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Legislation Committee
Answers to questions on notice
Environment portfolio

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Senator Singh asked:

.... I am also happy to give you some examples of where organisations are up to in terms of the products that are being delivered. In the past I know I have talked more generally about planning processes.

Senator SINGH: That would be useful. Would you give that to us on notice, because I know that the chair is trying to get us back on time.

Answer:

Below are some examples of where Natural Resource Management (NRM) organisations are up to in terms of the products that are being delivered.

Western Australia – South Coast NRM is progressively integrating climate science into its regional NRM strategy. A draft addendum documenting the latest climate change science, information and adaptation options to plan for the impacts of climate change has been completed. A summary document is also being developed to guide carbon farming stakeholders. A supporting GIS platform has identified priority landscapes for climate mitigation and adaption actions to improve landscape connectivity, resilience and wildlife corridors, including carbon sequestration opportunities. Additional salinity risk analysis is complementing this dataset and enabling more confident landscape-scale land use planning. Working collaboratively, regional NRM organisations in the south-west of Western Australia have developed cross regional bio-sequestration principles to assist relevant projects to take account of priority landscapes and utilise regional climate change information in their planning and project development.

South Australia – Adelaide Mount Lofty Ranges NRM Board is working with the region's community and key partners to identify key issues of concern, and develop projects with each of the seven subregions in the AMLR region. Work to date has included identifying key climate vulnerabilities for primary production and biodiversity in the region, documenting the Board's understanding of key issues of concern for each subregion, and identifying opportunities and risks associated with carbon plantings. Climate change risks and opportunities will ultimately be fully integrated throughout the plan. Ongoing work will include the continued involvement of key stakeholders, including local government, Regional Development Australia, industry groups, research organisations, and community and traditional owner groups.

Northern Territory – Territory NRM is working with stakeholders through interviews, focus group workshops and other consultation mechanisms to update its NRM plan to guide planning for climate change impacts on the land. Territory NRM has prepared an Integrated NRM Plan Review. The current version (October 2014) brings together priorities relevant to the revised 2015-2020 Integrated NRM Plan. A number of research projects and climate change projections relevant to the Monsoonal North and Rangelands areas are underway. The research covers relevant issues put forward by NRM groups, including: climate change and pest plants; drought and climate change; fire management and climate change; social resilience of pastoralists to climate change; biodiversity distributions in a changing climate; and Indigenous adaptation to climate change. The research will be utilised in consultations with NRM stakeholder groups, and a “resilience to climate change” approach will be integrated into the revised Integrated NRM Plan.

Victoria – Goulburn Broken Catchment Management Authority has developed a Spatial Assessment Tool to identify the possible risks and impacts of climate change to key assets in Goulburn Broken NRM region. The CMA is using this tool to assist in identifying climate change adaptation and mitigation measures. The information will then form part of the Goulburn Broken Regional Catchment Strategy.

Additional Victorian collaborative example across all ten Victorian Catchment

Management Authorities: all 10 CMAs are collaborating to create a single, statewide web portal that will provide stakeholders with easy access to regional scale information produced through the Regional NRM Planning for Climate Change projects. This will include projected impacts of climate change, landscape vulnerabilities, and opportunities for climate change mitigation in the landscape.

In addition, seven of the Victorian Catchment Management Authorities have collaborated in commissioning a spatial climate change vulnerability assessment of their regions as part of their Regional NRM Planning for Climate Change projects. The vulnerability assessment, undertaken by Spatial Vision, received the 2014 Victorian Spatial Excellence Award for Sustainability and Environment. The award recognises the project’s practical, logical and scientifically sound framework using a technologically innovative approach. The project has generated views of exposure, sensitivity, potential impact, adaptive capacity and vulnerability for a range of NRM assets and allows new data and knowledge to be applied as it becomes available.

Northern Territory NRM (TNRM) – The Territory is updating its NRM plan to guide planning for climate change impacts on the land, and to maximise the environmental benefits of carbon farming project. Northern Territory is working with its stakeholders through interviews and focus group workshops. The TNRM has prepared an Integrated Natural Resource Management (INRM) Plan Review. The current version of INRM Plan Review (October 2014) brings together priorities or points of concern relevant to the revised 2015-2020 INRM plan. There are a number of research projects and climate change projections being carried out relevant for the Monsoonal North and Rangelands areas. This research covers relevant issues as put forward by NRM groups and includes climate change and pest plants, drought and climate change, fire management and climate change, social resilience of pastoralists to climate change, biodiversity distributions in a changing climate and indigenous adaptation to climate change. This research will be utilised in consultations with the NRM stakeholder groups, and a resilience to climate change approach will be integrated throughout the revised INRM plan.

New South Wales – Greater Sydney LLS is modelling areas suitable for mitigation activities using a multi-criteria analysis of spatial data. This will identify areas where carbon stocks can be maintained or improved in soils, vegetation and estuarine wetlands, under existing and projected future climates. Adaptation strategies for climate impacts are being developed in consultation with academia, government and community stakeholders. For example, they have held detailed one-on-one consultation with appropriate staff in over 25 local governments to document their current situation in adaptation planning and to engage interest in collaboration to develop a regional strategy. They have organised a webinar to be delivered by CSIRO on sea level rise, with strong interest from institutional stakeholders. The University of Technology Sydney has also been engaged to deliver detailed workshops to assess community vulnerability to extreme events as part of the community consultation process.

Australian Capital Territory (ACT) – the ACT is on track to improve their evidence base and spatial decision support systems to achieve more defensible, strategic NRM investments. They are currently collecting and consolidating relevant spatial data to inform a new spatially-explicit NRM planning framework that is consistent with existing NRM guidance documents for the ACT region. This project is filling critical data gaps and exploring alternative spatial planning frameworks prior to updating the regional NRM plan. This work is being completed through broad consultation and collaboration with community and government stakeholders. The project is also strengthening the adaptive capacity of people and organisations in the ACT region through capacity building and training workshops.

Tasmania – Through funding from the NRM Planning for Climate Change Programme, **Cradle Coast NRM** has provided adaptation opportunities and solutions for the dairy industry in north-west Tasmania. In a joint project with the University of Tasmania, Cradle Coast NRM developed a regional map of pasture yields using climate information from Climate Futures Tasmania. Over 300 simulations across various drainage classes and soil types were run from present year until the year 2100. The results show that pastures are predicted to have an increase in spring growth of around 30 per cent due to warmer temperatures. However, this will be offset by more variable rainfall combined with around 20 per cent lower pasture production in summer and autumn. Managing variability in pasture production under future climate change will be a challenge to producers in the region. Therefore, feed deficit analysis was subsequently undertaken to determine ideal carrying capacity in the near (5 years) and medium term (15 years) to optimise animal health and milk production. The results mean farmers will need to consider options to best utilise surplus feed, strategic use of nitrogen fertiliser in winter and early spring, use of summer forage crops, and in some cases varying calving dates and/or stocking rates. Considering that the dairy industry is the highest grossing agricultural industry in the region and accounts for around 60 per cent of Tasmania's milk production, this modelling work is of direct benefit to enable farmers to be climate ready in an important agricultural region of Australia.