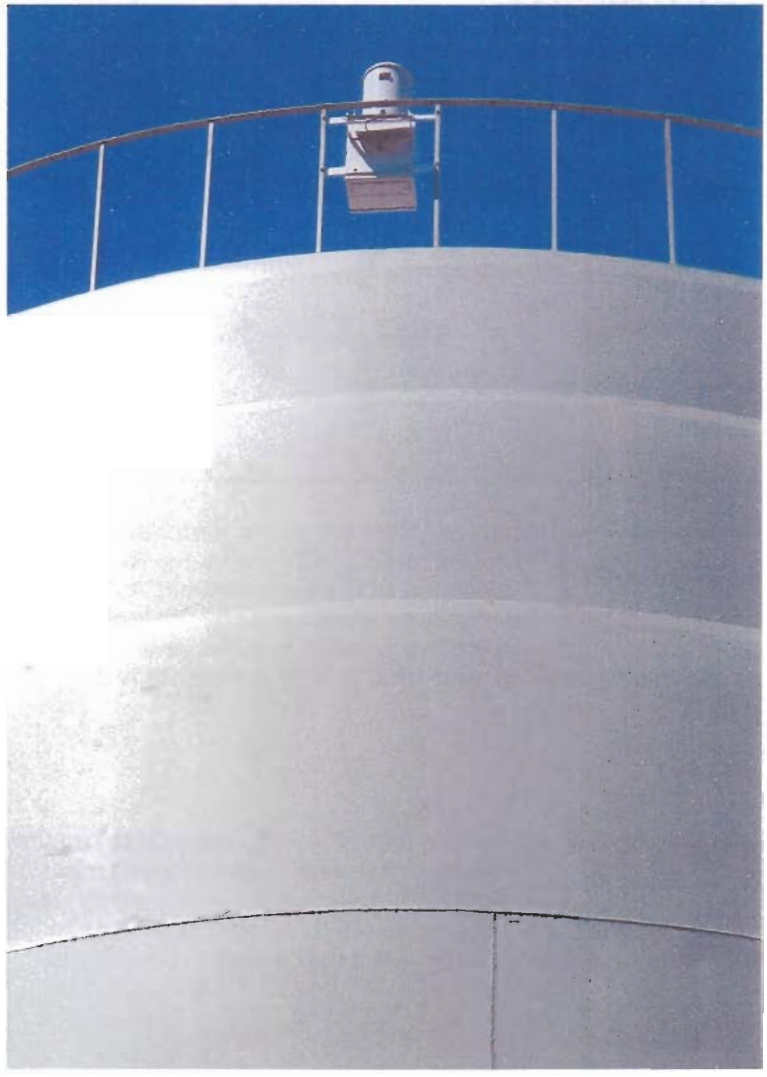
AUSTRALIAN HYDROGRAPHERS ASSOCIATION

Australasian Hydrographer



Keeping that rain gauge safe!

August, 2006

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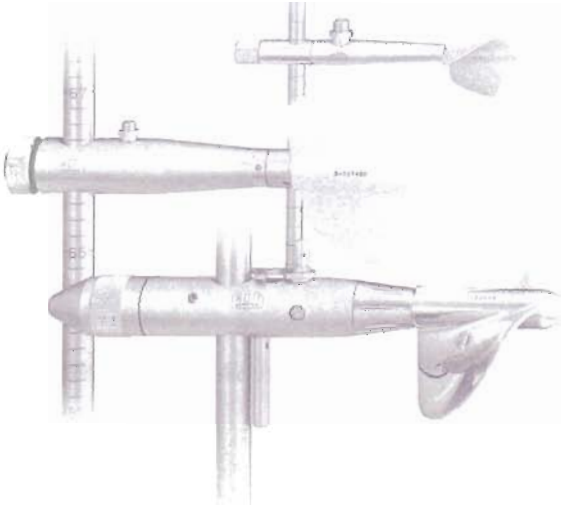

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THIS ISSUE

EDITORIAL

It was interesting to view some of the national commentaries in the last week or so in light of the recent Toowoomba referendum on whether the city should move into recycling waste water to supplement the cities drinking supplies – a resounding 'no' was the answer. There were many expert commentators in the press (journalists and politicians) avialble with a solution to everything water. One commentator laid the present water supply woes directly at the feet of the greenies who have prevented new dams being built!

Hang on didn't someone give that commentator some scientific information that probably a major reason there are water supply issues is that it hasn't rained, not necessarily because an interest group has stopped all dam construction?

Yes, it is agreed that water consumption is increasing due to population growth but existing dam systems were built on data and projected yield investigations that looked into the future, taking into account projected population growth, industry requirements and so on.

The crystal ball for used for yield studies requires **good quality ongoing long term** data and information in regards to water resource availability and variability and is now crucial to reviewing these models and to update them if needed.

In recent years monitoring sites that were closed in the economic rationalism years of the 80's and early 90's are now being re-established. If these sites had been maintained in 'sleep mode' instead of being closed basic data collection would have been possible instead of having 20 years or so of lost opportunities in data collection, and hence excellent additional data for yield studies, as we now have in many catchments.

Of course having good quality data available also places a requirement on those who are producing 'expert' information for dissemination to the general public to use it truthfully. For much of the general public the only information they get about our water resource situation is from the media and politicians pushing a barrow via the media. The general public don't have the time, and possibly the inclination, to digest the massive reports and modelling that get produced from those hydrometric figures that make up the data sets.

As one TV show put it "The truth is out there" and it is the responsibility of those of us in the science of water information to encourage end users to present and interpret the good quality water data we produce, with honesty and clarity.

Mic Clayton, Editor and Publicity Officer

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Visit our **Web Site** at: **http://www.aha.net.au** to download a Membership application and to find contact details for your state representative.

Editorial and advertising enquiries should be directed to the Association's **Publicity Officer**, Mic Clayton.

Journal editions are generally produced February, May, August and November. Copy is requested to be with the Publicity Officer by the previous month.

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KISTERS

KISTERS USER GROUP MEETING, September 1st, 2006.

In association with the Australian Hydrographers' Association Conference to be held in Darwin in 2006, the Annual Kisters User Group Meeting will be held at the Sky City Casino in Darwin.

KISTERS is again a **Major Sponsor** for this years conference and has been a proud supporter of the Australian Hydrographers' Association for many years with many of its users being hydrographers and hydrologists alike and the association of the User Group Meetings with the AHA's conference has continued to be a great success.

HYDSTRA, WISKI/SODA and Time Studio are the time series database management, analysis and reporting products of Kisters used worldwide by authorities and companies involved in water resource and environmental data collection and analysis as well as energy network management systems. The majority of Australian authorities and utilities are users of KISTERS softwares.

Kisters are co-ordinating the User Group day component of the Conference. Please contact KISTER to register your expressions of interest and abstracts for the KISTERS User Group day at the contact details below.

Kisters User Group Participant Registration still occurs through the Best Events Company who have been co-ordinating this year's Conference.

Further details in regards to the User Group Meeting and Darwin AHA conference are available via our website www.aha.net.au.

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Australian Hydrographers Association Inc
C/- The Secretary, 52 County Drive, Oakford, Western Australia

ANNOUNCEMENT AND NOTIFICATION TO FINANCIAL MEMBERS AND VISITORS

THE 26TH ANNUAL GENERAL MEETING OF THE AUSTRALIAN HYDROGRAPHERS' ASSOCIATION, THE BALLROOM, SKYCITY CASINO, DARWIN.

TUESDAY AUGUST 29th , 2006. 4:45 PM TO 6:00 PM.

Preliminary Agenda

1. Attendees (requested to fill in attendance sheet on entry to AGM)
2. Apologies
3. Minutes of 2005 AGM
4. Committee Reports:
   - Chairperson
   - Secretary
   - Treasurer
   - Publicity Officer
   - State Representatives (tabled only)
5. Announcement of resignation of Graham Armstrong as Chairman and Michael Lysaght as Committee Member as of this Annual General Meeting requiring ballot for these two positions.
6. Appointment of Committee Election Monitor
7. 2 Committee positions declared vacant at this AGM and election of the following positions for the two year balance of the triennial term to be conducted:
   - Chairperson
   - One Committee Member
8. Association affiliation/relationships development.
9. General Business

Note:

AHA members may wishing to have an item tabled in General Business at this AGM, are requested to lodge the item with the Secretary of the AHA no later than COB Tuesday, August 23rd 2006. Items may be emailed to secretary@aha.net.au or by post to The Secretary AHA, 52 Country Drive, Oakford, WA, 6121

Nominations and proxy voting forms for Committee Vacancies (Chairperson and one Committee member) are to be received by the Secretary of the AHA by COB, Tuesday August 23rd 2006. Nominations/Proxies may be emailed to secretary@aha.net.au or by post to The Secretary AHA, 52 Country Drive, Oakford, WA, 6121.

Preliminary Agenda Issued by the Secretary of the Australian Hydrographers' Association On behalf of the Australian Hydrographers Association Committee, 7th August 2006.

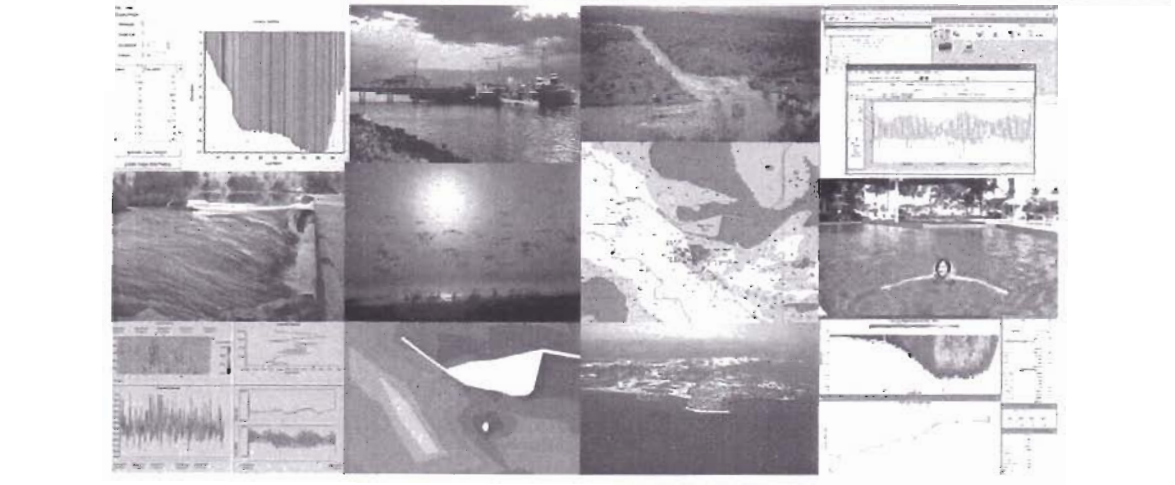
Australian Hydrographers Association

13th Hydrographic Conference

"Interactive Hydrography - Future Directions"

Sky City Casino, Darwin,
Northern Territory, Australia

29th August to 1st September 2006



The Northern Territory Government and the Australian Hydrographers' Association welcome everyone to the 13th Australasian Hydrographic Conference.
The Conference will bring together people from all over the Asian Pacific Region to discuss advances in the hydrographic industry.

The theme of the conference is **"Interactive Hydrography - Future Directions"**. This reflects how understanding the dynamics of water is essential for successful infrastructure design and the ecologically sustainable use of the world's marine and freshwater environments. It has become increasingly important that the application of new innovative technologies and data management are able to present information to the community and industry in a timely, effective and useable way.

The conference aims to encourage discussion on projects that improve the interaction of hydrographic, industry and community groups.

At this conference we are very keen to promote an interactive link between the people responsible for collecting data and those who are responsible for using the data in decision making. These links are very important to promote and maintain.

We look forward to seeing you at the conference.

Registrations for the Conference are still open. More information regarding registration, the venue, and accommodation options can be accessed via www.aha.net.au or www.ahahydro2006.com

Australian Hydrographers Association Conference 2006
Provisional Conference Program

Monday 28th August

Time	Session
6.00pm -8.00pm	Welcome Reception & Pre Registration at Darwin Ski Club

Tuesday 29th August- Project Presentations

Time	Session	
8.00am	Registration Desk Open	
8.30am-9.20am	**Official Conference Opening** Including Welcome to Country	
9.20am -10.00am	**Keynote Address – Professor Bob Wasson**	
10.00am-10.20am	**Trade Exhibit visits**	
10.20am -10.50am	Morning Tea	
	Presentations	
10.50am-11.15am	**Paul Martin-**	***The role of Hydrography in water resources planning***
11.15am-11.40am	**Martin Doyle-**	***Over the ditch- what's going down in New Zealand***
11.40am-12.05pm	**Guy Boggs-**	***Use of GIS in catchment risk assessment for source water protection***
12.05pm-12.30pm	**Damien Skinner-**	*River Murray water data management project*
12.30pm-1.30pm	Lunch (beside pool)	
	Presentations	
1.30pm-1.55pm	**Stephen Buckland-**	*Integrated water management plans – how can data help?*
1.55pm-2.20pm	**Martin Stumpfle-**	*OTT Parsivel® and OTT PLUVIO - Online monitoring systems for high intensities of precipitation at remote sites by OTT Messtechnik, Germany*
2.20pm-2.45pm	**Dene Moliere-**	***Flow regime classification of streams within the wet-dry tropics***
2.45pm-3.00pm	**Trade Exhibit visits**	
3.00pm-3.30pm	Afternoon Tea	
	Presentations	
3.30pm-3.55pm	**Tony Polchleb**	**TBA**
3.55pm-4.20pm	**Ursula Zaar**	***Interaction is the key to successful presentation of water resource information***

Wednesday 30th August – Project Presentations

Time	Session	
8.30am	Registration Desk Open	
9.00am-9.10am	**Welcome and Housekeeping**	
9.10am-9.50am	**Keynote Address – Professor Eric Valentine**	
	Presentations	
9.50am-10.15am	**Robert Thompson-**	*Enviromon – Moving real-time data collection into the modern world*
10.15am-10.30am	**Trade Exhibit visits**	
10.30am -11.00am	Morning Tea	
	Presentations	
11.00am-11.25am	*Jeff Watson-*	Hydrology at Horizons Regional Council
11.25am-11.50am	Stephen Pearson-	*High flow events in the Mid-West Gascoyne Region*
11.50am-12.15pm	Phil Downes-	*Hydrology in New Zealand*
12.15pm-12.40pm	**David Williams-**	***The hydrodynamics of a pearl necklace***

12.40pm-1.40pm	Lunch (beside pool)	
	Presentations	
1.40pm-2.05pm	Robert Thompson-	*Moving the Bureau of Meteorology from a regionalized data network to a Real-Time Event based national telemetry network.*
2.05pm -2.30pm	**Dr Sandra** Brizga -	*Using Hydrographic Data for Unintended Purposes: Specific Gauge Plots and Hydraulic Geometry Analysis*
2.30pm-2.55pm	**Paul Jensen-**	*Flood gauging at recently re-established gauging stations in the Lake Eyre Basin, Far Western Queensland*
2.55pm-3.10pm	**Trade Exhibit visits**	
3.10pm-3.40pm	Afternoon Tea	
	Presentations	
3.40pm-4.05pm	**Bill Barrett-**	***The Hornet***
4.05pm-4.20pm	**Roger Farrow-**	***Groundwater monitoring in the Northern Territory***
4.20pm-4.45pm	**Rodney Metcalfe-**	***Monitoring of nitrate inputs to streams***

Thursday 31st August – Acoustic Workshops

Time	Session	
8.30am	Registration Desk Open	
9.00am-9.10am	**Welcome and Housekeeping**	
9.10am-9.50am	**Keynote Address – Mr David Williams**	
	Presentations	
9.50am-10.15am	Hening Huang-	*Discharge Calculation Methods for Real-Time Discharge Monitoring Using Horizontal Acoustic Doppler Current Profiler (H-ADCP)*
10.15am-10.30am	**Trade Exhibit visits**	
10.30am –11.00am	Morning Tea	
	Presentations	
11.00am-11.25am	**Glenn McDermott-**	*Using acoustic velocity sensors to fast track stormwater discharge monitoring in Singapore*
11.25am-11.50am	**Arran Corbett-**	*Velocity Index Development – conquering hard to measure sites with old techniques and new tools.*
11.50am-12.15pm	**John Sloat-**	*Factors Affecting Uncertainties in Discharges Determined from Index-Velocity Ratings*
12.15pm-12.40pm	*Andrew Skinner-*	Move it or use it! – New challenges in getting data back from the bush
12.40pm-1.40pm	Lunch (beside pool)	
	Presentations	
1.40pm-2.05pm	Chris Misson-	*New Directions in Australasian Telemetry Technologies*
2.05pm -2.30pm	**Matt Saunders-**	*Your logged data - From field measurement to web interface analysis - Overview*
2.30pm-2.55pm	**Matt Saunders-**	*Your logged data - from field measurement to web interface analysis - What are the cost and other trade off's of IP data transfer and impact of data logging intervals for remote sites.*
2.55pm-3.10pm	**Trade Exhibit visits**	
3.10pm-3.40pm	Afternoon Tea	
	Workshops	
3.40pm-3.50pm	**Introduction**	
3.50pm-4.20pm	**Workshops**	
4.20pm-4.45pm	**Feedback**	

Friday 1st September – Kisters Users Group

Time	Session	
8.00am	Registration Desk Opens	
8.30am-8.40am	Workshop Introduction-	Bill Steen, Kisters
8.40am-9.10am	Introduction-	Klaus Kisters, Kisters AG
9.10am-9.30am	The Year in Review-	Bill Steen, Kisters
9.30am-10.15am	Time Studio/Wiski Integration Project Update-	Michael Natschke, Kisters AG
10.15am – 10.30	Morning Tea	
10.30am-11.30am	What's New in Hydstra-	Peter Heweston, Kisters
11.30am-12.00pm	Alphanumeric Variables-	Peter Heweston, Kisters
12.00pm-12.30pm	Hydstra Weather Station-	Paul Sheahan, Kisters
12.30pm – 1.30pm	Lunch	
1.30pm-2.30pm	Computer Industry Trends-	Peter Heweston, Kisters
2.30pm-3.00pm	Hydstra/SVR Task Server Module-	Peter Heweston, Kisters
3.00pm – 3.15pm	Afternoon Tea	
3.15pm-3.45pm	User Presentation- DNR-	John Hayes, DNR
3.45pm-4.15pm	User Presentation- WCW-QAVer	TBC, WCW
4.15pm-4.45pm	User Presentation-	TBC
4.45pm-5.00pm	Wrap-up and Close	

The Hornet

Remember when some of you used to get bogged on the way to that flood gauging site and the reason wasn't necessarily you'd done anything wrong but you were towing a huge traveller unit behind you're already overloaded flood gauging vehicle?

Recently in June, at the Hydrological Services testing facility on the Georges River in Sydney, a new radio controlled cableway traveller was launched. Over twenty representatives from various organisations and companies were present at the demonstration.

The Hornet, as it will be known as, has been designed to USGS specifications, and the model demonstrated has been designed for manoeuvring acoustic Doppler systems through stream sections where existing cableways are installed. Of course it may also be an option for new cableway installations.

The setup consists of a control box and controller, electric motor and the compact battery powered traveller unit running on an endless traversing cable. The battery capacity catered for in the traveller unit is approximately 38 AH, estimated at over 4 hours *continuous* operation. With raising and lowering only being intermittent the power time available will be quite large.

The traveller unit (much smaller than its prehistoric predecessors) is compact and can be easily and quickly positioned ready for use by one person.

Setting up the compact traveller unit

It is traversed across the main cable by an endless loop cable from an electric motor.

Power for the system demonstrated on the day was from a small portable 'ultra quiet' Honda generator and normal conversation was possible with this type of power setup. Battery powered options for the main control components will also be available. Having the generator option is good in that it provides facilities for battery charging if working for extended periods on a flood gauging trip.

Equipment is raised and lowered by radio control from the bank, there is no requirement for signal cables to be traversed out along the main cable as with the older traveller units. The controller panel is a simple forward/reverse and raise/lower control connected to the main control box bolted to one of the cableway supports.

The simple to use control pad with variable traversing speed facility and traverse speed indicator

An impressive feature of the unit is the ability to vary the traversing speed of the carriage across the section. 'So what?', some may ask.

An important consideration when using ADCP units is that if the traversing speed is too quick relative to the stream velocities, very poor data will result from these technologies.

Remembering that stream velocities vary through the section (both laterally and vertically) it is important to vary traversing speeds appropriately, that is when stream sections slow the Doppler traverse also needs to be slowed down.

It is important to allow the Doppler to sample for optimum time periods in the section, particularly in slower moving streams or poor data will most likely result. Having a Doppler doesn't always mean you can do things more quickly, or necessarily accurately, if the technology is not applied appropriately within its limitations or operated by a knowledgeable and experienced operator!

A safety feature is a large red 'kill' button in the main control button that cuts the traversing cable power and in the event of power failing at the traversing motor the motor clutch can be disengaged to allow manual return of the traveller unit from a stranded position.

The Big Red Safety Button!

Hornet 'Plus' is also expected to be available shortly and will have a distance indicators to enable meters to enable the traveller be positioned accurately in the stream section to permit stationary position methods to be utilised – a particularly important consideration in areas of moving or unstable stream bed features.

It is also understood that work is being done to develop the system further for normal current meter gaugings as per AS3778 gauging methods, though the Hydrological Services range of gauging winches are more than adequate for these tasks (including being used for stationary methods and, with a skilled operator, for traverse gauging).

The hospitality provided by Hydrological Services was appreciated by all and gave many in attendance an opportunity to also view other HS equipment and to get into some heavy technical talk with HS production and development staff.

Mic Clayton

Water Industry Training Package Review

A number of Industry Advisory Group members from the hydrographic industry have begun developing competency units for hydrographic/hydrometric training components of the Water Industry Training package review.

While only in the first draft development stage and the wording may not be right for the titles yet, competency modules currently being brainstormed include:

- Commission, decommission and monitor hydrometric sites, stations and facilities
- Install and maintain hydrometric instruments and equipment
- Collect and Analyse data and produce hydrometric data reports
- Contribute to hydrometric network planning and water resource management

Given the wide breadth and depth of work that hydrographers/field hydrologists undertake these days it is becoming apparent that some competency modules may need to be split further and that is an issue currently being worked on.

When the fist drafts have been compiled they will then go out to industry for further comment via our website and the EDNA web site for the Water Industry Training package review process at http://www.groups.edna.edu.au/course/view.php?id=416

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Australian Hydrographers' Association Educational Travel Grant, 2006

The Educational Travel Grant, 2006 for this year has been awarded to **Paul Jensen** from Queensland.

Paul works for Natural Resources Mines and Water in Queensland, based in Rockhampton. His position is as Project Officer (Water Monitoring) with this organisation.

Paul has worked with DNRMW for just on two and a half years and is in the final stages of completing his studies in the Certificate IV in Hydrography.

The grant assists Paul to attend and present at the 13th Australian Hydrographers Conference in Darwin in August, 2006.

His presentation will be titled '*Flood gauging at recently re-established gauging stations in the Lake Eyre Basin, Far Western Queensland*'

Paul's presentation will deal with the work required to re-establish accurate data recording at sites that were re-instated as part of the Lake Eyre Basin Intergovernmental Agreement.

The purpose of the Educational Travel Grant is to:

- promote the principle objective of the Association to further the development of the science of hydrography/field hydrology and its application to the under-standing monitoring and management of Australia's water resources, and
- encourage students undertaking the Hydrography Certificate IV or junior cadets/trainees within organisations to attend the Association's Hydrographic Conference and present papers describing their work.

Applications for the grant are open in the period prior to the bi-ennial Australian Hydrographers' Association Conferences and encourage junior hydrographers, cadets and students to prepare public presentations of technical aspects of their work or studies that they are currently involved in.

The Australian Hydrographers' Association Committee congratulates Paul on his success in gaining this award and looks forward to other successful applicants in the future.

More information on the requirements and conditions in applying for this award can be obtained from www.aha.net.au.

Following is the Abstract for Paul's Project.

Abstract from Project

In agreement with the Lake Eyre Basin Ministerial Forum three gauging stations in Far Western Central Queensland were re-instated in May/June of 2005. These stations were Burke River @ Boulia (001202A), Georgina River @ Roxborough Downs (001203A) and Diamantina River @ Diamantina Lakes (002104A). In accordance with the LEB Intergovernmental Agreement objectives a priority was placed on obtaining high flow measurements at these sites. A flood gauging trip to this region occurred in mid March 2006. While the flood gauging trip did not achieve it's primary goal of measuring the estimated 1200 m^3s^{-1} at 002104A due to severe access issues, valuable measurements at 001202A and 001203A in the ranges of 0.6-15.5 m^3s^{-1} and 11-73 m^3s^{-1} respectively were obtained. This report discusses these measurements along with their implications for the pre-1988 rating curves. These included the probable requirement for an entire re-rate at 001202A due to an apparent change in river morphology. The rating at 001203A has also been modified slightly after it's largest ever measurement. Observations about operational issues that faced the flood gauging party, especially those that differentiate these sites to other sites under Central West Water Monitoring Group control, are also listed and discussed so that future flood gauging trips to this area may be better prepared.

Hydrological Services Pty Ltd

What's New!!!

BlueComms

The BlueComms Model BC1 is Hydrological Services most modern Bluetooth™ wireless technology. When used in conjunction with Hydrological Services data logger Model ML1 (see bulletin No. 55), the user is able to configure the ML1 settings and download the data stored in the logger using a Bluetooth compatible PDA or Laptop.

Figure1.
BlueComms Connected to a Minilog, Communicating to a PDA Using Wireless Bluetooth™ Technology.

Features:

- Bluetooth Wireless Communication
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- Battery Reverse Polarity Protection
- Communication Status Indicator
- Battery Status Indicator
- Ideal for use with HS Minilog model ML1
- Eliminate Use of Fragile PDA Connectors

CMCsp

Figure2.
CMCsp Connected to Top Set Wading Rod

The Hydrological Services Current Meter Counter Signal Processor (CMCsp) is a small electronic device used to "clean" the signal from a mechanically rotating current meter such as a Price AA or Pygmy meter and directly reads on an LCD as well as interfacing to a PDA for computation of velocity and discharge.

Features:

- Digitally processes and 'cleans' signals from Catwhisker and Magnetic Head Meters
- Operates with two 'AA' batteries
- Works in high conductivity water(> 50,000µSiemens)
- Self contained unit with 2 x 8 character LCD display showing total meter counts and elapsed time
- Integrated Bluetooth Interface and RS232 Interface
- Also operates with any Palm, PocketPC, or Field Computer.
- Uses simple single character commands for operating modes and setting
- Signal Driver for AquaCalc(s), Sutron DMX and Hydrological Services CMC Series Meter Counters
- Fully self calibrating
- 'Self Test' for Serial Interface setup
- Can be used to adjust Current Meter contacts (measures meter 'Dwell Angle')
- Can display and produce 'Spin Test' record
- Selectable 10 second to 90 second fixed measuring intervals; default is 40 seconds
- 'Starts' and 'Ends' measurement on a meter contact closure
- Low battery indication
- Automatically indicates fault conditions

Hornet

The Hornet has been developed by Hydrological Services to replace mechanical current meters and Columbus gauging weights used for discharge measurements from Cableway systems. The Hornet is especially designed to be retrofitted to Manned Cableways, thus removing the risks to the operator that is associated with this method. Modern Acoustic Doppler Current Profilers, attached to a suitable fiberglass or aluminum catamaran, are used to measure discharge.

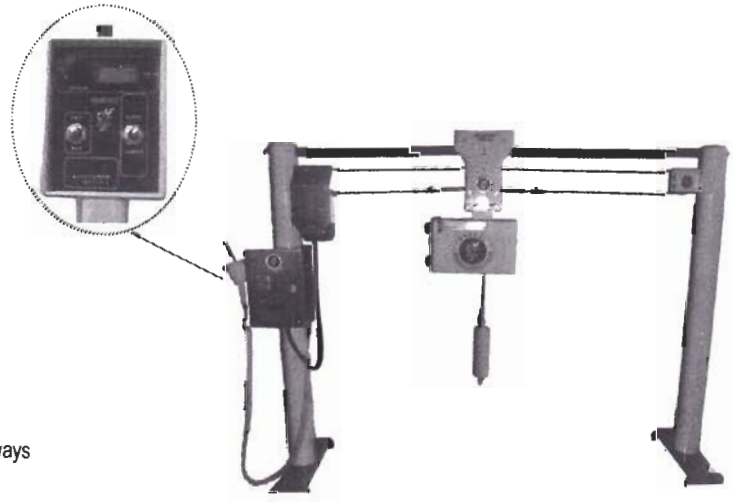


Figure3.
Hornet "Cableway Gauging System"

Features:

- Fully Controlled System
- Portable 12 VDC powered Hoist can be used on multiple cableways
- No Maintenance Required
- Used with Acoustic Doppler Current Profilers
- Radio Controlled Hoist, up to 1 Km (0.62 miles) range
- 100 KGs of Lifting Capacity
- IP65 Geared Motor

Australian Hydrographers' Association Educational Grant

The Committee of the Australian Hydrographers' Association has instituted a number of awards/grants to encourage younger (and not so young) cadets and hydrographers to undertake studies in the Hydrography Certificate IV. This has been implemented in 2006 and the following information is provided to AHA members. AHA members are also encouraged to make their employers and others aware of this grant and that the Association wishes to support the development of cadetships and traineeships within the industry, this grant being one aspect of the Associations support.

Along with this Grant the committee has also instituted an Educational Travel Grant (closed end of April 2006) and the Committee is currently considering applicants for this Grant

The following describes the requirements and conditions for the Educational Grant.

PURPOSE

The purpose of the Educational Grant is to:

- promote the principle objective of the Association to further the development of the science of hydrography/field hydrology and its application to the under-standing monitoring and management of Australia's water resources, and
- assist students undertaking the Hydrography Certificate IV (accredited under the Australian Qualifications Framework to undertake the final year Project (Subject 8004AA) as required in the course

THE GRANT

The Grant will be of a value of up to $1000 to assist the students undertaking studies in the Hydrography Certificate IV to purchase material/equipment and services necessary to undertake the Project in the final year of the course.

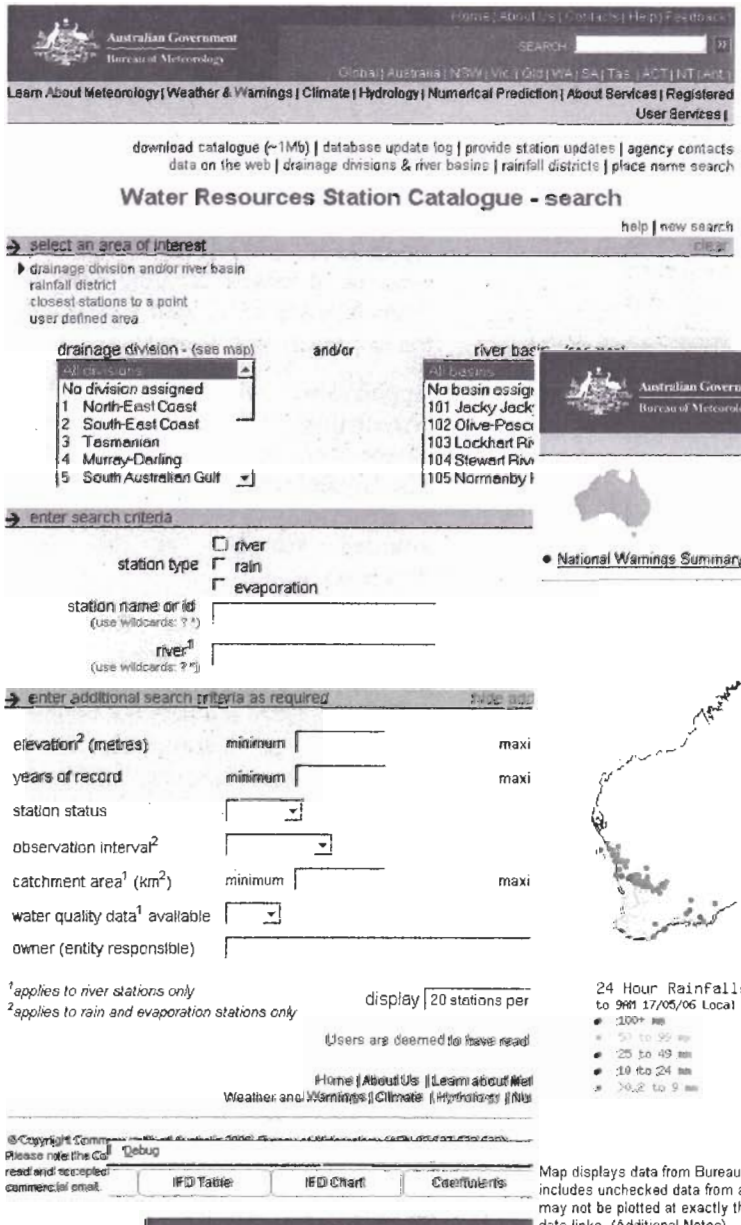
CONDITIONS

- The recipient will supply an initial abstract paper and a final project paper for publication in the Association's Journal "Australasian Hydrographer", and win advanced consideration for the right to present the Project paper (describing the work undertaken) at the Australian Hydrographers' Association Conference (at a future date) upon applying for the Conference Educational Travel Grant. (See previous section)
- The recipient will be a financial member of the Australian Hydrographers' Association.
- The recipient will normally be enrolled in the Hydrography Certificate IV (AQF).
- The recipient's project will have been approved by OTEN and/or the recipients employer as an appropriate project activity meeting the requirements of the Project (Subject 8004AA) in the Hydrography Certificate IV.
- Applications will include the approved Project proposal, a budget detailing other sources of financial/material support (for example from the employer/supervisor).
- Applications will be assessed by the Association's Committee who may invite advice from appropriately qualified people. The Committee may liaise with the employer where necessary. More than one grant may be awarded annually, at the Committee's discretion.
- The grant will take the form of a reimbursement to the awarded value, paid to the individual, or as a rebate to the employer that has initially covered the recipients costs incurred, after presentation of proof of purchase of items/services.
- Items purchased with the Grant will become the property of the recipient's institution/employer or in the case of a stand alone student, the student.
- Proof of purchase of the items/services must be supplied to the Treasurer prior to reimbursement if this grant is awarded.

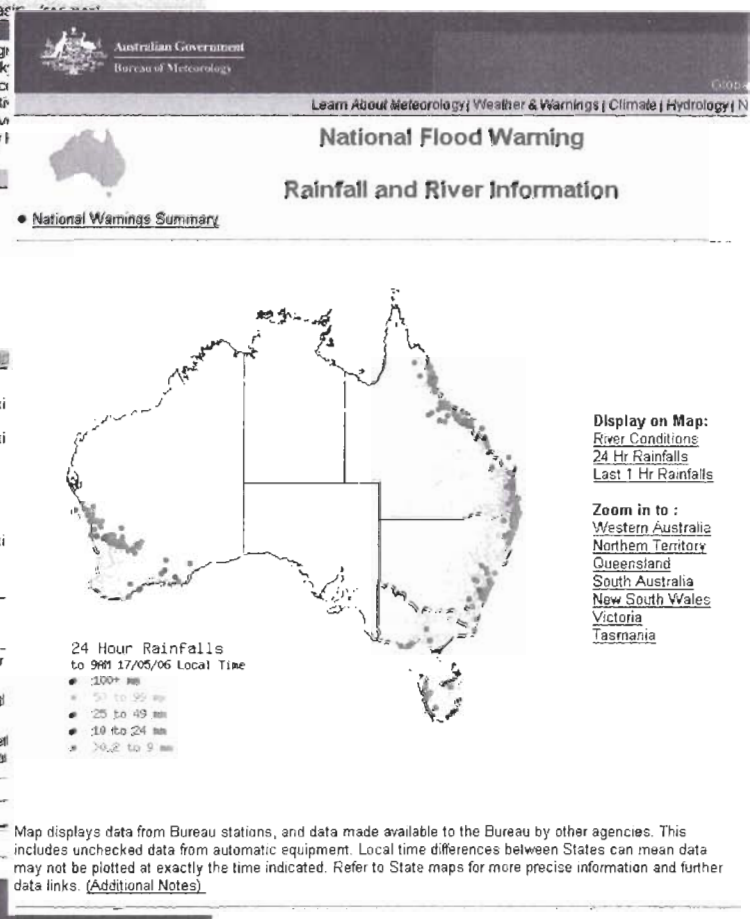
Further information and application forms can be found on the Associations website at www.aha.net.au

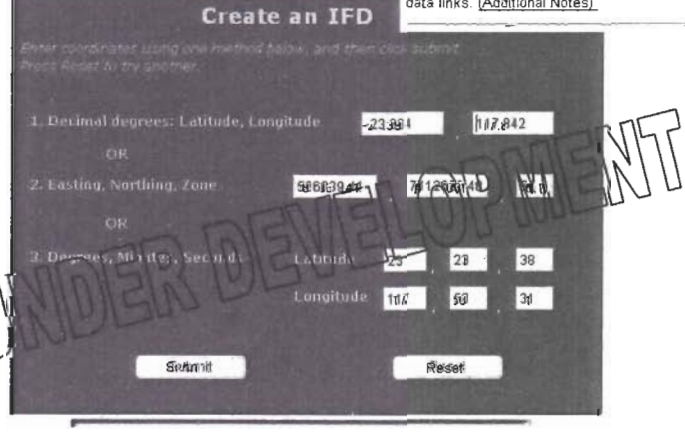
BUREAU OF METEOROLOGY RESOURCES ON THE WEB

www.bom.gov.au/hydro/wrsc



www.bom.gov.au/hydro/flood





Membership Renewals

Membership renewal reminders have recently been distributed to members, as well as lapsed member, encouraging your continued participation in the activities of the Association.

Those who will have received them will notice that the hard work has been done for you and the information you last provided to the Association is already filled in!

Its as simple as correcting the information (if needed) and returning the form with your payment to:

The Treasurer
Australian Hydrographers' Association
14 Kosciusko St,
Traralgon, Victoria 3844

Payment Options

The Association accepts payment of subscriptions by cheque, credit card and Electronic Funds Transfer. If you wish to debit from your account direct to the AHA account please email the treasurer to get our bank account details for EFT. (treasurer@aha.net.au)

Corporate Memberships

4 levels of Corporate Membership are offered as follows:

Corporate Membership Grade	Annual Cost	Included Membership
Bronze	$500	1
Silver	$1,000	6
Gold	$1,500	12
Platinum	$2,000	20

Main features of Australian Hydrographers' Association Membership (for both Individual and Corporate) include:

- Knowledge and information sharing amongst peers.
- Promotion and sponsorship opportunities at a biennial conference.
- Four journals, *Australasian Hydrographer*, per year.
- Association Website and peer group mailing list with discussion threads.
- Commitment to supporting continuing education of Hydrographers (Certificate IV Hydrography).
- Travel grant assistance scheme for student/cadet members to attend conferences.
- Educational grants.
- Job advertisement network to industry.
- Investing funds for educational support for hydrographic industry (Member of Industry Advisory Group).
- Supporting State based industry workshops.
- Access to and information about activities from other similar scientific and industry groups

It's Your Website!

Visit It!!!

www.aha.net.au

Other Workshops/Conferences From Around the Region

New Zealand Hydrological Society, "Resource Management Under Stormy Skies: Water Allocatin at the Crossroads. November 20-23, 2006. Christchurch, New Zealand. www.conference.canterbury.ac.nz/muss

30th Hydrology & Water Resources Symposium Hotel Grand Chancellor, Launceston, Tasmania, 4 – 7 December 2006. www.cdesign.com.au/hydrology2006

A River Somewhere

(or The Caring Sharing Bureaucrat)

23rd December, 1971.

My appreciation of the situation after speaking to the officers who have interviewed Miss Goodwin at various times over the past few weeks is that she has had the property up for sale for a number of years but to no avail. Those officers who have actually visited the site will not find this hard to understand as the property, as a grazing holding, has hardly a redeeming feature to recommend it. Some of Miss Goodwin's "friendly" neighbours expressed their view to her on the completion of the float recorder installation that it would detract from the property as a saleable proposition as either a grazing holding or alternatively as a National Park. I find this difficult to understand unless the recorder is deemed to detract from the rustic nature of the site as it is easily the most modern structure around for probably some thirty years.

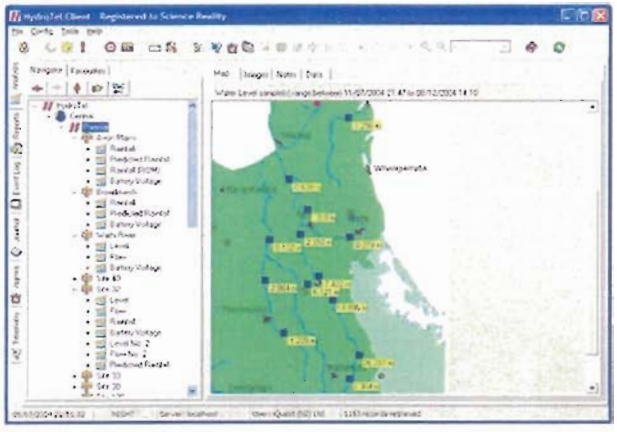
It seems that Miss Goodwin was genuinely surprised, if not alarmed, at the size of the completed recorder structure, but now that it has been painted to complement the general surrounds, together with her approval of the work done to the access track, I don't believe there will be any further complaints or any action pending following the installation.

Science Reality - Simple and Intuitive Solutions

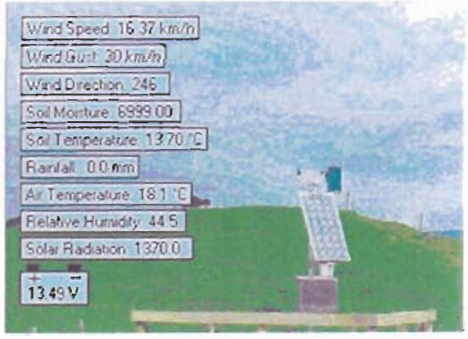
HydroTel - A stunning visual interface for those serious about environmental telemetry

HydroTel presents operators with a highly intuitive graphical view of their environmental telemetry network. The combination of maps and site images overlaid with the latest readings enables you to see in a glance what is happening around your catchments.

If you are considering implementing or upgrading an environmental telemetry system, you should ensure that HydroTel is included in your product evaluation so that you can see first-hand why HydroTel has been selected by most major environmental data collection agencies in New Zealand.



Main interface with catchment map showing latest readings



Site View showing latest sensor readings

Major features:

- Highly graphical & intuitive interface
- Advanced alarm management
  - 3 stage alarm escalation
  - Multiple alarm actions & notification options (email, sms, paging, fax, etc)
- Extensive communication options (dial-up radio GPRS/UDP TCP/IP, etc)
- Compatible with many logger types
- Flexible task scheduling logger polling and other tasks such as reporting & data publishing.
- No requirement for special hardware (runs on any Windows computer)
- Data stored in SQL Server database
- Control of barrage gates and pumps
- Compatible with HYDSYS/Hydstra

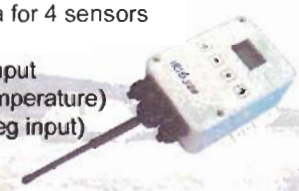
Other quality products and services available from Science Reality

iRIS 320 CDMA-1X/GPRS Datalogger

"Would you like fries with that?"

The iRIS 320 data logger from iQuest has it all:

- Communications with the lot!
  - Your choice of either GPRS or CDMA-1X comms
  - Call the logger to hear latest values reported as voice
  - SMS the logger to get SMS reply with latest values
  - Receive frequent (low-cost) data updates via Internet
  - Or do it the old way and just dialup to download data
- Stacks of memory with circular buffer
  - Stores over 18 months of 15 minute data for 4 sensors
  - Oldest readings overwritten when full
- Inputs: 4xAnalog, 2xDigital, SDI-12 Data Input
- Integrated condition monitoring (volts & temperature)
- Supply Voltage Regulator (15-30V DC unreg input)
- Extra heavy-duty weather-proof case
- Multi-line LCD display and keypad
- And, best of all – it's competitively priced too!



Scientific Software System Design & Development

Science Reality specializes in high quality software product development for scientific and engineering applications. Our software development team is experienced in advanced application development using the Microsoft Dot Net development platform with expertise in the following areas:

- Scientific and engineering software development
- Environmental telemetry systems & dataloggers
- Wireless Internet based data acquisition solutions
- Tablet PC and PDA based field data collection
- Analysis, reporting & graphical presentation of scientific measurement data

Contact us today for more information about our range of products and services

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Intuitive Software Solutions

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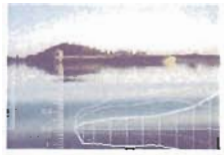
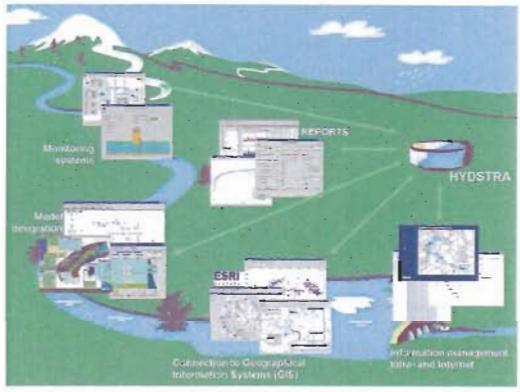
Science Reality
48 Bingley Street
Howrah, TAS 7018





RESOURCE MANAGEMENT SYSTEMS

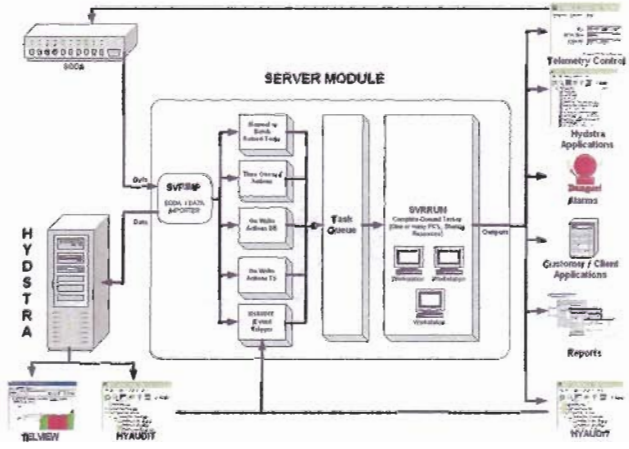


For over 20 years Kisters have provided:

- ✓ Technical superiority of products and services
- ✓ High performance
- ✓ Market leadership in terms of installations and technical excellence
- ✓ Strong client base support resulting in "user-ownership" and commitment to the products
- ✓ World's largest development and support team
- ✓ World's largest client base

SERVER MODULE – New Feature

- ➢ "On Write" data actions – Ability to automate reporting, modelling, alarming, web publication, audits, transfer of data, change polling requirements, etc as data appears on the system.
- ➢ "On Write" database actions – Ability to automatically export information such as ratings, site, and variables in any format to another user or database.
- ➢ Automatic importing of telemetry data.



Kisters principal business activity is the development and maintenance of hydrometric archive systems for the retrieval, storage, editing, manipulation, reporting [including web publication], and analysis of time series data and related information pertaining to the environmental industry.

Contact Kisters for all your data management needs

For more details contact;
Kisters Pty Ltd
Email: support@kisters.com.au
Ph: + 61 2 6288 2302

KISTERS

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