

**AQUACULTURE -
THE CLAIMS STORY**

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BUSINESS SESSION 9

AQUACULTURE - A CLAIMS STORY

In April 1996 the loss by fatality of approximately two thirds of the stock of tuna held in cages in the environs of Boston Bay, Port Lincoln, left the South Australian Southern Blue Fin Fishing Industry in dire straits. With the catching season closed and most of their reduced quota destroyed, the effects were understandably dramatic.

Before discussing this particular event, and the consequences which flowed from it, I believe it important to give a brief background of this aquaculture activity.

The Southern Blue Fin Tuna (*Thunnus Maccoyii*) is dissimilar to any other fish which are "farmed" in Australia. Unlike the vast majority of aquaculture activities, the tuna is not bred in controlled environs but is captured wild and then "fattened for market" whilst being progressively harvested between annual catching seasons.

The SBT are a pelagic species of fish in that they live near the surface of the oceans and seas of Southern and South Eastern Australia.

The main spawning area for the species is in the water North West of Australia nearer to the Indonesian Island of Java. They then travel down and around Australia's Western and Southern coasts and are some 3 to 4 years old when reaching Australia's main fishing areas in the South West. By this stage they are generally around 120 cm and weighing some 20 kg. They have been known to live for approximately 20 years and reach 200 cm and weigh up to 200 kg.

They are therefore not a small fish and not a species that you would associate with a farming activity.

With the increasing demand from Japanese sashimi markets for a continual supply of quality tuna in pristine condition, the traditional methods of catching tuna during a short season had to be re-assessed by Australian fishermen in the 1980's.

The concept of farming the Southern Blue Fin was thus investigated and developed by the fishermen of Port Lincoln in South Australia in 1990. The method adopted was that involving the use of purse seine nets which effectively capture schools of the fish at one time. Once a school is encircled, a drawstring at the base of the net is pulled and the bottom of the net is closed to entrap the fish.

Once entrapped, a towing cage is positioned alongside the net at a position where corresponding apertures in each can be opened to allow the fish to be herded from the net to the cage. This is achieved by the use of divers.

To avoid undue stress to these wild fish the towing cage is very slowly, eg., at a speed of 1 knot, brought into the sheltered waters surrounding Boston Island. There they are again transferred into holding pens using a similar method of divers herding the fish through matching gates.

It is during this process that a video camera is placed in line with this gateway so that when the film is replayed at a reduced speed it is possible to count the actual number of fish being transferred. A representative sample of anything up to 40 fish are then caught by line, weighed and returned alive to the cage. Based on the average weight and the number of fish held it is therefore possible to establish tonnages caught for the purpose of licence quotas. This information is also necessary for the establishment of the base value of the fish for insurance purposes.

In all these phases of the capture process every care is taken to minimise the fatality numbers of the fish due to stress or contact with the various enclosures.

The holding cages are actually cylindrical nets which are supported by a series of pontoons. The bottom of these nets is closed and floats suspended above the sea bed. Outside of these holding nets is a heavier predator net which extends from the surface all the way to the seabed. The average depth of water in Boston Bay being about 17 metres.

The fish thereafter are manually fed by farm personnel with a diet principally of pilchards and gradually increase in weight over the next 9 - 10 months during which time they are progressively harvested for the overseas market. This greatly extended the period of possible supply from the catching season of February/March, up until late in the year.

The event now under review occurred in mid April 1996, hence it will be appreciated that due to the relatively short period after capture, the cages held a large percentage of their maximum capacity of fish but that there similarly would only have been a moderate increase from their caught weight compared with their ultimate potential size.

As operations had only begun in the early 1990's, this was still a "fledgling" industry, hence the insurance coverage available was fairly restrictive in nature until a proven history of successful farming could be achieved.

On the 12 and 13 April 1996, periods of strong winds hit the Port Lincoln area including the waters surrounding Boston Island which forms the Eastern boundary of Boston Bay as shown on the attached map.

It was reported at the time that the combined strength, duration and direction of these winds had not previously been experienced for the locale. It was believed that these unusual conditions were the tail end effect of cyclone Olivia which had earlier unleashed its fury on the Western Coast of Australia.

In the days following these weather conditions, the various operators reported increasing numbers of dead fish being found in the cages. The water conditions at this time were very turbid and cloudy and the tuna were displaying signs of stress and fatigue.

It can be imagined that when wild fish encounter such conditions they would leave the location in search of clearer deeper water. These fish however were trapped in their cages. Southern Blue Fin are a very active fish and they rely upon a ram fed type of ventilation to obtain oxygen from the water. They must therefore be continually on the move to survive unlike your pet goldfish which can appear immobile for long periods.

Investigations were immediately begun in an effort to identify and rectify the problem and also clear the cages of the dead tuna.

These operations were hindered not only by the prevailing and continuing adverse conditions but also the lack of divers available to handle what was fast becoming a mammoth operation to remove the increasing number of carcasses which were accumulating at the base of the nets and placing undue strain on them..

Because of the rapidly deteriorating condition of the dead fish, and because no definitive cause of fatality could be immediately established, they could not be disposed via any method acceptable to the relevant health authorities and were ordered to be dumped. This in itself created a huge problem as it would ultimately involve the disposal of nearly 1,600 insured tonnes of rotting fish, let alone the uninsured quantity. Something the local tip had not foreseen nor able to accommodate in its normal operations.

The other important consequence was that there was not only no salvage proceeds available to the operators but in fact additional expenses had to be incurred over and above their already huge loss. These additional expenses were not insured against.

Following the notification of these potential claims, the magnitude of the assessment task quickly became apparent and a task force of personnel had to be rapidly assembled and sent to the Port Lincoln area.

Apart from the job of monitoring the number of actual dead fish retrieved from the cages and assessing the value of same, the biggest problem confronting insurers was establishing the cause of the fatalities and determining whether the limited policy coverage was sufficient to respond to the losses. This was to prove to be no easy exercise. The principal insured peril under consideration was loss 'directly caused by or resulting from storm &/or tempest'.

Initial investigations conducted by the operators, experts appointed by them and various Government authorities, concluded that sediment from the seabed under the cages had been stirred up as a result of the high winds and resultant wave action and that whilst these particles were suspended in the water column, the caged fish had become adversely excited and stressed. As a result of this agitation, it was alleged the irritation by the particles in the water to the gills of the fish caused the tuna to produce excessive quantities of mucous through their gills causing suffocation of the fish.

If these circumstances were accepted then the operators stated that they had legitimate claims under the storm and tempest cover afforded under their relevant policies.

Whilst this proffered scenario was possible it was not considered by insurers to be definitive in its conclusion and what subsequently ensued was to become the subject of intense investigation and evaluation by numerous teams of very respected scientific minds.

The considerations for insurers were basically to determine if the weather conditions which occurred would qualify as storm &/or tempest and whether the losses experienced were as a direct result thereof. Also to investigate that there had not been other agents such as toxic organisms or pollutants which would be considered as primary contributions to the fatalities.

Whilst the weather conditions were reported as being unusual and unexpected, there were differing opinions tendered by the various experts as to their origin and cause. It was also submitted that the wave conditions experienced around Boston Island and within Boston Bay, were the result of additional factors other than merely the winds which prevailed.

Expert opinions were tendered regarding a large but not unique tidal surge which had swept up the Gulf off the continental shelf and that upon entering Boston Bay had created a negative tide situation. This in turn had the effect of suspending matter in the water column for unusually long periods.

The nature of the matter suspended was also debated as it was proffered that this was mainly organic rather than the non-organic normal seabed particles. As mentioned earlier, the tuna are fed on a diet principally consisting of pilchards. The entire quantity of feed which is entered into the cages is never totally digested and a quantity of uneaten feed accumulates thereunder. This coupled with the normal waste exuded by the tuna will, over time, create an environ of high nutrients. This in turn has the potential for the development of organisms which could have toxic effects on the tuna trapped within the cages suspended closely above.

If it was established that the fatalities were as a result of such toxic organic matter, then the insurance policies would not respond.

The ensuing investigations, involving some of the world's leading experts in their respective fields resulted in a series of reports and counter opinions from both the operators and insurers.

Due to the lack of actual previous research material on the histology of the SBT, the results obtained from many of the tests conducted on samples of the fish were inconclusive for both the operators and insurers.

Because of the variance in the levels of brevetoxin found in samples of the dead tuna, doubts were raised in relation to the accuracy of the times and locations from where the samples were drawn also the preservation and security of them. Again, lack of historical records regarding the normal levels which would be expected hampered reliance on the relevance of the results.

Whilst insured's and insurers strove to prove or disprove theories as to the definitive cause of the deaths, speculation by various organisations both in favour and critical of the establishment of the industry kept media interest high.

Without doubt some entities were hopeful of some evidence emerging which would vindicate their long held allegations that tuna farming in the Boston Bay area was harmful to the environment and local ecology. On the other hand it could be argued that the actual natural environment was actually harmful to the industry.

In either event the South Australian State Government heavily supported the fledgling industry which was producing an every increasing revenue from export dollars.

What became increasingly evident was that operators and insurers alike were funding a series of researches by marine scientists and not really getting closer to a final answer.

It eventually was considered that litigation may be necessary to resolve the issue of policy response should the operators and insurers not be able to reach agreement.

A resolution was attempted with the 13 claimants by means of a formal mediation, however this broke down and was abandoned when the mediator was unable to gain sufficient concessions from the parties involved for discussions to continue.

The previously mentioned 13 claimants had united legal representation and were resolved in their pursuit of settlement.

Insurers were equally firm in their belief of the strength of their evidence, however they had other considerations to ponder should the matter be formally litigated.

Would there be political or social factors, whether consciously or unconsciously, which may be considered by a local judiciary when presented with potentially equal strength of arguments by the parties?

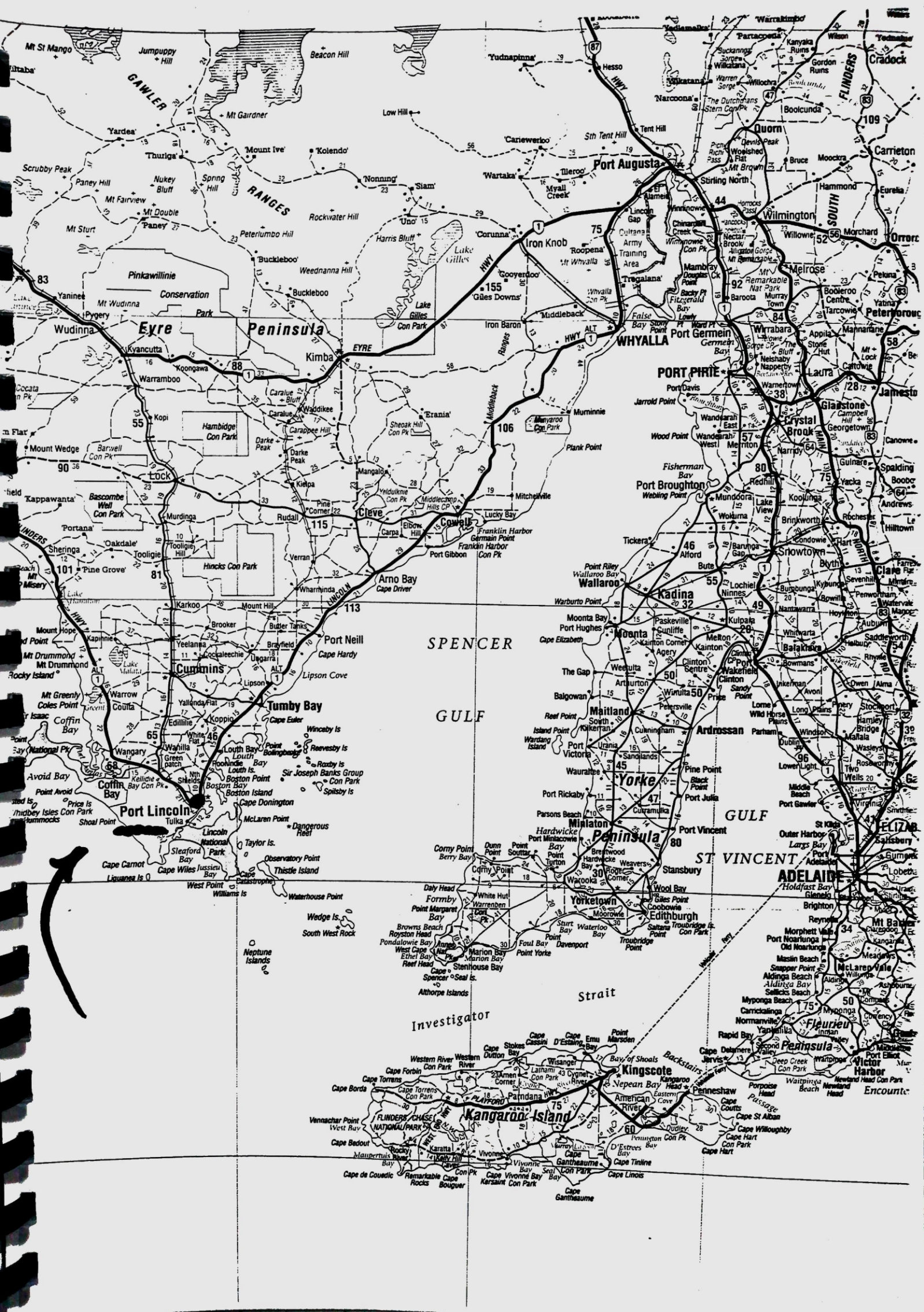
If the case proceeded to litigation, it would be a very long and very expensive exercise with little guarantee of success and with a potential financial pay out of approximately \$20 million.

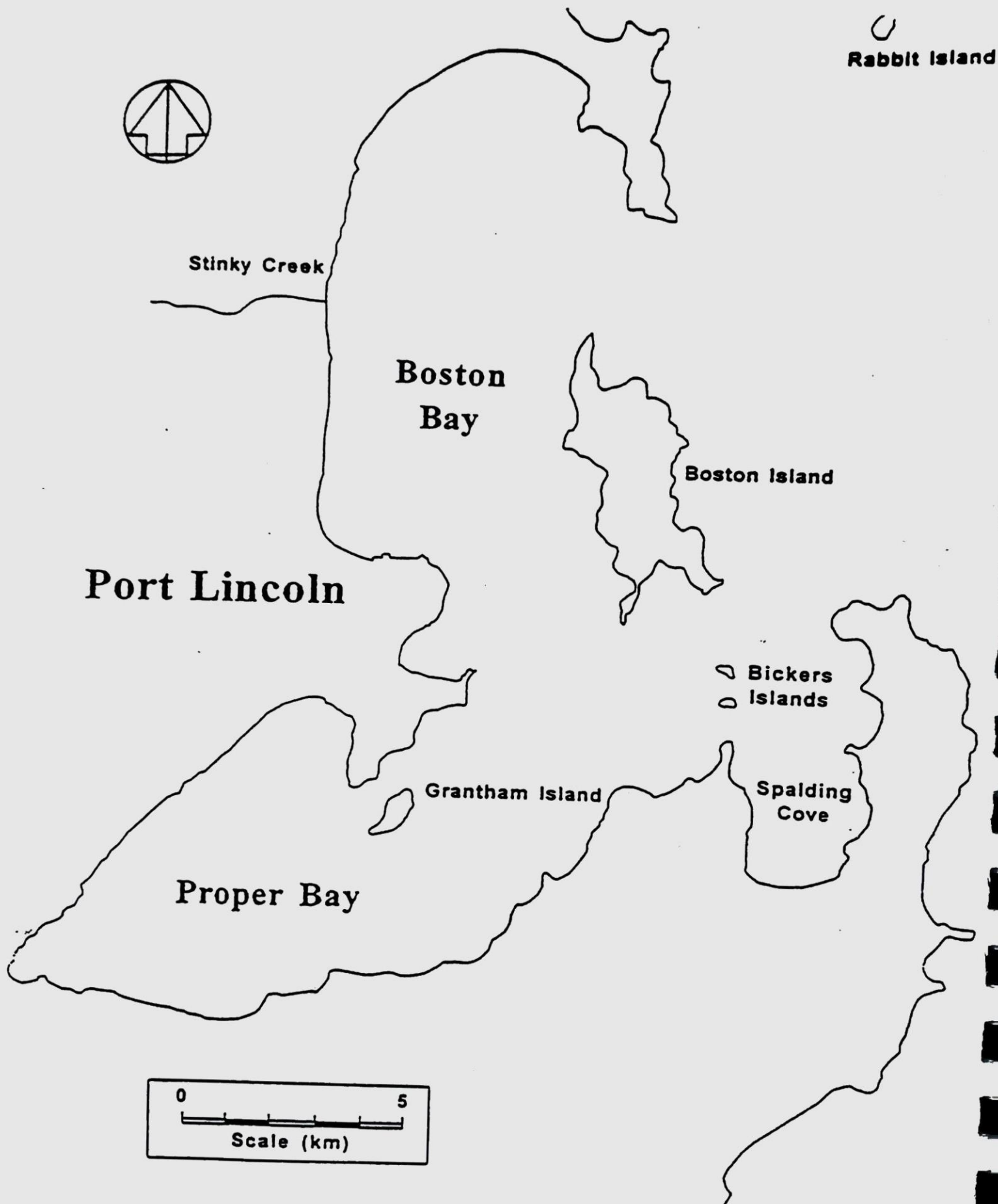
A further attempt at resolution was made on the basis of an informal mediation which resulted in agreement finally being reached between the insureds and insurers.

Under the terms of the agreement, details of the actual resolution are to remain confidential, however on the morning following the relevant meeting of the parties, the headline of the Adelaide Advertiser read **"TUNA FARMERS' \$14M PAYOUT"**. Whilst insurers are not permitted to confirm the exact cost of this claim, we all know the press are always accurate in what they report. (!!)

Like every adverse event there has to be an upside and due to the scope of investigations undertaken, a more informed industry has progressed with better farm management practices, improved feed and feeding procedures which will hopefully mitigate the impact of any future potential disaster.

Lessons learned hard are lessons well remembered.





Tuna farmers' \$14m payout

By BRONWYN HURRELL

Port Lincoln tuna farmers who lost about 60,000 fish in a violent storm early last year are to share a \$14 million insurance payout.

Although this is less than one-third of the total value of the dead tuna, the agreement with the MMI Insurance Group has been welcomed by the industry.

The payout ends more than 12 months of legal negotiation for some kind of compensation.

The agreement has been hailed as "tremendous news" for Port Lincoln, which is heavily dependent on the fishing industry.

The tuna that died in Boston Bay holding pens cost operators a bottom line of \$40 million to farm and would have been worth \$60 million on the market.

Most of the tuna died from stress and others were choked by mucus they produced to clean sediment from their gills.

But, under the terms of the MMI Insurance storm policy, the claimants were entitled to claim only \$14.7 million.

After initial legal wrangling and after their original claim was rejected, the tuna farmers last August lodged a writ against MMI in the Federal Court.

But, after a series of meetings between the parties and their legal representatives, an out-of-court settlement has been reached.

The payout will be shared by the 13 individual Boston Bay farmers who were insured by MMI.

The recipients include the owner of the biggest southern bluefin tuna operation in Australia, Mr Joseph Puglisi, and well-known tuna farmer Mr Hagen Stehr.

Nine other operators were not insured for storm damage.

Three of them have already gone into receivership because of their losses.

Precise details of the insurance claim and



Tuna being dumped at Port Lincoln after devastating storms last year.

the sums awarded are confidential, but the Tuna Boat Owners Association president, Mr Brian Jeffriess, said yesterday the parties had reached an "amicable agreement".

However, it is understood the tuna farmers received most of the \$14.7 million they were seeking.

"All I can say is the industry is extremely satisfied with the outcome," Mr Jeffriess said.

Tuna boat owners he had spoken to had all expressed a feeling of relief, he said.

The insurance payout is the only monetary lifeline the tuna farmers will receive

to rebuild their livelihoods after their appeals to both the State and Federal Governments for compensation failed.

"This issue was fought not just on the issue of recovery of costs - it was fought on principle," Mr Jeffriess said.

At the time of the tuna losses, the industry's farming methods were strongly criticised by politicians and marine scientists.

"We hope a lot of them will apologise now," Mr Jeffriess said.

But the industry would still take time to recover, regardless of the settlement.

"This (payout) is not going to change a lot of their situations.

"With a natural disaster of that proportion there's no way an industry can recover in the next decade.

"You can't lose \$40 million from your bottom line and expect the industry to ever be the same again."

Port Lincoln's mayor, Mr Peter Davis, said he was "delighted" a settlement had been reached.

"It's tremendous news for the city as well as the fishermen," he said.

"Sure they've made profits, but they've also taken enormous risks over the years.

"The settlement means life will be easier for the city."

Mr Davis said the decision would have a flow-on positive effect for the economy of the entire community.

Nearly 10 per cent of the town's population of 13,000 is directly involved with the tuna industry.

Spending by the tuna farmers keeps other segments of the town's economy buoyant.

"The economic impact of what the tuna fisheries do for our State - not just Port Lincoln - is tremendous," Mr Davis said.