












State of Climate Adaptation: RDCK Area J 2017




















Results at a glance

Legend

 Water Supply
  Extreme Weather and Emergency Preparedness
  Agriculture
  Flooding
  Wildfire

 Upward trend
  Downward trend
  Stable/no trend
  Present
  Absent
  Insufficient data

| INDICATOR AND DESCRIPTION | | PATHWAY | RESULTS |
|---------------------------|---|---|---|
| Climate Changes | Climate averages: temperature – average monthly temperature |  |  |
| | Climate averages: precipitation – average monthly precipitation |  |  |
| | Climate extremes: temperature – annual frequency of hot days |  |  |
| | Climate extremes: precipitation – annual amount of rain falling on very wet days |  |  |
| | Freeze-thaw cycle - total number of days annually where maximum temperature > 0 °C and minimum temperature < 0 °C during the same day |  |  |
| | Frequency of strong wind events – total number of days annually with sustained winds of 70 km/h or more and/or gusts to 90 km/h or more |  |  |
| | Frequency of extreme heat days – total number of days each year where maximum daily temperature exceeds 30 °C |  |  |
| | Frequency of extreme snowfall events – annual number of days with snowfall amounts of 15 cm or more within 24 hours |  |  |
| | Maximum 1-day rainfall – annual maximum 1-day precipitation |  |  |
| | Number of days with high fire danger – annual number of days in high or extreme danger classes of Canadian Forest Fire Danger Rating System |  |  |
| Environmental Impacts | Air quality – concentrations of fine particulate matter in the air |  |  |
| | Area burned by wildfire – number of hectares burned on an annual basis |  |  |
| | April 1st snow pack – depth of snowpack on April 1 each year |  |  |
| | Consecutive dry days – maximum number of consecutive dry days |  |  |
| | Drought index – number of days per BC Drought Index Level |  |  |
| | Growing degree days – amount of heat energy available for plant growth |  |  |
| | Ground water level – average monthly ground water level |  |  |
| | Glacier extent – area of glaciated terrain |  |  |
| | Invasive species – number of species present and extent of coverage |  |  |
| | Growing season length – annual number of days between the first and last occurrence of 5 consecutive days with a mean temperature of greater than 5°C |  |  |
| | Source water quality – monthly average turbidity and temperature |  |  |
| | Stream flow timing – date of half total flow, annual peak yield and late summer minimum yield |  |  |

| INDICATOR AND DESCRIPTION | | PATHWAY | RESULTS |
|--|---|---|---|
| | Stream flow volume – discharge for annual maximum and late summer minimum |  | ↕ |
| | Wildfire starts – annual number of human- and lightning- caused wildfire starts |  | ↑ |
| Adaptation Actions & Capacity Building | Backup power sources – presence of backup power source for essential services |  | ☑ ☒ |
| | Community food production – number of people in the community who grow at least a small portion of their own food |  | ⊘ |
| | Emergency preparedness plan – presence of an emergency preparedness plan, including a community evacuation plan that has been updated within the last 5 years |  | ☑ |
| | FireSmart-recognized community – recognition through FireSmart Canada's Community Recognition Program |  | ☑ |
| | Flood mapping extent and updates - currency and extent of flood mapping |  | ☑ |
| | Hectares irrigated – number of hectares irrigated |  | ⊘ |
| | Interface fire risk reduction – area treated to reduce wildfire risk |  | ⊘ |
| | Policies to reduce water consumption – degree of implementation of water consumption policies/practices |  | ☑ ☒ |
| | Residents with 72-hour emergency preparedness kits – proportion of residents with 72-hour emergency preparedness kits |  | ⊘ |
| | Water loss detection practices – degree of implementation of specified water loss detection practices |  | ☒ |
| | Water protection plans – consideration of projected climate changes in water planning documents |  | ☒ |
| | Community Impacts & Adaptation Outcomes | Area farmed – annual number of hectares being farmed |  |
| Agricultural productivity – ratio of agricultural outputs to inputs (in market value) | |  | ⊘ |
| Campfire bans – annual number of days under a campfire ban | |  | ⊘ |
| Cost of fire suppression – total amount of money spent on fire suppression annually | |  | ↕ |
| Developed properties in floodplain – number of developed properties in known and active floodplains | |  | ⊘ |
| Drinking water quality – annual length of drinking water advisories or boil water notices | |  | ↕ |
| Highway closures – number (per year) and/or duration (hours) of highway closures due to wildfire, flooding or weather | |  | ↕ |
| Frequency of interface fires – annual number of wildfires within 2 km | |  | ↕ |
| Implementation of water restrictions – number of days annually where water restrictions are active | |  | ⊘ |
| Per capita water consumption – annual volume of total water supplied, expressed per capita | |  | ⊘ |
| Provincial emergency assistance payments – amount paid to local government for clean up related to landslides, avalanches, snow, wind or freezing rain | |  | ⊘ |
| Water loss – percentage of water supplied annually that is lost to leakage | |  | ⊘ |
| Wildfire evacuation orders – number of evacuation orders due to the threat of wildfire | |  | ⊘ |