THE HIGHLAND COUNCIL

BLACK ISLE WARD FORUM

11th JUNE 2009

ACTION PLANNING FOR ADAPTATION TO CLIMATE CHANGE

Summary
The report outlines issues identified during an adaptation workshop held during a meeting of the Black Isle Ward Forum on 11th June to inform the Council's formulation of a Climate Change Adaptation Strategy for the Highland region.

1. INTRODUCTION

1.1 The Council has acknowledged and committed to take action towards the challenges presented by a changing climate through several initiatives including Scotland's Climate Change Declaration and the Single Outcome Agreement process.

1.2 The main objectives of effective adaptation planning within the Council are to:

- Assess current understanding of climate change impacts;
- Assess vulnerability to change;
- Raise awareness of the impacts in Highland;
- Highlight cost implications;
- Explore opportunities for change;
- Integrate Climate Change Impacts into existing monitoring systems;
- Build any Service-specific actions into Service Plans;
- Produce an Adaptation Strategy for Highland

1.3 The Highland Council Programme contains a commitment to "*Produce and implement a climate change strategy for the Highlands which will reduce our impact on the environment and adapt our services to cope with the impact of climate change*". In order to obtain community views and input into the formulation of the most appropriate strategy for the people of the Highlands a Community Climate Change Adaptation Workshop was held at a meeting of the Black Isle Ward Forum on 11th June.

1.5 The ward forum was very well attended and the audience demonstrated a particularly good knowledge of climate change issues both on a global scale and those more relevant to the local surroundings.

1.6 Outputs from group discussion work can be found in the relevant Appendices to this document. Summarised findings are also presented below.

2. ADAPTATION WORKSHOP OUTCOMES

2.1 Media Exercise - Cause, Effects & Implications:

2.1.1 Two exercises were designed to aid group discussion toward issue identification. The first of these focused on recent examples of weather related incidents based on media articles extracted from a recent Local Climate Impact Profile (LCLIPS) project. Attendees were split into 3 groups and each reviewed a separate article. The purpose for this exercise being that attendees could gain an appreciation for the causes, effects & wider implications of weather related incidents using real examples as reported through local press publications.

2.1.2 The exercise was useful in highlighting the causes, effects and implications of specific events both to the Highlands generally and to the Black Isle Ward in particular. Group outcomes have been combined and are presented in **Appendix 1** for further illustration.

2.2 Scenario Exercise – Threats & Opportunities:

2.2.1 Having explored the method of assessing causes, effects and implications using recent 'real' events the second exercise addressed future scenarios.

2.2.2 This theoretical scenario exercise, based on UKCIP02 scenario tools was designed to explore both threats ('negatives') and opportunities ('positives') of anticipated future climate change impacts in Highland. Scenarios covered differing greenhouse gas emission and climate change predictions.

2.2.3 The exercise was also used to identify the group's views on potential actions that could be taken at national government, local government and community level in order to be better prepared.

2.2.4 Again the threats and opportunities explored were largely of general application to both the region and the ward. Results from this exercise are presented in **Appendix 2**.

3. CONCLUSION

3.1 As illustrated in the appendices flooding and associated damage were recurring themes for the groups but a very strong desire also emerged for more empowerment to communities to bridge the gap between policies and those who are most affected through support, education and training and guidance to plan for and be more resilient to changing climatic conditions and extreme weather events working ultimately towards self-sufficiency in communities.

3.2 The workshop attended by residents from the Black Isle allowed the Sustainable Development team to identify important issues and priorities beyond normal Council service delivery and the groups are to be commended for their enthusiasm, interest and input.

3.3 This report is a starting point for the Sustainable Development Team. It provides a basis to develop thinking on climate change adaptation in communities and to add issues, priorities and actions to those already identified from work with Council services and other groups.

3.4 The Highland Council and the Sustainable Development team will continue to work with representative groups and communities in order to ensure that the best possible Climate Change Strategy, incorporating both reducing emissions and being more prepared for a changing climate and extreme weather events, is achieved.

Date: 22nd June 2009

Author(s): Ailsa Villegas, Sustainable Development Officer
Noel McAllister, Policy Assistant

LCLIPS MEDIA EXERCISE (CAUSES, EFFECTS & IMPLICATIONS) – COMBINED RESULTS

CAUSES:	EFFECTS:	IMPLICATIONS:
• Poor planning; • Centralisation of resources; • Dependency – lack of self sufficiency in communities; • Variability of weather; • Torrential rain; • Eroded peat (from Drier Summers); • Increased run off; • Landslides; • Inability to clean water system rapidly; • Sewage / contamination; • Increase in volume & speed causing damage and debris; • Post glacial landscape – erodes quickly; • Overloaded rivers; • Lack of fire breaks; • Lack of understanding / uneducated tourists and locals;	• Cutting back on man power / increased sub contracting; • Delay in school buses / School closures; • Inability to adapt demonstrated; • Repeated events; • Risk of drinking contaminated water; • Water borne diseases; • Sickness / diarrhoea; • Impact on health services; • Increased emissions - having to boil water; • Increased cost of maintenance; • Crops washed away; • Partially choked drains completely choked; • Greater requirement for information & education; • Increased leaflet distribution = increased CO2 in production; • Loss of / damaged properties; • Loss of life; • Loss of biodiversity; • Accelerated climate change; • Economic losses – tourism etc; • Landslides; • Insurance claims – non-cover; • Council having to re-house those affected; • Civil disturbance; • Travel (air, sea, road, rail) affected;	• If really big choke occurs – no water; • Loss of detailed local knowledge in the areas due to staffing changeovers; • Damage to communication / power / utilities; • Goods and services supply to Black Isle impaired; • Travel affected; • Opportunity for change of land uses and more biodiversity; • Need for Community Action Plans; • Creating contingency plans including more local self sufficiency; • Need to plan for major events to avoid complacency; • Risk management / planning delivered to Community Councils; • Need to improve self sufficiency / preparedness (e.g. food stocks); • Need to plan for increasing number of old people (living alone); • Communities to take more responsibility; • Decisions required on who takes responsibility at the different levels (THC, Water Board, Community) and cost effectiveness of actions; • Outreach information and involve local people; • Requirement for increased education; • Need for a range of alternative supply lines to be established;

SCENARIO EXERCISES (THREATS & OPPORTUNITIES) – COMBINED RESULTS

THREATS :	OPPORTUNITIES:
• Shipping loss; • Damage to buildings; • Damage to off shore wind; • Loss of life / injuries; • Transport links down; • Power lines down; • Coastal flooding (Avoch) & breakdown in defences; • Inland flooding; • Injured people – overloading NHS; • Emergency evacuations; • Heightened pressures on Emergency Services; • Vulnerable sectors in communities affected; Over stretched resources in public services; • Water going nowhere – causing rapid runoff; • Top soil run off; • Soil erosion; • Trees down; • Lack of insurance and increase in property prices; • Losing livestock; • Habitat unable to change – risk of fires & mischief makers causing fires; • Impacts on infrastructure, water and supply (power) networks; • Poor harvest from high temperatures; • General apathy to climate change leading to a more reactive approach • Increased population and more people moving to the highlands; • Flooding – storm surges; • Destruction of harbours and coastal features; • Water from snow melt meeting tidal flooding; • Boats at sea in trouble; • Civil rioting; • Low level villages under threat; • Damage to wind turbines;	• Self reliant / independent communities; • Empowering local communities; • Building standards and location; • Growing new or different crops; • Opportunity for better planning; • Opportunity to learn from events; • Looking at better ways to use water learning from good examples from Europe and Africa; • Improved forecasting (when, how severe, where) and identification of patterns including temperature gradients; • Better infrastructure planning; • Increased harnessing of renewables; • Use of better / different materials in construction; • Less use of tumble dryers; • Greater awareness / behavioural change; • More outdoor recreations; • Increased Tourism; • Access to disaster funds; • Emergence of innovation;

WHAT CAN BE DONE TO CHANGE:

- Get land from absentee landlords for community use;
- Better sea defences – SEA Defence Policy;
- Clarify accountabilities and responsibilities;
- Improved partnership working or one over-riding authority (e.g. for water catchments, river catchments and planning and management);
- Coordinated services (SNH, SEPA etc);
- Changing farming techniques and forestry practices (minimising run off);
- Changing planning laws;
- Creation of community woodlands;
- Protection for water catchments from floods;
- Establishment of community links;
- Local Authority contingency plans;
- Location of new builds away from danger areas;
- Reduction of commuting;
- More local businesses;
- More education about climate change;
- Conservation of electricity, gas and water;
- Build in species more resilient to effects;
- Emergency Planning including first responders and second responders;
- Better advice or funding from Government on delivery of emergency plans;
- Evaluation of Communication Strategies to determine whether the existing strands are good enough;
- Need local resilience;
- Communities actively engaging with each other;
- Local self reliance – Services and facilities, food, medical, energy, water, power, caring services;
- More community owned resources – farms / allotments / energy services;
- Training for first responders (first aid etc);
- Change attitudes – to transport / health / local services / waste / participation / energy;
- Guidance required for different eventualities;
- Be better prepared to expect the unexpected;
- Underground power lines;
- Building stronger to withstand extreme weather;
- Design of roads & infrastructure to withstand storms;
- Plan for low lying villages + flood plains;
- Improved farming practices – preventing erosion;
- Keeping young people positive;
- Engender personal responsibility;
- Find the positive side – a vision for better life;
- Start to invest in solutions;
- Need to get everyone thinking sustainably;