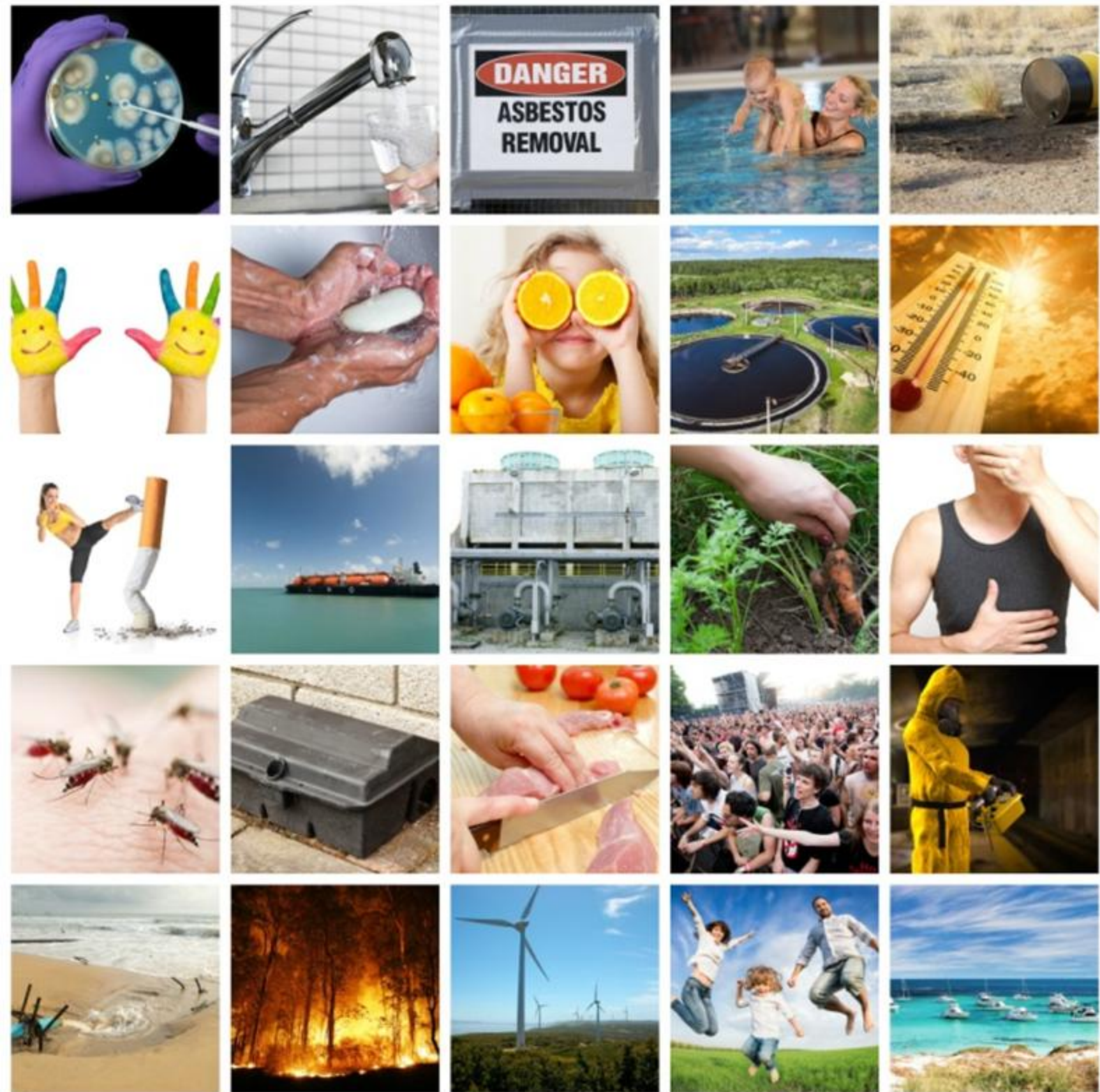




Environmental Health Directorate Yearbook July 2013 to June 2014



Our purpose

**To lead in the management of environmental
health risks**

Our vision


**HEALTHY
PEOPLE
IN A
HEALTHY
ENVIRONMENT**

Our values

COOPERATION | FAIRNESS | EXCELLENCE | INTEGRITY | LEADERSHIP

This yearbook is our way of showcasing what we have achieved for the people of Western Australia.

If you would like further information on any of these projects please email ehinfo@health.wa.gov.au



Environmental health impacts occur when people are exposed to hazardous substances and environments.

Hazardous substances have the potential to be very harmful to human health, can remain in the environment for a very long time and are suspected of contributing to a wide range of health concerns, from asthma to cancer.

The [World Health Organization](#) states that as much as 24% of global disease is caused by environmental exposures - which can be averted. Well-targeted interventions can prevent much of this environmental risk.

And this is why we exist.

Our role is to ensure interventions, such as regulations, guidelines, surveillance, monitoring and public education, are in place to prevent disease and illness arising from environmental exposures, as well as protect people from other environmental health impacts.

We are the voice in the room that asks *“but have you considered the impacts on people?”*

We're not always welcomed with open arms. But our team of environmental health experts makes every effort to protect the health of Western Australians.

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Did you know....

- Western Australia's (WA) population was 2 550 900 (as of December 2013).
- The population increased by 71 300 people during 2013.
- WA continued to record the fastest growth in population of all states and territories at 2.9%.



Message from the Director

The publishing of this yearbook is now a way of life for my team. It has been embedded into our annual planning and reporting program, and is a fantastic way of reflecting on the hard work of staff.

We have focused efforts on improving our overall performance by ensuring we make the time to plan our upcoming work schedule and to share ideas to support innovations in environmental health. Innovation in how we provide our services is critical in maintaining compliance with our regulations.

One project that will enhance our services is the environmental health atlas spatial database, which will enable Local and State governments to load and access spatial hazards data. The first tool being developed is mosquito population data so land managers can make more informed decisions about where to apply mosquito treatments for maximum impact and cost effectiveness.

The other project I'm excited about is the online payment and processing capability for licences and registrations. Not only will the process be user friendly, but it will significantly reduce the time required by staff to process over 10 000 licences and registrations each year.

I do want to acknowledge two prestigious awards won by my team. Firstly, an award recognising work on managing risks of clandestine drug laboratories. This is an issue that has escalated substantially in WA and we have been on top of the game in this space.

The other is a Premier's Award which was awarded to the Esperance Clean-up and Response Committee, for the extensive work that went into managing health concerns associated with lead contamination in Esperance over the past 7 years. Community engagement is critical in times of high stress and uncertainty. Lindsay Gillam, Mirella Goetzmann and Martin Matisons played a critical role by keeping the community well informed and by minimising health risks throughout the process.

With that I hope you enjoy reading about what we have achieved this year. If you would like information about any of these projects we are always willing to share our expertise.



Jim Dodds
Director
Environmental Health Directorate
Public Health and Clinical Services Division
Department of Health of Western Australia



Operational structure

The Environmental Health Directorate (the Directorate) is positioned within the Public Health and Clinical Services Division (PHCSD) structure of the Department of Health of Western Australia. The PHCSD is led by the Executive Director, Professor Tarun Weeramanthri.

Our Directorate is one of ten Directorates / Offices operating within the PHCSD structure.

The Directorate has six operational areas:

1. Business Unit
2. Environmental Health Hazards Unit (EHHU)
3. Food Unit
4. Radiation Health Unit
5. Science and Policy Unit (SPU) and the
6. Water Unit.

Management

Our team is led by the Director, Jim Dodds, and five unit managers.



Figure 1 From left to right: Hazel Upton, Managing Health Physicist Radiation Health Unit, Richard Theobald, Manager Water Unit, Jim Dodds, Director and A/Manager Science and Policy Unit, Manoj Agarwal, Manager Business Unit, Stan Goodchild, Manager Food Unit, and Dr Michael Lindsay, Managing Scientist Environmental Health Hazards Unit.

Enabling legislation

We administer a wide range of Acts, Regulations, By-laws and Codes of Practice, including:

Environmental Health Hazards

Health (Air-handling and Water Systems) Regulations 1994
Health (Asbestos) Regulations 1992
Health Act (Carbon Monoxide) Regulations 1975
Health (Garden Soil) Regulations 1998
Health (Poultry Manure) Regulations 2001
Hairdressing Establishment Regulations 1972
Health (Skin Penetration Procedure) Regulations 1998
Health (Offensive Trade Fees) Regulations 1976
Piggeries Regulations 1952
Health (Construction Work) Regulations 1973
Construction Camp Regulations
Health Act (Laundries and Bathrooms) Regulations
Health (Aquatic Facilities) Regulations 2007
Health (Public Buildings) Regulations 1992
Health (Rottnest Island) By-laws 1989
Fly Eradication Regulations
Health (Pesticides) Regulations 2011
Health (Prescribed Insect Pests) Regulations 1991
Health Act (Local Authorities Sewerage Undertakings) Model By-laws – Series “A”
Registration, Enforcement and Discharge of Local Authority Charges on Land Regulations

Food

Food Act 2008
Food Regulations 2009

Water

Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974
Health (Temporary Sanitary Conveniences) Regulations 1997
Health Act (Underground Water Supply) Regulations 1959

Radiation Health

Nuclear Waste Storage and Transportation (Prohibition) Act 1999

Radiation Health as secretariat to the Radiological Council

Radiation Safety (General) Regulations 1983
Radiation Safety (Qualifications) Regulations 1980
Radiation Safety Act 1975
Radiation Safety (Transport of Radioactive Substances) Regulations 2002




Science and Policy














Tobacco Products Control Amendment Act 2009
Tobacco Products Control Act 2006
Tobacco Products Control Regulations 2006

Financial year scorecard 2013-2014

We made a commitment to completing a number of projects during the financial year.











Did we achieve what we set out to do?

-  Project completed – we achieved our goal.
-  Satisfactory result – progressed but not completed.
-  Project not started – resources redirected or project no longer a priority.

Score	Operational priority
BUSINESS UNIT	
	1. Develop and communicate a building maintenance and cleaning schedule that identifies a quarterly, annual and 5 year schedule of works (including estimated costs) required to maintain GVH and Brockway Road grounds and buildings. The plan should also identify potential areas for renovation.
	2. Canvass the business administration support requirements needed with each Unit Manager. Develop individual service level agreements for all five Units clearly articulating the administration services that can and cannot be provided by the Business Unit.
	3. Establish an ongoing process for distributing quarterly business administration reminders (e.g. email, newsletter, posters in toilets). The process will include mechanisms identifying the quarterly administrative messages that need to be communicated to staff.
	4. Scope and report on options for improving the administrative burdens of the tobacco, pesticide, radiation, food and water licensing / registration databases which includes: <ul style="list-style-type: none"> • More user friendly databases • Ability to generate various reports
	5. Review the Tobacco, Radiation, Food and Pesticide licensing fees and charges and apply identified increases before September 2013.
	6. Develop a Business Case to support a permanent full time position to assist with tobacco and other licensing functions.
	7. Embed the staff induction process into Business Unit systems, ensuring 100% of new staff receive the induction package and complete the induction checklist.
	8. Establish a customer telephone complaint recording system and report quarterly to the Director to assist with identifying areas where improvements in telephone customer service can be achieved across the Directorate.
	9. Improve the process for staff travel (interstate and overseas) reporting required under the Department Travel Policy to enable Business Unit staff to better manage the travel database on behalf of individual staff.
	10. Submit the Information and Communications Technology request to Health Information Network to start the tender process for the electronic document management system project.
ENVIRONMENTAL HEALTH HAZARDS UNIT	
	1. Develop and publish a Mosquito Management Plan template on the website for use by Local Government.
	2. Develop the first stage of the 'Health Atlas spatial database' and trial real-time mosquito management data collection via mobile tools through mosquito Contiguous Local Authority Groups (CLAGs).
	3. Review and report on those aspects of the pesticide licensing and payments database which require modification or updating to enable: <ol style="list-style-type: none"> 1) recording of online bpay / bpoint reference numbers; 2) online data entry/application by a client; and

	3) other opportunities for improvement.
	4. Develop and trial a business inspection form for pest management businesses.
	5. Review and make recommendations for streamlining the processing of fumigation site assessments.
	6. Organise logistics and programme for the Mosquito Control Association of Australia Conference to be held in WA in September 2014
	7. Develop, publish and distribute guidance on public health risk from asbestos associated with mining activities
	8. Develop a guidance note on management, removal and disposal of asbestos cement material following a fire event (e.g. industrial fire, bushfire).
	9. Develop and publish a health risk assessment guideline on fracking and potable water in WA (including submission to scientific journal for peer review).
	10. Develop and publish a brochure on use of pesticides and pregnancies for inclusion on the website.
	11. Produce a draft guideline for body art and personal appearances industries with identified stakeholders and circulate widely for industry and public comment.
	12. Review the existing Code of Practice for Aquatic Facilities to incorporate amendments for the design, construction & operation of Water Spray Grounds.
	13. Develop, consult on and implement a four year (\$1 million per year) funding scheme to improve Local Government mosquito management programs in WA.
	14. Undertake a literature review of existing policy and regulations related to indoor air quality (e.g. kitchen, bathrooms, furnishings, timbers, carpets, gas appliances, mould) and report recommendations to the Air Quality Coordinating Committee on options for management in WA.
	15. Convene and coordinate a WA Asbestos Regulators Inter-Agency Group including development of linkages to the National Office of Asbestos Safety (in collaboration with Science and Policy Unit).
	16. Consult on, develop and publish a National position statement on clandestine drug laboratories and public health risks on behalf of enHealth.
	17. Plan and convene a spatial data workshop for WA Health and local governments on the use of spatial information to monitor and manage environmental health hazards.
	18. Produce reports on management recommendations for mosquitoes and mosquito-borne disease risks following wet season and cyclonic rainfall for the Local Governments of Broome, Kalgoorlie-Boulder and Port Hedland.
	19. Prepare and hold a week-long mosquito management training course for Local Government, Environmental Consultants and State Govt agency personnel.
	20. Revision and relaunching of the WA Clan Lab Guidelines
	21. Baseline survey of Community Awareness of Mosquitoes and Mosquito-Borne Disease in Western Australia (to inform development of new risk communication tools)
	22. Review and consult on guidelines on the use of risk management to determine first aid requirements for public events

FOOD UNIT	
	1. Review and update the Western Australian Shellfish Quality Assurance Program in partnership with industry to better define management of shellfish harvesting.
	2. Refine and streamline assessment, auditing, compliance and reporting processes for the administration of the Primary Production and Processing Standards of the <i>Australia New Zealand Food Standards Code</i> across food industries including dairy, meat, poultry, and bivalve molluscs. Adopt a State based approach for the consistent implementation of the Standard, consistent with national objectives.
	3. Review, update and implement the Food Unit Communication Strategy to provide support to enforcement agencies for implementation of food legislation.
	4. Communicate to local government enforcement agencies the national food recall process, outlining the roles and responsibilities of the various agencies/parties involved in a food recall.
RADIATION HEALTH UNIT	
	1. Re-establish and improve the Radiation Environmental Analysis Service by upgrading and testing new hardware.
	2. Re-establish the calibration service in the relocated Radiation laboratory.
	3. Improve the Radiation Health Unit emergency response service by formalising incident specific guidelines for staff who take part in the emergency on-call service.
	4. Revise the Industrial Radiography requirement for 200 kVp calibration by investigating calibration methods and collecting and evaluating collected X-ray spectra against ISO spectra.
SCIENCE AND POLICY UNIT	
	1. Review, update and prioritise the existing Directorate communication strategy. Commence implementation of at least three of the top remaining priority projects.
	2. Conduct the fourth "Environmental Health Needs Survey for Remote Aboriginal Communities" in a minimum of 200 communities by the end of the financial year.
	3. Develop and trial a home hygiene resource kit in two remote communities that promotes healthy living practices by Aboriginal people.
	4. Develop CEHAPS (Community Environmental Health action plans) for 50% of Remote Aboriginal Environmental Service Plans (RAESP) covered communities.
	5. Conduct Local Government emergency management professional development programs, to include at least two courses in the Perth Metropolitan area and the South West of WA.
	6. Develop a process for: <ul style="list-style-type: none"> • Identifying skill sets of internal Directorate officers to ensure appropriate deployment of volunteers to disaster areas • Formalising requests received by local government for assistance with major events.
	7. Review and update the Environmental Health legislation review program associated with the Public Health Bill and report on the scope of works required to update existing regulations.
	8. Improve, through education and training, the level of awareness of local government's role in the enforcement of tobacco legislation in the Perth metropolitan area on targeted stores to determine their likelihood of selling tobacco products to minors and enforcing the law if they do.
	9. Coordinate a tobacco compliance survey for a minimum of 500 stores in the Perth metropolitan area to monitor the current level of compliance with the tobacco Regulations and report on the survey findings.
	10. Conduct control purchase operations in Perth metropolitan area stores selling tobacco to determine their likelihood of selling tobacco products to minors and enforcing the law if they do.

	11. Implement a minimum of three high priority tasks of the Development Assessment Panel review.
	12. Conduct a business process review of the Water Unit to identify regulatory and/or internal administrative processes causing unnecessary administrative burdens and recommended strategies for improvements.
	13. Identify at least three EH research projects across the directorate that use data either routinely collected or if collected will be beneficial to the Directorate. Determine if any of these provide opportunities for collaboration with research institutes. Scope the feasibility for each project and prepare a research proposal to be submitted for approval.
	14. Identify existing hard copy application, registration, notification and licensing forms used across the Directorate that can be created into electronic online form and report on the: <ul style="list-style-type: none"> • Costs • Best option (eg use existing website or new website for converting into online forms).
WATER UNIT	
	1. Consult with identified stakeholders on the second draft of the Government Sewage Policy over a 3 month period and report on the consultation findings.
	2. Review and report recommendations on feasible options for reducing the number of days required to process a septic tank application and to minimise the complexity of submitting an application by a proponent.
	3. Review and report on feasible options for minimising the number of days required to process aquatic facility applications and minimise the complexity of submitting the application by a proponent.
	4. Identify the number of existing recycling wastewater schemes in WA and establish a process for auditing these schemes in subsequent years to ensure updated conditions for the management of the schemes to be issued in accordance with the “2011 Guidelines for the Non-potable Uses of Recycled water in WA”.
	5. Report on options to undertake environmental sampling required as part of the Department of Health metropolitan environmental waters monitoring program (river and ocean).
	6. Develop a communication strategy, in partnership with the Communications Directorate, on the fluoridation of drinking water. The strategy will include reviewing and improving the fluoridation of drinking water information available on the website to ensure information is available for the public by the end of the financial year.

We achieved 80% of our projects!

Major achievements for the year

What a year to celebrate! A few of our major achievements are outlined below.

Winning an award for managing Clandestine Lab risks (story page 28)

The number of clandestine drug laboratories has escalated substantially in WA and the Department has provided leadership not only in WA, but Australia wide, by ensuring appropriate management of public health issues. An interagency award was presented, recognising a number of WA State Department's collaborative work for developing the [Guidelines for the Notification and Risk Management after Detection of a Clandestine Drug Laboratory- March 2014.](#)

Setting a precedent for banning e-cigarettes (story page 18)

For many years our Tobacco Control Team has been investigating complaints about having e-cigarettes removed from sale. One case was taken to the Magistrates Court with the defendant found not guilty of selling e-cigarettes. The State Solicitor agreed to appeal the decision. The Judge hearing the case announced a decision to over turn the original decision, finding the defendant guilty of the original offence. A Supreme Court sentence was recently passed on an individual for selling this product, with the case sparking debate world-wide.

Winning a WA Premier's Award (story page 28)

A WA Premier's Award was awarded to the Esperance Clean-up and Response Committee, with Lindsay Gillam, Mirella Goetzmann and Martin Matisons, playing a critical role throughout the clean-up. The Committee was recognised for its work spanning nearly 7 years of working with the local Esperance community. Community engagement is critical in times of high stress and uncertainty. It is essential that people affected by a potential public health crisis are kept well informed throughout the event to manage real and perceived health concerns.

Quality assurance for WA shellfish (story page 21)

We have a responsibility for overseeing the WA Shellfish Quality Assurance Program (WASQAP), which ensures areas where commercial shellfish harvesting takes place across WA are safe. This helps to assure that WA shellfish is safe to eat. As part of this role we finalised two triennial surveys within Cockburn Sound and Mistaken Island near Albany. The reports present bacteriological, phytoplankton and chemical analysis data.

Auditing regional recycled water schemes (story page 40)

The Water Unit and Water Corporation worked together to complete a comprehensive review of 53 remote and regional recycled water schemes. Each visit required a detailed "Water Recycling Assessment Report", providing an in-depth review of each scheme and highlighting any compliance issues with the Guidelines for the Non-potable Uses of Recycled Water in WA. The reports are vital to define the roles and responsibilities of recycled water managers, and to protect public health into the future.

A high-resolution, blue-tinted photograph of water ripples. The image shows a central point where a drop of water has just struck, creating a series of concentric, overlapping ripples that spread outwards. The lighting is dramatic, highlighting the texture of the water's surface and the individual droplets. The overall color palette is a range of blues, from deep navy to light, airy sky blues.

What we did

Legislation, guidelines and publications

Our role is to ensure interventions, such as regulations and guidelines, are in place to minimise disease and illness from environmental exposures. During 2013-14 our team completed a number of legislation reviews, guideline and publication projects to further protect West Australians.

Managing asbestos risk for mining activities

By John Howell

In response to industry concerns we published a [Guidance Note on Public Health Risk Management of Asbestiform Minerals Associated with Mining – July 2013](#) on managing the health risks of asbestos material associated with mining activities. The guide is intended for use as part of the mine project approval process operated by the Department of Mines and Petroleum (DMP).

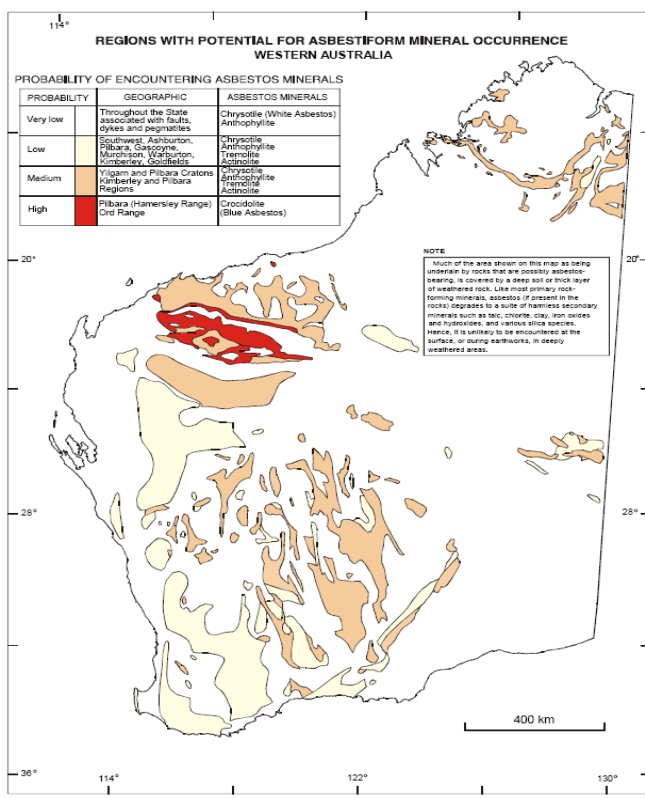


Figure 2 Map of regions with potential asbestiform mineral occurrence in WA

Asbestos management following a fire

By John Howell and David Peckitt

Asbestos-containing materials are common in pre-1990 buildings in Australia. Asbestos buildings or structures that have been affected by a fire may present an increased risk to public health. To address these health concerns we released a draft [Guidance Note on the Management of Fire Damaged Asbestos](#).



Figure 3 Asbestos roof burnt during a fire in Northbridge

Revised water chemical screening guidelines

By Pierina Otness

We revised and updated the [Contaminated Sites Ground and Surface Water Chemical Screening Guidelines](#). These guidelines assist site owners, stakeholders, environmental consultants and government agencies in the assessment and management of contaminated sites. They enable evaluation of chemicals in ground and surface water for the classification of suspected or known contaminated sites. The guideline was used by the Department of Environmental Regulation (DER) in helping to update their Contaminated Sites Guidelines.

National position statement on clandestine drug laboratories and public health risks

By John Howell

Due to our experience with identifying and managing the public health risks from illegal drug laboratories we were tasked with leading the development and publication of the national [enHealth Position Statement – Clandestine Drug Laboratories and Public Health Risks](#).

This review found that many thousands of Australians, particularly children, are at risk of adverse health effects from these laboratories underlining the importance of ensuring they are adequately cleaned up and the premises remediated.

Revised clandestine drug lab guidelines

By John Howell

After an initial 18 months of operation, our interim guidance on clandestine drug laboratories was updated and republished

as [Guidelines for the Notification and Risk Management after Detection of a Clandestine Drug Laboratory- March 2014](#).

The release was also accompanied by an extensive program of education and support for Local Government EHOs, with the responsibility for managing the risks.

The table below shows you just how big an issue clan labs have become in WA.

Table: Number of clan labs detected in WA by calendar year

Year	WA
2007–08	30
2008–09	78
2009–10	118
2010–11	171
2011–12	160



Figure 4 A homemade clan lab reported to police

Mercury factsheets By Sally Newbury

We developed three new mercury factsheets including:

- [Mercury exposure](#)
- [Clean-up guide for small mercury spills in the home](#)
- [Compact fluorescent lights \(CFL\)](#).

These were created in response to a growing number of public queries on the safe handling, clean up and disposal of intact and broken equipment containing small amounts of elemental mercury. These include; compact fluorescent (energy saving) lights, thermometers, barometers and sphygmomanometers (blood pressure cuffs).

Pesticides and pregnancy factsheet By Sally Newbury

A [factsheet for pregnant and breastfeeding women](#) was developed to outline possible health concerns on the use of pesticides in and around the home and on the skin (personal repellents). The factsheet discusses potential risks to children resulting from exposure of pregnant or breastfeeding women to pesticides applied around the home.



Figure 5 Pregnant women need to take extra precautions when using pesticides around the home.

Improving adventure activities casualty outcomes By Sid Brodie

A workshop was conducted in November 2013 to review how event management risks from adventure activities could be better identified, with outcomes for injured participants improved. Approximately 50 people responded to a Discussion Paper and 80 delegates attended the workshop to hear informative presentations from event organisers, first aid responders, the Royal Flying Doctor Service, Department of Sport and Recreation and Department of Health representatives. The next stage of the project will be the development of the guidelines during 2014-15.



Figure 6 Industry, government and non-government representatives who attended the adventure activities workshop

Body art review By Bree Abbott and Jaala Downes

We initiated a review of the *Health (Skin Penetration Procedures) Regulations 1998*, and Code of Practice for Skin Penetration Procedures, with the aim of combining the regulation of the hairdressing and skin penetration type industries into one all-encompassing regulation.

Extensive consultation was carried out over 4 months to capture feedback from as many stakeholders as possible. Feedback is now being collated and we are considering the comments received.

Hoarding toolkit released for comment

By Kelly Crossley

There is growing recognition of the prevalence of hoarding and squalor, the associated potential for adverse health impacts, and the need for greater cross-sectoral approaches to address the issue. WA currently does not have a coordinated approach to respond to the challenges of domestic environments (hoarding and squalor).

To address this concern we developed a hoarding 'Toolkit' aimed at those EHOs dealing with persons caught up with hoarding and squalor. The document will also assist the various agencies who work with these individuals. The draft toolkit will be released for comment to all EHOs. Once finalised, it will be made available online.

Code of Practice for aquatic facilities

By Llew Withers

The [Code of Practice for the Design, Construction, Operation, Management and Maintenance of Aquatic Facilities](#) was amended to include a new section on construction and operation of Water Spray Parks. The Code is recognised in Australia and internationally as aquatic facility best practice.

Table 8 -Microbiological Water Standards was also substantially rewritten to provide better direction to Technical Operators and EHOs.

Senior Adviser to the Environmental Health Hazards Unit, Mr Llew Withers, was invited to present to the World Health Aquatic Conference in Queensland (July 2014) to describe the development of WA risk based aquatic legislation.

Report on the Food Act 2008

By Rebecca Delsar

The [Report on the Food Act 2008](#) for the period 1 July 2010 to 30 June 2013 was compiled. The report collates information

reported by local governments on the performance of regulatory functions under the Food Act, and also highlights some of the innovative food safety and nutrition related public health initiatives that some local government enforcement agencies have implemented.

Communicating allergen information

By Catrina McStay

The Communicating Allergen Information Project was initiated in response to requests from stakeholders for guidance and resources for food allergen management. There is an increased prevalence of food allergy in Australia, and it is becoming increasingly important to provide up to date information and resources in this area. The aims of the project include the provision and promotion of allergen management resources for *Food Act 2008* (the Food Act) authorised officers, food businesses and the general public; and raising awareness of food businesses' responsibilities under the Food Act. The development of resources and consultation has been completed, with finalisation of the project due late 2014.



Figure 7 Food allergies has become a hot topic across Australia

Food Unit communication strategy

By Mark Fallows

A Communication Strategy was developed to communicate the Food Unit's purpose, values, roles and responsibilities. The

Strategy, which identifies food related stakeholders, intends to provide effective communication pathways. This Strategy was completed following consultation with stakeholders in June 2014 and includes an implementation plan for the coming year. The implementation plan will be published online once finalised.

Updated compliance and enforcement policy

By Marilyn Macfarlane

We updated the [Compliance and Enforcement Policy](#), which details the approach taken by the Department for compliance and enforcement of the *Food Act 2008*, the *Food Regulations 2009*, the *Australia New Zealand Food Standards Code* and the *Australia Standards relevant to the production of meat and meat products*. The approach is based on the *National Enforcement Guideline* and is subject to regular reviews. The revised document will be available online in the forthcoming year, for other enforcement agencies to adopt.

Exporting food activities

By Marilyn Macfarlane

The Chief Executive Officer (Director General) of the Department is described legally as the “appropriate enforcement agency” for food businesses engaged in exporting of food. The Food Unit published the [Regulatory Guideline No. 4](#) which aims to minimise the number of enforcement agencies involved in the exporting of food products from WA without compromising food safety. The Department is the centralised contact for the Commonwealth Government Department of Agriculture and industry. The Guideline is reviewed annually in line with a “letter of agreement” between the two agencies.

Food recall fact sheet

By Enita Ostojic

The Food Unit has developed a [Food Recall Fact Sheet](#) to provide guidance to the *Food Act 2008* authorised officers in local

government and to food businesses on determining the need for conducting a food recall. The fact sheet briefly outlines the process of conducting a food recall and also captures issues such as determining the type and level of food recall, outlining roles and responsibilities and stating the key points that need to be considered when conducting a food recall.

Consulting on the future of solaria

By Radiation Health

In September 2008 regulations were introduced under the Radiation Safety Act requiring the registration of commercial premises for the possession and operation of sun-tanning units. During the financial year several jurisdictions began announcing bans on commercial use of sun-tanning with many taking effect 1 January 2015.

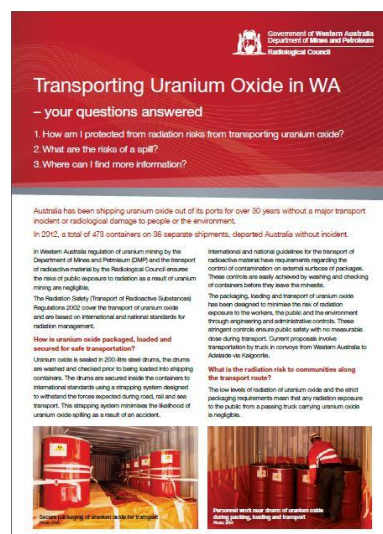
In early 2014 the Minister invited comments from all solarium operators asking why a ban on commercial solaria operations should not be announced for WA by the end of the year. The reply period has closed and a report has been presented to the Minister for consideration.

Transporting uranium in WA

By Duncan Surin

The Radiological Council worked with the Department of Mines and Petroleum, as the lead agency for uranium mining in WA and as a co-regulator of radiation in the mining industry, to produce the brochure;

[Transporting Uranium Oxide in WA](#). The brochure aims to answer some questions on the risk of transporting uranium.



Community studies, surveys and investigations

The WA population continues to grow and expand across the state. For this reason it is important that we continuously monitor environmental health issues at a community level. We do this by contributing to studies, surveys and investigating potential community health concerns.

Mosquito survey By Dr Peter Neville

A telephone survey of 2500 residents across WA was undertaken to determine the knowledge and attitudes of individuals to mosquitoes, mosquito-borne disease and mosquito avoidance practices. The data obtained will identify knowledge gaps, behavioural patterns or misconceptions that may facilitate or hinder public health efforts to reduce mosquito-borne disease transmission and enable risk groups to be targeted in future public awareness campaigns. The collection of data has been completed and the results will be used to develop the Directorate's communication strategy for future years.

Locally acquired case of Dengue Fever By Dr Peter Neville

Two mosquito surveys of Point Samson and Wickham were undertaken in response to confirmation of a human case of dengue fever (DEN1) in a resident of Point Samson, with no history of overseas travel prior to onset of illness.

The surveys were carried out immediately after the case was identified (October 2013) and following the first significant rainfall in the region (January 2014). The aim of both surveys was to determine whether the exotic dengue vector mosquito species, *Aedes aegypti* or *Aedes albopictus*, had become established in the localities where the dengue fever case was most likely infected. Extensive ground surveillance found no evidence of the presence of either species of exotic mosquito, so it was concluded that there was no risk of further transmission of dengue viruses.

Food access and cost survey (FACS) By Catrina McStay

We assisted with the Food Access and Cost Survey (FACS) as part of our state-wide food monitoring and surveillance. Food influences health, with affordability and access to food a key determinant of consumer food choices. The survey was undertaken by the Department in collaboration with the Australian Bureau of Statistics (ABS) and Curtin University of Technology to explore the cost, availability and quality of foods; along with enabling comparisons with the 2010 FACS. Surveyed, were the major retail grocery chains, including urban, rural and remote stores, and stores in remote Indigenous communities.

Pesticide residues in fresh fruit and vegetables surveys By Kim Unwin

We coordinate a surveillance program which monitors the level of pesticide residues in fresh fruit and vegetables sold from WA food businesses. This program is undertaken to inform food businesses and the relevant enforcement agencies where test results indicate the presence of pesticide levels that are not permitted, and to identify the presence of any agricultural chemicals not approved for use. The surveillance program included both imported and domestic produce. This program was recently reviewed to reflect the current use of agricultural chemicals in Australia and possibly overseas. Final test results are pending.

National food monitoring and research surveys

By Kim Unwin

Food Standards Australia New Zealand and other government public health agencies regularly conduct national and bi-national monitoring and research programs. The data is used to determine general compliance as well as inform new and existing food standards. WA collected samples for the following surveys:

- survey of cyanogenic glycosides in plant-based foods (2010-2013),
- national surveillance program for genetically modified foods (2012-2013),
- survey of trans fatty acids (2013)
- 25th Australian Total Diet Survey (2013-2014).

Published reports are available on the [FSANZ website](#).

New research projects to support evidence based policies

By Dr Peter Franklin

As part of our requirement to review the effectiveness of environmental health policies and regulations, the Directorate identified a number of activities that required further research to help inform future policy direction.

Four research projects have been identified, which required engaging with research and university groups to undertake some of the work. These projects, which will commence in the forthcoming year, include:

- Assessment of Aboriginal Environmental Health Needs survey: this will be done in collaboration with researchers from the Telethon Kids Institute and involves an assessment of the data collected for three surveys conducted since 1997.
- Toxicity of e-cigarettes: this project will assess the toxicity of e-cigarette vapours using a mouse exposure

model. It will also be conducted with researchers at the Telethon Kids Institute.

- Community asbestos exposure: a survey of current asbestos exposure in the general community will be undertaken by researchers at Curtin University of Technology in collaboration with the Directorate and the Cancer Council WA
- Tobacco Compliance Surveys: a project will be undertaken to assess the effectiveness of feedback to tobacco retailers about Controlled Purchase Operations for the selling of cigarettes to minors. This will be done in-house.

Tobacco retailer compliance survey

By Bruce Hawkins

Tobacco Retailer Compliance Surveys are used to measure retailers' compliance with the *Tobacco Products Control Act 2006* (Act), by determining the proportion of retailers in the Perth metropolitan area and major regional cities willing to sell cigarettes to "children" (described as under 18).

The 2013 survey took place in September and October school holidays.

- Four males and four females aged 15 and 16 years visited a range of stores across metropolitan Perth including delis, lunch bars, supermarkets, newsagents, service stations and lottery kiosks.
- 587 stores were visited and 1000 purchase attempts were made.
- 29% of all attempts to buy cigarettes resulted in a successful sale.
- 42% of stores sold cigarettes to the underage youths. Some stores sold cigarettes on multiple occasions.

All retailers were informed about the results of the survey and reminded of their legal responsibilities and penalties for the sale of cigarettes to children. Additional warning

letters were sent to those stores who sold cigarettes to minors.

Control Purchase Operation (CPO)

By Bruce Hawkins

CPOs are conducted on targeted tobacco retail stores to determine their likelihood of selling tobacco products to minors and enforcing the law if they do.

A CPO was conducted January 2014, following the Tobacco Retailer Compliance Surveys, in the Perth metropolitan area. A male and a female aged 16 years visited stores that were known to have previously sold cigarettes to a minor. This year the CPO focused on enforcing penalties for non-compliant stores, whereas previous CPOs focused on education and awareness raising.

As part of the exercise, 40 infringements were issued to individuals who sold cigarettes, 8 infringements were issued to tobacco licence holders and 3 written warnings were issued to individuals who sold cigarettes.

Banning e-cigarettes By Bruce Hawkins

Electronic cigarettes (e-cigarettes) are battery-powered devices which heat a cartridge containing nicotine, flavouring and other chemicals into an inhalable vapour.

They have typically mimicked traditional tobacco cigarettes, cigars or pipes in appearance, but are increasingly available in other styles.

The Department considers that electronic cigarettes are prohibited under section 106 of the *Tobacco Products Control Act 2006* (Act), and can not be sold in WA.

In 2013 the Department prosecuted a business called Heavenly Vapours for selling e-cigarettes.

The matter went to a Hearing and the Magistrate acquitted the case. The Department appealed this decision and the

matter was heard in the WA Supreme Court on 10 April 2014.

The Judge decided electronic cigarettes do resemble a tobacco product and the seller of these electronic cigarettes was convicted of this offence.

The Court decision highlights that products that resemble tobacco products, regardless of whether they contain nicotine or not, cannot be sold in WA and it is an offence to sell these products under the Act.



Figure 8 Example e-cigarettes that are now banned for sale in WA

Surveying future swimming dams

By Jared Koutsoukis

We conducted sanitary surveys, used to assess pollution sources, at Harvey Dam and Lake Towerrinning near Darkan. Because these dams are no longer required for drinking water supplies, it is expected they will become popular recreational sites. With the lifting of water quality catchment protections, the surveys enable health authorities to establish base line data and provide useful information on any changes that may occur to the water quality. Officers from the Shires of West Arthur and Harvey provided local knowledge and experience with the surveys.

Diesel spill By Jared Koutsoukis

During November 2013, the Directorate was alerted by the City of Kwinana, to a diesel spill on Kwinana Beach, following complaints from the public of skin irritation. We contacted the DER, Pollution Response Unit, which confirmed a pipe failure 300m from shore along the Coogee Chemicals pipeline.

We advised the adjacent shellfish harvesting area to cease harvesting and the City of Kwinana erected warning signs at recreational beaches in the area.

Fremantle Ports, Department of Transport, Coogee Chemicals and other agencies as mentioned, responded and participated in a debrief to discuss the incident and better respond to any future incidents of the same or similar nature.



Figure 9 Diesel spill into Cockburn Sound. A bund was placed around the Coogee chemical pipeline fissure. Source DER

Testing mock incident scenarios

By Brian Labza

Drinking water suppliers are required to run a mock “drinking water quality incident”. This year three mock incidents involving the Water Corporation, AqWest (Bunbury Water Corporation) and Rottnest Island Authority occurred.

During each incident a series of scenarios based on potentially real events are

conducted. Water Unit staff are responsible for auditing water providers’ risk management and incident management processes to identify any areas that may require further attention.

The mock events were part of the ongoing quality assurance process for drinking water quality that is required by the Department. While there is no such thing as the perfect risk management plan, the exercises are extremely useful to sort out any potential confusion between the responsible decision makers as they enable frank discussions which can build positive relationships between the Department and key stakeholders.

Ultimately these exercises reinforce confidence in the quality of drinking water in WA.

Projects, programs and other health initiatives

Innovations in environmental health not only help to improve our services, but help the WA community and visitors to WA to minimise exposure to environmental health risks. This is why it is important that we lead innovations in state and national projects, programs and other health initiatives.

Launched kNOw asbestos website

By Dave Peckitt

The Cancer Council of WA collaborated with the Directorate to develop an interactive asbestos e-learning program that was launched during National Asbestos Awareness Month (November 2013). The program is titled 'kNOw asbestos in your home' and is available on the [Cancer Council website](#). The site provides a free e-learning training course on the safe removal of asbestos in the home in an effort to reduce the potential for exposure to asbestos fibres for the DIY home renovator.



Trial pest management inspection form

By Tu-Trinh Tran and Kryz Gregory

A new business inspection form was developed to assist Pesticide Safety Officers and Local Government EHOs to ensure that businesses are complying with the requirements under the *Health (Pesticides) Regulations 2011*, such as correct pesticide storage, vehicle signage, record keeping and the use of appropriate personal protective equipment (PPE).

The development of the standardised form should ensure a consistent approach to business registration applications and ongoing compliance.

Streamlining fumigation

assessments By Geoff Harcombe

The *Health (Pesticides) Regulations 2011* now incorporate a risk assessment procedure for fumigation under Australian Standards, enabling both the pest management industry and importers to undertake their own preliminary risk assessment prior to approaching Government for site approval. The new procedure for assessing a fumigation site has been well accepted by industry. A site approval can be issued in most situations, provided industry have completed their preliminary site assessment and can demonstrate compliance with Australian Standards (AS2476).

Mosquito management template

By Amber Douglas

Effective mosquito management relies on the development of a comprehensive and flexible Mosquito Management Plan including regular monitoring and the use of appropriate control measures. Many Local Governments are implementing Mosquito Management Plans in response to large numbers of mosquito related complaints and/or human cases of mosquito-borne disease (e.g. Ross River virus). Mosquito management is a complex task, so the Directorate is developing a series of guides for Local Governments in the development of these Plans. The documents include templates for a Mosquito Management Plan and a Standard Operating Manual, along with guidance notes and case examples. Once completed, the documents will be made available online.

Health atlas spatial database

By Dr Peter Neville

The Directorate is developing an online repository for collection, storage and review of environmental health hazards data. The Atlas will provide mobile data collection tools and a central data repository to facilitate sharing of data between Local and State Governments and enhance the collection of spatiotemporal data on environmental health hazards across WA.

The first tools being developed include mosquito management applications to allow collection and collation of mosquito abundance data that will enable land managers to make informed decisions in regards to treatment thresholds and methods.

Tools for water monitoring and tobacco compliance will also be developed in the future.

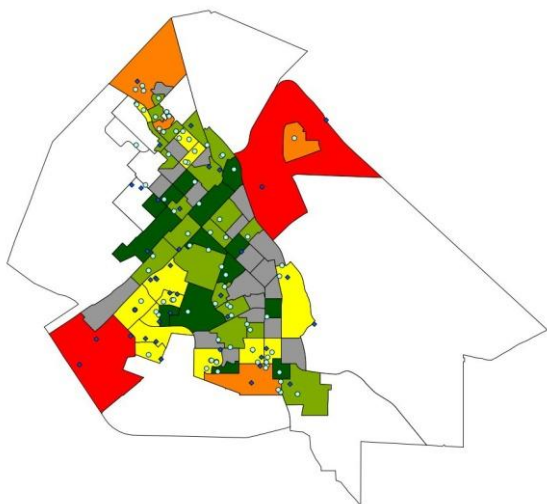


Figure 10 Spatial analysis maps generated using the Atlas database (above).

Triennial reports of shellfish harvesting areas

By Tracey Stamp

The Directorate oversees the WA Shellfish Quality Assurance Program (WASQAP). Our role involves shoreline and sanitary surveys of all commercial shellfish harvesting areas to identify possible pollution sources and determine their impact on the quality of the shellfish. Bivalve molluscs are filter feeders, extracting phytoplankton, bacteria and suspended organic and inorganic particles from the surrounding water as their food supply.

Waters from which bivalve molluscs are harvested may be subjected to pollution from a range of human activities, including discharges of untreated or poorly treated human waste, direct discharges of industrial wastes and runoff from urban and agricultural areas. Therefore harvesting areas have to be carefully assessed and monitored to ensure the shellfish are safe to eat. Shoreline and sanitary surveys are conducted regularly to assess the level of risk associated with shellfish harvesting in WA. The Triennial surveys have now been completed for Cockburn Sound and Mistaken Island near Albany.



Figure 11 Sanitary surveys conducted within the Cockburn Sound shellfish harvesting areas.

Biotoxin risk assessment for WA

By Tracey Stamp

Following the biotoxin (poison produced by algae) contamination of Tasmanian shellfish in 2012, the Directorate, in conjunction with Curtin University Centre of Excellence for Science, Seafood and Health, commenced a cross sector risk assessment relating to biotoxins in WA seafood. The risk assessment is based on available phytoplankton and biotoxin data.

The findings will enable the biotoxin Management Plan for WA shellfish areas to be reviewed and amended accordingly.

National food regulatory system

By Rebecca Delsar

The Food Unit has a role to provide input into the national food regulatory system, including submissions on applications and proposals to change the Australia New Zealand Food Standards Code and input into the development of policy guidelines. During 2012/13 the Food Unit made submissions on a number of topics including the regulation of caffeine in foods, *Listeria monocytogenes* in ready-to-eat food, primary production and processing of meat, minimum age labelling of infant foods, raw milk, and short chain fructo-oligosaccharides (sugar).

Local government tobacco control grants

By Bruce Hawkins

The Tobacco Control Grants Scheme is a project that is financed by the Tobacco Control Branch and administered by the Public Health Advocacy Institute of WA (PHAIWA).

It aims to facilitate and support the engagement of Local Governments in activities to support tobacco control and compliance across WA in accordance with the Tobacco Products Control Act 2006.

Both long term and one-off, new or improving existing projects or events that engage with the community are considered.

34 grants have so far been distributed, with the average grant being \$6029.

22 regional and 7 metropolitan Local Government Associations have received grants, with some Councils receiving two separate grants.

Identification of a skills matrix for volunteer staff

By Lindsay Gillam

On many occasions we have supported local governments which have been subjected to a disaster – usually cyclone events or fire related. In such cases our offer to assist has resulted in us sending a number of staff to the area for periods of up to a fortnight. Selection of suitable staff has historically been based purely on availability; however we propose in the future to base our selections on requesting the local government to identify what specific risks to public health have been identified, and then better matching the skills and experience of our volunteers to these tasks. This requires our officers to identify specific skills (such as experience with damaged asbestos) and also cover other general requirements necessary to deploy officers to disaster areas.

Review of Departmental fees and charges

By Manoj Agarwal

This financial year marks the first time that the Department has been required to provide a comprehensive evidence-based costing system to support an increase of fees and charges. The Business Unit was responsible for providing the economic justification for the proposed increases for applications received by the Tobacco, Pesticide and Food areas.

After extensive consultation with relevant stakeholders, each fee that required review was deconstructed using the current real

cost of undertaking each processing task and then applying a markup based on the Consumer Price Index (CPI) and projected salary increases under the Enterprise Bargaining Agreement. This process confirmed that the current fees were no longer meeting the administrative costs.

Fees and charges have been increased as per the CPI recommendations from Treasury and Finance.

Online payments for applications

By Katy Roberts

The Directorate introduced an EFTPOS machine and BPoint profiles for Water, Food, Tobacco and Pesticide as well as a BPay profile for Pesticide applications during 2013. This has improved payment options offered to our stakeholders and minimises administration burdens and complaints associated with processing payments.

Our Radiation Health Unit has now also adopted the credit card processing functions.

At this stage there will be no change to the application forms but in the near future, applicants will be able to make payment of fees via telephone and internet.

The introduction of BPay and BPoint for Pesticide Licensing is a significant development and requires a lot of work to update the current licensing database and licensing forms being used with these payment options. The Commonwealth Bank will need to approve the customer reference number (currently being developed) and all forms with the BPay and BPoint logos before implementation. It is expected this will occur in the first quarter of the new financial year.

The Directorate will be developing further payment options which will include over-the-counter payments/lodgements with Australia Post. This will take some time to develop and implement but when available, will

provide added benefits for the licensing areas by ensuring accurate applications with payments are received in a timely manner and maximising convenience to our stakeholders.

Business Unit refit

By Cherine Glasson

The Business Unit was refitted to provide extra work stations, causing some disruptions during the year. The refit enables additional staff to move into the area to provide improved support services.

A big thank you to staff who made space available for officers affected while the refit occurred.

Radiation laboratory update

By Radiation Health

Since the completion of the Radiation laboratory, staff have been busy commissioning the equipment necessary for the function of the Unit's environmental analysis, calibration and wipe testing services. Wipe testing services were re-opened during the financial year to clients who are required under standard registration conditions to have gauges wipe tested on a 12 monthly interval.



Figure 12 A wipe swab being placed in equipment for analysis in the Radiation laboratory.

9th Aboriginal and Torres Strait Islander Environmental Health Conference

By Matthew Lester

The 9th National Aboriginal and Torres Strait Islander Environmental Health Conference was held in Adelaide in November 2013. WA had the largest representation of environmental health practitioners of all the states and the conference provided the opportunity to exchange knowledge and awareness of the large range of programs offered around Australia.

The conference presentations covered a range of topics specifically related to environmental health in Aboriginal communities.

Presentations on behalf of WA were provided by Nirrumbuk Environmental Health (Chicky, Ken Bin Jacob, Louie and Aaron Bin Maarus), Kimberley Population

Health (Georgina Kelly), the Shire of Derby West Kimberley (Emma Caitlin, Scott MacKenzie and Genevieve Russ) and the City of Greater Geraldton (Mark Chadwick).

A special presentation was from Miranda Poynton showing the ease of use of the Indigenous Health InfoNet's Environmental Health website. enHealth have provided funding for three years to maintain this important resource which is based at Edith Cowan University.



Figure 13 Representatives who attended the Aboriginal and Torres Strait Island Environmental Health Conference

We recognise the importance of sharing knowledge locally, nationally and internationally. We do this by encouraging staff to submit project outcomes to environmental health related journals, enabling other health professionals to benefit from our research. This year we had articles published in two journals.

[Ross River Virus Risk Associated with Dispersal of *Aedes \(Ochlerotatus\) camptorhynchus* \(Thomson\) from Breeding Habitat into Surrounding Residential Areas:](#)

A Jardine, PJ Neville, C Dent, C Webster, MDA Lindsay - The American Journal of Tropical Medicine and Hygiene 2014

Abstract:

Rapid population growth in Western Australia has resulted in increased development of land for residential housing, and new developments are often proposed close to water because of intrinsic aesthetic values. However, this placement may place future residents at risk of mosquito-borne disease, of which Ross River virus (RRV) disease is the most common in Australia. Mosquito dispersal data were combined with a spatial analysis of human RRV cases to show that mosquitoes dispersed readily from larval habitat into surrounding low- and high-density residential areas and that residents living within 2 km had a significantly higher rate of RRV disease. This finding highlights the importance of planning authorities in state and local governments

considering mosquito-borne disease risks when considering residential development applications.

[The Changing Epidemiology of Murray Valley Encephalitis in Australia: The 2011 Outbreak and a Review of the Literature](#)

LA Selvey, L Dailey, M Lindsay, P Armstrong, S Tobin, *et al.* – PLOS Neglected Tropical Diseases 2014

Abstract:

An outbreak of Murray Valley encephalitis with 17 confirmed cases occurred across Australia in 2011. This outbreak involved parts of Australia where cases had not occurred for many decades. The epidemiology in this outbreak reflects a change that has occurred over the past 15 years, with more non-Aboriginal cases, fewer children and more cases that were not resident where they acquired the infection than had been observed prior to 2000. The outbreak was associated with significant flooding in many parts of Australia and most cases reported either outdoor activities where mosquito exposure was highly likely or significant mosquito exposure.



Figure 14 Funding is provided to support mosquito research across WA

During the year we responded to a number of unplanned events requiring our expertise to assist in managing any environmental health implications.

Northampton Lead issues

By Lindsay Gillam

The town of Northampton, 52kms north of Geraldton was originally known as “The Mines” because of the significant lead mines in the area. Lead has been exported out of the town for nearly 100 years.

A legacy of this activity has been a large accumulation of tailings (soil remaining after the lead has been extracted) which was used extensively throughout the Northampton town site in various ways. The large stockpile of material was secured several years ago by the Department of Lands, which has now been tasked with identifying how much of the potentially contaminated product has been distributed around the town, whether this poses any risk to health, and the process and estimated costs of removing the material and/or covering it up to mitigate this risk.

Together with other WA Government agencies, officers from the Directorate have been making regular trips to Northampton for the past 12 months as part of a large interagency committee overseeing results on more than 700 properties which have been checked for the presence of lead tailings by an independent consultant. Checking has consisted of utilising portable x-ray fluorescence units capable of quite accurate measurements of lead to a slight depth. In selected cases soil samples were also submitted to the Chemistry Centre WA for verification and to confirm consistency of results.

Officers visited 45 Northampton residents where elevated levels of lead were detected on their properties. Our officers have provided high level health advice in conjunction with medical staff from the Mid-West Public Health Unit based in Geraldton.



Figure 15 Lindsay Gillam, DOH, and Garry Keefe, CEO of Northampton Shire visiting an old tailings site in Northampton. Note that soil containing lead does not support growth of vegetation.

Information to Northampton residents continues to be provided through a series of press releases and Northampton Shire newsletters. In addition, information was provided at a display tent at the Northampton Agricultural Show late last year.

Funding initiative for mosquito management By Dr Peter Neville

Following the 2013 State Government Election, the Minister for Health committed \$4 million (\$1 million a year over four years) to enhance mosquito management in mosquito-affected areas across WA. The Minister for Health specified that the additional funding (from 2013 – 2017) would be allocated as follows:

- \$800,000 per year for four (4) years to provide additional funds directly to Local Governments [via Contiguous Local Authorities Groups and to build Local Government capacity for mosquito control into the future; and
- \$200,000 a year for competitive research projects on new and innovative ways to manage mosquito populations in WA.

The first year of the funding initiative was completed, with five successful research grant applications, additional funding to local governments across the state for equipment purchases and source (mosquito breeding site) reduction as well as several capacity building projects to enhance mosquito management and control efforts across the state.

Parliamentary Inquiry into Unconventional Gas By Lindy Nield

The Parliamentary Inquiry into the Implications for WA of Hydraulic Fracturing for Unconventional Gas by Environment and Public Affairs Committee was attended by Professor Tarun Weeramanthri and Dr Martin Matisons of our Directorate on February 17, 2014. [Transcripts](#) and the Department's [written submission](#) are available from the Inquiry page from the [WA Parliament website](#).

The Directorate has also provided comments on the DMP draft [Resource Management and Administration Regulations](#), as well as industry guidelines.



Figure 16 The State Government recognises the importance of assisting Local Government to control mosquito populations in problem areas of WA in order to minimise nuisances and disease.

Awards and recognition

It is always satisfying when the hard work of our staff is recognised by others. This year we were presented with two prestigious awards.

Award for managing risks in Clan Labs By John Howell

We won a 2013 Department of Fire and Emergency Services Resilient Australia Award for our collaborative work in managing risks of Clandestine Drug Laboratories and the publication of the [Interim Guidelines for Notification and Risk Management after Detection of a Clandestine Drug Laboratory](#).

Key co-contributors to the development and ongoing operation of the Guidelines included:

- Department of Environment Regulation (DER),
- West Australian Police,
- ChemCentre,
- Department of Housing (DoH) and
- Local Government.



Figure 17 Award ceremony (left to right) - David Harling (Department of Housing), Paul Newell (DER), John Howell (the Directorate), John Edwards (DER), Geoff Harcombe (the Directorate), Keith Neubronner (WAPOL), Kevin Wisbey (WAPOL)

Premier's Award By Lindsay Gillam

A team of public sector officers, including staff from our Directorate, were awarded a 2013 Premier's Award following their work in managing the Esperance lead contamination from 2006-13. The team included officers from the Directorate (pictured below), Transport, DER, as well as the ChemCentre and the Shire of Esperance.

The team was cited for Excellence in Public Service Management.

The team's main roles included:

- Rainwater tank and dust sampling in conjunction with local EHOs
- Addressing community concerns in open public meetings and presentations
- Analysis and interpretation of water and dust results and providing advice to householders on cleaning of homes and furnishings
- Provision of HEPA vacuum cleaners and
- Coordinating blood lead testing of the Esperance population and mapping services.

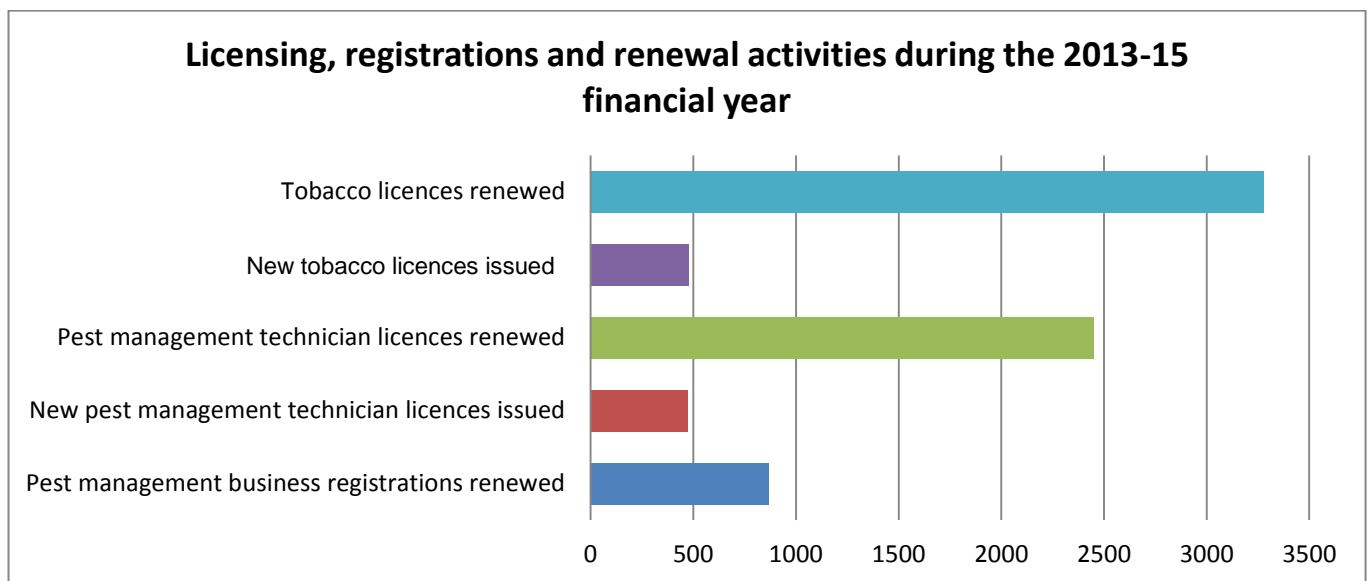


Figure 18 Mirella Goetzmann, Martin Matisons and Lindsay Gillam (the Directorate) contributed to a Premier's Award for managing health concerns of lead contamination in Esperance.

A large part of our work relates to enforcing legislative compliance requirements, which includes licensing, registration, approvals, permits, notification and assessment services for a range of activities. Various processes are in place, including auditing and compliance requirements to monitor industry risks against appropriate health legislation.

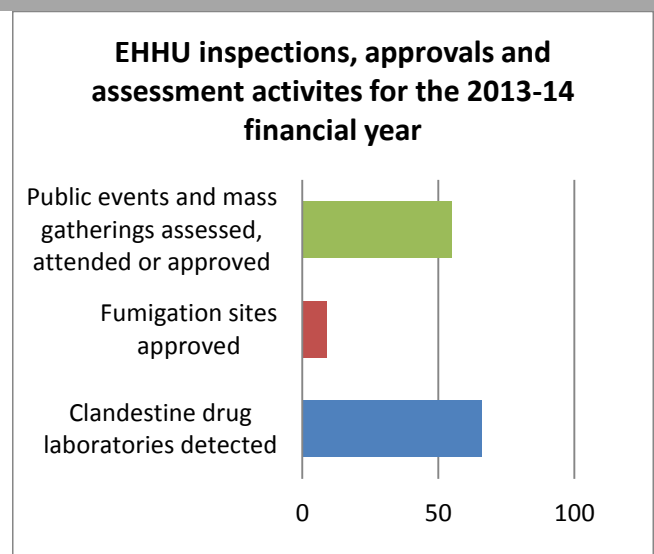
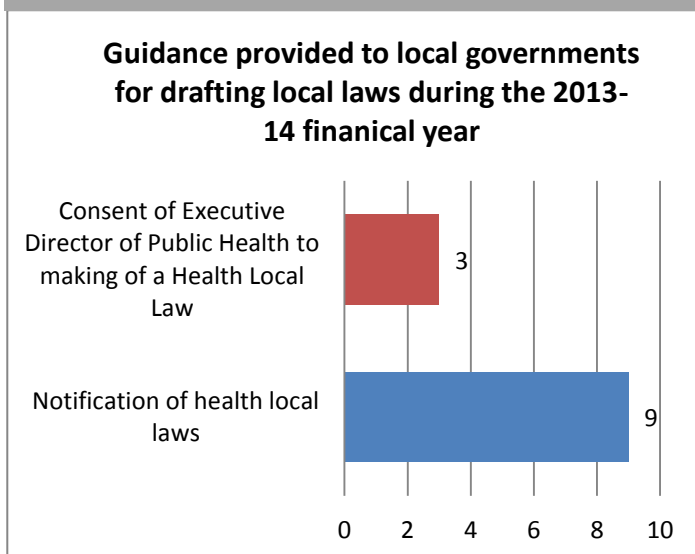
A snapshot of some of our compliance obligations during the 2013-14 financial year are outlined below.

Business Unit*

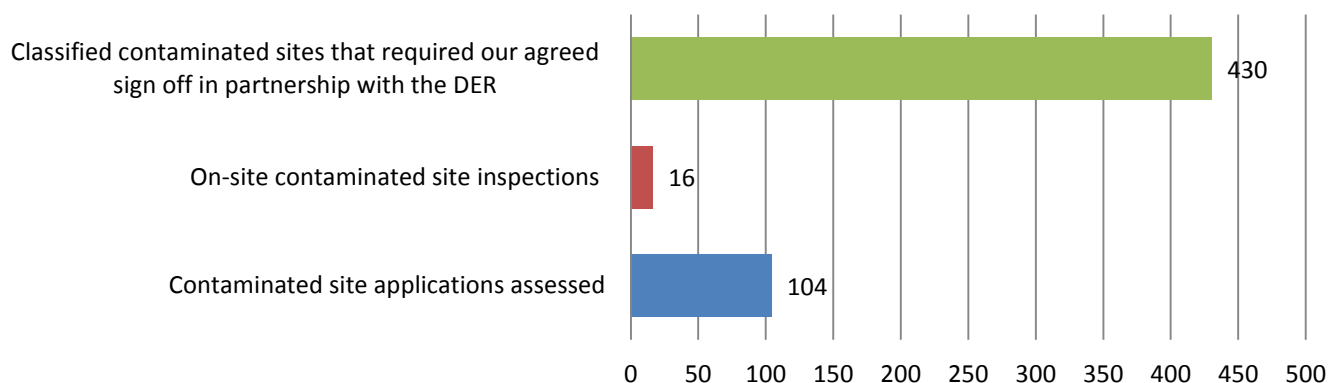


* The Business Unit coordinates the administration functions associated with issuing licences and registrations on behalf of the Environmental Health Hazards and Science and Policy Units. Compliance checks are undertaken in conjunction with Unit experts prior to issuing.

Environmental Health Hazards compliance numbers



Activities related to contaminated sites management during the 2013-14 financial year



Spotlight on contaminated sites: Contaminated sites are pieces of land including the soil, sediment and water that have become polluted with materials or agents which may present a risk to human health, the environment or environmental values. Contamination may have arisen from a range of human activities, including by industry, and needs to be properly managed, often through remediation.

Under the *Contaminated Sites Act 2003 (CS Act)* and the associated *Contaminated Sites Regulations 2006*, our staff are responsible for assessing the public health aspects of contaminated sites that are being proposed for redevelopment for commercial or residential purposes. This information is provided to the DER who administer the CS Act. Our role is to ensure the process and result of site clean-up do not expose nearby communities and eventual tenants and residents to unacceptable air, soil or water contaminant levels.

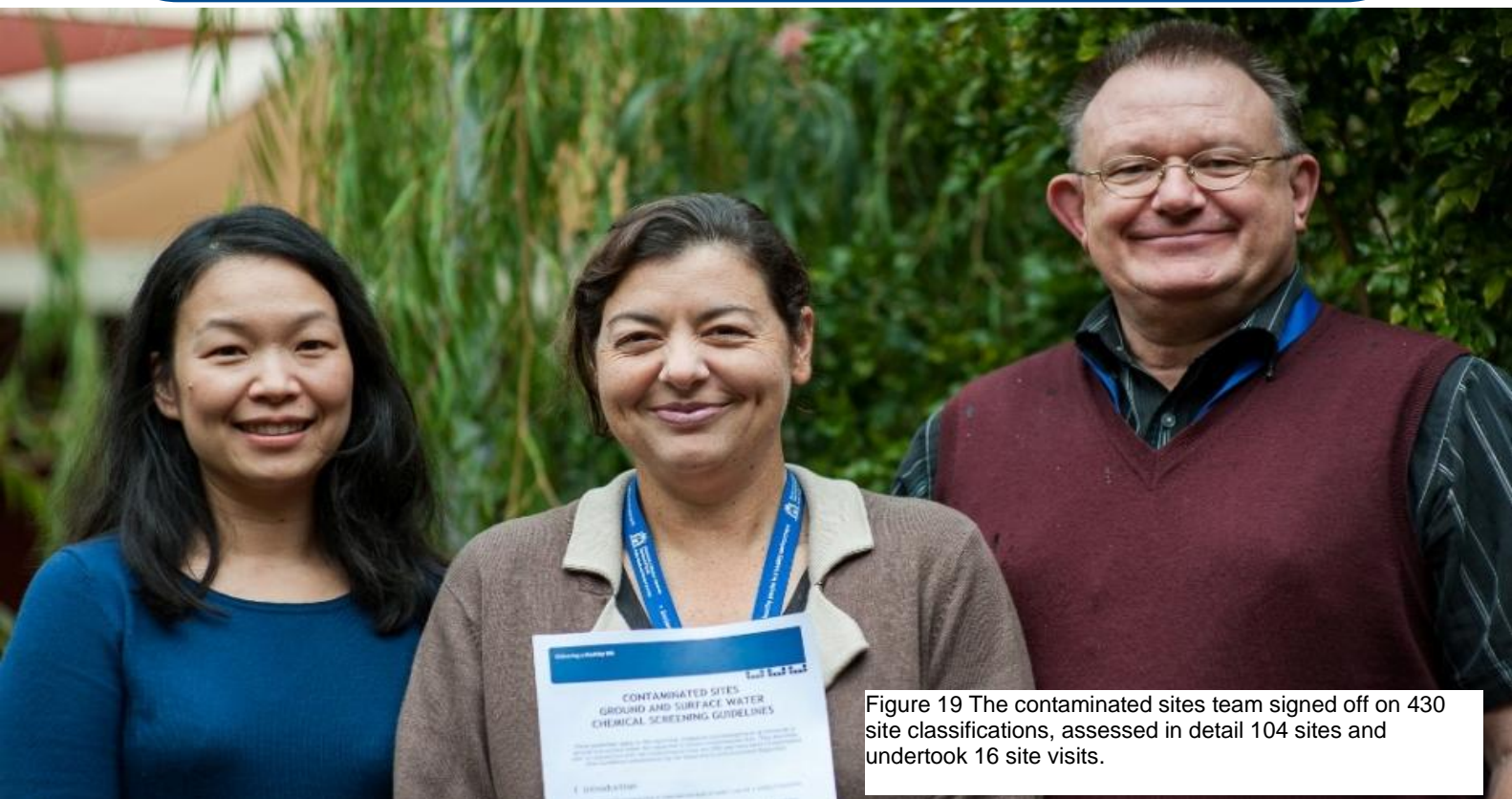


Figure 19 The contaminated sites team signed off on 430 site classifications, assessed in detail 104 sites and undertook 16 site visits.

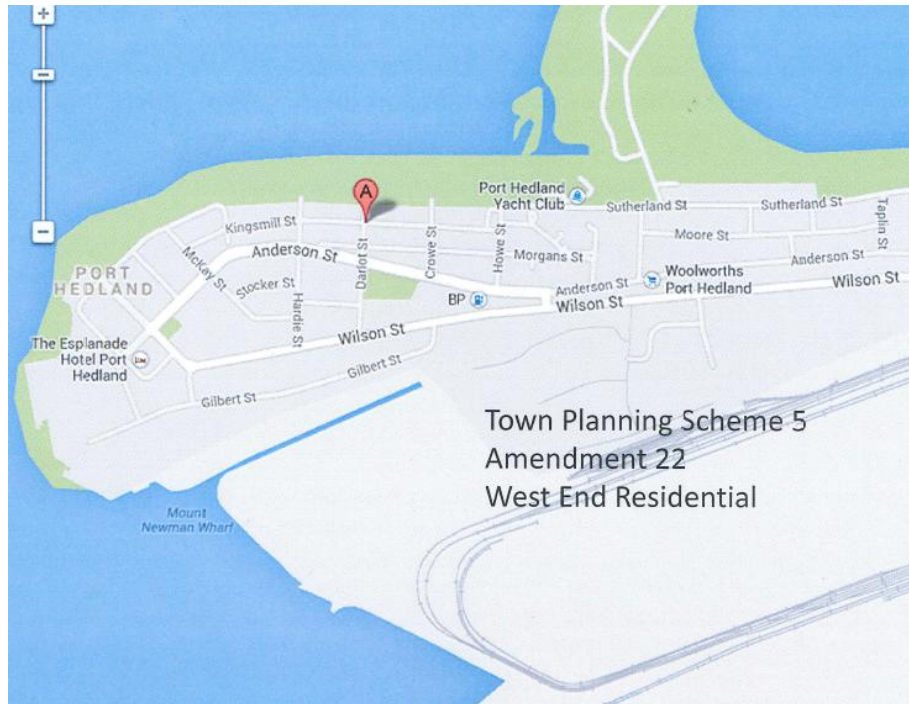
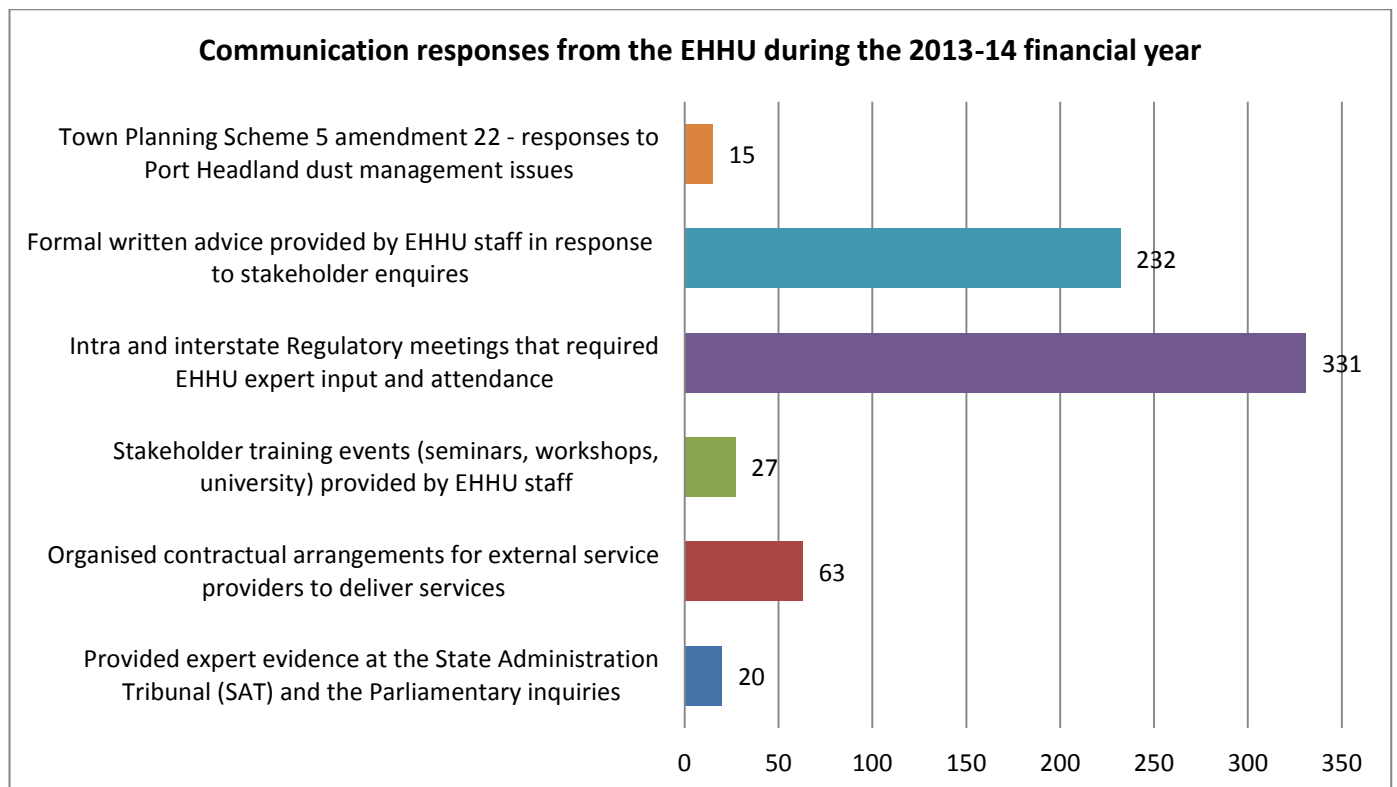
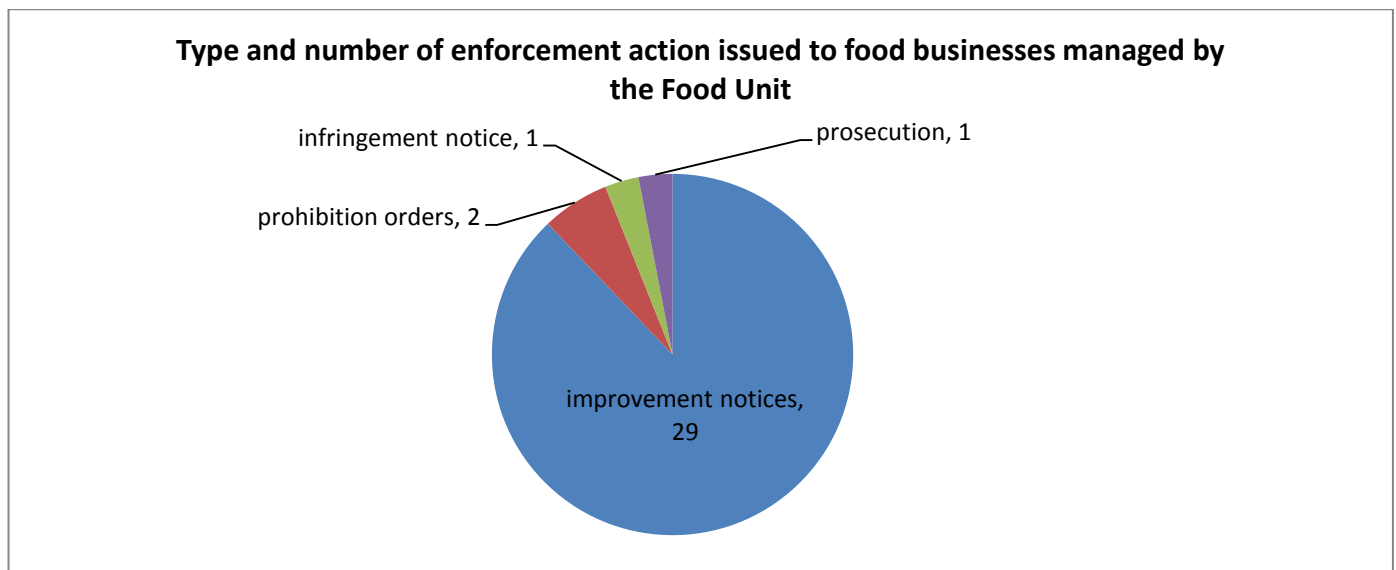
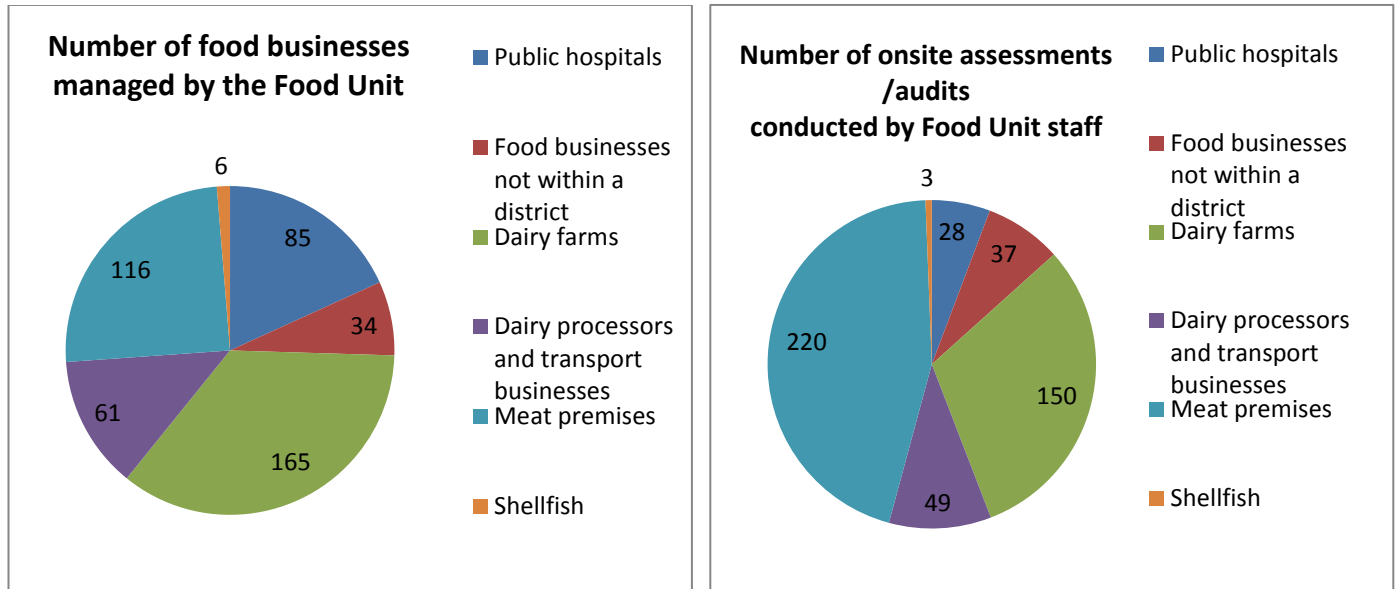


Figure 20 Toxicology staff are required to review dust management plans and multiple dwellings residential proposals for Port Hedland. The West end residential zone is a special control area established by the Office of Environmental Protection Agency (EPA). According to the [“Report and recommendations of the EPA Report 1414”](#), specific air quality control measures must be incorporated into the building design for any building located in the West end zone.



Food compliance numbers

The Food Unit is responsible for enforcing the *Food Act 2008* and *Food Regulation 2009* to select food businesses in WA. This role includes assessments and taking enforcement action.



Verification of Food Safety Programs

Under Part 8 of the Food Act some food businesses are required to implement documented food safety programs which must be audited by an approved regulatory food safety auditor; this includes food businesses that provide food service to vulnerable persons (such as public hospitals) and dairy primary production and processing businesses. Before a food safety program can be audited, enforcement agencies have a role of verifying food safety programs to determine if they substantially comply with the requirements of the Australia New Zealand Food Standards Code, Standard 3.2.1 – Food Safety Programs. The Food Unit is the enforcement agency for public hospitals and dairy primary production and processing businesses, and in the past year 47 dairy and 4 hospital food businesses were deemed to have prepared a food safety program that substantially complied with the requirements of the Code.

Number and type of food monitoring samples collected during the 2013-14 financial year

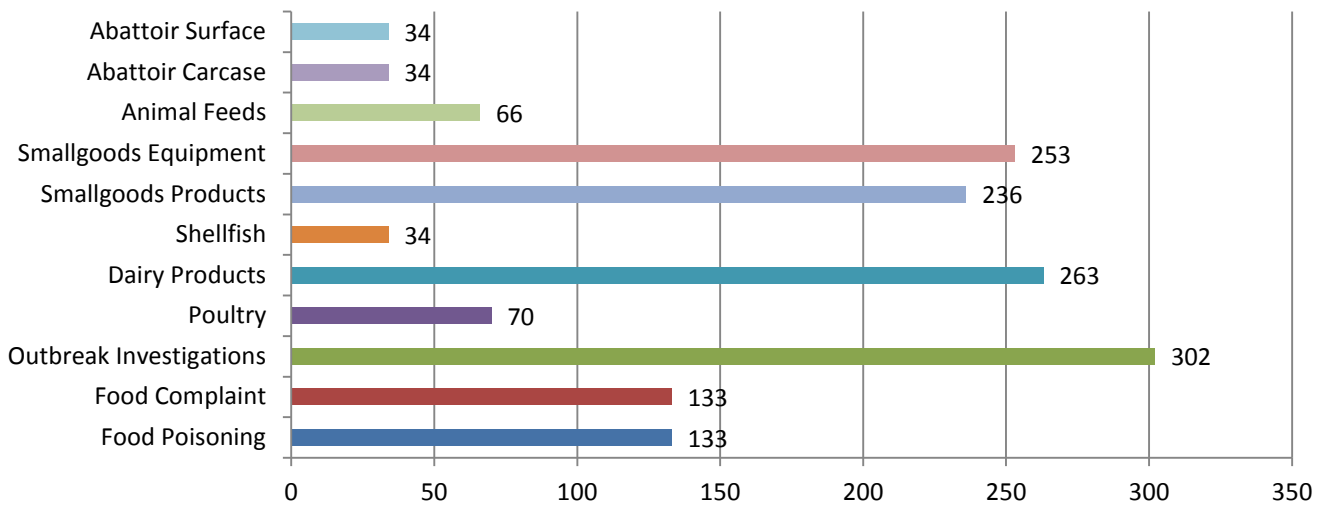


Figure 21 Kim Marks from the Food Unit assessing a dairy processor

First successful Food Act prosecution

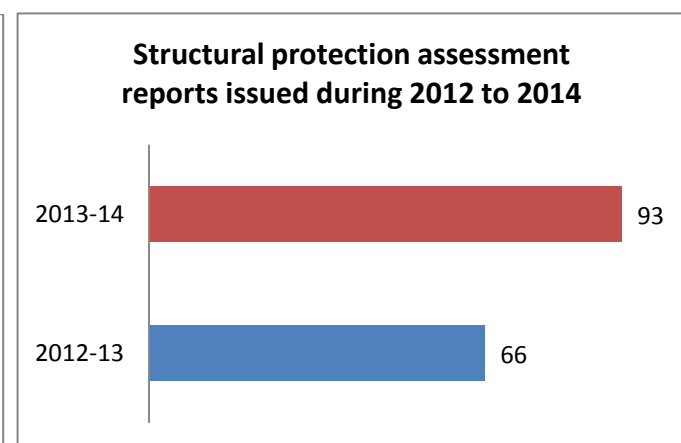
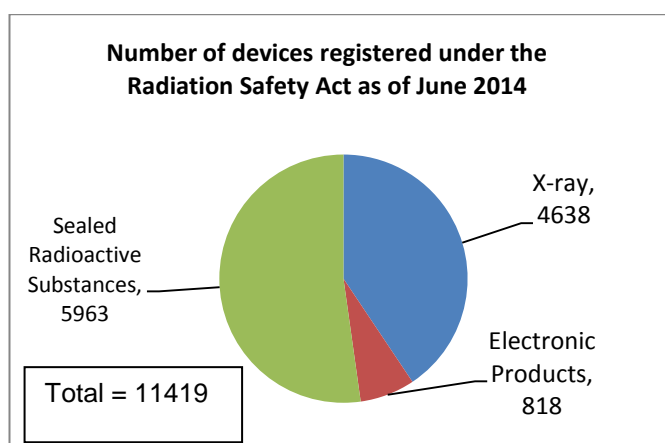
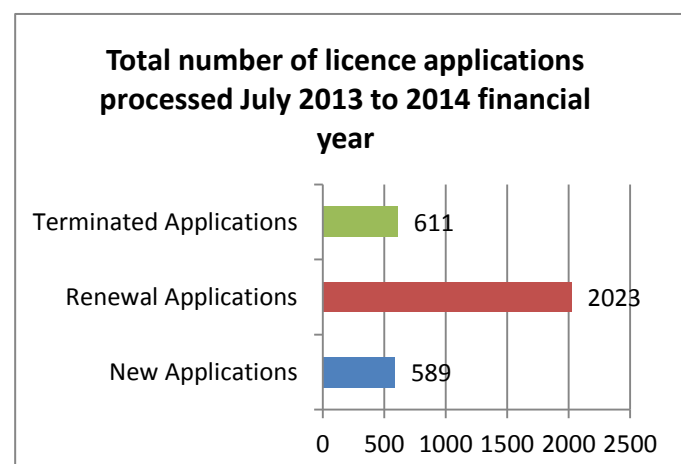
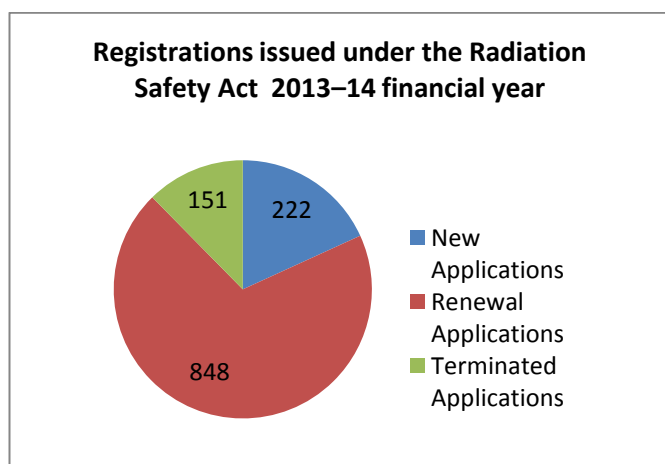
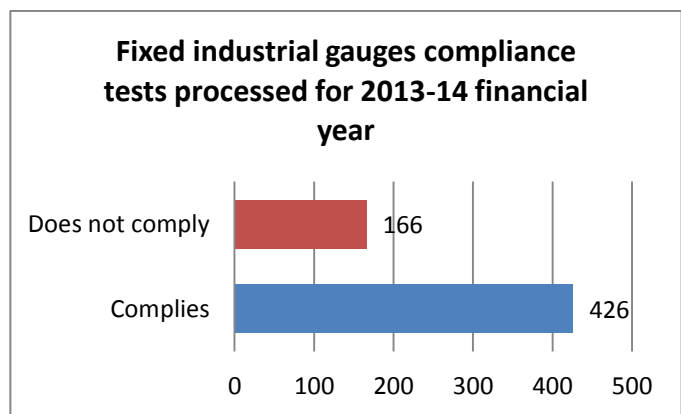
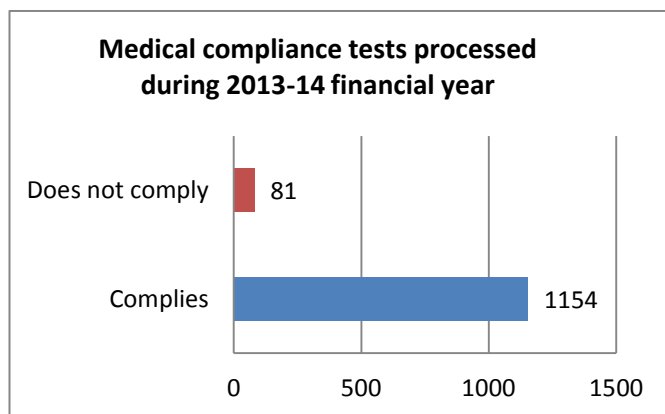
The first successful prosecution of a food business for breaches against the *Food Act 2008* has been undertaken by the Food Unit. The food business was convicted of four offences under Section 22 (1) of the Food Act for failing to comply with the Food Standards Code, and was ordered to pay a penalty of \$100,000 plus costs of \$896.90.

Breaches of the Food Standards Code included non-compliance with Standard 3.2.2: clause 6 (1) (a) – storage of food in such a way that it is protected from the likelihood of contamination; clause 19 (1) – cleanliness of food premises; clause 19 (2) – cleanliness of fixtures, fittings and equipment; and clause 24 (1) (b) – take all practicable measures to prevent pests entering the food premises.

Radiation Health compliance numbers (on behalf of the Radiological Council)

The Radiation Health Unit plays an administrative, supervisory and auditing role in the Radiological Council's compliance activities. Some of these activities include:

- processing and issuing of licences and registrations
- tracking of equipment and radioactive substances
- reporting and providing recommendations for structural protection and inspections and
- assisting the Radiological Council in the preparation and submission of the [Radiological Council's Annual Report](#) which details all the activities undertaken by the Radiological Council and the administrative support provided by the Radiation Health Unit.



Industrial use of radioactive sources and x-ray equipment

Within WA the use of radioactive substances and x-ray equipment isn't limited to the medical industry. Mining, construction and the oil and gas industries commonly use a range of radioactive sources and x-ray equipment for a variety of different purposes. A significant proportion of the Unit's workload is attributed to the large mining industry in the state. As an example mine sites commonly use fixed gauges for the purpose of analysing density, flow, volume and material presence. These gauges contain sealed radioactive sources which under the State's Act and regulations need to be registered and compliance tested on a triennial basis. A company must keep an active register of all radioactive sources on site including those that are in storage. Radiation Health staff are involved in site inspections and ensuring companies are meeting the requirements of the state and of the *Code of Practice for the safe use of fixed gauges* issued by the Australian Radiation Protection and Nuclear Safety Agency.

Radiation Incidents

There is also an obligation under Regulation 19A of the Radiation Safety (General) Regulations which requires registrants to notify the Council in writing of any abnormal or unplanned radiation exposures specified in the regulation. Incidents reported to the Radiological Council under Regulation 19A which then fall under Schedule 13 of the National Incident Reporting Framework are submitted to the [Australian Radiation Incident Register](#) (ARIR).

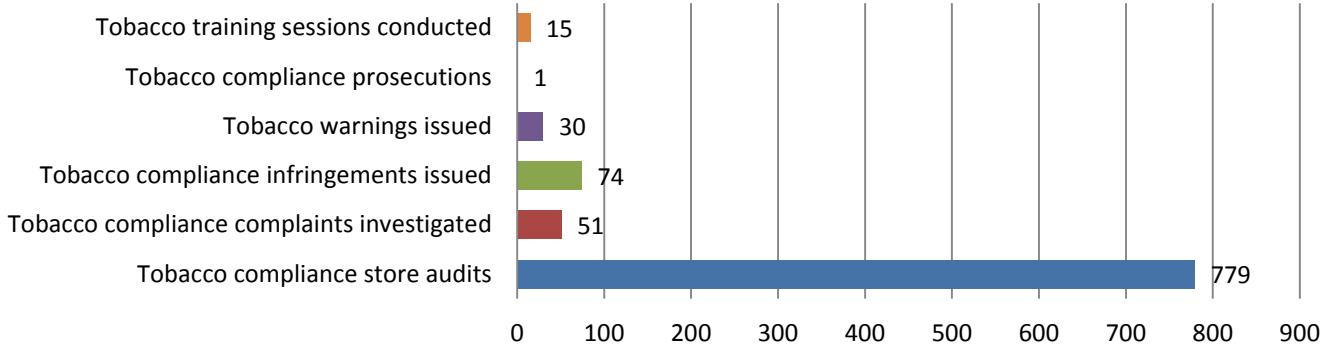
Whilst there is no certainty that all incidents are reported, Council encourages reporting and rigorous investigation of the cause of an incident as this provides a forum for improving work practices and minimising the risk of recurrence. WA incidents are documented in the [Radiological Council's Annual Report](#).



Figure 22 Example fixed radioactive gauge used on a mining site.

Science and Policy compliance numbers

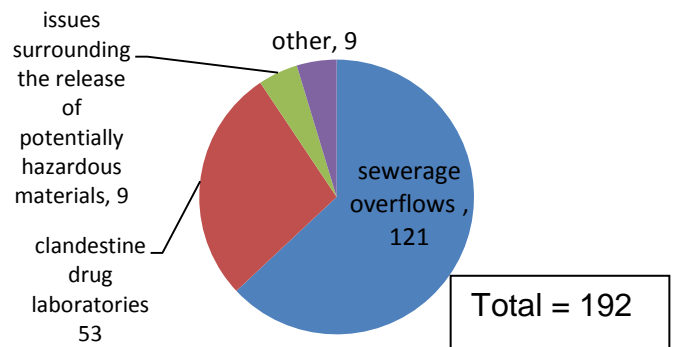
Tobacco compliance activities during the 2013-14 financial year



After hours emergency hotline response

Five staff across the Directorate rotate on a weekly basis providing 24/7 advice to issues affecting environmental health, including to the Department of Fire and Emergency Services where emergency events such as chemical spills and fire plumes have the ability to impact on health. We're looking to increase the number of on call staff to seven as part of our succession planning. Other common issues requiring our expert advice include clandestine laboratories, sewerage spills, and asbestos hazards.

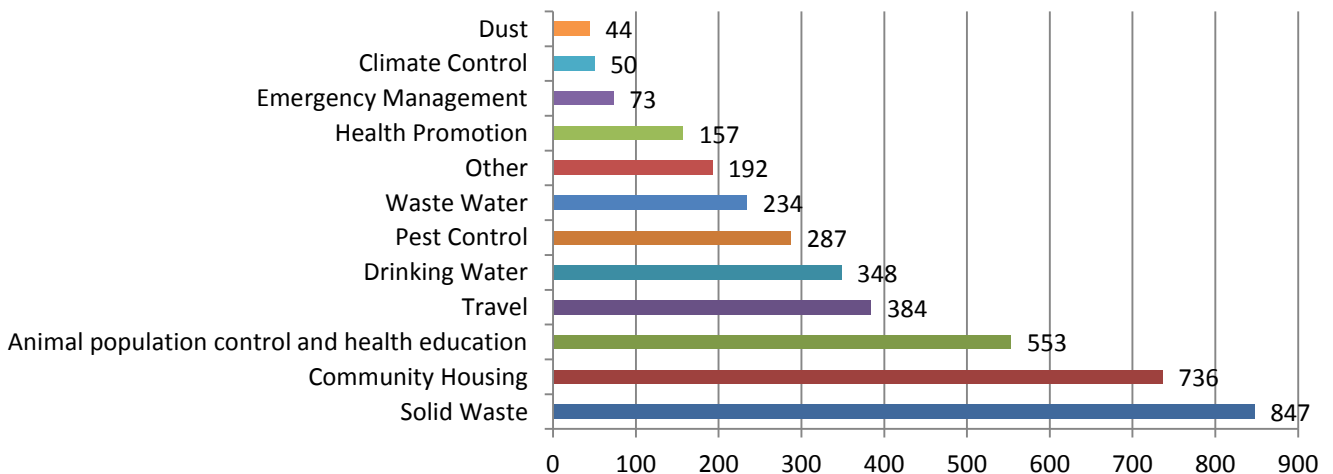
24/7 emergency hotline responses



Aboriginal Environmental Health Contracts

We fund 23 organisations to provide a range of environmental health services to remote Aboriginal communities. The tenacity of many of our regional environmental health practitioners is admirable as they continue to close the gap on services in remote settings.

Number of Aboriginal EH contract activities reported during 1 July 2013 to 31st May 2014



Spotlight on Aboriginal Environmental Health Contracts

Nirrumbuk Environmental Health responded to a large scale problem, by uniting their two teams based in Broome and Kununurra, and travelling to the Kutjungka region below Halls Creek for the purpose of removing car bodies present in the communities of Mulan, Balgo and Billiluna.

Abandoned car bodies provide shelter for vermin, pooled water allows for mosquito breeding, they are a fire hazard and there is a general danger that broken and sharp materials can pose for children who play in them. Despite their value for spare parts they can impact negatively on the home environment.

The team recruited local residents to participate in car body removal processes involving accredited training in the use of machinery such as the skid steer loader and bobcat. Over the course of two weeks, a total of 710 car bodies were relocated to the approved rubbish tip where they will remain until a metal recycling agency visits the area. Residents really noticed the difference this made to the general look of each community.

Photos: Top three photos show the abandoned car bodies being removed.

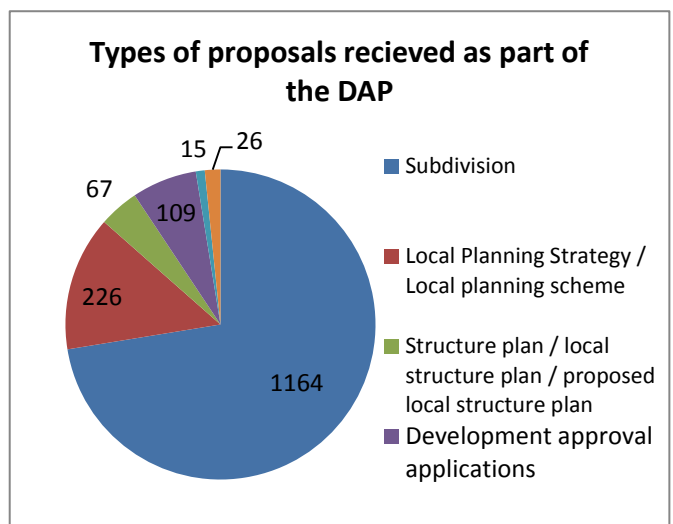
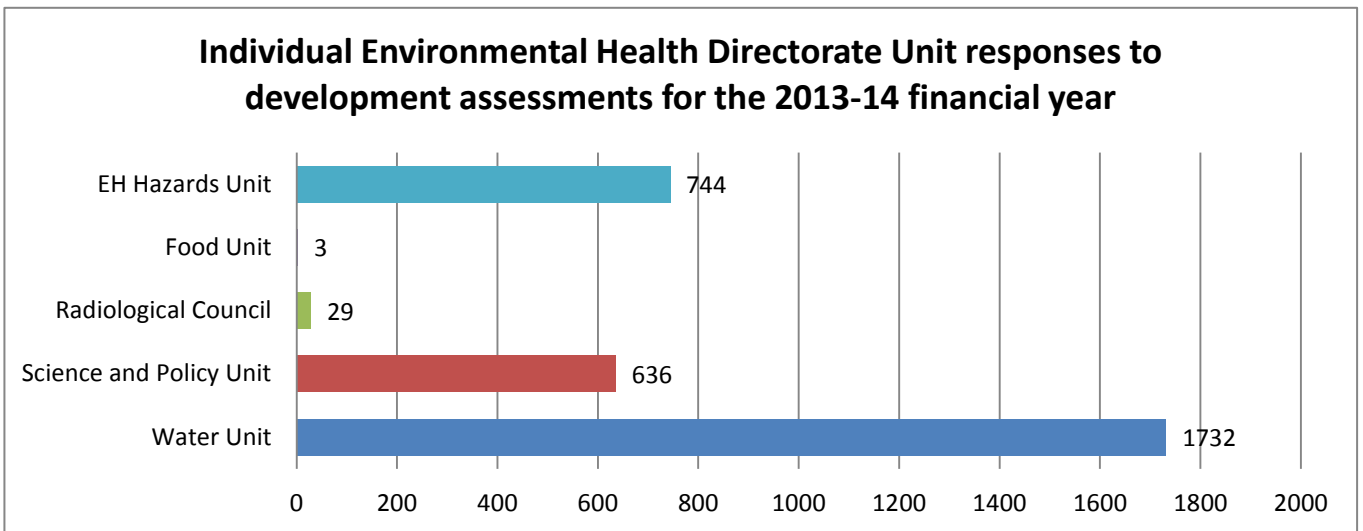
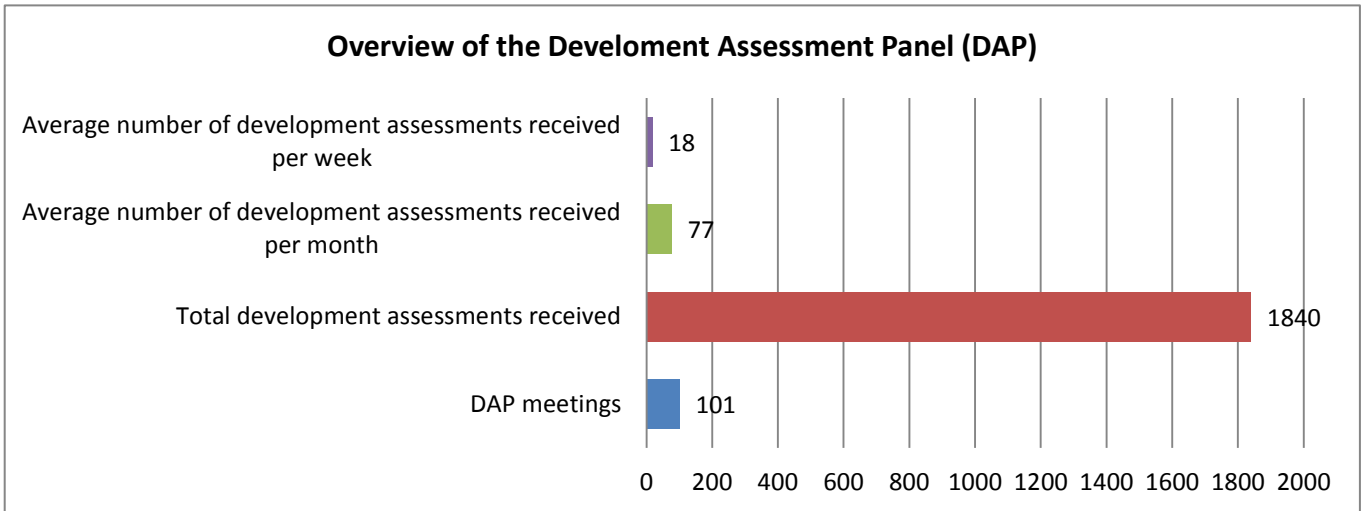
Bottom right: The Mulan recruits who undertook certification in the operation of a skid steer loader (from left) Donald Peck from Balgo, Donald Mathews from Mulan (seated in the loader), Ross Phillips (supervisor from Nirrumbuk) and Lawrence James Lulu (Mulan Community Chairperson)

Bottom left: Matthew Lester (left) presenting Lawrence James Lulu with his certificate for skid steer loader operation. Kenny Bin Jacob (Nirrumbuk East) the supervisor for the Kutjungka car body relocation is on the right.



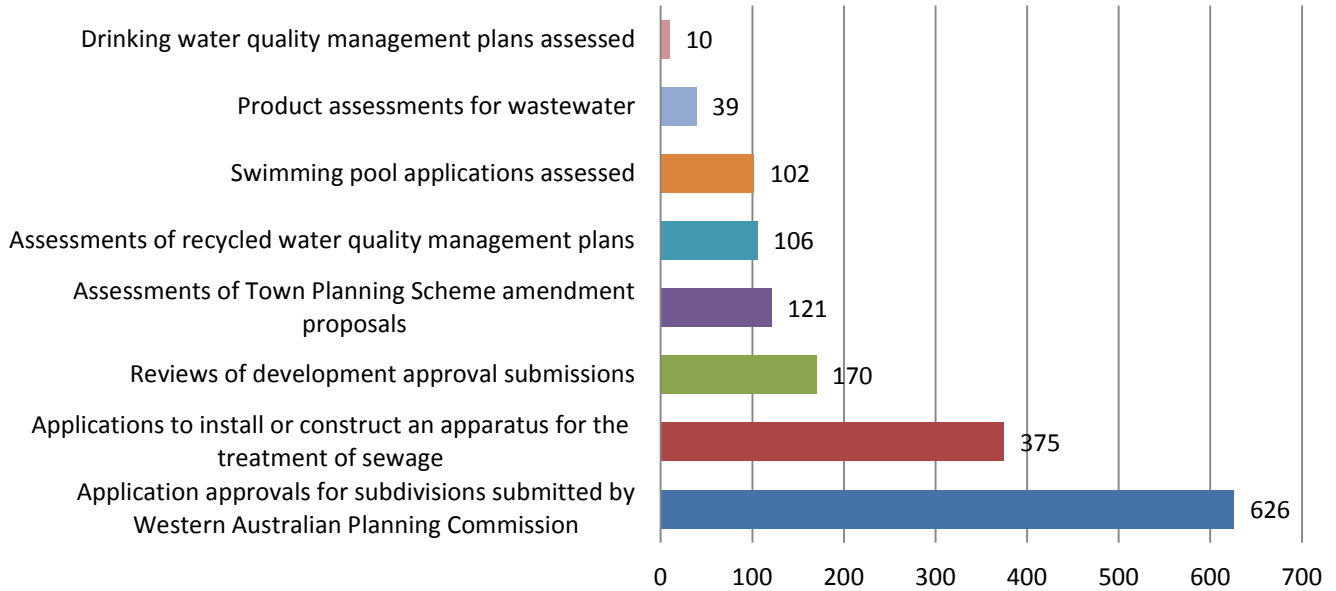
Development Assessment Panel (DAP)

The Science and Policy Unit coordinates the Development Assessment Panel (known as DAP) on behalf of the Directorate. This involves managing all incoming correspondence related to development proposals across WA to ensure appropriate input from key health experts. The following statistics provide an overview of development applications processed during the 2013-14 financial year.

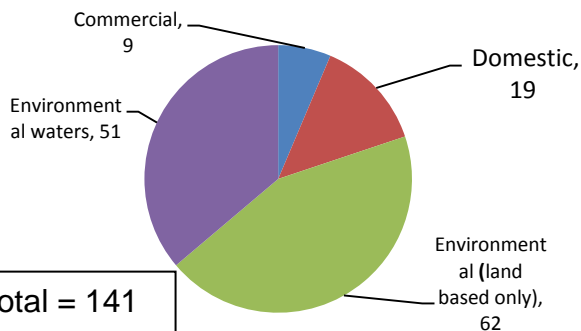


Water compliance numbers

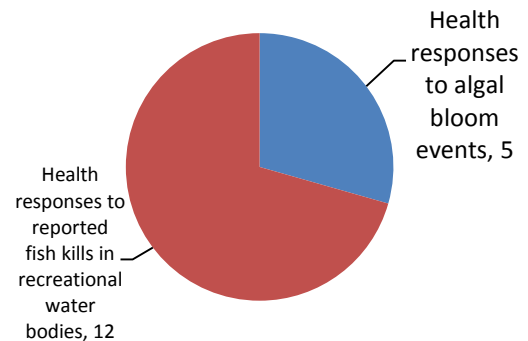
Water Unit assessments and approvals for the 2013-14 financial year



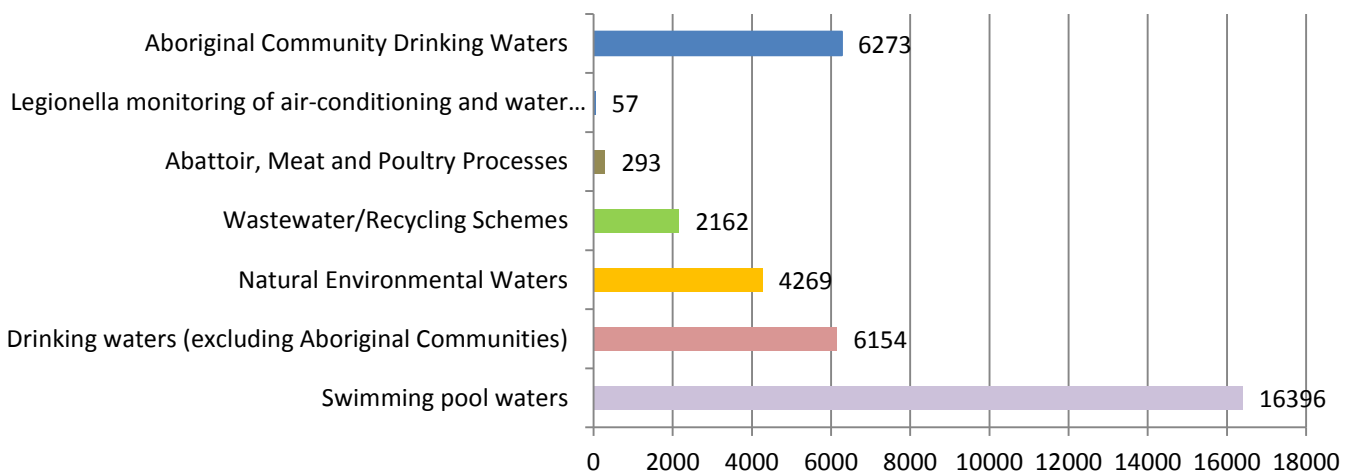
Type and number of responses to wastewater overflows / sewage spills during the 2013-14 financial year



Number of health responses to fish kill and algal bloom events during the 2013-14 financial year



Number and type of water monitoring samples collected during the 2013-14 financial year



Ten Thousand work items tracked

Between 2009 to 2014 the Water Unit recorded their ten thousandth work item, highlighting the vast amount of work requiring action. There has been a significant increase in planning and subdivision applications, swimming pool construction approvals, commercial waste water system assessments, recycled water quality management plan reviews, environmental water risk assessments, and drinking water quality monitoring.

Recycled water scheme audits

Water Unit officers travel considerable distances to audit recycled schemes. This year Dr Clemencia Rodriguez, one of our Senior Project Officers audited 17 regional recycled water schemes across southwest WA.

Treated sewage is recognised as a very valuable resource in many water scarce areas and its safe use is supported by the Department. Site visits let our staff assess compliance with the *Guidelines for the non-potable uses of Recycled Water in Western Australia* and, importantly, any site specific conditions of approval.

Dr Rodriguez considers that ‘getting out there’ is also beneficial because ‘scheme maintenance can become very routine, however an audit can spark extra attention and boost support for asset management plans and annual budgets’.



Figure 24 Above: Green parks and gardens watered using treated recycled water. Below: Warning sign advising people not to consume water from taps.



Figure 23 Above: Warning signs are required wherever recycled water is used. Below: A wastewater treatment sewage pond.



Committee representation

Our staff are represented on committees throughout Australia, helping to steer the agenda of numerous environmental health issues relevant to WA. Below is a small selection of some of these committees.

ASQAAC (shellfish committee) By Mark Fallows

The Australian Shellfish Quality Assurance Advisory Council (ASQAAC) exists as a government and industry represented body to assure the safe shellfish harvesting and production in Australia. As managers of the Western Australian Shellfish Quality Assurance Program (WASQAP), the Department of Health has representation on this Committee. The ASQAAC is currently working on reviewing the national standards that apply to the shellfish industry.

Food Regulation Standing Committee (FRSC) Caffeine Working Group By Catrina McStay

The Legislative and Governance Forum on Food Regulation (the Forum) develops policy guidelines to which Food Standards Australia New Zealand (FSANZ) must have regard when setting food standards. The Food Regulation Standing Committee (FRSC) provides advice on food policy to the Forum. In 2011, the Forum requested FRSC review the *2003 Policy Guideline on the Addition of Caffeine to Foods*, in light of the expansion of caffeinated products amidst public health concerns regarding dietary exposure. The Caffeine Working Group established by FRSC to undertake the review included a representative from the Food Unit. The "Food Regulations Policy Options Paper for the Regulation of Caffeine in Foods" was developed by this working group. A public consultation on the Policy Options Paper was held during September/October 2013, with the resulting feedback now under consideration by the food regulation policy bodies.

Implementation Subcommittee for Food Regulation (ISFR) By Stan Goodchild

The Directorate hosted a meeting of the Implementation Subcommittee for Food Regulation (ISFR) in August 2013. ISFR is a national group established by the Food Regulation Standing Committee and has the primary task of developing and overseeing consistent bi-national approaches to implementation and compliance with the Australia New Zealand food regulation system.

Our Food Unit Manager Mr Stan Goodchild is the Department of Health representative and also Deputy Chair of ISFR.

Asbestos Interagency Regulator's Group By Dr Peter Franklin

At the start of 2013 the Directorate reconvened the asbestos interagency regulator group, meeting for the first time in two years. Ten agencies are represented on the committee.

The primary goal of the group is to better coordinate asbestos management across the state to reduce, as much as possible, the public's exposure to asbestos fibres. Terms of reference for the group have been finalised, with five main aims and various action items for each aim. The group plans to meet every six months to advance the aims and actions outlined in the ToR.

Indoor air quality recommendations to the Air Quality Coordinating Committee By Mirella Goetzmann

The Air Pollution and Health Research Network chaired by Mirella Goetzmann Department of Health kicked off in August 2014. The Network brings together individuals from different organisations, tertiary institutions and government agencies interested in various aspects of indoor and outdoor air pollution. The Network, undertakes programs and actions identified in the Perth Air Quality Management Plan and informs initiatives of interest to the DOH. The Network meets quarterly and reports to the State Air Quality Coordinating Committee with the [Perth air quality management plan report card 2012–13](#).

Environmental Health Workforce Working Group By Vic Andrich

The National Environmental Health Workforce Working Group (EHWWG) was established in 2009 and operates under the guidance of the National Environmental Health Standing Committee (enHealth) of the Australian Health Protection Principal Committee (AHPPC).

EHWWG met in March 2014 to determine future activities required to address current and emergent environmental health workforce issues and these activities are reflected in an Action Plan that has been endorsed by enHealth. The current project is an 'environmental health workforce census' that is about to be commenced across Australia.

Western Australia Visiting Ships Panel (Nuclear) (WA VSPN) By Radiation Health

The Unit is on the WA VSPN and provides the State Radiation Officer and mobile monitoring teams under the Port Safety Scheme for nuclear powered warship visits.

Radiation Health Committee (RHC) By Radiation Health

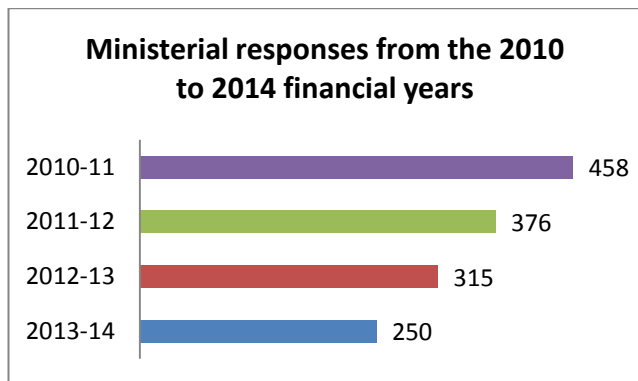
The Radiation Health Committee meets three times a year with the Secretary of the Radiological Council as the nominated representative for Western Australia. Staff members of Radiation Health also participate on working groups that report to the RHC in the development of National Codes of Practice and guidance.

Communication

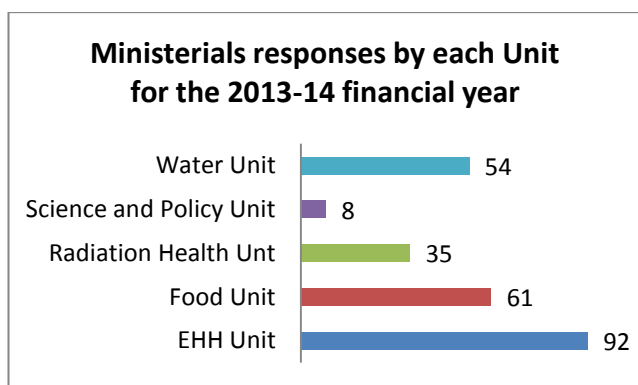


Communication is the golden rule!

Ministerials



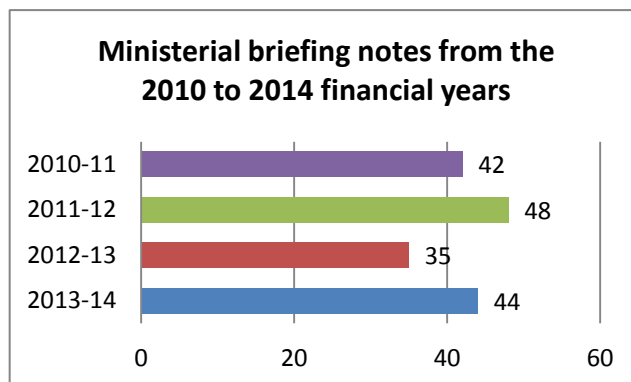
We assisted the Minister for Health in responding to **250** written community environmental health concerns.



Unit	Ministerial topic of most public concern
EHH	Use of Pesticides; noxious industries, laundries and bathrooms
Food	Front of pack Labelling; Hemp for human consumption; Alcohol labelling
Radiation	Solarium bans
SPU	Tobacco control
Water	Fluoridation of drinking water

Ministerial briefing notes

As part of the parliamentary process, we provided 44 briefings to the Minister for Health when requested to update on topical environmental health issues.

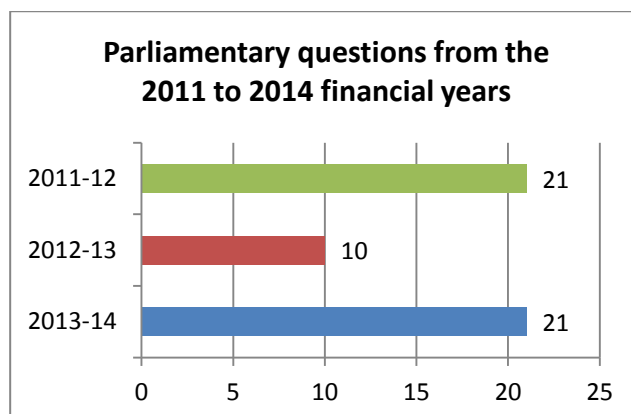


Contentious issue briefing notes

We provided **6** contentious issue briefing notes to the Minister for Health concerning, asbestos, mosquitoes, tobacco controlled purchase operations, hydraulic fracturing, and solariums.

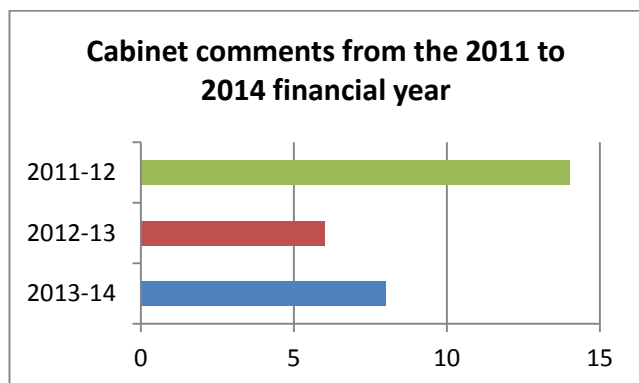
Parliamentary questions

We responded to **21** parliamentary questions.



Note: 2010-11 data not available for Parliamentary questions

Cabinet comments



Note: 2010-11 data not available for cabinet comments

Media releases/interviews

We issued **9** media releases across the state to advise or remind the community of potential public health risks for which extra vigilance was required. The previous year we issued 8 media releases.

Media release topics
Householders warned against carbon monoxide risk
WA gardeners urged to play it safe with potting mix
Ross River virus disease risk increases in south-west
WA Mosquito Management Course 2013
Pool owners warned of disease risk
Increase in biting flies across regional Western Australia
Algal bloom warning for Wellstead estuary in Bremer Bay
Mosquito-borne disease risk following Gascoyne and Pilbara flooding
Fine sends warning on e-cigarette sales

New website

The Department of Health's Communication Directorate took on a huge task of amalgamating hundreds of Departmental websites into one consumer based website www.healthywa.wa.gov.au. The site aims to consolidate health related information relevant to West Australians into one user friendly location.

Directorate staff worked tirelessly with the Communications Directorate to review and rewrite hundreds of consumer information sheets available at our website; www.publichealth.health.wa.gov.au, with the intention to relocate to the new site.

The next phase will look to redirect all consumers to the new Healthy WA website.

The Department is also developing a new "Corporate" website, designed for industry and government. Our staff will be required to undertake similar roles by reviewing industry information for relocation to the corporate site.



Mailchimp list server

We changed our electronic emailing system over to new program, called mailchimp.

The program provides a more efficient way of managing email subscriptions, and email templates, allowing the Directorate to email over 400 environmental health professionals subscribed to the electronic list.

Health promotion and professional development

Health promotion and professional development of the environmental health workforce and industry is a big part of our work. We make sure we get involved in every opportunity to promote good environmental health practices. Some examples for the year are provided below.

Outbreak investigation presentation at Curtin University

By Anna Anagno

Anna Anagno and Rebecca Delsar were invited to present to Curtin University 3rd year students undertaking the Food Safety Management 382 unit. The presentation included information on differentiating between sporadic cases and outbreaks, reviewing the outbreak investigation procedure, identifying roles and responsibilities of different government agencies followed by reviewing different case studies.

EH conference (poultry presentation) By Mark Fallows

A presentation was delivered at the National Environmental Health Australia Conference in September 2013 on the outcomes of a recent investigation of a *Salmonella* Typhimurium outbreak associated with poultry meat consumption in Western Australia. The presentation also highlighted how the primary production and processing standards of the *Australia New Zealand Food Standards Code* can be applied. One delegate wrote:

"It was good to see a Department of Health officer getting some really good hands on experience that should help in LGA and Department of Health dealing with Primary Production Standards that have now been legislated. Congrats Mark!"

EH Conference committee organisers By Anna Anagno and Mark Fallows

Anna Anagno and Mark Fallows from the Food Unit had a shared role on the 2013 EHA National Conference Committee. As well as assisting with general conference

administration, Anna and Mark were tasked with finding interesting speakers to present of food safety and/or nutrition. Topics covered included genetic modification of food crops, allergen management, food security, food advertising and obesity and seafood supply chains.

WA Health Conference (shellfish and poultry presentation) By Mark Fallows

The Food Unit delivered a presentation entitled – '*Monitoring environmental health standards through the food supply chain – an analysis of how risks are managed in WA's shellfish and poultry industries*'. This presentation was designed to give health practitioners an understanding of aspects of the food industry work and the work done by regulators in relation to food safety risk management.

SafeFish presentation By Mark Fallows

The Food Unit hosted a seminar on 1 April that was delivered by Alison Turnbull, Chair of SafeFish. SafeFish is a national co-operative focused on food safety and market access of seafood. Alison presented on SafeFish's role, discussed two case studies on biotoxins and viruses and detailed seafood safety specific issues including ciguatera and scombroid poisoning.

Australian Institute of Food Science and Technology seminar By Stan Goodchild

Stan Goodchild was invited to present on *Standard 1.2.7 – Nutrition, Health and Related Claims* of the *Australia New Zealand Food Standards Code* to industry and local government representatives at the ChemCentre and to industry representatives at a function organised by the Australian

Institute of Food Science and Technology at Brownes Dairy. The presentations included information on the Transitional Health Claims Standard 1.1A2, an overview of Standard 1.2.7 and implementation issues including the role of the Implementation Subcommittee for Food Regulation in developing guidance documents for use by industry and enforcement agencies.

Mosquito management training course

By Andrew Jardine

A [Mosquito Management Course](#) was held in Mandurah from 21-25 October 2013. Fifty one Environmental Health Officers, private consultants, military personnel and State Government employees from across Australia and New Zealand attended the course. The course covered theoretical and practical components of mosquito management to provide participants with the knowledge and skills to implement a mosquito management program in their own jurisdictions.

Combined CLAG forum

By Amber Douglas

The Contiguous Local Authority Group (CLAG) forum on mosquito-borne disease management was held at the request of a number of Local Government participants who are keen to make it an annual event.

Key themes included land-use planning as a means of managing mosquito-borne disease risk and resourcing mosquito management into the future. The forum was structured to allow participant input and comment throughout the day. It is hoped the information provided during the forum will assist participating LGs to enhance their mosquito management programs.

Spatial data workshop for WA Health and local government

By Andrew Jardine

We hosted the Environmental Health Spatial Data and Planning Workshop which explored the use of spatial tools offered by Landgate such as the Shared Land



Figure 25 Practical skills are taught to attendees of the mosquito management course

Information Platform (SLIP) and Interest Enquiry. Our aim is to improve the use and communication of environmental health hazard data for other Government agencies and the general public. We are currently developing risk based maps for WA on mosquito-borne diseases to be included in the Landgate Interest Enquiry to inform prospective buyers of the risks of mosquitoes associated with property purchases.

Aerobic Treatment Unit (ATU) training

By Alan Richard and Henry Tan

Water representatives were invited to present at the first WA course on servicing and designing ATUs, held at the Polytechnic West TAFE, to update attendees on the Code, Policies, Standards and regulations relating to onsite wastewater treatment,

disposal and ATUs. There was a strong focus on explaining the use of wastewater flows to size an apparatus, the impact soil type and site conditions have on the effectiveness and size of irrigation/infiltration areas. The aim is always to ensure that onsite waste disposal systems in unsewered areas will function well in the long term.

Water talks in the North-West

By Richard Theobald

A full day of water topics training was delivered at the North-West Environmental Health meeting in Broome.

Richard Theobald, Manager of the Water Unit, presented eight different sessions to remote region local government and industry health professionals. Topics covered potable, recreational and environmental water issues, onsite wastewater treatment and disposal, sewage

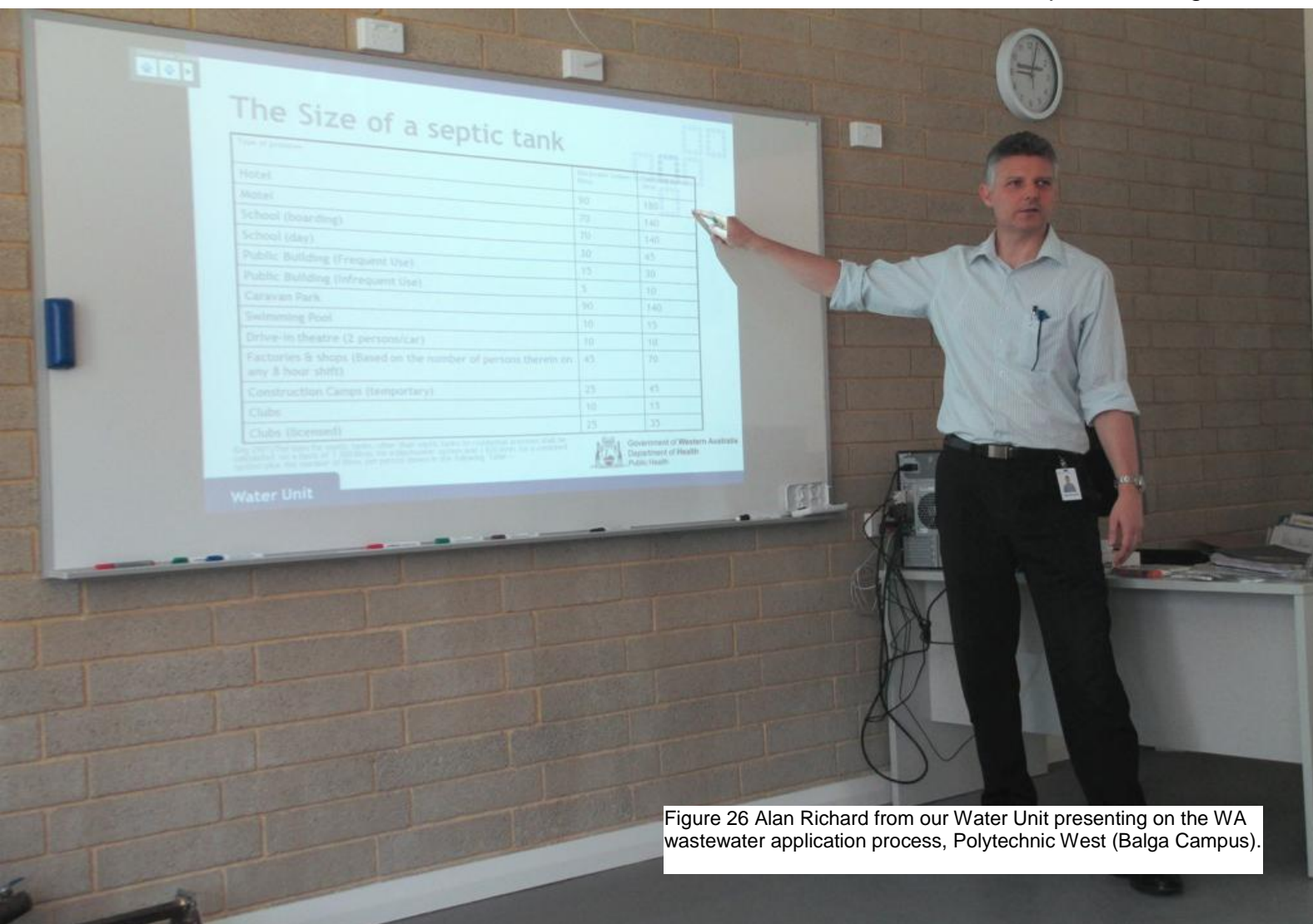


Figure 26 Alan Richard from our Water Unit presenting on the WA wastewater application process, Polytechnic West (Balg Campus).

system maintenance and the provision of services in remote Aboriginal communities. Regional personnel frequently have large jurisdictions and wide ranging responsibilities. The information sessions provided the opportunity for regional personnel to address any concerns in person with a Department of Health representative.

Emergency Management Training

By Lindsay Gillam

We hosted five 2-day courses on emergency management, two in the Metro area, and three in regional areas, including the Great Southern, S/W and Kimberley regions.

The courses are intended for local government EHOs, however a number of general public health practitioners attended. These included OH&S staff, risk management officers and hospital staff. Over 100 participants attended all courses.

In view of this demand further courses are planned in regional centres over the next 12 months. The support of local governments has been paramount with conducting the courses, with significant funding contributions allowing us to conduct the courses free of charge.

Tobacco training By Bruce Hawkins

Tobacco control staff conducted a range of training courses including:

- 10 training sessions were conducted at the WA Police (WAPOL) Academy for new police recruits.
- An annual training session conducted at Curtin University of Technology for students in the Health, Safety and Environment School of Public Health.
- Two sessions at the City of Perth in November and December 2013 to assist them with preparing for making the City's malls smoke free.

- Ongoing training sessions for Local Government Associations throughout WA is continuing.

Training material for retail sellers of tobacco was created in the first quarter of 2014 and is now available online.

Our staff



Our staff are our most important asset

We do everything possible to support staff training, professional development and career progression.

Julie Phelps continuing her education – Masters of Public Health

Congratulations to Julie Phelps of the Water Unit on completing a Master of Public Health (with Distinction), in the area of disaster preparedness and biosecurity. Julie said it was a 'long time between drinks and graduations', and noted the dramatic changes in technology since her undergraduate degree and completing the mainly computer based Masters. While enjoying the flexibility of external courses, Julie also appreciated being granted study leave to attend the more interactive block units.



Figure 27 Julie Phelps, from the Water Unit at her graduation ceremony.

A highlight of her extended study period was being seconded to Directorate CHOGM activities in 2011. Julie found that '...practical exposure to the intense level of thought, which went into the planning and preparedness stages for such an event, and the broadness of the stakeholders, was eye opening and exciting'.

Ryan Janes graduates - Masters of Infectious Diseases

Ryan reports "I initially wanted to enrol in postgrad studies to further my career development. I have always been interested in public health and clinical aspects of disease, so when I found out about the Master of Infectious Diseases course at UWA I thought it was exactly what I was looking for. Four years later, I completed the course.

My studies covered various areas of infectious and communicable diseases, but had a particular focus on tropical medicine and the public health risks and epidemiology of diseases endemic to tropical and developing areas of the world. The course has increased my knowledge of mosquitoes and mosquito-borne disease, which is great for my current role with Environmental Health, but has also given me the opportunity to develop other skills related to research, writing, reporting, fieldwork, and public speaking".



Figure 28 Ryan Janes, from the Hazards Unit, collecting mosquito samples as part of his Masters project.

Llew Withers, winning awards all round

Outside of working life, Llew Withers from the Hazards Unit, is very active supporting the community through Rotary and Scouting. He is able to bring these two passions together by being a member of the International Fellowship of Scouting Rotarians. This year he was recognised as a Paul Harris Fellow by his Rotary Club Attadale and was awarded a Silver Wattle Award recognising his 20 years of dedicated service.

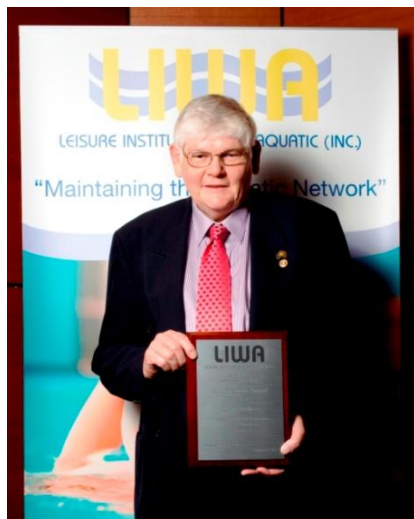


Figure 29 Llew Withers receiving an Achievement Award from the Leisure Institute of WA.

Within Llew's professional life he was awarded an Achievement Award in August by the Leisure Institute of WA recognising Llew's valued contribution to the Aquatic Industry over many years. And in June 2014, the Environmental Health Association (Australia) Inc. recognised Llew's contribution for over 30 years to the Environmental Health Profession, especially supporting country environmental health officers, with a Life Membership Award.

Abbey Potter graduates

Abbey reports “I began studying a Graduate Diploma in Secondary Education (Science) on a part-time basis during my previous position as a lecturer in Veterinary Physiology at Murdoch University. I have always enjoyed teaching and felt that it would better prepare me for a career in science education. However, my career took a welcome turn midway through my degree,

when I joined the Mosquito-Borne Disease Control team.

I had undertaken a PhD with them some time ago, so it was a natural progression to find myself back here. I decided to continue with my studies as it was a flexible course that taught wide and varied skills on topics such as science communication, innovative teaching practices and inclusivity of minority groups in society. These skills are particularly relevant in this position as a primary responsibility is to conduct training courses and speak at workshops on mosquitoes and mosquito-borne disease. The degree took a few more years than anticipated, due to the addition of a couple of children along the way, but after four long years I will be graduating this year”.



Figure 30 Abbey Potter graduates with a Diploma in Secondary Education (Science)

Jim Dodds, part of Leadership WA

Jim Dodds was nominated by the Acting Director General to take part in the Signature Leadership Program of “Leadership WA”. The program aims to foster strong leadership philosophy and practice that goes beyond personal and professional development. It is about building stronger and better communities and helping its graduates to give back to communities. The program runs over a year and includes many experiences. Jim has already been to the Pilbara to experience communities and the mining industry and will soon visit rural towns and communities in the Wheatbelt to hear first hand from leaders in that part of WA. Participants are expected to contribute their knowledge and life experiences to help the cohort see and understand issues from a different perspective.

Continuous planning

The Directorate adheres to an annual planning and reporting program designed to:

- continuously review and implement our strategic and operational priorities
- enhance our services
- support innovative thinking and
- improve environmental health for West Australians.

This year the program introduced a World Café to allow staff from across the Directorate to discuss our planned priorities for the coming year, provide suggestions on areas to improve, and share big ideas.

There was a great turn out with many useful ideas shared amongst staff. Ideas were presented to management for consideration.



Giving back to the community

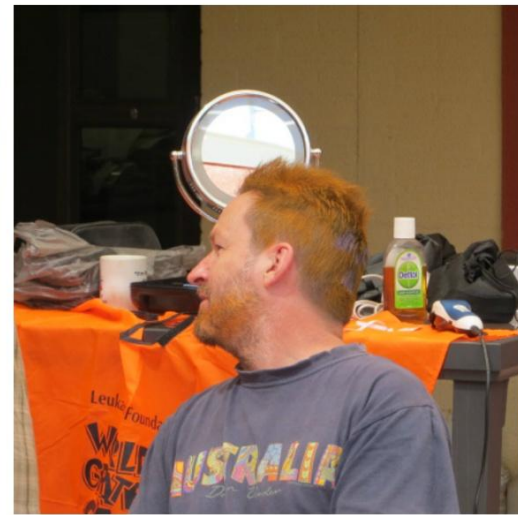
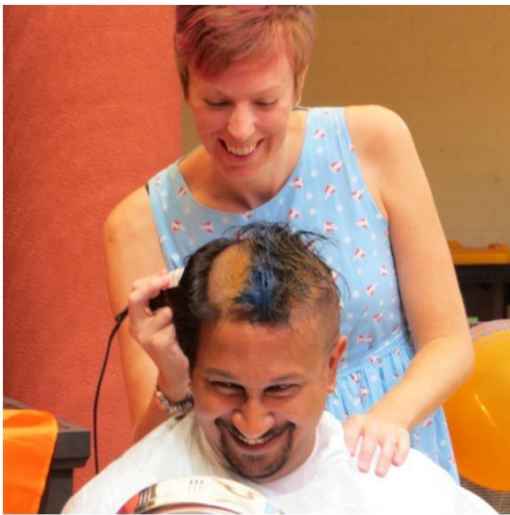
This year we added a twist to our monthly morning teas, with each Unit organising a fundraising event for a charity of their choice. This inspired a lot of creativity, team collaboration and a whole lot of fun!

Radiation Health Unit, in partnership with our Communicable Disease Control Directorate, decided to host a morning tea to

support the Leukaemia Foundation in the World's Greatest Shave.

A few staff went the whole way and shaved their heads, with other staff opting to dye their hair a variety of wild colours or wear a wig.

The event raised a total of \$746.65.



Water Unit staff chose Earth Day as their charity, which supports many water aid projects in developing countries. The event included a water related quiz – *how many litres of water does it take to produce X food item?* Competitions included the best dressed recycled outfit and a water spoon race. A great morning with \$140 raised.

Next was the Science and Policy team who decided to raise awareness for World No Tobacco Day, with money from the event donated to the WA Cancer Council. The day included a bingo competition with \$153.05 raised.



By far the most creative event was organised by the Hazards team, who decided to put on a bike race with a difference. The winner was the person who could ride the slowest and cross the finish line last, without putting their feet on the ground! With ten eager contestants, who won but the boss – well done Jim!

Hazards chose to support the White Zebra Foundation. An awesome fundraising effort with \$633 raised.

Altogether the Directorate has donated \$1672 after hosting only four events!



Fit and fabulous

We're not only a good looking bunch, but we are fast becoming a fit and fabulously healthy team.

Staff are jumping on board the healthy workplace wagon and taking part in daily bootcamp sessions before work or during their lunch breaks.

Staff of all ages are joining in and really enjoying the networking with people outside their teams, the flashback of primary school games such as leaderball, team races, and high intensity interval training.

Don't be surprised if you see a few leaner and muscular staff next time you visit Grace Vaughan House.



Figure 31 Bottom: The regular boot campers celebrating their hard work with a healthy breakfast together. Top: Training still happens in the rain!

Occupational Safety and Health

Our OHS officers continued to drive a number of safety programs.

Sub-committee

The Grace Vaughan House (GVH) OHS Sub-committee met quarterly, reporting to the main Department OHS Committee in East Perth. Whilst most issues relating to safe work practices were addressed, some also remain outstanding, and will continue to require minor attention during 2014/15.

Fire Warden

We appointed a permanent Chief Fire Warden and a program conducted through a recognised training provider of evacuation protocols has been introduced.

Incidents

Three incidents were reported during the year. The first two related to breaches of protocol following receipt of packages of potentially hazardous materials in our mail room. Although staff safety was not seriously compromised at the time, it alerted us to the fact that we again needed to review our protocols, undertake further staff training and install an appropriate device to house packages of this nature in the short term.

In the third case, an officer was slightly injured in a vehicle collision. The other driver was charged immediately by Police Officers at the scene. Fortunately our officer has fully recovered, not so the Government vehicle involved, which was extensively damaged.

REACH health and wellness checks

One great initiative we introduced was accessing the Roaming Education and Community Health (Reach) Program. The program is conducted free of charge through the Central Institute of Technology. It

involves trainee nurses working under the supervision of fully trained personnel who attend our workplace and conduct checks of cholesterol levels, blood pressure, sugar levels and girth measurement in addition to providing general health information. Over 40 staff attended the day-long event and feedback on the exercise was excellent. We intend making this an annual event.



Figure 32 Cherine Glasson taking part in the REACH program

Remote travel policy

Although the Department has some documentation relating to remote travel requirements, we believe our circumstances at GVH are quite unique. A number of our staff travel far off the beaten track such as very remote Aboriginal Communities. We have prepared a draft policy which is presently being reviewed, and which describes issues such as use of satellite phones, additional spare tyres, comprehensive first aid kits, GPS devices etc. This document will be finalised in the forthcoming months.

Our priorities for 2014-15



This year we plan to do the following:

Business Unit

1. Commence distributing quarterly internal business unit news letters to raise staff awareness of services and the need for adherence to Department of Health (DOH) policies and procedures.
2. Commence recording incoming topic based calls received at reception and provide quarterly reports to the level 8 managers with a view to identifying EH areas that may require additional FAQ information to be made available for the public, or require additional staff to assist taking phone calls.
3. Scope and report on the feasibility of the Australia Post online payments option for licensing and registration.
4. Identify and train other BU staff to upskill licensing and registration services knowledge across the EHD.
5. Conduct an audit of mobile phones and data packs issued across the Directorate with a view to rationalising the use of these services.
6. Assist SPU with the development of approved Aboriginal health community 5 year contract documents.

Environmental Health Hazards Unit

1. Develop a final report on adventure and obstacle races and activities that identifies risks, medical services required and provides appropriate management guidance.
2. Develop and publish a Guideline and Operational Directive on *Legionella* management in hospitals
3. Develop a factsheet on *Psittacosis* for publication on the DOH and Public Health websites.
4. Update the DOH event guidelines (sections medical, general, toilets) for publication on DOH and Public Health websites.
5. Complete Phase II of the Environmental Health Atlas. (Expect a phase III for 2015-2016)
6. Review outcomes of a survey of public awareness of mosquito-borne disease risks and draft a new communications plan and tools based on survey outcomes.
7. Develop DOH policy on mosquito impacts related to land-use planning and location (# cases, frequency, and proximity to wetland) and assign risk to localities to integrate into online repository (Landgate).
8. Review Regulations 88, 89 and 3 of the *Health (Pesticides) Regulations 2011* and amend as required.
9. Develop appropriate approvals process and draft written authorisation for drum recycling, including PeAC consideration of DER report on taking control of drum recycling.
10. Review training for soil fumigation to meet needs of end users and ensure that public and worker health is protected.
11. Develop MTBE Methyl Tertiary Butyl Ether guideline for circulation and publication on DOH and Public Health websites.
12. Develop proposal paper to Science Needs Committee (shared by the DMP) for funding to develop threshold of no toxicological concern (TNTC) for water chemicals. Engage a toxicological consultant to develop the TNTC.
13. Develop and finalise MOU with DMP to allow DOH to assess processes and chemical criteria of fracking proposals.

14. Develop and promote Guidance Note on assessment and management of fire damaged asbestos.
15. Develop and promote Guidance Note on assessing the condition and health risks associated with asbestos containing materials.
16. Produce information and guidance for the public on hazardous metals including mercury and lead for publication on the DOH and Public Health websites.
17. Develop a written guideline and notification and assessment process for lead exposure.
18. Review all current factsheets on pesticides and update information on DOH and Public Health websites as necessary.
19. Research and develop guidance information on Multiple Chemical Sensitivity for publication on PH and DOH websites.
20. Review and complete sulfometuron drinking water guideline.
21. Review existing international guidelines on vanadium in drinking water and develop DOH guideline.
22. Publish outcomes of investigations into a locally-acquired case of dengue fever in a peer-reviewed journal
23. Formalise a national exotic mosquito response protocol through NAMAC with input from key agencies and implement recommendations at Perth Airport
24. Complete a feasibility study of the use of a helicopter to apply larvicides for mosquito control in the Swan and Canning Rivers catchment
25. Review existing resources and develop standard responses to routine stakeholder enquiries about common EHH issues (e.g. mould, fire-damaged asbestos, public events, clan labs, personal services)
26. Administer Year 2 (2014-15) of FIMMWA funding, including advertising awarding and funding of competitive research grants and grants to Local Government.
27. Completion of Health Risk Assessment of fracking in WA.

Food Unit

1. Refine and streamline assessment, auditing, compliance and reporting processes for the administration of the Primary Production and Processing Standards of the *Australia New Zealand Food Standards Code* across food industries including eggs, dairy, meat, poultry, sprouts and bivalve molluscs. Adopt a State based approach for the consistent implementation of the Standard, consistent with national objectives
2. Commence the review of the *Food Act 2008* (the Food Act) and the *Food Regulation 2009* as required by section 146 of the Food Act
3. Review the "*Food borne illness in Australia annual incidence CIRCA document 2010*" when released to determine any impacts and identify opportunities for possible intervention in WA
4. Review and evaluate the *WA Food Regulation: WA Health Regulatory Food Safety Auditor Approval Process Policy* and *WA Food Regulation: Department of Health Management of Food Safety Auditor Policy* to determine their efficacy and report recommendations on operational improvements for WA
5. Communicate the outcomes of the Compliance and Enforcement Policy review to stakeholders
6. Undertake analysis of the Food Unit sampling program data to assist in evaluating the relevance and cost effectiveness of the current program and risk assessment activities, and make recommendations on sampling plan priorities

7. Draft and implement an incident response framework relating to biotoxins in WA seafood that encourages a cooperative approach across industry sectors and government on a regional and state-wide basis.

Radiation Health Unit

1. Review, identify and amend reporting format for the Radiation Environmental Analysis Service to include the additional information requirements of Health Corporate Network.
2. Choose two of the Radiation Health Unit incident specific guidelines and conduct a desktop exercise on each to evaluate the appropriateness of the guidelines and identify any gaps in training and equipment for the two specific scenarios.
3. Review *Safety Report Series No. 79, Managing Regulatory Body Competence*, published in December 2013 by the International Atomic Energy Agency, and tailor the existing training program for Radiation Health Unit staff to align with the objectives of this publication.
4. Investigate calibration methods for Industrial Radiography 200 kVp x-rays by collecting field-site x-ray spectra and evaluating these against ISO spectra.

Science and Policy Unit

1. Scope out the requirements for conducting the fourth “Environmental Health Needs Survey for Remote Aboriginal Communities” in a minimum of 200 communities by the end of the financial year.
2. Develop a home hygiene kit resource for wider application in remote community locations which identifies and educates on the maintenance of appropriate health hardware in the home.
3. Evaluate and report on the burden of Environmental Health caused conditions in the remote Aboriginal communities of Dampier Peninsula, Wiluna and Mid-west to identify evidence based planning and service delivery.
4. Review and evaluate twenty three Aboriginal EH contracts against Department of Health procurement requirements, and identify areas to minimise administrative burdens associated with the contracts.
5. Prepare a business case to HIN to support the investment of resources allocated to the EH database project to support better management and sharing of EH surveillance data.
6. Work with the Food Unit to streamline the management of food related data by implementing an improved system of data capture, as well as incorporate automated data analysis tools for improved reporting.
7. Draft a scoping tool for “industrial estates and public health considerations” to enable developers to better understand public health impacts and improve information submitted for new industrial estates as part of the development assessment process.
8. Conduct emergency management training courses in the Mid-west and Southern Goldfields local governments to support the development of knowledge and skills for responding to environmental health emergencies.
9. Review the constitution of the Environmental Health Professional Review Board and prepare a report with recommendations to the EDPH for future service prerequisite provisions of the board.
10. Represent WA's position on a proposed document to be published by enHealth, relating to a national Emergency Response Plan for Communicable Disease and Environmental Health Threats/Events of National Significance. The draft Plan will be available later in 2014 and published during the 13/14 reporting period.

11. Mentor EHD project officers who want to analyse existing EH data and prepare articles for publication. This is part of the strategy to improve the national/international awareness of the Directorate's management of environmental health issues relevant to WA.
12. Evaluate the effectiveness of the 2014 controlled purchase operations for tobacco retailer's compliance with the Tobacco Regulations and report on strategies to support future compliance concerns.
13. Finalise and distribute the tobacco training package for retailers and enforcement agencies to aid with compliance and enforcement of the Tobacco Regulations.
14. Develop and release a Toolkit for local governments to assist in the management of people living with hoarding and domestic squalor.

Water Unit

1. Identify all sewage schemes operated by local government and determine their gazettal status.
2. Undertake site visits in conjunction with relevant local government authorities/other agencies to determine health risk factors and water quality monitoring requirements for primary contact recreation activities in dams that have been made available for public recreation.
3. Renew/update all existing Memoranda of Understanding for Drinking Water between the Department and licensed water service providers and execute a new one for a new service provider.

Cross-unit projects

1. Develop and publish a discussion document and draft guideline on how to assess the health risk from Mould in domestic and public buildings and how to remediate mould affected spaces.
2. Complete a desktop audit of environmental health risks, roles and responsibilities in correctional institutions to ensure that procedures and practices comply with an appropriate standard of environmental health.
3. Draft new Body Art and Personal Appearances Guideline based on last year's public consultation. (expect phase III to take place in 2015-2016 to Upgrade Code of Practice)
4. Review Health legislation in consultation with Building Commission to identify that which requires amendment, or transferring to Building Legislation, including scoping cost and amount of work required.
5. Finalise drafting instructions to complete the review of the Health Asbestos Regulations.
6. Develop and implement a new 3-5 year contract with UWA and PathWest for provision of State-wide arbovirus surveillance and research.
7. Develop electronic forms and online processing pathway for PCO licensing and business registration as part of BU development of online and electronic licensing and payments.
8. Expand the functionality and reporting capabilities of the Pesticides data base.
9. Undertake health risk assessment of tattoo ink, effect of laser removal and report on composition of tattoo ink and safety.
10. Undertake literature review of existing indoor air quality policy and regulations and report on recommended amendments.
11. Prepared public information and awareness material for Asbestos Week 2015 and promote in collaboration with Communications Directorate.
12. Undertake a review of mosquito production, mosquito management and infrastructure of wastewater management systems in the north-west of WA.

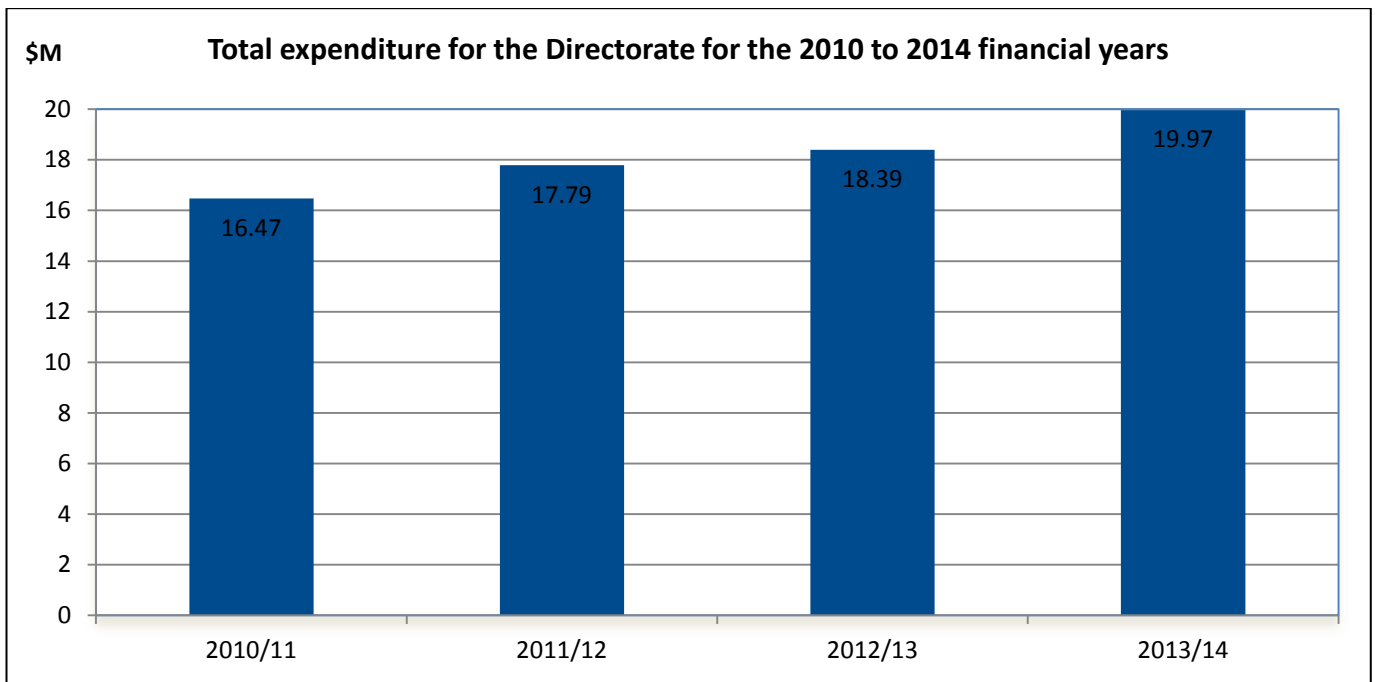
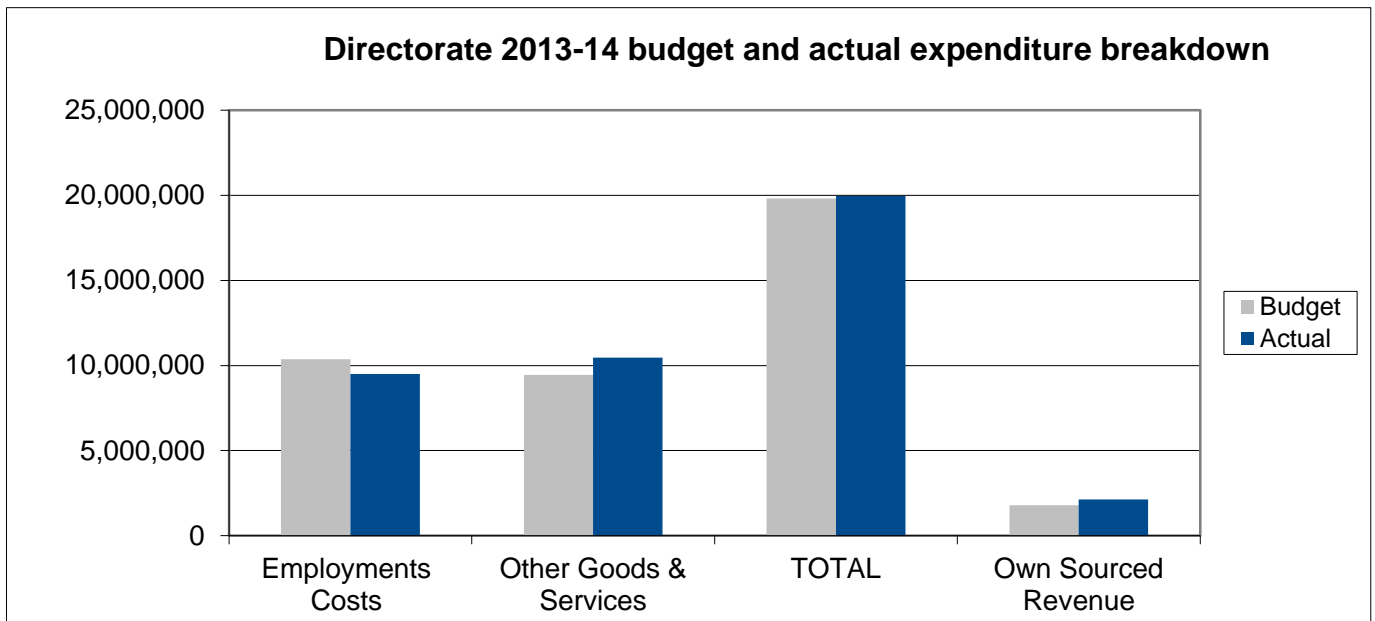


Our financial status

Using the state's resources wisely

Expenditure breakdown

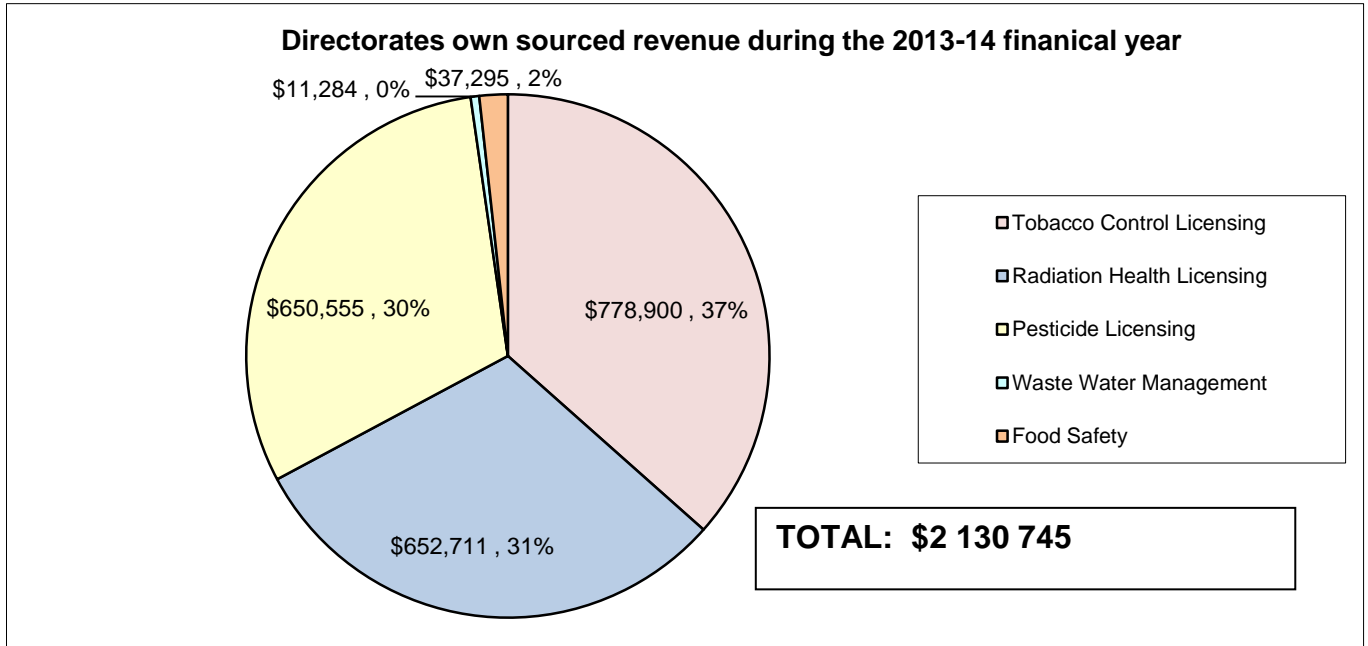
The total expenditure for 2013-14 was \$19.97 million which was slightly over the expenditure limit of \$19.82 million. This was possible due to increase in Own Sourced Revenue income by \$349,303. The Directorate's major expenditure areas are in employee expenses and Other Goods and Services. The employee expenditure has grown in accordance with salary increases allowed for by the Public Service and General Officers General Agreement. The Other Goods and Services costs also included operational expenses and GVH building maintenance expenditure.



Own sourced revenue breakdown

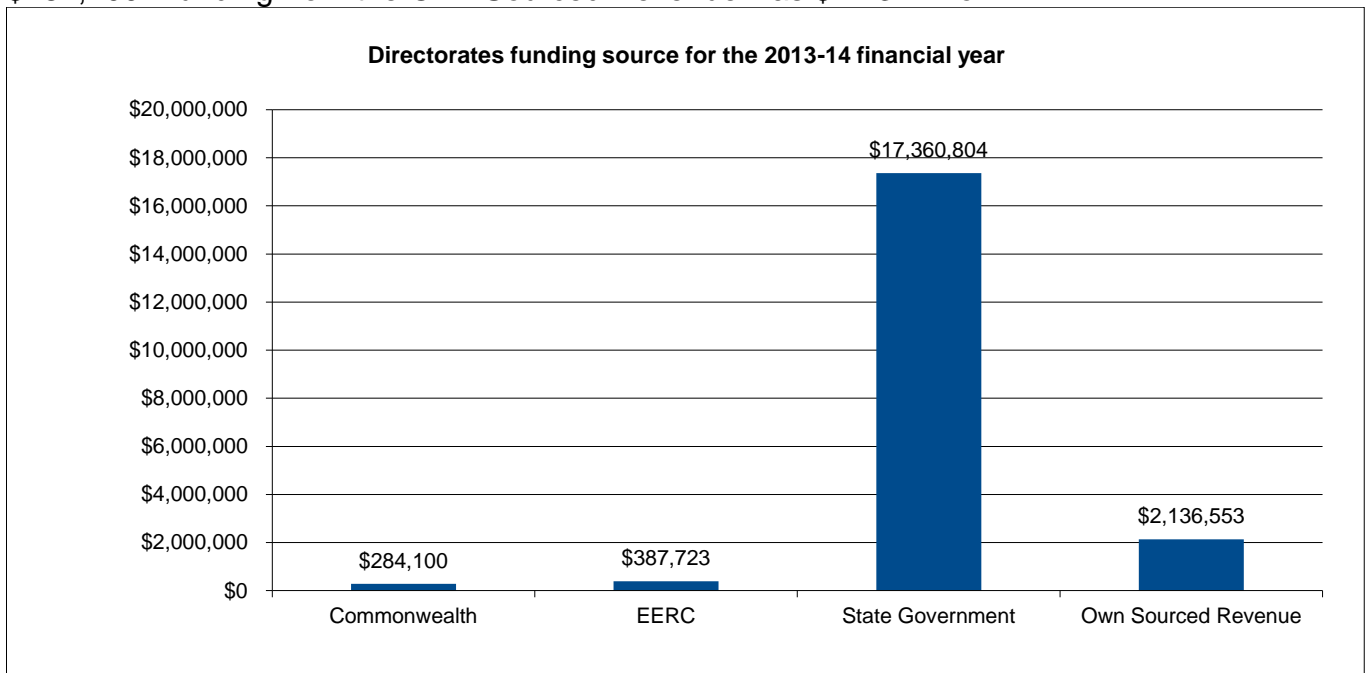
Income from licensing and registration activities increased by 20% above that received in 2012-13. This increase was due to an increase in licensing activities and growth in population in WA.

Revenue generated by Tobacco Licensing was used for 2013 Tobacco Retailer Compliance Survey in metropolitan WA. It also paid for the Tobacco Quit Line program expense.



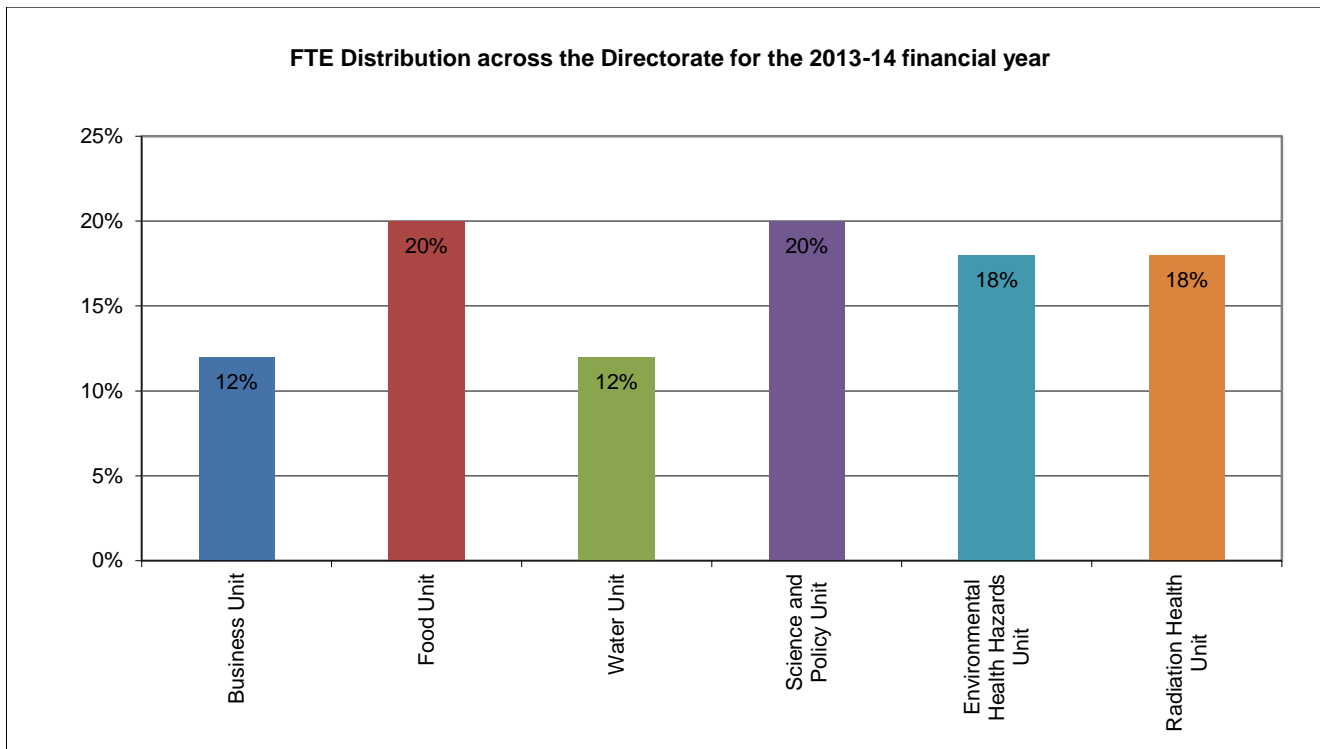
Where our funding came from

In 2013-14, funding for the operations of Directorate came from different sources. The WA State Government funded around \$17.7 million and the Commonwealth Government contributed \$284,100. Funding from the Own Sourced Revenue was \$2.13 million.

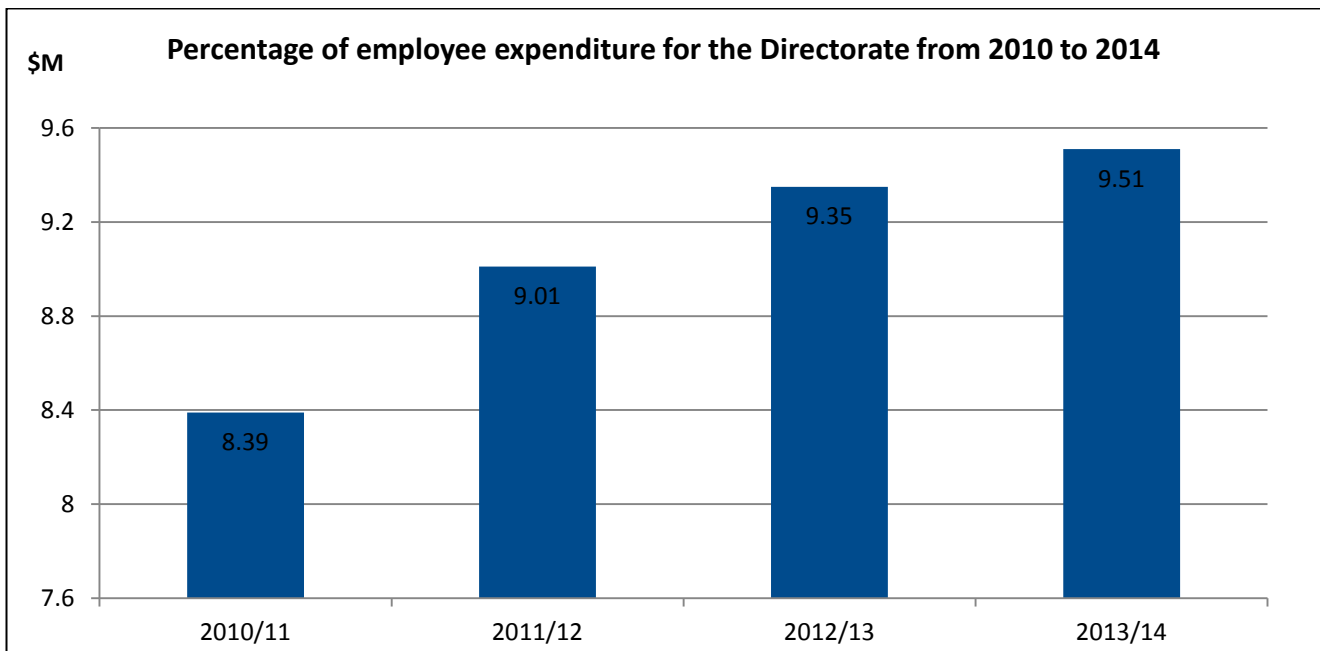


Workforce distribution

In 2013-14, the Directorate had 96 Full Time Equivalents (FTEs) staff members.



Employee expenditure



Financial overview

In 2013-14:

- The Directorate contributed **\$6.17 million** to various organisations for the provision of Environmental Health Services in Aboriginal communities.
- EHHU spent **\$1.96 million** on mosquito management programs and on funding assistance to local governments for local mosquito control programs under the CLAG funding program.
- Food Unit spent **\$229,177** to implement surveys to estimate the levels of pesticide residues in fruit and vegetables produced and sold on the domestic market.
- Food Unit provided **\$84,707** on Front-of Pack labelling project as WA Contribution
- Food Unit provided **\$22,500** to Curtin University to review the Tasmania Paralytic Shellfish toxin event and safefish recommendations and determine an interim risk management approach for WA.
- The Directorate provided **\$100,000** to Curtin University for establishment, management and evaluation of a state wide tobacco control grants scheme to support tobacco compliance activities.
- The Directorate provided **\$49,013** to Telethon Kids Institute to conduct research into the toxicity of e-cigarettes.
- The Directorate provided **\$50,000** funding to Curtin University in relation to Community Asbestos Exposure Study.
- The Directorate paid **\$14,300** to ChemCentre for project on chemical safety of tattoo inks.
- The Directorate spent **\$96,265** on 2013 Tobacco Retailer Compliance survey to collect information on how willing tobacco retailers are to sell cigarettes to children.
- Water Unit spent **\$15,700** on Port Hedland Community Fluoride Survey.

Glossary

CDCD	Communicable Disease Control Directorate
Directorate	Environmental Health Directorate
DER	Department of Environment Regulation (previously Department of Environment and Conservation)
DOH	Department of Health
DMP	Department of Mines and Petroleum
EHD	Environmental Health Directorate
EHP	Environmental Health Practitioners
EHO	Environmental Health Officer
LG	Local Government
PHCSD	Public Health and Clinical Services Division

Acknowledgements

The completion of this yearbook would not happen without the dedication of our staff.

A big thank you goes to those staff who took the time to contribute information to include within the yearbook.

In particular, we would like to thank the Yearbook Team for helping to coordinate the collation of information across the Directorate. Members include:

- Bree Abbott, Science and Policy Unit
- Willow Warren, Environmental Health Hazards Unit
- Sally Newbury, Environmental Health Hazards Unit
- Rebecca Delsar, Food Unit
- Julie Phelps, Water Unit
- Cherine Glasson, Business Unit
- Marta Berzins, Radiation Health Unit
- Lindsay Gillam, Science and Policy Unit

This document can be made available in alternative formats on request for a person with a disability.

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