

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**



**Department of Agriculture and Food**

**Hon Martin Aldridge MLC asked:**

1. I refer to the Department of Agriculture and Food WA Annual Report (Final) 2017, page 155, under the "Employment and industrial relations" and I ask:

a) Will you provide the total number of employees (and FTE) as at 30 June 2017?

Answer: As at 30 June 2017, the Department of Agriculture and Food WA (DAFWA) had a headcount of 1142 employees, and full-time equivalent (FTE) of 1023.9.

b) Will you provide the total number of employees (and FTE) as at 13 December 2017?

Answer: DAFWA no longer existed as at December 13, 2017, however the Department of Primary Industries and Regional Development (incorporating the former Department of Agriculture and Food, Department of Fisheries, Department of Regional Development and 9 Regional Development Commissions) comprised a headcount of 1834 employees, and full time equivalent (FTE) of 1671.4.

c) Can the Minister also include how many FTE were employed in each department within the department and the new DPIRD and regional offices as of December 13, 2017?

Answer: As at 13 December 2017, the total number of employees working in regional Western Australia within the new DPIRD (incorporating DAFWA, the former Department of Fisheries and Regional Development, plus staff previously employed within the 9 Regional Development Commissions) was 673 (611.4 FTE).

DPIRD Interim Divisions	December 2017	
	HEADCOUNT	FTE
Great Southern	116	104.2
Kimberley	68	65.7
South West	128	116.7
Gascoyne	32	29.6
Goldfields-Esperance	56	49.7
MidWest	69	63.6
Wheatbelt	141	125.3
Pilbara	29	27.1
Peel	34	29.4
<b>TOTAL</b>	<b>673</b>	<b>611</b>

Public / Internet

07/02/18

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Martin Aldridge MLC asked:**

2. I refer to the Department of Agriculture and Food WA Annual Report (Final) 2017, page 11, under the "Taking stock of our role" and I ask:  
Can the Minister outline when the results of the Stock-take and Future Directions Review will be made public?

Answer: The DAFWA Stocktake and Future Directions Review report was made public on 1 November 2016.

*a*

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Martin Aldridge MLC asked:**

3. I refer to the Department of Agriculture and Food WA Annual Report (Final) 2017, page 45, under the "growing and developing markets" and I ask:  
 What is the breakdown of funding/grants spent on each Grower Group in WA?

Answer: The Agriculture Sciences Research and Development Fund (ASRDF) funded 20 industry led, economic development projects in its first round. The breakdown of funding spent on each grower group is provided in the table below.

<b>Grower Group</b>	<b>No. of projects</b>	<b>Total value of Grants (\$)</b>
Carnarvon Growers Association	1	50,000
Evergreen Farming	1	450,000
Fitzgerald Biosphere Group	2	300,000
Merredin and District Farm Improvement Group	1	418,100
Mingenew Irwin Group	1	475,700
Ord River District Cooperative	1	440,560
Pork Innovation WA	1	413,500
South East Premium Wheat Growers Association	1	413,410
Stirlings to Coast Farmers	2	643,000
Truffle Producers of Western Australia	1	360,000
VegetablesWA	2	490,000
WA Citrus	1	263,500
WA Meat Marketing Co-operative	1	30,000
West Midlands Group	2	949,628
Western Australian Farmers Federation	1	500,000
Wines of WA	1	500,000
<b>Total</b>		<b>6,697,398</b>

I refer to the Department of Agriculture and Food WA Annual Report (Final) 2017, page 126, under the "Notes to the Financial Statement" and I ask:  
 How much funding has been spent on maintaining the South Perth Agriculture and Food office?

Answer: \$2,014,399



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Colin de Grussa MLC asked:**

1. I refer to page 35 of the 2017 annual report under the Growing People heading and dot point three, which references 137 staff completing a Diploma or Certificate III in Public Safety:

(a) What is the target rate for staff to complete same or similar training programs in 2017-18;

Answer: 2017-18 training targets are for 30 staff to complete a Certificate III qualification and 20 staff to complete a Diploma Qualification.

(b) Which registered training organisations are contracted to deliver the training for Department staff; and

Answer:

In 2016, Animal Health Australia entered into contract with TOCAL College, NSW on behalf of the National Biosecurity Committee to maintain the suite of biosecurity response qualifications within scope and to develop supporting material. DPIRD delivers accredited Emergency Management training using a combination of contracted nationally recognised subject matter experts from TOCAL College and experienced DPIRD staff with training qualifications.

Currently only two registered training organisations in Australia have the biosecurity response qualifications within their scope. Both are in the Eastern States. There is insufficient demand in Western Australia to make it financially viable for a locally registered training organisation to meet the governance and compliance requirements associated with provision of biosecurity response qualifications.

(c) What is the total number of DAFWA staff who hold up-to-date accredited public safety qualifications?

Answer: To the end of 2017, 168 staff hold a current accredited public safety qualification.

- 107 - Certificate III in Public Safety (Biosecurity Response Operations)
- 61 - Diploma in Public Safety (Biosecurity Response Management)

a

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Colin de Grussa MLC asked:**

2. On page 42 of the 2017 annual report under Summary of key performance indicators there is a line item under service 1 and service 5 and I ask:

- (a) What is the decrease in public and private sector co-investment in DAFWA-led initiatives attributed to, across both service areas; and

Answer: In regard to Service 1 (Market development, investment and market access), the reduction is attributed to the completion of several major contracts; and our focus on finalising the Royalties for Regions - funded *Seizing the Opportunity* in Agriculture projects.

In regard to Service 5 (Biosecurity and product integrity), some of the results for the 2016/17 target for this new Service are now reported under new Services 2, 3 and 4 rather than Service 5. Taking this into account, there is no reduction in biosecurity and product integrity capability.

- (b) What processes has the Department implemented to improve these service area KPIs in 2017-18?

Answer: On 1 July 2017, the former Departments of Agriculture and Food, Fisheries and Regional Development merged to become the Department of Primary Industries and Regional Development. Appropriate KPIs will be developed for the amalgamated department.

The focus for the department in 2017/18 is to maintain a high level of service delivery while finalising the amalgamation process.

*cl*

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Colin de Grussa MLC asked:**

3. Page 56 the Annual Report discusses demands of animal welfare administration and plans to build the animal welfare team:

(a) What was the 2016-17 average FTE within the animal welfare team;

Answer: Total of 14.3 Full Time Equivalent (FTE's) in Animal Welfare Regulation, including the Livestock Compliance Unit (LCU).

(b) How many of these FTE were designated compliance officers;

Answer: 7.7 FTE General Inspectors in LCU, including 1.5 FTE Scientific Inspectors, who are also appointed as General Inspectors.

(c) Can the Department provide a timeline of the broader Animal Welfare Act 2002 review being undertaken in 2017-18, as indicated by Minister MacTiernan; and

Answer: The Animal Welfare Amendment Bill 2017 (the Bill) was introduced to Parliament in November 2017. The comprehensive review of the *Animal Welfare Act 2002* commenced with a stakeholder forum on 16 November 2017 and it is anticipated to be completed by the end of 2018.

(d) What are the educational and professional qualification requirements for recruitment to this team?

Answer: The key roles in the team are Compliance Inspectors, Senior Compliance Inspectors, Policy Officers and Senior Policy Officers. Recruitment requirements for each of those roles are outlined below:

**Compliance Inspector**

- Highly developed workplace communications skills to maintain accurate records and prepare reports, briefings and correspondence of both technical and non-technical nature.
- Demonstrated ability to monitor and inspect livestock.
- Sound knowledge of and ability to interpret and apply relevant Western Australian and Commonwealth legislation, regulations, codes of practice and standards.
- National Police Certificate.
- Qualifications in an approved discipline relevant to Animal Welfare, Regulatory and inspectorate duties. (Desirable criteria)

### **Senior Compliance Inspector**

- Ability to monitor and inspect livestock through the demonstrated knowledge of and experience in livestock production, identification and transport and animal welfare issues.
- Proven ability to maintain accurate records and prepare reports, briefings and correspondence of both technical and non-technical nature,
- Relevant experience in interpreting and applying relevant Commonwealth and Western Australian legislation, codes of practice and standards.
- National Police Certificate
- Preference will be given to applicants with qualifications in an approved discipline relevant to Animal Welfare, Regulatory and inspectorate duties. (Desirable criteria)
- During the first three (3) months after appointment, mandatory online training is required. A Certificate IV in Government Investigations is normally completed within the first 12 months of recruitment.

### **Policy Officer**

- Demonstrated the ability to plan, coordinate and direct multiple activities to meet competing priorities by the application of research, conceptual and analytical skills, through independent judgment and problem solving techniques.
- Well-developed workplace communication skills (including but not restricted to extensive oral and written communication skills, well-developed ability to negotiate, facilitation skills, ability to develop and maintain relationships and networks, team work skills, high level of interpersonal skills).
- Demonstrated understanding of government reporting requirements, and how they are linked to departmental planning and evaluation, and be competent in the use of and application of personal computer technology and relevant software (eg databases, spreadsheets, models and work processing packages).
- Knowledge of and an ability to understand scientific matters that relate to the use of animals for research and teaching purposes. (Desirable criteria)
- Knowledge of and ability to interpret and apply relevant Western Australian legislation, regulations, codes of practice and standards. (Desirable criteria)
- Experience of and knowledge of the Animal Welfare Act and associated regulations and codes of practices including the Australian Code for the Care and Use of Animals for Scientific Purposes (8th Edition) (Desirable criteria)

## Senior Policy Officer

- Demonstrated high-level policy support and advice, including policy formulation, implementation, review and evaluation.
- Demonstrated high level workplace communication skills.
- Demonstrated excellent project management and organisational skills, including demonstrated experience in implementing cross sectoral projects and delivery of outputs within agreed timeframes are required of successful applicants.
- Demonstrated highly developed research, conceptual, analytical and decision-making skills.
- A degree in Veterinary Medicine, Agriculture, Law, Natural Resource Management, Environmental Science, Economics, Business Management or approved equivalent is desirable. (Desirable criteria)

a



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Colin de Grussa MLC asked:**

4. On page 156 of the 2017 annual report under the Employee development section there is a reference to training more than 80 staff in Ministerial writing. Can you please explain:

(a) Why more than 80 people were chosen to undertake the training;

Answer: The department was seeking to improve the quality of its ministerial correspondence. The selected staff were responsible for regular drafting of ministerial correspondence such as briefing notes and draft replies to letters sent to the Minister and the department.

(b) When did the training occur and what organisation was it provided by;

Answer: The training occurred in June 2017, provided by PDT Consultancy.

(c) What was the nature of training; and

Answer: The training was delivered in workshops where attendees learnt theory and analysed examples of their previous writing.

(d) What was the aggregate time spent undertaking the training by all staff involved?

Answer: 294 hours.

Q

## Estimates and Financial Operations Committee

### 2016-17 Annual Report hearings - Questions prior to hearings

#### Department of Agriculture and Food

#### Hon Colin de Grussa MLC asked:

5. I refer to the Employment and industrial relations table on page 155 of the Annual Report and I ask:

- (a) What was the total number of employees (and FTE equivalent) working in regional Western Australia and a region-by-region breakdown of employee locations as at 30 June 2017.;

Answer: As at June 30, 2017, the total number of employees working in regional Western Australia within DAFWA was 464 (422.0 FTE).

REGION	HEADCOUNT	FTE's
Great Southern	97	89.9
Kimberley	47	44.3
South West	95	85.4
Gascoyne	11	10.6
Goldfields	43	38.2
MidWest	37	34.0
Wheatbelt	126	112.3
Pilbara	1	1.0
Peel	7	6.2
<b>Total</b>	<b>464</b>	<b>422</b>

- (b) What was the total number of employees (and FTE equivalent) working in regional Western Australia and a region-by-region breakdown of employee locations currently.;

Answer: As at 14 December 2017, the total number of employees working in regional Western Australia within the new DPIRD (incorporating DAFWA, the former Department of Fisheries and Regional Development, plus staff previously employed within the 9 Regional Development Commissions) was 673 (611.4 FTE).

REGION	HEADCOUNT	FTE
Great Southern	116	104.2
Kimberley	68	65.7
South West	128	116.7
Gascoyne	32	29.6
Goldfields-Esperance	56	49.7

MidWest	69	63.6
Wheatbelt	141	125.3
Pilbara	29	27.1
Peel	34	29.4
<b>TOTAL</b>	<b>673</b>	<b>611</b>

- (c) The total number of positions required to be cut by the Department as part of the State Government's Voluntary Targeted Separation Scheme; and

Answer: Agency targets are Cabinet-in-confidence and were provided as a guide to assist agencies and Ministers with implementation of the scheme. While the reductions will vary between agencies depending on factors like MoG changes, the size and role of individual agencies and other impacts, all agencies are expected to contribute in order to meet the overall reduction target of 3,000

- (d) With reference to question (c), please provide the total number of employees (and FTE equivalent) working in regional Western Australia which will be cut by the Department as part of the State Government's Voluntary Targeted Separation Scheme?

Answer: The Department has not yet finalised its implementation of the State Government's Voluntary Targeted Separation Scheme and is not in a position to answer this question.

*Q*

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Colin de Grussa MLC asked:**

6. I refer to the Equity and Diversity section of page 166 of the 2017 annual report and ask:

- (a) Does the Department plan to update its Workforce and Diversity Plan and Reconciliation Action Plan when they expire in 2018;

Answer: Yes, plans including the Workforce and Diversity Plan and the Reconciliation Action Plan, will be created in the context of the new Department's needs.

- (b) What was the level of female FTE within the department in 2016-17 and how does that compare with the female FTE figure now;

Answer:

<b>Former Department</b>	<b>FTE's @ 29 June 2017</b>
Agriculture & Food	462.5
Fisheries	192.0
Regional Development	91.0
<b>Total</b>	<b>746</b>

As at 14 December 2017 there was an equivalent of 799.6 full-time females within the Department of Primary Industries and Regional Development (DPIRD).

- (c) What was the level of Aboriginal FTE within the department in 2016-17 and how does that compare with the Aboriginal FTE figure now; and

Answer:

<b>Former Department</b>	<b>FTE's @ 29 June 2017</b>
Agriculture & Food	11.0
Fisheries	6.0
Regional Development	5.5
<b>TOTAL</b>	<b>23</b>

As at 14 December 2017, an equivalent of 20.8 full-time employees have self-reported as being Indigenous Australians within DPIRD.

- (d) What was the FTE level of people considered to have a disability within the department in 2016-17 and how does that compare with the FTE figure now?

Answer:

<b>Former Department</b>	<b>FTE's @ 29 June 2017</b>
Agriculture & Food	15.9
Fisheries	14.0
Regional Development	1.0
<b>Total</b>	<b>31</b>

As at 14 December 2017, an equivalent of 30.8 full-time employees have self-reported as having a disability within DPIRD.



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

1. I refer to DAFWA's Annual Report, in which it is stated that the cost of degradation of Rangelands has reduced the carrying capacity of pastoral lands by about 27% at a cost of around \$145,000 per annum per pastoral business, and that mitigation and recovery will require government intervention:

- (a) What action will DAFWA take to improve the current system of land monitoring and administration in order to ensure that the ecological sustainability of pastoral lands is adequately protected;

Answer: As part of the pastoral lands reform process, the Minister is examining ways in which to improve the inter-agency responsibility for monitoring soil and vegetation health so that we can ensure pastoral leases are managed on an ecologically sustainable basis. This is in keeping with the recommendations identified by the Auditor General's Report of 2017 into the Management of Pastoral Lands in Western Australia.

The current level of land condition monitoring is not adequate to address land degradation, and a more reliable system that includes both remote sensing technology and ground inspections to monitor changes in land condition at the lease level, is currently being investigated.

- (b) Will DAFWA develop a clear, widely understood and accepted definition of "ecological sustainability" relevant to the LA Act, since there is currently no such definition despite the requirement to ensure leases are managed on an ecologically sustainable basis:

Answer: The ecologically sustainable management of pastoral leases falls under the LA Act administered by DPLH. DPLH is currently developing a definition of "ecological sustainability" for consideration by the Pastoral Lands Board in 2018.

- (i) If yes to (b), which government organisations, stakeholders and citizens will be involved in developing the definition of ecological sustainability, and how will they be involved;

Answer: Not applicable.

- (ii) If yes to (b), when will DAFWA develop this definition;

Answer: Not applicable.

- (iii) Will DAFWA consider requiring pastoral lessees to adopt at least a "triple bottom line" management framework; and

Answer: No.

- (iv) If no to (b), why not; and

Answer: DPIRD is responsible for the economic development of pastoralism and the prevention and mitigation of land degradation that may be detrimental to the present and future use of leasehold land (through the Commissioner of Soil and Land Conservation under the *Soil and Land Conservation Act 1945*). The ecologically sustainable management of pastoral leases falls under the LA Act administered by DPLH. DPLH is currently developing a definition of "ecological sustainability" for consideration by the Pastoral Lands Board in 2018.

- (c) Will DAFWA improve data and land management systems within the Department of Primary Industries and Regional Development and the Department of Planning, Lands and Heritage:

Answer: The Pastoral Lands Board has tasked DPLH with investigating how rangeland data and land management systems can be better managed.

- (i) If yes to (c), what improvements DAFWA intending to implement;

Answer: DPIRD will work with DPLH to develop an interagency database that contains lease compliance and compliance-related information.

- (ii) If yes to (c), which stakeholders will DAFWA collaborate with, and how will they collaborate with them in order to improve data and land management systems;

Answer: DPIRD will work with DPLH to identify relevant stakeholders.

- (iii) If yes to (c), when will DAFWA implement these improvements; and

Answer: DPIRD will work with DPLH to determine an appropriate timeframe for implementation.

- (iv) If no to (c), why not?

Answer: Not applicable.



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

2. I refer to the response to the detection of the tomato potato psyllid (TPP) in February 2017, which involved significant staff and resources:

- (a) Does DAFWA consider that the outcomes of this response were satisfactory:
- (i) If yes to (a), please describe the positive outcomes that were achieved, including those relating to control of the disease, cost effectiveness of the response, and timeliness of the response; and

Answer: The TPP response was a complex response. TPP was a national emergency plant pest and the control activities were undertaken in accordance with national arrangements and direction.

DPIRD acknowledges there are some concern within industry about the department's response to the incident. The Minister has commissioned two independent reports into the response to TPP, one from the WA Biosecurity Council and one from Professor Peter Klinken AC, WA Chief Scientist.

- (ii) If yes to (a), how did the response to the detection of TPP compare to the response to other diseases, pests and industry emergencies in terms of the outcomes it yielded; and

Answer: The TPP response was the largest emergency response activation by WA to date and it is difficult to compare with previous response activities.

- (b) Has DAFWA undertaken a detailed analysis of the key drivers and actions of the response to TPP which lead to positive outcomes:

Answer: Yes

- (i) If yes to (b), please describe the actions, and drivers of those actions in the case of TPP, that lead to positive outcomes;

Answer: DPIRD undertook a two phase evaluation;

Phase 1 – External Efficiency Review of systems, process, structure, command and control undertaken by an independent external assessor; and



Phase 2 – Internal review including consultation with Executive, Industry and identified response staff and an externally facilitated debrief of key response personal.

These two reviews complement the reports by the WA Biosecurity Council and Professor Klinken commissioned by the Minister.

- (ii) If yes to (b), has DAFWA identified opportunities to improve or develop the effective aspects of this response to further improve outcomes in future emergency incident responses;

Answer: The Department's review and evaluation activities have identified a number of business improvement opportunities to enhance capacity and capability for future emergency incident responses.

The two independent reviews by the WA Biosecurity Council and Professor Klinken commissioned by the Minister also provided recommendations to improve future biosecurity responses.

- (iii) If yes to (b), how will the findings of this analysis be used to improve incident responses in future, for example in light recent staffing changes; and

Answer: Findings from the two DPIRD reviews have been consolidated. Business Improvement Opportunities (BIO) are being prioritised and will be implemented to enhance the Department's operational preparedness capability for future agricultural incidents in Western Australia.

DPIRD has been restructured to strengthen Western Australia's biosecurity capabilities and improve dialogue with industry. The department has identified key roles and positions required to strengthen its biosecurity capabilities and is in the process of recruiting to fill those gaps.

- (iv) If no to (b), why not?

Answer: Not Applicable.



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

3. I refer to the establishment of the SoilsWest Alliance with the University of Western Australia, in order to combine scientific and research capabilities to improve the long term future of soil science in WA, enhancing soil fertility and sustainability, and crop profitability:

- (a) Please list the complementary skills and knowledge that DAFWA and the University of Western Australia have identified that can be integrated to deliver improved research outcomes;

Answer: The Department of Primary Industries and Regional Development (DPIRD) and the University of Western Australia (UWA) have a combination of applied and fundamental science capabilities, respectively. This provides opportunities to work together translating science innovation to industry. UWA has science capability in imaging techniques, engineering, physics, polymers, plant physiology and instrumentation, amongst others.

This is complemented by DPIRD's established regional network of researchers and research support units with capability to manage field trials and large integrated soil management projects in close collaboration with leading growers and grower groups.

- (b) Please list any existing gaps in research capabilities in the SoilsWest Alliance that have been identified;

Answer: The SoilsWest Alliance was formed to complement known strengths and complementary skills in this area. Its role is to look for R&D opportunities within its expertise, rather than identify gaps.

- (c) What are the key research areas in relation to soil science that have been identified for SoilsWest Alliance to address over the next 3-5 years:

Answer: SoilsWest supports improved crop and pasture productivity and sustainability, aligned to the priorities of the Australian agricultural sector through joint research and knowledge transfer. Key research areas for SoilsWest Alliance are crop nutrition, biological function and physical and chemical soil constraints.

- (i) Will the Alliance consider undertaking research into carbon farming in Western Australia; and

Answer: The pastoral lands reform process will consider strategies to enable carbon farming to occur on pastoral properties in WA.

- (d) Will the Alliance consider using innovative collaborative approaches between farmers and scientists in research projects beyond business as usual:

Answer: Yes.

- (i) If yes to (d), what new forms of collaborative research will the Alliance consider implementing; and

Answer: SoilsWest continues to explore innovative collaborative approaches to improve the effectiveness with which relevant, science based R&D can be conducted and new innovations adopted by farmers. One example is large-scale field-based research trials that maximise the benefits of positioning experimental treatments within controlled traffic farming systems.

A key focus of soils research will be to understand the extent and long-term benefits of soil renovation to the farming system (rotational benefits, financial benefits, long-term improvements in soil health).

- (ii) If no to (d), why not?

Answer: Not Applicable.

a

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

4. I refer to use of the term "sustainability" in DAFWA's Annual Report. For example, the report uses in the term "environmental sustainability" as well as referring to the "sustainability of the agricultural industry", and I ask:

- (a) Does DAFWA endorse an understanding of sustainability that integrates ecological, social, and economic concerns, as described in seminal reports such as the Brundtland Report and the recently released UN Sustainable Development Goals;

Answer: The Department of Primary Industries and Regional Development (DPIRD) considered sustainability to embrace a wide range of considerations – including ecological, social, and economic aspects – depending on context.

- (b) How does DAFWA currently define "sustainability":

Answer: DPIRD did not seek to adopt or establish a definition.

- (i) How does DAFWA define the "sustainability of the sector"; and

Answer: DPIRD did not seek to adopt or establish a definition, but considers sustainability to embrace a range of considerations depending on context.

- (ii) How does DAFWA define "environmental sustainability"; and

Answer: As above.

- (c) What definition of the concept of "sustainability of the sector" did DAFWA provide to respondents to DAFWA's 2017 survey of stakeholders?

Answer: The context of this question is environmental sustainability; and the question put to survey respondents includes the explanation: "by sustainability we mean anything that relates to being able to properly manage the health of your soil, water, biosecurity, remnant vegetation etc."



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

5. I refer to DAFWA's annual report, in which the Western Barley Genetics Alliance is described, and I ask:

- (a) Will the barley genome map be used in subsequent research projects and applications in Western Australia:

Answer: The intent is to use the barley genome map in conjunction with other scientific knowledge to produce beneficial outcomes for WA growers.

- (i) If yes to (a), will it be used in GMO research projects in Australia or internationally; and

Answer: The barley genome map is published and available in the public domain. This information could be used by research organisations for GMO research in Australia and/or internationally.

Currently, Murdoch University, through the Western Barley Genetics Alliance, is undertaking some laboratory research on new gene editing technology, but there is no research on transgenic GMOs.

- (ii) Who retains the intellectual property generated in this and future research; and

Answer: Intellectual property generated in the barley genome mapping project is shared by the Western Australian Agriculture Authority (WAAA), Murdoch University and the Grains Research and Development Corporation (GRDC) and international collaborators.

- (b) Will the international research network that worked in partnership with this Alliance continue to contribute to subsequent research initiatives using the barley genome map?

Answer: Research networks are key to solving complex problems and are strategically developed and deployed. While the international linkages will continue to be nurtured, the composition of future partnerships will depend on the skills and knowledge required for those initiatives.

a

**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

6. I refer to the Regulatory Burden Reduction project described in DAFWA's Annual Report, and I ask:

- (a) What are the "onerous administrative requirements for aircraft pilots and spraying companies" for which regulatory changes were drafted; and

Answer: The Department identified that there were onerous administrative requirements for pilots and spraying companies which included annual licencing, monthly spray records, frequent updating of pilot information to the Civil Aviation Safety Authority and insurance documentation. These changes will implement the National Framework for Agriculture Veterinary Chemicals, remove redundant requirements, recognise national industry training competencies and national record keeping requirements.

However as part of these reforms there will be no change to the environmental protections under the Environmental Protection Act 1986 or other health protections under the Health (Pesticides) Regulations 2011.

- (b) What draft regulatory changes have been proposed?

Answer: Repeal of the *Aerial Spraying Control Act 1966* and the *Aerial Spraying Control Regulations 1971* and replacing them with new aerial spraying regulations under the *Biosecurity and Agriculture Management (Agriculture Standards) Regulations 2013*. The drafting of the regulations was approved in September 2016.

In particular:

- Pilot licencing no longer required.
- Pilots no longer required to provide monthly spray records to the Department.
- Pilots no longer required to supply updated copies of their Civil Aviation Safety Authority, commercial pilot's licence and agriculture rating.
- Pilots / Aerial Spraying Companies no longer have to supply proof of adequate compulsory insurance with an approved insurance company.
- Recognition of remotely piloted aircraft.



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

7. I refer to the collaboration between DAFWA, the Ord River District Co-operative (ORDCO), and the Northern Australia Crop Research Alliance outlined in DAFWA's Annual Report, and I ask:

- (a) Will this, or other research partnerships DAFWA is involved in, include trial plantings of GMO cotton in the Ord River District;

Answer: Yes

- (b) If yes to (a), what likely benefits and risks associated with GMO cotton trials has DAFWA identified; and

Answer: Small scale field trials for GM cotton have been undertaken in Ord River district since 1997. These trials have been to assess the performance of various GM cotton varieties approved by the Office of the Gene Technology Regulator (OGTR) for release in Australia. The benefits and risks associated with the various GM varieties undergoing trials are assessed by the OGTR as part of the OGTR's release approval process.

The risk to the health and safety of people, or the environment from the release of GM cottons into the environment was assessed to be negligible. Hence the OGTR considered that the dealings involved in the limited and controlled release did not pose a significant risk to either people or the environment. The control measures included containment provisions at the trial site, preventing the use GM plant materials in human food or animal feed, destroying GM plant materials not required for further studies and conducting post-harvest monitoring at all trial sites to ensure all GMOs were destroyed.

The OGTR has specific responsibilities to protect the health and safety of people, and to protect the environment, by identifying risk posed by or as a result of gene technology, and by managing those risks through regulating certain dealings with genetically modified organisms (GMOs).

- (c) If yes to (a), has DAFWA collaborated with citizens and stakeholders to decide whether to undertake trials into GMO cotton:

Answer: A discussion paper titled "GM Cotton in the Ord River Irrigation Area Discussion Paper" was commissioned by the Ministerial GMO Industry Reference Group in July 2007.

- (i) If yes to (c), please describe the collaborative processes that were implemented; and

Answer: The discussion paper mentioned above was to obtain feedback from stakeholders and community members on the production of Genetically Modified (GM) cotton in the Ord River Irrigation Area located in the north of Western Australia.

(ii) If no to (c), why not?

Answer: Not Applicable.

A handwritten signature or mark consisting of a large, stylized loop followed by a horizontal line extending to the right.



## Estimates and Financial Operations Committee

### 2016-17 Annual Report hearings - Questions prior to hearings

#### Department of Agriculture and Food

#### Hon Diane Evers MLC asked:

8. I refer to the continuing expansion of salinity in the South West Agricultural Region, and associated negative impacts on agriculture and offsite natural assets referred to in DAFWA's Annual Report, and I ask:

- (a) Given that previous and current approaches have failed to halt the expansion of salinity, what new approaches will DAFWA develop and implement in the next 3-5 years to address the issue of salinity;

Answer: The 2006 Salinity Investment Framework (Department of Water, SLUI 34) was adopted by Government with the aim to direct funds to projects with the best potential to protect assets of high public value and to support salinity management where direct investment for on ground works cannot be justified.

In the South West Agricultural Region (as defined in the DAFWA 2013 Report Card) it is not generally true that current approaches have failed to halt the expansion of salinity. In this region the return on investment in salinity intervention is generally high and the combination of legislation to control land clearing, revegetation of catchments and engineering works have been largely successful in managing salinity.

The eastern agricultural zones generally have a lower return on salinity intervention investment than the South West Agricultural region.

Over the next 3-5 years, DPIRD proposes to undertake surveillance monitoring of salinity, assist grower groups, regional NRM groups and Shires to assess and implement solutions and seek research partners to develop new options for salinity management.

The Minister formed an interim Ministerial Advisory Committee to guide the re-establishment of the Soils and Land Conservation Committee to drive improvement to soil health and land degradation. Strategies to address salinity will be part of the mandate of the Committee.

- (b) Has the economic cost of the impact of salinity on ecosystem services been quantified:

Answer: Yes.

- (i) If yes to (b), what is the estimated value of ecosystem services that have been negatively impacted by salinity.; and

Answer: The value of ecosystems services is taken to be the cost of recovery action. In 2006, the estimated cost of recovery of the Collie

River ranged from \$30 to \$68 million and the cost to protect the existing biodiversity of the Lake Muir – Unicup system is estimated at \$9.24 million.

The annual cost attributed to the loss of ecosystem services for roads and railway assets was estimated for the whole of the agricultural region and each was estimated to be \$175.5 million. (Ref: Department of Water SLUI Report No 34).

(ii) If no to (b), why not;

Answer: Not applicable.

(c) The economic impact for the period 2009-13 is estimated to be \$519 million per annum. What is the rate of change of economic impact of salinity per annum; and

Answer: The economic impact of \$519 million reported in the DAFWA 2013 Report Card is the combination of the cost to agriculture (\$344m) and roads (\$175.5m) for the whole of the agricultural region, rather than the South West Agricultural region. It was estimated that 14,000ha of land was lost to salinity each year between 1988 and 1998 (McFarlane et al 2004, and Furby 2010). Based on this, the economic impact is estimated at \$6.6 million per year.

(d) Is additional funding required to adequately address salinity in the South West Agricultural Region?

Answer: Additional funding would allow the current extent and trends of salinity in the agricultural regions of Western Australia to be determined, and provide a basis for the development of a new salinity action plan if required.

However the relative priority of this need must be weighed in the context of the current fiscal environment being managed by the State Government.



**Estimates and Financial Operations Committee**  
**2016-17 Annual Report hearings - Questions prior to hearings**

**Department of Agriculture and Food**

**Hon Diane Evers MLC asked:**

9. I refer to DAFWA's annual report, in which the issue of widespread inappropriate fertiliser use that impacts farm profitability as well as causing off-site land degradation is highlighted as a critical area undermining agricultural sustainability, and I ask:

- (a) What mitigating effect does DAFWA anticipate that its existing strategies will have on inappropriate fertiliser use on the coastal plain and in the south-west;

Answer: DPIRD research suggests that about 70% of paddocks in the Peel Harvey and Swan Canning coastal catchments do not require additional phosphorus fertiliser applications to maintain farm productivity. Full adoption of evidence based fertiliser practices would eventually see phosphorus losses to waterways fall by 15-25%.

- (b) Will DAFWA consider developing new and innovative approaches to mitigate and repair damage done by inappropriate fertiliser use; and

Answer: Yes. DPIRD has been, and will continue to, develop new and innovative approaches to promote evidence based farm fertiliser management. These include:

- Working with industry and Fertiliser Australia to achieve industry-wide standardization.
- Assessment of automated sampling equipment
- Development of easier to use map products
- Partnering with the fertiliser industry to develop fertilisers specifically designed for sandy soils
- Calibration and modification of fertiliser spreading equipment
- On-farm fertiliser demonstrations
- Using community based social marketing principles to increase adoption
- Research into interactions between soil acidity, soil phosphorus and pasture phosphorus content.

- (c) Does DAFWA require additional resources to adequately address the issue of inappropriate fertiliser use in Western Australia? If so, what resources would be required, and when would they be required?

Answer: Relevant DPIRD staff are currently focused on addressing inappropriate fertilizer use as part of the Regional Estuaries Initiative (REI) until 2020. The most appropriate scope and methodologies to address this issue in other regions is under consideration.

