

Senate Standing Committee on Rural and Regional Affairs and Transport

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2007

Agriculture, Fisheries and Forestry

Question no: LWA01, LWA02, LWA03, LWA04 and LWA07

Division/Agency: Land & Water Australia

Topic: Rick Evans research report

Hansard page: 27, 29, 31, 32 (24/5/07)

Senator O'Brien asked:

How many drafts of Dr Evans's report have there been? (LWA01)

How many versions have gone through that (review) process? (LWA01)

So is it the case that a number of sections of the report have been changed or been removed during this peer review process? (LWA02)

If so, could you let us know what parts were changed or removed? (LWA02)

I would really like to know if, for some reason, calculations on the impact of groundwater extractions on the Murray-Darling Basin flows were in the document and had been removed. (LWA03)

I guess what I wanted to know is if that aspect of the report has been—and you probably need to take this on notice—the subject of substantial change in its iterations leading to the final report, particularly in terms of calculations of impact of groundwater extraction. (LWA04)

Were there ever specific numbers on the amount of buybacks required of groundwater and surface water licences in Dr Evans's previous iterations in his report? Similarly, were there numbers in the original draft on the amount of double counting that has occurred for ground and surface water, which differs from the final report? In each case, if so, what were they? (LWA07)

Answer:

How many drafts of Dr Evans's report have there been? (LWA01)

1. Until the report was finalised, it remained in draft form.

How many versions have gone through that (review) process? (LWA01)

2. One version of the Technical Report went through the peer review process.

So is it the case that a number of sections of the report have been changed or been removed during this peer review process? (LWA02)

If so, could you let us know what parts were changed or removed? (LWA02)

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There were a large number of authorial and editorial changes made during the preparation of the Technical Report. No sections were removed. Dr Rick Evans considers the corrections done in this review process to be typical of the report and peer-review process. Small changes were done to make sure the report was correct and readable.

I would really like to know if, for some reason, calculations on the impact of groundwater extractions on the Murray-Darling Basin flows were in the document and had been removed. (LWA03)

There were no calculations of the impact of groundwater extractions on the Murray-Darling Basin flows removed from the Technical Report.

I guess what I wanted to know is if that aspect of the report has been—and you probably need to take this on notice—the subject of substantial change in its iterations leading to the final report, particularly in terms of calculations of impact of groundwater extraction. (LWA04)

There were no calculations of the impact of groundwater extractions removed from the Technical Report.

Were there ever specific numbers on the amount of buybacks required of groundwater and surface water licences in Dr Evans's previous iterations in his report? Similarly, were there numbers in the original draft on the amount of double counting that has occurred for ground and surface water, which differs from the final report? In each case, if so, what were they? (LWA07)

There was no mention of the amount of groundwater buybacks required in previous iterations of the Technical Report.

There were no new estimates of the amount of double counting that has occurred for ground and surface water in any version of the report. All the estimates and specific numbers quoted on double-counting had been previously published.

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Agriculture, Fisheries and Forestry

Question no: LWA 05

Division/Agency: Land & Water Australia

Topic: Land & Water Australia's water research

Hansard page: 31 (24/5/07)

Senator O'Brien asked:

Senator O'BRIEN—Okay. Thank you for that. What are other works which Land and Water Australia has funded and which we can expect in the next 12 months?

Dr Robinson—Currently I think across the portfolio we have in the order of 280 to 300 different projects.

Senator O'BRIEN—Okay. Perhaps you will take that question on notice?

Dr Robinson—I am happy to provide our annual operational plan to you which explains the areas.

Senator O'BRIEN—How many roughly are water based?

Dr Robinson—Again, I will take that on notice. I think it is in the order of 80 or 120—of that sort of order.

Answer:

Land & Water Australia is currently managing 75 projects that are predominantly for applied water management. These projects cover the following types of water research for management: river water, farm water, catchment water, groundwater estuary, general water management, wetlands, estuaries and floodplains.

Details are available in Land & Water Australia's Annual Operating Plan and Strategic Plan that are available on the web at lwa.gov.au/Publications_and_Tools/Corporate_Publications.

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Question no: LWA 06

Division/Agency: Land & Water Australia

Topic: Land & Water Australia's Senior Research Fellows

Hansard page: 31 (24/5/07)

Senator O'Brien asked:

Senator O'BRIEN—You talked about the type of project that Dr Evans was on, the \$100,000 grant, and you talked about six of those, including Dr Evans's work as being ongoing, and another three. What are the six? Can you identify them, excluding Dr Evans's work, of course?

Dr Robinson—To be honest, no, I cannot recall the details of all six. Again, I am happy to take that on notice. I am happy to also include the three new ones which were selected late last year.

Answer:

Details on the Senior Research Fellowships are available on the web at lwa.gov.au/Research/Senior_Research_Fellowships/index.aspx

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Question no: LWA 08

Division/Agency: Land & Water Australia

Topic: Factors affecting Soil Carbon

Hansard page: 33 (24/5/07)

Senator Allison asked:

Senator ALLISON—Are you able to inform the committee about the factors that reduce organic carbon in soil?

Dr Robinson—There is a range of factors, but I guess I would rather leave that to the soil experts than comment on it myself.

Dr O'Connell—Senator, I might just state that Dr Robinson was drawing to your attention the fact that he had some 180 projects underway in Land and Water Australia. So it is probably quite difficult for him to be able to pin down each specific project. Taking that question on notice might be the most useful way for him to get an accurate response to you.

Answer:

The reduction in soil organic carbon mass is a function of a complex interaction of physical, chemical and biological processes that are themselves imperfectly understood. This is an important and complex issue that is vital to sustainable agriculture in Australia.

Some soils have less soil organic carbon to start with (eg sandy soils) and others are more susceptible to losing organic carbon than others (eg saline soils). The innate soil properties are a strong controlling factor in how much and how rapidly soil organic carbon can decline.

As a general rule, land management that involves high levels of disturbance such as tillage, stubble burning, high stocking rates, continuous cropping and other practices that result in low levels of year round vegetative cover tend to reduce soil organic carbon. Excessive traffic, salinity, high stocking rates and tillage of wet soils can also cause structural and chemical changes that further reduce soil organic carbon.

Land & Water Australia currently has a 'Healthy Soils for Sustainable Farms' programme funded by DAFF that includes research into the management of soil organic carbon.