



THE HYDROLOGICAL SOCIETY OF S.A. INC.

C/o Water Resources Branch
Box 1751, Adelaide, S.A. 5001

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EDITORIAL

ICM and the MFP

by Richard Clark

If we are to contemplate the establishment of a sustainable world, and that seems to be accepted as a 'good thing' by the majority, then the place to start investigations of how to achieve it must be in our cities, where the bulk of the population are living, and, in the process of doing so, are creating the bulk of the non-sustainable demands.

With this in mind, there were two events, which, I believe, were of the greatest local importance during the past year. These were the talk given by Dr. Suzuki at the Apollo stadium and the recent success of the South Australian Multi Functional Polis submission.

The MFP was not on the agenda when Dr. Suzuki came through Adelaide. However, the Adelaide Planning Review had been recently commissioned and, at the Apollo stadium gathering, Mr. Bannon announced that Dr. Suzuki would be an advisor to the Review. Since a central component of the South Australian MFP submission is the notion of an integrated MFP-Adelaide, presumably, therefore, Dr. Suzuki will now also participate, at least peripherally, in the discussions on the broader MFP concept.

For a State which, on environmental grounds, has recently repeatedly balked at much smaller development projects, taking on the high-tech MFP might seem to a casual observer like an invitation to community polarisation and dissention.

If, however, 'sustainable development' is a way of keeping both pro and anti development lobbies happy, the initial planning, at least, appears headed in the right direction. We are assured that the MFP will be an 'environmental' MFP. It will be a water, forest and field MFP and will house a world environmental centre.

Is this all too good to be true? Is it all achievable? Two statements made at the joint AWWA/ANZAAS water seminar on future directions in water resources management and one paper given to the seminar highlight my growing sense of unease.

The first statement was the very wise preference expressed by one speaker for the phrase 'the development of sustainable systems' instead of the usual phrase 'sustainable development'. The latter quite wrongly implies that sustainable development can be merely selected off the shelf in the place of the normal kind of development, whereas the former indicates only too correctly that we have a long way to go, first in deciding what sustainability is and then working out if and how it can be achieved, - that is if it doesn't achieve us beforehand!

The second statement, disappointingly, was made by another speaker in seeking to justify a plan to build a pipeline from the Murray to serve future water needs of Melbourne.

He asked the supposedly rhetorical question that if the Melbournians had the money and the Murrians had the water, why stop the marriage? From the point of view of sustainability there are very many excellent reasons, but unfortunately they do not yet appear to be widely, nor instinctively recognised, even by people who might be expected to know better.

To date, as far as the development and achievement of the concepts of sustainability are concerned, water managers are probably as far advanced as any group of public administrators, and that's not far! Water managers have named their particular route towards the utopia of sustainability as integrated catchment management (ICM), but, as the paper presented by Dr. John Rolls to the seminar described, we, in South Australia in particular, have groped our way only very slowly and not very far along it. Moreover, not only has progress been slow but, to date our 'I' has only attempted to integrate land and water management and our 'C' generally has referred to only rural catchments. We, and all other groups of public administrators, will have to do better than this. Leaving aside the enormous problem of population control, water managers, for their part, must redefine their 'I' to include at least energy considerations and their 'C' to also include urban catchments.

With a replacement bill of \$10,000 million for our ageing water supply and sewerage assets, and a similar large amount for our stormwater drainage

assets, there is every economic incentive for water managers to cut their costs by adoption of more innovative, integrated, appropriate, and sustainable methods, especially since such methods are those which invariably add considerable additional benefits to the urban amenity at the same time. These are the kinds of ideas that John Argue, Geoff Fisher and I have been promoting, with some small, but growing success. It is from these tiny seeds of success that my hopes for some real achievement of sustainability springs.

But there's an awfully long way to go yet. The first report of the Adelaide Planning Review shows that the EWS assets only form about 25% of the total replacement bill for public assets. The ideas of integrated management, and the large benefits to be gained from their adoption, are, I am convinced, as applicable to other public assets, and in particular to energy assets, as those of water.

I believe that we all face an enormous challenge as far as sustainability is concerned. I believe that the achievement of multiple objectives by the adoption of integrated management is the only way to go. I believe that an appropriate model is being created in the area of urban water services in Adelaide, based upon, but extending the ideas of ICM, and I believe that South Australia's MFP could just lead the way towards creating a more appropriate built urban component of a brave new sustainable world.

NEW TECHNOLOGY : Scientists in Melbourne have seemingly developed a viable means of incinerating toxic wastes on site. The plasma arc furnace destroys toxic chemicals almost instantly at temperatures four times greater than at the surface of the Sun. This would eliminate the need to transport these wastes elsewhere and hence the associated risks of accidents along the way.

DID YOU KNOW : Lake Baikal is between 20 to 25 million years old. Excluding Lake Tanganyika which is about 2 million years old all other lakes are less than 20 thousand years old.

I WISH I'D BEEN THERE ... SEMINAR REPORTS

IF IT AIN'T BROKE DON'T FIX IT

[Reporter : Claus Schonfeldt]

A joint ANZAAS/AWWA seminar on the topic, Future Directions In Water Resources Management, was held in Adelaide on 20 July.

Not just another talk fest of the enlightened preaching to the converted the seminar attracted a diverse audience and quite a bit of media attention.

This was undoubtedly attributed to the presence of a distinguished panel of speakers including Robyn Williams, the ABC Science Show presenter, as the key note speaker. He introduced us to the video 'PLANET WATER' produced for the Sydney Water Board and challenged us to reacquaint ourselves with the pervasiveness and importance of water.

He created a fair degree of interest in the Greenhouse vs. Mini Ice Age question and referred us to learned opinions which conclude that global warming (Greenhouse) will overwhelm global cooling related to decrease in the Sun's activity during the early decades of the 21st Century (Ice Age). [Ed. You read it first in Hydsoc Newsletter no. 63, Feb. 1990]

Nutrient enrichment, a more pressing and manageable problem, was also highlighted and reinforced by almost every speaker, Unmistakeably this is the fashionable issue and typifies the need for integrated resource management.

On this subject John Rolls demystified integrated catchment management (ICM) but those who read the journalist's report of this in the Advertiser the next morning must have wondered if they were at the same venue.

Dr. Alan Wade challenged us to rethink our priorities for water quality concerns with his simple ABC. He said,

"There is a tendency to regard microbial water pollution as the main source of human health risk and chemical pollution as the health bogey, especially in developing countries.

The real risks, at least in Australia, are otherwise. In an ABC water directory of real human health hazards, the ranking is accidents a strong first, biological risk second, and chemical exposure a distant last. All are important, but perception and reality are often mixed"

Dr. Nancy Millis directed our attention to some important missing links which require research effort. Predominantly these relate to the interaction between land and water, the impact of climate change and the specific requirements of valued environments.

By now you're wondering what the title of this article has to do with the report on the seminar.

Well, it was Dr. Millis who offered us the real highlight of the day when she pleaded for stability in government institutional arrangements. Many of us would be able to empathise with this and, as she points out, stability would seem to be fundamental if you want the community to take up the challenge of responsible resource management.

No wonder they and we get confused when things get changed every time they seem to be up and running smoothly.

JUST FOR INTEREST : The Arctic icecap is floating and if it should melt as a consequence of global warming it won't of course contribute to rising sea levels.

DID YOU KNOW : Lake Baikal contains the world's largest volume of surface freshwater ... more than that of America's five Great Lakes.

GROUNDWATER IN LARGE SEDIMENTARY BASINS

[Reporter : Don Armstrong]

Some 200 delegates and partners converged on Perth to witness the opening of the wet season and discuss 'large' sedimentary basins including a basin which occupies 1000 sq km in Sweden.

It is interesting to note that after WA, the host State, the next best representation came from Canberra followed by NSW. SA came in a creditable fourth in the attendance table with 13 delegates, 3 papers, 1 poster display and two discussion leaders.

After a bewildering display of poli-speak by the Minister for Water Resources the conference was treated to an elegant discourse on local, intermediate and regional flow systems and their relevance to petroleum accumulation and noxious waste disposal in the keynote address by Professor Jozef Toth.

The format of the conference followed the same pattern as the 1986 Brisbane conference with 5 x 10 minute papers per session with collective discussion time for each session. Discussion leaders were encouraged to broaden the

scope of the discussion beyond the limits set by the papers. At the end of the day a half hour session heard reports from the discussion leaders.

The social side of life was not neglected with a cocktail party, boutique brewery beer tasting, wine tasting and the conference dinner.

The standard of papers was generally high and it is a measure of the interest generated during all sessions that your reporter did not once lapse into the customary comatose state during working hours.

The post conference tour commenced at Alice Springs and travelled by luxury coach through the SW margin of the Great Artesian Basin. The low point of the tour was the decision to give Dalhousie Springs a miss due to the dubious road conditions for a luxury coach. One week after departure the tourists were recaptured by SADME personnel in the Barossa Valley where they were force fed a little hydrogeology followed by some wine and high class BBQ before wearily heading for Adelaide and then dispersing to all parts of the compass.

ARTICLES

NEW WATER RESOURCES ACT

[Reporter : Claus Schonfeldt]

A new and improved Water Resources Act came into operation on 1 July 1990.

The principal innovations relate to the management of water quality (called ' protection of water resources') and the role of the water resources committees.

Since most of the water we use has to pass over land surface management of water quality must begin on the land. Land use and land management practices undeniably influence water quality. The new Act recognises this by providing means to regulate the manner in which potentially polluting land uses are carried out.

In addition, over and above the previous arrangements which only enabled action to be taken once a problem had occurred, the new Act enables regulatory initiatives to be taken to prevent or avoid water quality problems .

The role of the water resources committees is evolving and the new Act provides a framework in which these committees will be able to adopt a greater management interest in addition to the existing advisory role.

This paves the way for a more streamlined process of review and implementation of policy. Coupled with regionalisation of water resources management in the EWS DEpartment this should provide a better service to the community.

MURRAY-DARLING BASIN COMMISSION NUTRIENT MANAGEMENT STRATEGY

[Reporter : Paul Harvey]

Water resources management has a new focus of interest. Nutrients. That was one of the messages pervading the seminar on future directions in water resources management and who could argue with that given our recent experiences in Lakes Alexandrina and Albert. Violet Town in Victoria also had to find alternative supplies earlier this year because of cyano bacteria problems.

The Murray-Darling Basin Commission has established a Nutrient Working Group to investigate nutrient management in the basin. Although this initiative was started late last year the problems with toxic algal blooms across the whole basin in January and February have given it added impetus.

It is proposed that a nutrient management strategy, similar to the Salinity and Drainage Strategy, will be developed for the basin with the aim of reducing the frequency and intensity of algal blooms both in the river system and the storages.

The Nutrient Working Group which includes representatives from EPA Victoria, State Pollution Control Commission NSW, Federal Department of Primary Industry and Energy, the MDBC and EWS has held 2 meetings.

The study is already breaking new ground in that at the request of this working group Queensland has been invited to participate. It has indicated general agreement and it is hoped that a Queensland representative will become involved in the near future.

The Working Group has identified that the first task is to quantify and compare the various sources of nutrients across the basin and while much of these data are probably held by the various state and local government agencies (at least for the point pollution sources along the Murray River) the disseminated records and varying quality of data will make this collection a difficult task. In addition there are very few data available for the Darling or Murrumbidgee River systems or on diffuse sources of pollution.

In view of these difficulties it has been decided to engage a consultant. Expressions of interest have been sought and it is anticipated that the consultancy will be commenced in late August.

The Nutrient Working Group is required to report on phase one of its study by April 1991.

INVESTIGATOR SCIENCE AND TECHNOLOGY CENTRE

[Reporter : Paul Harvey]

In May the state government agreed to provide a grant of \$850 000 to help with the establishment of a permanent hands-on science centre, the Investigator Science and Technology Centre in the International Pavillion at the Wayville Showgrounds. This, together with \$1.2m in pledges from companies, semi-government bodies, organisations and individuals, will ensure that the project proceeds. It is intended that the centre will be opened mid-1991.

Your committee has indicated that this society would like to help (probably both in terms of financial and physical assistance) in the establishment of a water related exhibit. Unfortunately the response from members to the call

in the April Newsletter for ideas for an exhibit has been disappointing so no decision has yet been made as to what form this assistance should take. Please contact Paul Harvey with your ideas for a reliable, repeatable hands-on experiment presenting some aspect related to water so we can start negotiations with the Investigator Centre Board of Management as soon as possible.

To introduce the people of Adelaide to the concept a hands-on science centre it has been decided to arrange a temporary exhibit in the Royal Show Theatre during this years Royal Adelaide Show (31 August to 8 September). Anybody that is interested in helping out for a few hours as an 'explainer' during this time please contact Paul Harvey (226 2502 work).

URBAN STORMWATER : A RESOURCE FOR ADELAIDE

[Reporter : Geoff Fisher]

The report 'Urban stormwater a resource for Adelaide', (EWS Report 89/16) highlighted that much scope exists for the wider use of urban stormwater provided we adopt a multipurpose approach and promote a small is beautiful philosophy.

By embracing these concepts it was possible to conceptualise a five step scheme for the development of a potable water supply, and for a range of additional benefits which include:

- o reduced pollution of urban waterways and the marine environment.
- o flood mitigation.
- o improved amenity.
- o enhancement of native flora and fauna.
- o tourism.

The success or failure of urban runoff water supply schemes will depend largely on commitment of Local Government (and the community). It is therefore important that Local Government is not only aware of the Department's initiatives but also is actively involved with the development and refinement of the required technology.

Key components of the five step scheme were the use of wetlands for primary treatment of urban runoff and storage in under ground aquifers.

Both of these aspects require a great deal of further evaluation and testing prior to a scheme be declared feasible let alone constructed.

To this end the Engineering and Water Supply Department is actively pursuing a range of further investigations in conjunction with local government.

To date joint studies have been established with Salisbury and Enfield

Councils and the Department is also supporting the Urban Stormwater Monitoring Group, (whose activities were reported in the April 1990 newsletter).

The work with Salisbury Council involves the monitoring of two existing wetland systems, one at the 'Paddocks' the other at 'Greenfields'.

The aim of the investigation with Salisbury Council is to validate (or if necessary modify) the retention time and efficiency relationships for wetlands developed in the eastern states.

At the Enfield General Cemetery the Cemetery Trust, Enfield City Council, Pak Poy and Kneebone, Department of Mines and Energy and the Engineering and Water Supply Department are investigating artificial recharge characteristics with the view to using stormwater for irrigating the cemetery grounds.

Should the investigations at Salisbury and Enfield provide positive results then two astute councils will be irrigating parkland areas with urban stormwater and thereby reducing their operating costs.

Further, the Department will explore areas for it's own potable water supply development.

During the interim period the Department will be actively encourageing the development of wetland systems for the range of additional benefits to water supply. This will include technical advice and encouragement and the possibility of some financial assistance for similar investigations to that being conducted with Salisbury and Enfield Councils.

Details of the investigations being undertaken by the EWS and opportunities for new initiatives can be discussed with Geoff Fisher, telephone 226 2506.

YES VIRGINIA, HYDROLOGY IS ALIVE AND WELL ...

THE BIG WET REVISITED ? NOT QUITE

[Reporter : John Van den Burg]

Heavy rains during April 1990 caused widespread flooding from south west Queensland to eastern Victoria. The full impact of flooding to the communities of Charleville, Nyngan and Bairnsdale will probably never be fully assessed.

While South Australia received virtually none of these rains the catchment areas of the Cooper Creek and to a lesser extent the Diamantina River received major falls. Early indications on the Cooper Creek were that the flow would approach the 1974 record.

At this point it is interesting to note that the 1974 event may have exceeded by an event in 1906. This event was supposed to have reached the walls of the original pub at Innamincka. If this was the case it would have been a couple of metres higher than the 1974 event. Unfortunately there is no documentation available only the tradition of generations passing on their memories.

The major tributaries of the Cooper Creek meet near Windorah where the peak of 7.95 metres occurred on 28 April (1974, 8.4 metres). Following on the flow during 1989 this was predicted to cause major flooding of a similar magnitude to the 1974 flood.

What transpired in the following weeks has necessitated a major rethink in flood warning for the Cooper system. Levels recorded from Windorah to the South Australian border varied around the 1974 peaks, however the flood wave took less than 2 weeks to travel this distance instead of the 4 to 6 weeks thought normal.

The lead of the event reached Innamincka on Friday 11 May and rose nearly 9 metres in the next 2 days.

The last part of the event to the peak slowed considerably before peaking on Wednesday 16 May. The peak at the Innamincka causeway was 11.44 metres (1974 11.99 metres). The peak occurred 5 days after reaching Innamincka compared with 4 weeks in 1989.

This rapid progress continued, particularly down the Strzelecki Creek which reached the Strzelecki Track on Sunday 20 May and had nearly filled Lake Blanche a week later. Continued rains have ensured the flow in both the Cooper and Diamantina systems will continue for several months and should contribute a significant amount to Lake Eyre, but the lake is not expected to fill.

GAUGING EXERCISE

The significance of this event provided an ideal opportunity to finalise the stage-discharge relationship for GS 003501 in Callamurra Waterhole, about 10 kilometres u/s of Innamincka. The entrance to Callamurra Waterhole, known locally as 'THE CHOKE' is the narrowest place known on Cooper Creek. Only a few hundred metres wide it provides an ideal location for streamflow measurement on a stream that elsewhere can be 50 kilometres wide. At the peak the flow through the choke was extremely turbulent, making quite a spectacular site on what is normally a lazy river.

The site chosen for the measurements was about 1 kilometre downstream of the choke where the flow conditions were much steadier. The main channel here was about 250 metres wide with a similar distance of backwater flow beyond the right bank. At this point hopes and expectations were high, however these were soon to suffer a major setback.

With the site chosen all that remained was to erect a steel cable and commence gauging. The flow was near the peak with the velocity and sheer force of the water making this a difficult task.

An inflatable dinghy with a 20 HP motor was used to traverse the channel with cable in tow. At least 100 combinations come to mind that would have been more suitable for the task. After much effort and cursing the job was achieved.

With the worst behind us, we thought, all that remained was to tension the cable, hook the boat on and commence gauging. We failed on both counts. Due to the sheer force of flow we were unable to clear the water surfaces and the violent action this had on the cable meant we were unable to commence conventional gauging for several days.

By this time the flow had peaked and the moving boat method was used to obtain velocity readings to help estimate the peak discharge. Readings were taken at a stage of 11.13 and 11.10 metres. The peak at GS 003501 was 11.14 metres (1974 peaks 11.82 metres). Velocity readings were up to 2.5 metres/ second near the surface and in excess of 2.0 metres/second at depth.

By the time the stage had fallen to 10.9 metres we were able to commence normal gaugings. The first of these gave a discharge of approximately 4 200 cumecs, including backwater, at a stage of 10.85 metres. Measurements were continued down to a stage of 9.5 metres where the discharge was approximately 2 500 cumecs.

With the cross-section established the results of the velocity readings taken earlier were used to estimate the peak discharge. A flow of nearly 5 000 cumecs was derived and this is considered a good estimate of the peak.

The previous highest measurement at this station was at 7.68 metres, 1 410 cumecs and 8.02 metres, 1 320 cumecs by QWRC in 1989.

With these new measurements a new stage-discharge relationship has been established which varies considerably from the old relationship above 9 metres.

The peak for the 1974 event is now estimated to be about 6 300 cumecs.

It is interesting to note that the flow doubled from 9.5 metres to 11.14 metres, the cease to flow at GS 003501 being 1.34 metres. The stage-discharge relationship is now considered good for all ranges.

This gauging exercise provided an opportunity to achieve several things. The obvious benefit related to defining the flow relationship and the aid this will give in better understanding the hydrology of arid areas streams. It also provided the opportunity to test skills knowledge, techniques and equipment. The scorecard shows more wins than losses although some of the losses need to be addressed.

The event has also highlighted the difficulties associated with predicting floods and therefore flood warning in arid areas. There is little doubt that satellites, using monitoring and imagery hold the key to improving our ability to do this and should be pursued.

The final word on the exercise, it was a good experience, well worthwhile but I hope it doesn't happen again for a while.

FLOOD LESSON : Flood levees are of course useful to hold back flood waters but they also instill a false sense of safety and complacency. In Nyngan all efforts were directed to maintaining the integrity of the levee. When it finally breached, and Nyngan was swamped almost immediately, people lost treasured possessions because they hadn't taken the simplest of precautions like storing these possessions at safe heights.

JUST FOR INTEREST : Recent floods in outback Queensland and NSW have many interesting stories. One is that the Paroo River actually flowed into the Darling for the first time since recording began.

NEW FACES

[Reporter : Peter Dillon]

The Centre for Groundwater Studies welcomes four new postgraduate students : -

Peter Thorburn

On leave from QDPI and is working with Glen Walker, Jorg Hacker and Ian Jolly on a study of evapo-transpiration from the River Murray floodplain. This affects salt accumulation in floodplain soils and the study will lead to better estimates of groundwater and salt discharge to the river.

Naser Pakrou

On an EWS/AWRAC Water Industry Research Award to study the leaching of nitrate to groundwater beneath leguminous pastures near Mt. Gambier.

Joachim Schuering

Spending 12 months on a project to quantify groundwater recharge and discharge in an area affected by dryland salinity on Cooke Plains. He is supervised by Gordan Stanger and has already participated in a drilling exercise with Joe Mazzone and Andrew Holub.

Matthew Duthy

A civil engineer with PPK consulting engineers who has commenced an MSc supported by PPK and DITAC on simulating the insitu remediation of nitrate contaminated groundwater. Matthew is supervised by Santo Ragusa and Gordan Stanger on a sequel to Stuart Richardson's MSc.

Farewell to Stuart who submitted his thesis on Groundwater Contaminated By Cheese Factory And Abattoir Effluent to Flinders University this month. He has started work with Mackie Martin and Associates groundwater consultants in Perth.

UPCOMING EVENTS

- * HSSA AGM : August 9
- * HSSA meeting : October 11
 - Tatiara Groundwater Basin. What's Going On ?
- * HSSA meeting : November 29
 - Clay Mobilisation
- * Murray Valley League 46th Annual Conference : August 30 : Theme is Managing Change : Venue is Murray Bridge Local Government Centre
- * Greenhouse Action Conference : Sydney April 3 - 8 1991 : Theme is Water Resources and Management.
- * Australian Workshop on Evaporation Measurement by Micro Meteorological Methods : November 27 - 29 1990 : Centre for Groundwater Studies : see Peter Dillon for information on (08) 274 9381

I am the editor

the editor I am

All contributions for the next newsletter kindly submitted to Claus Schonfeldt by 22 September.

Telephone : (08) 226 2499

Facsimilie : (08) 226 2161

DID YOU KNOW : Lakes are usually lifeless below 200 to 300 metres but Lake Baikal is unique in this regard because it has a flourishing community of animals even at the bottom at about 1600 metres. Scientists think this may be due to hot water vents on the lake bed similar to hydrothermal vents of the deep ocean.

THE INVESTIGATOR NEEDS YOU

VOLUNTEERS ARE NEEDED TO HELP WITH THIS NEW AND EXCITING HANDS-ON SCIENCE AND TECHNOLOGY CENTRE

WHAT'S IT ALL ABOUT ?

South Australia is to have its own interactive science and technology centre. It will feature hands-on exhibits like those at Questacon in Canberra and it will be located permanently in the International Pavilion at the Wayville Showgrounds. It will open in August next year.

However, we will be borrowing about 35 exhibits from the Shell Questacon Travelling Science Circus to put on a "mini-Investigator" at this year's Royal Show from 31st August to the 8th September inclusive. It will run in the Royal Show Theatre (formerly the Rothmans Theaterette) from 9.00am to 10.00pm everyday of the Show.

Volunteers are needed to act as "Explainers" for this event. An explainer helps people with the exhibits and generally helps with other aspects of the event. About 150 explainers are needed for the mini-Investigator event at the 1990 Royal Show. When the Investigator is up and running, about three times this number will be needed.

WHAT IS AN EXPLAINER ?

The most important characteristic of an explainer is an interest in science and technology. Explainers are the "human-face" of the exhibition. In addition, you will ensure the continued operation of the exhibits. Several exhibits also require constant

supervision. You need to be at ease with people and be willing to communicate with them. There is much personal satisfaction to be gained from being involved in the exhibition if you have some time you are willing to devote to this voluntary cause.

Explainers come in all shapes and sizes and from all sorts of social and educational backgrounds. If you are a secondary student you must be in Year 11 or 12.

The time commitment from an explainer is not all that great. You will need to go through a short training course of about one and a half hours, but most of your training will be "on the job".

WHAT DO I NEED TO KNOW ?

To be an explainer at this year's mini-Investigator you will need to follow these steps:

~ 1 ~

Fill in an explainer application form which you can get from the institution or organisation which is displaying this information.

CONTACT

or by ringing 226 1797. When you have filled in the form please send it to the address below by Friday, August 3rd.

The Investigator
Science & Technology Centre
Explainer Recruitment
GPO Box 1019
ADELAIDE SA 5001

~ 2 ~

Successful applicants will be contacted by telephone during the week August 6th to 10th. You will be required to attend a short information meeting at approximately 5.00pm on Monday, August 13th and a hands-on training session at approximately 5.00pm on Thursday, August 30th.

~ 3 ~

During the show, explainers will be rostered into four hour sessions. The number of sessions you explain is up to you but we would like it to be at least three (on three different days). You will be given an exhibitors pass into the Royal Show.

~ 4 ~

If you are not successful in being chosen as an explainer for the mini-Investigator, your name will be listed on our data-base and when The Investigator is nearing completion, you will be invited to re-register your interest in being an Investigator explainer.

The mini-Investigator is proudly sponsored by ETSA. The assistance of Questacon, National Science and Technology Centre and Shell is gratefully acknowledged.

THE INVESTIGATOR

SCIENCE AND TECHNOLOGY CENTRE

EXPLAINER APPLICATION FORM

Dr/Miss/Ms/Mrs/Mr

Date of Birth

Address

Home Phone

Postcode

Work Phone

EMPLOYMENT RECORD

Most recent Employer/School

Position held/Year Course studying

Are you fluent in another language? (Which?)

Do you have current First Aid Qualifications? (Level?)

Special skills, training, interests or hobbies

Experience with the public

Experience with children/students

Why are you interested to volunteer with The Investigator Science and Technology Centre?

Times when you could be available. Please number the boxes according to your most preferred days/times

Dates : Fri 31st August – Sat 8th September

	Fri	Sat	Sun	Mon	Tues	Wed	Thur	Fri	Sat
8.45 – 12.15									
12.00 – 3.15									
3.00 – 6.15									
6.00 – 10.00									

Preferred name for Name tag

EMERGENCY CONTACT

Name

Phone

Applicant's Signature

Date

(or Guardian if under 18)

RETURN ADDRESS :

The Investigator Science & Technology Centre, Explainer Recruitment, GPO Box 1019, ADELAIDE SA 5001