

Appendix A

Risk Register for Adaptation and Resilience against impacts of Climate Change																
Last reviewed 6/10/23																
description/ consequence	Risk Owner	Operational	Likelihood	Impact	Inherent Risk Score	(Existing) Mitigating Controls	Likelihood	Impact	Residual Risk Score	Further Actions (for inclusion in responsible role Service Plan)	Officers to Action	Responsible role	Target date to achieve target risk score	Target Risk Rating		
Column17	Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8	Column9	Column10	Column11	Column12	Column13	Column14	Column15	
G	Extreme Weather - General					0										
G1	As a result of climate change extreme weather events occur far more frequently. Leading to restriction on service provision, biodiversity loss, negative social impacts especially to residents most vulnerable to the health effects of severe weatherconditions. At-risk groups include older people, the very young and people with pre-existing medical conditions as well as those whose health, housing or economic circumstances put them at greater risk of harm from adverse weather	Strategy & Partnerships	Operational	4	4	16	UKSHA Adverse Weather and Health Plan (AWHP) builds on existing measures taken by UKHSA, the wider government, its agencies, NHS England and local authorities to protect people from the health effects of adverse weather and build community resilience. It requires a risk management plan to mitigate the effects of the extreme weather which includes introducing adaptations to services and assets to ensure continuity of service and protection to the open and built environments. This risk assessment works alongside national level risk assessment to reflect the unique characteristics of Three Rivers. Cross service actions are in place to address:- Fuel poverty - through the retrofit schemes, Home Energy Support Service, cold weather payments and the welcoming spaces programmer where residents can stay cool in the summer or warm in winter. Health - through the provision of Healthy Hubs and place based health inequality initiatives. Housing: working with the social housing providers to retrofit homes with increased insulation and ventilation to provide a more resilient home Increasing awareness of home adaptation options through the Transition Street programme Work with partners through the LSP to encourage them to prepare their own resilience risk register	3	3	9	Introduce a Communication Programme and training - Provide a housing advice leaflet on how to adapt the home to perform better in floods, warm and cold weather including behavioural advice, low cost options and the higher cost retrofit actions - Promote and share with Healthy Hubs, Housing Associations, Health partners sections of the above according to the weather/ season, to increase resident resilience to extreme weather - Run an advert in the local media - preceding each summer season to raise awareness and encourage behavior change and home / garden adaptations - The met office are developing a system called L8 LACS which will provide Local Authorities (LA's) across the UK with local climate information to inform adaptation planning and will produce a visual Local Authority Climate Report. In future years this will provide data to inform sub local decision making. - Introduce training for Development Management and those associated with capital projects team on resilience and adaptation. - Run a landlords forum to help raise awareness of funding support available to private landlords to improve their homes' thermal properties	Climate Change & Sustainability Strategy Officer Housing Manager	Head of Strategy & Partnerships	April 2024 then ongoing	6	
G2	Climate change has meant that we can now expect regular episodes of extreme temperatures, both hot and cold or storm. This would result in the council having to activate SWEP (Severe Weather Emergency Protocol) more regularly. This would mean the Council are required to accommodate those who are sleeping rough for the period that SWEP has been activated, who would not normally be eligible for accommodation. No Government funding is provided for this provision, therefore, this may impact the Council's temporary accommodation budget.	Housing Services	Operational	3	3	9	Accommodation provided when SWEP has been activated is currently council owned temporary accommodation or sourced via known nightly let providers. Although it is required at times throughout winter, activation of SWEP during warmer months is very rare.	3	1	3	Housing Services to explore the possibility of a support provider providing SWEP accommodation for the council at low cost.	Housing Navigator	Housing Operations Manager	01/04/2024	5	
D	Drought															
D1	Increase in wildfires	Leisure and Landscapes	Operational	4	4	16	In Service Plans: - Prepare areas vulnerable to fire by cutting fire breaks to protect homes and biodiversity and ensure fire break plan is implemented annually - Cut and lift plans commence in June to reduce risk -Work in partnership with the Community Safety Partnership wildfire prevention group to support their district plan. -Annual communication programme to raise awareness of preventing wildfire - During periods of high temp and drought actively promote Wild Fire Prevention communication plan.	4	2	8	Annual review of the wild fire prevention programme	Landscapes & Leisure Development Manager Waste and Environment Manager Partnerships Manager	Associate Director for Customer and Community	Annually	5	
D2	Biodiversity loss:- - Water bodies and rivers dry up creating fish deaths and reductions in ecological health. - Limitations on water use affecting maintenance of vegetation. - Drying out/death of vegetation such as in parks and green spaces.	Leisure and Landscapes	Operational	4	4	16	Green Spaces : - Assess potential for drought resistant tree species to be introduced. - Removal of bedding from displays substituting with annual seeding and perennial planting which are more drought resistant and less reliant upon additional watering. - Ensure that young trees are irrigated. - Mulch trees to retain moisture & prevent damage from weeds. - Grass cutting scheduled less frequently, allowing grass to grow longer.(bearing in fire risk) -Some areas left to become meadows where appropriate (which will also benefit biodiversity). -Through Water Partnership work to encourage reduced abstraction from water companies to increase river flows	3	3	9	Blue spaces: - Review planting opportunities alongside water bodies to ensure rivers are shaded to reduce evaporation and provide cooler habitats for wildlife. Green spaces: - Explore the potential for drought resistant tree species to be introduced - Use of drought resistant plants as standard -Further assess grass cutting schedules to determine if there are more optimisations that can take place without impacting the fire risk	Landscapes & Leisure Development Manager Waste and Environment Manager	Associate Director for Customer and Community	Ongoing through open spaces Management Plans	6	
D3	Increased risk of subsidence in district, and on TRDC premises	Planning Policy	Operational	3	4	12	Planning applicants should consider type of soil and require homeowner to take specialist advice and deeper foundations if clay	3	4	12	Proactive management involving the identification of vulnerable areas in all council assets e.g. trees planted near foundations Monitor reports from building and condition surveys to see if there is any movement in buildings	Head of Property & Major Projects	Head of Planning Policy & Conservation	09/09/2024 & ongoing	9	
D4	Shortages in public water supply for agriculture, industry and domestic use resulting in potential food shortages and economic losses	Strategy & Partnerships	Operational	3	4	12	UKHSA Adverse Weather and Health Plan Through Water Partnership work to encourage reduced abstraction from water companies to increase river flows Support Affinity Water Water Resources Plan to encourage transfer of water into the district Greener Living guide given out with planning applications suggests ways to save water	3	3	9	Reduce water use by: -Encourage developments / extensions to utilise water saving devices - by pro-active promotion of low water use - Encourage Affinity Water to extend their metering programme and water saving device programme in the district -Promote water reduction behaviour in times of drought	Dev Management Team Leader Climate Change & Sustainability Strategy Officer	Head of Strategy & Partnerships	Ongoing	6	

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F Flooding															
F1	<p>Increase flooding affecting buildings, opens spaces and causing Disruption to access to council buildings or services (e.g. waste, leisure) - closure of assets</p> <p>Increase in demand for, and pressure on services for those directly affected by flooding</p> <p>Increase in response times for services reaching those in need</p> <p>Risk to safety of those working in flood conditions</p> <p>Insurance premiums rise</p>	Environmental Services	Operational	4	4	16	<p>Maintenance</p> <ul style="list-style-type: none"> - Planned preventative maintenance of buildings (clearing drains, gullies, gutters), - Open spaces and woodlands clearing ditches to be incorporated into management plans including working with HCC. <p>Retrofit</p> <ul style="list-style-type: none"> - Specific retrofit SUDS project in South Oxhey / Eastbury led by LLFA - Aquadrome project incorporates a hydrological survey to understand water movement, and what measures need to be installed to minimise impact of flooding <p>Policy</p> <ul style="list-style-type: none"> - Multi-agency Flood & Inundation Plan 	3	3	9	<p><i>Continuous monitoring of flooding in the district</i></p> <p><i>Review of emergency planning procedures to ensure flooding is covered, and partners are involved</i></p> <p><i>Working with LLFA and ColneCAN to incorporate SUDS work in the Smarter Water Catchment Programme</i></p> <p><i>Mapping of sources of drains / ditches, grates, gulleys on our land to understand responsibilities and maintenance requirements to prevent current and future flooding.</i></p> <p><i>Understand when SUDS are conditioned on new developments who is responsible for implementation and maintenance, could planning conditions added</i></p> <p><i>Review LLFA Map areas within the district which are susceptible to flooding and then consider mitigations for council buildings and land which are affected</i></p>	LLFA/ Environment Agency DP & Resilience Manager Climate Change & Sustainability Strategy Officer Waste & Environment Manager Development Management Head of Property & Projects	Head of Property & Major Projects	Ongoing	8
F2	<p>Damage to homes may mean people need to be relocated / find temporary accommodation. People who require rehousing in this circumstance may approach the council for this, if it is not provided by their landlord or insurance company. This may create an additional pressure on the council's temporary accommodation budget.</p>	Planning Policy	Operational	4	4	16	<p>TRDC Emergency Plan</p> <p>Development Management is required to use the policies in the current local plan with reference to the emerging local plan to ensure new development does not exacerbate flood risk</p> <p>Current Plan:-</p> <ul style="list-style-type: none"> - No development in flood zone 3b, Flood risk assessment for one 2&3 and in 1 hectare or more in Zone 1 - Development will only be permitted where it would not be subject to unacceptable risk of flooding; and would not unacceptably exacerbate risk of flooding elsewhere. Where practicable existing flood risks should be reduced. - Development in all areas should include Sustainable Drainage Systems to reduce surface water run off. - Sustainable Drainage Systems (SUDs) to be used to ensure developments minimise risk of flooding <p>Existing Homes</p> <ul style="list-style-type: none"> - LLFA pilot retrofit SUDs project for Eastbury / South Oxhey - Encourage homeowners to install porous driveways through Development Management - Council-owned temporary accommodation in the event of an emergency, if this is at capacity, Housing Services would use other sources of accommodation on a nightly basis. <p>Background</p> <p>Strategic Flood Risk Assessment for South West Herts : https://www.threerivers.gov.uk/services/planning/planning-policy/new-local-plan#Evidence%20base</p>	3	3	9	<p>Work to reduce risk of flooding from existing buildings:-</p> <ul style="list-style-type: none"> -Identify flood risk areas on GIS - work with LLFA to encourage retrofit SUDs in hot spot areas identified in the SFRA https://www.hertfordshire.gov.uk/media-library/documents/environment-and-planning/water/flood-risk-management/three-rivers-district/appendix-c-hotspot-assessment-sheets-checked.pdf -namely in Batchworth, Oxhey Brook, Tom's Lane, Harefield Road - Prepare a flood prevention communication plan which can be issued when floods are forecast - Ensure CIL funds applications for SUDs / flood prevention infrastructure are considered - Explore opportunities for landscaping conditions on planning application relating to non porous hard standings <p>In the draft local plan flood prevention measures are enhanced and include:-</p> <ul style="list-style-type: none"> - a requirement for sequential tests to be passed, and flood risk prevention measures to be demonstrated. - Major developments in all areas will require SUDs to reduce surface water runoff 	GIS officer Climate Change & Sustainability Strategy Officer Head of Regulatory Services Development Manager Team Leader Head of Planning Policy and Conservation	Head of Strategy & Partnerships	Sept '24 Ongoing April '24 Ongoing Local plan timetable	8

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H	Heat														
H1	Residents vulnerable to overheating in their homes Increase in heat related illnesses and excess summer deaths	Strategy & Partnerships	Operational	4	4	16	<ul style="list-style-type: none"> - Annual tree-giveaway to residents to encourage more shade in their gardens and community spaces - Community spaces plan in place for extreme heat and cold - Established Community Group Networks cross the district to understand needs of communities and to disseminate messages rapidly - Working with public health to communicate behaviour change needed - UKHSA Adverse Weather and Health Plan - Guide to Greener Living contains advice on keeping the house cool - Housing: working with the social housing providers to retrofit homes with increased insulation and ventilation to provide a more resilient home - Increasing awareness of home adaptation options through the pilot Transition Street programme 	4	3	12	<p><i>Temporary Housing - Improve ventilation to dwellings as part of a Housing Improvement programme. Include programme of works in the medium-long term housing investment programme.</i></p> <p><i>Include shade and orientation to reduce overheating - in all new buildings</i></p> <p><i>Raise awareness with Housing Associations/ Private landlords to improve ventilation using landlords forum above and through LSP structures.</i></p> <p><i>Provide a housing advice leaflet on how to adapt the home to perform better in warm and cold weather - including behavioural advice, low cost options and the higher cost retrofit actions</i></p> <p><i>Roll out Transition Street programme to more communities</i></p> <p><i>During periods of high temp: Communications: issue advice on keeping the house cool to be used as required, and promote cool space options</i></p> <p><i>Working with public health to communicate behaviour change needed</i></p>	Head of Property & Major Projects Strategic Housing Manager Climate Change & Sustainability Strategy Officer	Head of Strategy & Partnerships	Ongoing Sept '24 Ongoing As required	9
H2	Council Buildings and public realm vulnerable to effects of overheating. Increased need for cooling in council premises and water consumption (increased cost and carbon)	Property and Asset Management	Operational	4	4	16	<p>Council premises</p> <ul style="list-style-type: none"> -Optimise use of windows -As windows are upgraded incorporate heat reflective coating -Sensible building management by utilising blinds. - Retender water contract to include leak monitoring and cut water rate to maintain budget <p>Capital Projects</p> <ul style="list-style-type: none"> -Environmental Impact Assessment tool incorporates a section on adaptation which should be used for all capital projects, tender submissions and CIL applications to ensure resilience is embedded into all new projects <p>UKHSA Adverse Weather and Health Plan has guidance</p>	3	3	9	<p>Council Premises</p> <ul style="list-style-type: none"> - Ensure council owned or led capital projects incorporate shading and cooling both in buildings and open spaces - Make sure that new and refurbished buildings have adequate ventilation and cooling, minimising need for air conditioning. - Include shade and orientation to reduce overheating - in all new buildings and existing buildings. - Review retrofit options and blinds for council buildings to reduce heat ingress <p>- Adaptation training to capital projects group so they are aware it needs to be considered in project design(orientation buildings, landscaping, flood prevention)</p> <p>Council open spaces</p> <ul style="list-style-type: none"> - Review tree planting options to provide for shade in seating areas, walkways, playgrounds - Install more refill water fountains and shaded seating in major public areas <p>Planning Policy & Dev Management</p> <ul style="list-style-type: none"> - Negotiate adaptation inclusion into planning proposals and capital projects - Plan an Agents Forum for planning professionals to disseminate information on adaptation <p><i>draft Local Plan to include a policy requiring design to include measures to consider</i></p>	Head of Property & Major Projects Climate Change Strategy Officer Landscapes & Leisure Dev Manager Dev Manager Team Leader	Head of Property & Major Projects		8
H3	Council staff and work crews are subject to excessive heat which could lead to heat stroke, dehydration and fatigue	Environmental Services	Operational	3	4	12	<p><i>During periods of high temp:</i></p> <ul style="list-style-type: none"> - Heatwave Plan for England - All staff have access to sun cream, a refillable water bottle and a supply of fresh, cold drinking water and further risks are identified in the the Dealing with Adverse Weather Conditions Risk Assessment. 	2	2	4		Waste and Environment Manager	Associate Director Customer and Community	N/A	4
H4	Increase noise and air pollution resulting from changes in public behaviour (people outdoors, windows open, BBQs), - Increase in antisocial behaviour, littering (people outdoors) and crime due to heat	Leisure and Landscapes/Strategy and Partnerships	Operational	4	4	16	<p><i>Anti-Social Behaviour Action Group and Parks and Open Spaces Group to address concerns and plan for likely events for example peak summer school holidays and bank holidays. Working in partnership with Police and Fire.</i></p>	3	3	9	<p><i>Have heatwave plan to incorporate adjustments to waste collections form public spaces</i></p>	ASB Manager Waste and Environment Manage	Head of Strategy & Partnerships		8