

26 March 2015

Paper Title	Embedding consideration of climate change risk across NRW
Paper Reference:	NRW B B 19.15
Paper Prepared By:	Clive Walmsley

Purpose of Paper:	Update and Decision
Recommendation:	To adopt the risk and opportunity-based approach to progressively implement the WG adaptation guidance and thereby facilitate mainstreaming of climate change action across all NRW's activity
Decision Required:	Approval of approach

Impact: To note – all headings might not be applicable to the topic	Impact on the Environment: Considering the impacts of climate change will become increasingly crucial to the delivery of our environmental management work. The application of the WG guidance provides a framework and process to address this. Adopting the Ecosystem Approach will necessitate taking account of climate change within Integrated Natural Resource Planning.
	Impact on the Economy: Impacts of climate change on the economy are comparatively poorly understood, although extreme weather events are already having effects and it will undoubtedly be the case that some sectors e.g. agriculture, forestry and tourism will be significantly impacted while development of the green economy presents opportunities.
	Impact on Community:

	Communities are at the frontline of climate change impacts, and engaging them in greater awareness of risks and approaches will be an important element of our work. Impact on Knowledge: Improved understanding and synthesis of evidence to inform decision-making on climate change risks is an essential part of the process set out in the paper. Knowledge and its communication are essential to building adaptive capacity both within NRW and externally.
--	--

Issue

A Board paper relating to the role of NRW in addressing climate change in Wales was presented in May 2014. It was agreed that further work was needed to identify an approach to mainstreaming consideration of climate change across NRW in a way that not only met the requirements of the WG guidance but also ensured that the risks to NRW's objectives were minimised and that demonstrated action to tackle the issue externally. This paper provides an update on progress and sets out our proposed approach.

Summary

A phased prioritised approach to embedding consideration of climate change into all of NRW's activity is proposed based on the risks to NRW delivering its outcomes. During 2015/16 the approach will be trialled on 5 areas of work.

Background

Science and policy context

1. Reviewing scientific evidence the Inter-governmental Panel on Climate Change's 5th Assessment Report published in 2013/14 reinforced the message that there is now greater certainty that anthropogenic emissions are responsible for historical climate change and that it is projected with greater confidence that warming will continue, thereby increasing the likelihood of severe, pervasive and irreversible impacts on the environment, economy and societal wellbeing across the globe.
2. Within Wales, the Climate Change Strategy published by Welsh Government in 2010 set out measures to achieve annual emission reductions of 3% pa within sectors with devolved competence from 2011 onwards and an Adaptation Framework to build our evidence base and capacity to mainstream adaptation across all sectors. In 2012 and 2013 the annual emission reduction targets have been met but with current policies it is anticipated that it will not be possible to meet the other Welsh Government target to reduce overall Welsh emissions by 40% by 2020. The recently published Annual report on Climate Change Strategy progress for 2014 has reinforced the message that to date targets have been achieved but further policy and delivery mechanisms are required if future targets are to be met.
3. In response to the challenging future targets, WG initiated a climate change policy refresh in 2014 that NRW provided input to – in the form of a Ministerial briefing paper. In October 2014 the Minister's oral statement on climate change set out four priority areas for future action – i) driving out climate risk, ii) driving down emissions, iii) driving up energy efficiency and iv) driving forward low-carbon energy. It is expected that a more comprehensive refresh update expanding

upon planned activity on these priorities (and possibly a revised policy) will be produced later in 2015.

Incorporating climate change within NRW's work programme

4. One of our key communication messages is that 'NRW is driven by the need for change in a society facing climate change, dwindling resources and population pressures. We exist to make sure the environment and our natural resources are sustainably maintained, enhanced and used, now and for future generations.' This places tackling climate change at the heart of why NRW needs to take a new integrated approach to our work.
5. NRW's Corporate Plan makes a specific commitment (E4) to *help to make Wales more resilient to climate change and other impacts, as well as supporting global efforts to reduce emissions of greenhouse gases*. The Business Plan includes a specific objective to *ensure climate change adaptation is embedded in all areas of our work to reduce risk of impacts on delivery* with the 2015/16 plan having a target to *embed consideration of climate change in high risk areas of our work and demonstrate application of Welsh Government guidance for reporting authorities on climate change adaptation*.
6. NRW has been identified by Welsh Government as a Reporting Authority under the Climate Change Act 2008. This requires NRW to demonstrate that we are considering the risks posed by climate change to the delivery of our remit, and if it so wishes WG can require us to report on those risks and how we are managing them. To date, the Welsh Government has chosen not to require any organisation to report. Nevertheless, we have agreed to be among the first public bodies to 'road test' the WG Statutory guidance to prepare for a changing climate that was published in 2013. We intend to be an exemplar organisation for other Welsh public bodies by demonstrating its application to reduce the climate-related risks to our business.
7. In recent discussions with WG we have received a clear steer to give climate change greater prominence and profile in our work programme, and as a result we have reinforced the importance of climate change within the 15/16 Business Plan. NRW makes an important contribution to the delivery of the Climate Change Strategy in relation to both mitigation and adaptation. In addition to the work set out in the Business Plan we have agreed to provide case studies demonstrating the embedding of climate change within our work that will help demonstrate how the public sector is showing leadership in terms of action on climate change.
8. In addition, the recent Minister's Written Statement on climate change delivery (5 March) sets out WG's intention to fund NRW to undertake an evaluation of NRW's net carbon impact as an organisation building on the Environmental Management System related work that audits our emissions. This assessment would take account of the net carbon impact of the whole of our estate too and

identify what would be required for NRW to become a net carbon positive organisation.

Approach to applying the statutory adaptation guidance

9. Our intention is to phase the process of applying the WG five-part guidance by completing Parts 1 (Starting) and 2 (Investigating) during 2015/16 – we started this process in 2014 with the Board session. We will also trial the rest of the approach Parts 3, 4 and 5 (Planning, Implementing and Monitoring) within a small number of specific areas of the business. At the end of 2015/16, we will review progress and refine our approach for its roll out across other activities in 16/17 – 17/18. The Board paper on climate change is an important element of applying Part 1 of the guidance which requires the engagement of senior decision-makers, including Board members. We will subsequently be organising sessions with the Leadership team to both engage them in the process and start to further consider the risks identified. We have decided not simply to examine the need for adaptation as required by the WG guidance but to address the role of our activities in delivering emission reductions as well in a single process.
10. An initial assessment of the climate change related risks and opportunities across NRW has been undertaken using the 250 activities identified as part of the transition work prior to the vesting of NRW. For each of the activities the following elements were assessed in a qualitative manner:
 - Impact-risk - the effect climate change impacts will have on our delivery and business outcomes for the activity;
 - Urgency – the timescale for adaptation response based on the time horizon for any significant impact, i.e. significant impacts by 2020s, 2050s or 2080s;
 - Mitigation impact – the importance of the activity to NRW’s overall influence on Welsh Greenhouse Gas emissions;
 - Overall climate change priority – the combined adaptation and mitigation score for the importance of addressing climate change for the activity.In addition to the above elements that were used to calculate an overall score for the priority of climate change action for each activity, a further 3 components were qualitatively evaluated (High/Medium/Low) to provide contextual information that should inform the selection of priority work areas:
 - Uncertainty – an assessment of uncertainty for both the adaptation impact-risk and the mitigation impact assessment;
 - Existing adaptation - the degree to which climate change impacts have already been considered in planning and delivering the activity;
 - Agency - the degree to which NRW is presently positioned in terms, staffing, finance, opportunity and timing to deliver adaptation for this activity
11. As a result of this analysis it has been possible to classify NRW’s 250 activities into 3 levels of overall priority (high, medium, low). A total of 24 have been identified

as high priority covering forestry, nature conservation, energy generation, planning, marine, water management, land management and waste work areas. 76 activities have been evaluated as medium priority covering a wider range of work areas including education & awareness, enterprise, navigation, fisheries, facilities management and a variety of internal and external advice and policy and strategy development activities. The remaining 152 activities have been identified as low priority. These are dominated by corporate office-based activities including corporate governance, people services, legal services, knowledge management etc. The category also includes a range of processes such as tackling crime, enforcement, corporate and business planning and reporting, financial and management accounting along with some elements of regulation, permitting and licencing, which either do not require consideration of climate change or where climate change is addressed within the overarching policy but does not need to be considered within the activity itself.

12. Given limited resources, it is necessary to identify priority areas for in-depth consideration of both the climate change risks and impacts, and the measures that will be implemented to manage them. It is proposed that 5 work areas should be trialled in 2015/16 - as set out in the business plan. The first four of the five proposed work activities have been selected based on their high *Overall climate change priority*, low or medium level of *Existing adaptation* and medium or high *Agency*. They also represent work activities from each of the Legacy bodies. The suggested priority work areas are:

- Development and land use planning – consideration of implications of climate change within the planning process, including provision of appropriate guidance and change factors to inform decision-making;
- Protected Areas – consideration of the impacts on wildlife within the notification and site management activity, including marine sites;
- Maintain and operate the Forest Estate – demonstrating best practice land management taking account of both adaptation and mitigation;
- Water Quality and/or Water Resources Permitting – this is not about the permitting process per se but ensuring that climate change is fully considered in relation to the outcome of the permitting;
- Recreation and access infrastructure – focussing on the risks from climate change to the Wales Coast Path and proposing adaptation measures taking account of the existing Shoreline Management Plans and NRW's coastal flood risk work.

This final priority has been selected as an example of an activity that though not identified within the 250 activities is seen as a clear priority owing to the impact of the 2013/14 storms on the integrity of the Path and the substantial additional costs invested in its repair, along with the lack of consideration of climate change risk to date. It will be important to progressively consider the impact of climate change on all of NRW's infrastructure as the approach is rolled out after the trial.

13. Part of this process of in-depth consideration will be evaluating how best to engage different areas of the business in the process of embedding climate change risk and what level of engagement and facilitation is required from climate change specialists for success. We will also consider the production of generic adaptation guidance that could be used in other areas of NRW.

Wider mainstreaming of climate change across NRW

14. Alongside the process of embedding consideration of climate change within discrete work areas by applying the guidance, there is a need for a wider programme of mainstreaming across the organisation from a strategic Board level to on-the-ground delivery of adaptation measures. This requires us not only to think about how all decisions are made in the context of climate change but also how they link to other issues that require mainstreaming such as INRM and sustainable development. At Board level Andy Middleton acts as the Board climate change champion and at ET level climate change is principally addressed within the Good for Environment programme chaired by Graham Hillier but it is important that the issue is considered by all across the organisation. To this end the following actions to embed consideration of climate change are proposed:

NRW corporate planning and programmes,

- All 'Good for' Programme Boards and Chairs to review their consideration of climate change within their programme;
- NRW Strategies and Policies address climate change mitigation and adaptation principles from the outset, e.g. Accommodation Strategy;
- Climate change mitigation and adaptation considered explicitly within Integrated Natural Resource Management approach, including within the trials;
- Strategic consideration of achieving climate change aims through our Partnership funding programme, working with our partners on shared climate change risks;

Raising staff awareness of the NRW approach to climate change,

- Develop training material/presentations to roll out across the organisation to raise awareness of the latest climate change science and the way that NRW is embedding consideration of climate change risk;
- Establish a virtual climate change team with members from across NRW to help in the process of evaluating risks and future priority areas for action;
- Develop case study material based on priority activities to demonstrate approach to applying WG guidance to both inform further implementation internally and to share with WG, the Climate Change Commission for Wales and others.

15. While this paper focusses specifically on the integration of climate change within the work of NRW, it is important to recognise the interrelationship between Sustainable Development, Natural Resource Management and Climate Change.

Those who contributed to *The Wales We Want* conversation identified climate change as the most critical single issue for future generations. The Wellbeing of Future Generations Bill includes explicit reference to climate change mitigation and adaptation within its goals (as currently revised) – recognising that tackling climate change is a substantial step towards sustainable development. It will be important that consideration of climate change is fully integrated into the work of the PSBs and the production of Local Wellbeing Plans. The integration of climate change adaptation and mitigation issues and measures within the Natural Resource Management process will provide another important route to integration of climate change. There is a need to give further consideration to integrated reporting systems covering these key themes.

Next Steps

The immediate priorities proposed are to:

- Identify representatives from across NRW to form a virtual climate change team in discussion with LT;
- Establish programme board for climate change to steer and coordinate proposed work, and other activity identified as part of embedding process;
- Identify/recruit a dedicated project coordinator for delivery of the WG guidance process across NRW in order to ensure that this cross-cutting priority work is not side-lined by other priorities;
- Discuss with relevant LT and staff engaged in specific work areas the appropriate process for embedding and scope of work for 15/16 – amending priority activities if necessary;
- Hold exercise with ‘Good for...’ Chairs to further explore mainstreaming of climate change across ‘Good for...’ programmes in collaboration with WG Climate Action and Resilience team.

Risks

Failure to undertake the proposed work will lead to continued exposure to the increasing risk of climate change impacts possibly preventing delivery of some aspects of NRW's remit. The main risks associated with the work proposed are related to a lack of capacity or willingness to engage in the process, or undertake the adaptation options identified. These risks can be mitigated by ensuring senior level buy-in to the process at Board, ET and LT level, with allocated staff resources with responsibility for the topic within other areas of the business.

Financial Implications

Financial costs of the process are largely confined to staff time along with the costs of any selected adaptation actions that will be implemented. The staff resource required to undertake the approach will be assessed as part of the trial. The costs of the actions can

only be evaluated and reviewed as part of the implementation process and they are likely to vary substantially depending on the area of NRW activity. In terms of staff capacity while existing climate change staff have some capacity to enable mainstreaming of climate change action, it is recognised that the programme of work to embed the WG adaptation guidance in discrete areas of work will require a dedicated individual to coordinate the work in collaboration with managers and staff in the selected areas of the business. Their key role will be to coordinate the process and ensure that each area of the business plays its part in delivery of the approach.

Communications

Our environment and natural resources are coming under increasing pressure from a range of issues including climate change. This is why our positioning on climate change plays such an important role in NRW's communication strategy both internally and externally.

Much of the actions noted in this paper have an internal focus, based around raising staff awareness about the work programme and so a staff engagement plan will be developed to successfully support the proposed work and communicate our progress over time. It is equally important to drive external awareness through our work and an effective approach to proactive, constructive messaging is built into our communications strategy.

Equality impact assessment (EqIA)

Not relevant. Although as detailed actions emerge they may require EqIA to ensure mitigation or adaptation actions are equitable and provide equality for all.