### **Summary Matrix**

Ch. #	Chapter Title Key Finding	Magnitude of Impacts [Confidence Level]	Mag. #	Timeline - Regional	Sectors Affected	Communities of Concern	Explanation
3.0	Public Health	X	X	x	x	X	x
3.1	Health-1 Heat-related Illnesses	High [very high confidence]	5	2020s	Public Health	Elderly, low-income, communities of color, homeless people, outdoor workers	Future climate ch including for Kits for residents, spe
3.2	Health-2 Respiratory Illnesses	Low-medium [medium-high confidence]	2	Already happening	Public Health	Those with chronic health conditions, elderly, low-income, communities of color, homeless people, outdoor workers	Acute and chroni quality is projecto impacts for Kitsa
3.3	Health-3 Acute Injuries from Extreme Weather	High [medium confidence]	5	Already happening	Public Health, Stormwater	Those with chronic health conditions, elderly, low-income, communities of color, homeless people, outdoor workers	Extreme weather in the Northwest Kitsap County res
3.4	Health-4 Vector-borne Diseases	Medium [medium confidence]	3	Already happening	Economy	Those with chronic health conditions, elderly, low-income, communities of color, homeless people, outdoor workers	Diseases through increased over th diseases will incr
3.5	Health-5 Food Security	Low-medium [medium confidence]	2	Already happening	Public Health, Economy	Low-income, Tribal communities, homeless people, outdoor laborers	Climate impacts of financial burden resources for the
3.6	Health-6 Mental Health and Wellbeing	Low-medium [medium confidence]	2	Already happening	Public Health	Those with chronic health conditions, elderly, children, low-income, communities of color, homeless people, outdoor workers	There is some evi and with future c and social impact
3.7	Health-7 Communities of Concern	Very high [very high confidence]	5	Already happening		Children, elderly people, Tribal and Indigenous peoples, outdoor laborers, homeless people, and people with chronic illnesses	Frontline commu of climate change climate-related h There is diversity
3.8	Health-8 Health and Social Safety Net	Medium [high confidence]	3	Already happening	Public Health		risks and outcom Although Kitsap ( a need to prepare related healthcar
4.0	Economy	Х	Х	Х	Х	Х	Х
4.1	Economy-1 Property Values and Buildable Land	Low-medium [medium confidence]	2	2100	Economy	Homeowners, renters	Sea level rise will Property values a economic health.
4.2	Economy-2 Shifts in Business Opportunities	Low-medium [medium-high confidence]	2	2050	Economy	Low-Income, Tribal and Indigenous communities, outdoor workers, natural resource businesses	Many industries i labor lost, loss of County businesse Despite some of positive economi
4.3	Economy-3 Energy Demand and Utilities	Medium-high [high confidence]	4	2040	Economy, Public Health	Children, elderly people, people with chronic illnesses	Seasonal energy summer months infrastructure in

change projections will further stress health risks for the region, itsap County, and likely lead to multiple detrimental health outcomes specifically the noted communities of concern.

nic respiratory illnesses are clearly linked to declining air quality. Air cted to continue to degrade and may likely lead to a range of health sap County residents.

her events may likely increase in frequency and intensity in the future est and may likely exacerbate acute and chronic health impacts for residents during and after extreme weather events.

gh a diverse range of vectors, such as food, water, and insects, have the past few decades in the region. It is likely that these types of crease from climate change in the future.

ts on food systems may lead to increased food prices, increasing en and food insecurity, especially for people who depend on natural cheir diets, culture, and economy.

evidence linking climate change impacts to mental health challenges e climate projections very likely to increase mental health challenges acts for communities of concern.

nunities, or communities that often face the first and worst impacts ge, have and will continue to experience disproportionately higher I health risks.

ity across and within communities which leads to variance in health omes in the near and longer term.

p County already collects data around health indicators, there is still are for the expected increase in stress and demand for climatecare across the region.

ill likely affect property values and buildable land.

s are sensitive to both future environmental change and future the sensitive to both future to both

es in the region are already beginning to see impacts (e.g., hours of of sales and revenue, shifting species composition), and Kitsap sses will be affected by mid-century.

of the negative consequences of climate change, there may be mic opportunities in the future (e.g., viticulture)

y demand will change, with more cooling energy required in the ns with significant economic damages related to utilities and energy n the near and longer term.

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4	4 Economy-4 Economic Costs of Climate Change	High [high confidence]	5	Already happening	All sectors	Low-income, Tribal and Indigenous communities, outdoor workers, natural resource businesses	Climate change h County, with mor The full suite of co the level of plann
5	0 Cultural Resources	X	х	×	x	Х	x
5	1 Cultural-1 Historic and Archaeological Sites	Medium-high [medium confidence]	4	Already happening	Economy, Recreation, Culture	Tribal and Indigenous communities	Flooding is alread rise and extreme archaeological sit
5	2 Cultural-2 Recreation	Low-medium [medium confidence]	2		Economy, Recreation	Recreationists	Climate change ir threats to the div Impacts to these residents and visi
5	3 Cultural-3 Tribal Cultural, Ceremonial, and Harvesting	High [very high confidence]	5	Already happening	Economy, Recreation, Culture	Tribal and Indigenous communities	Future climate ch hold traditional a and the other sur
6	0 Public Infrastructure	X	Х	×	X	Х	x
6	1 Infrastructure-1 Transportation	Low-medium [high confidence]	2	Already happening	Public Health, Economy	Children, elderly people, rural communities, commuters	Climate factors m may likely cause i infrastructure, lea Disruptions in tra compounding im
6	2 Infrastructure-2 Water Resources	Medium-high [high confidence]	4	2050	Public Health, Economy, Recreation	Tribal and Indigenous peoples, low-income communities, communities/residents with single-source water systems	response capabili Sea level rise and wastewater, storn Impacts may lead degradation of gr
6	3 Infrastructure-3 Coastal Infrastructure	High [high confidence]	5	Already happening	Public Health, Economy, Recreation, Military	Homeowners, renters, Tribal and Indigenous peoples	Climate change ir coastal areas in tl businesses, food
6	4 Infrastructure-4 Urban Infrastructure	Medium [medium confidence]	3	Already happening	Public Health, Economy, Recreation	Low-income communities, homeless people	Kitsap County urb Climate projectio impacts to Kitsap
6	5 Infrastructure-5 Rural Infrastructure	Medium [high confidence]	3	Already happening	Public Health, Economy, Recreation	Small-farm communities, outdoor laborers	A substantial pop urban areas and h higher temperatu Climate change w present new chal
6	6 Infrastructure-6 Power and Energy	Medium [high confidence]	3	Already happening	Public Health, Economy, Recreation	Low-income communities, rural communities	Energy infrastruc likely worsen in t

has already affected economies in Washington State and Kitsap ore significant costs expected in the near and longer term.

f costs may not be accurately captured; costs can be dependent on nning and investments made into resilient systems.

ady happening in Kitsap County and future impacts from sea level ne precipitation will likely damage nearby historical and sites in the near term.

impacts, such as flooding and sea level rise, are likely to pose liverse portfolio of recreational sites in Kitsap County.

e sites may limit access and opportunities for Kitsap County isitors.

change will very likely limit access to these sites and opportunities to I activities for the Port Gamble S'Klallam Tribe, the Suquamish Tribe, urrounding Tribes that have ties to Kitsap County.

may create conditions for more frequent or severe natural hazards e more severe damages to Kitsap County's transportation leading to more closures, delays, or detours.

ransportation systems and infrastructure will very likely have mpacts to public health, access to food and services, and emergency bilities.

pilities. nd flooding will likely impact water resource infrastructure, including ormwater, and groundwater sources.

ad to potential health risks, such as vector-borne diseases or groundwater drinking sources in the long term.

impacts will very likely lead to increased flooding risk for low-lying the Puget Sound region and Kitsap County, affecting homes, d systems, infrastructure, and support systems.

Irban areas already experience impacts from natural hazards.

ions will very likely worsen current challenges and may present new ap County's urban areas in the long term.

oopulation of Kitsap County lives in exurban or rural areas outside of d have already experienced impacts from flooding, storms, and atures.

will continue to alter rural infrastructure and landscapes and may allenges in the long term.

ucture disruptions are already happening in Kitsap County and may the near term due to climate change.

#### **Summary Matrix**

Ch. #	Chapter Title Key Finding	Magnitude of Impacts [Confidence Level]	Mag. #	Timeline - Regional	Sectors Affected	Communities of Concern	Explanation
7.0	Land Use and Development	х	Х	Х	Х	X	Х
7.1	Land Use-1 Land Use Affects Local Climate Impacts	Medium-high [medium-high confidence]	4	Already happening	Public Health, Economy, Recreation	Low-income communities, rural communities, urban communities, communities of color	More local data is use decisions, sim on climate impact
7.2	Land Use-2 Climate Impacts on Land Use and Cover	Medium [high confidence]	3	Already happening	Public Health, Economy, Recreation	Low-income communities, rural communities, urban communities, communities, communities of color	Land use is sensiti precipitation, and Climate change is land uses in the fu land use decisions
7.3	Land Use-3 Adaptive Capacity	Medium-high [very high confidence]	4	Already happening	Public Health, Economy, Recreation	Low-income communities, rural communities, urban communities, communities of color	In Kitsap County, decision-making r wildfires, flooding
8.0	Agriculture	Х	Х	Х	Х	Х	Х
8.1	Agriculture-1 Crops	Low-medium [medium-high confidence]	2	2050	Economy, Agriculture, Public Health	Rural communities, agriculture workers	There will be a div positive (e.g., vitio livestock and irrig
8.2	Agriculture-2 Pests	Low [medium confidence]	1	Already happening	Economy, Agriculture, Public Health	Rural communities, agriculture workers	Climate change w crops, such as dec to parasites and p
8.3	Agriculture-3 Flood Risks	Low-medium [medium confidence]	2	Already happening	Economy, Agriculture, Public Health	Rural communities, agriculture workers	Farmlands and far future flooding ev or near floodplain
8.4	Agriculture-4 Agricultural Economies and Livelihoods	Low-medium [medium confidence]	2	Already happening	Economy, Agriculture, Public Health	Rural communities, agriculture workers	Warmer temperativery likely decreased Climate impacts of level of mitigation
8.5	Agriculture-5 Adaptive Capacity	Medium [high confidence]	3		Economy, Agriculture, Public Health	Rural communities, agriculture workers	Despite the climat and implementati sector in the long
9.0	Local Government Finance	х	Х	Х	Х	Х	Х
9.1	Gov. Finance-1 Insurance	Low-medium [low-medium confidence]	2	Already happening	Economy, Public Health	Low-income communities, homeowners, renters	Insurance industri and future climate likely to increase i
9.2	Gov. Finance-2 Municipal Bonds	Low [medium confidence]	1	2100	Economy, Public Health		The Puget Sound regions; however, disruption to mur
9.3	Gov. Finance-3 Tax Revenue	Low-medium [medium confidence]	2		Economy, Public Health		Future growth and base and may like
10.0	Geologic and Natural Hazards	х	Х	Х	Х	Х	Х
10.1	Nat. Hazards-1 Landslides and Sediment Processes	Medium-high [high confidence]	4		Economy, Public Health	Rural communities	In Kitsap County, I bluffs, or areas ne intensity, and hyd in the winter and
10.2	Nat. Hazards-2 Bluff Erosion	Medium-high [low-medium confidence}	4	2100	Economy, Public Health	Homeowners, renters, coastal communities	Increased winter i rainfall events, an the increase of ma

is needed on future impacts, however, research has found that and milar to those made in Kitsap County, can have significant effects cts, such as heat waves and flooding.

itive to climate change including changes to temperature, ad extreme weather events.

is very likely to shift vegetation cover, forest cover, habitats, and future, although long-term impacts will be dependent on future ns in Kitsap County.

, coordination between climate action strategies and land use may likely mitigate some climate impacts, including landslides, ng, and sea level rise impacts.

liverse range of crop responses to climate conditions, with some ciculture and extended growing seasons) and some negative (e.g., igated crops).

will likely have long-term impacts to Kitsap County livestock and ecreased health and productivity along with increased susceptibility pathogens.

arm infrastructure in Kitsap County will likely to be damaged from events driven by climate change since many of the farms are within ins.

ratures, pests and diseases, and shifting precipitation patterns will ease crop productivity and quality for some crops.

on crops may have unknown long-term risks, depending on the on and adaptation strategies implemented.

ate risk and exposure for agriculture, the sector is typically resilient, ation of adaptation strategies can increase the resiliency of the ag term.

tries across the country have already been incorporating current ite impacts into their policies in consideration of costs and damages e in the near and longer term.

d region is anticipated to not be affected as much as other U.S. er, extreme events or natural disasters may likely lead to economic unicipal bonds and credit.

nd development within the region will benefit Kitsap County's tax kely mitigate impacts felt from climate change.

, landslide risk is most likely to happen near coastal areas, coastal near river channels. Projected increases in heavy rainfall, storm vdrological changes will increase the risk and likelihood of landslides d early spring while decreasing risk and likelihood in the summer.

r rain precipitation, higher intensity winter storms, more heavy and sea level rise will very likely increase bluff erosion rates, though magnitude of erosion rates in Kitsap County is unclear.

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Ch. #	Chapter Title Key Finding	Magnitude of Impacts [Confidence Level]	Mag. #	Timeline - Regional	Sectors Affected	Communities of Concern	Explanation
10.3	Nat. Hazards-3 Storm Surge and Coastal Flooding	Very high [very high confidence]	5	Already happening	Economy, Public Health	Homeowners, renters, coastal communities, urban communities, rural communities	Coastal flooding e happening in Kitsa Extreme flooding annually by the er
11.0	Hydrology and Hydrogeology	Х	Х	Х	Х	х	
11.1	Hydrology-1 Hydrological Changes	High [high confidence]	5	Already happening	Economy, Public Health	Tribal and Indigenous peoples, communities/residents with single-source water systems	Impacts to hydrolo temperatures, sea precipitation. Future climate con and resources in k stormwater.
11.2	Hydrology-2 Stream and Riverine Flooding	Medium-high [medium-high confidence]	4	Already happening	Economy, Public Health	Children, elderly people, Tribal and Indigenous peoples, homeless people, and Iow-income communities	Stream and rivering
11.3	Hydrology-3 Hydropower	Low-medium [medium-high confidence]	2	2040	Economy, Public Health, Utilities		Increasing summe summer energy de production and di
11.4	Hydrology -4 Agriculture	Low-medium [medium confidence]	2	Already happening	Economy, Public Health, Agriculture	Agricultural communities	Decreases in wate farmers and Triba irrigation). Howev resilient to most c
12.0	Habitat	Х	х	x	Х	x	X
12.1	Habitat-1 Terrestrial Habitat	Medium [ <i>medium-high</i> ]	3	2080	Economy, Land Use	Tribal and Indigenous peoples, agricultural communities	Regional impacts impacts to Kitsap Climate change w
12.2	Habitat-2 Freshwater and Aquatic Habitat	Medium-high [high confidence]	4	2080	Economy, Public Health, Recreation	Tribal and Indigenous peoples	Freshwater ecosys experiencing impa declining summer Projected changes aquatic species.
12.3	Habitat-3 Marine and Coastal Habitat	Low-medium [high confidence]	2	2050	Economy, Public Health, Recreation	Tribal and Indigenous peoples	Changes to marin affecting local ecc These impacts wil and the communi
12.4	Habitat-4 Invasive Species, Pests, and Diseases	Medium [medium-high confidence]	3	2100	Economy, Public Health, Recreation	Tribal and Indigenous peoples, agricultural communities, recreationists	Invasive species, p and will continue Specific projection of host and specie

events from sea level rise, and winter storms are already start county.

g will have long-term impacts, with flooding very likely to occur end of the century.

ological systems and resources are being driven by increasing air ea level rise, declines in snowpack, and decreasing summer

onditions are expected to continue to disrupt freshwater systems Kitsap County, including surface water, groundwater, and

rine flooding will have long-term impacts to communities and within the floodplain, with flooding very likely to occur annually by entury.

ner temperatures and population are anticipated to increase demand and decrease the water available for regional hydropower distribution.

ter supply and quality may likely cause challenges to Kitsap County bal communities that rely on water for agricultural use (e.g.,

ever, agriculture in the Puget Sound region is anticipated to be t climate change impacts.

ts to terrestrial systems will have direct and indirect long-term ap County terrestrial systems. Individual species' responses will vary.

will further stress current forest management practices.

systems in Kitsap County and the Puget Sound region are already pacts from increasing air temperature, reduced snowpack, and er precipitation.

es will have long-term implications for ecosystem composition and

ine and coastal habitats are already happening in Kitsap County and cosystems.

vill likely have near- and long-term consequences to the food web nities that rely on those systems. , pests, and diseases are already a problem that Kitsap County faces

, pests, and diseases are already a problem that Kitsap County faces e over the long term.

ons on impacts to Kitsap County will vary due to the complex nature cies' relationships

## Summary Matrix

Ch	•		Magnitude of Impacts	Mag.	Timeline -	Sectors		
#	Title	Key Finding	[Confidence Level]	#	Regional	Affected	Communities of Concern	Explanation
1	3.0 Fire		X	Х	Х	Х	Х	Х
1	3.1	Fire-1 Wildfires	Medium [medium confidence]	3	2030	Public Health, Recreation	Those with chronic health conditions, elderly, low-income, outdoor workers	Fire risk and wildfi direct and indirect
1	3.2	Fire-2 Wildland-Urban Interface (WUI)	Medium [medium confidence]	3		Public Health	Rural communities	Although the incre been linked to futu to compounding ir
1	3.3	Fire-3 Emergency Response Demand	Low-Medium [medium confidence]	2		Public Health	Those with chronic health conditions, elderly, rural communities	Kitsap County has may stress future of

dfire seasons will increase due to climate change and may have ect impacts for Kitsap County residents and ecosystems.

creased Kitsap County Wildland-Urban Interface (WUI) area has not future increased wildfire risk, WUI growth may increase fire risk due g impacts of climate change, development, and individual behaviors.

as a robust emergency response service; however, climate change re demand for fire emergency response services in the future.