

07 June 2018 SCAP Vulnerability Assessment - Identifying climate and non-climate stressors to:

**Water Use & Demand**

CLIMATE VARIABLES	Ag water use	Ag water demand	Recreation water use	Recreation water demand	M&I water use	M&I water demand
Precipitation timing (Change in wet/dry cycle)						
Water temperature change (streams/lakes)						
Water temperature change timing (streams/lakes)						
Storm Frequency						
Storm Severity						
Fire frequency						
Fire intensity						
Fire season length						
River flow rate						
Chilling hours						
Heat extremes/waves						
Increase in mean summer temperature						
Increase in mean cool-season temperature						
Increase in length of growing season						
Increase in growing degree days						
Increase in mean evapotranspiration						
Change in summer soil moisture						
Change in mean summer precipitation						
Change in mean winter precipitation						
<b>NON CLIMATE VARIABLES</b>						
demographic shifts						
population changes						
climate refugees						
water usage						
change in recreational interests						
workforce						
urban sprawl						
Education and awareness						
consumer pref/demand						
business/industry growth						
socioeconomic impact						
crop prices						
market forces						
fuel costs						
energy costs						
trade policy						
forest management						
exempt wells						
summer urban water use/soil depth						
cheap water						
court decisions						
nutrient loading						
invasive species						
growing Ag/chemicals						
groundwater levels						
CO2 levels						

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Natural Disasters

CLIMATE VARIABLES	Fire	Drought	Flood
Precipitation timing (Change in wet/dry cycle)			
Water temperature change (streams/lakes)			
Water temperature change timing (streams/lakes)			
Storm Frequency			
Storm Severity			
Fire frequency			
Fire intensity			
Fire season length			
River flow rate			
Chilling hours			
Heat extremes/waves			
Increase in mean summer temperature			
Increase in mean cool-season temperature			
Increase in length of growing season			
Increase in growing degree days			
Increase in mean evapotranspiration			
Change in summer soil moisture			
Change in mean summer precipitation			
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Regulations

CLIMATE VARIABLES	Transboundary Constraints	Out of basin transfer	Upstream Activities in Idaho Impact Spokane Water Supply
Precipitation timing (Change in wet/dry cycle)			
Water temperature change (streams/lakes)			
Water temperature change timing (streams/lakes)			
Storm Frequency			
Storm Severity			
Fire frequency			
Fire intensity			
Fire season length			
River flow rate			
Chilling hours			
Heat extremes/waves			
Increase in mean summer temperature			
Increase in mean cool-season temperature			
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Human Health

CLIMATE VARIABLES	Fire/smoke	Water quality
Precipitation timing (Change in wet/dry cycle)		
Water temperature change (streams/lakes)		
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Storm Frequency		
Storm Severity		
Fire frequency		
Fire intensity		
Fire season length		
River flow rate		
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Increase in mean summer temperature		
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Well-being & Identity

CLIMATE VARIABLES	Population changes	Lifestyle	Landuse change
Precipitation timing (Change in wet/dry cycle)			
Water temperature change (streams/lakes)			
Water temperature change timing (streams/lakes)			
Storm Frequency			
Storm Severity			
Fire frequency			
Fire intensity			
Fire season length			
River flow rate			
Chilling hours			
Heat extremes/waves			
Increase in mean summer temperature			
Increase in mean cool-season temperature			
Increase in length of growing season			
Increase in growing degree days			
Increase in mean evapotranspiration			
Change in summer soil moisture			
Change in mean summer precipitation			
Change in mean winter precipitation			
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change in recreational interests			
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Education and awareness			
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