



A Changing Climate

Special Edition Community Trends Report 2017

November 6, 2017

Role of Community Trends Report

- ▶ Forward looking document
- ▶ Understanding how global and local trends impact Kelowna
- ▶ Identifying opportunities for future action
- ▶ Preparing City, residents, businesses, community groups for future trends





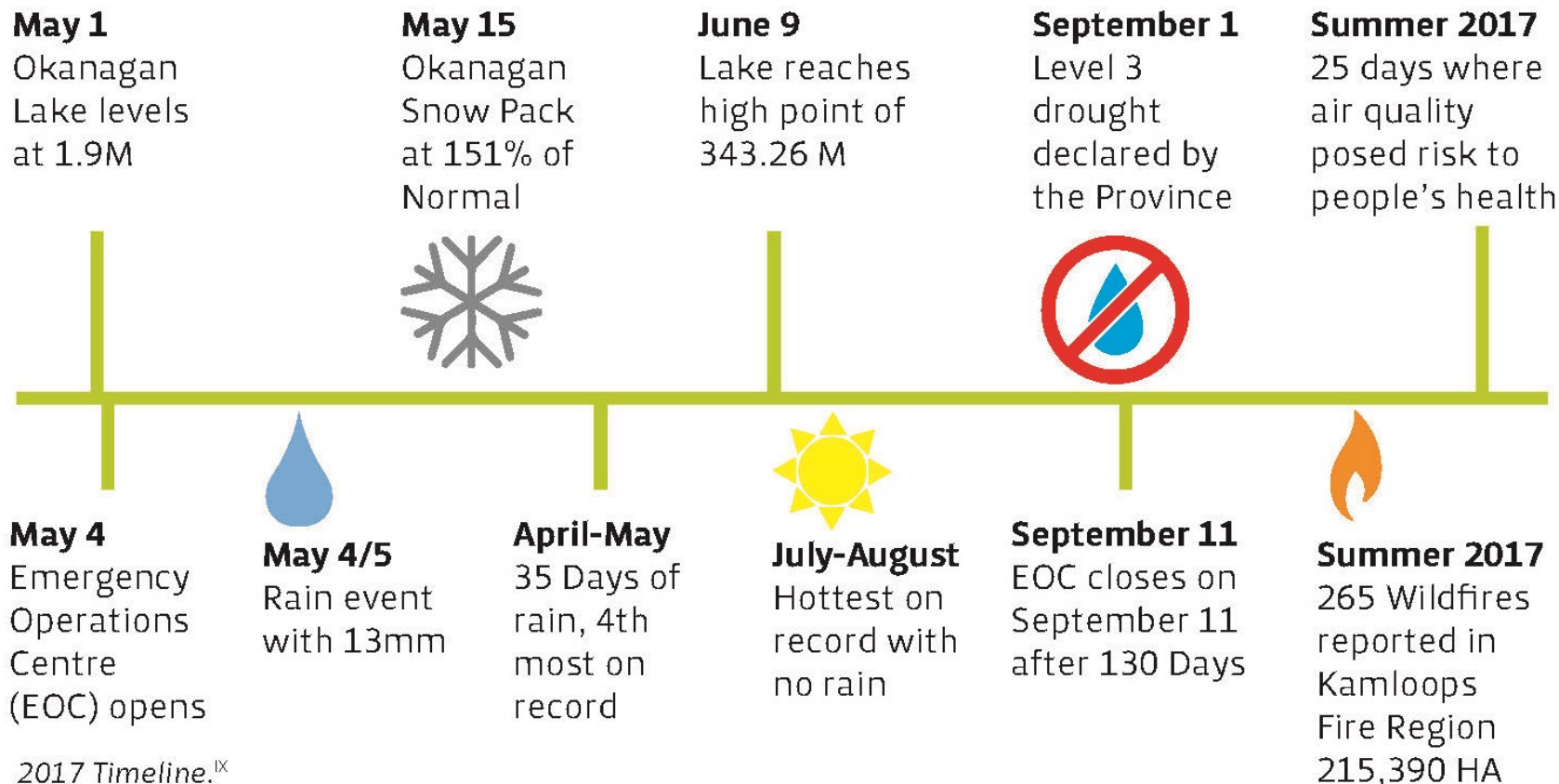
Lane south of Rowcliffe Ave on May 6th

Special Edition Trends Report 2017

- ▶ Recognizing global trend of climate change
- ▶ Investigate how this trend is impacting Kelowna
- ▶ Using theme areas: environment, economy people/ health, and infrastructure
- ▶ Identify opportunities for action



2017 A Year of Extremes



2050 Climate Projections

- ▶ *Pacific Climate Impacts Consortium* projections based on increase of 2 degrees
- ▶ Hotter, drier summers
- ▶ More annual precipitation
- ▶ Decrease in snowpack
- ▶ Aligns with events in 2017
- ▶ **Key Action:** Continue to work with regional partners on flood mapping project

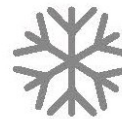
2050 Climate Projections



**1.9 CELSIUS
INCREASE**



**10% ANNUAL
INCREASE**



**14% ANNUAL
DECREASE**

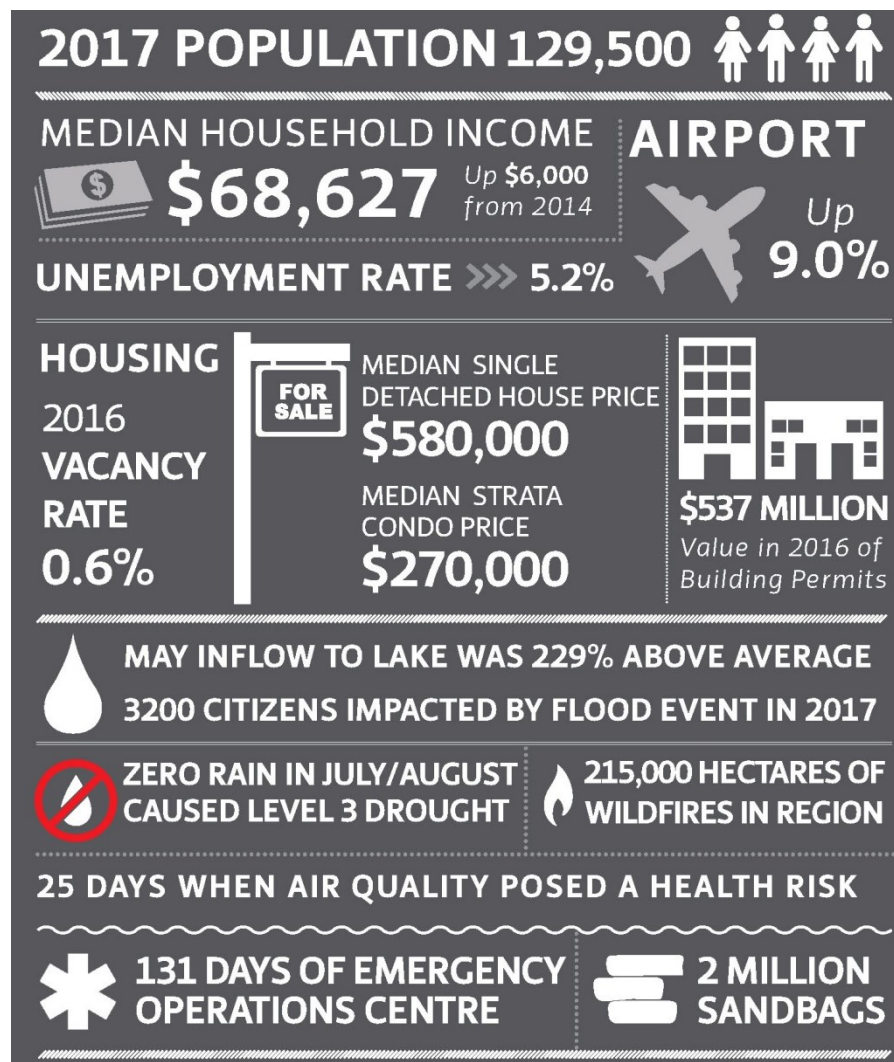
Special Edition Trends Report in 2017

Economic Trends

- ▶ Growing population
- ▶ Robust employment
- ▶ Real estate booming

Climate Trends

- ▶ Freshet 2017 impacts
- ▶ Drought & Wildfires
- ▶ Extended EOC activity



Our People / Health

- ▶ Human impacts
- ▶ Coordinated response and enhanced resiliency needed for long emergencies
- ▶ Wildfires: 25 days when air quality posed a health risk
- ▶ Water advisory from high turbidity
- ▶ **Key Action:** Community Wildfire Plan identifies risks in interface areas



Our Economy

- ▶ Growing population & leading job market
- ▶ Economic impacts of flooding & wildfires
 - ▶ Significant property damages
 - ▶ State of emergency for 2.5 months (Wildfires)
 - ▶ Impacts to local residents & tourism
- ▶ Climate change also could impact agriculture



Our Infrastructure

- ▶ 2017 spring freshet resulted in major flood event
- ▶ Damage to City roads, parks, and culverts (\$10.7 million in City damage)
- ▶ Impacted City stormwater infrastructure
- ▶ **Key Action:** Continue to support Mission Creek Restoration Initiative



Moving Forward on Adaptation

- ▶ Build on positive momentum
- ▶ Further adaptation & prevention action required:
 - ▶ Develop a Community Climate Adaptation Strategy
 - ▶ Update 2040 Official Community Plan and 20 Year Servicing Plan from a resiliency lens and have a responsive growth strategy
 - ▶ Examine infrastructure design standards & enforcement
 - ▶ Create more green infrastructure
 - ▶ Ensure sustainable & dynamic emergency response model remains
- ▶ Requires collective action