


Table 4.1 Summary of possible impacts by sector

	Weather & Climate Related Event or Trend	Examples of Possible Impacts					
		Ecology	Water	Recreation	Health & Safety	Energy	Built Environment
<p>Incremental Change</p>  <p>Transformative Change</p>	Change in average annual temperature	Gradual uphill shifts in plant and animal species	Evaporative losses from river and soils; changes in quality, quantity, timing of river flows	Challenge meeting target ski area conditions; alterations to timing of rec. seasons	Increased vulnerability to heat stress for vulnerable populations (e.g. elderly); increase in potential for VBD	Changes in energy demand and supply patterns over time	Changes in HVAC requirements
	Increase in frost free days	Increase in growing season; potential for invasive species	Early drying of soil in summer; greater irrigation demand	Expansion of summer recreation; impaired snowmaking conditions	Lengthened, intensified allergy season; increased fire risk	Increase in demand for energy for cooling systems; seasonal shifts in energy requirements	Deployment of efficient irrigation systems; change in engineering standards
	Change to local hydrology	Expansion of dry climate species; altered river ecology	Temperature driven evaporative losses	Shortened winter season; timing mismatch for rafting	Increased fire danger; air pollution from fire	Altered hydroelectric supply pattern	High water and low water impacts to infrastructure
	Changes in extreme temps	Heat/drought stress to sensitive species	Increased evaporation, evapotranspiration	Reduced conditions for snowmaking	Increased potential for heat stress; lengthened, intensified allergy season	Increased energy demand for cooling systems such as AC	Greater deployment of AC; intolerable conditions within existing systems
	Drought	Iconic species at risk (e.g. Sudden Aspen Decline)	Restrictions on water use; further risk of over-allocation	'76/'02 like skiing conditions; summertime wilderness use restrictions	Regional impacts to agriculture, local food production	Decreased water availability for hydroelectric production	Less water available for municipal use
	Extreme Precipitation	Destruction of some habitats	High water flows; localized flooding;	Hazards to recreational users and infrastructure	Flooding, flash flooding, landslides	Interruptions to energy production and distribution systems	Flood damage to buildings, bridges, roads
	Severe fire	Dramatic alteration to landscape	Debris flows into river; water quality impacts	Damage to recreational infrastructure; degraded aesthetic quality	Personal endangerment; heightened air quality risk	Impairment and/or destruction of energy production and distribution	Destruction of infrastructure and structures