

## **CLIMATE CHANGE ACTION PLAN FOR ESSEX**

### **1 SUMMARY**

- 1.1 To seek Members' views on the priorities for a Climate Change Action Plan for Essex.

### **2 BACKGROUND**

- 2.1 Essex County Council is consulting on priorities for inclusion in a proposed Climate Change Action Plan for Essex.
- 2.2 Two events have been held that resulted in a wide range of possible actions against climate change being identified and interested parties and partner organisations are being asked to prioritise their top five in each of seven action areas. These areas are:-
- Biodiversity and agriculture issues
  - Coastal area issues
  - Economic opportunities
  - Health issues
  - Infrastructure and development issues
  - River and fluvial issues
  - Water supply.
- 2.3 Officers have entered some suggested responses on the appended sheets, but this is entirely a matter for the Committee's determination and individual Members will, no doubt, hold strong personal views on some issues.

### **3 ENVIRONMENTAL IMPLICATIONS**

- 3.1 Climate change has the potential to have a significant impact on the District.

### **4 RESOURCE IMPLICATIONS**

- 4.1 The resource implications that will arise from implementation of measures to deal with climate change cannot be determined until the action plan is finalised.

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**5 RECOMMENDATION**

5.1 It is proposed that the Committee **RESOLVES**

To consider the key themes for the Essex Climate Change Action Plan, and to advise Essex County Council of this Council's priorities.

Graham Woolhouse

Head of Housing, Health & Community Care

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**Background Papers:-**

Letter from Essex County Council, August 2004.

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**APPENDIX**

**CLIMATE CHANGE**

**ACTION PLAN- KEY THEMES**

This is the list of key issues which have emerged.  
Where issues were similar we have grouped together or deleted to remove duplication.

**Coastal area issues**

**Impacts:**

- Risk of damage to human life;
- Risk of damage to property;
- Community perceptions of the coast may change;
- Coastal towns lose tourism income;
- Marine habitat will be lost to erosion;
- Coastal biodiversity will change;
- Coastal footpaths lost through erosion;
- Coastal water temperature increases could lead to algae blooms and closure of some economic sectors on the coast;
- Closure of some economic sectors on the coast;
- Dislocation of populations;
- Essex may get smaller as land is lost to the sea;
- Change may stress existing management structures

<b>No.</b>	<b>Actions to take</b>	<b>Priority?</b>
1	Improve sea defences	
2	Remodel Essex coast in response to climate changes	3
3	Planning, nature reserves and sustainable development	
4	Protect against blight- long and short term	
5	Prepare for disaster	
6	Address public perceptions and understanding	4
7	Shift budgetary priorities	2
8	Joined up thinking needed, locally and nationally	
9	Longer term thinking & decision making of where people can live	1
10	Identify key areas/ strategy	
11	Wash land	
12	Capture water for future uses	
13	Need to make the most of flood defence provision to provide a leisure amenity	
14	Need to adapt the coastal economy to account to physical changes	
15	Implement PPG25 robustly	5
16	Address public perceptions and understanding	
17	Teach people to swim	
18	Engage communities in solving flooding	

If you have any ideas to help implement one or more of these priority actions, please use the space below to explain. If this is something you or your organisation might like to lead on, please let us know.

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**Biodiversity and Agriculture issues**

**Impacts:**

- Soil erosion;
- Increased vermin;
- Arrival of termites and mosquitoes;
- Impact of water abstraction on wildlife;
- Increase of heat fires;
- Agricultural challenges: new weeds and diseases;
- Some areas becoming too dry to support agriculture;
- Reduction in birds;
- Change in agricultural patterns;
- Loss of habitat and natural diversity

No.	Actions to take	Priority?
1	Encourage salt marsh	3
2	Identify the likely risks that are associated with importing predators	
3	Use subsidies to introduce integrated system of wildlife corridors through agricultural land	
4	Increase moving hard flood defences	
5	Identify likely risks both due to temperature change and for importing goods	5
6	Start planting new species, both crops and trees	
7	Plan for change of crops grown	1
8	Encourage biodiversity in agriculture not monoculture	4
9	Plan nature reserves and sustainable development	
10	Plan for flash flooding, windblown and loss of soil	
11	GM crops? : Crop patterns; public awareness	
12	Plan for sustainable irrigation of agricultural crops	
13	Learn to cope with arid conditions	
14	Increase and improve better storage capacity for winter rainfall	
15	Increase public awareness	2
16	Need to consider the effect changes will have on trees	
17	Need an educational programme to parties who need to take action	
18	Adjust nature conservation objectives on sites to reflect climatic change implications	

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**Economic opportunities**

**Impacts:**

- Industries may move to areas where water is more available;
- Increasing costs in agriculture leading to increasing food costs as some costs become uneconomic;
- High insurance premiums;
- Flood areas not being covered by insurers;
- Increase in CO<sub>2</sub> emissions as a result of development in Stansted;
- Warmer temperatures;
- Emergency service adjustments
- Cost of heating will be decreased in the winter months

No.	Actions to take	Priority?
1	Encourage Green Industry- Create centres of Excellence	
2	Showcase construction designed to adapt to climate change	
3	Encourage a new tourist industry with the warmer and longer summers	2
4	Wine making	
5	More opportunities to revive and restore the British seaside culture	
6	Introduce a café culture	
7	Create opportunities to market new goods and services that help adapt to climate change	5
8	Need to work with Government and Europe to increase industrial development in the light of changes in the future	
9	Different crops encouraged including vines, melons and more fruit	
10	Increased shellfish and fish obtained from the flooding of land	
11	Ensure risk assessments allow for long term climate change	3
12	Solar panel usage increased- increased electricity consumption for cooling systems	1
13	Improve heat storage	
14	Increase water storage	
15	Encourage more efficient cars	4
16	Develop the skills for the 'new world'	
17	Opportunities to market new goods and services that help adapt to climate change	

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**Health issues**

**Impacts:**

- Emergence of diseases not usually associated with this country
- Impacts of increase in flooding
- High temperatures impact on refuse collection systems
- Impact on hospitals: increased burden on the NHS
- Spread of infectious insects
- Heat related health problems
- Rising pollution levels
- Ability to respond to emergencies
- Heat stress on the vulnerable

No.	Actions to take	Priority?
1	Monitor bio-diversity e.g. mosquitoes	1
2	Plan for the possibility of the arrival of these new diseases	5
3	Educate people about skin cancer	2
4	Protect from too much heat	
5	Educate people of the dangers and how to cope with living in different temperatures	
6	Take precautions against dehydration	
7	Teach people to cover up not uncover	
8	Control of vermin and preventatives against these diseases	
9	Plan for the increase in the NHS due to the heat especially of the elderly and the vulnerable	3
10	Review and update emergency planning to address the issue	
11	Improve health through the better diets which are associated with hotter climates and use this to advantage	
12	Climate control- mechanisms need to be put in with new housing development as part of the building regulations	
13	Educate people of dangers	4
14	Plan with the NHS on how it would cope	

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**Infrastructure and development issues**

**Impacts:**

- Increased building costs
- Conflicts between development pressure and flood risk areas increase
- Pressures on transport networks: train tracks buckling in the heat
- Increased maintenance on roads/bridges from drying out on clay foundations – road safety issues
- Rural public transport decline forcing more car use
- Storm damage on emergency provision
- High temperatures will cause power supply problems e.g. surge of electricity for air conditioning
- Second runway at Stansted would effectively put rivers in culverts
- Civil disorder

No.	Actions to take	Priority?
1	Create comfortable classrooms	
2	Ensure that building regulations are looking sufficiently far forward in terms of the effects of climate change	1
3	Prevent intensification of building in current urban areas	
4	Design property to be flood resistant	3
5	Increase use of high thermal mass buildings 'natural' air conditioning	
6	Reduce car use – no car zones	
7	Transport planning needs to take climate change into account	2
8	Design of classrooms needs to be flood resistant	
9	Build up not out	
10	Design buildings with flooding in mind a) Floating houses b) Homes on stilts	
11	Have a compulsory means of escape for new housing	
12	Have electricity supply at first floor	
13	Increase standards of construction	5
14	Service planning	
15	Encourage natural sources of energy in buildings: wind, solar, tidal	4
16	Combined heat and power systems	

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**River and fluvial flooding issues**

**Impacts:**

- Increased flooding in winter
- Rising sea levels;
- Challenge to providing target figure of homes in flood plains
- Displacement of communities- physically cut off by water, cut off from services and electricity
- Difficulty in managing scale of new development in Essex
- Changes in the landscape and soil erosion
- Damage to the infrastructure: roads and rail
- Drainage capacity problems
- Increased soil erosion
- Implementation of PPG 25

No.	Actions to take	Priority?
1	More money needed to improve flood defences	
2	Stricter controls of new planning applications in flood prone/ plain areas	2
3	An improved public warning system needed	
4	Electricity and other services need to be improved to make sure that they will hold strong if flooding happens	
5	Strict planning applications	
6	Better management of storm run off water is needed	1
7	Improved drainage and alleviation systems need to be in place	
8	A need to accept that change will happen and then work to cope	
9	Greater use of renewable energy sources	3
10	Implement PPG25	
11	Reassess the capacity of the drainage systems	4
12	Press Government for more funding for flood defence	
13	Change of construction methods	5

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**Water supply**

**Impacts:**

- Drought causing a loss of wetland and species;
- Water shortages;
- The agricultural need for water is increasing;
- An excess of housing may lead to insufficient water for drinking leading to an increase in demand and distribution networks 'cracking' under the strain;
- Increase in blue and green algae caused by pollution;
- Lack of water supply issues mentioned in the planning directives

No.	Actions to take	Priority?
1	Higher water charges	
2	Conservation of water	2
3	Water resource development	
4	Educate people to use water wisely	3
5	Encourage the use of water meters	
6	Store water in the winter to offset summer shortages	
7	Reduce usage- efficient appliances/ fittings	
8	Desalination	4
9	Rainwater flushing toilets	
10	Evaluate water resource options	5
11	Increase movement of water from other areas of the country	
12	Change to dry gardens	
13	Farmers to look into water retaining crops and irrigation	
14	Reduce water usage on farms	
15	Develop efficient technology for agricultural irrigation	
16	Catchment level management to reduce CO <sub>2</sub> emissions	
17	Prioritise reduction of climate change effects	
18	Review the capacity of reservoirs	
19	Research and monitor the subsidence potential	
20	Increase and improve maintenance of distribution infrastructure to cope with and make better use of winter rains	1
21	Limit the amount of housing consisting with availability of water supplies	

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