CHW's HACH WIMS JOURNEY

CENTRAL
HIGHLANDS
WATER

WHERE WE WERE

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- Previous program also called WIMS
- Developed in response to reporting requirements in legislation
- Stored both operational and laboratory data

ISSUES

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- Program developed and supported by a single person
- In later years getting support was becoming more difficult
- The program became unstable, slow and crashes were common
- Data integrity became a problem – difficult to adjust result errors and having these adjustments traceable
- In-built reporting developed bugs, loss of user confidence
- Final use was really just as a filter to extract data to Excel

THE PROCESS

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- Several failed attempts were made to re-develop the old WIMS or build a new database internally
- Some work would be done, we would test it and then hear nothing
- This went on for some time…all hope seemed lost…and then:
- Another iteration of a Business Case developed to seek an alternative – management support
- Development of a user needs document (evaluation criteria)

THE PROCESS RESURRECTION

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- Environmental scan of ‘off the shelf’ products was conducted
- Discussions with other water businesses around product use (this had been ongoing for several years)
- Evaluation of existing CHW software to determine if any could be adapted (e.g. LIMS, Hydstra)
- Closed tender for selection of companies identified in environmental scan
- HACH WIMS chosen

IMPLEMENTATION

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- Working group established including operator involvement to establish database structure
- Optimistic timeframes established
- Database to cover Water, Wastewater and Trade Waste (including lab and operational data)
- Direct interface with LIMS – including auto variable creation
- All non-routine data to be stored for the first time
- Decision made (late in process) to migrate all data from old WIMS system instead of LIMS causing some data integrity issues

DEVELOPMENT

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- Objective to recreate paper forms in WIMS, difficult due to no immediate mobile solution and Citrix connectivity issues
- Move all current reporting to WIMS which was complex due to:
  - Differences between WIMS and Excel
  - Grouping Customer Tap Sites
  - Future Proofing Reports
  - Work in progress
- Determining how to effectively process non-routine data
- Allowing for future scope to integrate SCADA data/reporting

DASHBOARDS

CENTRAL HIGHLANDS WATER

Central Highlands Drinking Water
Tuesday, 20 November 2018

RCARTY

CENTRAL HIGHLANDS WATER

WIMS - WATER QUALITY TEAM

Data Query:

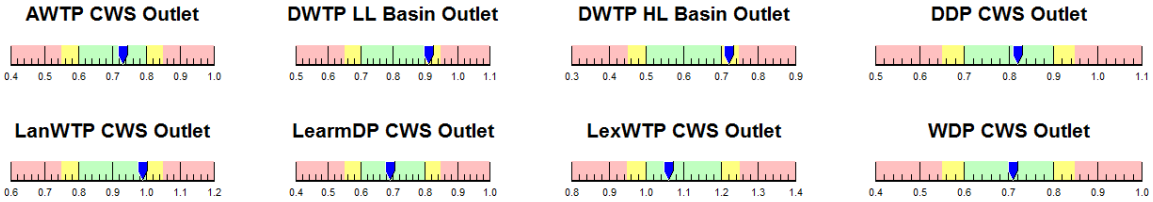
- Reports
- Variable Analysis
- Time Series Graph

Operations:

- Operator Dashboard
- Exceedances - LIMS
- Exceedances - Operations
- Log Books

LIMS CSV/ Daily	Valid Records	Invalid Records	Imported Records
Routine - Q14450 - Variable Creation Tool			0
Non-Routine - Q14450 - Variable Creation Tool	1	0	1
Routine - Q14451 - Hour Generator Tool			0
Non-Routine - Q14451 - Hour Generator Tool	1	0	1

Chlorine Residual Monitoring



DASHBOARDS

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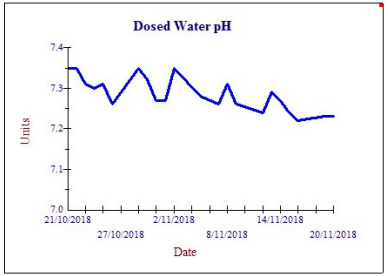
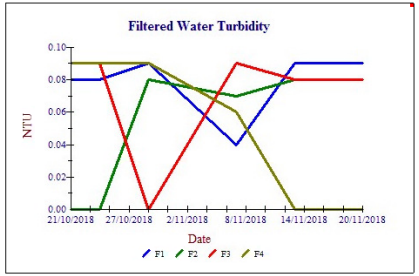
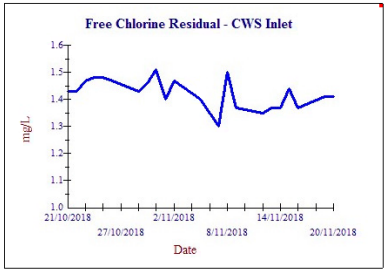
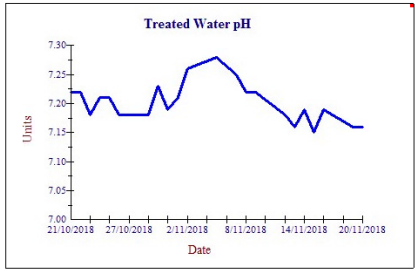
DW - DAYLESFORD

- Data Entry
- Weekly Checklist
- Monthly Checklist
- Calibration Logs
- Chemical Receivals
- Filter Bed Inspection
- Daylesford Log Book
- Home









EXPERIENCES (THE GOOD)

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- Test Database also included, useful for testing new reports/ideas before adding to production
- All paper based operational checklists recreated and all data now available – time saving
- Ability to set exceedance limits down to site level useful (previously we could only apply limits to a whole category)
- Flexibility to create own reports of data internal to WIMS, bypassing Excel

EXPERIENCES (THE GOOD)

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- Ability to view and/or trend previous 1000 results quickly and easily has been a big advantage
- Much more stable than previous product

EXPERIENCES (CHALLENGES)

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- Initially difficult to extract data from the database for ad-hoc data queries/reporting, particularly an issue for reports that still had to run in Excel
- Graphing tool user-friendliness
- Reporting tool differences to Excel, some formula bugs
- Our database structure has restricted some of the report functionality
- Better process for managing non-routine data
- Location setup bugs

QUESTIONS

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