into the future. They argue that this is understandable but is often risky. This process is called forecasting and equates with "Mental Model 1" in Diagram 1.

It is well known that industries emerge, grow, evolve and metamorphose and that this is likely to continue into the future. It follows therefore that the industry we know today will not be there in the same form tomorrow.

Most people however are truly blinded by what Global Foresight Australia calls the mental model of today's industry. The mental model holds a whole set of coded assumptions about what is the industry, who are the customers, who are the competitors, what constitutes success and where the money is to be made.

In order to undertake true long-term planning there is a need to first develop a new mental model – ie to foresee the future industry shape. This process of developing and creating this new mental model is called foresight and is normally based on a vision of 10 years in the future.

Inevitably when foresight is developed, the direction that the industry evolution is taking is clear. From this point the positioning that is wanted in the future world can be developed and this is called strategic intent. Once the strategic intent is created the whole strategic architecture can then be created for the organisation that is wanted in the future. With this defined view of the future, strategic pathways can be plotted from the present to that future.

The steps and processes defined above must be carried out by as many people in the organisation as possible – in order to maximise the creative input and build the commitment to what will inevitably be a journey of stretch and leverage of limited resources.

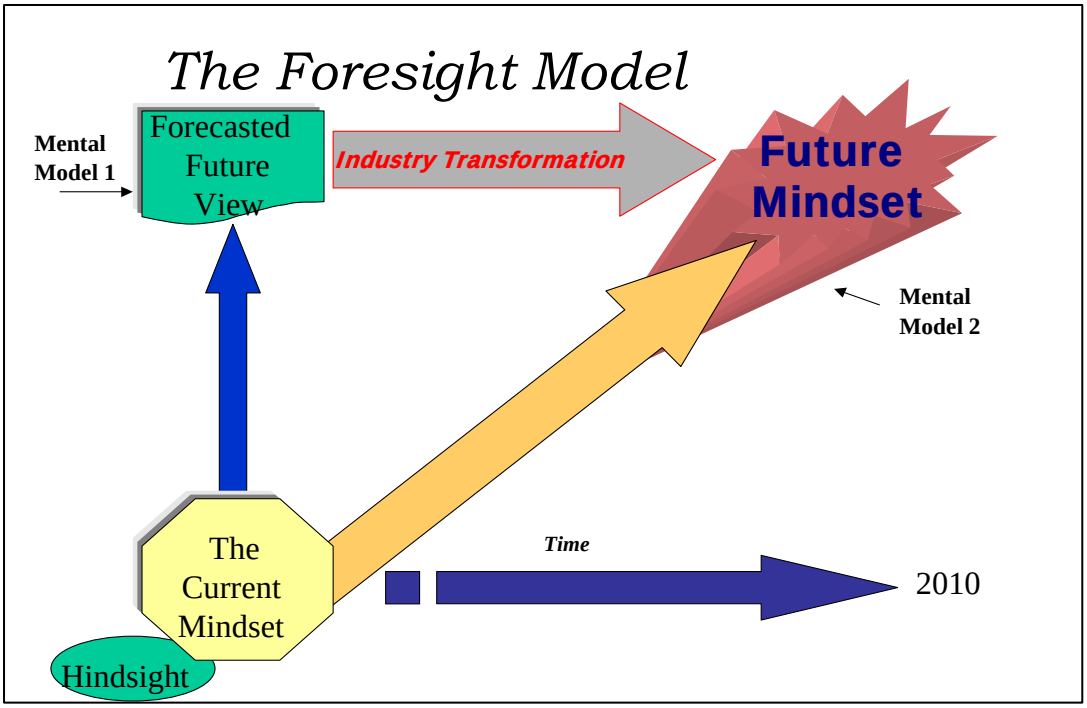


Diagram 1: Foresight Model

The foresight and strategic planning processes identify a series of cross-functional projects – both of opportunity (tomorrow's business) and performance (today's business). These projects allow the organisation and its members to reorient and realign the organisation to the future while maximising today's performance. However, foresight looks beyond the normal horizon of 3-5 years to a future 10 to 15 years from now.

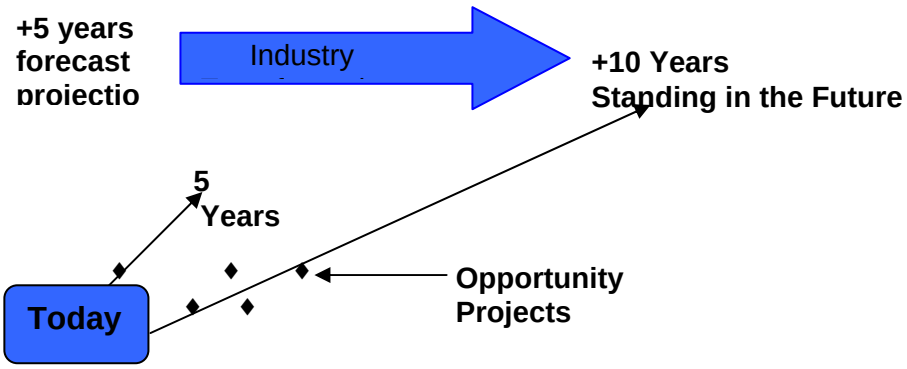


Diagram 2: Industry Foresight Model

Industry Foresight ensures future competitive advantage by helping to answer the following questions:

- What new types of customer benefits could be developed?
- What new skills, technologies, resources and capabilities will be needed to offer those benefits?
- How will we need to re-configure the industry to meet future needs? and
- What will constitute success and ensure sustainability?

Foresight Methodology

The foresighting methodology represents an innovative tool for the development of future directions or plans, focusing on active participation by all stakeholders. The methodology relies on stakeholders developing an agreed scenario of the future and working together on achieving the desired position.

The foresight process deliberately focuses on the long-term future. It establishes a coherent picture of trends, drivers and uncertainties and helps to bring into focus a desirable position within that future. It also provides a conceptual framework for plotting pathways to a desirable future and identifying the core competencies critical for creating such pathways
Foresight is an evolutionary process, so that views of the future can be refined over time. As ideas evolve, through widespread input and interaction, strategic outcomes and competencies will be refined. Rather than prescriptive statement of rules and of priorities the aim is a robust policy and priorities framework within which the management of the resource can develop flexibly over time.

Foresight should be an ongoing process that generates, and keeps on generating, a sense of where to go and how to get there. The future cannot be expected to follow any chartered pathway precisely and there will be emerging situations that change the status quo. By developing a focus on foresight, it is possible to acquire an ability to adapt, with a long-term perspective, to events and trends as they unfold, rather than simply managing the present.

Key Elements of the Strategic Foresighting Methodology

The key elements of the strategic foresighting methodology are:

- Exploring mindsets
- Identifying the future context
- Creating our future position
- Designing the pathway(s)
- Getting value and implementing the process
- Mobilising the people
- Embedding the thinking and transitioning to a 21st century framework

Exploring Mindsets

Exploring mindsets is about exploring mental models of today's industry and tomorrow's industry. Surveying industry leaders and thinkers with specially designed questionnaires and analyses of strength, weaknesses, opportunities and threats are examples of the most commonly applied methods of obtaining the appropriate information.

Identifying the Future Context

Many organisations have no framework to think about the future. Thus they cannot turn information into knowledge and are unable to recognise the weak signals about the future that exists today. Foresighting provides an appropriate methodology for identifying the future context.

Creating our Future Position

Creating a future position will depend on identifying core competencies or alliances that will provide distinct competitive advantages in the long term. These core competencies are also part of the strategic architecture that is a road map of the future that identifies which core competencies to build and their constituent technologies. Strategic architecture is also important to our future thinking, as it is a tool for communication with other groups involved in creating our future position.

Designing the Pathway

Simply having a view of what you want to be is not sufficient. You need to design the pathway that gets you from where you are today to where you want to be. These pathways are based on key strategies and actions or activities that will provide the linkages between the desired future and the present position.

Getting Value and Implementing the Process

Foresighting can provide immediate value to organisations or industries by concentrating on the 'strategic renewal' process. This process is focussed on monitoring the external and internal environments in which the organisation or industry operates and identifying opportunities for change in the direction of the organisation or industry. This monitoring can occur through a performance and opportunity matrix system aligned to the future position and subsequent pathways.

Mobilising the People

There is a range of methods and processes designed to involve people in an industry or organisation in thinking about the future, provide ongoing avenues for them to express their commitment and for them to be committed to fulfilling that future direction. These methods include involving people in the process from the start by organising industry workshops where issues affecting the industry can be identified, debated and defined. The information derived from this exercise can then be used to inform debate on the development of a desired industry future – a vision for 10 years hence.

Embedding the Thinking

The strategic renewal process can be embedded through the design of an ongoing matrix of projects that will inevitably drive the organisation to a project management based organisation model.

Other Key Concepts

Other key concepts utilised within the project include the following:

- Driving Forces
- Predetermined
- Uncertainties
- Scenario Planning
- Pathways
- Strategic Renewal

Driving Forces

Driving forces can be defined as major sources of change in the macro-environment that impact on the future. Driving forces are the pull factors (see Diagram 3 below) that have influence over the key factors or issues currently facing the organisation or industry. Some examples of macro-environmental global forces include:

- Society
- Environment
- Political and legal
- Economic
- Knowledge

Driving forces do not however need to be global. They can be national, state or local or any external force. Once driving forces are identified, it is important to explain how they combine to determine future conditions. To do this, driving forces are divided into what are called pre-determined elements (ie what is inevitable, like many demographic factors that are already happening) and critical uncertainties (ie what is unpredictable or a matter of choice such as public opinion). The pre-determined elements, because they are inevitable, will play a part in all scenarios of the future.

The critical uncertainties are those driving forces that involve the most disagreement or greatest uncertainty but would give rise to a major impact on us if they happened or did not happen. They can be used to provide 'axes of uncertainty' or polar positions that define distinctly different, yet plausible pictures of the future external environment (eg clean/dirty water).

Driving forces are the elements that move the plot of a scenario, that determine the story's outcome. Without driving forces, there is no way to begin thinking through a scenario. Driving forces are a device for honing initial judgements and for helping decide which factors will be significant and which factors will not.

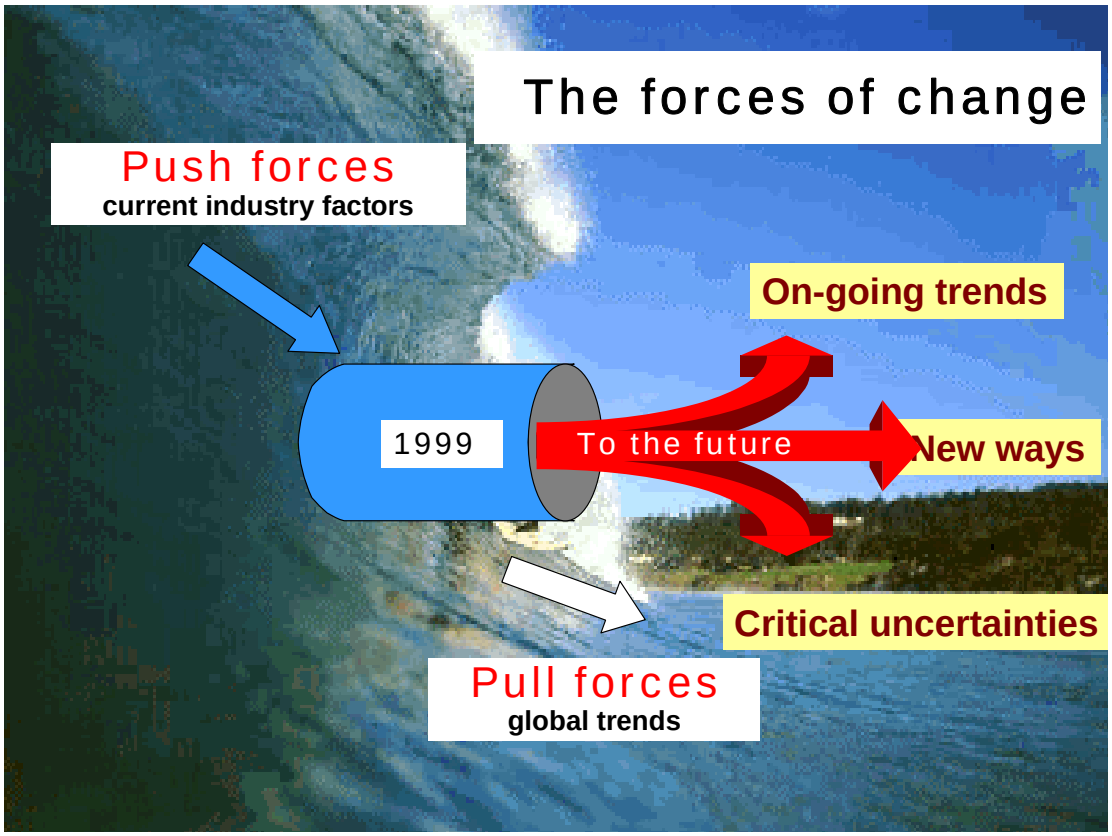


Diagram 3: The Forces of Change

Scenario Planning

Scenarios are stories rather than scientific analyses. The reliability of the content is less important than the types of conversation they spark (Arie de Geus 1997)

Scenario planning is a way of envisaging what the future may hold for a particular organisation or industry. It is an attempt to identify the major drivers that are likely to shape our future and to gauge the impact these will have on the organisation or industry and its relationship with customers or stakeholders. They are considered to be one of the main tools for looking to the future.
Scenario planning is a way of recognising and challenging existing assumptions. Rather than using straight-line projections from past trends, scenario planning attempts to tell stories about possible and plausible futures in which the organisation or industry may have to operate. These stories explore shifts, changes, trends and critical uncertainties to help identify key branching points and choices. It also builds logical sequences of events in an organisation's external environment in order to show how the future might evolve from the present. Scenarios address the following components:

- Issues, trends and events in the current environment that are of concern to the decision-makers;

- Elements in the environment that are determinable and somewhat predictable; and
- Elements in the environment that are more uncertain-trend breakers that affect a system in unpredictable ways, but with understandable dynamics.

Scenarios and their attendant pathways attempt to describe a strategy of movement, not position. It must be distinguished from legislation that has different purposes. Generally speaking legislation is about strategy of position and minimums and therefore has quite different purposes altogether.

The scenario process provides a context for thinking clearly about the impossibly complex array of factors that affect any decision. It gives participants a common language for talking about these factors starting with some 'what if' stories. Then it encourages participants to think about the future as if it had already come to past (Schwartz 1991). Scenario planning can be implemented by following five basic steps:

- Step 1 is to select an agreed topic of focus for scenario building;
- Step 2 is to review key issues and influences;
- Step 3 is to identify which variables are likely to be key drivers relevant to the topic or focus;
- Step 4 involves the writing of story lines using the key variables to describe a sequence of events over the scenario period; and
- Step 5 is to assess and test the scenarios and their implications for the purpose for which they were intended. This is done to establish that the identified scenarios exhaust the scenario possibilities and that each scenario describes a consistent pathway to a plausible future.

Preferred Scenario

The preferred scenario arises from the scenario planning process and is a mechanism for defining the future, taking into account the significant local and global shifts and multiple stakeholder aspirations. It may be that not all means to realise the scenario are yet known. In that sense it expresses aspiration and the framework for making that happen.

Pathway

Having developed a preferred future there is still the need to create a pathway of actions to go from the preferred future back to the present time. This process of working back from a future period of time to the present differentiates this procedure from strategic planning where the process takes you from the present to some point in the future. Conceptually this point is critical as it forces people to develop a clearly articulated view of their preferred future.

To develop a series of actions spanning a number of years it is helpful to determine from the scenario development and preferred future a range of strategies. The diagram below shows the relationship between the preferred future, strategies and implementation of actions and projects.

The strategies are processes that are means to achieve the ends or themes arising from the scenario development included in the preferred future. The essence of strategy formulation is to choose the right themes and ensure appropriate resources can be allocated to it. It is also critical that the strategies are capable of implementation. It is better to develop a few strategies so they receive the time and energy they require re-positioning the organisation or industry. Once strategies have been documented projects or actions can be identified with relevant time lines. Diagram 4 shows:

- The relationship between where we are now and our preferred future;
- Pathways to get from the present to the future, in this case 2010; and
- The many projects or activities that, when implemented, will get us to our preferred position in the future.

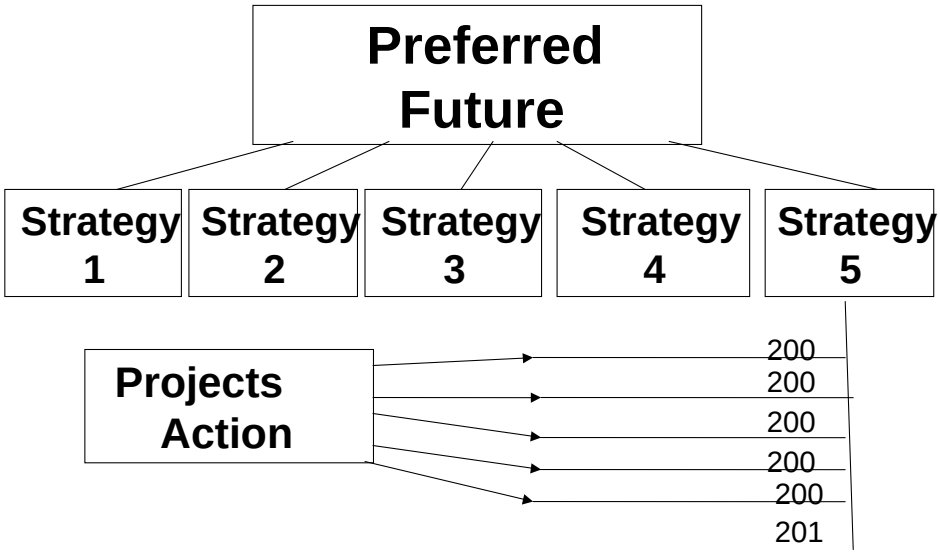


Diagram 4: Pathway Development

Foresighting Framework

Diagram 5 below shows the relationship among variables in the foresighting methodology. It expresses diagrammatically the unique aspect of foresighting in that a person has to imagine a future that they want and be able to stand, metaphorically speaking, in that future. To be in a position to do that, driving forces that are creating change need to be analysed and the mindset needs to be focused on the future possibilities. By standing in the future and looking back to the present it becomes relatively easier to identify the pathways and projects that are required to achieve that desired future.

This framework is linked very closely with the scenario-planning phase as the scenarios give the possible shape or context of desired futures that then becomes the basis of developing strategies and projects for achieving that desired future.

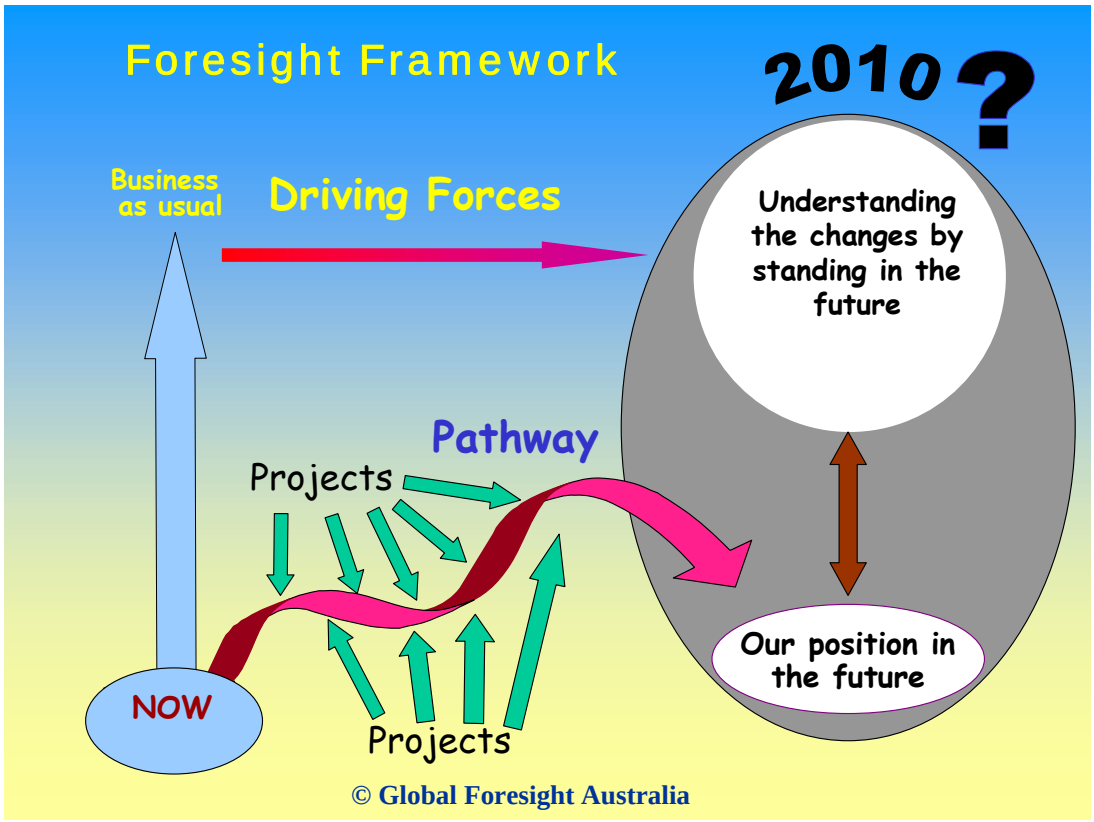


Diagram 5: Foresight Framework

Strategic Renewal

Organisations and industries go through characteristic lifestyle phases. In very simplistic terms success, in meeting new needs of the market place, in a superior manner to competitors, is reflected in rapid growth. Over time this growth slows and the organisation or industry experiences plateauing – characterised by less (incremental) success in the market place and a sense of lack of direction. Organisations or industries at this point face the challenge of either strategic renewal or strategic stagnation and decline.

3. NEED

During the 1990s, possibly as a consequence of the Recreational Fishing Inquiry which reported in 1994, fishing sector interests in Queensland were in conflict over the amount of access their sectors had to fisheries resources. At that stage the fishing sector interests were competing for what they believed was their rightful share of the resource and based on the "winner takes all" strategy.

Following the establishment of the FIDC and discussions by members about the perceived state of Queensland's fisheries it was agreed that the foresighting process be utilised by the FIDC to plan for Queensland's fisheries to be sustainable and profitable into the future. The changing community expectations about the treatment of natural resources like fisheries was also a key driver in FIDC engaging in the development of a long-term planning process.

FIDC members agreed that the foresighting process appeared to be a powerful methodology and a useful mechanism for developing a cross-sectoral approach to the future of Queensland fisheries. It was also important for the key government agencies from all relevant levels to be involved in the project as there needed to be full agreement on a 'vision' for the industry by all FIDC members

FIDC agreed that the resources of research and development and management were not currently directed towards an optimised cross-sectoral strategy. Accordingly this project was seen by FIDC as being of the highest priority. The need for the project was also driven by the recognition that greater benefits could be achieved by the fishing sector interests focusing on those issues they could agree on rather than focusing on issues that divided them.

The project addresses several Queensland Fishing Industry Research Advisory Committee (QFIRAC) priority areas, but is largely focused on the industry development desires of the relevant fishery sectors.

4. OBJECTIVES

The objectives for the project were:

- To promote cultural change in the fishing industry through scenario planning;
- To provide an holistic framework for the development of the fishing industry in Queensland including all stakeholders eg commercial, recreational, indigenous, charter boat operators, aquaculture, service providers and the community at large; and
- To promote both ecological and economic sustainable development through cooperative planning

5. METHODS

The principal investigator's (PI) role was an interesting one in that his organisation was a contributor at a sector level and the PI contributed also by assisting and guiding the various fishing sector interests involved in the project. This was only possible by Global Foresight Australia Pty Ltd (a company responsible for a number of successful projects on foresighting in New Zealand) ensuring that the PI received the appropriate training in foresighting techniques. This training provided the PI with the knowledge and skills to facilitate the processes and drive the activities outlined below.

Personal Interviews

During June 1998 personal interviews were conducted with 35 stakeholder representatives seeking their views on a range of issues in the Queensland fishing industry. These stakeholders were also requested to provide the names of other key people that could be approached to join the survey. (A copy of the survey questions is at Attachment 1**).** Fifteen other "thinkers" or respected individuals were subsequently interviewed based on the recommendations of the original 35 representatives.

Pilot Study

A pilot study was commenced in July 1998 and was run by Global Foresight Australia Pty Ltd.. The aim of the study was to build sample future scenarios from information obtained from the personal interviews conducted with industry representatives in June 1998. Analysis and synthesis of the results of the pilot study resulted in four scenarios being identified. The four scenarios were used to focus on the interaction of key drivers in possible futures. They were not predictive or preferred outcomes but were meant to be provocative and stimulating. Key outcomes learnt regardless of the scenario included:

- There needs to be clarity about the future
- Frameworks need to be transparent and accountable
- All stakeholders must be involved
- Research and development has a crucial role
- Long-term planning is important
- Infighting among stakeholders and interest groups has a potential detrimental impact on the fisheries and their sustainability

Commitment by FIDC

In September 1998 the FIDC met to review the QFISH Foresight pilot project. The project was endorsed by the members of the FIDC as an effective approach to developing a long-term plan for Queensland fisheries. Based on the success of the pilot project Foresight Australia P/L was contracted by DPI to develop an innovative foresighting project for FIDC use. An FIDC sub-group was established to facilitate activities and assist FIDC in utilising the QFISH Foresighting process to develop a cohesive vision for Queensland's fisheries and the fishing industry.

Preliminary Scenario Planning

During the remainder of 1998 workshops were held with fisheries management staff, fisheries research staff and compliance officers to explain the process of foresighting and to commence development of scenarios. Foresight Australia P/L conducted a round of meetings with key fishing industry sector groups, such as seafood marketers, to assist them in documenting their first drafts of scenarios of the future. To ensure research needs were also factored in at the early stages researchers from universities, Cooperative Research Centres, resource management agencies, CSIRO and the Australian Institute of Marine Science met with Foresight Australia in November 1998 to discuss their views on the role of science within fisheries of the future. Their key

ideas, key priorities, role and aspirations of researchers and next steps were documented and passed into the FIDC process.

QFISH 2010 Scenario

In early 1999 the first draft of an overall narrative scenario, based on work done with a range of stakeholders, results of the personal interview survey and refinement by the consultant from Foresight Australia, was presented to the FIDC. It was agreed at this meeting that each of the sectors of the fishing industry would provide comments on the draft and commence development of sector specific scenarios. Subsequently a document titled QFISH 2010 Scenario was circulated to representatives from all fishing industry sectors. It stressed that if the fishing industry was to keep exploiting fisheries resources, as it was currently, then it would be difficult to be sure of either the future sustainability or profitably of those resources.

Following on from the circulation of the draft QFISH 2010 Scenario document earlier in the year a postal questionnaire was developed and distributed to all stakeholder groups (copy of questionnaire is at Attachment 2). This survey was designed to collect information on a preferred position for the year 2010 by all stakeholders that would cover the diverse nature of fisheries. Additional information was distributed on global trends, local trends and an example of a 2010 preferred position to assist respondents in framing their responses. It was also at this stage that part funding for the project had been approved by the FRDC.

By mid 2000 two documents - “Queensland Fisheries 2010 Vision” and “Future Directions of Queensland Fisheries 2010 Vision Scenarios” - were distributed widely. The purpose of the distribution was two fold. Its substantive purpose was to obtain comments from the stakeholders as to its accuracy and completeness and a secondary purpose was to publicise the project to any interested party. To ensure a large number of organisations and individuals were aware of the documents and their purpose, efforts were made to send the documents to as many fisheries groups as possible.

A web site was also established to provide information to all sectors of the fishing industry and to the public about the Foresighting project. The web site contains general information about foresighting and provides links to the draft major documents created during the project.

Sector Pathways Finalised

Through the remainder of 2000 and into 2001 a working group of stakeholder representatives from the FIDC was convened to develop fishing sector pathways to realise the preferred future scenarios of the sectors. A contractor with fisheries expertise and well known to all sectors was recruited to assist fishing sectors in developing and finalising their pathways (copies of the fishing sector pathways are at Attachment 3).

Fisheries Summit

A Fisheries Summit was held on 30 April/1 May 2001 to showcase the work that had been achieved by the various fishing interest groups. The program for the Summit is at Attachment 4. The Summit was attended by representatives from all of the interest groups, apart from the indigenous sector; invited interstate fisheries visitors

representing national fishing bodies; and representatives invited from some of the other primary industries using the foresighting methodology to engage their industry members in visions for the future. The indigenous sector was not disinterested in the Summit and the processes leading up to it, but rather they considered a comprehensive view of their sector was not possible until appropriate consultation occurred with Traditional Owners and indigenous communities.

A further survey was distributed to representatives of the fishing interest groups on the FIDC working group to gauge the level of effectiveness of the processes used and where the sectors believe they should be heading collectively from here. (A copy of the survey is at Attachment 6)

Building Smart Futures Brochure

A "Building Smart Futures in Fisheries" document was published in October 2001 **(**see attachment 7). The Document was a summary of the fishing sector interests preferred future positioning in the world in 2010. It is envisaged that fishing interest organisations, groups and sectors will use the Document as a reference to influence their decisions for the future. The Document will particularly provide a basis against which government and fishing interests can determine appropriate research and development priorities and government can develop policy settings and support for the fishing interests and the resources.

6. RESULTS / DISCUSSION

Introduction

The establishment of the FIDC in 1997, a peak fishing advisory body, comprising an independent Chair, key leaders of fishing sector interest groups and Queensland and Federal Government senior officers, set the scene for an examination of where Queensland's fisheries were heading in the longer term.

Whilst FIDC members were grappling with this key issue, they became aware of the New Zealand Government's review of its current economic direction in a number of its business areas. The concepts and methodology of foresighting were being adopted widely by the New Zealand fishing industry, rural industries and sectors within the New Zealand Government. It was also apparent that substantial resources were being committed to the introduction and implementation of foresighting in government business areas.

The challenge undertaken by New Zealand at that time was to conceptualise the new economy and then move from its current economic model based on efficient resource utilisation to one where its knowledge base can be both enhanced and leveraged (Global Foresight Australia). Foresighting was considered a powerful method of conceptualising a new economy by developing a detailed view (a vision) of the future, developing a preferred position for the economy (preferred scenario) and then planning actions to achieve that future vision (pathways).

The introduction of foresighting from New Zealand to Queensland at that time was timely given the problems and difficulties that FIDC was experiencing in developing a strong, unified approach to the future management and development of fisheries. Although it had been recognised and acknowledged across Queensland fishing interest

groups that the fishing industry needed a strong focus for the future it was proving very difficult for the groups to cooperate with one another to achieve it.

At its meeting in early 1998, FIDC was appraised of the foresighting process and methodology and subsequently agreed that the process might provide the first real opportunity for fishing sectors to identify and act cohesively and collaboratively on a vision for the future. The initiation of FIDC into foresighting coincided with the strong interest being shown by DPI generally in the process. DPI recognised the potential of foresighting to act as a change agent across a range of primary industries in Queensland.

The difficulties being experienced by FIDC in working cooperatively on future directions and DPI's interest in the process, provided the impetus for the Fisheries Group in DPI to champion foresighting as a process with the potential to deliver agreed long-term outcomes for the fishing industry in Queensland. On the basis of this support and the interest shown by FIDC members towards foresighting, it was agreed that a trial project be initiated in the fishing industry.

Queensland Fisheries Foresight Pilot Project Phase (1998)

Process and Discussion

The pilot project commenced in June 1998 with the purpose of developing a strategy to manage all aspects of Queensland's fisheries into the future. The process is summarised in Diagram 6 and consisted of the following steps:

- Gaining a preliminary view of the broad industry vision for the year 2010 by interviewing a sample of "thought leaders". "Thought leaders" are defined as those who have had a high level of standing in the industry or known to be innovative thinkers.
- The interview process consisted of a series of questions that were designed to lead the interviewee into considering the current state of play in his/her sector of the industry and, if possible, other sectors.
- He/she was encouraged to address what his/her ideal for the industry would be 10 years into the future.
- This time frame is selected so that the interviewee would not feel constrained by the immediate challenges but will focus on the ideal.
- Finally the interviewee was encouraged to suggest means by which the future he/she has described might be achieved.
- Aggregating the views of those interviewed to gain a composite goal for future industry direction and to establish the priority issues.
- These views were then developed into a series of scenarios for 2010 that detailed the successes and failures involved in achieving these scenarios. The first cut was performed by DPI officers involved in the interview process. Other DPI staff supported these officers and the consultant facilitated the process.
- The scenarios were presented to the FIDC for the members to gauge the merit or otherwise of the process. If deemed an appropriate process, the process was to be extended to a broader range of stakeholders and a preferred industry scenario would be developed.

The intention was to have full industry ownership of this scenario and appropriate strategies and resource allocations developed in a holistic manner to achieve the desired future for Queensland's fisheries. Having mapped out a plan of action the trial study commenced with the survey of 35 influential stakeholders and 15 other people who were considered 'thinkers' by the 35 stakeholders. The survey was carried out by selected DPI staff who were given specific instructions on interview techniques by Global Foresight Australia Pty Ltd.

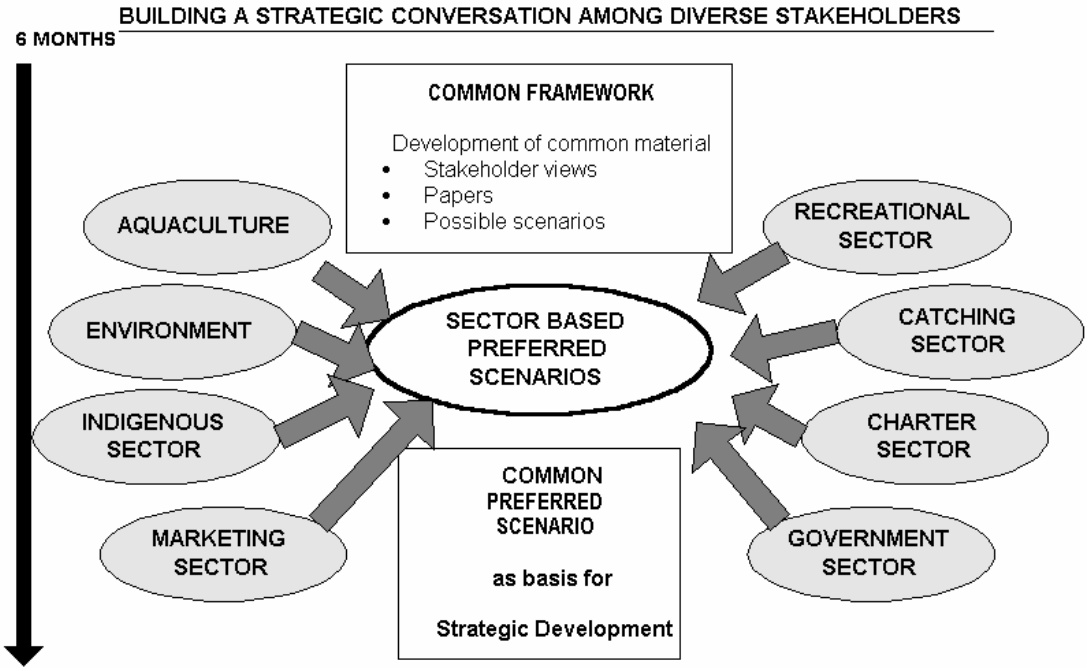


Diagram 6: Building a strategic conversation Among Diverse Interest Groups

The most important element in the interview process was creating a situation where representatives could talk freely and expansively about their views of the future. Another important element was making sure the interviewer was clear as to what domain the interviewee was thinking when responding. Domain is the industry the interviewee believes they are in. For example charter skippers may see themselves as part of the fishing industry or as part of the tourism industry. Knowing the domain is important for both the interviewer and interviewee because the perspective for this survey was the fishing industry. The context of time frames is also important because the concept of foresighting has a significant time horizon associated with it. Some of the fundamental questions that require answers here include:

- What is tomorrow's industry?
- Who are tomorrow's customers?
- Who will be tomorrow's competitors?
- What will constitute success tomorrow? And
- What technologies will be relevant etc and importantly how will we build a pathway to that future as opposed to simply projecting from today?

The majority of the questions in the survey are concerned with building the future. They range across a number of areas such as SWOT analyses, leadership, value chains, and networks to name a few.

The interview responses were then analysed and they showed unanimity of thinking about the future. Key implications of the analysis included:

- Determine 10-year time frame objectives;
- Decide on action;
- Ensure that appropriate funding is available to progress that action; and
- Establish an implementation schedule to attain some objectives quickly.

The interview analysis also resulted in the identification of a number of forces of change. These forces of change comprise key global shifts, current local trends and cross-sectoral drivers that respondents believed would impact on the fishing industry.

Key Global Shifts

A number of global forces of change have been identified as influencing fisheries over the next 10 years and these are identified in Diagram 7 below.

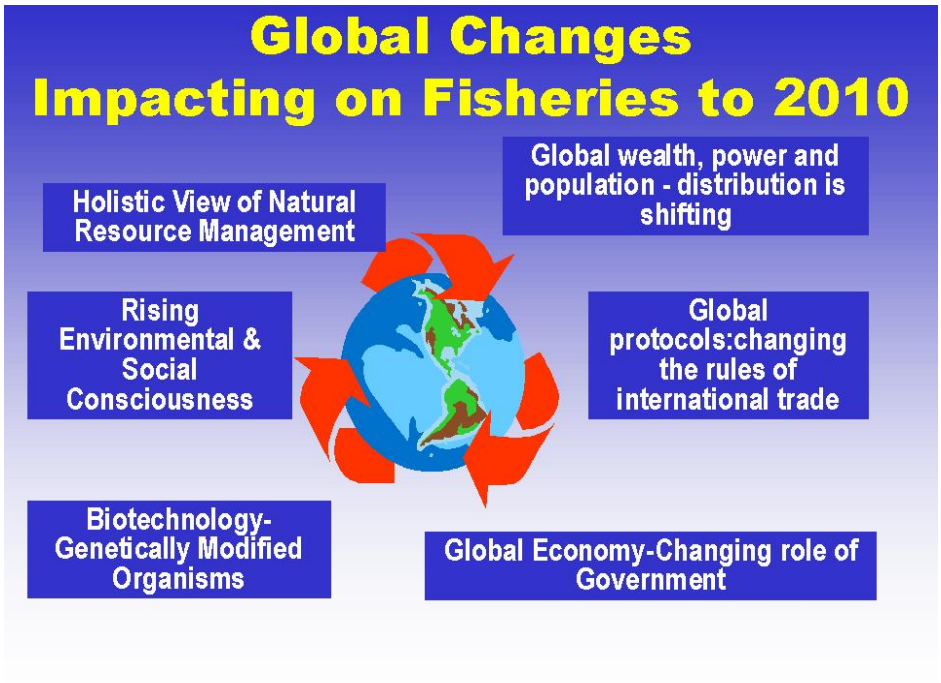


Diagram 7:Expected Key Global Forces of Change Impacting on Fisheries

Holistic View of Resource Management - to manage natural resources given the complexity of our eco-system the community must consider the entire system or assume a high risk of breakdown in the long run. The holistic view of resource management treats people and their environment as a whole using human, biological resources to succeed. Fisheries Ecosystem based management 'is an approach that takes major ecosystem components and services into account in managing fisheries. It values habitat, embraces a multi-species perspective and is committed to understanding ecosystem processes.'

Environmental Sustainability - being the idea that a resource is used in such a way that it is not depleted permanently or the use of the resource can be continued indefinitely. This included broadening the scope of environmental impacts to include forces other than just fishing, in particular:

- Global warming - post Kyoto greenhouse policies including carbon credits, carbon trading and carbon taxes
- Water shortages leading to water quota and the trading of water quota
- Dryland salinity and soil acidification
- Tax on polluting and waste creating practices
- Destruction of the aquatic environment by fishing or land based activity.

Animal Ethics – and the increasing awareness by the community of the ethical issues associated with the treatment and slaughter of animals for food products and for research. The ethical treatment of fish is already well established within the R&D sector of fisheries and is likely to become more prominent with the methods used in commercial and recreational fishing.

Significant Shifts in Global Power and Wealth - changing societies are changing the nature of markets: The societies on which markets are based are radically changing. The world population is growing where most people in the developing world can least afford the necessities of life while in the developed world its citizens are not reproducing enough to replace themselves. This significantly changes the age profiles. Eg. Japan's population in the 21st century will be 56% of today's population.

Communication Revolution - Electronic commerce is creating a global business revolution.

Biotechnology is the Defining Technology - The new biotechnologies will provide the means for genetically modified foods and manipulation of food characteristics. These new technologies will drive new forms of medical help and create new proteins for human consumption that will not need any kind of animal / fish base.

Economically we are now a Global Village - The world is now a global village and this has unprecedented consequences. Competition will be global and few barriers remain to protect our position as a low cost agricultural commodity producer. In this world, new value chains are being developed where powerful supermarket chains and their consumers require traceability, and above all else, food safety.

The Role of the Nation State is Changing - Globalisation is changing the role of the nations and States. Increasingly national decisions are aligned to global and regional protocols. Governments seem poorly equipped to handle the major global shifts. International frameworks are being increasingly driven by ideas such as intergenerational equity and environmental sustainability.

The State of the Environment is a Key Community Concern - Global warming and emission control, biodiversity, sustainability, alternative fuels, and more frequent negative environmental impacts are driving increasing environmental accountability and responsibility. Technology and biotechnology carry both promise and peril in this regard.

Transportation and Energy Costs - Australia's stocks of domestic oil will be running low requiring large imports from the Middle East. Not so much a problem of availability but one of price (erratic fluctuations on a world market) and further pressure on balance of payments position. Technological fixes are possible, particularly transitions to compressed or liquified natural gas, shale oils, biofuels such as bio-diesel, bioethanol and biomethanol.

Key Local Trends

The key current trends identified are presented diagrammatically below with a brief explanation of each one following.

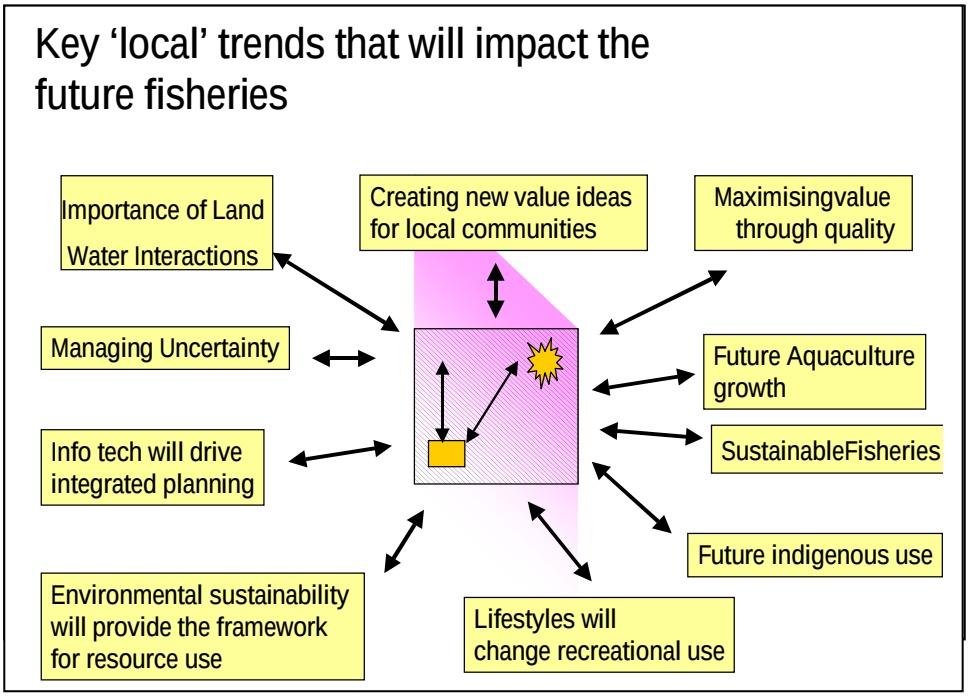


Diagram 8: Key Local Trends

Land and Water Interactions - There is significant evidence that traditional and new land uses are causing significant, negative impact on many Fisheries. Views on how those Fisheries might be used in the future are also changing. Few models for positive relationships between Fisheries stakeholders and land users exist.

Sustainable Fisheries - There is an increasing demand for commercial and recreational users of fisheries to act in ways that are environmentally sustainable. This extends not just to fish stocks but also to habitat.

Creating New Value Ideas for Local Communities - Global trends are forcing local communities within Queensland to rethink what they are, and how they will retain value, employment and economies of size. Access to and use of fisheries, either in current or new forms, is a key consideration in this debate.

Maximising Economic Value and Quality - The economic viability of fisheries is related to the demand for quality. The drive for Worlds best practice – as expressed in protocols and standards – is a key strategy by the current stakeholders.

Aquaculture Expansion - Aquaculture is seen as a key mechanism for satisfying future market demand for fish, but is challenged by a range of technical and environmental problems. The improving track record on disease and risk management is the key to future market attractiveness.

Lifestyles are Redefining Recreational Use - Significant changes in lifestyles are changing the nature of recreation. This is creating new industries and new propositions. These new industries are changing the use of the fisheries thereby creating new economics and new stakeholder aspirations.

Indigenous Demand - There is an increasing articulation of Indigenous demand with respect to fisheries. Over time it is likely that issues of native title and indigenous fishing will be progressively addressed and settled.

Managing Uncertainty - Despite the ability of new technologies, it is likely that the fisheries and their management will always be characterised by levels of uncertainty.

Information Technologies and Integrated Planing - Widespread information and knowledge will drive both the expectation and requirement that Management agencies are both consistent and integrated in their practice**.**

Environmental Sustainability - will provide the framework for resource use. International protocols, consumer requirements for environmental guarantees, and community expectations will drive environmental sustainability. Any, or all, 'local' global collapses will heighten this perception. Australia will base much of its future international reputation for agricultural product on its 'greenness' and seek to get advantage from this.

Cross Sectoral Drivers

The participants in the survey identified the following cross-sectoral drivers. These cross-sectoral drivers constitute significant issues that generally affect more than one sector and were taken directly from the survey responses.

- Adjacent land use;
- Rationalisation of access to the resource;
- Changing social contract;
- Ratio of aquaculture to wild caught product;
- Competitive barriers to entry;
- Global pressures on the fisheries;
- Marketing and investment;
- Research and Development-invest in-for what?
- What protection means in 2010?
- Leadership shifts by stakeholders;
- Reshaped commercial sector;
- Fisheries as a holistic idea;
- Licensed recreational fishing;
- Effective compliance;
- Total quality management in the whole industry;
- Using technology to benefit fisheries and for good management;
- Stock assessment for all fisheries;
- Demand for fish; and
- Industry structure that facilitates an economic or social return for all sectors.

The key global shifts, key local trends and cross-sectoral drivers were then discussed and analysed by a special meeting of the FIDC with a view to developing draft scenarios for the fishing industry. The key sectoral drivers received a lot of attention, as they are, within the context of global drivers, the basis of creating a preferred scenario. Some of the more important feedback from the scenario development showed that whatever the scenario:

- There needs to be clarity about the future;
- Frameworks need to be transparent and accountable;
- All interest groups must be involved;
- Infighting among interest groups has a significant detrimental impact on fisheries and their sustainability;
- Research and development has a crucial role; and
- Long-term planning is important

An important decision taken by the FIDC was to establish a task force that would develop an early draft of a preferred scenario for the future of the fishing industry, demonstrate areas of common understanding and agreement and identify key issues to be faced. The task force comprised representatives from all of the major sectors except environment, GBRMPA and indigenous sectors. These sectors were not yet involved in the process.

Results and Discussion

The pilot project was a vital part of the introduction of foresighting to the Queensland fishing industry. It was important for the following reasons:

- The survey and scenario planning elements provided the background for the major participants to come to grips and understand the thinking behind foresighting and what benefits could flow from its use.
- The information obtained from the use of a structured survey was a valuable background commodity as it was collected from a range of "thought leaders" who had ideas about the types of changes needed for the future growth and development of the fishing industry.
- The information was also valuable in focusing attention towards the future rather than reinforcing the current issues that were stifling any move towards industry sectors working together for the benefit of the industry.
- Having an outside consultant very familiar with foresighting and with the capability to clearly describe global changes currently occurring and project these changes and possible impacts forward into the future, was a critical element in jolting stakeholder representatives into taking seriously the task before them.
- As participants became more involved in the theory and processes of foresighting, some understanding of how vested interests can be destructive was realised and a more cooperative dialogue started to develop.
- The introduction of scenario planning provided an opportunity for participants to expand their minds and start to think about the possible futures that could be imagined for their industry.
- The growing understanding and realisation by participants that it was possible to imagine a more desirable future and there were methods to guide the way, fostered an emerging commitment to developing a better future for fisheries. This commitment was later exemplified by seeking and obtaining funds from FRDC to further develop the outcomes sought from the foresighting process.
- There was a realisation that the project required a high level team to drive and manage it, the Fisheries Group in DPI to champion the project and adequate resources to fund it.

The trial project met the critical components of the foresight model in that:

- mindsets were being explored;
- future contexts were being identified;
- the current thinking was being challenged; and,
- an emerging realisation that the industry needed to change if it was going to survive into the future.

A cost to the project at that time was the lack of representation from the environmental, Commonwealth environment agency and indigenous sectors. The cost was in terms of not having the views of all major interest groups included, particularly in this early stage, and this was recognised subsequently and steps taken to engage these interest groups..

At a special meeting of FIDC on 2 September 1998, members evaluated and endorsed the pilot foresighting project that had been initiated in July. The members agreed that the encouraging results of the trial project should be used by FIDC to develop a cohesive vision for Queensland's fisheries.

At this point there was guarded optimism and enthusiasm shown by industry sectors as the process and project was well supported by the Fisheries Group of DPI and other senior DPI executives. It was also viewed by fishing interest group representatives as having provided the first real occasion for them to plan and act cooperatively and with purpose.

A promising start had been achieved to this point through the efforts of various organisations and individuals. The next stage of the foresighting process was the development of a preferred position/scenario that encompassed the diverse array of interest groups and diverse nature of fisheries for the year 2010.

QFISH Foresight Project and Preferred Future Phase

Process and Discussion

This phase of the project follows the adoption by stakeholders of the completed pilot project process. As a consequence, FIDC agreed to broaden the scope of the pilot project to encompass all fishing sector interests in Queensland fisheries. To this end, representatives from the environmental movement, indigenous sector, tourism sector and the Great Barrier Reef Marine Park Authority (GBRMPA) were invited to participate in the project.

The project during this and following phases was funded jointly by FRDC and DPI. The particular interest of FRDC was in developing a methodology that could be used by other jurisdictions to develop a strong coordinated commitment by all stakeholders to an agreed vision of fisheries of the future.

The FIDC then oversighted the development of a detailed vision as to:

- where Queensland fisheries and fishing industry might be in 2010;
- the preparation of several alternate scenarios as to what that vision might include; and
- the management of a planning process to deliver a 2010 vision(The 2010 vision was also called a preferred scenario.)

FIDC representatives were asked to sketch a preferred scenario looking forward to the year 2010 and based on the following headings:

- What would be the desired state of fisheries?
- What issues would have to be faced and solved?
- What would we need to have been good at to achieve that state and solve the issues?
- What would the relationship between users have been?
- What knowledge and skills would we have needed?
- What technology would be required?

- What research would be needed?
- What mindset would be required among interest groups?
- What values are important? and
- What would the milestones/pathways look like?

Industry representatives and DPI staff analysed the responses to the headings above as well as continuing to build on the draft scenarios commenced during the pilot phase of the project. From this point, the process continued by establishing a story line that revolves around the two scenarios. The beginning of the new century sees two choices for the stakeholders in Queensland fisheries. They can either compete for their "rightful (my) share" in a declining wild resource or they can cooperate in order to create "pristine fisheries" that are the global benchmark, which involves both wild and farmed stock.

The "my share" mindset is a projection of a business as usual mindset. The proposed "pristine fisheries" mindset reflects the desire by the stakeholders of the FIDC to find a better way both to improve the fisheries and their habitat and to realise their future role and aspiration.

<u>The "My Share" mindset.</u>

Characteristics of the "my share" mindset include:

- Continued conflict between users
- Lack of information
- Poor planning and cohesion
- Failure to heed signs
- Piecemeal compromise decisions

All actions are driven by the legacy of the past and a fundamental belief in their role (whoever the stakeholder may be) is one of necessity not choice.

<u>The "Pristine Fisheries" Mindset.</u>

Characteristics of the "pristine fisheries" option include:

- Strong coordinated commitment to an agreed vision
- Sound modelling techniques
- Effective management
- Holistic approaches
- Cohesive stakeholder approaches
- Agreed pathways

Crucial to the "pristine fisheries" scenario is an understanding that a fishery with more resources provides choice both for today's and tomorrow's stakeholders.

The drafting of the two polar scenarios not only heightened awareness of the foresighting process but also engendered a healthy questioning attitude towards how the process for establishing a preferred scenario should be developed. Members of FIDC and the project team became divided on the "best" way to develop a preferred scenario for the industry generally. One view was to go straight to an industry preferred future based on the initial survey results and discussion with sector leaders. Another view was that each sector should develop a preferred scenario for their sector

before attempting a general industry scenario. In addition, the question of pathways and projects on pathways heightened the debate on the preferred future as it was argued that unless the sectors did their own preferred futures, they will not identify and own the projects needed to achieve the scenarios. It was subsequently agreed at a FIDC meeting that each fishing interest group should develop a preferred future for their sector before finalising the whole industry preferred future.

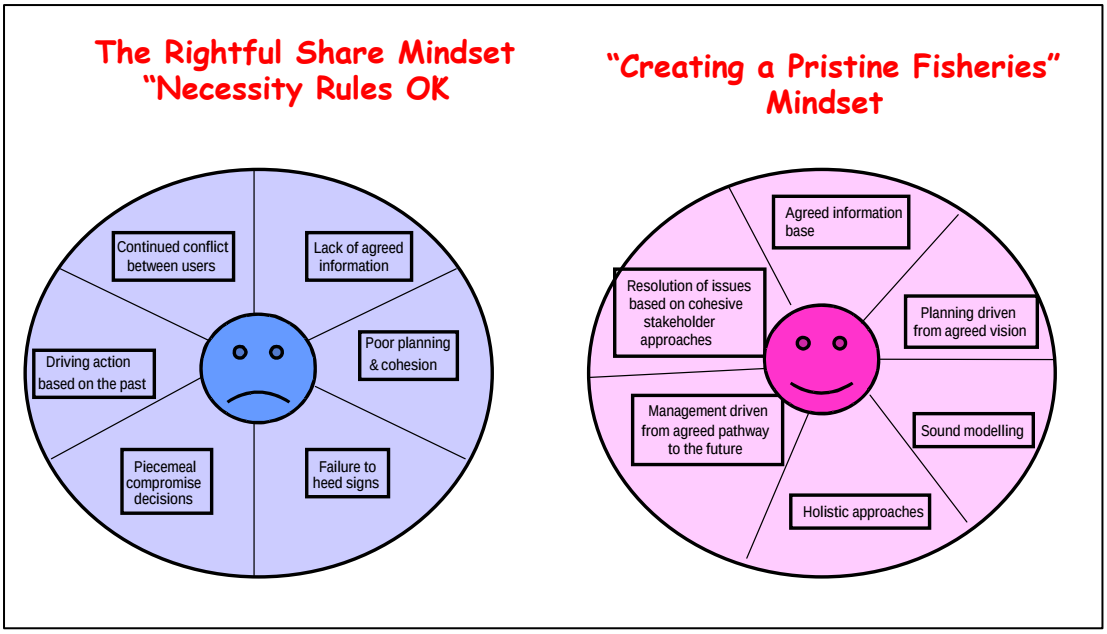


Diagram 9: Preferred Future Draft Scenarios

It was at this time (early 1999) that other matters in fisheries began to exert pressure on key fishing interest groups and their FIDC members and deflected the focus from the foresighting project. Issues such as, the Trawl Management Plan, Review of Fisheries Agencies and the Review of the future of Industry Development Councils (IDC) exerted pressure on the foresighting process to the point where the pace and progress of the project slowed dramatically. As a result, it took the next year for the industry preferred scenario and sector scenarios, (circulated as the draft Queensland Fisheries Vision 2010 Ensuring a Sustainable Future for All), to be advanced enough for the work to be circulated for comment

Results and Discussion

As indicated previously, the development of the preferred future for the fishing industry proved more difficult than first imagined. The first few drafts of the preferred future were quickly developed with the assistance of the consultant. As each succeeding draft however went through an iterative process involving a number of sectors, the debate became more willing and protracted. The debate centred on the appropriateness of developing an industry preferred future before each sector had developed a preferred future for its sector. There were also lingering doubts expressed by some participants about the effectiveness of the foresighting process in an industry as diverse as the fishing industry.

The project planning to this point was based on developing an industry preferred scenario utilising information obtained from the survey of industry "thinkers" and discussions with industry sector leaders who were generally FIDC members. It was believed that this method would develop a draft, preferred scenario quickly and the scenario could then be distributed to sector leaders and other individuals with an interest in fishing for comment and refining.

One difficulty with this method was that it assumed that sector leaders would know what they wanted for the whole industry, including six to seven sectors other than their own. Another difficulty involved the degree of commitment that a sector could give to a process and outcomes without having to develop, with their own membership, scenarios and pathways in their sector. At the core of the debate was the question of ownership of outcomes.

In terms of the methodology, the debate over the best way to develop an industry preferred scenario highlighted the linkage between creating a desired future position and identifying pathways to achieve that future position. It was very important to first develop a preferred future based on global shifts, local trends and cross-sectoral drivers but an understanding of how that preferred future would be achieved was also crucial. The identification of strategies and then projects to help achieve a preferred future tended to anchor the process and was more likely to promote greater commitment to the preferred future than would otherwise be the case.

The creation of the fisheries of choice, the pathway to it, and the ability to solve issues that will arise inside fishing interest groups, and between, them required strong cross sectoral leadership. The leadership would come from fishing interest groups and community expectation of such behaviour. The leadership was expected to focus on clarity of the vision, pathway and issues, commitment to the overall approach, transparency and honesty in dealings and a "fisheries focus" versus "political focus" to decision making.

The dramatic development of key issues in fisheries in the April 1999 to June 2000 period tested the resolve of sector leaders to maintain faith in the foresighting process. In the event, the other issues were so significant that they had a detrimental effect on the foresighting process during this period. Most of the key fishing interest groups, and particularly their leaders, were heavily involved in these other key issues and therefore had very little time to spend on developing scenarios in their sector let alone develop industry-wide scenarios collaboratively with other sectors. Issues like the review of fisheries institutions and the trawl management plan challenged industry leaders to maintain focus, commitment and transparency in their foresighting activities and stay "fisheries focused" rather than becoming "politically focused" in their dealings with Government on these other issues.

The reviews of fisheries institutions and the trawl issue also tended to distract the attention of fisheries managers from the foresighting project. It was difficult to maintain a strong leadership when the future was uncertain due to Government policy shifts and the key fishing interest groups were engaged in what they saw to be other more pressing issues. Even with these significant interruptions some headway was made but very slowly. A significant achievement at the end of this period was the distribution for public comment of an early draft, preferred future for the industry

In relation to the theory of foresighting, the events of 1999/2000 could not be considered helpful. Fishing interest groups were either very frustrated with the level of inaction or were fully occupied with other matters. The good work done initially in terms of exploring mindsets, identifying future contexts, creating desired futures and

designing pathways was quickly being eroded. It appeared as if one of the driving forces was competition to win the minds of decision makers rather than operating on a united front to inspire confidence in decision makers that all the sectors were cooperating in achieving a common future.

There is an indication that some representatives of FIDC expected that the project, including the trial project, would be completed within the first 12 to 18 months. This view is interesting as it suggests that all sectors were clear about their future direction and had a good understanding of where other sectors were heading. All evidence suggests that most sectors were still coming to grips with the methodology of foresighting and apart from knowing some of the major outcomes being sought by other sectors, had no knowledge of how those other sectors were going to achieve their outcomes.

In terms of the objectives of the project this 1999/2000 period exhibited many of the characteristics of the industry before foresighting was established. Some sectors positioned themselves to take advantage of any key decisions regarding the outcome of the Government reviews into fisheries institutions and implemented strong media messages to strengthen their position.

There was some evidence however of cultural change particularly in the formation of the recreational fishing alliance bringing together Sunfish, Bait and Tackle industry and the Boating Industry. Also, the agreement between the commercial catching sector and the recreational fishing sector to work collaboratively on habitat issues. The other core objectives of adopting an holistic framework for development of the fishing industry and promoting a cooperative planning approach to ecologically sustainable development did not fare as well during this period.

Pathway Development

Process and Discussion

The third major phase of the project was pathway development. Pathway development (Diagram 4) consists of determining strategies and projects to turn the preferred future into reality.

In the development of the preferred scenario, the analysis by FIDC members, the DPI project team and the consultant brought out a number of key points concerning a possible shared view of pathways. On the basis of these discussions and published material of key interest groups, the following points formed an agreed and shared view of the general direction of a pathway:

- A desire to create future fisheries that are cleaner, have better habitat and more sustainable levels of fish stock;
- A focus on building an industry based on worlds best practice operating in an environment that is considered worlds best practice;
- Is based on entrants being “profitable” in their activities;
- Subscribes to the ground rules; and
- Creates prosperous Queensland communities for both present and future residents.

This general pathway outcome led to a number of broad streams that could form the basis of a series of pathways that interest groups might wish to utilise in creating their preferred future. The six streams identified include:

- Information/research stream;
- Access stream;
- Management stream;
- Local response stream;
- Stakeholder engagement stream; and
- Alignment stream.

The pathway development phase was an element of the foresighting process that developed very slowly. The slow progress was particularly a consequence of foresighting being challenged by other pressing matters and a lack of resources being made available for progressing foresighting generally. This situation was alleviated by the decision to combine the Queensland Fisheries Management Authority (QFMA) and the Fisheries Group of DPI to create the Queensland Fisheries Service (QFS). In the rearrangement of portfolios and duties in mid 2000 after the creation of QFS, the foresighting project was allocated new staff including the employment of a contractor to concentrate on assisting fishing interest groups with their pathway development. These initiatives were very helpful in re-energising the foresighting process.

As indicated earlier a major difficulty with progress of the project was the lack of FIDC direction and influence during the early stages of the project. However, with the changes to fisheries administration identified above, the FIDC committed to refocussing its energy on strategic matters (as opposed to operational) and a sub-committee of FIDC comprised of representatives from each of the key fishing interest groups was formed to re-energise the project. The sub-committee met on a number of occasions to consolidate the work already achieved and then to go forward in a team environment to complete the project. Staff of Global Foresight Australia facilitated many of the meetings and all sectors were represented. During this phase all sectors developed preferred scenarios or preferred futures for their sector and commenced work on the pathways. An amended draft industry preferred future was documented through much iteration.

A couple of the fishing interest groups had proceeded during the “loss of direction” period to develop their own pathways without assistance from DPI or the contractor. The recreational sector and to some degree the commercial and charter sectors had an understanding of where they wanted to be but the recreational sector was the only sector to document its pathways without assistance.

Results and Discussion

Pathway development was one of the hardest concepts for fishing interest groups to manage in the foresighting process. Its difficulty is not in understanding the theory but in how to go about constructing the strategies and actions based on time frames. Its difficulty is possibly associated with the lack of long-term planning generally in the fishing industry that historically has been reactive rather than being proactive to change.

The general lack of detail available in the foresighting methodology to provide guidance to groups undertaking pathway development constituted another difficulty for the

project. There is a lack of information on how to get from the theoretical framework to an understanding of how the pathways are developed. This could be because the implementation of this element of the theory is highly dependent on a facilitator being present to guide and generate ideas for participants to investigate in terms of their preferred future. This aspect was borne out by the success achieved by interest groups working closely with the contractor and the guidance given by the consultant at working group meetings.

The development of pathways by fishing interest groups was mixed and varied. One sector recognised the process as providing a methodology that would give their aspirations legitimacy whilst being a method of describing, to other sectors, how they intended achieving their preferred future. Other sectors saw opportunities for strengthening their sector and working towards a united position whilst others saw the advantages in understanding how other sectors viewed their future and what pathways they were using to achieve it.

The development of pathways, although long and protracted, did contribute to the project's objectives. The better understanding of the relationship between the preferred future and the pathways to get there began to piece together a picture of a framework in which to follow in developing the fishing industry for the future. The various scenarios developed by the sectors highlighted the commonalities across the sectors and generated new ways of viewing the position of those sectors. The sector pathways developed are provided at Attachment 3.

Fisheries Summit – Building Smart Futures

Process and Discussion

The Summit was an opportunity to showcase work that has been done by all sectors of the Queensland Fishing Industry. The program (Attachment 4) for the Summit highlights the comprehensiveness of the work achieved. The work represents scenarios and pathway developments that reflect where each of the sectors wants to be in the future and what pathways or strategies they will use to get them there.

It was pointed out that the industry has a diverse number of interest groups that share a common property resource. This circumstance makes it different but not impervious to cooperation and collaboration among the groups to forge agreed resolutions to issues. The essential outcome for this industry is to have stakeholder and interest groups reaching a consensus on the future that is best for the resource and for current and future generations.

The Summit program format was also designed to provide for guest speakers to present informative, entertaining and provocative talks. These talks promoted one of the project's objectives of encouraging people in the fishing industry to think about changes going on around them and develop new ways of thinking and doing business that will reposition their industry to successfully meet the challenges in the future. The Summit was also organised around opportunities for participants to interact and exchange views.

Many industry and government fisheries and environmental management representatives from around Australia were invited to the Summit. Representatives from other primary industries in Queensland involved in foresighting projects in their industry were also invited to provide a cross industry perspective to the Summit.

The Summit was held over two days and formatted to provide each sector of the fishing industry with the opportunity to present its preferred future and pathways. The method of presentation consisted of all presentations by sectors being placed on a computer using the program Powerpoint and each sector presenter given 20 minutes to make their points. On the completion of each presentation, the consultant put a key question relevant to that presentation to the Summit for discussion and debate. Once all presentations were completed the Summit moved into group discussions to respond to a series of questions posed by the consultant. These questions were futuristic in nature and were compiled from information obtained from the sector presentations and guest speakers.

Another element of the Summit process was to have invited representatives of other agricultural sectors attending to enable cross-fertilisation of ideas and assure the fishing industry that foresighting was being utilized in many other areas of primary industry. These representatives gave insights into how the process of foresighting was travelling in their areas and provided ideas and examples of their experiences.

Subsequent to the Summit a survey (Attachment 6) was undertaken of sector representatives to obtain their views on how they assessed the value of the foresighting process for their sector and where they believed the process should be going to from here. There was general agreement that the process had made an impact on how they viewed the world but for the process to retain its impact it was necessary for FIDC to continue its support for the methodology. It could do this by ensuring an annual review was made of the progress by sectors on their individual pathway development and that there was a continuing conversation among sectors about future goals and directions.

Results and Discussion

The convening of the Summit worked well in terms of adding an imperative to fishing interest groups to hasten the development of their sector's preferred futures and pathways. Eight of the nine sectors comprising the fishing industry presented their views of the future and some ideas of how they were going to achieve that future. The indigenous sector did not attend the Summit as they felt that inadequate appropriate consultation had occurred with indigenous communities and therefore believed it was impossible to express their collective views adequately to the Summit.

The method of presentation did not work as well as expected as complex preferred futures were by necessity summarised down to dot points and a lot of important detail was lost. Preferred futures or scenarios should be by their nature stories that have a high level of reasonableness or plausibility about them. These stories are best told as a narrative. In condensing them down to dot points it created an enormous responsibility on the part of the presenter to build a clear picture of where the sector is going for the participants at the Summit. All presenters did their best to develop and present these word pictures but in a lot of cases the result did not do justice to the work that had been done.

One of the general outcomes of the Summit was the continuing conversation about change and how each sector viewed its position in the future. Specifically, each of the sectors articulated where it wanted to be in 2010 and then described some of the pathways it would follow to achieve these futures. Many new insights were obtained from the presentations and the group or plenary discussions that followed. A number of additional challenges like global warming, changing societal expectations, availability and price of liquid fuels and smarter and quicker ways of creating change within

industry and government were raised and debated. The presentation by guest speakers on thought provoking topics was a highlight of the Summit.

From a Queensland fisheries perspective the following strategic themes, highlighted during the Summit discussions, will require cooperation and collaboration among sectors of the fishing industry if sustainable fisheries are going to exist in 2010.

- Ecosystem management approach to management of fisheries;
- Fair allocation of resources among stakeholder groups;
- Developing processes for engaging grass roots community involvement in fisheries;
- Continuous improvement in ecologically sustainable criteria and standards;
- Developing partnership among stakeholder groups, including those with a vested interest in fisheries resources, and land-based groups who have the potential to impact upon them to improve land/water interactions;
- More flexible Government policy processes to speed up decision making;
- Environmentally friendly fishing practices and methods - reduce by-catch and discarded fish;
- Climate change, population demographics, energy resources and other global forces scenarios incorporated into fisheries management planning;
- Improve utilisation of processing waste from fisheries resources;
- Reduce fish protein fed to terrestrial and aquatic livestock and increase availability for food chain to satisfy environmental and human needs; and
- Aquaculture industry development

The two days of presentations and dialogue with the breadth and depth of views being expressed brought another level of realisation to most participants that significant changes were needed if the fisheries in 2010 were to be lauded as being ecologically sustainable and managed under a regime of ecosystem management. The Summit highlighted the growing understanding that a cultural change was occurring through the industry but it needed to be accelerated. Initiating or continuing discussions with rank and file fishers about scenarios and their attendant key drivers were seen to be valuable tools in promoting cultural change throughout all sectors of the fishing industry.

There was also a growing realisation that foresighting was a means of developing a general framework in which sectors could continue their discussion about the future under the auspices of FIDC. It was also a means of adopting a common language or phraseology among the various sectors so that a mind-set of cooperation could be developed where sectors could thresh out some of their problems together without requiring the government umpire.

The completion of the Summit marked an appropriate time to survey fishing sector respondents (survey questionnaire is at Attachment 5) on the effectiveness of the foresighting process and how they believed it could assist industry into the future. All sectors responded to the survey and responses in the main were very positive. There were positive remarks made about all sectors talking to one another and that environmental concerns had been highlighted by all sectors as one of the most pressing areas for action.

One or two sectors were slightly critical of the perceived lack of progress made by other sectors in the completion of pathways and many sectors were concerned that a lack of commitment by government to the process would quickly erode any gains made to this point. There was an expectation that QFS would be providing ongoing support through the FIDC process to sectors in developing and implementing pathways in a collaborative way.

Subsequent to the Summit the sector representatives met to discuss the outcomes of the Summit and put together a final draft of a "Building Smart Futures for Fisheries" brochure that all sectors could accept as a preferred future for Queensland's fisheries. This document (Attachment 6) was endorsed by the FIDC at its meeting in September 2001 and was subsequently published and distributed to all sectors in November 2001.

The 'Building Smart Futures for Fisheries" brochure is tangible evidence of substantial commitment by fishing sectors to promote cultural change and develop a framework for the future development of the fishing industry. It also represents a significant milestone in cooperative planning for Queensland fisheries.

All sectors indicated through their responses to the survey in 2001 their awareness that this milestone is just the beginning and a lot more work is required to continue the conversation about the future throughout all levels of each sector. Through the auspices of FIDC the "Building Smart Futures for Fisheries" brochure will be reviewed and updated where needed. More importantly however each sector will be contributing to the ongoing foresighting process by progressing projects designed to achieve their pathways, hopefully in conjunction with other sectors with an interest in achieving similar outcomes.

Management of Project

Process and Discussion

The introduction of foresighting and the foresighting project were instigated by the reality that the fishing industry was generally looking backwards rather than looking forwards. It was fighting and competing for a static if not dwindling resource and resisting any attempts to develop a shared future view of where the fishing industry was heading or should be heading

It is essential that there is an understanding that this project was about changing attitudes and values in the fishing industry, and the processes used, and the key personnel involved, were methods and agents of change. The management of the foresighting project was therefore a critical aspect as it had the task of achieving progress in cooperation and outputs whilst recognising the sensitivity and wary nature of the diverse fishing sectors.

Management of the project was the responsibility of the principal investigator who had a support team, comprising departmental staff and an external consultant, providing advice and attending to the many tasks and responsibilities associated with the project. It was fortunate that before the FRDC/DPI project commenced the foresighting consultant had the opportunity to appraise the key industry representatives of the foresighting process. He also had the opportunity to train DPI staff in foresighting methodology and as a consequence of the early trial QFISH project, a substantial amount of information had been collected from industry leaders and "thinkers".

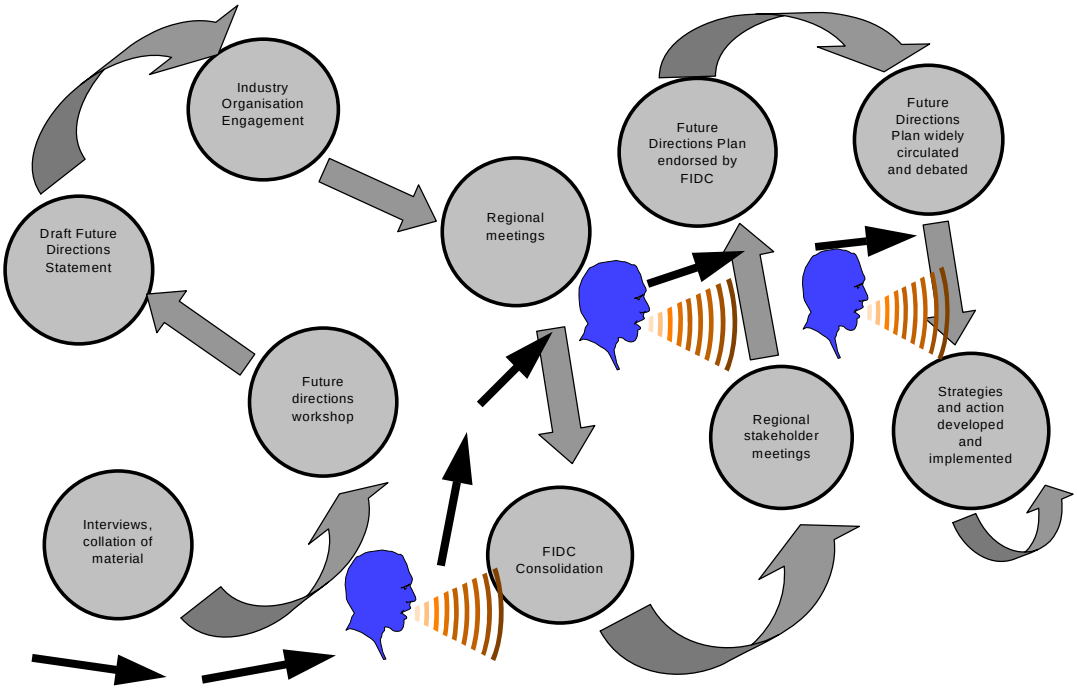


Diagram 10: High Level Future Directions Components

During the pre-FRDC/DPI stage of the project a task force comprising the consultant, senior DPI staff and industry representatives had been established by the FIDC to plan and implement the project. This mechanism operated well for the first few months of the project with considerable progress being achieved. The task force viewed its activities as generally following the key components shown in Diagram 10. These components were strategic components in the foresighting process and provided guidance to the task force in the coordination of the project. During this period the FIDC, and particularly its independent Chair, supported the task force by ensuring that foresighting was the main item of discussion at FIDC meetings.

The commencement of the FRDC/DPI stage of the project received a setback when the contracting of the consultant took much longer to organise than expected. It was three to four months before the project got under way and the consultant and principal investigator realised that a good deal of momentum had been lost. Shortly after, the Queensland Government initiated a review of fisheries institutions.

These events made the task of the consultant and the project team that much more difficult as some of the fishing sectors had a strong vested interest in the outcome of these reviews. These reviews had a recognised immediate impact on the future of these fisheries sectors, whereas foresighting dealt with a longer-term outlook and unfortunately lost priority in those challenging times. One of the key lessons to be learnt from this study is that commitment to foresighting must continue through “bush fires” if it is to achieve the best result.

The development of pathways for a multi-sector model is both time consuming and challenging. A matrix model was developed by DPI staff and found to be onerous on resources. An engineering approach evolving from the recreational sector was refined with DPI support and provided the basis for all future pathway development. These

pathway developments evolved directly from the project work and the consultant confirmed these were new and proactive approaches.

In July 2000 a new principal investigator, a dedicated temporary support project officer and a part-time contractor were appointed to operate with the consultant to get the project re-energised. It was recognised that the project would not succeed without the involvement of the fishing industry sectors. To this end, a sub-committee of the FIDC, comprising the major players who had been involved from the outset of the project, was established to pick up the pieces and work towards a satisfactory conclusion. The sub-committee met on a number of occasions and made reasonable progress, although issues such as the trawl fishery management plan tested the resolve of some of the participants.

This working group, with support from the principal investigator, consultant and contractor, kept to the task and successfully steered the organisation of the Summit, compiled individual sector preferred futures and pathways and negotiated the completion of a preferred future for the industry. This preferred future is summarised by the "Building Smart Futures for Fisheries" brochure.

Results and Discussion

As indicated earlier, the project was about changing cultures and convincing fishing industry sectors that they could develop a common agreed future rather than staying with a highly individualistic "business as usual" approach. In any analysis this task was enormous particularly as the project was dealing with very disparate groups whose general way of operating to that point was steeped in competition and win/lose negotiation and scenarios.

The management of the Foresight 2010 project could best be described as occurring in three stages. These stages included a high-level task force, a project team and an FIDC working group including project team members. Apart from the task force, events and circumstances generally outside of the control of the management team necessitated the changes to other forms of management.

The high-level task force operated extremely well due to a number of reasons. Firstly, the composition of the task force included the executive director of the Fisheries Group in DPI, the leaders of the commercial, recreational and charter fishing sectors, the head of the Queensland Fisheries Management Authority, Chair of the FIDC and the senior consultant. This group had the power and resources to make things happen.

Secondly, the leaders of the major sectors recognised the need to develop a better process for the future sustainable development of Queensland's fisheries. In this respect they were keen to show a new fisheries administration that industry had the commitment to working towards fisheries sustainability and fishing industry development needs in an integrated way.

Thirdly, the concept of foresighting, which is considered to be a key modern approach to strategic planning, was timely in that sector leaders believed it would be a very useful methodology to assist them in planning a unified approach to industry development.

In the first few months of the trial project, the breadth and depth of the work done on foresighting was substantial. This level of commitment and progress was maintained

for about a year until in mid-1999 other significant issues started to take the time of some of the major players.

That this state of affairs should occur is not surprising, as it is very rare that senior government managers or industry leaders can devote all of their attention to one project for extended periods of time. The project had done its job in terms of introducing the new way of thinking and putting together a process that could be implemented by middle managers and industry representatives. This situation poses a conundrum in that attitude or cultural change in an organisation or sector is best led from the top and by example. The scope of the task in the fishing industry however was so large that senior officers and industry officials did not have the luxury of spending significant time on the project.

The difficulties with introducing change in an industry with independent sectors are magnified more than in a single purpose organisation. At least in an organisation the managing director has a greater chance of implementing required changes because of the greater levels of control. It has been argued by some people that the use of change agents such as foresighting to modify thinking and behaviour across an industry as independent as the fishing industry is expecting too much.

The gradual decline in the impact of the task force meant that the consultant and middle managers of DPI were tasked with assuming all of the management functions including the overview of the project's direction. This period coincided with the debate between two groups within FIDC as to how best to develop the common preferred future.

As mentioned earlier, the debate was centred on whether it was best for all sectors to develop a common preferred future without the sectors having first developed their own individual preferred future. In some ways, phasing out of the task force and the slowing down of progress in developing preferred futures could be viewed as an advantage to the project. It gave sector representatives time to reflect on what they were doing and ultimately may have led to a more thoughtful and considered outcome. It was also crucial to future pathway development, as before activities and projects can be identified pathways need to be built. This requires consistency but that was difficult to achieve at the time because of a lack of resources.

The project team’s role became increasingly difficult over time. The commitment and undertakings given to the project by industry representatives were steadily being diluted due to other more pressing, current issues. There was also the problem of sectors being at different levels of understanding of the process and at different stages within the process. The different stages of understanding and development by sectors, particularly in pathway development, put a severe strain on the management team that did not have the resources to provide individual assistance to each sector.

During this period the team also had to cope with a supportive executive director transferred to another portfolio, an equally supportive FIDC Chair resigning, lack of FIDC meetings, reviews of fisheries institutions and structure and IDC’s and a lengthy negotiation on the trawl management plan. It is to the project team’s credit that they didn’t fold completely under the burden in which they were operating.

During the project team’s involvement two documents were published. These documents summarised the work completed to that time and distributed foresighting information for the first time to people other than the members of FIDC or departmental staff.

The replacement of the project team, apart from the consultant and the establishment of the Queensland Fisheries Service (QFS) with its attendant portfolio changes introduced a re-focusing of the project. The major decision of the new management team at that time was to form a working group of members of the inactive FIDC and this resulted in giving a major boost to the progression of the project. The series of working group meetings between July 2000 and March 2001, facilitated by the consultant, further developed the industry's preferred future and significant progress was made on pathways for individual sectors.

Another major initiative at this time was to provide individual assistance to sectors to develop their pathways. An outside contractor with extensive fisheries knowledge and prior intensive contact with all sector representatives was dedicated to the task of working closely with the sectors to deliver the pathways. The contractor was also able to offer significant assistance to sectors in preparing their presentations for the Summit. It cannot be overstated how valuable the availability of an external, dedicated professional well known to the industry was to a project like this where knowledge, rapport and persuasion are essential.

The working group method was instrumental in getting the job done as well as restoring confidence in the project and its objectives. The inclusive nature of the working group and the steady progress made since its inception combined to inject a new enthusiasm and a willingness to complete the project within the allotted time schedule. Levels of liaison and feedback given by management team members to the fishing sector representatives matched this enthusiasm. This management period highlighted the necessity to obtain adequate and appropriate resources to undertake and complete projects that, although are important within themselves, never the less have to compete for time, energy and commitment with a multitude of other priorities.

7. ACKNOWLEDGEMENTS

I thank members of the Fishing Industry Development Council, past and present, for their foresight and wisdom in seeing the advantages of initiating a project to set a common direction for Queensland fisheries.

Special thanks to DPI and particularly FRDC for financing the project and having the foresight to support a project of this nature. The project is not a conventional scientific one but was more of a socially oriented attempt to influence cultural change across a diverse industry.

Thanks to Mr John Pollock, who as executive director of the Fisheries Group, DPI championed this project from the start until his appointment to another portfolio in the Department. Thanks also to Mr Peter Neville, who as the deputy director-general, Queensland Fisheries Service, carried on the support of the project until its finalisation.

The project could not have been started without the assistance of Global Foresight Australia Pty Ltd and particularly its director Mr Mike McAllum. Mr McAllum provided the intellectual stimulus and methodology for the project and facilitated the many workshops, sector discussions and other meetings that spread the challenge and continued the discussion about the future.

Other members of the task force and/or management team, Bill Widerberg, David Bateman, Ted Loveday, Jim Gillespie, Athol Johns, Peter Peterson and Michelle Trainor. are thanked for their significant contribution to the project. Special thanks to

Pat Appleton from Impact Consulting Pty Ltd, who apart from being a member of the task force was co-writer of this report

Thanks to the members of the FIDC working group, Duncan Souter, John Doohan, Bruce Alvey, David Bateman, Graham Lee, Ray Joyce, Imogen Zethoven, Kate Davey, Felicity Wishart, Martin Breen, Carl Young, Ted Wittingham, Randall Owens, Stephen Thrower and Sian Breen for their commitment and willingness to cooperate in finding solutions.

Finally, my thanks to all other fishing sector representatives and DPI staff who contributed to surveys and willingly and constructively provided advice and assistance to the project.

8. BENEFITS

The project has shown that significant benefits can accrue to fishing sector interests from the foresighting methodology and process. These benefits include:

All fishing sector interests are talking constructively with one another. The project brought together representatives from nine sectors viz commercial catching, recreational, charter, aquaculture, conservation, marketing, Queensland fisheries agency, Commonwealth conservation agency and indigenous (some discussions were held with indigenous representatives but not to the same extent as with other sectors) who discussed a range of issues affecting their interests. There is a commitment for these discussions to continue under the auspices of FIDC.

During discussions, all sectors recognised that the marine and freshwater environments were paramount and changes to current fishing practices and behaviour were required across all active fishing areas. There was recognition that ecological sustainability was critical but economic and social considerations should not be ignored.

The methodology of foresighting has encouraged fishing sectors to think more clearly about what type of future they want and become part of the change process rather than being a casualty of change. The project has highlighted to sector representatives the nature of driving forces for change within industries and focussed their attention on the scale and speed of global changes likely to affect the fishing industry.

The methodology has also emphasised the importance of industry leaders taking time out to think about what direction their industry sector is heading and whether this direction is going to position the sector best to cope with changing social attitudes, environmental standards and economic performance.

There was a recognition that if the fishing industry could agree on a positive view of the potential for the Queensland fisheries into the future and work strongly towards that vision, then people outside the fishing industry could be persuaded to invest and bring innovation to the industry.

The project was the catalyst for the recreational sector to combine its resources and create a Recreational Fishing Industry Alliance comprising Sunfish, Queensland Industry of Recreational Fishing (Bait and Tackle Industry) and the Boating Industry of Queensland. This initiative was recognition that each one of the groups had a vested interest in promoting recreational fishing and could speak with one view when dealing with government. It was also important to be recognised as a major participant in

fisheries and prepared to develop whole of sector policies that could be put to Government and other sectors for negotiation and consideration.

The common cause between the commercial and recreational sectors in relation to water quality, habitat protection and management issues was highlighted. To this end both sectors agreed to work together to agitate and persuade Government to implement policies and developments that minimise any further impact on fisheries habitat within Queensland.

There has been a much greater appreciation by individual sectors as to the goals and aspirations of other sectors. Although there will still be many differences among sectors there is a better understanding of where sectors have similar views on issues. This is helping to promote cooperation and willingness for fishing sectors to seek solutions outside of Government regulation.

9. FURTHER DEVELOPMENTS AND RECOMMENDATIONS

This study has shown that the future disposition of Queensland's fisheries and the fishing industry depends on whether fishing sector interests wish to work together for a better future for all or whether they want to compete individually for as much of the resource as possible. The outcome of the Building Smart Futures for Fisheries document strongly suggests that the future in 2010 for fisheries will depend on fishing sector interests' cooperation if access to a common property owned resource is guaranteed.

It has been recognised by some participants in the project that the foresighting process needs to be extended to the rank and file levels of the sectors so that the gains made through this project can be spread further throughout the fishing industry. This will be a responsibility for each of the fishing sectors to undertake possibly under the banner of industry development.

All fishing sector interests acknowledged the critical element of environmental sustainability as the basis of a framework for resource use. The influences of international protocols, consumer requirements and community expectations were seen as driving environmental sustainability but not entirely at the expense of economic and social considerations.

The commercial fishing, marketing and aquaculture sectors were increasingly viewing themselves as part of the seafood industry, which in turn is inextricably linked with the food industry. Recognizing that added value approaches, quality, food safety and environmental accountability were fundamental to future success, the three sectors were starting to understand the need to implement new systems to meet these imperatives.

The full involvement of indigenous people in this process was difficult to achieve. The major problem was a cultural one in that indigenous people from one region or area cannot speak on behalf of people in another region or area. This meant that only very general comments could be made by the indigenous representatives on the working group and the FIDC.

A number of important indigenous issues did surface during the foresighting process and these included:

- That fisheries management authorities need to understand that indigenous communities are a special type of fishing sector with distinct and unique fisheries interests;
- Barriers to the practice of traditional subsistence fishing activities need to be reduced;
- There is a growing realization by a number of indigenous communities, particularly those in Cape York, that by working together they can negotiate with the Queensland Government for access to commercially oriented activities such as commercial harvesting, aquaculture and ecotourism.

FIDC will continue the conversation about the future with fishing sector interests through the communication channels open to it. It will stimulate and encourage the initiation of projects and activities by fishing sector interests. It will also work with government to create policy frameworks and initiatives that enable the fishing industry to create a future in which it can prosper within an ecologically sustainable development culture.

For its part, QFS is committed to the development of policy frameworks and industry development measures that assist the fishing industry to build sustainable futures. The QFS will be supporting the FIDC in its role of fostering cooperative management practices and ensuring the fishing sector interests revisit the Building Smart Futures in Fisheries document to review progress and make amendments over time.

Recommendations

A formal high level representative body is essential to the successful planning and implementation of this type of project. The type of debate in this body must be at a strategic level and geared to doing the “right things” rather than being caught up in operational issues and arguments of detail. The nature of this operation, with its extended time frames for outcomes, requires continuous review and strong commitment from Government and all fishing sector interests. Without this formal structure there is no mechanism for driving the process forward.

The long-term nature of cultural change in fisheries will make it difficult to maintain a continuous focus, as current issues will always intrude. It is necessary to employ dedicated, resourceful people to work with fishing interest groups to achieve progress towards foresighting outcomes irrespective of the pressure of day to day problems.

There needs to be certainty surrounding continuing funding otherwise enormous pressure will be brought to bear on the foresighting processes leading to poor performance in achieving progress.

A unified team effort is essential to deliver creditable outcomes from the foresighting process. The many members of the team- foresighting consultant, industry representatives, agency support staff, industry and agency leaders and champions all have important roles to effect the changes required for the fishing industry to manage the changing national and international environments.

A high level of training support from foresighting consultants, particularly early in the project, is extremely desirable and the mentoring of key support staff in a proactive mode is crucial.

Strong messages drawn by fishing industry representatives from the scenario building component of the project are vital to any project involved in change management of fisheries. These messages include:

- There is a strong need for clarity about the future which in turn should lead to greater investment;
- Frameworks for consultation and management advice need to be transparent and accountable;
- All fishing sector interest groups must be involved and be provided with adequate information on which to form judgements;
- Infighting among fishing sector interest groups has a significant detrimental impact on fisheries and their sustainability by delaying crucial decisions;
- Research and development has a crucial role in determining any sustainable future; and
- Long term planning with all fishing sector interests around the table is paramount.

10. CONCLUSION

The introduction of the foresighting process to the Queensland fishing industry has been both challenging and rewarding. Its major challenge has been to turn attitudes of major fishing sectors away from strong individual, destructively competitive behaviour based on the "my share" philosophy to cooperation based on the reality that fisheries in the future will be reliant on sectors working together as partners rather than protagonists. A subsidiary challenge has involved industry's understanding of the depth and breadth of change that will be facing it in 2010. These changes include global, national, State and locally driven events that will redefine the nature of fisheries.

The rewarding aspect of the project has been the reinforcement of the strategic planning directions and the realisation by fishing sector interests that the world will be a completely different place in 2010 to now and their current thinking needs to reflect that position. The outcome of the Fisheries Summit reinforced the view that there are a lot of commonalities such as environmental concerns and a need to redefine the type of business in which fishing sectors believe they are involved.

There is a growing realization by fishing sectors that the foresighting process has provided a tool for refocussing on where the fishing industry is heading in the future. There is still a considerable way to go but a framework for development has been established and sectors have learnt a new way of looking at the world. More importantly however fishing sectors are starting to see the world as other sectors see it and this situation will hopefully provide the catalyst for cooperation among the fishing sector interests.

REFERENCES

Changing Course-Sustainable Fisheries in a Healthy Aquatic Eco-system, New Zealand Ministry of Fisheries, 1997

Hamel G. and Prahalad C. K., "Competing for the Future" 1994, Harvard Press

Schwartz P., "The Art of the Long View" 1991, Doubleday

Tapscott D., "The Digital Economy" 1996, McGraw Hill

The Academic Basis of Strategic Foresight, the Knowledge Revolution and it's application to Australian Society, Marsh N., and McAllum M., Foresight Institute of New Zealand

Van der Heijden K., "The Art of Strategic Conversation" 1996, Wiley

LIST OF STAFF

Principal Investigators –

Peter Peterson October 1999 to June 2000;
Col Bishop July 2000 to completion of project

Project Officers

Jim Gillespie – October 1999 to June 2000
Athol Johns October 1999 to February 2000
Michelle Trainor February 2000 to December 2000

Consultants

Michael McAllum, Global Foresight Australia P/L
Impacting Consulting (Qld) P/L (Pat Appleton) August 2000 to October 2001

Attachment 1: Pilot Study Interview Survey

FORESIGHT

HITCHHIKER'S GUIDE TO FORESIGHT INTERVIEWS FOR DPI FUTURE FISHERIES PROJECT

The material contained in this guide is to assist those who are doing Foresight interviews based on the Foresight Interview Protocol and it's related reporting template. Clearly the most important thing in these interviews is to ensure that people talk about their views of the future freely. This should be encouraged even to the point where the questions are changed in terms of order and/or are ignored altogether.

What we would like, though, is to ensure that whatever comments are made they are put within the reporting template so we can compare one reply with the other!

DOMAINS

It is important that the domain is established with the interviewee at the beginning of the interview. Many of them may see themselves not in the Fishing Industry but in the Tourism Industry or some other industry. While this is great from our point of view we just need to make sure we know what the domain is and they in turn should be aware that our perspective is that of the Fishing Industry and Queenslands's positioning.

A discussion about domains, is often a very interesting one as it can sometimes prompt views about what "the future industry might be" as opposed to "what today's industry is".

Questions 1&2 - The first two questions are aimed at allowing participants to get out of their heads today's strategic issues that face the industry and then get on to some futures material. As they identify each issue it is important that you try and understand what the trend is that is sitting behind each issue and encourage the interviewee to think out what the implications of those trends might be in the next ten years.

Question 3- Time Allocation- The time allocation question is a useful time to introduce the notion of foresight. For those of you who are not familiar with the idea please visit our website which is www.globalforesight.com and refer to the section on foresight.

Fundamentally, what we are interested in is the answers to the questions;

- What is tomorrow's industry?
- Who are tomorrow's customers?
- Who will be tomorrow's competitors?
- What will constitute success tomorrow?
- What technologies will be relevant etc and importantly how will we build a pathway to that future as opposed to simply projecting from today.

Please note that we believe that it is important to understand BOTH today's industry and tomorrow's. We would contend that clarity of thinking about the future imposes greater urgency on doing the right things in today's business, rather than neglecting it.

We are asking them to assess roughly their time in percentage terms.

> Simply doing business well today is what we call 'managing performance in the current business'.
>
> Improving the current business' is marginal shifts in terms of profit percentage, cost efficiency, restructuring or for that matter re-engineering which is simply an imitation of what anyone else in the industry is doing.

These two activities does not in itself constitute any kind of future thinking or future planning, they are simply trying to get up with what is currently best practice in the industry.

> The process of renewal, or what we have termed 'Thinking about and preparing for the future', is trying to radically rethink what the industry might be and therefore how one positions for that in terms of moving ones' organisation.

Our previous experience of using these questions is that the renewal process occupies from between 2% and 15% of people's time, with the bulk being on managing performance and incremental adaptability.

Question 4 – The Five Words Question This question is very useful as one can describe graphically very quickly what people think about today and what people are hoping for tomorrow. When we ask for five words we are asking for five distinct ideas as opposed to a sentence about the industry. So you should have five words about today which may be things like 'marginal', 'declining', 'incremental', 'traditional'. You may get words about the future which can range from either pessimistic ideas or very positive ones.

You should encourage people to think about positive futures rather than pessimistic ones if this idea has any kind of realism. The future after all can be created and what one might see as initially threatening [which it is in todays paradigm] might be turned into a positive with some thought and repositioning

Sometimes people find it hard to express their key ideas in a single word and may use a phrase to describe that word. From my point of view, at this point this is acceptable as we can easily find a synonym later.

BUILDING THE FUTURE

Question 5 - is a very interesting question and you should listen very carefully. What it does do is encourage people to think outside the box. Of particular interest are questions around reconfiguring value chains or developing entirely new value propositions.

Questions 6 & 7 - focus on the threats and opportunities and are should focus on the impact of current trends and discontinuities and what they might do. The answers to these threats and opportunities will be reflected in question 8. In practice I often run questions 6- 8 together.

Question 8 - The "three key issues" question is the first attempt to try and get people to paint a pathway of in fact what the industry will be like in 2010 (which is a convenient date just beyond the ten year mark). What we are looking for is key strategic issues that will have been faced and solved rather than minor incremental ones.

Again, what you should be listening for is what it tells you about what is tomorrow's industry, tomorrow's competitors, new technologies, etc.

Question 9 – Explores other industries and where they might be going. Often it is easier to see the shifts in other peoples industries rather than ones own. If people have had difficulty thinking about the future – thinking about shifts in other industries and then asking the what if .. questions is a useful device.

Question 10- The ideal future direction or scenario question is the attempt to get them to paint a picture of the successful industry. A scenario might contain a mix of:

1. Future lifestyles.
2. Strategic drivers.
3. What the positioning of the industry will be in 2010.
4. What its direction will be.
5. What it will have been good at.
6. What products and services it might have.
7. What new markets it might have and who its customers might be.
8. It will also describe what values it will have.
9. How it will be led.
10. What kind of value chains it might have.
11. What kinds of systems it will have.
12. It might also include the kinds of people who will make up the industry of the future.

Question 11- 12 Competencies & Capabilities This question explores capabilities [what we will need to be good at] and competencies – what might give us advantage. Areas of knowledge and skill can be divided into two classes. The first are those areas of knowledge and skill which will simply be capabilities in future industries i.e. they will be the things that you need to have in order to be a significant player. Indeed, one might argue that we are perhaps only fringe in terms of our knowledge and skills at the moment in terms of capabilities. What we also need to find is areas of knowledge and skill that will give us unique competitive advantage that we can leverage from in the future. These are called core competencies.

Question 13 – is about value chains and most importantly future value chains. If the industry is to move fast to meet future market propositions/ environmental standards etc. it needs to understand where it needs to make it's investments, as opposed to where it does now. The important question here is to determine where the areas are in either today's value chain or tomorrow's value chain where we can get the most leverage both from Queensland's positioning and from an industry perspective.

We may either have these core competencies at present or we may need to either develop them or acquire them through J/V or some kind of acquisition.

Question 14 - This question is designed to assess whether in fact the people you have interviewed are prepared to lead futures or whether they are simply followers. The scale is quite clear and I suggest that you simply record this.

Question 15 – 16 The networks and networking questions are important in terms of either finding new sources of information or key people that we should interview. Please note these very carefully and in particular try and get e-mails, faxes and phone numbers so that we can follow them up. The sources of information I have found particularly valuable.

FORESIGHT

The Future for your Industry/Sector

1. What are the 3 key challenges facing your industry/sector today?

2. What are the trends driving those challenges?

3. How do you allocate your time between:
   - Managing today's business
   - Improving the current business
   - Thinking about, and preparing for, the future

4. What 5 key words/ideas would describe the Industry as you see it today?

5. What 5 key words/ideas would describe the Industry as you would like it to be in 2010?

6. What is it that is impossible to do today, but if you could do it, would radically change your industry/sector?

7. What are the 3 key threats facing your Industry/sector over the next 10 years.

8. What are the 3 key opportunities facing your industry/sector over the next 10 years?

9. What issues would therefore have been faced and solved and what key projects need to be done to move towards that future?

10. What other industry/sectors do you need to monitor in order to create that future?

Future Positioning

11. Given the 'described future' what is the ideal industry direction in 2010?

12. What will the Industry need to be good at to achieve that positioning?

13. What skills and knowledge will it need to develop to underpin that positioning?

14. Have we got out resources/assets allocated in a way that will help create the future we want?

Networking & Resources

15. To what extent do you feel optimistic about creating the future you have described in this interview?
1 Low 10 High

16. Which other key people would you recommend that we approach?

17. What other key sources of information should we be aware of?

Attachment 2: QFISH 2010 Questionnaire

QFISH 2010 Foresight Project Questionnaire

To assist in the development of a broad industry scenario for the year 2010 it is important to consider the views and thoughts of all key stakeholders. To gather this important information in a consistent and meaningful manner a questionnaire has been prepared. The intention of the questionnaire is to assist your agency to focus on a common set of features that will form the draft 2010 scenario.

The questionnaire is not meant to limit or constrain your thoughts on this matter. It is a guide only, and therefore if you would like to add more information or expand in areas not covered by the questionnaire please feel free to do so.

Within a context of what you would like to see happen and taking into account the changing social, economic, environmental trends and expected changes, could you describe your industry in 10 years time.

It would be appreciated if you could complete the attached questionnaire and return to this office in the addressed postage paid envelope provided.

The Questionnaire consists of three sections:

- Section 1. General questions relating to the broader issue of fisheries
- Section 2. Specific questions relating to your discrete area of interest
- Section 3. Descriptive presentation of your sector's preferred scenario

SECTION 1. GENERAL QUESTIONS RELATING TO THE BROADER ISSUE OF FISHERIES

1. Community Perception, Acceptance and Support of the Fishing Industry:

1.1. What do you think is the current attitude of the Queensland community towards the fishing industry?

1

1.2. How would you like to see the community's attitude towards the fishing industry change?

1.3. What steps do you consider would need to be taken to achieve the desired community perception in 20101?

2. Fishing Resource Stocks:

2.1. What is your preferred position concerning the level, type and development of fishing stocks as a public resource in 2010?

What strategies do you consider are necessary, given the current resource stocks, to achieve the situation you have described above?

Do you support the view of integrating land and water management in terms of the adverse effects of agriculture and urban development on fishing stocks?

2.2. What do you think would be the most effective strategies to maintain fishing resource stocks and the global ecosystem.

3. Research:

3.1. Who do you think should be responsible for research associated with fishing industry in 2010?

What do you think is the most effective way to fund the research?

Who should manage the research projects and how can the research be held accountable for practical application to the fishing industry?

4. Fisheries Management:

4.1. How do you think the fishing industry and associated industries can be most effectively managed to achieve your goals on a sustained basis in 2010?

DO you feel that management should be regionally based, sectionally based or centrally delivered?

Where do you see Government and statutory agencies fitting into the management process?

How should the appropriate policy framework be developed and how should it be administered, including registrations and compliance?

How can the management process be transparent in its operation, open to all interested and affected parties, with effective delivery of services to all users?

5. **The General Fishing Industry:**

5.1. What strategies do you consider should be developed to ensure fishing stocks are maintained at an economically sustainable level to the year 2010 and beyond?

What are your thoughts concerning:

(a) Establishment of Quality Industry Benchmarks:

(b) Adoption of world's best practice principles for the Qld fishing industry:

(c) Demonstrably Sustainable fishing practices:

(d) Introduction of User – Pays principles:

(e) Growth of fishery dependent industries:

(f) Systems for food safety and environment protection accountability:

(g) Industry self management in a transparent manner:

6.

7.

8.

9.

4

10. Marketing and Promotion:

10.1. How would you like to see the industry and fishing activities most effectively marketed and promoted, both at a local level and at an international level?

Who should be responsible for marketing and promotion of the industryt and how would it best be funded?

SECTION 2. SPECIFIC QUESTIONS RELATING TO YOUR DISCRETE AREA OF INTEREST

11. Sector/Interest Identification:

11.1. Please define your area of interest or activity in fisheries (i.e. Professional Fishing; Tourist; Recreational; Aquaculture, Statutory Agency etc)

What are the other major fishery sectors do you most frequently related to?

12. Industry Relationships:

12.1. What agencies and other organisations would you like o develop closer cooperative links with?

What strategies would you like to see developed to achieve your desired level of cooperation across the areas of interest?

Future Challenges:

12.2. What are the major challenges your sector faces in the coming 10 years?

What are the opportunities that you see developing in the next 10 years for your sector?

What do you consider to be the major strengths of your sector that could be further developed and enhanced to apply to the achievement of your sectors goals for the next 10 years?

What are the weaknesses within your sector which would need to be addressed during the next 10 years in order to effectively achieve your goals?

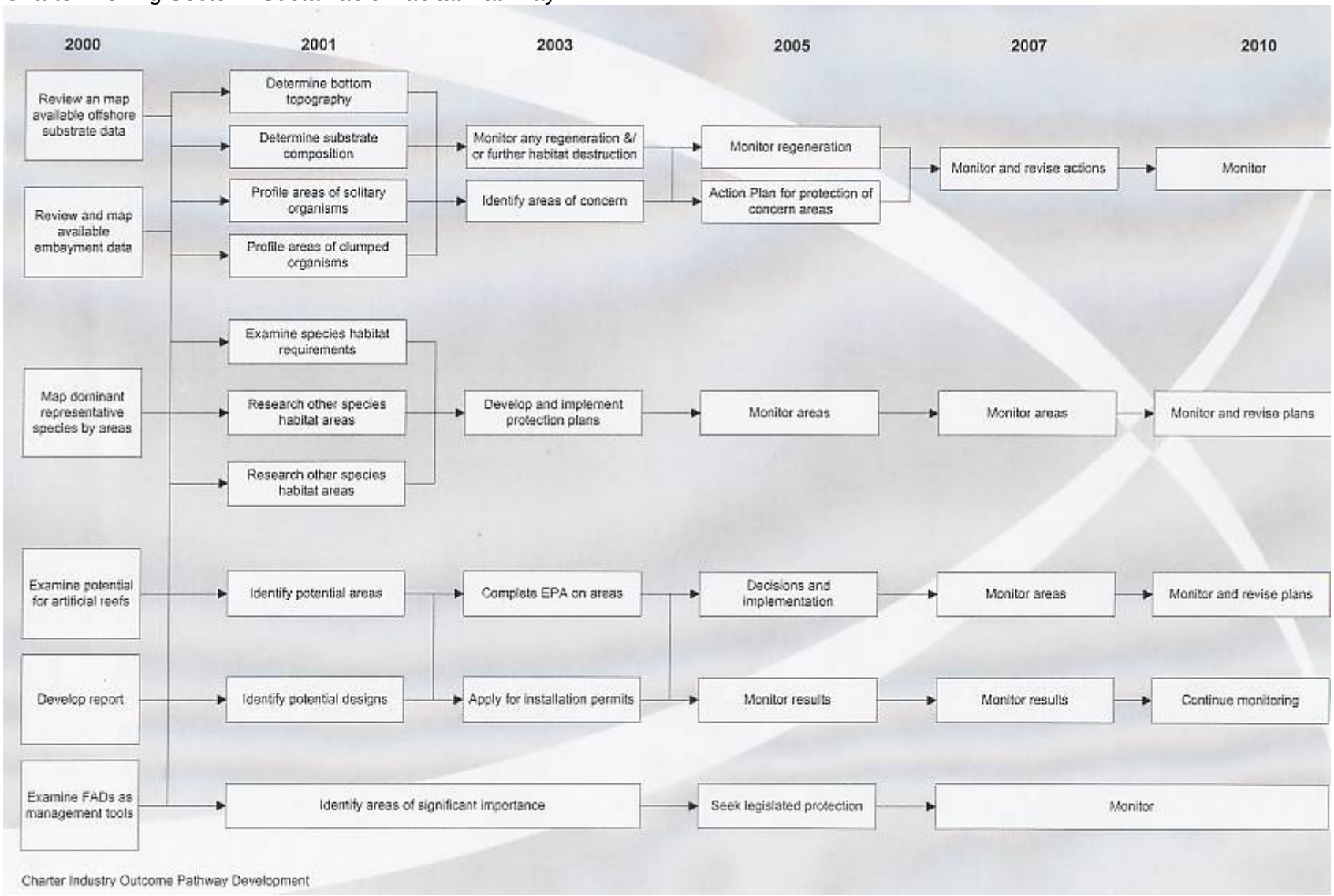
What do your consider to be the major threats to your sector, particularly in achieving your 10 year goals?

SECTION 3. DESCRIPTIVE PRESENTATION OF YOUR SECTOR'S PREFERRED SCENARIO

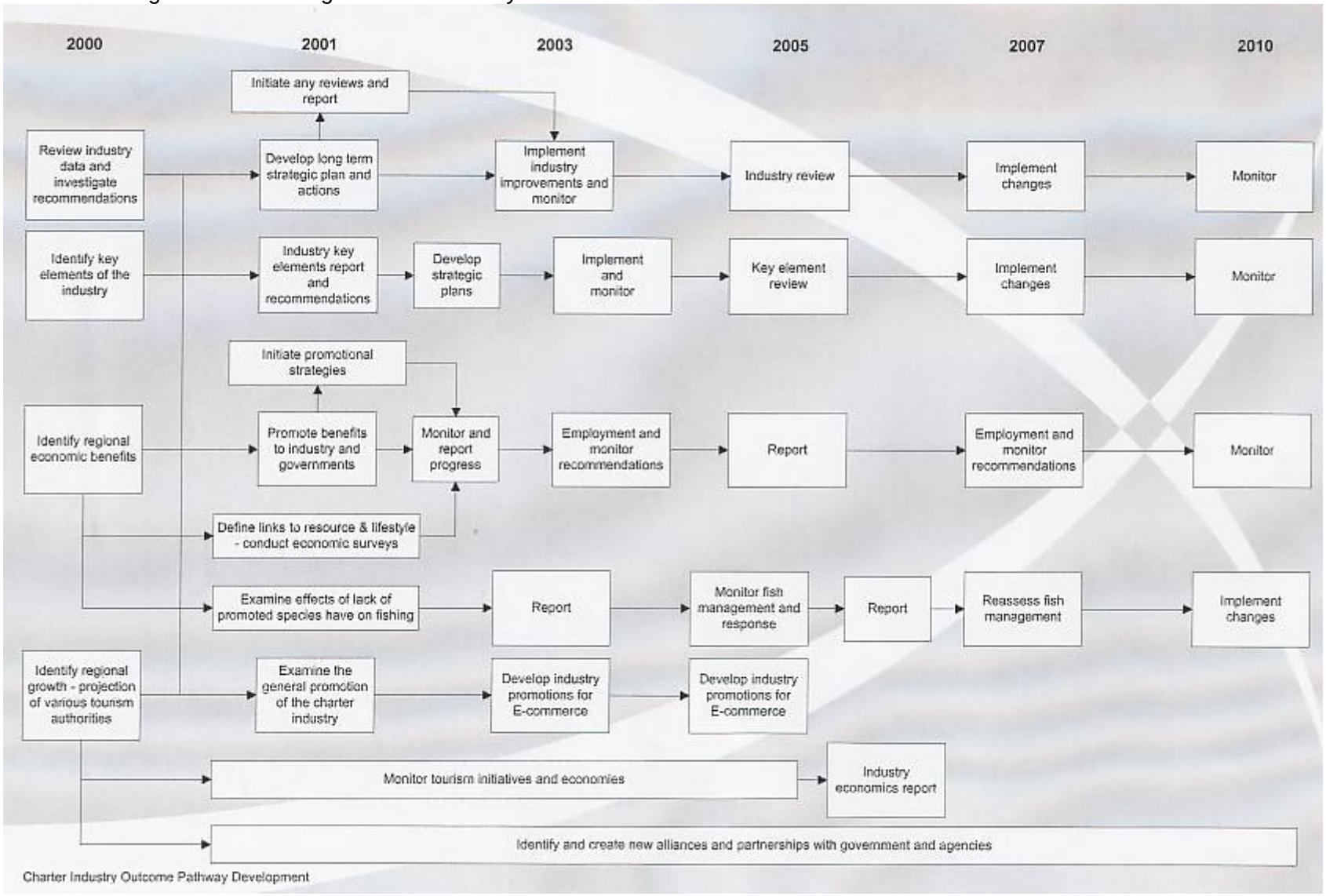
It would be appreciate if you could describe how you would see your sector in the year 2010. What is your vision for your sector, and how does it see itself in context with the broader fisheries area. You are encouraged to take full license to describe your preferred position or scenario. To assist it may be useful to consider the headings in the previous two sections. An example of a preferred scenario/position is attached as appendix …

Attachment 3: Sector Pathways

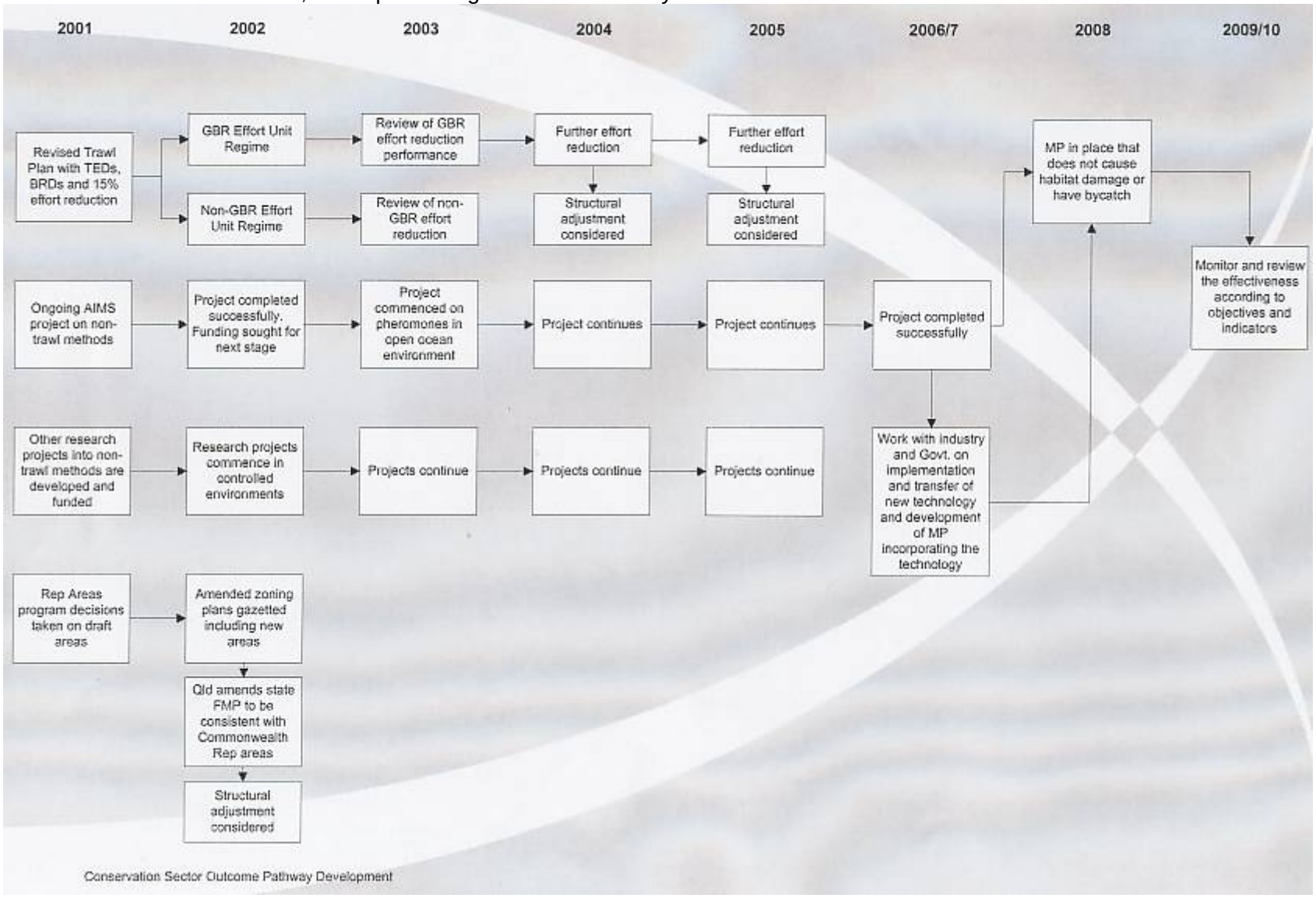
Charter Fishing Sector – Sustainable Habitat Pathway



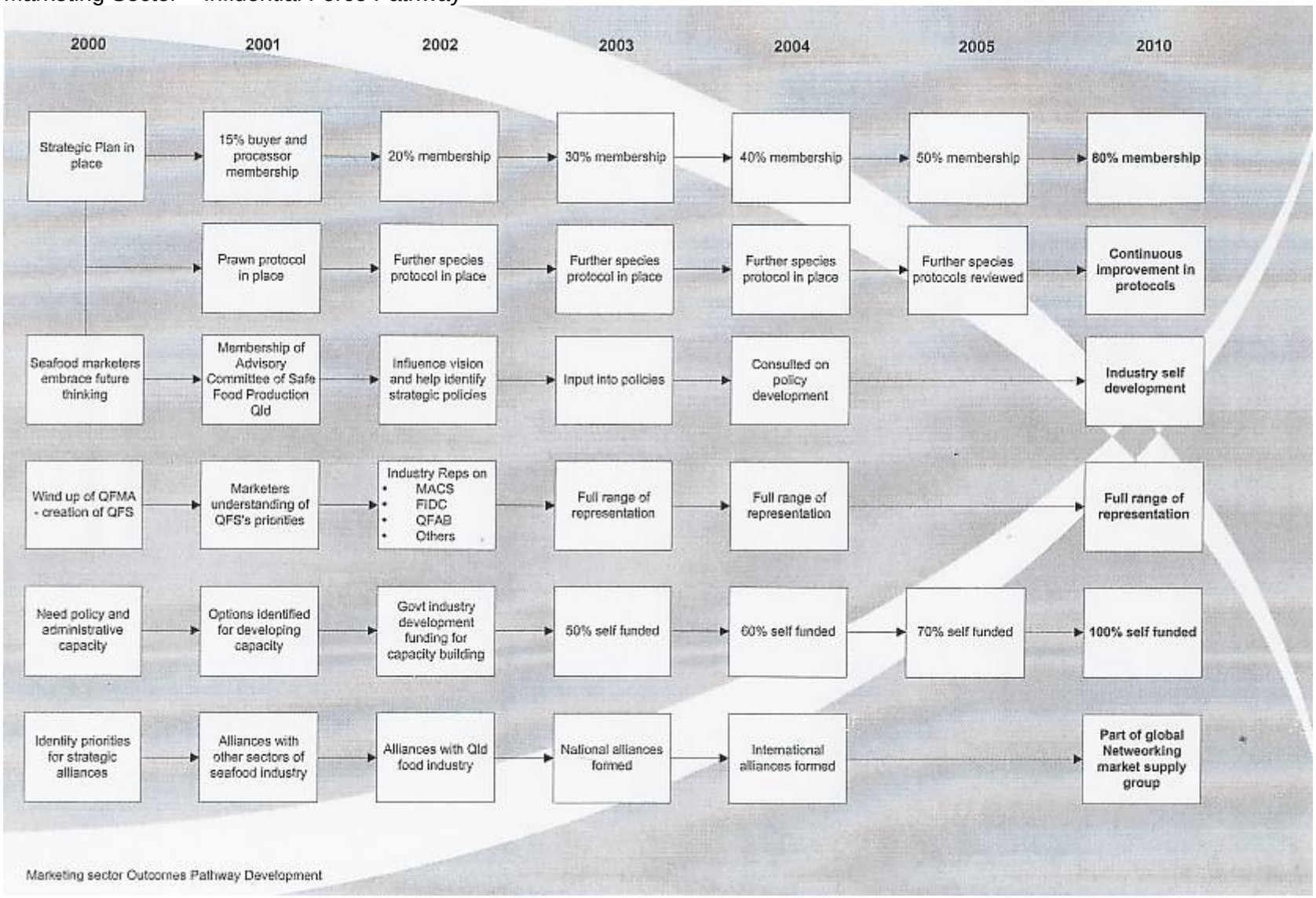
Charter Fishing Sector – Fishing Tourism Pathway



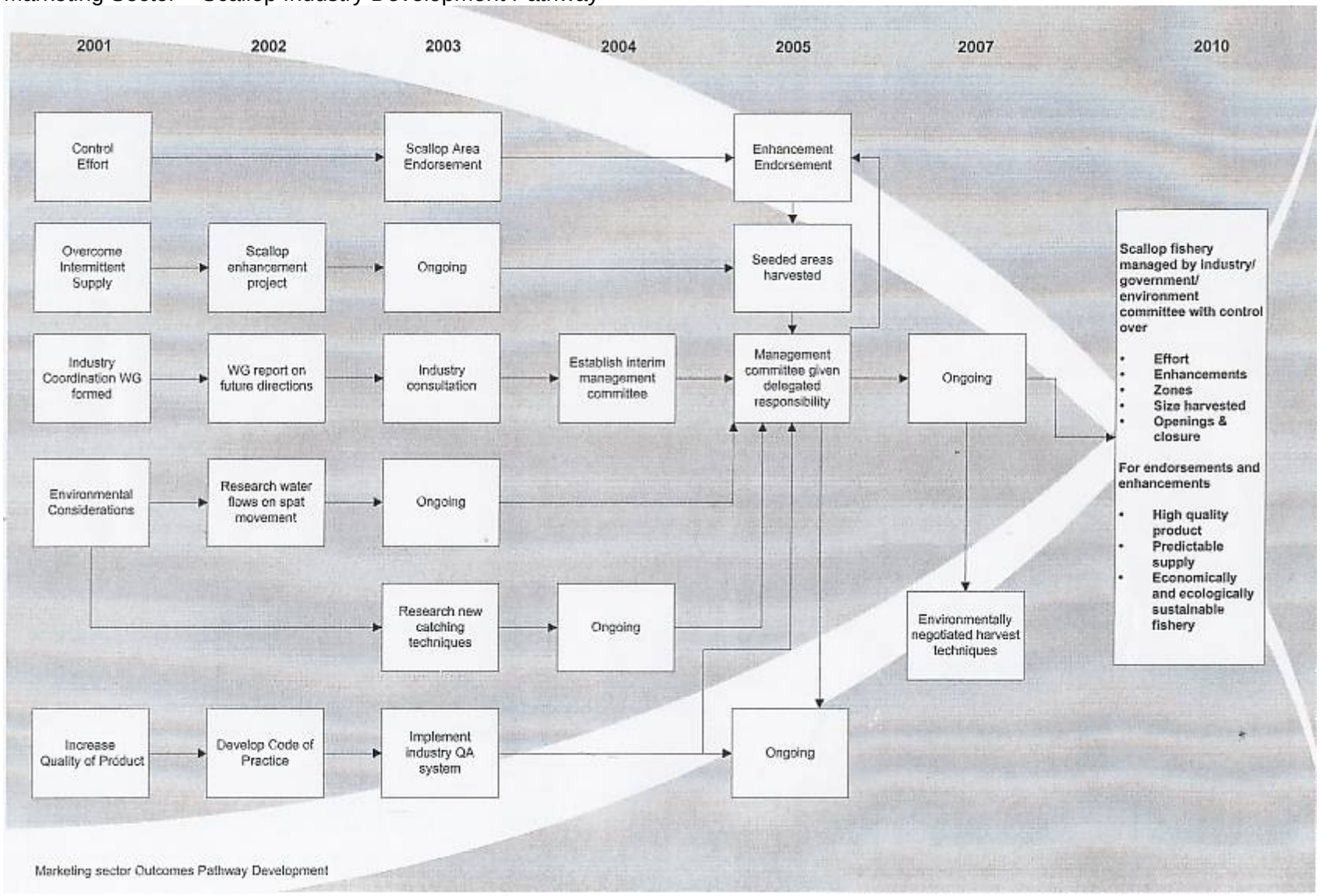
Conservation Sector – Prawn, Scallop and Bug Fisheries Pathway



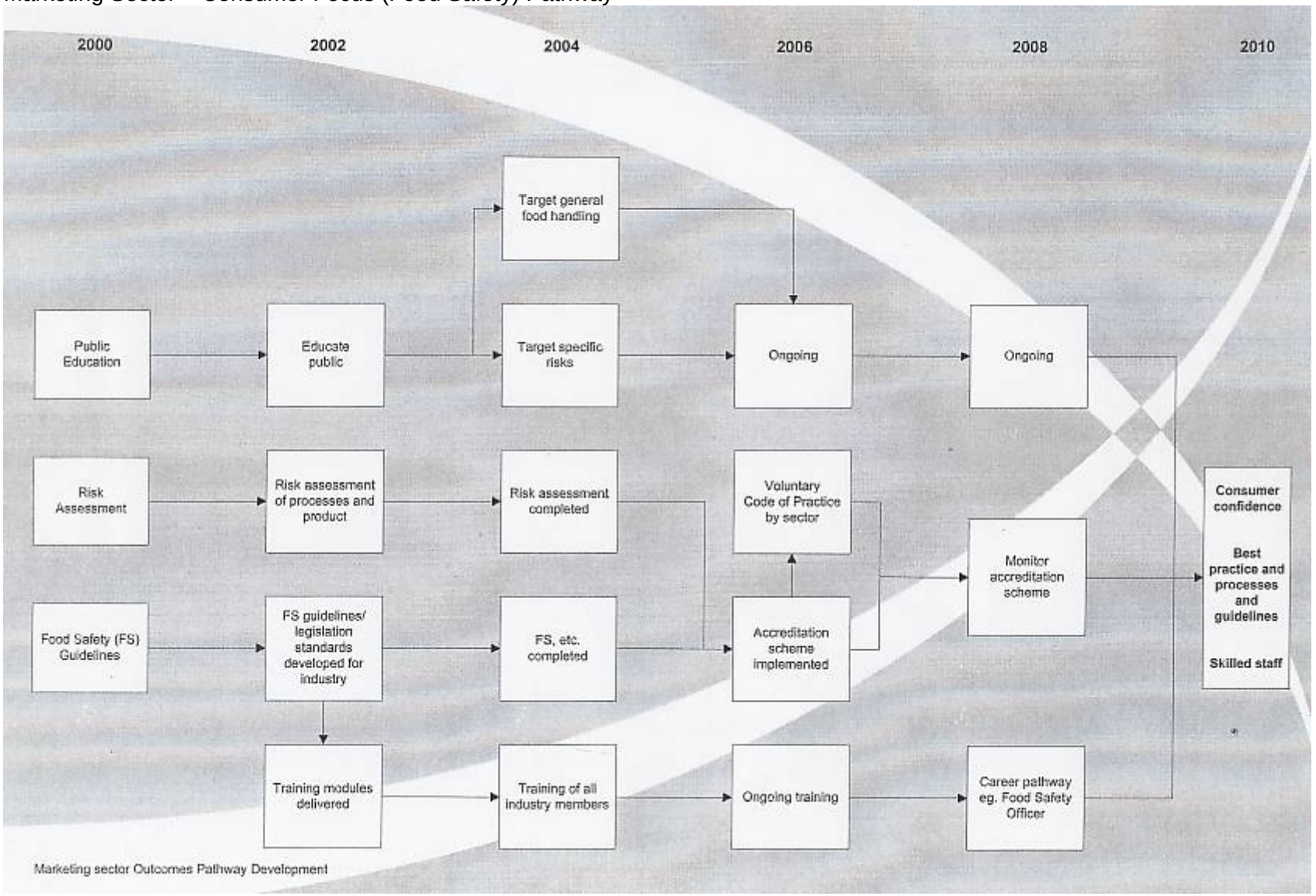
Marketing Sector – Influential Force Pathway



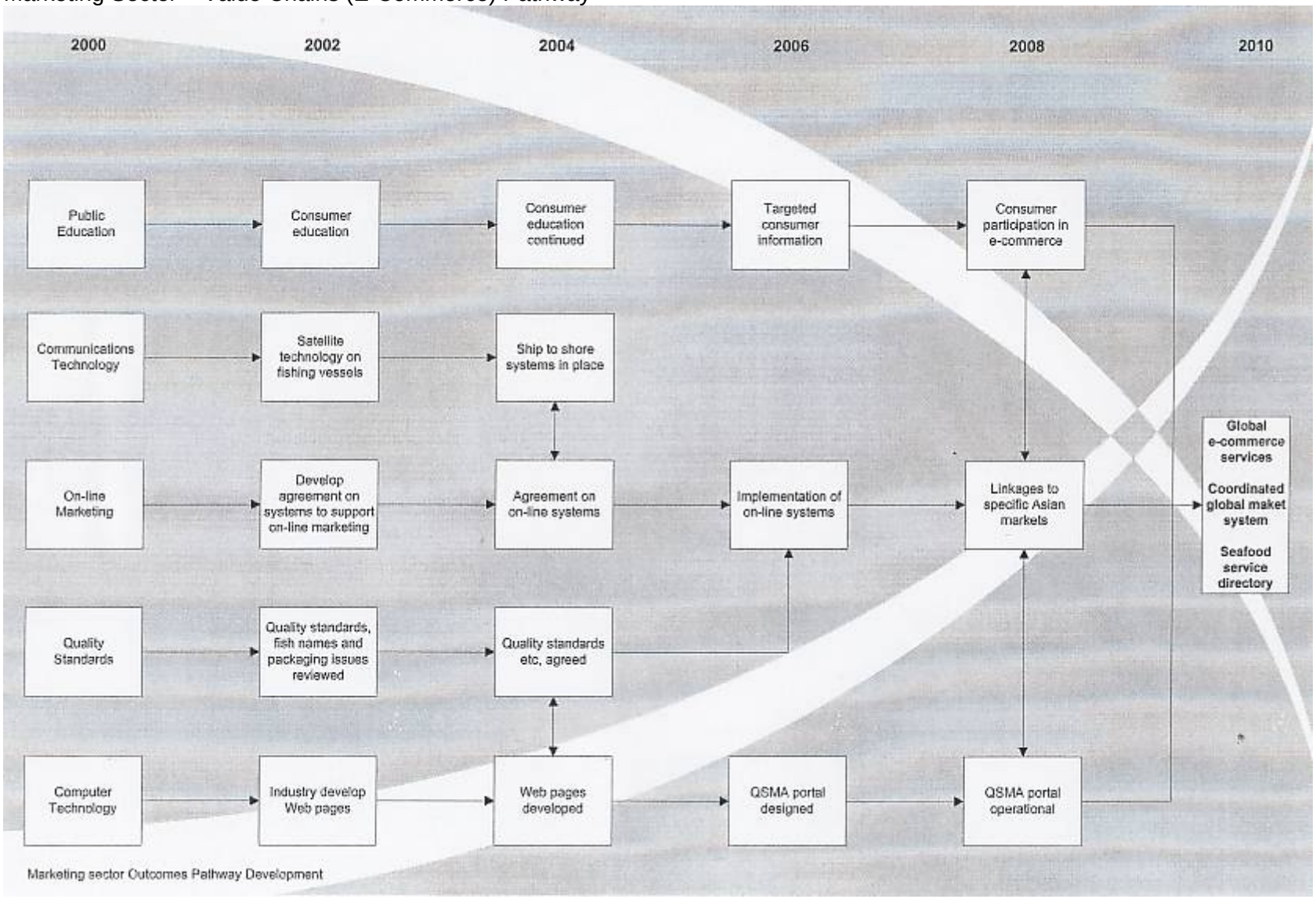
Marketing Sector – Scallop Industry Development Pathway



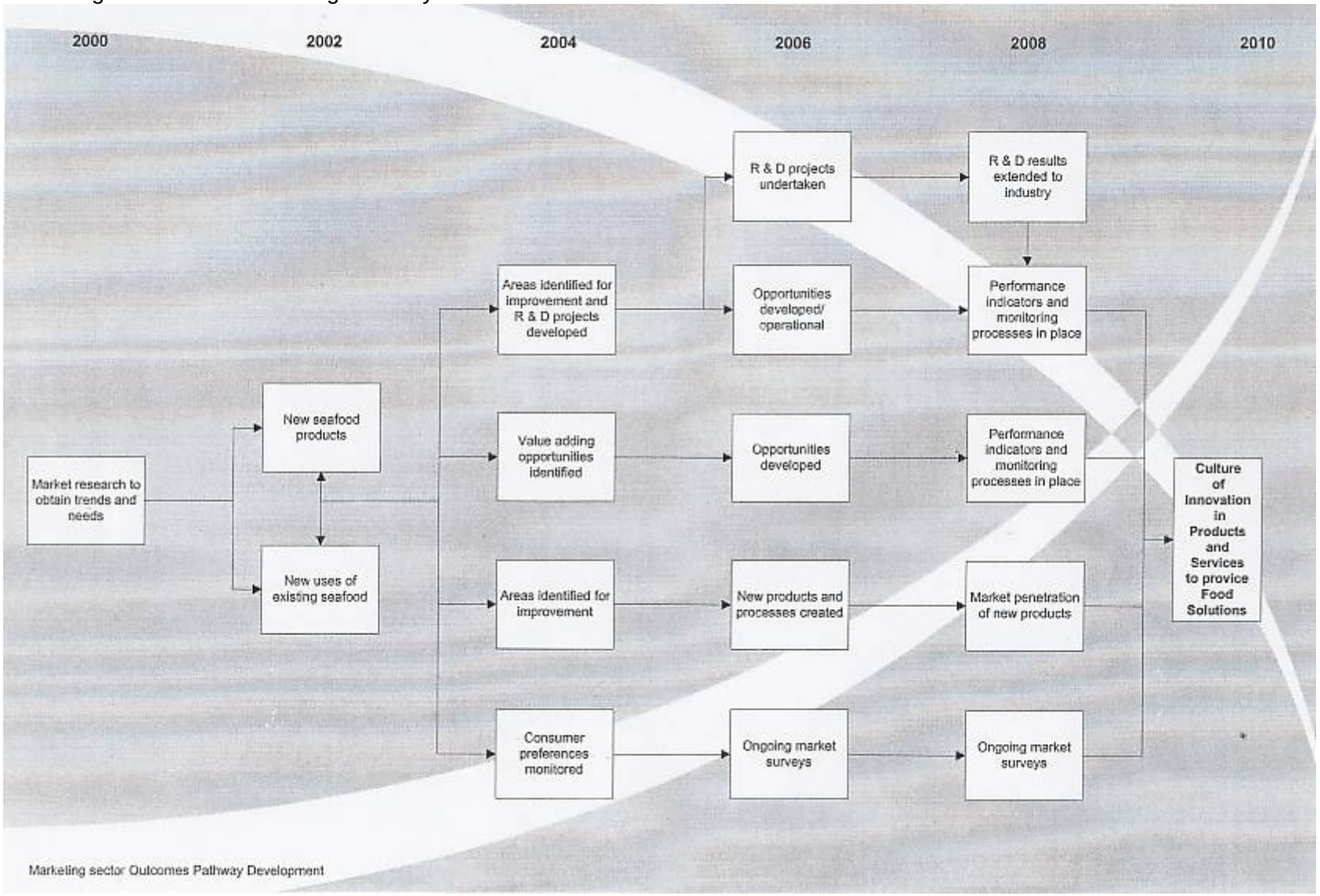
Marketing Sector – Consumer Focus (Food Safety) Pathway



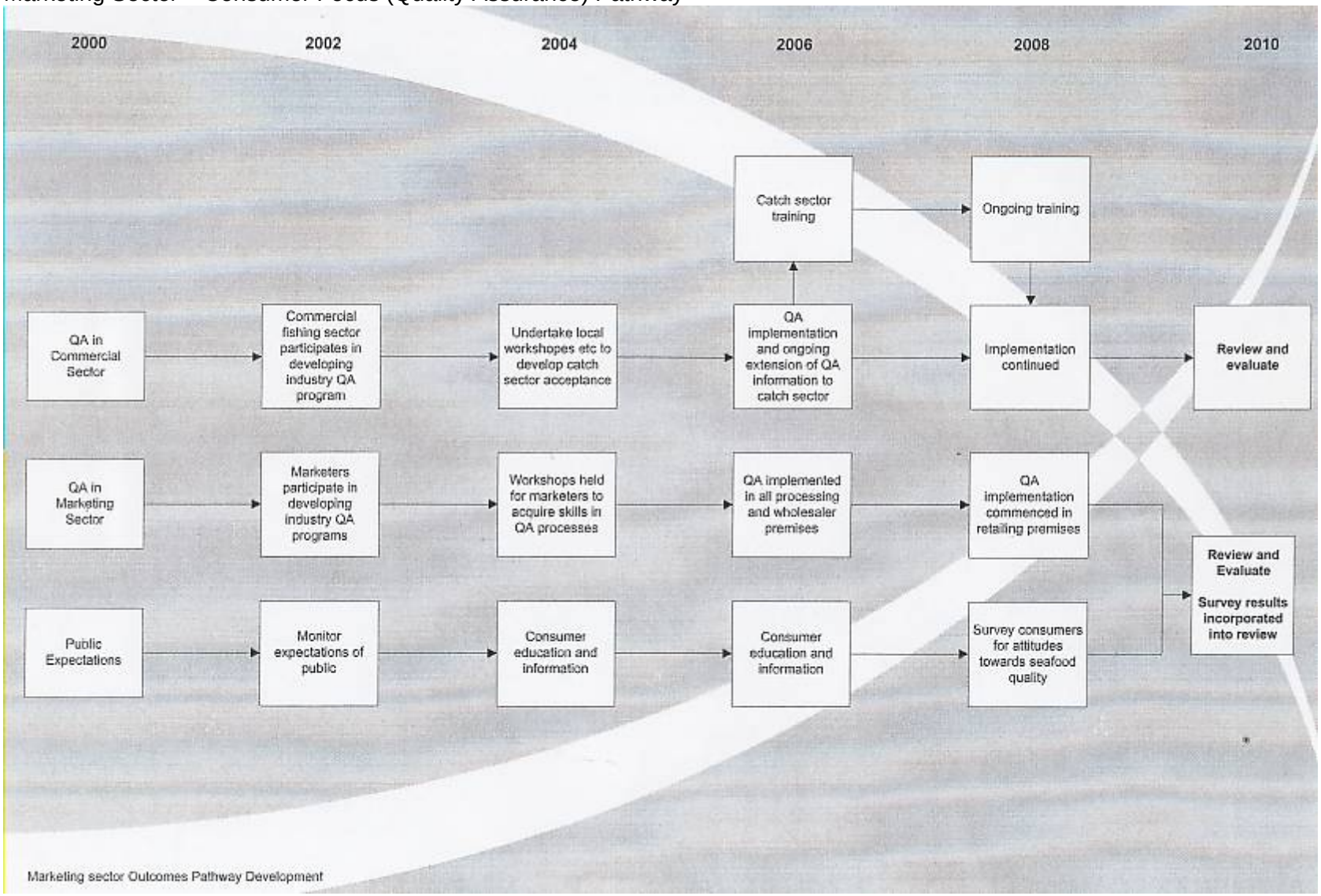
Marketing Sector – Value Chains (E-Commerce) Pathway



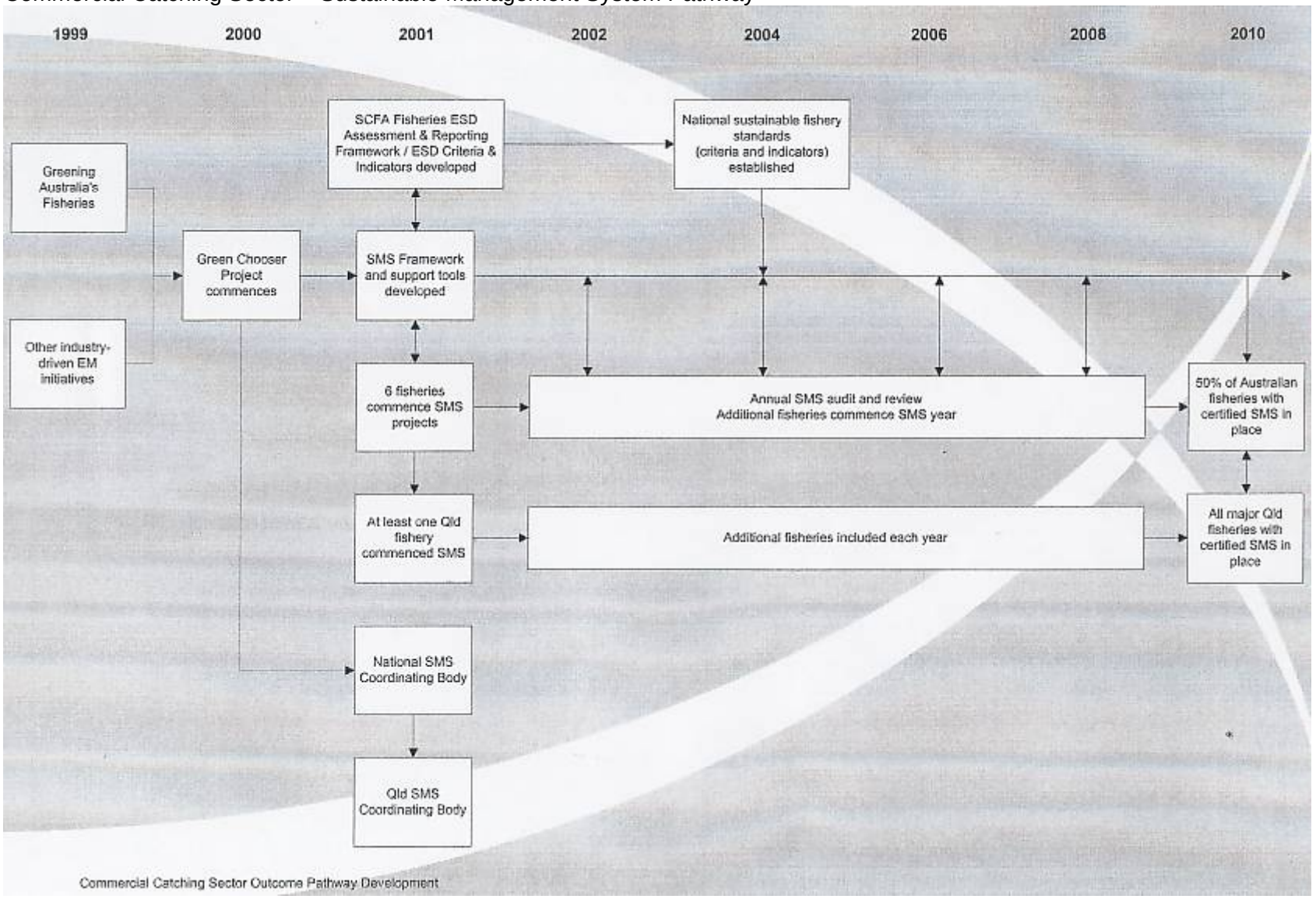
Marketing Sector – Value Adding Pathway



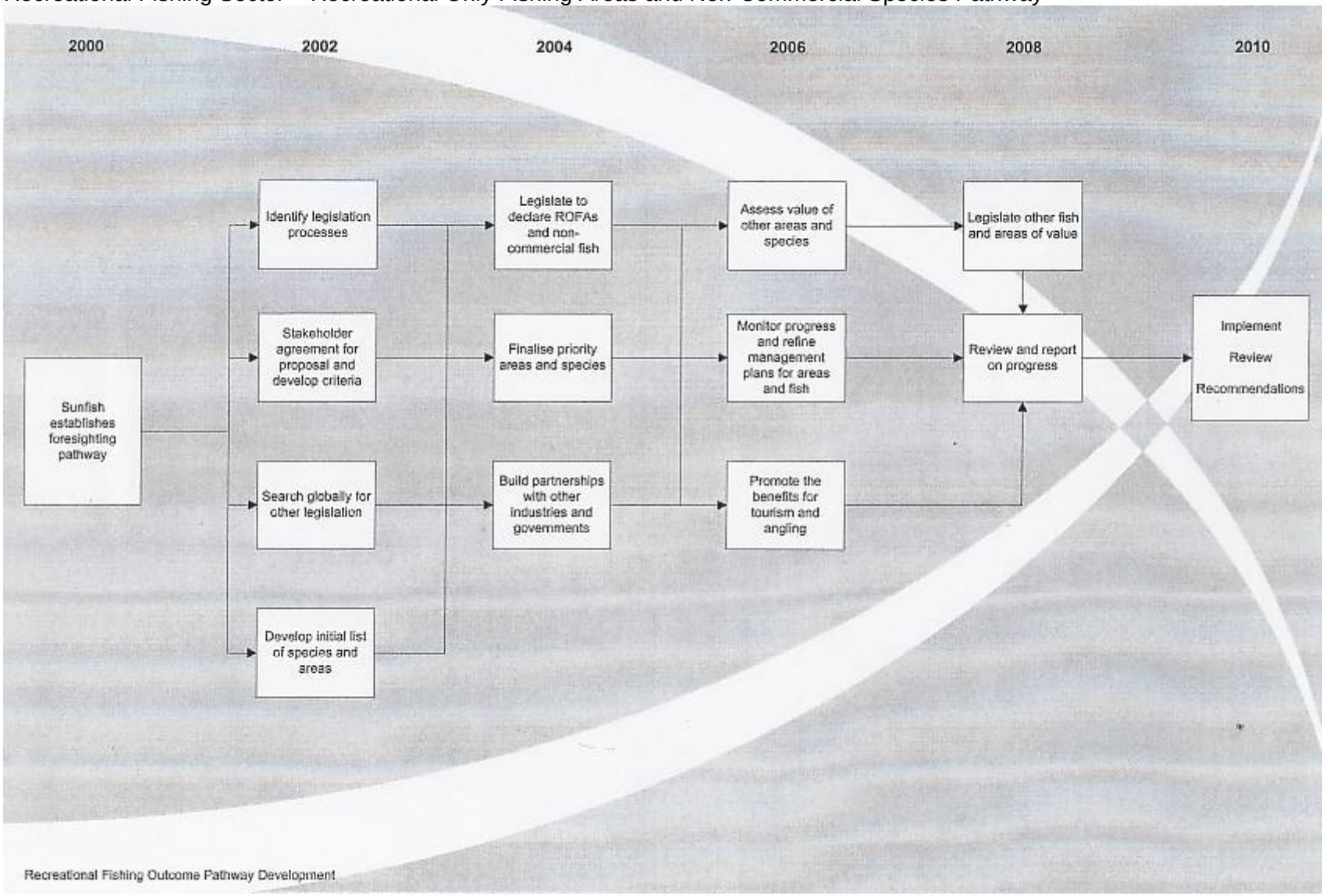
Marketing Sector – Consumer Focus (Quality Assurance) Pathway



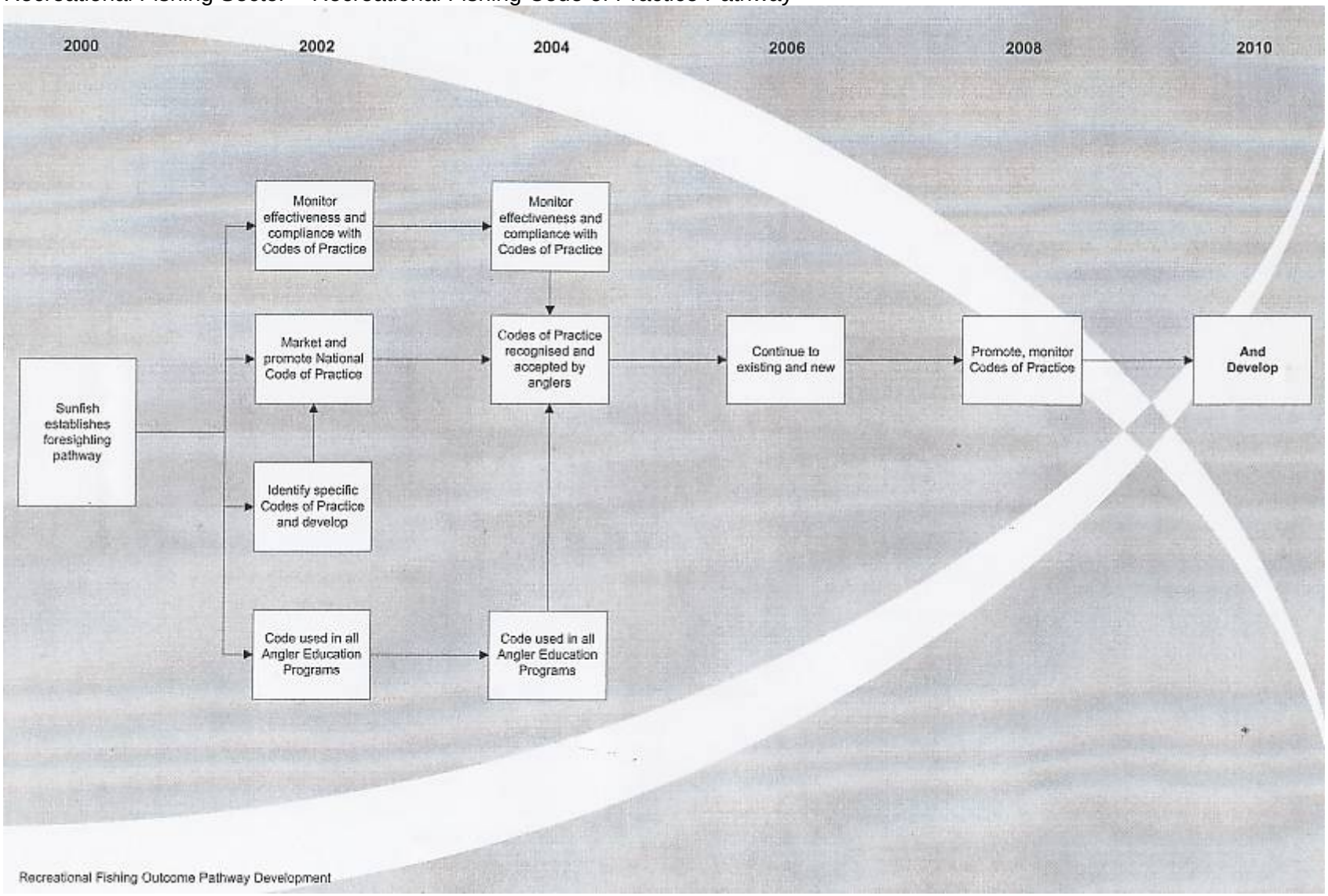
Commercial Catching Sector – Sustainable Management System Pathway



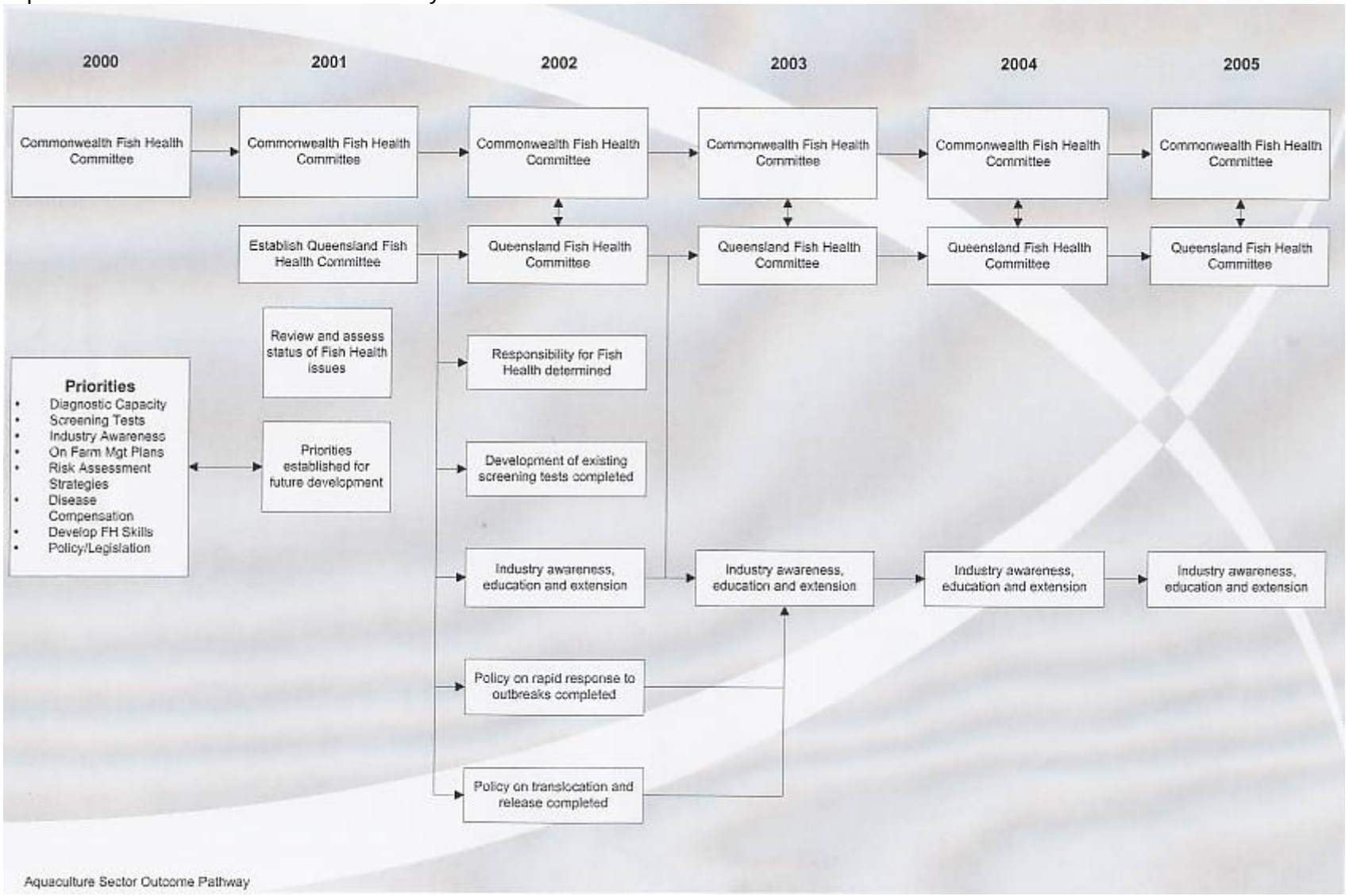
Recreational Fishing Sector – Recreational Only Fishing Areas and Non-Commercial Species Pathway



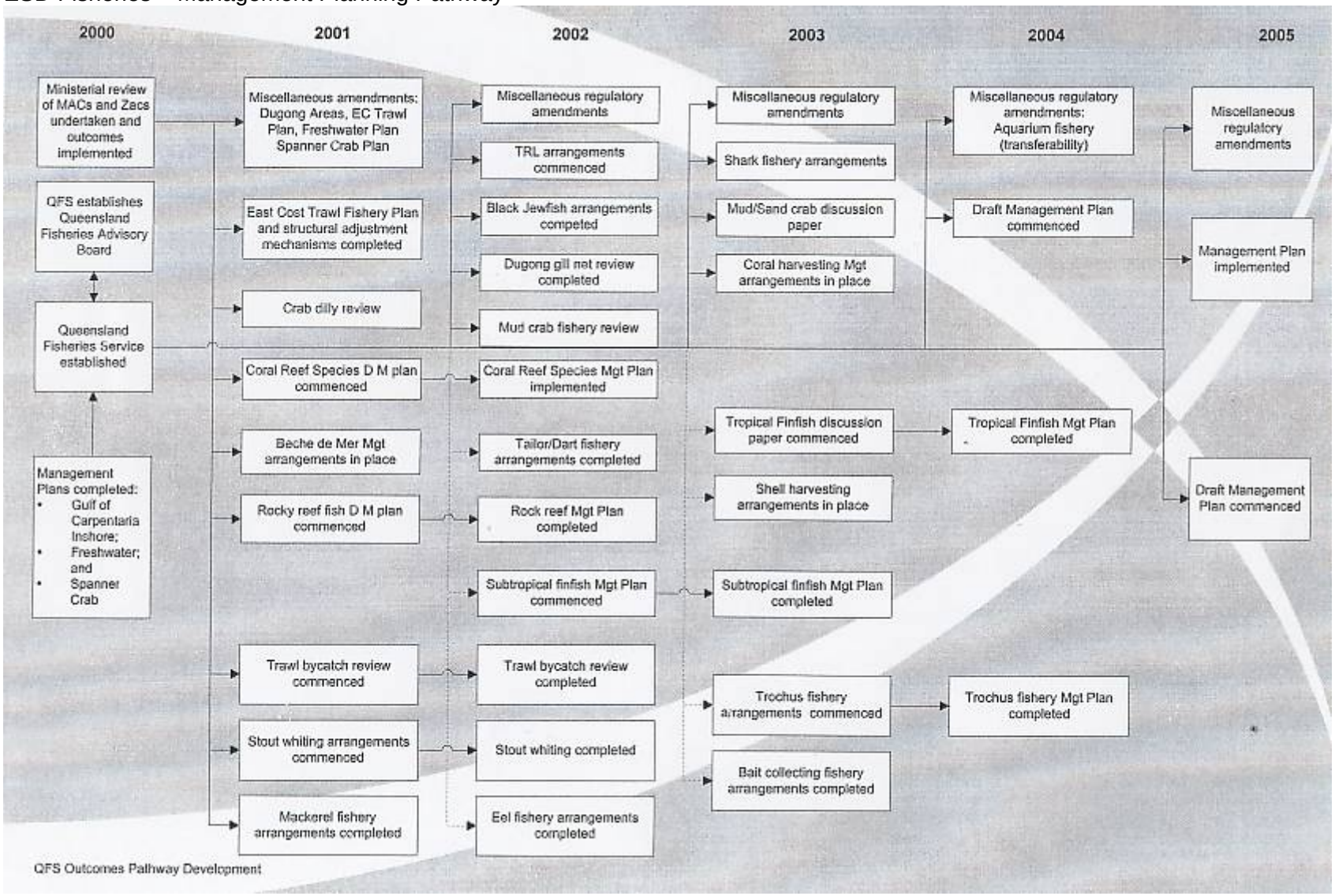
Recreational Fishing Sector – Recreational Fishing Code of Practice Pathway



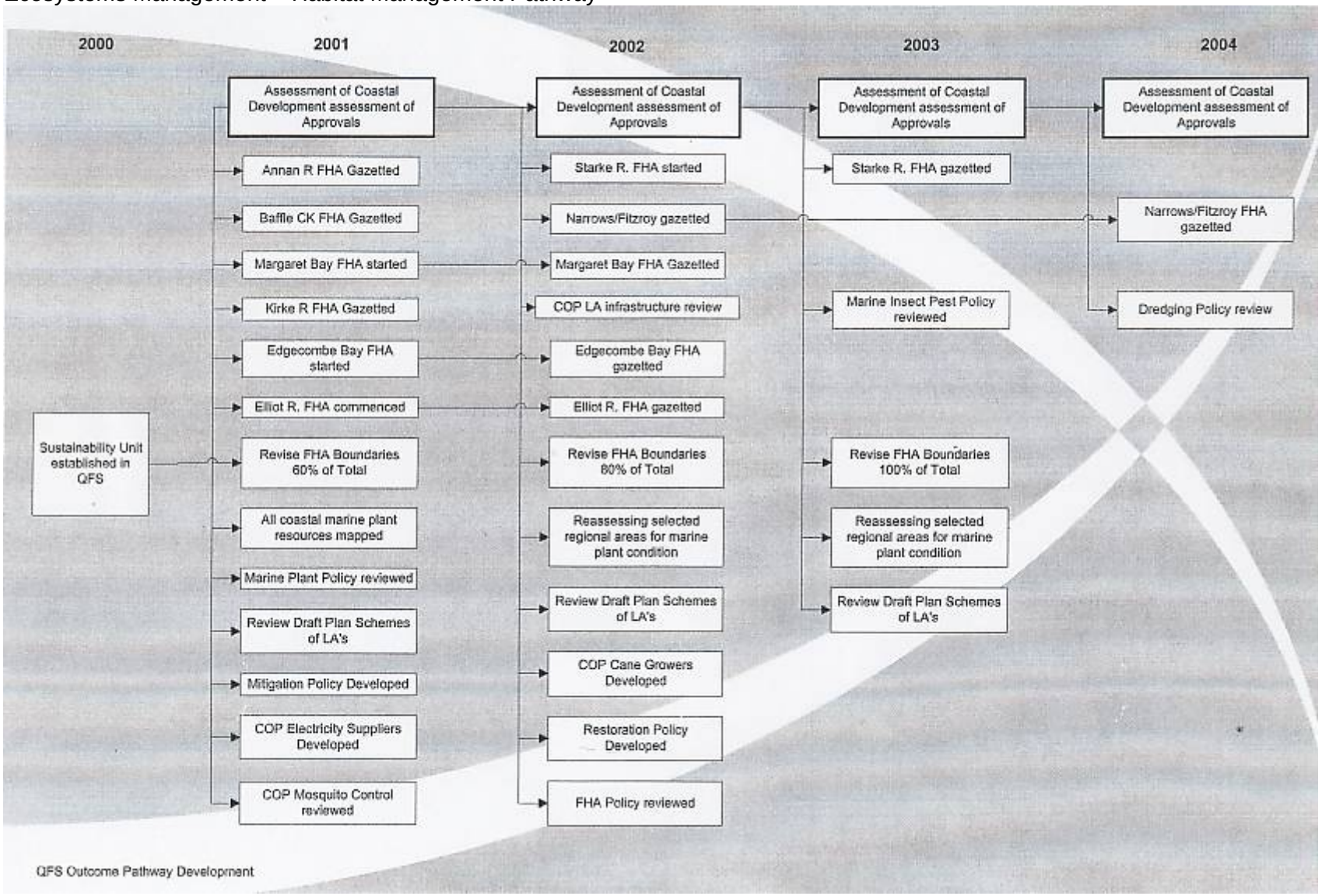
Aquaculture Sector – Fish Health Pathway



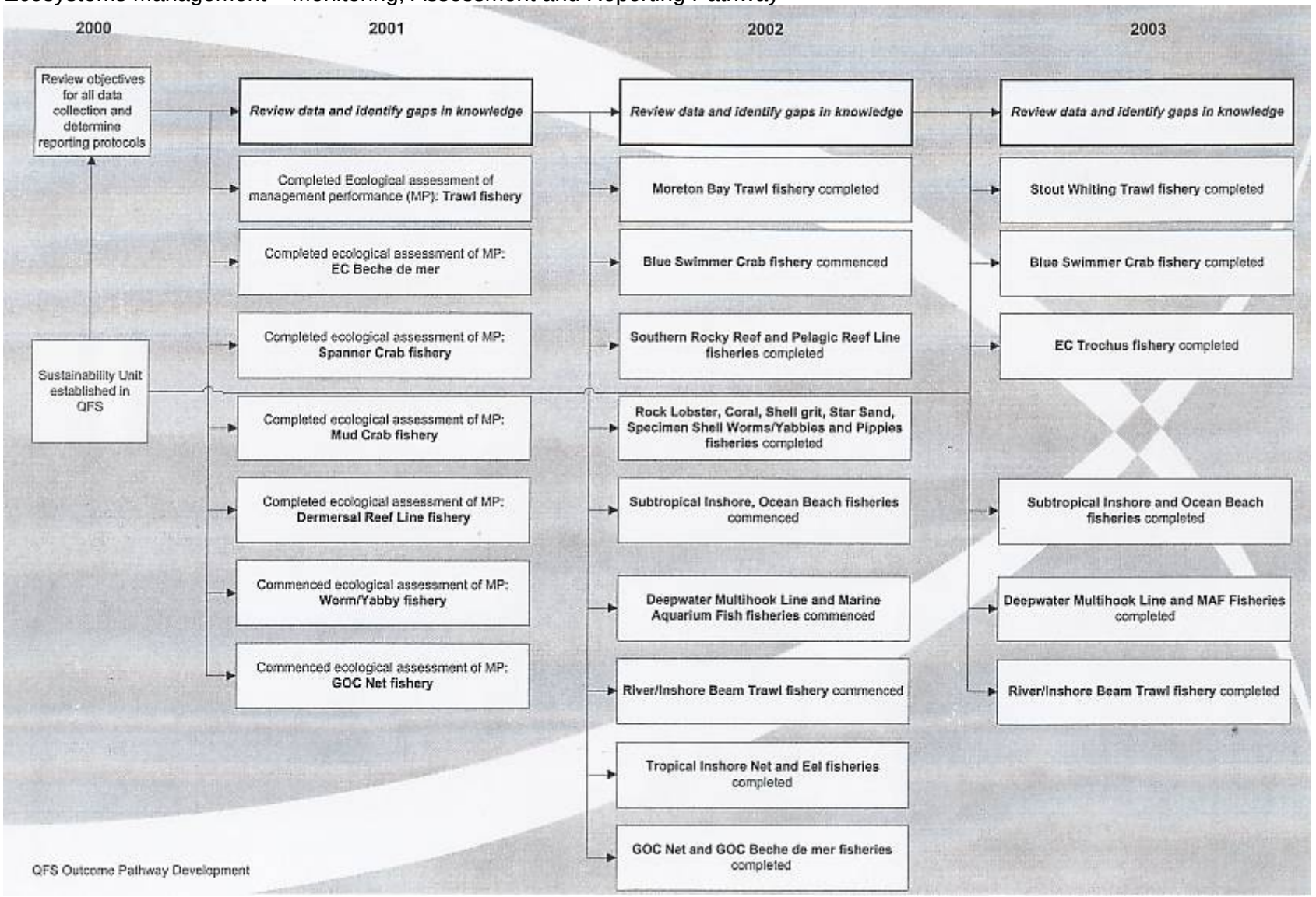
ESD Fisheries – Management Planning Pathway



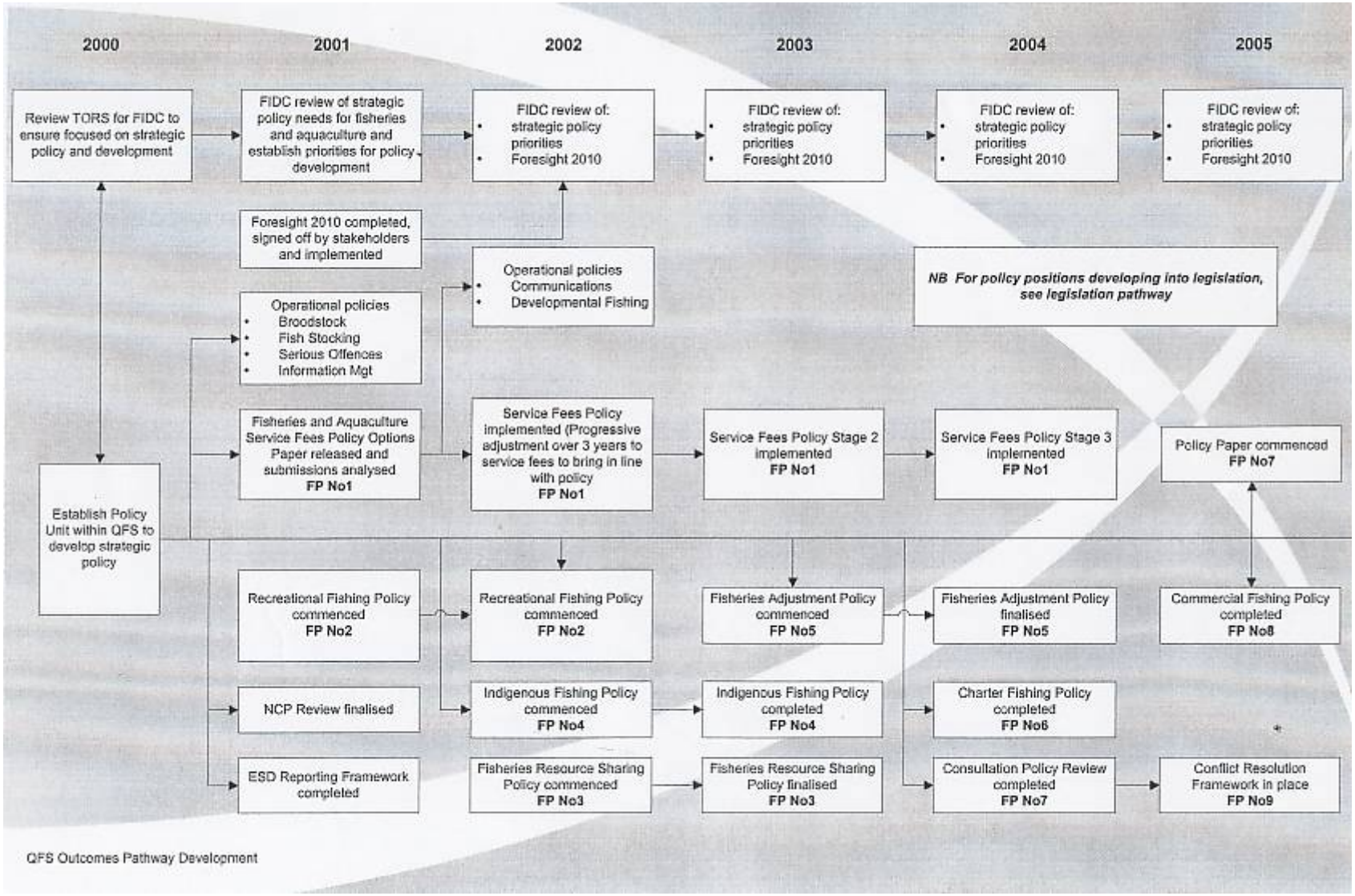
Ecosystems Management – Habitat Management Pathway



Ecosystems Management – Monitoring, Assessment and Reporting Pathway



ESD Governance – Strategic Policy Pathway



Attachment 4: Building Smart Futures Summit

BUILDING SMART FUTURES
QUEENSLAND FISHERIES SUMMIT
30TH APRIL – 1ST MAY 2001

PROGRAM

MONDAY 30th April

Time	Session	Presenter
8.30-9.30	Registration	
9.30-9.40	Welcome and Opening address	Mr Peter Neville Deputy D/G QFS
9.40-9.50	Brief synopsis of process used in developing preferred futures and pathways for achieving it.	Mike McAllum (Foresight Australia) and Facilitator for Summit
9.50-10.30	**World in 2020-Implications for fisheries**	Barney Foran (CSIRO)
10.30-11	Morning Tea	
11.00- 12.40	Showcase fishing sector preferred futures and critical pathways 15 minutes presentation and plenary discussion for another 10 minutes	Charter Fishing Recreational Fishing Aquaculture GBRMP Authority
12.40-1.30	Lunch	
1.30-3.10	Showcase fishing sector preferred future and critical pathways 15 minutes presentation and plenary discussion for another 10 mins	Commercial Seafood Environment NGOs Marketing Qld Fisheries Service
3.10-4.15	Group discussions on preferred future etc and Afternoon tea	Mike McAllum
4.15-5.00	**Can science/Innovation really deliver value in the creation of this future?**	Dr Joe Baker, Chief Scientist Qld and Commissioner for the Environment in the ACT
5.00-5.45	Group discussions and reporting on discussions	Mike McAllum,
6.00	**Close – Day 1**	

TUESDAY 1ST MAY

8.30-9.30	Remainder of group reporting	Mike McAllum
9.30-10.30	**Solutions through partnerships outside of Government**	Bryan Pierce, South Australian Research and Development Institute
10.30-11.00	Morning tea	
11.00-12.00	**Linkage with other industries – building bridges etc**	Mike McAllum,
12.00-1.00	**Climate Change and implications for Fisheries**	Professor Ove Hoegh-Guldberg Director , Centre for Marine Studies UQ
1.00-2.00	Lunch	
2.00-3.30	Group Discussion and Presentations	Mike McAllum
3.30-4.00	Afternoon tea	
4.00-5.00	**Summit views of critical Priorities for Queensland Fisheries**	**Mike McAllum**
5.00	Close	

Attachment 5 Fisheries Foresight 2010 Survey

Fisheries Foresight 2010 Survey

Please study the following questions and provide brief considered answers before returning the survey form to Jane McCasker (e-mail address: mccaskj@dpi.qld.gov.au or Fax No 07 3229 8146) by the 13 July 2001.

Question 1:
Do you believe that the QFISH Foresight 2010 project and its associated activities has made any difference to how you think about your sector's positioning going into the future?

Yes/No (strike out which does not apply)

Please explain why/why not.

Question 2:
Are you intending to continue (or initiate) the discussion on foresighting with "rank and file" members in your sector?

Yes/No (strike out which does not apply)

If Yes, briefly describe how do you intend to do this?

If No, please indicate briefly why you do not intend to continue the discussion?

Question 3:
How do you intend to use your preferred future for the benefit of your sector? (You may wish to refer to the role of FIDC in your response).

Question 4:
Is your sector going to further develop its individual pathways and implement them?

Yes/No (strike out which does not apply)

If Yes, please indicate briefly how this will occur?

If No, please indicate briefly why development and implementation will not occur?

Question 5:
If your sector intends to continue the discussion and develop pathways, will it require any assistance and, if so, what type of assistance and from whom?

Question 6:
How should QFS respond to your pathways

Question 7:
Has the foresighting process assisted you in understanding/appreciating the position of other sectors

Yes/No (strike out which does not apply)

Please explain why you do/do not believe it has been of assistance.

Question 8:
Have you had any contact with other groups concerning their pathways and how their pathways may affect yours?

Yes/No (strike out which does not apply)

Please explain why .

Question 9:
Please list three initiatives/outcomes that you believe were a direct consequence of the Foresight 2010 project.

Question 10:
Please list three impediments that could prevent the building of viable, socially harmonious fishing sectors and ecologically sustainable fisheries in Queensland by 2010.

Question 11:
What do you **now** believe are the 3 most important strategic issues for fishing sector interests leading up to 2010?

Question 12: Where does the current discussion using foresighting need to go to from here?

Attachment 6: Building Smart Futures Brochure

Queensland fishing sector interests

building *smart futures* for fisheries

A Conversation about the Future . . .

Queensland fishing sector interests including indigenous, recreational, commercial, environmental and relevant government resource management agencies collectively commenced a discussion about their future through the Fishing Industry Development Council in 1998. This discussion arose from concerns that there was no agreed common vision about the future of fisheries.

The discussion was based on the concept of "foresighting". This concept is about building a framework for the future. The framework includes the use and analysis of desired scenarios to develop a picture of the preferred future for fisheries in 2010 and consultations within sectors and across different sectors of fishing interests. Such scenarios need to be built.

The *building smart futures for fisheries* document reflects the fishing interests preferred future positioning in the world in 2010. It provides a considered foundation for the future development of Queensland fishing and of management of Queensland's fisheries. It was developed with the purpose of providing individuals, entities, groups and organisations involved in all sectors of fishing with a broad framework in which to develop a collective future as well as their own preferred futures, plans and actions.

It is envisaged that organisations, groups, enterprises and individuals within fishing will use the document as a reference to influence their decisions for the future. The document will also provide a basis against which government and fishing interests can determine appropriate research and development priorities and set policies.

Significant benefits are expected to accrue to the fishing interests from achievement of the outcomes in the document. Many of the benefits align with Queensland Government priorities — more jobs, smart skilling, building regions, better quality of life, protecting the environment and safer and more supportive communities — highlighting that fisheries are an important contributor to Queensland's economy, lifestyle, indigenous culture and future.

This document is not set in stone. Fishing interests expect it will be revised regularly in response to opportunities, new information and changing community needs.

There are no Traditional Owners or indigenous communities' views expressed in this document. This omission is not a consequence of a lack of interest by the indigenous sector in planning for the future but rather a situation where appropriate consultation has not yet occurred with Traditional Owners or indigenous communities. It is anticipated that this consultation will occur in due course and the Document will be reviewed and amended to reflect the additional views.

Our Vision for 2010

In 2010 Queensland will be recognised for the ecologically sustainable development of its fisheries resources. Queensland fishing is:

- managing fisheries in accordance with ecosystem-based planning and management
- producing safe, high quality seafood-based products to domestic and global markets
- delivering a diverse range of world-class fisheries related experiences to leisure, adventure and recreational markets
- contributing to a sustainable economic future for Queensland communities
- working in partnerships with traditional owners and indigenous communities based on agreed cooperative management principles

Strategic direction

- 'Queensland fisheries: "the benchmark for ecologically sustainable fisheries"
- Maintenance and restoration of healthy, productive and biodiverse aquatic ecosystems
- A legislative and policy framework that ensures ecologically sustainable use of fisheries resources
- A policy framework that facilitates cooperative dialogue among fishing interests
- Effective alliances to remove barriers between fishing interests and promote understanding of indigenous cultural differences and aspirations
- Ecologically sustainable development of aquaculture in high-value markets
- Provision of high value added seafood-based products as a demand management tool
- A vibrant and active recreational sector with no increase in harvest levels
- Fisheries based tourism incorporating leisure, adventure, seafood consumption and education
- Use of environmentally friendly technologies that are highly selective of target species and avoid damaging impacts to benthic communities
- Land users taking more responsibility for offsite impacts and aquatic environments becoming cleaner
- Managing for the whole community so that fisheries resources are shared equitably
- Increasing information base on which to apply sound management decisions
- Being clear about the way forward.

Underlying trends

Some of the underlying trends that need consideration and understanding if our vision for 2010 is to be achieved include:

- business as usual is not an option
- the difficulty of decision-making because of the paucity of information
- the requirement for increasing responsibility with respect to the environment
- the impact of climate change on the world's oceans and fisheries
- technology changes the nature of how fishing sectors perform and how management can be delivered
- community perceptions will influence future public policy
- increasing global demands for fish
- indigenous rights and interests in sea country will influence future public policy
- competition for a finite resource.

Our Strategies

To achieve our preferred future, we will be guided by the Building Smart Futures for Fisheries document that is innovative and focused on ecologically sustainable fishing, smart delivery, cooperation and managing change in fisheries. The key elements of these strategies are mentioned below.

Ecologically sustainable fishing

Fishing interests use globally recognised continuous improvement processes and ecologically sustainable practices throughout their decision-making and management operations.

We achieve this through:

- cooperatively developing an ethos of environmental stewardship and strong commitment to ecologically sustainable development
- developing partnerships among fishing interests and land-based groups to improve the land/water interactions
- supporting ecosystem-based planning and management including networks of no-take fishing zones
- applying precautionary fisheries management tools
- responding to community expectations of responsible fishing interests' behaviour
- investing in appropriate research, monitoring and independent auditing capability
- developing ecologically friendly fishing practices and methods that are highly selective of the target species and avoid damaging impacts on benthic communities
- effective alliances to remove barriers between fishing interests and promote understanding of indigenous cultural differences and aspirations
- applying innovative practices that meet ESD requirements
- expanding information base on which to apply sound management decisions
- meeting the standards expected by discerning customers
- creating a basis for positioning against competitors
- improving the utilisation of processing waste from fisheries resources
- reducing fish protein fed to terrestrial and aquatic livestock and increase availability for food chain to satisfy environment and human needs;
- increasing profitability for commercial sectors
- achieving independent environmental certification of fisheries
- increasing the awareness of fishing interests and community to the threat posed by exotic diseases and species

Smart delivery

Fishing interests are successfully delivering a diverse range of services and products at home and around the world.

We achieve this through:

- assessing and responding to client and consumer preferences
- emphasising differentiated products and services
- extension of research results to fishing interests quickly and effectively
- utilising high levels of knowledge and skills within the sectors
- removing impediments to accessing key markets
- developing associated opportunities based around fisheries-related products, services and knowledge
- marketing products and services on the basis of an independent assessment of the ecological sustainability of our fisheries.

Cooperating to deliver

There is increasing cooperation and collaboration among individuals, businesses, groups, industry organisations, environmental interests, traditional owners, indigenous communities and governments to deliver agreed outcomes.

We achieve this through:

- showing strong, firm leadership in developing a culture of ecologically sustainable use at individual fishing interest and FIDC level
- building alliances and networks and working collaboratively on projects
- being both flexible and focused in achieving outcomes
- managing relationships and communications well
- maximising effectiveness of R&D through relevant structures and systems and reliable funding streams
- workable and equitable policy settings and associated legislation
- engagement of traditional owners and indigenous communities in fisheries cooperative management.

Managing change in fisheries

The management of fisheries is governed by factors such as ecological processes, economic considerations and social/cultural needs. The wise management of these factors takes account of fishing sector interests' requirements as well as the public interest.

We achieve this through:

- establishing an ecosystem-based approach to the planning and management of fisheries
- continuous improvement in ecologically sustainable criteria and standards
- supporting the application of the precautionary principle as the primary tool for change management
- establishing a system of objectively-based allocation of resources
- creating more flexible Government policy processes to speed up decision-making without sacrificing transparency and inclusiveness
- providing better information on fishing and the environment to the Queensland community
- building educational and consultative processes for engaging "grass roots" community involvement in fisheries
- incorporating global change drivers such as climate change, population dynamics and energy resources into fisheries management planning processes
- integrating indigenous communities' aspirations and involvement into decision-making processes
- developing the capacity and using the knowledge and skills of fishing interests
- earning community confidence as responsible managers.

Achieving our preferred future

The four strategies — sustainability, smart delivery, cooperation and managing change will be addressed through pathways and actions within each of the fishing interests and government to achieve the outcomes set out in this document. These pathways and activities will occur at a number of levels and include:

- all fishing interests working with government to develop policies and projects in support of the document
- all fishing interests disseminating information and developing educational strategies to inform the public of the vision and directions in the document
- fishing interest bodies working with their members and other fishing interest bodies to encourage initiatives consistent with the thrust of the document
- regional groups, in some cases involving local government, developing regional initiatives consistent with the thrust of the document
- individual enterprises developing initiatives and making decisions consistent with the thrust and intent of the document
- individuals in the fishing interest groups continuing the conversation about the future and helping to create viable, socially harmonious and ecologically sustainable fisheries

Fishing Industry Development Council

The Queensland fishing interests Building Smart Futures Plan was developed under the auspices of the Fishing Industry Development Council (FIDC), a high-level fisheries consultative forum established by the Minister for Primary Industries and Rural Communities. FIDC has representatives drawn from all fishing interests including commercial, industry, marketing, recreational interests, charter fishing, environmental non-government organisations, indigenous peoples, aquaculture and State and Commonwealth Government agencies.

Pathway development

This document is supported by outcome-based pathways and actions developed by all fishing interests. These pathways flow from the strategies set out in the document and on implementation will assist in achieving the fishing interests' preferred future positioning. Equally important is the situation that each sector is aware of the pathways of every other sector and consequently has the opportunity to collaborate in achieving mutually desirable outcomes. Information about these pathways and actions is available by contacting the relevant contact points given below.

The work of the FIDC in developing this Plan was guided by specialist consultancy advice from Global Foresight Australia in planning for the future, with extensive support from the Department of Primary Industries.

FIDC will not achieve the collective Queensland fishing interests preferred future alone. The Council's role is to focus on identifying and responding to fisheries sustainability and fishing sector interest development needs in an integrated way.

FIDC will continue the conversation about the future with fishing sector interests through the communication channels available to it. It will stimulate and encourage the undertaking of projects by fishing interests and work with government to create policy frameworks and initiatives that enable the interests to create a future in which they can prosper within an ecologically sustainable development culture.

Contact Point/s:

Organisation	Contact	Phone No	Facsimile	E-mail address
Qld Fisheries Service	Jane McCasker	07 3225 1846	07 3229 8146	mccaskj@dpi.qld.gov.au
Qld Seafood industry Assn	Duncan Souter	07 3262 6855	07 3262 7650	dsouter@qsia.com.au
Sunfish	David Bateman	07 3880 4261	07 3880 4261	sunfish@modemss.brisnet.org.au
Qld Industry of Recreational Fishing	Bruce Alvey	07 3271 2844	07 3271 2451	info@alvey.com.au
Qld Charter Vessel Assn	Ray Joyce	07 5591 7582	07 5592 9856	info@marinelife.org.au
Qld Seafood Marketers Assn	Ted Wittingham	07 4972 4888		fishmac@ozemail .com.au
	Sid McKeown	07 4153 4800	07 4153 2075	hbfprocessor/@bigpond.com
Qld Conservation Council	Felicity Wishart	07 3221 0188		coord@qccqld.org.au
Aust Marine Conservation Society	Kate Davey	07 3848 5235	07 38925814	katedavey@ozemail.com.au
World Wide Fund for Nature (Great Barrier Reef)	Imogen Zethoven	07 3839 2677	07 38392633	izethoven@wwfqld.org
Aust Prawn Farmers Assn	Martin Breen	07 3255 1070	07 3844 7307	apfa@qff.org.au
Non-prawn Aquaculture Industry	Carl Young	07 3844 7261		carlyoung@ozemail.com.au
Harvest Fisheries	Sian Breen	07 3227 8754	07 3227 8792	breens@dpi.qld.gov.au
Seafood Services Australia	Stephen Thrower	07 3406 8599	07 3406 8677	throwes@dpi.qld.gov.au
Great Barrier Reef Marine Park Authority	Randall Owens	07 4750 0735	07 4772 6893	randallo@gbrmpa.gov.au