Phase 3 Okanagan Basin Water Supply and Demand Project:

Projected Water Supply and Use in the Okanagan Basin (2011-2040) -Okanagan Basin Water Accounting Model Results

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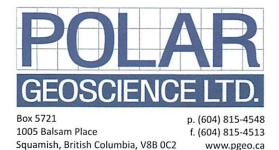
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Natural Resources Canada Ressources naturelles Canada

March 2012



March 31, 2012

Reference: 240101

Anna Warwick Sears, Ph.D. Project Manager Okanagan Basin Water Board 1450 KLO Road Kelowna, BC V1W 3Z4

Dear Dr. Warwick Sears:

Re: Projected Water Supply and Use in the Okanagan Basin (2011-2040) - Okanagan Basin Water Accounting Model Results

Polar Geoscience Ltd. (Polar) is pleased to provide this report summarizing selected Okanagan Basin water supply and use projections for 2011 to 2040. The projections are based on the Okanagan Basin Water Accounting Model (OBWAM) (and its supporting models) developed in Phase 2 and updated in Phase 3 by RHF Systems under contract to OBWB. The projections are based on six (6) groups of scenarios identified by the Technical Working Group [i.e., six (6) future land use/population combinations each under the influence of two (2) future climates]. In addition, three (3) 5-year synthetic drought scenarios were assessed. Given some uncertainty in the future climate, population change, land use change, and several input parameters used by the models, the results are not considered predictions of the future, but rather indications of possible future trends and patterns of water supply and use in the Basin.

S. UUNILA #27700

If you require any further assistance or have any questions, please do not hesitate to contact me.

Yours truly, Polar Geoscience Ltd.

Lars Uunila, M.Sc., P.Geo. (BC), P.Geol. (AB), P.H., CPESC Senior Hydrologist & Geoscientist

EXECUTIVE SUMMARY

This report summarizes a selection of Okanagan Basin water supply and use projections for 2011 to 2040. The projections are based on the Phase 3 modeling using the Okanagan Basin Water Accounting Model (OBWAM) and its supporting models: the Okanagan Basin Hydrology Model (OBHM) and the Okanagan Water Demand Model (OWDM). Phase 3 modeling has been conducted by RHF Systems Ltd. with support from the OBWB, Agriculture and Agri-Food Canada, and Environment Canada. Polar Geoscience Ltd. was retained by the OBWB to provide technical and analytical support during Phase 3. Based on the Phase 3 projections for the 2011-2040, the following key points are made:

Future climate:

- Temperatures in the Okanagan are projected to generally increase throughout the year, however, year to year variability is high.
- Precipitation projections are mixed and highly variable but tend to suggest increases during winter.
- The proportion of rain to snow is expected to generally increase, resulting in reduced snowpacks, particularly at lower elevations. These snowpacks may also be subject to increased mid-winter melt periods.
- Snowmelt is projected to occur earlier and because of reduced snowpacks, runoff from meltwater is expected to decrease. However, this is offset by rain-generated runoff that is expected to increase considerably over the winter.

Surface water supply:

- Annual runoff is expected to increase overall, with much of this resulting from the increased runoff between October and March due to increased rain and mid-winter meltwater. Decreased runoff is expected between May and July as a result of the advancement of the freshet period. Runoff is expected to be about the same in August and September.
- Year to year variability in runoff is expected to increase, particularly in winter.
- Prolonged drought has a dramatic impact on surface water availability. After five consecutive years, up to 50% less surface water runoff in total is produced relative to normal conditions.

Surface water extraction:

- Surface water extractions represent about 68% of the total water used in the Okanagan.
- During late summer, surface water extractions from the tributary streams generally exceed the natural supply, and in Mission Creek for example, extractions in late summer are double the available natural supply; in future they may be nearly triple. In order to meet water demands, regulation of the available water supply through upland and main-stem reservoirs is and will continue to be paramount. Given the projections for reduced snowpacks, earlier freshet and increased rain-generated runoff in future, water managers may have to consider modifying their storage capabilities and current reservoir operation strategies in order to successfully meet future demands.
- Assuming climate change alone (Scenario Group A), water extractions in most months will increase modestly (5-10%), except in April when it will increase by 40%, and in late fall when it will increase by up to 20%.
- If the population increases at the expected 1% per year and if agricultural water use efficiency improved at its expected rate (Scenario Group B), surface water extraction should not dramatically change in future.
- A population boom with urban sprawl (Scenario Group C) is projected to increase overall surface water requirements by 20-30% throughout the year.
- An increase in the agricultural land base under irrigation (Scenario Group D) is expected to increase overall water extractions by 5-10% throughout the irrigation months.
- A worst case scenario of population boom and agricultural expansion (Scenario Group E) is projected to increase overall water extractions by 30-40% during spring and summer and by 50-70% during the winter.
- Improvements in water use efficiency (Scenario Group F) will mitigate the worst-case scenario (Scenario Group E) by roughly 5% during spring and summer, and up to 20% in the winter.

Net inflows to main-stem lakes:

• Net inflows to the main-stem lakes are projected to increase considerably between November and April. During these months the effect of climate change is dominant over the land use and population factors. By May, climate change is responsible for slight reductions in net inflow to Kalamalka-Wood and Okanagan Lakes, however these are not universally projected downstream, given the regulation of Okanagan Lake and River. By June, climate change is projected to decrease net inflows to Okanagan Lake by 38%, and under the worst-case scenario (Scenario Group E), a further 18% reduction is projected. Projected reductions in runoff and increased extractions in July, August and September further exacerbate conditions and maintain negative net inflows to Okanagan Lake under all future scenarios. Fortunately, with Okanagan Lake and Okanagan River regulation, downstream lakes are projected to maintain positive, albeit modestly lower, net inflows over the summer months.

Okanagan Basin Water Board



TABLE OF CONTENTS

EXECU	JTIVE SUMMARY	iii						
TABLE	OF CONTENTS	iv						
LIST O	PF TABLES	v						
LIST O	PF FIGURES	v						
1.0	INTRODUCTION							
1.1	Project Background							
1.2	2 Project Objectives							
1.3	3 Study Team and Acknowledgements							
2.0	IDENTIFICATION OF FUTURE SCENARIOS (PHASE 3)							
3.0	FACTORS AFFECTING WATER SUPPLY AND USE							
3.1	L Climate							
	3.1.1 Air Temperature							
	3.1.2 Precipitation							
3.2	2 Watershed Conditions							
3.3	3 Water Use Efficiency							
	3.3.1 Domestic (Indoor and Outdoor) Efficiency							
	3.3.2 Agricultural Efficiency							
3.4	Agricultural Land Base							
3.5	5 Population Growth							
4.0	PROJECTED WATER SUPPLY							
4.1								
4.2	•							
	4.2.1 Overall Okanagan Basin Water Supply							
	4.2.2 Tributary Water Supply							
	4.2.3 During Extended Drought							
5.0	PROJECTED WATER USE AND EXTRACTION							
5.1								
5.2								
5.3	3 Water Extraction							
6.0	NET RUNOFF/INFLOW							
6.1	•							
6.2								
7.0	SUMMARY AND CONCLUSIONS							
8.0	RECOMMENDATIONS							
9.0	REFERENCES							
Appen	ndix A: Phase 2 Scenarios							
Appen								
	-							
Appen	ndix D: Selected Summaries of Projected Water Use							

Appendix E: Selected Summaries of Projected Water Extraction

Appendix F: Selected Summaries of Projected Net Runoff

Appendix G: Phase 3 Demand Modeling Assumptions and Methodologies (Memo, RHF Systems)

Digital spreadsheet summaries:

1) Natural runoff, 2) Net runoff, 3) Net inflow to main-stem lakes, 4) Water use, 5) Water extraction



LIST OF TABLES

Table 1.1	Climate models used in Phase 2 and 3 2
Table 2.1	List of future scenarios assessed in Phase 3
Table 5.1	List of water utilities, by reporting zone, for which water <u>use</u> estimates were compiled
Table 5.2	List of surface water sources by reporting zone for which water extraction estimates were compiled 32
Table 5.3	Projected distribution of Okanagan Basin average annual water use by source. The results are based on the OWDM using HadCM3 A2 climate projections
Table 5.4	Summary of median monthly and annual water extraction vs. natural runoff in Mission Creek. Estimates are for baseline (1971-2006) and future (2012-2040) scenarios assuming climate change only and are presented for the HadCM3 A2 and CGCM3 B1 climate models
Table 5.5	Projected annual net inflows to Okanagan Lake under drought scenarios 55, 56, and 57

LIST OF FIGURES

Figure 3.1	Projected mean annual temperatures for the Okanagan Basin. Red and blue data represents the projections from the HadCM3 A2 and the CGCM3 B1 models respectively. Solid lines are the best-fit regression lines, while the dashed lines indicate the 95% prediction limits. On an annual basis, the projected temperature trends based on the two models are comparable, and both have high inter-annual variability
Figure 3.2	Projected change in mean monthly Okanagan Basin temperature based on the HadCM3 A2 model (red) and the CGCM3 B1 model (blue). With the exception of January, all months are projected to be warmer, however, the pattern of increases varies by climate model
Figure 3.3	Projected mean annual precipitation for the Okanagan Basin. Red data represents the HadCM3 A2 model, blue data represent the CGCM3 B1 model. Solid lines are the best-fit regression lines, while dashed lines indicate the 95% prediction limits. Overall, the long-term trends are weak and inter-annual variability is high
Figure 3.4	Projected change in mean monthly Okanagan Basin precipitation based on the HadCM3 A2 model (red) and the CGCM3 B1 model (blue). The pattern of changes varies by climate model. Both models suggest some increase in precipitation over the fall and winter, however over summer, the CGCM3 B1 projects wetter conditions while the HadCM3 A2 projects drier conditions
Figure 3.5	Overall cumulative precipitation in the Okanagan under normal conditions between 1996 and 2006 (grey) and under an extended drought (red). The drought was synthesized by Environment Canada to mimic climatic conditions similar to the 1929-1931 drought of record in the Okanagan
Figure 4.1	The yellow area shows the elevations greater than 1,000 m within Okanagan Lake watershed (i.e. the drainage area above the outlet of Okanagan Lake at Penticton). This is the area from which snow water equivalent (SWE) data was extracted
Figure 4.2	Projected annual maximum snow water equivalent (SWE) averaged across all elevations greater than 1,000 m within the Okanagan Lake watershed. Red data represent SWE estimates based on the HadCM3 A2 model, while blue data represent estimates based on the CGCM3 B1 model. Notice the wide variability in the SWE predicted by both models
Figure 4.3	Projected date of annual maximum snow water equivalent (SWE) for the Okanagan Lake watershed: a) based on the HadCM3 A2 model, and b) based on the CGCM3 B1 model. The size of the dots is proportional to the maximum snow water equivalent on that date
Figure 4.4	Projected change in monthly maximum snow water equivalent (SWE): a) based on the HadCM3 A2 model (Scenario 28), and b) based on the CGCM3 B1 model

Okanagan Basin Water Board

Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)



Figure 4.5	Projected total annual natural runoff in the Okanagan Basin based on the HadCM3 A2 climate projections (red) and CGCM3 B1 climate projections (blue). Annual runoff displays large year-to-year variability, with trends towards increasing values in the future; however these trends are not statistically significant 20
Figure 4.6	Projected change in natural annual runoff in the Okanagan Basin between the modeled baseline (1971-2006, "BASE") and modeled future (2011-2040, Scenario Group "A") periods: Fig. a) HadCM3 A2; Fig. b) CGCM3 B1. The results are organized by i) the four reporting zones (North, Central, South-Central, and South), ii) Okanagan Lake watershed vs. Okanagan River watershed (below Okanagan Lake), and iii) Overall. Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively.
Figure 4.7	Projected change in monthly runoff in the Okanagan Basin between the baseline (1971-2006) and modeled future (2011-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively.
Figure 4.8	Projected % change in median monthly runoff due to climate change in the Okanagan Basin
Figure 4.9	Projected % change in the variability of monthly runoff as indicated by the IQR due to climate change in the Okanagan Basin
Figure 4.10	Typical distribution of annual surface runoff by stream in the Okanagan Basin. Values are in percentage of total Basin runoff over the period 1996-2006
Figure 4.11	Projected change in natural monthly runoff in Mission Creek (at the mouth) between the modeled baseline (1971-2006) and modeled future (2012-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively. The arrows indicate the change in median monthly runoff.
Figure 4.12	Projected change in natural monthly runoff in Trout Creek (at the mouth) between the modeled baseline (1971-2006) and modeled future (2012-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively. The arrows indicate the change in median monthly runoff.
Figure 4.13	Projected change in natural monthly runoff in Vaseux Creek (at the mouth) between the modeled baseline (1971-2006) and modeled future (2012-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively. The arrows indicate the change in median monthly runoff.
Figure 4.14	Overall cumulative (natural) runoff in the Okanagan under normal conditions between 1996 and 2006 (grey) and under an extended drought. The drought was synthesized by Environment Canada to mimic climatic conditions similar to the 1929-1931 drought of record in the Okanagan
Figure 5.1	Projected total annual water use in the Okanagan Basin (from all sources) under the six (6) main scenario groups assessed in Phase 3. Red data are based on the HadCM3 A2 model, blue data are based on the CGCM3 B1 model and purple data are based on the CGCM2 A2 model results of Phase 2. Note that the Phase 2 results are not strictly comparable with the Phase 3 results given some differences in the underlying assumptions, particularly in figures e and f where Phase 2 modeling assumed population growth by infilling of currently developed areas as opposed to development of new residential areas (Phase 3). a) Group A: climate change only; b) Group B: climate change and current trends in land use and population change; c) Group C: climate change along with population boom and urban sprawl; d) Group D: climate change and increasing irrigated agricultural land; e) Group E: climate change along with

Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)



<u>A</u>

- Figure 5.7 Projected monthly surface water extraction from: a) Okanagan Lake drainage area (including Okanagan Lake), b) Okanagan River drainage area below Okanagan Lake (including Okanagan River), and c) Okanagan Basin overall. The results are based on the HadCM3 A2 climate model. Data based on the CGCM3 B1 model are provided in Appendix E.
- Figure 5.8 Projected monthly surface water extraction from: a) Mission Creek, b) Trout Creek, and c) Vaseux Creek. Note the vertical scales for each plot is different. The results are based on the HadCM3 A2 climate model. Data based on the CGCM3 B1 model are provided in Appendix E.
- Figure 5.10 Projected median monthly net inflow to: a) Kalamalka-Wood Lake, b) Okanagan Lake, and c) Skaha Lake,
 d) Vaseux Lake, and e) Osoyoos Lake. Note the vertical scales for each plot is different. The results are based on the HadCM3 A2 climate model. Refer to Table 2.1 for description of the scenario groups...... 51
- Figure 5.11 5-year cumulative net inflow to Okanagan Lake under extended drought scenarios (55, 56, and 57)....... 52





1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

The Okanagan Basin Water Supply and Demand Project (OBWSDP) is a multi-year, multi-disciplinary basin-wide water resource study initiated in 2004 by the Okanagan Basin Water Board (OBWB) and the Province of BC, in partnership with Environment Canada, Agriculture Canada, First Nations, and other stakeholders. During Phase 2 of the OBWSDP in 2010, the Okanagan Basin Water Accounting Model (OBWAM) was developed (DHI, 2010). The OBWAM is a state-of-the-science computer-based tool (based on the MikeSHE and Mike11 hydrologic modeling platforms) used for evaluating the future availability and use of water throughout the Okanagan. The OBWAM accounts for the natural water supply and water use at multiple points-of-interest throughout the Okanagan. The water supply and use projections used in the OBWAM are determined by two (2) supporting models: the Okanagan Basin Hydrology Model (OBHM) and the Okanagan Water Demand Model (OWDM) (refer to Summit 2010 for a full description).

With the release of the OBWAM in 2010, a limited number of future climate change, population, and land use scenarios were examined (i.e. Phase 2 scenarios). The scenarios were chosen principally to demonstrate the utility of the model and provide insight on some possible future trends in the water supply in the Okanagan. With a desire to further utilize the OBWAM and examine additional future scenarios, the OBWB and its partners initiated Phase 3 modeling in late 2010. Phase 3 modeling was led by RHF Systems under contract to OBWB, with support by Agriculture and Agri-Food Canada.

In Phase 2, the climate datasets used in the OBWAM were based on the second version of the Canadian Centre for Climate Modelling and Analysis Coupled Global Climate Model (CGCM2) using the A2 emissions scenario (CGCM2 A2) (refer to Appendix N of Summit, 2010 for details on the development of this dataset). This data was a good starting point in Phase 2 since it represented a reasonable "middle-ground" scenario amongst the available climate datasets. In Phase 3, two (2) additional climate datasets were generated for the Okanagan by Environment Canada based on two global climate models (GCMs) (Table 1.1). The two models include the third generation of the Coupled Global Climate Model with the B1 emissions scenario (CGCM3 B1) and the Hadley Centre



Coupled Model, Version 3 with the A2 emissions scenario (HadCM3 A2). These two models were chosen to better characterize the variability in Okanagan climate than was originally represented in Phase 2 by the CGCM2 A2 climate model. The dataset based on the HadCM3 A2 is considered to represent somewhat warmer and drier conditions, while the CGCM3 B1 is characterized by cooler and wetter conditions. It is important to note that neither is considered better or worse than the other - they simply reflect a selection (albeit one carefully selected by Environment Canada to reasonably reflect the Okanagan) of the many plausible climate projections available.

Table 1.1	Climate models used in Phase 2 and 3.						
Phase	Climate Model	Projected seasonal changes	General description				
2	CGCM2 A2	Winter: warm and moderately wet Spring: hot and unchanged Summer: warm and dry	Moderate scenario				
		Fall: warm and moderately wet					
3	HadCM3 A2	Winter: warm and wet Spring: warm and wet Summer: hot and dry Fall: hot and unchanged	Warmer and drier				
	CGCM3 B1	Winter: warm and unchanged Spring: cool and very wet Summer: cool and unchanged Fall: moderately warm and moderately wet	Cooler and wetter				

1.2 **PROJECT OBJECTIVES**

The OBWB's desire to assess more scenarios using the OBWAM was driven not only by the availability of additional GCM data but also a wish to evaluate different assumptions for land use change, population change, and water use efficiency. The principal objectives of Phase 3 modeling were to:

- 1. Identify a suite of possible future scenarios that can be used to evaluate the effects of each major factor driving water supply and use, principally climate change, population growth, water use efficiency, and land use,
- 2. Run the OBWAM and its supporting models OBHM and OWDM,
- 3. Compile the model output in a usable format for further investigation, and
- 4. Interpret and report the key results.



While this report highlights the first two (2) points above, it is focused on the third and fourth points. Those interested in the specific technical details of the models and their input datasets are referred to DHI (2010), Summit (2010) as well as technical reports and memos by contributors to the study. A copy of such a memo by RHF Systems is provided in Appendix G. Background information on climate modeling may also be found online at Environment Canada (http://www.ec.gc.ca/ccmac-cccma/) and the Pacific Climate Impacts Consortium (PCIC) (http://pacificclimate.org/).

1.3 STUDY TEAM AND ACKNOWLEDGEMENTS

The Project Manager and Contract Monitor of this study was Anna Warwick-Sears of the OBWB. Lars Uunila of Polar Geoscience Ltd. was the technical lead for this study. He was supported by Drew Lejbak, Rebekka Lindskoog and Travis Nagy of Summit Environmental Consultants Inc. Ron Fretwell of RHF Systems, Denise Neilsen of Agriculture and Agri-Food Canada and Alex Canon of Environment Canada are the key persons responsible for the development of supporting models and the data used in this study.





2.0 IDENTIFICATION OF FUTURE SCENARIOS (PHASE 3)

In Phase 2, the CGCM2 A2 climate model was the basis for 15 future scenarios [refer to Table A.1 in Appendix A and Summit (2010) for a full description]. In Phase 3, the HadCM3 A2 and CGCM3 B1 climate model data were used in assessing each of six (6) main groups of scenarios (12 total) (Table 2.1). In addition, three (3) synthetically derived 5-year drought scenarios¹ were assessed.

The current or baseline conditions in the Okanagan are represented by Scenarios 65 and 66 (1971-2006); these scenarios are developed with the HadCM3 A2 and CGCM3 B1 climate models respectively. It is important to note that while Scenarios 65 and 66 mimic the historical climate, they do not reflect specific weather patterns that were actually observed in any specific year. In order to minimize bias, the climate data under Scenarios 65 (HadCM3 A2) and 66 (CGCM3 B1) are used as references to their respective model's future projections.

In late 2010 the Technical Working Group initiated a discussion on the future scenarios to be modeled in Phase 3. Given the multitude of factors driving water supply and use and multiple objectives, the scenario list was reviewed and refined until it was confirmed in spring 2011. A total of six (6) groups of future scenarios for 2011-2040 were identified for Phase 3 modeling. Each group was run with each of the two climate models. In addition, a group of three (3) scenarios based on a synthesized 5-year drought period were modeled. The processing of these 15 scenarios by RHF Systems involved approximately 12 months, although a considerable portion of that time involved training and the transfer of knowledge between the model developers (DHI Inc.) and RHF Systems.

The main groups of scenarios assessed in Phase 3 are described generally as follows:

- *Group A* Scenarios 28 & 29: <u>Climate change only</u>; all factors (except climate) remain constant at 2006 levels;
- Group B Scenarios 30 & 31: Climate change and land-use and population <u>continue "as-is"</u> <u>based on current trends</u>;



¹ The 5-year drought scenarios are based on a single synthetic drought with three (3) different assumptions on land use and population change.

- Group C Scenarios 34 & 35: Climate change with "population boom" (assuming "urban sprawl");
- Group D Scenarios 36 & 37: Climate change and <u>increased agricultural land base</u> under irrigation;
- Group E Scenarios 38 & 39: Climate change with <u>a possible "worst-case" scenario</u> for land use and population growth;
- Group F Scenarios 40 & 41: Climate change with <u>a possible "worst-case" scenario</u> for land use and population growth, but <u>mitigated by efficiency improvements</u>.
- Group G Scenarios 55, 56, 57: The effects of a <u>5-year drought</u> assuming current conditions, future conditions, and future conditions with efficiency improvements, respectively.

In Phase 2, population growth was modeled assuming it would occur principally by infilling of developed residential areas (i.e. densification). For Group C, population growth was modeled assuming expanded residential development consistent with available planning documents and files for the Okanagan (refer to Appendix G for details). Based on discussions amongst members of the Technical Working Group and the study team, it was felt that the assumption of urban sprawl may be more realistic than densification given the observed trend in residential development in the Okanagan. Dr. Denise Neilsen of Agriculture and Agri-Food Canada and Ron Fretwell of RHF Systems Ltd. developed the methods used to describe the population boom, urban sprawl scenario.





<u>Scenario</u> Group	<u>Scenario</u>	<u>Period</u>	<u>Model</u>	<u>Mountain</u> <u>Pine Beetle</u>	Domestic (indoor & outdoor) Efficiency	Agricultural Efficiency	<u>Agricultural Land</u> <u>Base</u>	Population growth	Description
Baseline	65	1971-2006	HadCM3 A2	Expected	Maintained constant at 2006 level	Maintained constant at 2006 level	Maintained constant at 2006 level	Actual	Baseline period – modeling based on HadCM3.A2 climate model
	66	1971-2006	CGCM3 B1						Baseline period – modeling based on CGCM3 B1 climate model
A	28	2011-2040	HadCM3 A2	Expected	Maintained constant at 2006 level	Maintained constant at 2006 level	Maintained constant at 2006 level	Maintained constant at 2006 level	Isolates the GCM effect (roughly comparable to #25 from Phase 2)
	29		CGCM3 B1						
В	30	2011-2040	HadCM3 A2	Expected	Maintained constant at 2006 level	Improves at expected rate	Maintained constant at 2006 level	Expected rate of population growth (increase at 1% +/- per year)	Continue as-is moderate scenario (roughly comparable to #1 from Phase 2)
	31		CGCM3 B1					, ,	,
C	34	2011-2040	HadCM3 A2	Expected	Maintained constant at 2006 level	Improves at expected rate	Maintained constant at 2006 level	High rate of population growth (increase at 2.5%+/- per year) accommodated by "urban sprawl"	Isolates the effect of population boom with urban sprawl (NEW comparison)
	35		CGCM3 B1						
D	36	2011-2040	HadCM3 A2	Expected	Maintained constant at 2006 level	Improves at expected rate	Irrigate all available agricultural land	Expected rate of population growth (increase at 1% +/- per year)	Isolates the effect of increasing the agricultural land base (roughly comparable to #3 from Phase 2)
	37		CGCM3 B1		ievei		agriculturarianu	year)	
E	38	2011-2040	HadCM3 A2	Expected	Maintained constant at 2006 level	Maintained constant at 2006 level	Irrigate all available agricultural land	High rate of population growth (increase at 2.5%+/- per year) accommodated by "urban sprawl"	A possible "worst-case" (roughly comparable to #4 from Phase 2)
	39		CGCM3 B1					spiawi	

Table 2.1List of future scenarios assessed in Phase 3.

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Table 2.1 cont'd.

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<u>Scenario</u> Group	<u>Scenario</u>	<u>Period</u>	<u>Model</u>	<u>Mountain</u> Pine Beetle	Domestic (indoor & outdoor) Efficiency	<u>Agricultural</u> <u>Efficiency</u>	<u>Agricultural Land</u> <u>Base</u>	Population growth	Description
F	40	2011-2040	HadCM3 A2	Expected	Linear improvement of 33% (total) between 2011-2040	Improves at expected rate	Irrigate all available agricultural land	High rate of population growth (increase at 2.5%+/- per year) accommodated by "urban sprawl"	Illustrates how efficiency in both domestic and agriculture may mitigate a "worst-case" scenario under a "dry" climate (roughly comparable to #4 from Phase 2)
	41		CGCM3 B1						
G	55	5-year drought (2011-2016)	Synthetic drought sequence	Expected	Maintained constant at 2006 level	Maintained constant at 2006 level	Maintained constant at 2006 level	Maintained constant at 2006 level	Illustrates what may happen if we have a 5-year drought tomorrow.
	56	5-year drought (2039-2044)	Synthetic drought sequence	Expected	Maintained constant at 2006 level	Maintained constant at 2006 level	Irrigate all available agricultural land	High rate of population growth (increase at 2.5%+/- per year) accommodated by "urban sprawl"	A possible "worst-case" drought scenario 30 years into the future
	57	5-year drought (2039-2044)	Synthetic drought sequence	Expected	Linear improvement of 33% (total) between 2011-2040	Improves at expected rate	Irrigate all available agricultural land	High rate of population growth (increase at 2.5%+/- per year) accommodated by "urban sprawl"	Illustrates how efficiency improvements may mitigate a possible "worst- case" drought scenario 30 years into the future



3.0 FACTORS AFFECTING WATER SUPPLY AND USE

This section highlights the principal factors that drive the water supply and use in the Okanagan and identifies how these factors are projected to change in the future based on the assumptions used in this study. For the purposes of this report, technical details on the development of the input datasets have been largely omitted. Nevertheless, some of the Phase 3 modeling assumptions and methodologies are documented in a memo by RHF Systems (Appendix G). Further modeling details are available in DHI (2010), Summit (2010) and other reports being prepared by the main contributors to this study (e.g. Agriculture and Agri-Food Canada).

3.1 CLIMATE

Similar to Phase 2, Environment Canada produced gridded climate datasets for the Okanagan Basin at 500 m resolution. For each of the climate models as well as a five year synthetic drought (which attempts to mimic the 1929-1931 drought of record), hourly temperature, precipitation, and reference evapotranspiration were supplied to RHF Systems Ltd. for use in the OBHM, OWDM, and OBWAM. For presentation purposes, we have reduced this large volume of data to Basin-wide mean monthly and annual values for the period 1971 to 2006 (Scenarios 65 and 66) and the future (2011-2040) period (Scenarios 28 and 29).

In order to understand the projected Okanagan's water supply and use in future, it is useful to understand what the climate models (used in Phase 3) are projecting. The following sections illustrate the possible future patterns in temperature and precipitation.

3.1.1 Air Temperature

Figure 3.1 illustrates how the mean annual temperatures are projected to change over the next three (3) decades under Scenario 28 (HadCM3 A2) and Scenario 29 (CGCM3 B1). Figure 3.2 illustrates how temperatures are projected to vary monthly. Figures 3.1 and 3.2 indicate that both models suggest a warming throughout the year, with the HadCM3 A2 model projecting considerably warmer summer and fall temperatures. With warming temperatures in winter, it is speculated that the proportion of rain to snow may increase and the duration of freezing temperatures would



decrease. Furthermore, the risk of mid-winter snowmelt may increase. All these factors could serve to reduce the volume of water available from the snowpack and affect the timing at which it is available.

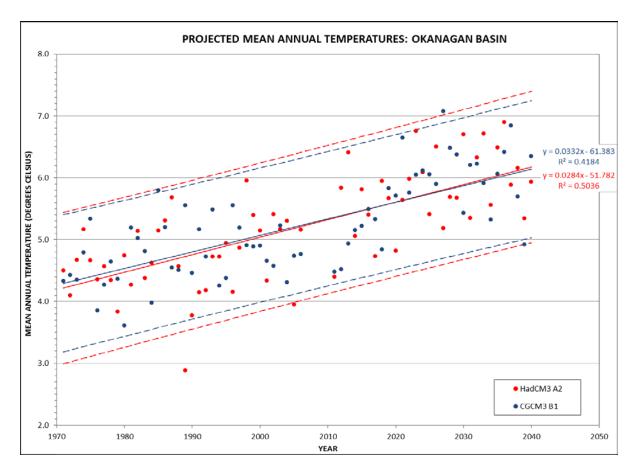


Figure 3.1 Projected mean annual temperatures for the Okanagan Basin. Red and blue data represents the projections from the HadCM3 A2 and the CGCM3 B1 models respectively. Solid lines are the best-fit regression lines, while the dashed lines indicate the 95% prediction limits. On an annual basis, the projected temperature trends based on the two models are comparable, and both have high inter-annual variability.





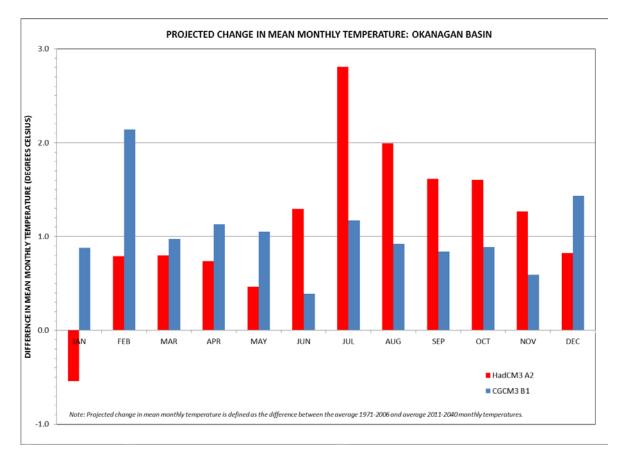


Figure 3.2 Projected change in mean monthly Okanagan Basin temperature based on the HadCM3 A2 model (red) and the CGCM3 B1 model (blue). With the exception of January, all months are projected to be warmer, however, the pattern of increases varies by climate model.

3.1.2 Precipitation

Annual precipitation projections, as shown in Figure 3.3, have a relatively high inter-annual variability and display weak and inconsistent trends in the future. Seasonally, projected precipitation change varies by climate model with the HadCM3 A2 suggesting slightly greater amounts in late fall and winter, but reduced amounts in spring and summer. The CGCM3 B1 model differs in that it projects increased precipitation in most months, including much of the summer period (Figure 3.4). This direct affects runoff production under that assumed climate model.

The Basin-wide cumulative precipitation under an assumed synthetic 5-year drought is presented in Figure 3.5. For reference, the grey lines indicate historical precipitation patterns for a suite of consecutive five-year periods between 1996 and 2006. The red line indicates the cumulative



precipitation under the synthetic 5-year drought. Given the divergence of the drought and historical plots, it is clear that the longer the period of drought, the more severe the impact on the water supply will become. By the end of the fifth year, for example, the total precipitation received during the drought is about 30% less than under normal conditions. The effect of this decrease precipitation on the water supply is discussed below.

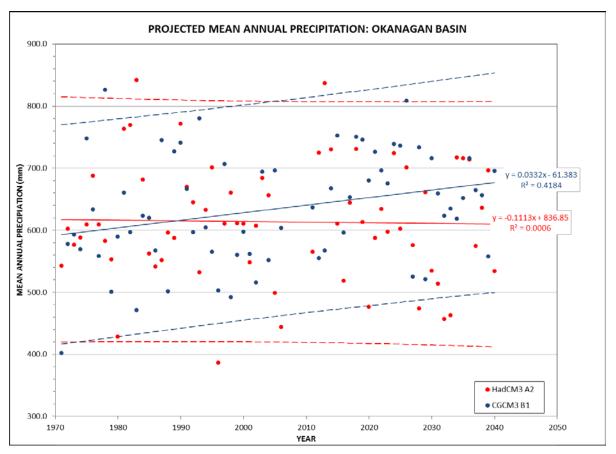


Figure 3.3 Projected mean annual precipitation for the Okanagan Basin. Red data represents the HadCM3 A2 model, blue data represent the CGCM3 B1 model. Solid lines are the best-fit regression lines, while dashed lines indicate the 95% prediction limits. Overall, the long-term trends are weak and inter-annual variability is high.



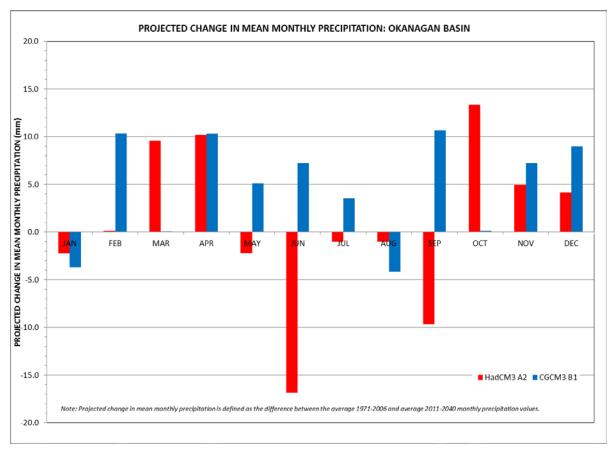


Figure 3.4 Projected change in mean monthly Okanagan Basin precipitation based on the HadCM3 A2 model (red) and the CGCM3 B1 model (blue). The pattern of changes varies by climate model. Both models suggest some increase in precipitation over the fall and winter, however over summer, the CGCM3 B1 projects wetter conditions while the HadCM3 A2 projects drier conditions.





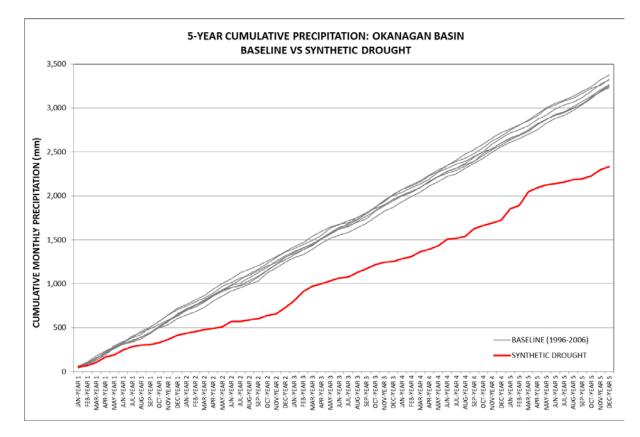


Figure 3.5 Overall cumulative precipitation in the Okanagan under normal conditions between 1996 and 2006 (grey) and under an extended drought (red). The drought was synthesized by Environment Canada to mimic climatic conditions similar to the 1929-1931 drought of record in the Okanagan.

3.2 WATERSHED CONDITIONS

Phase 3 modeling of the past and future watershed conditions adopted the assumptions and parameters used in the Phase 2 modeling (DHI, 2010). This included assumptions on the evolution of the forest cover over time (i.e. by logging, fire and mountain pine beetle). For all Phase 3 scenarios, the same assumed evolution of the forest cover was used.

3.3 WATER USE EFFICIENCY

The efficiency by which water is used is an important factor that can affect water use. In Phase 3 modeling, the effects of both domestic and agricultural (irrigation) water use efficiency was evaluated. The specific assumptions used during Phase 3 modeling by RHF Systems are outlined in a memo in Appendix G.



3.3.1 Domestic (Indoor and Outdoor) Efficiency

As shown in Table 2.1, domestic (indoor and outdoor) efficiency was either assumed constant (at 2006 levels) or assumed to improve linearly by approximately 1% per year over the period 2011-2040.

3.3.2 Agricultural Efficiency

Agricultural water use efficiency was either assumed constant (at 2006 levels) or assumed to improve at the expected rate based on historical trends.

3.4 AGRICULTURAL LAND BASE

The agricultural land base was modeled either using the assumption that it is maintained constant at 2006 levels or that all available agricultural land becomes irrigated (refer to Appendix G).

3.5 **POPULATION GROWTH**

During Phase 3 modeling, three (3) assumptions for the rate of population growth and type of residential development were used (refer to Appendix G):

- 1. Population maintained constant at 2006 levels,
- 2. Population growth occurs at a rate of 1% per year and growth occurs principally by infilling of existing residential areas (i.e. densification).
- 3. Population growth occurs at a rate of 2.5% per year, and growth occurs principally by expansion into formerly undeveloped lands (i.e. "urban sprawl").



4.0 PROJECTED WATER SUPPLY

4.1 SNOWPACK

Given the interior climate in the Okanagan, the availability of water currently depends largely on the accumulation and melt of snow in the higher elevation uplands. The many upland reservoirs in the Okanagan are a testament to the importance of capturing snowmelt in spring for controlled release as demands require during drier times of the year.

The term snow water equivalent (SWE) is used to indicate the water content of the snowpack (in mm). For the purposes of this study, SWE estimates were extracted from the Okanagan Basin Hydrology Model (OBHM). To provide an indicator of the possible future changes in snowpack, SWE estimates for the Okanagan Lake watershed (i.e. the drainage area above the outlet of Okanagan Lake at Penticton, not the entire Okanagan River Basin) were averaged across all areas above 1,000 m elevation (Figure 4.1). This area was used since it is similar to the area considered by the BC Ministry of Environment when developing Okanagan Lake inflow forecasts each spring.

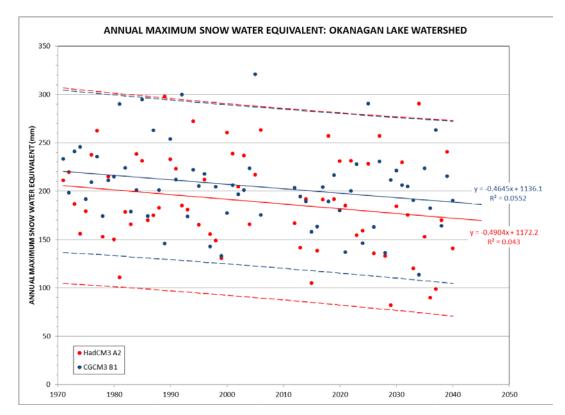
Projected SWE data was provided for both climate models: HadCM3 A2 and CGCM3 B1. Figure 4.2 presents this data as annual maximum SWE. The two models indicate that inter-annual variability in the maximum SWE is high; a fact that is clearly reflected in the historical annual inflow volumes to Okanagan Lake. For example, since 1971, Okanagan Lake inflows have ranged from a low of about 129,000 million litres (ML) to a high of 1,330,000 ML (i.e. a difference of about 10 times). In spite of the wide year to year fluctuation in SWE, there is a subtle shift towards lower values in the future. Such a shift is likely driven not so much by changes in precipitation (Figure 3.3), but by the increasing temperatures during winter, which can affect the distribution of snowfall (versus rain) and the duration and amount of snow on the ground. In addition, there is evidence that the timing of the annual maximum SWE may be earlier in the future (Figure 4.3).

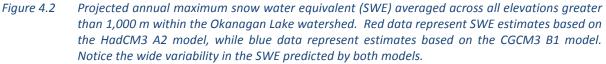




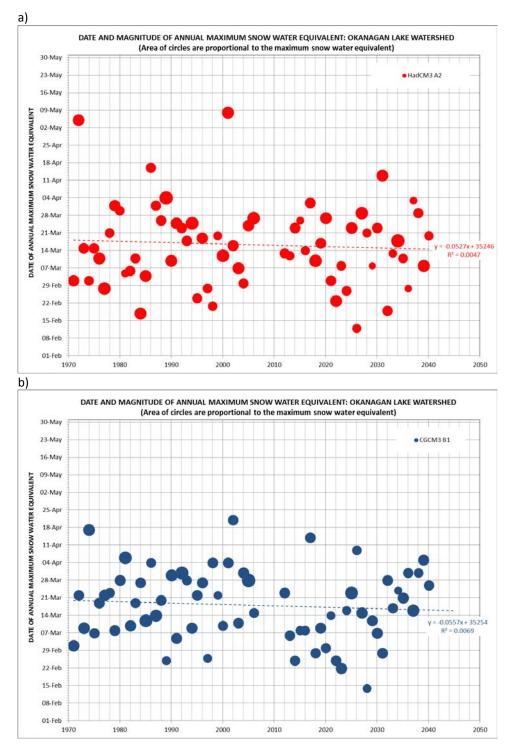


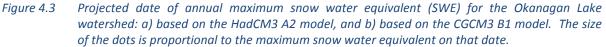
Figure 4.1 The yellow area shows the elevations greater than 1,000 m within Okanagan Lake watershed (i.e. the drainage area above the outlet of Okanagan Lake at Penticton). This is the area from which snow water equivalent (SWE) data was extracted.













Although the trends in the timing and magnitude of the annual maximum SWE are subtle, on a monthly basis there is stronger evidence that the snowpack is diminishing in late winter (Figure 4.4). The changes however are dependent upon the assumed climate model. Under the HadCM3 A2 model, reductions throughout the winter/spring season are projected, while under the CGCM3 B1 model, these reductions tend to be skewed primarily towards the late spring.

In summary, based on the SWE projections under two climate models, there is some evidence that the volume of water represented by the snowpack will decrease in future, and that the period with snow cover in the uplands may also be reduced. The implications of this are an earlier onset of spring freshet and a reduction in the volume of snowmelt runoff produced. However (as discussed below) this may be mitigated by increased precipitation as rain.

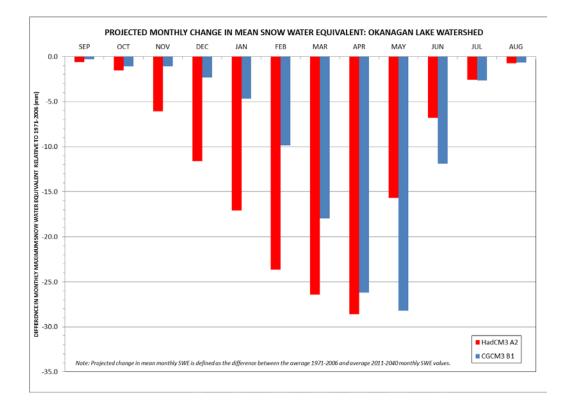


Figure 4.4 Projected change in monthly maximum snow water equivalent (SWE): a) based on the HadCM3 A2 model (Scenario 28), and b) based on the CGCM3 B1 model.

Okanagan Basin Water Board



4.2 SURFACE WATER SUPPLY (NATURAL RUNOFF)

Future projections for Okanagan's water supply were made using the Okanagan Basin Hydrology Model (OBHM) (described in Summit, 2010). The model was run for the period 1971-2006 (baseline period) and 2012-2040 (future period) using two climate models (HadCM3 A2 and CGCM3 B1). Some of the key findings are provided below.

4.2.1 Overall Okanagan Basin Water Supply

Overall, total annual (natural) runoff from the Okanagan Basin is highly variable from year to year (Figure 4.5). Between 1996 and 2006, annual runoff averaged about 886,000 ML (117 mm) (Summit, 2010). Based on the OBHM, annual runoff between 1971 and 2040 ranged from about 400,000 ML to nearly 1,900,000 ML (a difference of 4.75 times). The projections suggest a general trend towards increasing annual runoff in the future; however this is not *statistically* significant. The trend is slightly stronger under the CGCM3 B1 climate, which is projected to have increasing precipitation. Interestingly, despite relatively uniform annual precipitation under the HadCM3 A2 climate (Figure 3.3), there is a slight runoff increase over time.

Long-term annual runoff statistics for the Okanagan Basin are presented as box plots in Figure 4.6; these data are organized by the four (4) main reporting zones (refer to Section 5.0 and Appendix B), as well as for "Okanagan Lake" and "Okanagan River"². Separate box plots are shown for the OBHM results with the HadCM3 A2 climate (a) and with the CGCM3 B1 climate (b). These plots effectively show the expected value in terms of the median³ annual flow (horizontal line through each box), as well as the variability as indicated by the inter-quartile range (IQR) (i.e. the spread between the 25th percentile). The "whiskers" include the maximum and minimum projections.



² "Okanagan Lake" in this context refers to the drainage area above Okanagan Lake at Penticton. "Okanagan River" refers to the drainage area feeding Okanagan River between the outlet of Okanagan Lake and outlet of Osoyoos Lake.

³ The median is generally preferred over the mean as it is less biased by extreme high or low values.

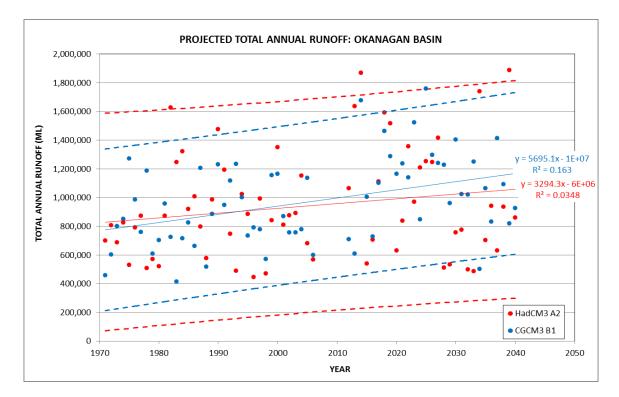
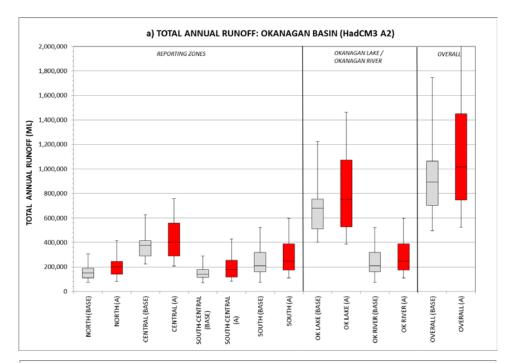


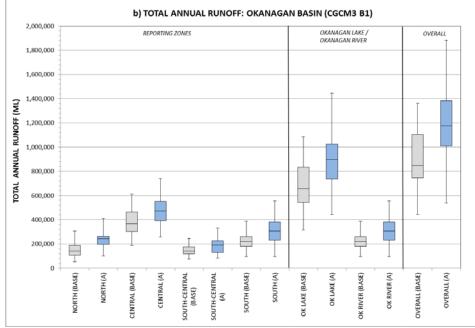
Figure 4.5 Projected total annual natural runoff in the Okanagan Basin based on the HadCM3 A2 climate projections (red) and CGCM3 B1 climate projections (blue). Annual runoff displays large year-to-year variability, with trends towards increasing values in the future; however these trends are not statistically significant.

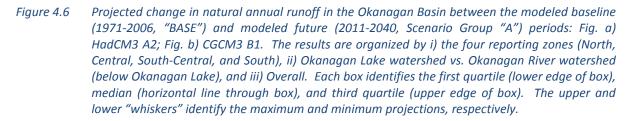
Based on Figure 4.6, there is an indication that in all areas, the median annual runoff is expected to increase into the future (2012-2040), similar to the increase suggested on Figure 4.5. Perhaps more striking is that the variability in natural runoff is projected to dramatically increase into the future; something that may prove to be challenging to water management in the Basin.

To provide some insight at finer time scales, the projected long-term monthly natural runoff for the Okanagan Basin is provided in Table C.1 (Appendix C) and shown in Figure 4.7. In both Appendix C and Figure 4.7, projections for both climate models are provided. On Figure 4.7, the white boxes represent the modelled baseline (1971-2006) period, while the colored boxes represent the future (2011-2040) period. Note that the median monthly runoff is identified by the horizontal line that bisects each box. The inter-quartile range (IQR), is represented by difference between the top and bottom of the box. The IQR provides an indication of the variability in the runoff projections.

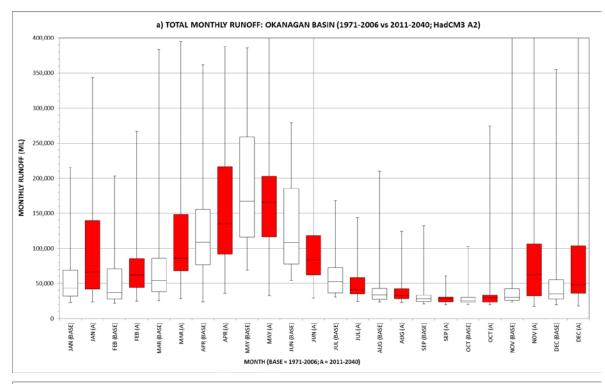












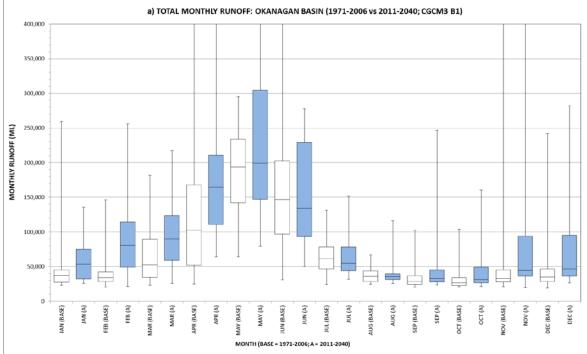


Figure 4.7 Projected change in monthly runoff in the Okanagan Basin between the baseline (1971-2006) and modeled future (2011-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively.

Okanagan Basin Water Board



Based on these plots, another picture emerges. Between late fall and early spring (October to March), there is a marked increase in the monthly runoff in the future (Figure 4.8). However this is also accompanied by considerably more variability (Figure 4.9), which is likely a result of the increase in precipitation in the winter and early spring and especially an increase in the proportion of rain to snow. Some of the increased runoff may result from mid-winter melt periods as well as advancement in the timing of the spring freshet. By May or June, a shift towards decreased monthly runoff occurs. This possibly reflects the earlier depletion of the snowpack and drier and warmer summer conditions.

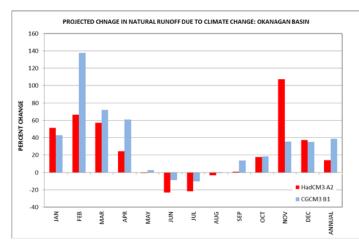


Figure 4.8 Projected % change in median monthly runoff due to climate change in the Okanagan Basin.

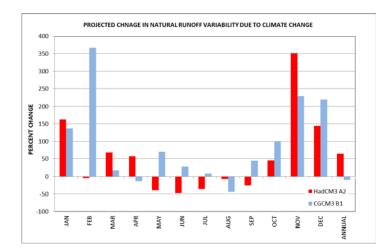


Figure 4.9 Projected % change in the variability of monthly runoff as indicated by the IQR due to climate change in the Okanagan Basin.



The pattern of increasing winter and spring flows and decreased summer flows appears not only at the Basin-scale but at the sub-basin level as well (see below) and is generally consistent with the findings of other regional studies of climate change effects on the hydrology of interior streams [e.g. Pike et al. (2010), Rodenhuis et al. (2009), Schnorbus and Rodenhuis (2010)].

4.2.2 Tributary Water Supply

The Okanagan Basin is divided into 31 principal stream catchments or "sub-basins"; these catchments generate the bulk of the surface water runoff in the Okanagan. Figure 4.10 shows the typical distribution of annual surface runoff between the 31 streams in the Okanagan. This figure excludes the 40 "residual areas" (i.e. areas within the Okanagan that are not defined as stream catchments) that typically supply only a very small fraction of the total Basin's surface water.

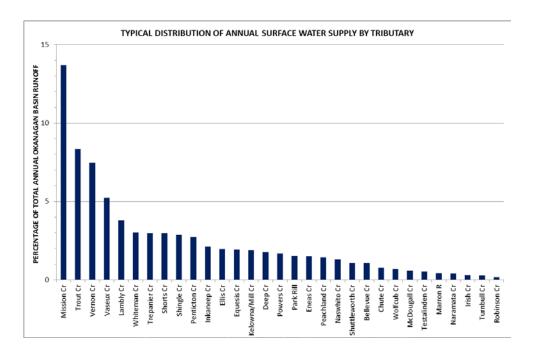


Figure 4.10 Typical distribution of annual surface runoff by stream in the Okanagan Basin. Values are in percentage of total Basin runoff over the period 1996-2006.

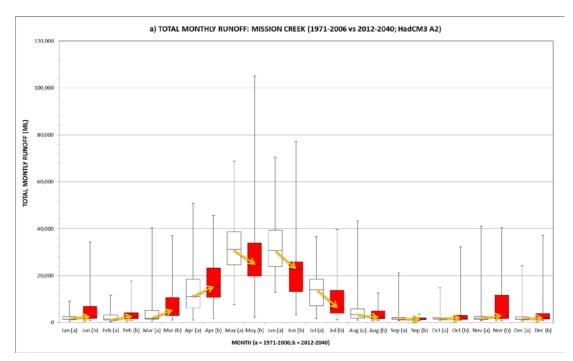
To demonstrate the patterns and future projections of natural runoff in the Okanagan, selected stream catchments from north to south were assessed in greater detail. Runoff projections for Mission Creek, the largest single contributor of runoff in the Basin, along with Trout Creek and



Vaseux Creek are provided in Table C.2 (Appendix C) and are plotted in Figures 4.11 to 4.13. Despite their different size and location, these streams reflect remarkably similar patterns to the Basin overall, specifically, increased runoff in winter and early spring and reduced summer runoff. In many (but not all) cases this is accompanied by increased variability, particularly during winter.







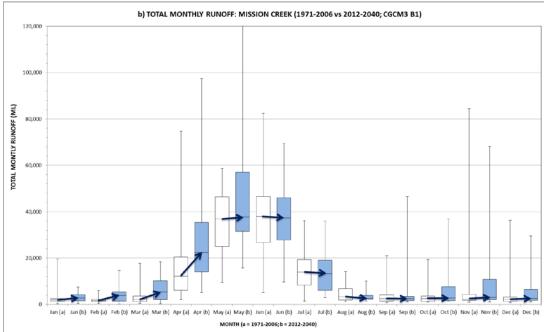
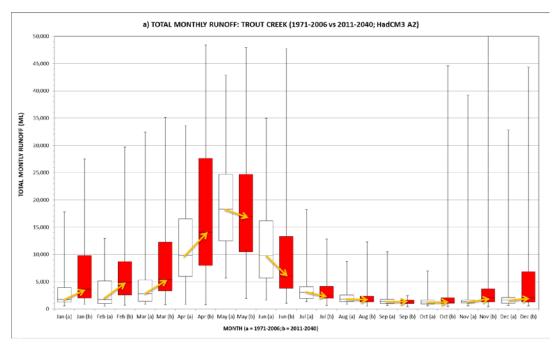


Figure 4.11 Projected change in natural monthly runoff in Mission Creek (at the mouth) between the modeled baseline (1971-2006) and modeled future (2012-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively. The arrows indicate the change in median monthly runoff.





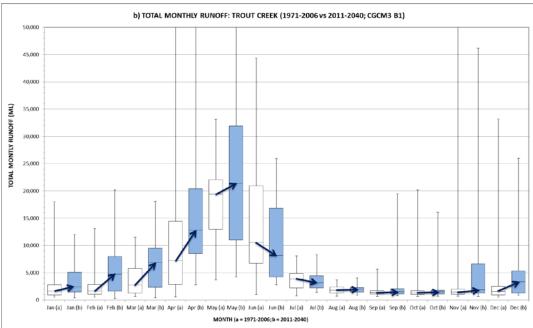
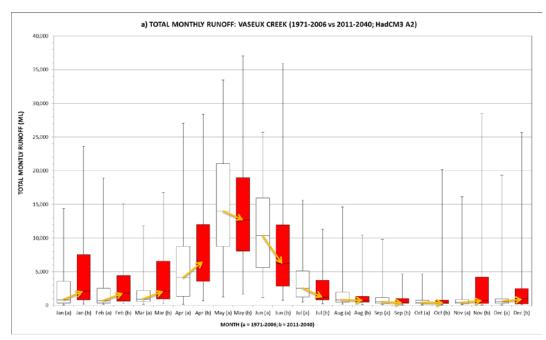


Figure 4.12 Projected change in natural monthly runoff in Trout Creek (at the mouth) between the modeled baseline (1971-2006) and modeled future (2012-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively. The arrows indicate the change in median monthly runoff.





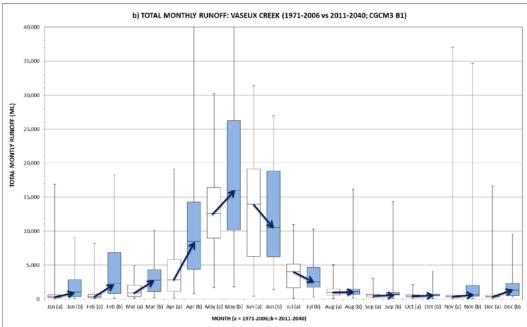


Figure 4.13 Projected change in natural monthly runoff in Vaseux Creek (at the mouth) between the modeled baseline (1971-2006) and modeled future (2012-2040) periods: a) HadCM3 A2 (white and red); b) CGCM3 B1 (white and blue). Each box identifies the first quartile (lower edge of box), median (horizontal line through box), and third quartile (upper edge of box). The upper and lower "whiskers" identify the maximum and minimum projections, respectively. The arrows indicate the change in median monthly runoff.



4.2.3 During Extended Drought

An extended drought typically poses the most challenging conditions to the management of the Okanagan's water supply. With each year under an extended drought, the water supply is taxed during summer and fall, but unlike normal years, reservoir storage does not necessarily get replenished over winter and spring. To illustrate the effect of a simulated 5-year drought of similar climatic conditions to the 1929-1931 drought of record, the OBHM was run using a synthesized climatic dataset from Environment Canada. The overall runoff projected for the Okanagan Basin during drought is shown in Figure 4.14. For reference, the drought projections are plotted against a suite of natural runoff time-series for the baseline period (1996-2006). The divergence of the red and grey lines indicates the effect of drought on the natural water supply. By the end of the 5-year period, the cumulative runoff during the baseline period ranges from 4,700,000 to 6,200,000 ML. By contrast the drought period cumulative runoff is 3,100,000 ML, or 35 to 50% lower. Trends similar to this during extended drought are also projected for individual streams in the Okanagan.

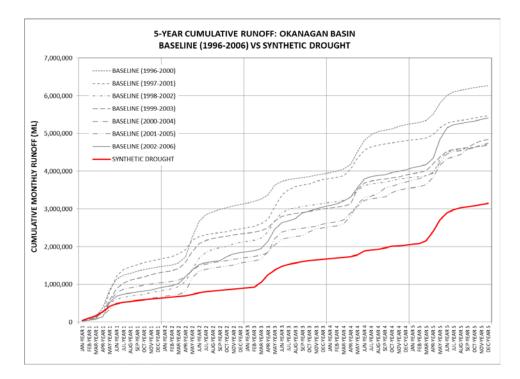


Figure 4.14 Overall cumulative (natural) runoff in the Okanagan under normal conditions between 1996 and 2006 (grey) and under an extended drought. The drought was synthesized by Environment Canada to mimic climatic conditions similar to the 1929-1931 drought of record in the Okanagan.



5.0 PROJECTED WATER USE AND EXTRACTION

The Okanagan Basin Water Demand Model is described in Summit (2010). The model provides detailed estimates of the water use for nine (9) end-uses (including losses) organized by water use area (i.e. areas serviced by water utilities) (Appendix B). The principal end-uses are:

- Agriculture,
- Domestic (indoor),
- Domestic (outdoor),
- Golf courses,
- Parks and open spaces,
- Industrial,
- Commercial,
- Institutional, and
- Lost or unaccounted for water.

Water use estimates were developed by RHF Systems at a weekly time-scale; however, for the purposes of this study, we have reduced this data to monthly and annual time-steps by developing Microsoft Access and Excel-based macros. Furthermore, we have organized the water use data into spreadsheets organized by water purveyor and reporting zone (Table 5.1, Appendix B). These spreadsheets will be supplied digitally to the OBWB. The four (4) reporting zones (North Okanagan, Central Okanagan, South-Central Okanagan, and South Okanagan) were chosen in consultation with members of the Technical Working Group to provide a means to assess broad spatial water supply and use patterns. These zones approximate some of the regional district boundaries and avoid splitting water utility service areas. Where possible these boundaries follow watershed and sub-basin boundaries.

The source(s) of water (and approximate distribution) used by each water utility listed in Table 5.1 was determined in Phase 2. This information was used to estimate the volume of water extracted from each surface water source (Table 5.2), from groundwater, from sources outside the Okanagan Basin (i.e. imports), as well as reclaimed water within the Basin.

Okanagan Basin Water Board Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)





North Okanagan		Central Okanagan		South-Central Oka	anagan	South Okanagan	
Water Use Area	Description	Water Use Area	Description	Water Use Area	Description	Water Use Area	Description
427	Canadian Lakeside Developments	407	Alto Utility	436 - 440	City of Penticton	413	Bobtail Ranch
428	Canyon Waterworks District	408	Antler Beach	442, 443	Corp. of the District of Summerland	415	Boundary Line Irri
431, 432	City of Armstrong	409	Belair Estates Mobile Home Park	450	Faulder Community System	416, 417	Burrowing Owl Vir
441	Claremont Utilities	410, 411, 412	Black Mountain Irrigation District	453-455	Former Naramata Irrigation District	426	Cabana Beach Can
445	Crown Villa	414	Boucherie Beach	465	Greata Ranch	444	Covert Farms
446, 447	Eagle Rock Waterworks District	418	Bylaw 1083 - Sunnyside	488	Meadow Valley Irrigation District	456	Gallaghers Lake W
463, 464	Grandview Waterworks District	419	Bylaw 369 - Falcon Ridge	549	Penticton Indian Band Reserve 1_System 2	462	Golden Arrow Trai
466, 467,	Greater Vernon Water Utility	420	Bylaw 434 - Killiney Beach	554	Sage Mesa Water System	474	Idle-O-Apartments
472	Highlands Park Waterworks District	421	Bylaw 571 - Dietrich (Star Place)	584	West Bench Irrigation District	477	Kaleden Irrigation
480	Landsdowne Waterworks District	422	Bylaw 597 - West Kelowna Estates	625-638, 640	Other_South_Central_Okanagan	482	Lakeshore Waterw
484, 485	Larkin Waterworks District	423	Bylaw 695 - Westshore Estates			486	Lower Nipit Impro
489	Meighan Creek	424	Bylaw 793 - Pritchard/Shanboolard			487	McIntyre Bluff Ran
499-516	Okanagan Indian Band Reserve 1	425	Bylaw 981 - Sunset Ranch			498	Okanagan Falls Irri
517	Okanagan Landing Utilities	429	Casaloma			518-544	Osoyoos Indian Ba
547	Otter Lake Waterworks Improvement District	430	Cedar Creek Winery			545, 546	Osoyoos Irrigation
557	Silver Star RV Park	433, 434, 435	City of Kelowna			550, 551	Penticton Indian B
562	Stardel Waterworks District	448	Eastside Utility Ltd.			552	Rolling Hills Water
564	Steele Springs Waterworks District	449	Edgewater Pines			556	Shuttleworth Cree
587	Whitewood Neighborhood Utility	451, 452	Fintry			558	Skaha Estates Imp
595-604, 606	Other_North_Okanagan	457 - 461	Glenmore Ellison Improvement District			563	St Andrews Utility
	0	470	Green Bay Water Utility			565	Sun Valley Improv
		471	Greystokes			566	Tamri Motel & Car
		473	Holiday Park Resort			567-574	Town of Oliver
		475	Jennens			575-578	Town of Osoyoos
		476	Kal Pine Estates			580	Twin Lakes Water
		478	Kelowna Springs Golf Course			581	Vaseux Lake Impro
		479	La Casa			582	Waltons Mountain
		481	Lake Country Irrigation District			583	Weeping Willow M
		483	Lakeview Irrigation District			588	Willow Beach Utili
		490 494	Municipality of Lake Country			589	Willowbrook Wate
		495 - 497	Municipality of Peachland			639, 641-665	Other_South_Oka
		548	Peachland Ponderosa			000) 012 000	e anen_ee aan_en aa
		553	Rutland Water Works				
		555	Shannon Lake Golf Course				
		559, 560	South East Kelowna Irrigation District				
		561	South Okanagan Mission Improvement District				
		579	Traders Cove				
		585	Westbank First Nation				
		586	Westbank Irrigation District				
		590	Westbank in gaton District				
		591	Winfield Mobile Home Park				
		591	Woodsdale Utility				
		592 593					
			Woods Lake Resort				
		594, 605, 607-624	Other_Central_Okanagan				

Table 5.1 List of water utilities, by reporting zone, for which water use estimates were compiled.

Okanagan Basin Water Board Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)





Irrigation District_1 Vineyards Campground

e Waterworks

Trailer Park

ents

ion District

erworks District provement District

Ranch

Irrigation District

Band

tion District

in Band Reserve 1_Systems 1 and 3

ater Works District

reek Irrigation District

mprovement District

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Campground

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Dkanagan

	com						
North	Okanagan	Central	Okanagan	South C	Central Okanagan	South C	Dkanagan
Node	Description	Node	Description	Node	Description	Node	Description
2	Kal-Wood Lk	1	Vernon Cr	33	W-11	48	Ok R at Penticton
3	Deep Cr	2	Kal-Wood Lk	34	Chute Cr	49	W-14
4	W-1	13	E-2	35	E-6	50	E-10
5	Irish Cr	15	W-5	36	Eneas Cr	51	Shingle Cr
6	W-2	16	Shorts Cr	37	W-12	52	Ellis Cr
7	E-1	17	W-6	38	Robinson Cr	53	W-15
8	Equesis Cr	18	Lambly Cr	39	E-7	54	E-11
9	W-3	19	W-7	40	Naramata Cr	55	Marron R
10	Naswhito Cr	20	Kelowna/Mill Cr	41	E-8	56	W-16
11	W-4	21	E-3	42	Trout Cr	57	W-17
12	Vernon Cr	22	Mission Cr	43	W-13	58	Skaha Lk
14	Whiteman Cr	23	E-4	44	Turnbull Cr	59	Ok R at Ok Falls
47	Okanagan Lk	24	Bellevue Cr	45	E-9	60	Shuttleworth Cr
-9999	Imports	25	E-5	46	Penticton Cr	61	W-18
		26	McDougall Cr	47	Okanagan Lk	62	W-19
		27	W-8			63	E-12
		28	Powers Cr			64	Vaseux Lk
		29	W-9			65	E-13
		30	Trepanier Cr			66	Vaseux Cr
		31	W-10			67	W-20
		32	Peachland Cr			68	E-14
		47	Okanagan Lk			69	Park Rill
						70	W-21
						71	Wolfcub Cr
						72	E-15
						73	Testalinden Cr
						74	W-22
						75	Ok R near Oliver
						76	E-16
						77	W-23
						78	Inkaneep Cr
						79	E-17
						80	Osoyoos Lk

Table 5.2List of surface water sources by reporting zone for which water extraction estimates were
compiled.

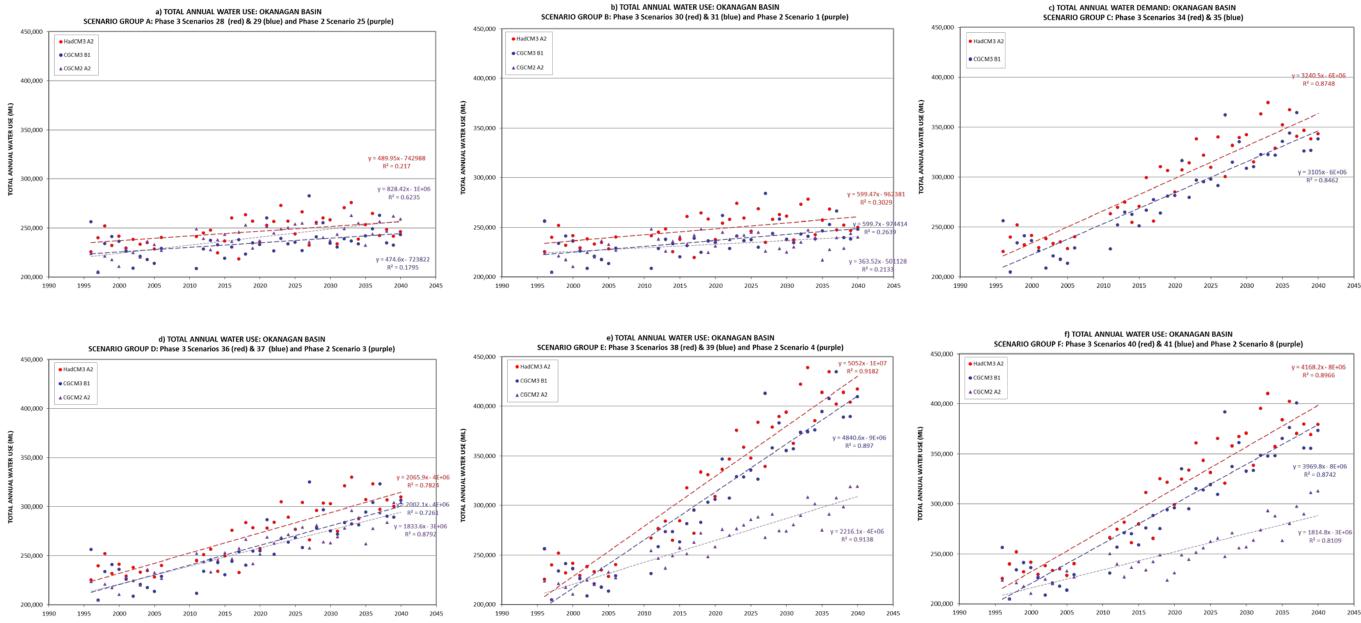
Note: The surface sources identified by an alphanumeric value are *residual areas* within the Okanagan Basin watershed. They generally do not contain significant streams and given their low elevation, collectively produce only a small percentage of the annual runoff in the Okanagan watershed.

5.1 OVERALL WATER USE

To provide an overview of the water use trends in the Okanagan, projected total annual water use throughout the Okanagan between 1996 and 2040 is presented in Figure 5.1. In this figure, total water use includes all nine (9) of the end-uses noted above regardless of source.







Projected total annual water use in the Okanagan Basin (from all sources) under the six (6) main scenario groups assessed in Phase 3. Red data are based on the HadCM3 A2 model, blue data are based on the CGCM3 B1 model and purple data are Figure 5.1 based on the CGCM2 A2 model results of Phase 2. Note that the Phase 2 results are not strictly comparable with the Phase 3 results given some differences in the underlying assumptions, particularly in figures e and f where Phase 2 modeling assumed population growth by infilling of currently developed areas as opposed to development of new residential areas (Phase 3). a) Group A: climate change only; b) Group B: climate change and current trends in land use and population change; c) Group C: climate change along with population boom and urban sprawl; d) Group D: climate change and increasing irrigated agricultural land; e) Group E: climate change along with population boom and increasing irrigated agricultural land (a possible worst case); f) Group F: Group E mitigated by efficiency improvements.

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The six (6) separate plots shown in Figure 5.1 represent the projected total Basin-wide water use for each of the six (6) main scenario groups modeled in Phase 3 (Table 2.1). Each plot presents the water use projections as determined by the Okanagan Water Demand Model (OWDM) driven by the two climate models: HadCM3 A2 (red) and CGCM3 B1 (blue). For reference, data from Phase 2 for roughly comparable (but not necessarily the same) scenarios are plotted in purple⁴. For clarity, the best-fit linear regressions are shown.

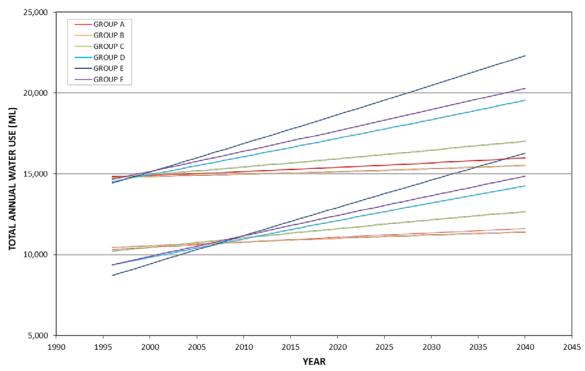
Examination of the six (6) plots in Figure 5.1 indicates that there is considerable variability in annual water use in all scenario projections owing primarily to weather variability from year to year. In spite of this variability, there is a subtle trend towards increasing water use in the future for all scenarios. Under the effects of climate change only (Group A, Figure 5.1.a), the increase is slight, and the Phase 2 projections, as expected, are generally bounded by those based on the two climate models in Phase 3. In Group B (Figure 5.1.b), not only is the effect of climate change imposed, but also the effects of an increased population (at an expected rate of +1% per year). However, the differences between Group B and A are negligible because Group B assumes that agricultural water use efficiency will improve based on current trends, while they remain constant at 2006 levels in Group A. Group C projections (Figure 5.1.c) reflect a population "boom" that is accompanied by "urban sprawl". Given the higher rate (+2.5% per year) of population growth, and more importantly the increased domestic outdoor water requirements associated with residential development in the form of single-family homes, there is a significant rate of increase in water use in the Basin. By 2040, population boom and urban sprawl (Group C) is projected to require 30% +/- more water than under the more moderate growth scenario of Group B. Scenario D (Figure 5.1.d) represents an increase in the agricultural land base requiring irrigation. While it does not show quite as dramatic an increase in water use as the population boom scenario (Group C), water requirements by 2040 are projected to increases by about 20% +/- over current levels. Groups E (Figure 5.1.e) and F (Figure 5.1.f) represent "worst-case" conditions whereby population boom and full utilization and irrigation of available agricultural land occur in the absence of efficiency improvements and with



⁴ Refer to Appendix A and Summit (2010) for a complete description of Phase 2 scenarios. Phase 2 and Phase 3 scenarios must be compared with caution given their different underlying assumptions (e.g. efficiency improvements, population growth patterns).

efficiency improvements, respectively. The increased requirements under Groups E and F by 2040 are projected to be about 60% +/- and 50% +/-, respectively.

In order to illustrate the patterns of water use within an individual utility, the projected total water use for Black Mountain Irrigation District (BMID) is presented as an example in Figure 5.2. Rather than present the raw data, only the upper and lower 95% prediction limits for each of the six (6) scenario groups are provided. The water use within the BMID reflects similar patterns identified Basin-wide, and is also characterized by relatively high inter-annual variability. The seasonal (and monthly) patterns of water use by the BMID also tend to be quite similar to the Basin-wide trends.



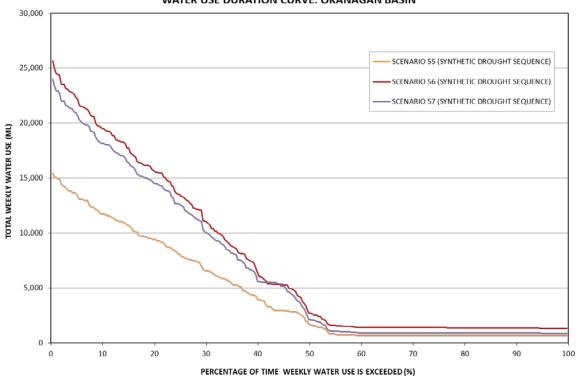
PROJECTED TOTAL ANNUAL WATER USE: BLACK MOUNTAIN IRRIGATION DISTRICT

Figure 5.2 Projected total annual water use within the Black Mountain Irrigation District. Each pair of lines represents the 95% prediction limits for each of the groups of scenarios identified. For clarity, annual data are not shown. The wide spread of the prediction limits for each scenario group indicates the relatively high inter-annual variability in water use over time.

Okanagan Basin Water Board Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)



In addition to the modeling of future climate, water demands were also modeled using the OWDM based on a synthesized five-year drought. Although only one synthesized drought climate dataset was modeled, three (3) sets of assumptions on land use and population growth were examined. These assumptions are noted in Table 2.1 for Scenarios 55, 56 and 57. The water use projections for these three scenarios are plotted as duration curves in Figure 5.3. The red curve (Scenario 56) represents the "worst case" of the three drought scenarios, whereby high population growth and full utilization and irrigation of agricultural land occurs. The purple line indicates the effect of improvements in water use efficiency in both agricultural and domestic water systems. The orange curve (Scenario 55) represents the projected water use assuming a 5-year drought occurs under current land use and population.



WATER USE DURATION CURVE: OKANAGAN BASIN

Figure 5.3 Water use duration curve for the Okanagan Basin under drought conditions. Scenario 55, 56, and 57 are shown in orange, red and purple, respectively.

Okanagan Basin Water Board Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)



5.2 WATER USE BY END-USE

As noted above, nine (9) end-use categories were modeled in the Okanagan Water Demand Model (OWDM). To illustrate how water use patterns for the main end-uses are projected to trend into the future, plots of the total Basin-wide water use by end-use is provided in Tables D.1 to D.6 (Appendix D) and in Figure 5.4.

It is well understood that the agricultural sector is the largest water user on an annual basis with 55% used by that sector annually (Summit, 2010). By comparison, domestic outdoor and indoor water use account for roughly 24% and 7%, respectively. Combined, the industrial, commercial, and institutional sectors account for 7%, while golf courses and parks/open spaces account for close to 5% and 2%, respectively. The following highlights some of the key points from the Phase 3 modeling results:

Agriculture (Figure 5.4.a and Table D.1):

- Based on climate change alone, agricultural irrigation requirements are projected to increase by up to 8% annually, however, projected monthly requirements during the irrigation season vary by the climate model used, between a modest increase (+9%) for the HadCM3 A2 and a considerable decrease (-16%) for the CGCM3 B1 model.
- Improvements in irrigation efficiency at today's rate are projected to reduce water use by about 1% annually.
- Full utilization and irrigation of the Okanagan's available agricultural land alone will result in an annual increase in agricultural water use by up to 27%, with monthly increases as much as 31%.

Golf Courses (Figure 5.4.b and Table D.2):

• Based on climate change alone, golf course irrigation requirements are projected to increase by 4% to 6% annually.



Parks and Open Spaces (Figure 5.4.c and Table D.3):

• Based on climate change alone, irrigation of parks and open spaces are projected to increase by 3% to 6% annually.

Domestic Indoor (Figure 5.4.d and Table D.4):

 At the expected rate of population growth (1% per year), indoor domestic water use is projected to increase by 25%; at the rate of 2.5% per year, indoor domestic water use is projected to increase by 67% by 2040.

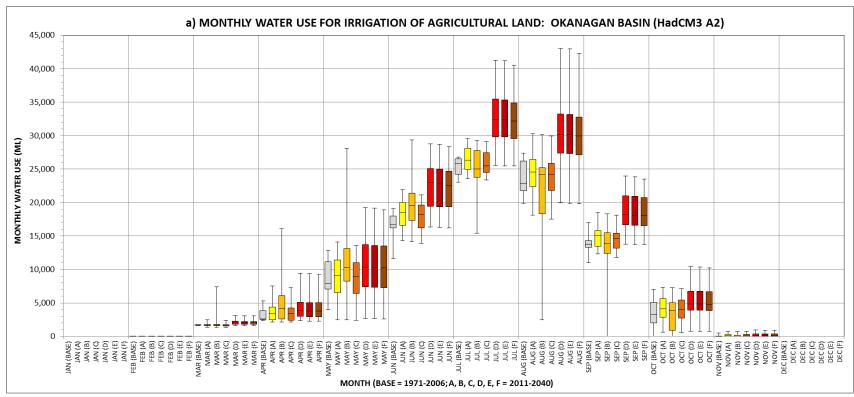
Domestic Indoor (Figure 5.4.e and Table D.5):

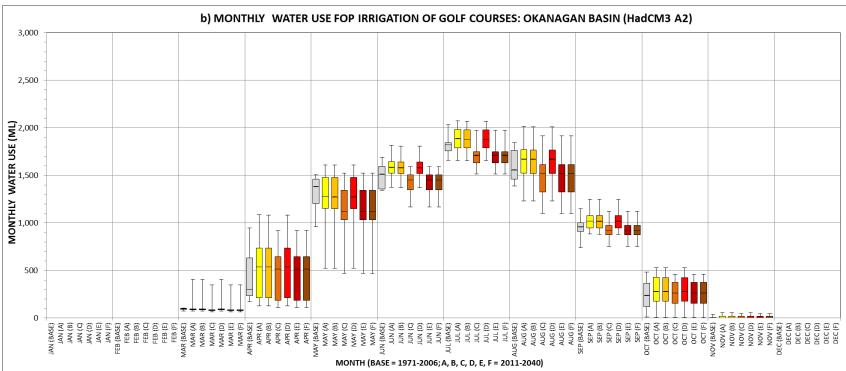
- Based on climate change alone, domestic outdoor water use is projected to increase by up to 6% annually.
- At the expected rate of population growth (1% per year), which is accommodated by infilling or densification of existing residential areas, outdoor domestic water use is projected to increase by only 3%. If however, a population "boom" occurs with urban sprawl, by 2040, outdoor domestic water use is projected to double current levels, and approach volumes currently used by the agricultural sector.

Industrial, Commercial, & Institutional (Figure 5.4.f and Tables D.6):

• The ICI sector generally reflects the domestic water use patterns, and specifically the population in the Okanagan. As a result of climate change alone, there is a projected 7% increase in water use by the ICI sector. This is projected to increase by 24% under the expected rate of population growth, and 67% assuming population boom and urban sprawl.







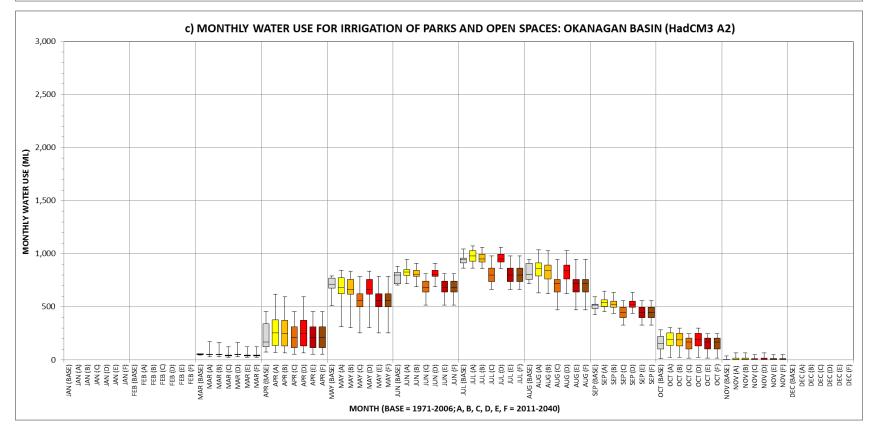
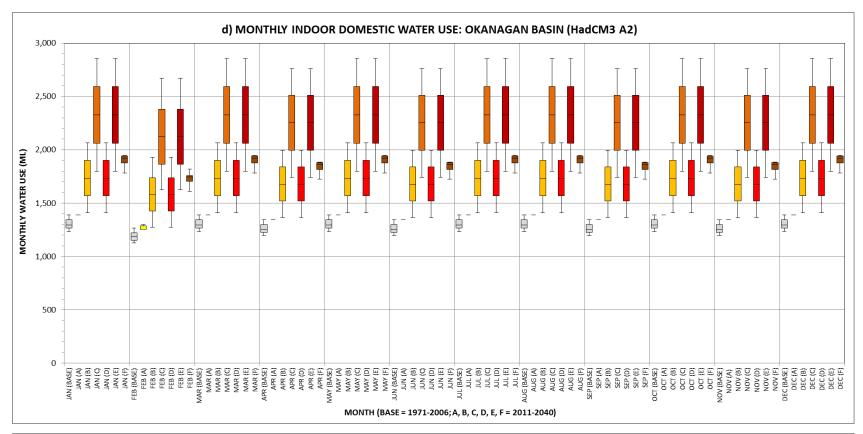


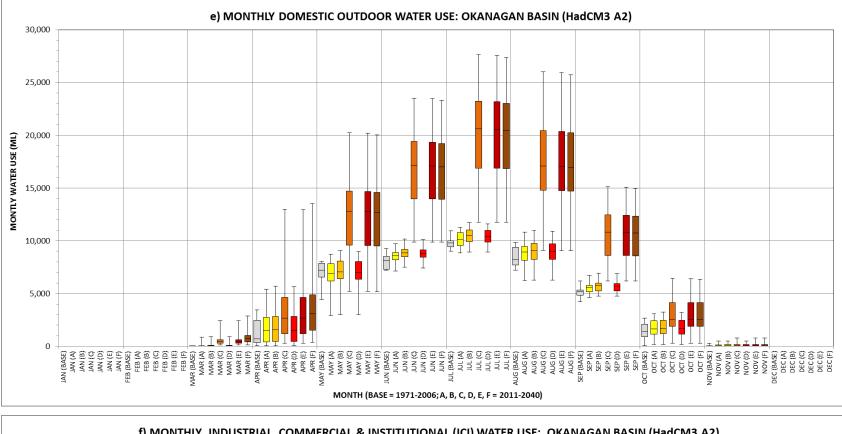
Figure 5.4 Total Okanagan water use by end-use for the baseline and future scenarios. Only the results based on the HadCM3 A2 model are shown.

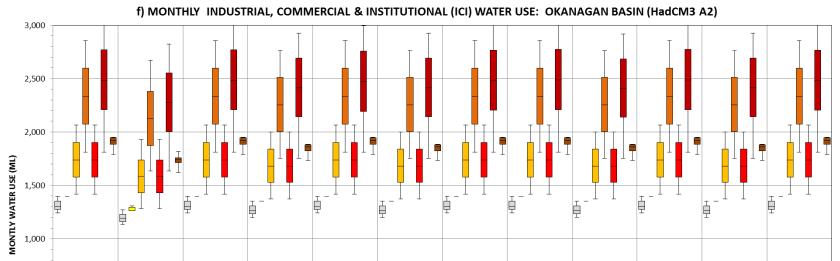
Okanagan Basin Water Board











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	NAL	FEB	AA AA AA	APR	. Y Z Z Z Z Z Z Z Z	N	JUL	AUG	SEP	00000	2 Z Z Z Z Z Z Z	DEC
					MONTH (BA	SE = 1971-2006;	A, B, C, D, E, F = 20	011-2040)				

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Figure 5.4 Continued.

Okanagan Basin Water Board





5.3 WATER EXTRACTION

The water used in the Okanagan is supplied by four (4) principal sources: surface water, groundwater, imported water, and reclaimed water. Table 5.3 presents the source distribution of water used in the Basin under the baseline, future, and drought scenarios. Currently, about 68% of the water used in the Basin is sourced from surface water, including streams, lakes, and springs. Under the future scenarios, this value ranges slightly, and is projected to drop by as much as 5% during prolonged drought. Groundwater supplies 21% of the Basin's water currently, but is likely to be relied upon more in the future, particularly during times of drought (up to 28%). Water imported from outside the Okanagan Basin and reclaimed from wastewater account for 8% and 4%, respectively and change little in the future. The following focuses on the surface water component to the Okanagan's water supply.

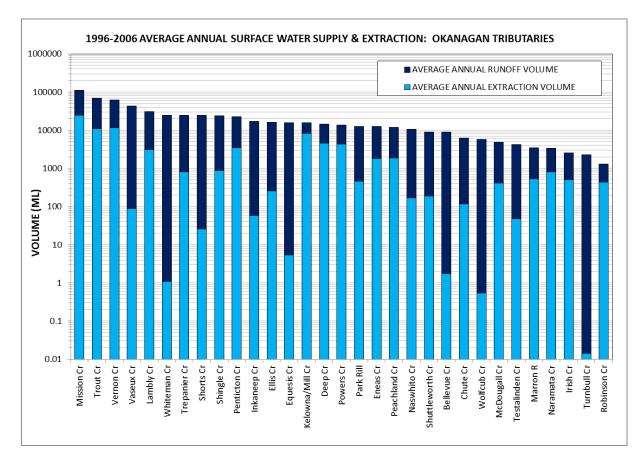
Table 5.3	Projected distribution of Okanagan Basin average annual water use by source. The results
	are based on the OWDM using HadCM3 A2 climate projections.

Cooncelo	Total Water	Source						
Scenario	Use (ML)	Surface Water (ML)	Groundwater (ML)	Imported (ML)	Reclaimed (ML)			
Baseline (1996	5-2006)							
1	235,934	159,745	48,636	18,269	9,284			
		68%	21%	8%	4%			
Future (2011-2	2040)							
28	249,936	169,390	51,398	19,376	9,772			
		68%	21%	8%	4%			
30	252,285	171,379	51,682	19,408	9,816			
		68%	20%	8%	4%			
34	316,868	216,802	70,101	20,291	9,674			
		68%	22%	6%	3%			
36	284,262	182,984	68,371	22,482	10,425			
		64%	24%	8%	4%			
38	356,113	234,180	87,977	23,655	10,301			
		66%	25%	7%	3%			
40	321,034	219,960	67,799	23,012	10,263			
		69%	21%	7%	3%			
5-year Drough	nt							
55	228,619	155,285	46,838	17,656	8,840			
		68%	20%	8%	4%			
56	386,065	249,365	102,501	24,476	9,723			
		65%	27%	6%	3%			
57	349,233	220,011	96,520	23,088	9,614			
		63%	28%	7%	3%			

Figure 5.5 illustrates the distribution of surface water extractions amongst the tributary streams in the Basin. It shows all 31 principal streams in the Basin in descending order of annual surface water

Okanagan Basin Water Board





supply. Note that the vertical axis is in logarithmic units in order to display the wide range of associated supply and extraction volumes. The data is based on the 1996-2006 baseline period.

Figure 5.5 1996-2006 average annual surface water supply and extraction for each of the 31 main Okanagan tributaries. Note the logarithmic vertical axis.

Table 5.4 and Figure 5.6 demonstrates the seasonal pattern of water supply and extractions in Mission Creek. Values are presented for the baseline (1971-2006) and future (2012-2040) periods. Figure 5.7 shows the clear difference in timing between the availability of the surface water and the demands for it. Comparison of Figure 5.6.a and 5.6.b also shows that in the future, the supply is projected to decrease during the freshet period (April-June) while the demand increases in the summer. The result of this is displayed on Figure 5.6.c, which presents the monthly extractions as a percentage of the monthly surface water supply. During the months November to February, this value is 10% or less. This increases steadily during spring and summer and by September, this value is nearly 200%. In the case of Mission Creek and many of the streams in the Okanagan, this



Okanagan Basin Water Board

imbalance is addressed by storage of a portion of the freshet period runoff and regulated releases of that water based on downstream requirements. Nevertheless, with climate change, the percentage of extractions to supply during late summer is projected to increase by up to 280%. This means that in the future, the management of upland reservoirs will become even more important in successfully meeting water demands. Given the projections for reduced snowpacks, earlier freshet and increased rain-generated runoff in future, to successfully meet demands, water managers may have to consider modifying their current reservoir operation strategies.

Table 5.4Summary of median monthly and annual water extraction vs. natural runoff in Mission Creek.
Estimates are for baseline (1971-2006) and future (2012-2040) scenarios assuming climate
change only and are presented for the HadCM3 A2 and CGCM3 B1 climate models.

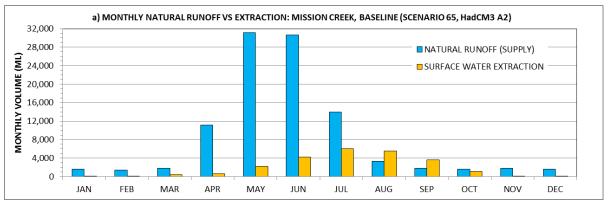
MISSION CRE	EK						
Parameters:	Natural runoff vs Extraction			Parameter:	Natural runoff vs Extraction		
limate Model	: HadCM3 A2			Climate Mode	el: CGCM3 B1		
	Sub-Basin Name:	MISSIO	N CREEK		Sub-Basin Name:	MISSIO	N CREEK
	Scenario Group:	BASELINE	Α		Scenario Group:	BASELINE	Α
	Scenario Number:	65	28		Scenario Number:	66	29
JAN	Median Monthly Runoff (ML):	1,590	2,585	JAN	Median Monthly Runoff (ML):	1,876	2,801
	Median Monthly Extraction (ML):	142	153		Median Monthly Extraction (ML):	142	153
FEB	Median Monthly Runoff (ML):	1,385	2,673	FEB	Median Monthly Runoff (ML):	1,630	3,893
	Median Monthly Extraction (ML):	134	142		Median Monthly Extraction (ML):	134	142
MAR	Median Monthly Runoff (ML):	1,800	5,098	MAR	Median Monthly Runoff (ML):	2,167	5,476
	Median Monthly Extraction (ML):	389	401		Median Monthly Extraction (ML):	387	402
APR	Median Monthly Runoff (ML):	11,211	15,517	APR	Median Monthly Runoff (ML):	12,146	22,373
	Median Monthly Extraction (ML):	627	849		Median Monthly Extraction (ML):	658	927
MAY	Median Monthly Runoff (ML):	31,165	24,716	MAY	Median Monthly Runoff (ML):	36,896	37,712
	Median Monthly Extraction (ML):	2,272	2,519		Median Monthly Extraction (ML):	1,944	2,469
JUN	Median Monthly Runoff (ML):	30,690	22,667	JUN	Median Monthly Runoff (ML):	37,989	37,331
	Median Monthly Extraction (ML):	4,246	4,652		Median Monthly Extraction (ML):	4,304	4,271
JUL	Median Monthly Runoff (ML):	13,952	6,152	JUL	Median Monthly Runoff (ML):	13,904	13,257
	Median Monthly Extraction (ML):	6,070	6,333		Median Monthly Extraction (ML):	6,171	6,038
AUG	Median Monthly Runoff (ML):	3,375	2,115	AUG	Median Monthly Runoff (ML):	3,388	2,565
	Median Monthly Extraction (ML):	5,566	5,949		Median Monthly Extraction (ML):	6,007	5,652
SEP	Median Monthly Runoff (ML):	1.864	1,409	SEP	Median Monthly Runoff (ML):	2,500	2,481
	Median Monthly Extraction (ML):	3,661	3,950		Median Monthly Extraction (ML):	3,315	3,681
OCT	Median Monthly Runoff (ML):	1,576	1,913	OCT	Median Monthly Runoff (ML):	2,532	2,717
	Median Monthly Extraction (ML):	1,089	1,391		Median Monthly Extraction (ML):	613	1,413
NOV	Median Monthly Runoff (ML):	1.833	3.055	NOV	Median Monthly Runoff (ML):	2.285	3,040
NOV	Median Monthly Extraction (ML):	142	148	NOV	Median Monthly Extraction (ML):	138	148
DEC	Median Monthly Runoff (ML):	1,670	2,049	DEC	Median Monthly Runoff (ML):	2,168	2,650
DEC	Median Monthly Extraction (ML):	142	153	DEC	Median Monthly Extraction (ML):	142	153
ANNUAL	Median Annual Runoff (ML):	118,275	124,609	ANNUAL	Median Annual Runoff (ML):	130,796	167,603
ANNOAL	Median Annual Extraction (ML):	24,876	26,464	ANNOAL	Median Annual Extraction (ML):	23,445	24,843
	Wiedian Annaa Extraction (WE).	24,870	20,404		Wedian Annaal Extraction (WE).	23,443	24,043
arameter:	Water extraction as % of natural run	off		Parameter:	Water extraction as % of natural ru	noff	
imate Model		011		Climate Mode			
indic model	Sub-Basin Name:	MISSIO	N CREEK	difficte filoat	Sub-Basin Name:	MISSIO	N CREEK
		BASELINE				BASELINE	A
	Scenario Group:		Α		Scenario Group:		
	Scenario Number:	65	28		Scenario Number:	66	29
JAN		9%	6%	JAN		8%	5%
FEB		10%	5%	FEB		8%	4%
MAR		22%	8%	MAR		18%	7%
APR		6%	5%	APR		5%	4%
MAY		7%	10%	MAY		5%	7%
JUN		14%	21%	JUN		11%	11%
JUL		44%	103%	JUL		44%	46%
AUG		165%	281%	AUG		177%	220%
SEP		196%	280%	SEP		133%	148%
OCT		69%	73%	OCT		24%	52%
NOV		8%	5%	NOV		6%	5%
DEC		9%	7%	DEC		7%	6%
ANNUAL		21%	21%	ANNUAL		18%	15%

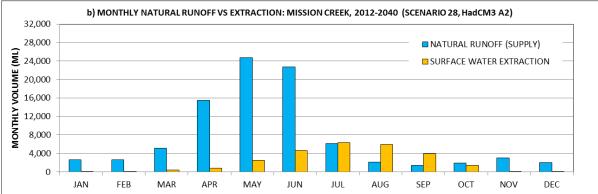
Okanagan Basin Water Board

Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)



MISSION CREEK





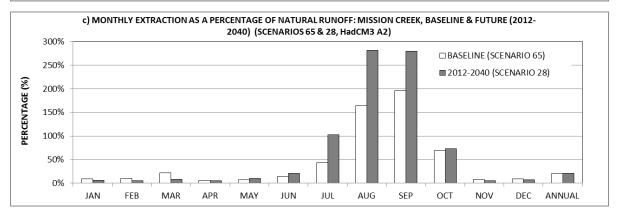


Figure 5.6 Monthly median natural runoff versus extraction for Mission Creek: a) Baseline period (Scenario 65), b) 2012-2040 (Scenario 28), and c) extractions as a percentage of the natural runoff for baseline and 2012-2040 periods. Results for the HadCM3 A2 model are shown; refer to Table 5.4 for results based on the CGCM3 B1 climate model. Note that extractions in excess of available natural runoff are supported by storage in Mission Creek

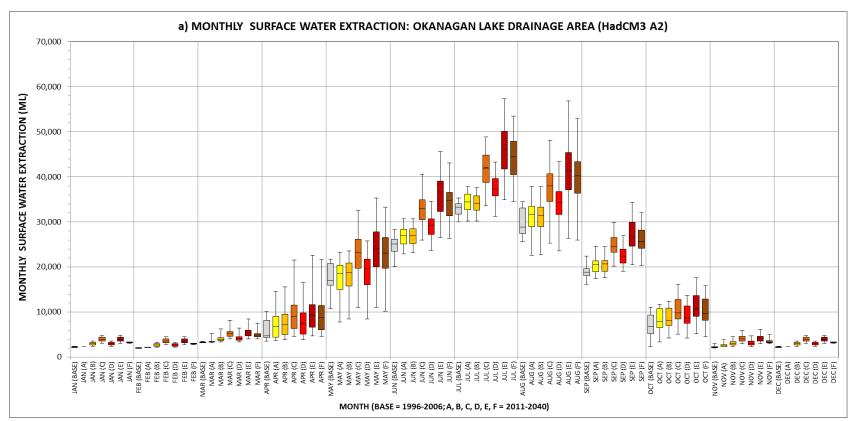


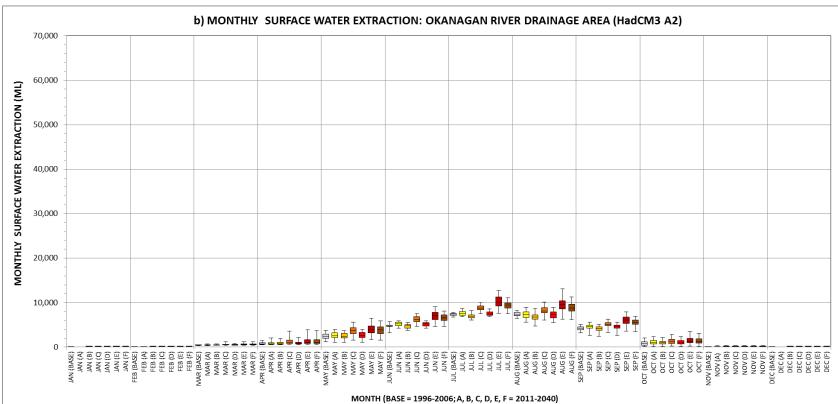
To illustrate the effect of the various future scenarios on seasonal surface water extraction, a series of box plots are presented in Figures 5.7 and 5.8. Figure 5.7 presents the total monthly surface water extractions for the Okanagan Lake drainage area, the Okanagan River drainage area (downstream of Okanagan Lake), and the Okanagan Basin overall. Figure 5.8 shows the same plots but for a selection of streams: Mission Creek, Trout Creek and Vaseux Creek. For each month and each scenario, the median, upper and lower quartile, and minimum and maximum extractions are shown. It is evident that the patterns in extraction are similar in most cases. Details on the projected water extractions for each scenario are provided in Appendix E. The following summarizes the key points with a focus on the Okanagan Basin overall.

Okanagan Basin (overall):

- Assuming climate change alone (Scenario Group A), water extractions in most months will increase modestly (5-10%), except in April when it will increase by 40% and in late fall when it will increase by up to 20%.
- If the population increases at the expected 1% per year and if agricultural water use efficiency improved at its expected rate (Scenario Group B), surface water extraction should not dramatically change.
- A population boom with urban sprawl (Scenario Group C) is projected to increase surface water requirements by 20-30% throughout the year.
- An increase in the agricultural land base under irrigation (Scenario Group D) is expected to increase water extractions by 5-10% throughout the irrigation months.
- A worst case scenario of population boom and agricultural expansion (Scenario Group E) is projected to increase water extractions by 30-40% during spring and summer, and by 50-70% during the winter.
- Improvements in water use efficiency (Scenario Group F), will mitigate the worst-case scenario (Scenario Group E) by roughly 5% during spring and summer, and up to 20% in the winter.







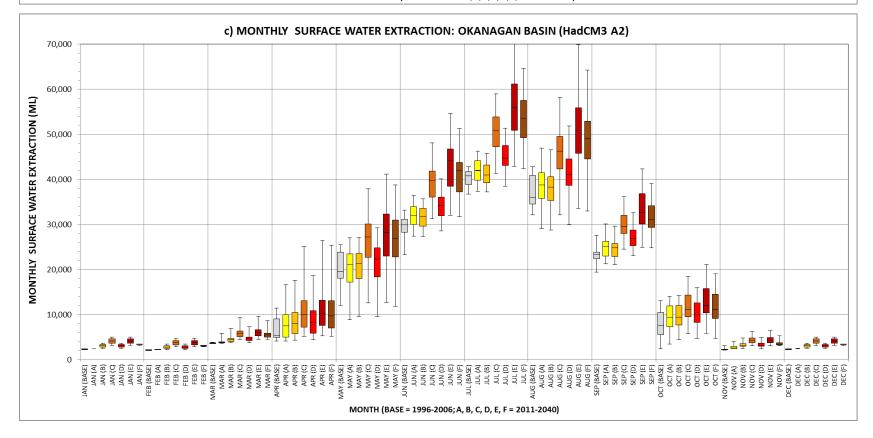


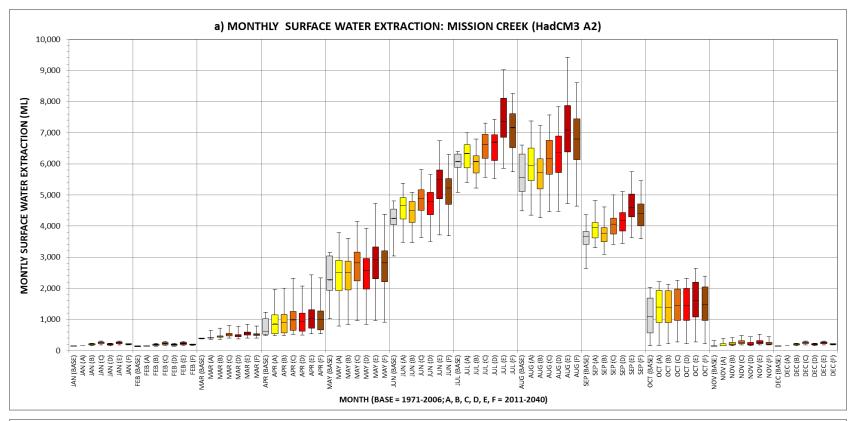
Figure 5.7 Projected monthly surface water extraction from: a) Okanagan Lake drainage area (including Okanagan Lake), b) Okanagan River drainage area below Okanagan Lake (including Okanagan River), and c) Okanagan Basin overall. The results are based on the HadCM3 A2 climate model. Data based on the CGCM3 B1 model are provided in Appendix E.

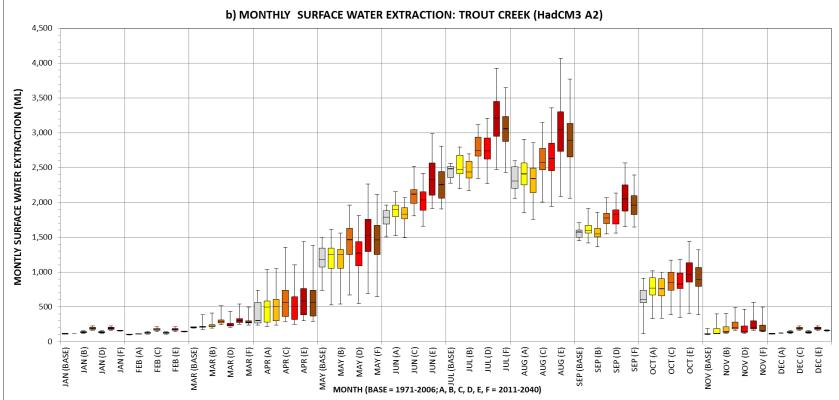
46

Okanagan Basin Water Board









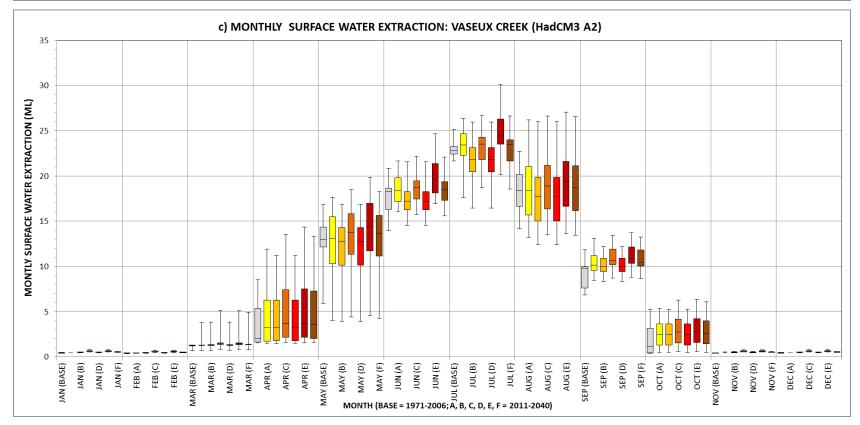


Figure 5.8 Projected monthly surface water extraction from: a) Mission Creek, b) Trout Creek, and c) Vaseux Creek. Note the vertical scales for each plot is different. The results are based on the HadCM3 A2 climate model. Data based on the CGCM3 B1 model are provided in Appendix E.

47

Okanagan Basin Water Board

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6.0 NET RUNOFF/INFLOW

The OBWAM is an accounting tool that, in simple terms, accounts for the water supply projections (outlined in Section 4.0) and the water extraction estimates (outlined in Section 5.0) and considers several other parameters that describe the movement and regulation of water in the Basin (e.g. groundwater movement, reservoir regulation, water imports). One of the key outputs of the OBWAM is net runoff (with respect to a stream) or net inflow (with respect to a lake), which refers to the volume of water flowing past a point or received by a water body during a given period, respectively. It accounts for all sources of incoming water plus human additions and withdrawals, and with respect to lakes includes additions from precipitation and losses from evaporation. With the huge volume of model output available, there are many possible assessments that could be made. For example, it can be used to evaluate the availability of water in a specific stream for conservation or licensing purposes. To facilitate future assessments, spreadsheet summaries will be provided digitally to the OBWB.

6.1 NET LAKE INFLOWS

For the purposes of this report and to illustrate the available dataset, the net inflow to each of the main-stem lakes (based on the HadCM3 A2 climate model) is presented in Figure 5.10. The data based on the HadCM3 A2 model as well as the CGCM3 B1 model are provided in Appendix F. For clarity, only the median monthly net inflows are presented for the baseline and each of the scenarios.

The lakes presented in Figure 5.10 are organized in downstream order and scaled identically to show the pattern of seasonal inflows to each of the main-stem lakes as well as to show the projected effects of each of the future scenarios. Kalamalka-Wood Lake is the upstream-most waterbody, which receives runoff from a relatively smaller area than the others and thus has net inflows generally less than 10,000 ML per month. Between June and October, net inflows are negative indicating that losses by evaporation and extractions outweigh natural inflow. Okanagan Lake, the next lake "down the valley", shows a similar pattern yet with larger values owing to its greater drainage area. With respect to the baseline conditions (grey bars), there is a distinct rise in net inflow to Okanagan Lake until May, than a sudden drop following freshet. Similar to Kalamalka-



Wood Lake, Okanagan Lake experiences a negative net inflow between July and September. As a result of the regulation of Okanagan Lake and Okanagan River by the dam at Penticton, downstream flows are significantly buffered from the spring freshet. This is evident in the net inflows to Skaha Lake as well as Vaseux Lake and Osoyoos Lake, however additional tributary flow can affect inflows to downstream lakes.

Future net inflow projections are a direct reflection of the future natural runoff as well as the future surface water extractions. It is not surprising therefore that the net inflows are projected to increase considerably between November and April. During these months the effect of climate change is dominant over the land use and population factors. By May, climate change is responsible for slight reductions in net inflow to Kalamalka-Wood and Okanagan Lakes, however these are not universally projected downstream, given the regulation of Okanagan Lake and River. By June, climate change is projected to decrease net inflows to Okanagan Lake by 38%, and under the worst-case scenario (Scenario Group E), a further 18% reduction is projected. Reduced runoff and increased extractions in July, August and September further exacerbate conditions maintaining negative net inflows to Okanagan Lake under all future scenarios. Fortunately, with Okanagan Lake and Okanagan River regulation, downstream lakes are projected to maintain positive, albeit modestly lower, net inflows over the summer months.

6.2 NET LAKE INFLOW DURING EXTENDED DROUGHT

In Section 6.1, the expected (or median) net lake inflows over the long-term baseline and future periods were presented. To illustrate the effect of an extended drought, the net inflows to Okanagan Lake during a 5-year arbitrary period are shown in Figure 5.11 for Scenarios 55, 56, and 57. To provide context, the annual net inflows for each year are provided in Table 5.5. For reference, the mean annual net inflow over the historical period of record (1922-2006) is 484,228 ML (Summit, 2009).





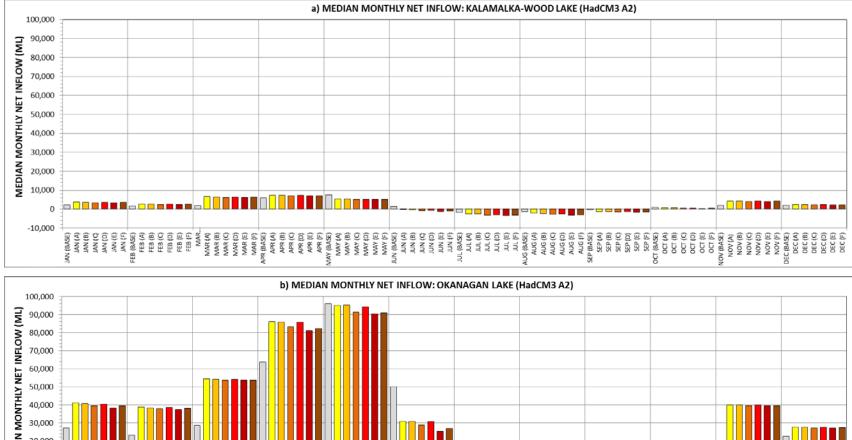
	SCENARIO									
	55	56	57							
Year 1	290,405	257,606	264,273							
Year 2	58,027	32,886	37,208							
Year 3	388,763	331,874	343,742							
Year 4	145,786	115,930	120,144							
Year 5	646,170	573,409	586,920							

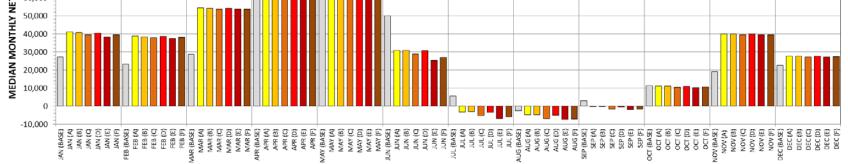
Table 5.5Projected annual net inflows to Okanagan Lake under drought scenarios 55, 56, and 57.

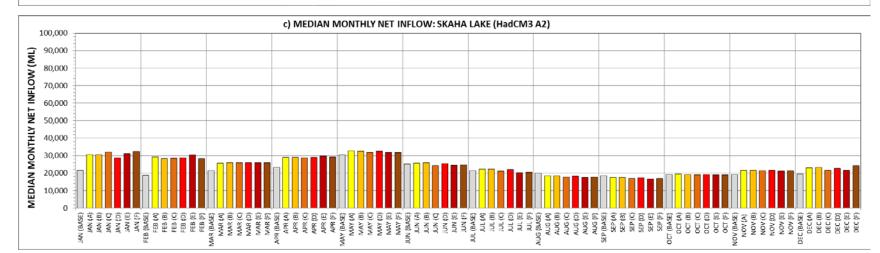
Okanagan Basin Water Board Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)

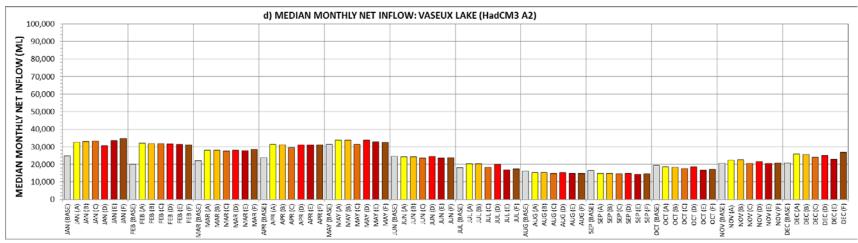












e) MEDIAN MONTHLY NET INFLOW: OSOYOOS LAKE (HadCM3 A2)

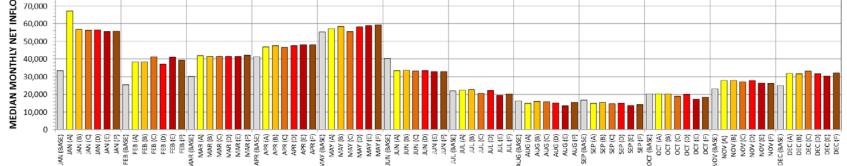


Figure 5.10 Projected median monthly net inflow to: a) Kalamalka-Wood Lake, b) Okanagan Lake, and c) Skaha Lake, d) Vaseux Lake, and e) Osoyoos Lake. Note the vertical scales for each plot is different. The results are based on the HadCM3 A2 climate model. Refer to Table 2.1 for description of the scenario groups.

Okanagan Basin Water Board





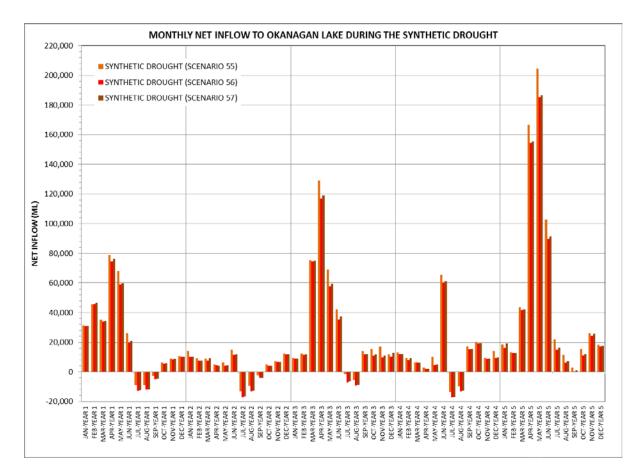


Figure 5.11 5-year cumulative net inflow to Okanagan Lake under extended drought scenarios (55, 56, and 57).

The modeled net inflows to Okanagan Lake based on the three synthesized drought scenarios in any given year vary from an extremely low value of 33,000 ML to above-average values of 646,000 ML. Despite this, the consecutive years of drought will have an effect on replenishing storage reservoirs in the uplands and main-stem lakes. At the end of five years, only about half of the normal net inflow volume will be received during drought (Figure 5.12).





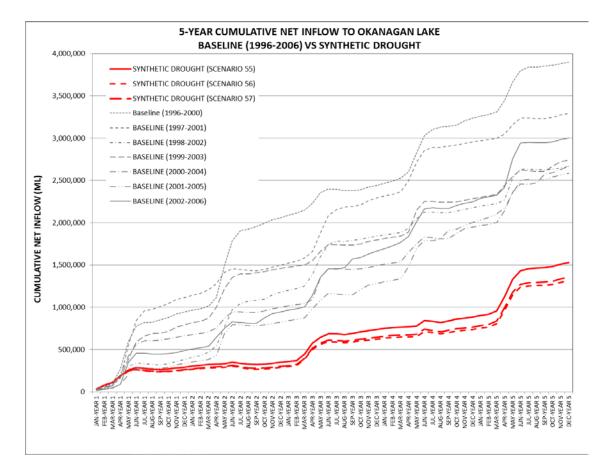


Figure 5.12 5-year cumulative net inflow to Okanagan Lake under normal conditions between 1996 and 2006 (grey) and under extended drought scenarios (55, 56, and 57).

Okanagan Basin Water Board Projected Water Supply and Demand in the Okanagan Basin (2011-2040) (File 240101, March 2012)





7.0 SUMMARY AND CONCLUSIONS

Based on the Phase 3 projections for the 2011-2040 period using the Okanagan Basin Water Accounting Model (OBWAM) and its supporting models the Okanagan Water Demand Model (OWDM) and Okanagan Basin Hydrology Model (OBHM), the following key points are made:

Future climate:

- Temperatures in the Okanagan are projected to generally increase throughout the year, however, year to year variability is high.
- Precipitation projections are mixed and highly variable but tend to suggest increases during winter.
- The proportion of rain to snow is expected to generally increase, resulting in reduced snowpacks, particularly at lower elevations. These snowpacks may also be subject to increased mid-winter melt periods.
- Snowmelt is projected to occur earlier and because of reduced snowpacks, runoff from meltwater is expected to decrease. However, this is offset by rain-generated runoff that is expected to increase considerably over the winter.

Surface water supply:

- Annual runoff is expected to increase overall, with much of this resulting from the increased runoff between October and March due to increased rain and mid-winter meltwater.
 Decreased runoff is expected between May and July as a result of the advancement of the freshet period. Runoff is expected to be about the same in August and September.
- Year to year variability in runoff is expected to increase, particularly in winter.
- Prolonged drought has a dramatic impact on surface water availability. After five consecutive years, up to 50% less surface water runoff in total is produced relative to normal conditions.

Surface water extraction

• Surface water extractions represent about 68% of the total water used in the Okanagan.



- During late summer, surface water extractions from the tributary streams generally exceed the natural supply, and in Mission Creek for example, extractions in late summer are double the available natural supply; in future they may be nearly triple. In order to meet water demands, regulation of the available water supply through upland and main-stem reservoirs is and will continue to be paramount. Given the projections for reduced snowpacks, earlier freshet and increased rain-generated runoff in future, water managers may have to consider modifying their storage capabilities and current reservoir operation strategies in order to successfully meet future demands.
- Assuming climate change alone (Scenario Group A), water extractions in most months will increase modestly (5-10%), except in April when it will increase by 40%, and in late fall when it will increase by up to 20%.
- If the population increases at the expected 1% per year and if agricultural water use efficiency improved at its expected rate (Scenario Group B), surface water extraction should not dramatically change in future.
- A population boom with urban sprawl (Scenario Group C) is projected to increase overall surface water requirements by 20-30% throughout the year.
- An increase in the agricultural land base under irrigation (Scenario Group D) is expected to increase overall water extractions by 5-10% throughout the irrigation months.
- A worst case scenario of population boom and agricultural expansion (Scenario Group E) is projected to increase overall water extractions by 30-40% during spring and summer and by 50-70% during the winter.
- Improvements in water use efficiency (Scenario Group F) will mitigate the worst-case scenario (Scenario Group E) by roughly 5% during spring and summer, and up to 20% in the winter.

Net inflows to main-stem lakes:

 Net inflows to the main-stem lakes are projected to increase considerably between November and April. During these months the effect of climate change is dominant over the land use and population factors. By May, climate change is responsible for slight reductions in net inflow to Kalamalka-Wood and Okanagan Lakes, however these are not

Okanagan Basin Water Board



universally projected downstream, given the regulation of Okanagan Lake and River. By June, climate change is projected to decrease net inflows to Okanagan Lake by 38%, and under the worst-case scenario (Scenario Group E), a further 18% reduction is projected. Projected reductions in runoff and increased extractions in July, August and September further exacerbate conditions and maintain negative net inflows to Okanagan Lake under all future scenarios. Fortunately, with Okanagan Lake and Okanagan River regulation, downstream lakes are projected to maintain positive, albeit modestly lower, net inflows over the summer months.



8.0 **RECOMMENDATIONS**

Based on the findings of this study the following recommendations are made:

- Given the huge volume of information produced during Phase 3 modeling, there is an opportunity to further examine and assess water supply and use conditions throughout the Okanagan at various temporal and spatial scales. We encourage the OBWB and its partners to examine and utilize this available data in future investigations, including those involving the Water Evaluation and Planning System (WEAP).
- Some technical issues were identified during the review of the Phase 3 model data. A specific issue involves some modeling irregularities for the natural runoff in the Vernon Creek sub-basin. While we made a best effort to ensure that the results from Vernon Creek would not affect overall water supply estimates, we have some reservations on the accuracy of the data. We recommend that the modeling team, led by RHF Systems, examine the Vernon Creek sub-basin and update the model code to improve the model overall.
- Moving forward, there is a an opportunity to merge the abilities of the OBWAM and the WEAP models and develop a solid and comprehensive modeling platform for the Okanagan. To improve the OBWAM, we suggest that the spatial domain be expanded to account for all water source areas outside the physical boundaries of the Okanagan Basin. This includes for example Duteau Creek and Fortune Creek, both of which supply water to users in the Okanagan.





9.0 REFERENCES

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APPENDIX A: PHASE 2 SCENARIOS



Scenario number	Time Period	CO ₂ Emission scenario	Mountain Pine Beetle	Efficiency	Agricultural Land Base	Population growth	Description	Acronym
1	2011-2040	Expected	Expected	Current use patterns and current trends	Present conditions	Expected rate	2011-2040 - current trends continued	T1C1M1E1A1P1
2	2011-2040	Expected	Expected	Current use patterns and current trends	Present conditions	High rate	2011-2040 - current trends, except rapid population growth	T1C1M1E1A1P2
3	2011-2040	Expected	Expected	Current use patterns and current trends	Irrigate all	Expected rate	2011-2040 - current trends except expanded agriculture	T1C1M1E1A2P1
4	2011-2040	Expected	Expected	Current use patterns and current trends	Irrigate all	High rate	2011-2040 - current trends except rapid population growth and expanded agriculture	T1C1M1E1A2P2
5	2011-2040	Expected	Expected	33% Efficiency	Present conditions	Expected rate	2011-2040 - efficient water use, otherwise current trends continued	T1C1M1E2A1P
6	2011-2040	Expected	Expected	33% Efficiency	Present conditions	High rate	2011-2040 - efficient water use, rapid population growth, otherwise current trends	T1C1M1E2A1P2
7	2011-2040	Expected	Expected	33% Efficiency	Irrigate all	Expected rate	2011-2040 - efficient water use, expanded agriculture, otherwise current trends	T1C1M1E2A2P
8	2011-2040	Expected	Expected	33% Efficiency	Irrigate all	High rate	2011-2040 - efficient water use, rapid population growth, expanded agriculture, expected climate and pattern of Mountain Pine Beetle	T1C1M1E2A2P
17	3 driest years 2011-2100	Expected	Expected	Current use patterns and current trends	Present conditions	Expected rate	3 successive drought years - current trends continued	T2C1M1E1A1P
18	3 driest years 2011-2100	Expected	Expected	Current use patterns and current trends	Present conditions	High rate	3 successive drought years - current trends, except rapid population growth	T2C1M1E1A1P
19	3 driest years 2011-2100	Expected	Expected	Current use patterns and current trends	Irrigate all	Expected rate	3 successive drought years - current trends except expanded agriculture	T2C1M1E1A2P
20	3 driest years 2011-2100	Expected	Expected	Current use patterns and current trends	Irrigate all	High rate	3 successive drought years - current trends except rapid population growth and expanded agriculture	T2C1M1E1A2P
25	2011-2040	Expected	Expected	Present conditions	Present conditions	Present conditions	2011-2040 - effect of climate change alone	T1C1M1E3A3P
26	2041-2070	Expected	Expected	Present conditions	Present conditions	Present conditions	2041-2070 - effect of climate change alone	T3C1M1E3A3P
27	3 driest years 2011-2100	Expected	Present	Present conditions	Present conditions	Present conditions	3 successive drought years starting 2011	T2C1M2E3A3P

Table A.1List of future scenarios modeled in Phase 2.

Notes:

• 3 driest years 2010-2100 occur in 2076, 2033, 2026.

• CO₂ emissions: 1. Expected = CGCM2 A2.

• Mountain Pine Beetle: 1. Expected pattern of current MPB infestation and associated vegetation changes; 2. Present conditions (assume 2011, 2012, 2013).

• Efficiency: 1. Current use patterns and current trends, based on current use patterns and current trends in efficiencies (both irrigation and non-irrigation water uses); irrigation demand driven by climate; 2. 33% Efficiency improvement in all water use by 2020, no reductions past 2020; irrigation demand driven by climate

• Agricultural Land Base: 1. Present conditions for current crops and systems; 2. Irrigation of all reasonable possible irrigable land.

• Population growth: 1. Expected rate; 2. High rate

APPENDIX B: WATER USE AREAS IN THE OKANAGAN



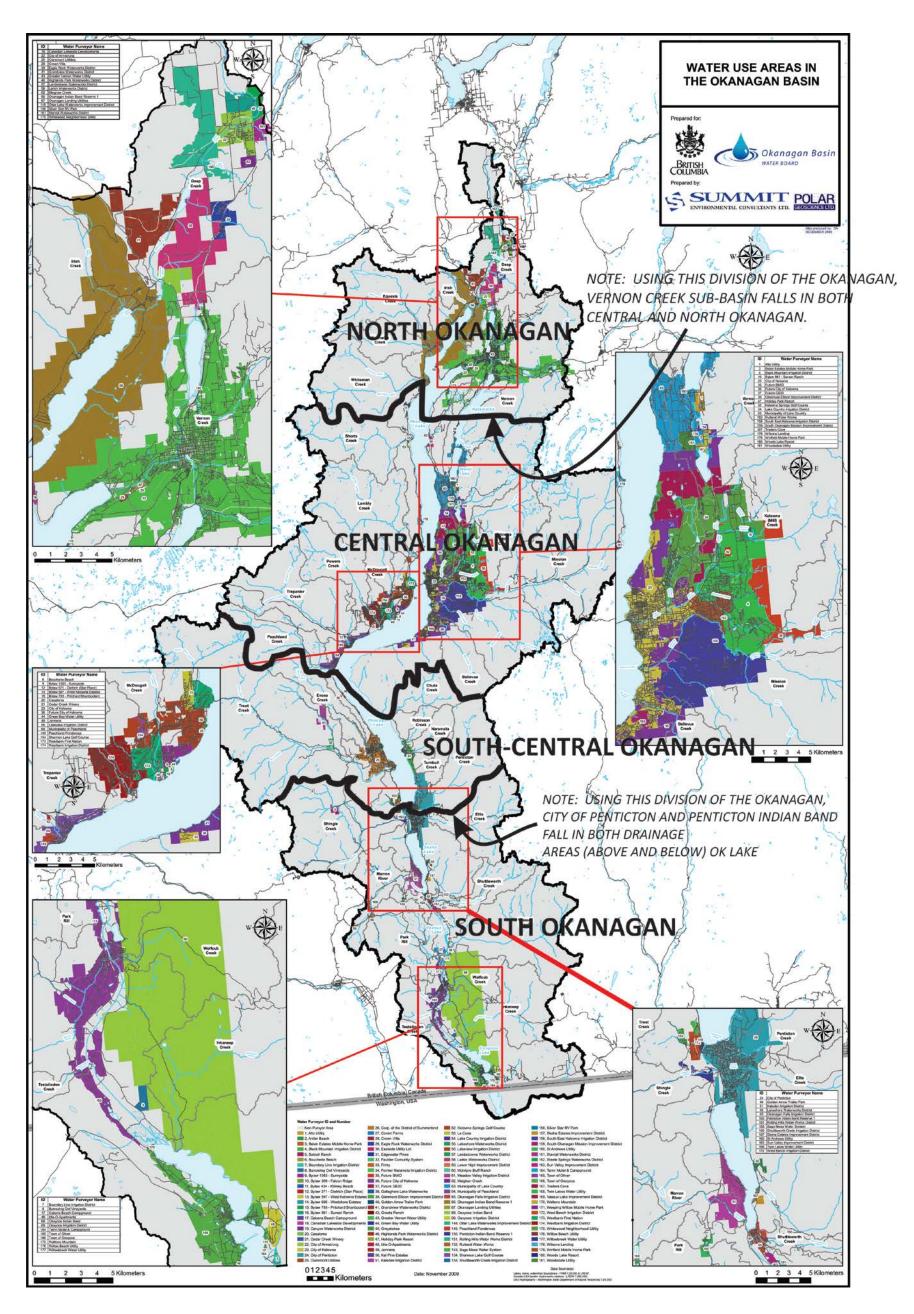


Figure B.1 Map of the Okanagan Basin showing the water use areas in the Okanagan. Four (4) reporting zones were adopted for this study: North Okanagan, Central Okanagan, South-Central Okanagan, and South Okanagan. See Summit (2010) for a higher resolution copy of this map.



Table C.1Projected Okanagan Basin median monthly and median annual runoff based on the HadCM3
A2 and CGCM3 B1 climate models. Baseline results are based on the period 1971 to 2006.
Scenario Group A is based on 2012 to 2040. To provide an index of the variability in the
projections, the inter-quartile range (IQR) is provided.

-	: OKANAGAN BASIN						
arameter:	Total (natural) runoff (M	L)		Parameter:	Total (natural) runoff (MI	.)	
limate Model:	HadCM3 A2			Climate Model:	CGCM3 B1		
	Scenario Group: Scenario Number:	BASELINE 65	A 28		Scenario Group: Scenario Number:	BASELINE 66	A 29
JAN	Median	43,787	66,318	JAN	Median	37,661	53,747
57.03	IQR	37,328	97,897	5,111	IQR	18,124	42,882
FEB	Median	37,145	61,847	FEB	Median	33,993	80,773
	IQR	43,112	41,229		IQR	13,892	64,796
MAR	Median	54,595	85,823	MAR	Median	52,276	89,822
100 41	IQR	47,602	80,307	100 00	IQR	55,079	64,668
APR	Median	108,826	135,181	APR	Median	102,378	164,499
	IQR	79,446	124,715	ALK	IQR	116,219	99,955
MAY	Median	167,035	165,842	MAY	Median	193,708	199,032
MAT	IQR	142,773	85,693	IVIAI	IQR	92,210	155,032
ILINI				JUN			
JUN	Median	108,278	83,151	JUN	Median	146,835	134,137
	IQR	107,292	56,052		IQR	106,074	136,050
JUL	Median	52,484	41,135	JUL	Median	61,289	55,006
AUC	IQR	35,840	23,146		IQR	31,775	34,342
AUG	Median	33,928	32,871	AUG	Median	35,591	35,304
05-	IQR	15,075	13,969		IQR	15,165	8,442
SEP	Median	28,313	28,583	SEP	Median	28,694	32,657
	IQR	9,153	6,821		IQR	12,236	17,675
OCT	Median	25,140	29,598	OCT	Median	26,390	31,302
	IQR	7,107	10,320		IQR	11,316	22,718
NOV	Median	30,071	62,340	NOV	Median	32,897	44,601
	IQR	16,403	74,034		IQR	17,517	57,805
DEC	Median	35,309	48,422	DEC	Median	34,710	46,859
	IQR	27,526	67,055		IQR	18,391	58,664
ANNUAL	Median	890,963	1,017,622	ANNUAL	Median	847,839	1,177,815
	IQR	428,671	704,546		IQR	418,313	375,456
arameter:	Ratio of total (natural) ru	moff botwoon inc	licated scoparios	Parameter:	Ratio of total (natural) ru	noff hotwoon indi	cated scopario
limate Model:		anon between mt	icated scenarios	Climate Model:	CGCM3 B1	non between mu	cateu scenario
innate would .	Ratio:	A:BASLINE		crimate Moder.	Ratio:	A:BASLINE	
JAN	Median	1.51		JAN	Median	1.43	
3414	IQR	2.62		JUN	IQR	2.37	
FEB	Median	1.67		FEB	Median	2.37	
FLD				FLD			
MAD	IQR	0.96		MAD	IQR	4.66 1.72	
MAR	Median			MAR	Median		
4.00	IQR	1.69		4.00	IQR	1.17	
APR	Median	1.24		APR	Median	1.61	
MANY	IQR	1.57			IQR	0.86	
MAY	Median	0.99		MAY	Median	1.03	
	IQR	0.60			IQR	1.70	
JUN	Median	0.77		JUN	Median	0.91	
	IQR	0.52			IQR	1.28	
JUL	Median	0.78		JUL	Median	0.90	
	IQR	0.65			IQR	1.08	
ALLC	Median	0.97		AUG	Median	0.99	
AUG	IQR	0.93			IQR	0.56	
		1.01		SEP	Median	1.14	
SEP	Median				IQR	1.44	
SEP	IQR	0.75			Median	1.19	
	IQR Median	1.18		OCT			
SEP OCT	IQR Median IQR	1.18 1.45			IQR	2.01	
SEP	IQR Median IQR Median	1.18		OCT NOV		2.01 1.36	
SEP OCT	IQR Median IQR	1.18 1.45			IQR	2.01	
SEP OCT	IQR Median IQR Median	1.18 1.45 2.07			IQR Median	2.01 1.36	
SEP OCT NOV	IQR Median IQR Median IQR	1.18 1.45 2.07 4.51		NOV	IQR Median IQR	2.01 1.36 3.30	
SEP OCT NOV	IQR Median IQR Median IQR Median	1.18 1.45 2.07 4.51 1.37		NOV	IQR Median IQR Median	2.01 1.36 3.30 1.35	

Table C.2Projected natural runoff for Mission, Trout and Vaseux Creeks based on the HadCM3 A2 and
CGCM3 B1 climate models. Baseline results are based on the period 1971 to 2006. Scenario
Group A is based on 2012 to 2040. To provide an index of the variability in the projections, the
inter-quartile range (IQR) is provided.

arameter:	a: SELECTED ST Total natural ru							Parameter:	Total natura	run-off (Mr)					
limate Model:								Climate Mode		run-on (iviL)					
annate would .	Sub-Basin Name:	MISSION		TROUT	CDEEV	VASEUX	CDEEV		ub-Basin Name:	MISSION	CDEEK	TROUT	CDEEK	VASEUX	CDEEK
			A	BASELINE	A	BASELINE	A				A	BASELINE	A	BASELINE	A
	Scenario Group: Scenario Number:	65	28	65	28	65	28		Scenario Group: enario Number:	66	29	66	29	66	29
JAN	Median	1,590	2,585	1,755	3,612	786	2,087	JAN	Median	1,876	2,801	1,670	2,372	387	1,048
JAN	IQR	1,173	5,031	2,700	7,810	3,203	6,710	JAN	IQR	1,321	2,574	1,901	3.611	425	2,449
FEB	Median	1,385	2,673	1,759	4,893	692	1,819	FEB	Median	1,630	3,893	1,608	4,771	384	2,445
	IQR	2,269	2,734	4,162	6,160	2,208	3,793	120	IQR	1,066	3,977	1,829	6,390	528	6,049
MAR	Median	1,800	5,098	2,807	5,385	915	2,107	MAR	Median	2,167	5,476	2,762	6,873	925	2,799
	IQR	3,753	7,681	3,893	8,934	1,595	5,588		IQR	2,321	8,122	4,563	7,176	1,662	3,246
APR	Median	11,211	15,517	9,890	14,088	4,121	6,554	APR	Median	12,146	22,373	7,199	12,761	2,823	8,500
	IQR	12,173	12,626	10,621	19,652	7,480	8,425		IQR	14,282	21,253	11,521	11,938	4,710	9,904
MAY	Median	31,165	24,716	18,263	16,914	13,979	12,711	MAY	Median	36,896	37,712	19,387	21,382	12,611	16,019
	IQR	14,045	14,121	12,213	14,212	12,272	10,900		IQR	21,381	25,498	9,123	20,912	7,446	16,084
JUN	Median	30,690	22,667	9,744	6,079	10,386	6,177	JUN	Median	37,989	37,331	10,543	8,146	13,995	10,519
	IQR	15,458	12,623	10,568	9,531	10,361	9,048		IQR	19,765	18,280	14,235	12,601	12,900	12,604
JUL	Median	13,952	6,152	3,016	2,349	2,525	1,223	JUL	Median	13,904	13,257	3,820	3,158	4,020	2,522
	IQR	11,279	9,748	2,175	2,194	3,869	2,921		IQR	11,059	12,974	2,611	2,258	3,505	2,938
AUG	Median	3,375	2,115	1,789	1,656	802	674	AUG	Median	3,388	2,565	1,794	1,982	1,000	1,070
	IQR	3,896	3,421	1,214	1,058	1,493	859		IQR	4,931	1,726	1,057	852	966	718
SEP	Median	1,864	1,409	1,344	1,312	523	395	SEP	Median	2,500	2,481	1,331	1,520	563	692
	IQR	925	831	774	645	846	689		IQR	2,664	1,919	586	945	405	348
OCT	Median	1,576	1,913	1,273	1,271	385	345	OCT	Median	2,532	2,717	1,284	1,489	437	590
	IQR	764	1,805	713	1,052	458	493		IQR	2,292	5,880	678	705	325	242
NOV	Median	1,833	3,055	1,361	2,057	439	703	NOV	Median	2,285	3,040	1,446	1,853	421	636
	IQR	1,221	9,973	532	2,419	544	3,944		IQR	2,548	8,770	961	5,402	303	1,555
DEC	Median	1,670	2,049	1,591	2,077	512	993	DEC	Median	2,168	2,650	1,534	3,329	387	1,311
	IQR	1,069	2,444	1,032	5,554	645	2,300		IQR	1,859	4,804	1,585	4,109	324	1,836
ANNUAL	Median	118,275	124,609	60,404	84,944	44,643	42,222	ANNUAL	Median	130,796	167,603	64,582	84,159	43,665	63,085
	IQR	41,649	79,459	40,057	73,066	34,664	44,916		IQR	55,198	48,269	40,398	46,445	21,186	38,750
arameter:	Ratio of total n	atural run-off	between inc	licated scenario	s			Parameter:	Ratio of tota	I natural run-o	off between	indicated sce	enarios		
limate Model:	HadCM3 A2											i maieatea sec			
								Climate Mode	I: CGCM3 B1						
	Sub-Basin Name:		EK	TROUT CREEK	[VASEUX CREE	к		I: CGCM3 B1 ub-Basin Name:	MISSION CRE	EK	TROUT CREE		VASEUX CRE	EK
	Ratio:	A:BASELINE	EK	A:BASELINE	[A:BASELINE	к	S	I: CGCM3 B1 ub-Basin Name: Ratio:	MISSION CRE A:BASELINE	EK	TROUT CREE A:BASELINE		A:BASELINE	EK
JAN	Ratio: Median	A:BASELINE 1.63	EK	A:BASELINE 2.06		A:BASELINE 2.66	K		l: CGCM3 B1 ub-Basin Name: Ratio: Median	MISSION CRE A:BASELINE 1.49	EK	TROUT CREE A:BASELINE 1.42		A:BASELINE 2.71	EK
	Ratio: Median IQR	A:BASELINE 1.63 4.29	EK	A:BASELINE 2.06 2.89		A:BASELINE 2.66 2.09	K	JAN	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR	MISSION CRE A:BASELINE 1.49 1.95	EK	TROUT CREE A:BASELINE 1.42 1.90		A:BASELINE 2.71 5.76	EK
JAN FEB	Ratio: Median IQR Median	A:BASELINE 1.63 4.29 1.93	EK	A:BASELINE 2.06 2.89 2.78		A:BASELINE 2.66 2.09 2.63	K	S	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97		A:BASELINE 2.71 5.76 5.95	EK
FEB	Ratio: Median IQR Median IQR	A:BASELINE 1.63 4.29 1.93 1.20	EK	A:BASELINE 2.06 2.89 2.78 1.48		A:BASELINE 2.66 2.09 2.63 1.72	K	JAN FEB	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49		A:BASELINE 2.71 5.76 5.95 11.46	EK
	Ratio: Median IQR Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92		A:BASELINE 2.66 2.09 2.63 1.72 2.30	K	JAN	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49		A:BASELINE 2.71 5.76 5.95 11.46 3.03	EK
FEB	Ratio: Median IQR Median IQR Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50	к 	JAN FEB MAR	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95	EK
FEB	Ratio: Median IQR Median IQR Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59	K	JAN FEB	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84	EK	Image: TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01	EK
FEB MAR APR	Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04	EK	A:BASELINE 2.06 2.89 2.78 1.48 2.29 1.42 1.85		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13	K	JAN FEB MAR APR	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49	EK	Image: Transmission of the system A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10	EK
FEB	Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91	K	JAN FEB MAR	I: CGCM3 B1 ub-Basin Name: Ratio: Ratio: IQR Median IQR Median IQR Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02	EK	Image: Transmission of the system A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04 1.10		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27	EK
FEB MAR APR MAY	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89	K 	JAN FEB MAR APR MAY	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04 1.10 2.29		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16	EK
FEB MAR APR	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59	K	JAN FEB MAR APR	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19 0.98	EK	A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04 2.99 0.77		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75	EK
FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74 0.82	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87	K	JAN FEB MAR APR MAY JUN	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19 0.08 0.98 0.92	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04 1.10 2.29 0.77 0.89		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.98	EK
FEB MAR APR MAY	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87	K	JAN FEB MAR APR MAY	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19 0.98 0.92 0.95	EK	Image: Transmission of the system A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04 1.10 2.29 0.77 0.89 0.83		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.98 0.63	
FEB MAR APR MAY JUN JUL	Ratio: Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44 0.86	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87 0.48 0.75	K 	JAN FEB MAR APR MAY JUN	I: CGCM3 B1 ub-Basin Name: Ratio: <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i>	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19 0.98 0.92 0.95 1.17	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04 1.10 2.29 0.77 0.83 0.86		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.98 0.63 0.84	EK
FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44 0.86 0.63	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.89 0.87 0.48 0.75 0.84	K 	JAN FEB MAR APR MAY JUN	II: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 3.50 1.84 1.49 1.02 1.49 1.02 1.95 0.98 0.92 0.95 1.17 0.76	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 1.57 1.77 1.04 1.10 2.29 0.86 0.883 0.86 1.10		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.98 0.63 0.84 1.07	EK
FEB MAR APR MAY JUN JUL AUG	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 1.20 1.38 1.04 0.79 1.04 0.79 1.04 0.79 1.04 0.79 1.04 0.79 0.04 0.82 0.44 0.86 0.63 0.88	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.93		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87 0.48 0.75 0.84 0.58	K	S JAN FEB MAR APR MAY JUN JUL AUG	II: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.09 0.98 0.92 0.95 1.17 0.76 0.35	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.04 1.10 2.29 0.77 0.83 0.86 1.10 0.81		A:BASELINE 2,71 5,76 5,95 11,46 3,03 1,95 3,01 2,10 1,27 2,16 0,75 0,98 0,63 0,84 1,07 0,74	EK
FEB MAR APR MAY JUN JUL	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.63 0.63 0.63 0.76	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.98		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87 0.48 0.75 0.84 0.75 0.84 0.58 0.76	K	JAN FEB MAR APR MAY JUN	II: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19 0.98 0.92 0.95 1.17 0.76 0.35 1.17 0.76 0.39	EEK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.04 1.10 2.29 0.77 0.89 0.83 0.86 1.10 0.81 1.10		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.16 0.75 0.98 0.63 0.84 1.07 0.74 1.23	EK
FEB MAR APR MAY JUN JUL AUG SEP	Ratio: Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44 0.82 0.44 0.63 0.88 0.76 0.90	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.83		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.89 0.89 0.87 0.87 0.87 0.84 0.75 0.84 0.58 0.76 0.81	K	S JAN FEB MAR APR MAY JUN JUL AUG SEP	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19 0.98 0.92 0.95 1.17 0.76 0.35 0.99 0.97 0.72	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 0.04 1.10 2.29 0.86 1.10 0.83 0.86 1.10 0.81 1.14 1.61		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.98 0.63 0.84 1.07 0.74 1.23 0.86	EK
FEB MAR APR MAY JUN JUL AUG	Ratio: Median IQR Median	A:BASELINE 1.63 4.29 1.33 1.20 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44 0.85 0.63 0.88 0.76 0.96 0.96 1.21	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.83 0.83 1.00		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.89 0.59 0.87 0.48 0.75 0.84 0.75 0.84 0.75 0.84 0.78 0.78	K	S JAN FEB MAR APR MAY JUN JUL AUG	II: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.49 1.02 0.98 0.92 0.95 1.17 0.76 0.35 0.99 0.72 1.07	EEK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.04 1.10 2.29 0.77 0.83 0.86 1.10 0.81 1.14 1.61		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 0.75 0.98 0.63 0.84 1.07 0.74 1.23 0.86 1.35	EK
FEB MAR APR MAY JUN JUL AUG SEP OCT	Ratio: Median IQR	A:BASELINE 1.63 4.29 1.93 1.20 2.83 1.20 1.20 1.20 1.38 1.04 0.79 1.01 0.74 0.85 0.63 0.68 0.68 0.68 0.76 0.99 1.21 2.36	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.98 0.83 1.00 1.48		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87 0.48 0.75 0.84 0.75 0.84 0.75 0.84 0.58 0.76 0.81 0.90 1.08	K	S JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	I: CGCM3 B1 ub-Basin Name: Ratio: <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>Median</i> <i>IQR</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i> <i>Median</i>	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.09 1.02 1.19 0.98 0.92 0.95 1.17 0.76 0.35 0.99 0.72 1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.17 1.17 1.19 1.17 1.19 1.17 1.19 1.17 1.17 1.19 1.17	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.04 1.10 2.29 0.77 0.89 0.86 1.10 0.86 1.10 0.81 1.14 1.61 1.04		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.63 0.84 1.07 0.74	EK
FEB MAR APR MAY JUN JUL AUG SEP	Ratio: Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44 0.82 0.44 0.82 0.44 0.88 0.63 0.88 0.76 0.90 1.21 2.36 1.67	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.87 0.88 1.00 1.48 1.48		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 0.89 0.89 0.87 0.87 0.87 0.88 0.75 0.84 0.75 0.84 0.75 0.84 0.75 0.84 0.76 0.81 0.90 0.81 0.90	K	S JAN FEB MAR APR MAY JUN JUL AUG SEP	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.19 0.98 0.92 0.95 1.17 0.76 0.35 1.17 0.76 0.35 0.99 0.72 1.07 2.57 1.33	EEK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.77 1.04 1.10 2.29 0.89 0.89 0.86 1.10 0.81 1.14 1.61 1.16 1.04		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.98 0.633 0.84 1.07 0.74 1.23 0.86 1.35 0.74 1.51	EK
FEB MAR APR JUN JUL AUG SEP OCT NOV	Ratio: Median IQR	A:BASELINE 1.63 4.29 1.33 1.20 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44 0.85 0.63 0.88 0.76 0.99 1.21 2.36 1.67 8.17	EK	A:BASELINE 2.06 2.89 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.98 0.83 1.00 1.48 1.51		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87 0.48 0.75 0.84 0.75 0.84 0.75 0.84 0.75 0.84 0.58 0.76 0.81 0.90 1.08 1.60 7.25	K	SEP OCT NOV	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.49 1.02 0.98 0.92 0.95 1.17 0.76 0.35 0.99 0.72 1.67 1.67 1.77 1.73 3.44	EEK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.04 1.10 2.29 0.77 0.83 0.86 1.10 1.14 1.61 1.16 1.04 1.28		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 0.78 0.63 0.84 1.07 0.74 1.35 0.74 1.35 0.74 1.35 0.74 1.51	
FEB MAR APR MAY JUN JUL AUG SEP OCT	Ratio: Median IQR Median	A:BASELINE 1.63 4.29 1.93 1.20 2.83 2.05 1.38 1.04 0.79 1.01 0.74 0.86 0.63 0.88 0.76 0.90 0.78 0.76 0.90 1.21 2.36 1.67 8.17 8.17 8.17	EK	A:BASELINE 2.06 2.89 2.78 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.98 0.83 1.00 1.48 1.51 1.31		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87 0.48 0.75 0.84 0.75 0.84 0.75 0.84 0.76 0.81 0.90 1.08 1.08 1.08 0.75 0.84 0.75 0.84 0.75 0.84 0.75 0.84 0.75 0.84 0.75 0.84 0.90 1.08 0.84 0.75 0.84 0.90 1.08 0.75 0.84 0.75 0.84 0.90 1.08 0.84 0.75 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.84 0.90 1.08 0.90 0.84 0.90 1.08 0.90 1.08 0.90 1.08 0.90 1.08 0.90 1.08 1.08 0.90 1.08 1.09 1.08 1.94 1.94	K	S JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.73 1.84 1.49 1.02 1.84 1.49 1.02 0.95 1.17 0.76 0.35 0.99 0.72 1.17 0.76 0.35 0.99 0.72 1.17 0.76 1.33 3.34 1.42 1.42 1.42 1.42 1.43 1.45 1.47 1.45 1.47 1.42 1.42 1.47 1.42	EK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.04 1.10 2.29 0.77 0.89 0.83 0.86 1.10 0.81 1.14 1.61 1.04 1.28 5.62 2.17		A:BASELINE 2.71 5.76 5.55 11.46 3.03 1.95 3.01 2.10 1.27 2.16 0.75 0.98 0.63 0.84 1.07 0.74 1.23 0.84 1.07 0.74 1.23 0.84 1.35 0.74 1.35 1.33 9.339	
FEB MAR APR JUN JUL AUG SEP OCT NOV	Ratio: Median IQR	A:BASELINE 1.63 4.29 1.33 1.20 2.05 1.38 1.04 0.79 1.01 0.74 0.82 0.44 0.85 0.63 0.88 0.76 0.99 1.21 2.36 1.67 8.17	EK	A:BASELINE 2.06 2.89 1.48 1.92 2.29 1.42 1.85 0.93 1.16 0.62 0.90 0.78 1.01 0.93 0.87 0.98 0.83 1.00 1.48 1.51		A:BASELINE 2.66 2.09 2.63 1.72 2.30 3.50 1.59 1.13 0.91 0.89 0.59 0.87 0.48 0.75 0.84 0.75 0.84 0.75 0.84 0.75 0.84 0.58 0.76 0.81 0.90 1.08 1.60 7.25	K	SEP OCT NOV	I: CGCM3 B1 ub-Basin Name: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	MISSION CRE A:BASELINE 1.49 1.95 2.39 3.73 2.53 3.50 1.84 1.49 1.02 1.49 1.02 0.98 0.92 0.95 1.17 0.76 0.35 0.99 0.72 1.67 1.67 1.77 1.73 3.44	EEK	TROUT CREE A:BASELINE 1.42 1.90 2.97 3.49 2.49 1.57 1.04 1.10 2.29 0.77 0.83 0.86 1.10 1.14 1.61 1.16 1.04 1.28		A:BASELINE 2.71 5.76 5.95 11.46 3.03 1.95 3.01 2.10 0.78 0.63 0.84 1.07 0.74 1.35 0.74 1.35 0.74 1.35 0.74 1.51	



APPENDIX D: SELECTED SUMMARIES OF PROJECTED WATER USE

Table D.1Projected median monthly and median annual water use for <u>aqricultural irrigation</u> in the
Okanagan Basin. The results are based on the HadCM3 A2 and CGCM3 B1 climate models.
Baseline results are based on the period 1996 to 2006. Future projections are based on the
period 2011 to 2040. To provide an index of the variability in the projections, the inter-quartile
range (IQR) is provided.

Parameter:	Total monthly v	water use (ML)							Parameter:	Total month	y water use (ML)					
limate Model	HadCM3 A2								Climate Model:	CGCM3 B1							
	Scenario Group:	BASELINE	А	В	с	D	E	F	Sc	enario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40	Sce	nario Number:	2	29	31	35	37	39	41
JAN	Median	0	0	0	0	0	0	0	JAN	Median	0	5	0	0	0	0	0
	IQR	0	0	0	0	0	0	0		IQR	0	1	0	0	0	0	0
FEB	Median	10	11	11	11	11	11	11	FEB	Median	10	550	11	11	11	11	11
	IQR	1	2	4	2	2	2	2		IQR	1	34	2	2	2	2	2
MAR	Median	1,711	1,687	1,697	1,669	2,097	2,072	2,072	MAR	Median	1,662	2,207	1,668	1,646	2,020	2,002	2,002
	IQR	25	111	163	104	420	397	397		IQR	106	409	136	141	435	415	415
APR	Median	2,627	3,492	4,198	3,463	3,844	3,795	3,791	APR	Median	2,780	5,329	3,601	3,539	4,063	4,012	4,011
	IQR	1,345	1,918	3,469	1,838	2,151	2,119	2,108		IQR	561	1,623	1,148	1,093	941	924	921
MAY	Median	7,948	9,128	10,285	9,012	10,382	10,318	10,235	MAY	Median	6,140	11,614	9,296	9,147	10,897	10,843	10,819
	IQR	4,105	4,828	4,851	4,608	6,262	6,251	6,226		IQR	2,758	2,250	3,462	3,413	4,622	4,582	4,550
JUN	Median	16,680	18,536	19,568	18,181	22,971	22,913	22,599	JUN	Median	16,571	19,185	16,414	16,175	20,581	20,524	20,358
	IQR	1,765	3,407	4,033	3,423	5,604	5,615	5,318		IQR	2,564	2,206	2,813	2,766	5,692	5,709	5,557
JUL	Median	25,864	26,336	25,010	25,462	32,432	32,359	32,212	JUL	Median	25,565	24,321	24,675	24,354	30,028	29,981	29,680
	IQR	2,315	3,182	4,012	2,983	5,643	5,560	5,326		IQR	3,057	2,600	2,554	2,678	4,151	4,138	3,831
AUG	Median	22,861	24,589	24,156	24,177	30,196	30,145	29,923	AUG	Median	24,580	20,438	22,815	22,632	28,270	28,176	27,798
	IQR	4,407	4,090	6,889	4,057	5,874	5,851	5,635		IQR	3,060	2,597	2,973	2,832	7,390	7,359	7,142
SEP	Median	13,804	15,076	13,906	14,621	18,165	18,111	18,028	SEP	Median	12,668	10,704	13,698	13,517	17,287	17,228	17,102
	IQR	1,025	2,320	3,112	2,216	4,337	4,341	4,195		IQR	3,051	1,934	2,064	1,997	3,174	3,149	2,943
OCT	Median	3,245	4,149	3,876	4,056	4,845	4,823	4,793	OCT	Median	2,392	3,137	4,957	4,874	5,727	5,703	5,674
	IQR	3,074	2,786	4,178	2,734	2,855	2,831	2,771		IQR	1,501	1,769	2,602	2,529	3,298	3,273	3,212
NOV	Median	1	93	6	89	100	98	97	NOV	Median	2	14	34	33	38	37	37
	IQR	1	336	149	318	360	358	358		IQR	16	182	288	278	371	363	358
DEC	Median	0	0	0	0	0	0	0	DEC	Median	0	0	0	0	0	0	0
	IQR	0	0	0	0	0	0	0		IQR	0	0	0	0	0	0	0
ANNUAL	Median	95,997	103,392	101,993	100,669	126,942	126,605	125,672	ANNUAL	Median	91,991	95,987	94,569	93,449	119,697	119,364	118,199
	IQR	4,629	9,728	9,553	9,616	19,242	19,085	18,533		IQR	10,302	4,322	4,241	3,960	22,915	22,739	21,587
Parameter:	Ratio of total w	ater use betwo	en indicated	scenarios													
limate Model									Parameter:	Ratio of tota	l water use b	etween indic	ated scenario	DS			
	: HadCM3 A2								Parameter: Climate Model:		water use b	etween indic	ated scenario	DS			
	HadCM3 A2 Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E			CGCM3 B1	A:BASLINE	etween indic B:A	C:B	D:B	E:A	F:E	
JAN		A:BASLINE	B:A		D:B -	E:A -	F:E			CGCM3 B1					E:A	F:E -	
	Ratio:			C:B					Climate Model:	CGCM3 B1 Ratio:	A:BASLINE	B:A	C:B	D:B			
	Ratio: Median			C:B					Climate Model:	CGCM3 B1 Ratio: Median	A:BASLINE	B:A	C:B	D:B			
JAN	Ratio: Median IQR	-	-	C:B -	-	-	-		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR	A:BASLINE -	B:A -	C:B -	D:B -	-	-	
JAN	Ratio: Median IQR Median	- - 1.06	-	C:B - - 0.95	0.97	- 0.98	1.00		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR Median	A:BASLINE - - 52.62	B:A - - 0.02	C:B - - 0.99	D:B - - 1.00	- 0.02	1.00	
JAN FEB	Ratio: Median IQR Median IQR	- - 1.06 2.00	- 1.03 2.00	C:B - - 0.95 0.50	- - 0.97 0.50	- - 0.98 1.00	- - 1.00 1.00		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR	A:BASLINE - - 52.62 34.00	B:A - - 0.02 0.06	C:B - 0.99 1.00	D:B - 1.00 1.00	- 0.02 0.06	- 1.00 1.00	
JAN FEB	Ratio: Median IQR Median IQR Median	- 1.06 2.00 0.99	- 1.03 2.00 1.01	C:B - - 0.95 0.50 0.98	- 0.97 0.50 1.24	- 0.98 1.00 1.23	- 1.00 1.00 1.00		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR Median	A:BASLINE - - 52.62 34.00 1.33	B:A - - 0.02 0.06 0.76	C:B - 0.99 1.00 0.99	D:B - 1.00 1.00 1.21	- 0.02 0.06 0.91	- 1.00 1.00 1.00	
JAN FEB MAR	Ratio: Median IQR Median IQR Median IQR	- 1.06 2.00 0.99 4.44	- 1.03 2.00 1.01 1.47	C:B - 0.95 0.50 0.98 0.64	- 0.97 0.50 1.24 2.58	- 0.98 1.00 1.23 3.58	- 1.00 1.00 1.00 1.00		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR	A:BASLINE - 52.62 34.00 1.33 3.86	B:A - - 0.02 0.06 0.76 0.33	C:B - 0.99 1.00 0.99 1.04	D:B - 1.00 1.00 1.21 3.20	- 0.02 0.06 0.91 1.01	- 1.00 1.00 1.00 1.00	
JAN FEB MAR	Ratio: Median IQR Median IQR Median IQR Median	- 1.06 2.00 0.99 4.44 1.33	- 1.03 2.00 1.01 1.47 1.20	C:B - 0.95 0.50 0.98 0.64 0.82	- 0.97 0.50 1.24 2.58 0.92	- 0.98 1.00 1.23 3.58 1.09	- 1.00 1.00 1.00 1.00 1.00		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median	A:BASLINE - - 52.62 34.00 1.33 3.86 1.92	B:A - - 0.02 0.06 0.76 0.33 0.68	C:B - 0.99 1.00 0.99 1.04 0.98	D:B - 1.00 1.00 1.21 3.20 1.13	- 0.02 0.06 0.91 1.01 0.75	- 1.00 1.00 1.00 1.00 1.00	
JAN FEB MAR APR	Ratio: Median IQR Median IQR Median IQR Median IQR	- 1.06 2.00 0.99 4.44 1.33 1.43	- 1.03 2.00 1.01 1.47 1.20 1.81	C:B - 0.95 0.50 0.98 0.64 0.82 0.53	- 0.97 0.50 1.24 2.58 0.92 0.62	- 0.98 1.00 1.23 3.58 1.09 1.10	- 1.00 1.00 1.00 1.00 1.00 0.99		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE - 52.62 34.00 1.33 3.86 1.92 2.89	B:A - - 0.02 0.06 0.76 0.33 0.68 0.71	C:B - 0.99 1.00 0.99 1.04 0.98 0.95	D:B - - 1.00 1.00 1.21 3.20 1.13 0.82	- 0.02 0.06 0.91 1.01 0.75 0.57	- 1.00 1.00 1.00 1.00 1.00 1.00	
JAN FEB MAR APR	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- 1.06 2.00 0.99 4.44 1.33 1.43 1.15	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13	C:B - - 0.95 0.50 0.98 0.64 0.64 0.53 0.88	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01	- 0.98 1.00 1.23 3.58 1.09 1.10 1.13	- 1.00 1.00 1.00 1.00 1.00 0.99 0.99		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE - 52.62 34.00 1.33 3.86 1.92 2.89 1.89	B:A - - 0.02 0.06 0.76 0.33 0.68 0.71 0.80	C:8 - - 0.99 1.00 0.99 1.04 0.98 0.95 0.98	D:B - - 1.00 1.00 1.21 3.20 1.13 0.82 1.17	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
JAN FEB MAR APR MAY	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR IQR IQR	- 1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00	C:B - 0.95 0.50 0.98 0.64 0.82 0.53 0.88 0.95	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29	- 0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29	- 1.00 1.00 1.00 1.00 0.99 0.99 1.00		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - - 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54	C:8 - 0.99 1.00 0.99 1.04 0.99 0.95 0.98 0.99	D:8 - - 1.00 1.00 1.21 3.20 1.13 0.82 1.17 1.34	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99	
JAN FEB MAR APR MAY	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06	C:B - 0.95 0.50 0.98 0.64 0.82 0.53 0.88 0.95 0.93	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17	- 0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29 1.24	- 1.00 1.00 1.00 1.00 1.00 0.99 0.99 1.00 0.99		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE - - - 34.00 1.33 3.86 1.92 2.89 1.89 0.82 1.16	B:A - - 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54 0.86	C:B - - 0.99 1.00 0.99 1.04 0.99 0.95 0.98 0.99 0.99	D:8 - - 1.00 1.21 3.20 1.13 0.82 1.17 1.34 1.25	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.99	
JAN FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	- 1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.93	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18	C:B - 0.95 0.50 0.98 0.64 0.82 0.53 0.88 0.95 0.95 0.93 0.85	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39	0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29 1.24 1.65	- 1.00 1.00 1.00 1.00 1.00 0.99 0.99 1.00 0.99 0.99 0.99		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - 52.62 34.00 1.33 3.86 1.92 2.89 1.89 0.82 1.16 0.86	B:A - - 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54 0.86 1.28	C:B - - 0.99 1.00 0.99 1.04 0.99 0.95 0.98 0.99 0.99 0.99	D:8 - - 1.00 1.21 3.20 1.13 0.82 1.17 1.34 1.25 2.02	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.99 0.99	
JAN FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.93 1.02	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18 0.95	C:8 - - 0.95 0.50 0.98 0.64 0.82 0.53 0.88 0.95 0.93 0.85 1.02	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30	- 0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29 1.24 1.65 1.23	- 1.00 1.00 1.00 1.00 0.99 0.99 1.00 0.99 0.95 1.00		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE - 52.62 34.00 1.33 3.86 1.92 2.89 1.89 0.82 1.16 0.86 0.95	B:A - 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54 0.86 1.28 1.01	C:B - - 0.99 1.00 0.99 1.04 0.98 0.95 0.98 0.99 0.99 0.99 0.99	D:8 - - 1.00 1.21 3.20 1.13 0.82 1.17 1.34 1.25 2.02 1.22	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59 1.23	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.99 0.99 0.99	
JAN FEB MAR APR MAY JUN JUL	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - - - - - - - - - - - - -	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18 0.95 1.26	C:B - 0.95 0.50 0.98 0.64 0.82 0.53 0.88 0.95 0.93 0.85 1.02 0.74	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30 1.41	- 0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29 1.24 1.65 1.23 1.75	- 1.00 1.00 1.00 1.00 0.99 0.99 1.00 0.99 0.95 1.00 0.96		Climate Model: JAN FEB MAR APR MAY JUN JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54 0.86 1.28 1.01 0.98	C:B 0.99 1.00 0.99 1.04 0.98 0.98 0.98 0.99 0.99 0.99 0.99 1.05	D:8 - 1.00 1.00 1.21 3.20 1.13 0.82 1.17 1.34 1.25 2.02 2.02 1.63	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59 1.23 1.59	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.99 0.99 0.99 0.99	
JAN FEB MAR APR MAY JUN JUL AUG	Ratio: Median IQR	- 1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.93 1.02 1.37 1.08 0.93	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18 0.95 1.26 0.98 1.68	C:B - 0.95 0.50 0.98 0.64 0.82 0.53 0.88 0.95 0.93 0.85 1.02 0.74 1.00 0.59	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30 1.41 1.25 0.85	- 0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29 1.24 1.65 1.23 1.75 1.23 1.43	- - 1.00 1.00 1.00 1.00 0.99 0.99 0.99 1.00 0.99 1.00 0.99 0.95 1.00 0.99 0.95		Climate Model: JAN FEB MAR APR JUN JUL JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE	B:A - 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54 0.86 1.28 1.01 0.98 1.12 1.14	C:B - - 0.99 1.00 0.99 1.04 0.98 0.99 0.98 0.99 0.98 0.99 0.99 1.05 0.99 0.95	D:8 - 1.00 1.21 3.20 1.13 0.82 1.17 1.34 1.25 2.02 1.22 1.63 1.24 9	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59 1.23 1.59 1.38 2.83	- - 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.97 0.99 0.99 0.97 0.99 0.99 0.97 0.99 0.97 0.99 0.97 0.99 0.97 0.97 0.97 0.97 0.97 0.99 0.97 0	
JAN FEB MAR APR MAY JUN JUL	Ratio: Median IQR Median	- 1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.93 1.02 1.37 1.08	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18 0.95 1.26 0.98	C:B - - 0.95 0.50 0.98 0.64 0.82 0.95 0.93 0.85 1.02 0.74 1.00 0.59 1.05	- 0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30 1.41 1.25	- 0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29 1.24 1.65 1.23 1.75 1.23	- 1.00 1.00 1.00 1.00 0.99 0.99 1.00 0.99 0.95 1.00 0.96 0.99		Climate Model: JAN FEB MAR APR MAY JUN JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A-BASLINE 52.62 34.00 1.33 3.86 1.92 2.89 1.89 0.82 1.16 0.86 0.95 0.83	B:A - 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54 0.86 1.28 1.01 0.98 1.12	C:B - 0.99 1.00 0.99 1.04 0.98 0.95 0.98 0.99 0.99 0.99 1.05 0.99 0.99	D:8 - 1.00 1.00 1.21 3.20 1.13 0.82 1.13 1.34 1.25 2.02 1.22 1.63 1.24	- 0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59 1.23 1.59 1.38	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.99 0.99 0.99 0.99 0.99 0.99	
JAN FEB MAR APR MAY JUN JUL AUG	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.93 1.02 1.37 1.08 0.93 1.09	- 1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.66 1.18 0.95 1.26 0.98 1.68 0.92 1.34	CB - - - - - - - - - - - - - - - - - - -	0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30 1.41 1.25 0.83 1.31 1.39	- - 0.98 1.00 1.23 3.58 1.09 1.10 1.13 1.29 1.24 1.65 1.23 1.75 1.23 1.43 1.20 1.87	- 1.00 1.00 1.00 1.00 0.99 0.99 0.99 0.99 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.99 1.00 0.99 0.99 1.00 0.99 0.99 0.99 1.00 0.99 0.96		Climate Model: JAN FEB MAR APR JUN JUL JUL	CGCM3 B1 Ratio: Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R	A:BASLINE 	B:A - - - - - - - - - - - - -	C:B - 0.99 1.00 0.99 1.04 0.98 0.98 0.99 0.99 0.99 1.05 0.99 0.99 0.99	D:8 - - 1.00 1.21 3.20 1.13 0.82 1.17 1.34 1.25 2.02 1.22 1.63 1.24 2.49 1.26 1.54	0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59 1.23 1.59 1.38 2.83 1.61 1.63	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.97 0.99 0.93 0.99 0.93	
JAN FEB MAR APR MAY JUN JUL AUG SEP	Ratio: Median IQR Median	- 1.06 2.00 0.99 4.44 1.33 1.43 1.13 1.13 1.13 1.13 1.13 1.13 1.02 1.37 1.02 1.37 1.08 0.93 1.09 2.26 1.28	1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18 0.95 1.26 0.95 1.26 0.95 1.68 0.92 1.34 0.93	CB - - 0.95 0.50 0.50 0.50 0.50 0.50 0.50 0.50	0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.30 1.41 1.25 0.85 1.31		1.00 1.00 1.00 1.00 1.00 0.99 0.99 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 0.95 1.00 0.95 0.55 0		Climate Model: JAN FEB MAR APR JUN JUL JUL AUG SEP	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE - - - - - - - - - - - - -	B:A 0.02 0.06 0.76 0.33 0.68 0.71 0.80 1.54 0.80 1.54 0.80 1.54 1.28 1.01 0.98 1.12 1.14 1.28 1.01 1.58	C:B - - 0.99 1.00 0.98 0.95 0.98 0.99 0.99 0.99 0.99 0.99 0.99 0.99	D:8 - - 1.00 1.21 3.20 1.13 0.82 1.13 1.25 2.02 2.02 1.63 1.24 1.22 1.63 1.24 1.22 1.63 1.24 1.26 1.54 1.26	0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59 1.23 1.59 1.38 2.83 1.61 1.63 1.82	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.97 0.99 0.97 0.99 0.97 0.99 0.97 0.99 0.97 0.99 0.90	
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	Ratio: Median IQR	- 1.06 2.00 0.99 4.44 1.33 1.43 1.43 1.15 1.11 1.93 1.02 1.37 1.08 0.93 1.09 1.09 2.26	1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18 0.95 1.26 0.95 1.26 0.92 1.34 0.93 1.50	CB - - - - - - - - - - - - - - - - - - -	0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30 1.41 1.25 0.83 1.31 1.39		- 1.00 1.00 1.00 1.00 0.99 0.99 1.00 0.99 1.00 0.95 1.00 0.96 0.99 0.96 1.00 0.97		Climate Model: JAN FEB MAR APR JUN JUL JUL AUG SEP OCT	CGCM3 B1 Ratio: Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R	A:BASLINE - - - - - - - - - - - - -	B:A - - - - - - - - - - - - -	C:8 - - - - - - - - - - - - - - - - - - -	D:8 - - 1.00 1.21 3.20 1.13 0.82 1.17 1.34 1.25 2.02 1.22 1.63 1.24 2.49 1.26 1.54	0.02 0.06 0.91 1.01 0.75 0.57 0.93 2.04 1.07 2.59 1.38 2.83 1.61 1.63 1.83 1.83	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.97 0.99 0.93 0.99 0.93	
JAN FEB MAR APR MAY JUN JUL AUG SEP	Ratio: Median IQR Median		1.03 2.00 1.01 1.47 1.20 1.81 1.00 1.00 1.00 1.00 1.00 1.18 0.95 1.26 0.98 1.68 0.98 1.54 0.93 1.54 0.93 1.54	C8 - - 0.95 0.50 0.95 0.64 0.82 0.93 0.88 0.95 0.93 0.85 1.02 0.74 1.00 0.59 1.05 0.71 1.05 0.71			1.00 1.00 1.00 1.00 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 0.95 1.00 0.99 0.95 1.00 0.99 0.9		Climate Model: JAN FEB MAR APR JUN JUL JUL AUG SEP	CGCM3 B1 Ratio: Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - - 0.06 0.76 0.73 0.68 0.71 0.80 1.54 0.86 1.28 1.01 0.98 1.28 1.01 0.98 1.21 1.14 1.28 1.07 1.58 1.07 1.58 1.47 1.58	C:B - - - 0.99 1.00 0.99 1.04 0.98 0.99 0.97 0.99 0.97 0.99 0.97 0.99 0.97 0.99 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.95	D:8	- 0.02 0.06 0.91 1.01 0.75 0.57 1.23 1.59 1.23 1.59 1.23 1.59 1.38 2.83 1.61 1.63 1.82 1.82 2.61	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.93 0.99 0.99 0.99 0.93 0.99 0.99 0.99 0.99 0.93 0.99 0.99 0.99 0.93 0.99 0.99 0.99 0.93 0.99 0.99 0.99 0.99 0.99 0.93 0.99 0.99 0.99 0.99 0.99 0.93 0.99 0.90 0.90	
JAN FEB MAR APR JUN JUL JUL AUG SEP OCT NOV	Ratio: Median IQR	1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.19 1.08 0.93 1.09 2.26 1.28 0.91	1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.00 1.06 1.18 0.95 1.26 0.95 1.26 0.92 1.34 0.93 1.50	C8 - - 0.95 0.50 0.88 0.64 0.82 0.33 0.85 0.95 0.93 0.85 1.02 0.71 1.00 0.59 1.00 0.59 1.00 0.59 2.13 2.13	0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.39 1.31 1.39 1.31 1.39 1.25 0.85 0.85 0.92 0.63 0.64 0.65 0.55 0.5		1.00 1.00 1.00 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.95 1.00 0.99 0.95 1.00 0.99 0.95 0.99 0.95 0.99 0.99 0.95 0.99 0.99 0.95 0.99 0.95 0.99 0.98		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	CGCM3 B1 Ratio: Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8	A:BASLINE - - - - - - - - - - - - -	B:A - - 0.02 0.76 0.76 0.78 0.71 0.80 1.54 0.86 1.28 1.01 0.98 1.12 1.14 1.28 1.07 1.54 1.47	C:B - - - 0.99 1.00 0.99 0.99 0.99 0.99 0.99 0.99	D:8 - - 1.00 1.21 3.20 1.21 3.20 1.21 3.20 1.22 1.23 1.24 2.49 1.26 1.54 1.54 1.27	0.02 0.06 0.91 1.01 0.75 0.57 2.04 1.07 2.59 1.23 1.59 1.23 1.59 1.23 1.61 1.61 1.61 1.63 1.82 1.82 2.61	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.93 0.98 0.98 0.98 0.98 0.99 0.98 0.98 0.98 0.99 0.98	
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	Ratio: Median IQR Median	1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.93 1.02 1.37 1.08 0.93 1.09 2.26 0.91 1.28 0.91 71.10 3.36.00	1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.06 1.18 1.06 1.18 1.26 0.98 1.26 0.92 1.34 1.50 0.92 1.50 0.04	C8 - - 0.95 0.50 0.95 0.64 0.82 0.93 0.88 0.95 0.93 0.85 1.02 0.74 1.00 0.59 1.05 0.71 1.05 0.71	0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30 1.41 1.25 0.68 1.31 1.25 0.68 1.25 1.25 1.24 2.42		1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.99		Climate Model: JAN FEB MAR APR JUN JUL JUL AUG SEP OCT	CGCN8 B1 Ratio: Median 10R 10R 10R 10R 10R 10R 10R 10R 10R 10R	A:BASLINE - - - 34.00 1.33 3.86 1.92 2.89 0.82 1.16 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85	B:A - - 0.06 0.76 0.76 0.88 0.71 0.86 1.54 0.86 1.28 1.01 0.98 1.12 1.14 1.28 1.01 1.58 1.44 1.58	C:B - - - - - - - - - - - - -	D:8 - - 1.00 1.00 1.21 3.20 1.13 0.82 2.02 1.25 2.02 1.25 2.02 1.24 1.24 1.26 1.26 1.27 1.12 1.27 1.22 1.29	- 0.02 0.06 0.91 1.01 0.75 0.57 1.23 1.59 1.23 1.59 1.38 2.83 1.63 1.82 1.82 2.61		
JAN FEB MAR APR JUN JUL JUL AUG SEP OCT NOV	Ratio: Median (QR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.06 2.00 0.99 4.44 1.33 1.43 1.15 1.18 1.11 1.93 1.02 1.37 1.08 0.93 1.09 2.26 0.91 1.28 0.91 71.10 3.36.00	1.03 2.00 1.01 1.47 1.20 1.81 1.13 1.06 1.18 1.06 1.18 1.26 0.98 1.26 0.92 1.34 1.50 0.92 1.50 0.04	C8 - - 0.95 0.50 0.88 0.64 0.82 0.33 0.85 0.95 0.93 0.85 1.02 0.71 1.00 0.59 1.00 0.59 1.00 0.59 2.13 2.13	0.97 0.50 1.24 2.58 0.92 0.62 1.01 1.29 1.17 1.39 1.30 1.41 1.25 0.68 1.31 1.25 0.68 1.25 1.25 1.24 2.42		1.00 1.00 1.00 1.00 1.00 1.00 0.99 0.99		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	CGCM3 B1 Ratio: Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8 Median 10/8	A:BASLINE - - - 34.00 1.33 3.86 1.92 2.89 0.82 1.16 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85	B:A - - 0.06 0.76 0.76 0.88 0.71 0.86 1.54 0.86 1.28 1.01 0.98 1.12 1.14 1.28 1.01 1.58 1.44 1.58	C:B - - - - - - - - - - - - -	D:8 - - 1.00 1.00 1.21 3.20 1.13 0.82 2.02 1.25 2.02 1.25 2.02 1.24 1.24 1.26 1.26 1.27 1.12 1.27 1.22	0.02 0.06 0.91 1.01 0.75 0.57 2.04 1.07 2.59 1.23 1.59 1.23 1.59 1.23 1.59 1.38 2.83 1.61 1.63 1.82 1.82 2.61 1.99		

Table D.2 Projected median monthly and median annual water use for <u>golf course irrigation</u> in the Okanagan Basin. The results are based on the HadCM3 A2 and CGCM3 B1 climate models. Baseline results are based on the period 1996 to 2006. Future projections are based on the period 2011 to 2040. To provide an index of the variability in the projections, the interquartile range (IQR) is provided.

	OR IRRIGATIO		.001323														
Parameter:	Total monthly v	vater use (ML)							Parameter:		y water use (ML)					
Climate Model:									Climate Model:								
	Scenario Group:		Α	В	с	D	E	F		enario Group:		Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40		nario Number:	2	29	31	35	37	39	41
JAN	Median	0	0	0	0	0	0	0	JAN	Median	0	0	0	0	0	0	0
	IQR	0	0	0	0	0	0	0		IQR	0	0	0	0	0	0	0
FEB	Median	0	0	0	0	0	0	0	FEB	Median	0	0	0	0	0	0	0
	IQR	0	0	0	0	0	0	0		IQR	0	0	0	0	0	0	0
MAR	Median	94	93	93	83	93	83	83	MAR	Median	92	93	92	83	92	83	83
	IQR	2	7	7	6	7	6	6		IQR	3	8	8	10	8	10	10
APR	Median	303	538	537	514	537	514	514	APR	Median	337	604	602	520	602	520	520
	IQR	397	525	523	459	523	459	459		IQR	131	264	264	231	264	231	231
MAY	Median	1,383	1,276	1,274	1,120	1,274	1,120	1,120	MAY	Median	1,057	1,309	1,306	1,166	1,306	1,166	1,166
	IQR	258	326	326	309	326	309	309		IQR	323	241	238	231	238	231	231
JUN	Median	1,513	1,585	1,581	1,452	1,581	1,452	1,452	JUN	Median	1,504	1,447	1,444	1,311	1,444	1,311	1,311
	IOR	242	121	122	156	122	156	156		IQR	165	222	225	248	225	248	248
JUL	Median	1,822	1,886	1,880	1,711	1,880	1,711	1,711	JUL	Median	1,801	1,756	1,753	1,627	1,753	1,627	1,627
	IQR	88	195	191	121	191	121	121		IQR	200	125	128	249	128	249	249
AUG	Median	1,558	1,671	1,669	1,520	1,669	1,520	1,520	AUG	Median	1,645	1,531	1,528	1,371	1,528	1,371	1,371
	IOR	301	247	247	289	247	289	289		IQR	174	230	227	123	227	123	123
SEP	Median	960	1,021	1,018	922	1,018	922	922	SEP	Median	873	943	939	834	939	834	834
52.	IOR	89	129	128	98	128	98	98	52.	IQR	186	125	123	132	123	132	132
OCT	Median	238	280	279	263	279	263	263	ОСТ	Median	154	327	327	288	327	288	288
001	IQR	250	252	251	203	251	203	203	001	IQR	118	181	180	163	180	163	163
NOV	Median	0	3	3	220	3	220	2	NOV	Median	0	1	100	105	100	105	105
NOV	IQR	0	20	20	18	20	18	18	NOV	IOR	1	18	18	16	18	16	16
DEC	Median	0	0	0	0	0	0	0	DEC	Median	0	0	0	0	0	0	0
DEC									DEC								
	IQR	0	0	0	0	0	0	0		IQR	0	0	0	0	0	0	0
ANNUAL	Median IQR	7,864 319	8,316 834	8,308 835	7,644 868	8,308 835	7,644 868	7,644 868	ANNUAL	Median IOR	7,520 629	7,816 488	7,800 485	7,024 477	7,800 485	7,024 477	7,024 477
Parameter:	Ratio of total w	ater use betw	een indicate	d scenarios					Parameter:	Ratio of tota	l water use be	etween indic	ated scenario	DS .			
Climate Model:	HadCM3 A2								Climate Model:	CGCM3 B1							
	Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E			Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	-		· ·	-	-	-		JAN	Median	-		· ·	-	· ·	· ·	
	IQR	-		-	-	-	-			IQR	-		-	-	-	-	
FEB	Median	-	-	-	-	-	-		FEB	Adadian	-	-	-	-	-	-	
	IQR	-	-						FEB	Median							
MAR				-	-	-	· ·		FEB	IQR		-		-		-	
	Mealan	0.99				- 0.89				IQR	-	1.00	- 0.89	- 1.00	-		
	Median IOR	0.99 3.50	1.00	0.89	1.00	- 0.89 0.86	- 1.00 1.00		MAR		1.01	- 1.00 1.00	- 0.89 1.25	- 1.00 1.00	- 0.89 1.25	1.00	
APR		0.99 3.50 1.78					1.00			IQR Median	-	1.00 1.00 1.00	- 0.89 1.25 0.86	- 1.00 1.00 1.00	- 0.89		
APR	IQR	3.50	1.00 1.00	0.89 0.86	1.00 1.00	0.86	1.00 1.00		MAR	IQR Median IQR	- 1.01 2.67	1.00	1.25	1.00	- 0.89 1.25	1.00 1.00	
	IQR Median IQR	3.50 1.78 1.32	1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88	1.00 1.00 1.00 1.00	0.86 0.96 0.87	1.00 1.00 1.00 1.00		MAR APR	IQR Median IQR Median IQR	- 1.01 2.67 1.79 2.02	1.00 1.00 1.00	1.25 0.86 0.88	1.00 1.00 1.00	- 0.89 1.25 0.86 0.88	1.00 1.00 1.00 1.00	
APR MAY	IQR Median	3.50 1.78	1.00 1.00 1.00	0.89 0.86 0.96	1.00 1.00 1.00	0.86 0.96	1.00 1.00 1.00		MAR	IQR Median IQR Median	- 1.01 2.67 1.79 2.02 1.24	1.00 1.00	1.25 0.86	1.00 1.00	- 0.89 1.25 0.86	1.00 1.00 1.00	
MAY	IQR Median IQR Median IQR	3.50 1.78 1.32 0.92 1.26	1.00 1.00 1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88 0.88 0.88	1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95	1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY	IQR Median IQR Median IQR Median IQR	- 1.01 2.67 1.79 2.02 1.24 0.75	1.00 1.00 1.00 1.00 0.99	1.25 0.86 0.88 0.89 0.97	1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.89 0.96	1.00 1.00 1.00 1.00 1.00 1.00	
	IQR Median IQR Median IQR Median	3.50 1.78 1.32 0.92 1.26 1.05	1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88 0.88 0.95 0.92	1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92	1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR	IQR Median IQR Median IQR Median IQR Median	1.01 2.67 1.79 2.02 1.24 0.75 0.96	1.00 1.00 1.00 0.99 1.00	1.25 0.86 0.88 0.89 0.97 0.91	1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.89 0.96 0.91	1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN	IQR Median IQR Median IQR Median IQR	3.50 1.78 1.32 0.92 1.26 1.05 0.50	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88 0.88 0.95 0.95 0.92 1.28	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN	IQR Median IQR Median IQR Median IQR Median IQR	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35	1.00 1.00 1.00 0.99 1.00 1.01	1.25 0.86 0.88 0.89 0.97 0.91 1.10	1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.89 0.96 0.91 1.12	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY	IQR Median IQR Median IQR Median IQR Median	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00	0.89 0.86 0.96 0.88 0.88 0.95 0.95 0.92 1.28 0.91	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY	IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98	1.00 1.00 1.00 0.99 1.00 1.01 1.00	1.25 0.86 0.88 0.97 0.97 0.91 1.10 0.93	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.89 0.96 0.91 1.12 0.93	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 0.98	0.89 0.86 0.96 0.88 0.88 0.95 0.92 1.28 0.91 0.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63	1.00 1.00 1.00 0.99 1.00 1.01 1.01 1.00 1.02	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.89 0.96 0.91 1.12 0.93 1.99	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN	IQR Median IQR Median IQR Median IQR Median IQR Median	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 0.98 1.00	0.89 0.86 0.96 0.88 0.95 0.95 0.92 1.28 0.91 0.63 0.91	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.93	1.00 1.00 1.00 0.99 1.00 1.01 1.01 1.00 1.02 1.00	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.89 0.96 0.91 1.12 0.93 1.99 0.90	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 0.98 1.00 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.91 0.63 0.91 1.17	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.63 0.93 1.32	1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 1.02 1.00 0.99	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90 0.54	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.96 0.91 1.12 0.93 1.99 0.90 0.53	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82 1.06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 0.98 1.00 1.00 1.00 1.00	0.89 0.86 0.88 0.88 0.95 0.92 1.28 0.91 0.63 0.91 1.17 0.91	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.62 0.91 0.62 0.91 1.17 0.90	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.93 1.32 1.08	1.00 1.00 1.00 0.99 1.00 1.01 1.01 1.02 1.00 0.99 1.00	1.25 0.86 0.89 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.99 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG SEP	IQR Median IQR	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82 1.06 1.45	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.98 1.00 1.00 1.00 0.99	0.89 0.86 0.96 0.88 0.95 0.95 0.92 1.28 0.91 0.63 0.91 1.17 0.91 0.77	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.90 0.76	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.93 1.32 1.08 0.67	1.00 1.00 1.00 0.99 1.00 1.01 1.00 1.02 1.00 0.99 1.00 0.99 0.99 1.00 0.99	1.25 0.86 0.88 0.89 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.99 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88 1.06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG	IQR Median	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82 1.06 1.45 1.17	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 0.98 1.00 1.00 1.00 0.99 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.63 0.91 1.17 0.91 0.77 0.94	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.76 0.76 0.94	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.93 1.32 1.08 0.67 2.13	1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 1.02 1.00 0.99 1.00 0.98 1.00	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07 0.88	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.89 1.25 0.86 0.88 0.96 0.91 1.12 1.99 0.90 0.53 0.83 1.06 0.88	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82 1.06 1.45 1.17 1.01	1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 1.01 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.91 0.63 0.91 1.17 0.91 0.77 0.94 0.88	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.90 0.76 0.94 0.87	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.93 1.32 1.08 0.67 2.13 1.53	1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 1.02 1.00 0.99 1.00 0.98 1.00 0.99 1.00 0.99	1.25 0.86 0.89 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07 0.88 0.91	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88 1.06 0.88 0.88 0.90	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82 1.06 1.45 1.17	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.91 0.63 0.91 1.17 0.91 0.77 0.94 0.88 0.76	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.90 0.76	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.93 1.32 1.08 0.67 2.13	1.00 1.00 1.00 0.99 1.00 1.01 1.00 1.01 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07 0.88 0.91 0.95	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.98 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88 1.06 0.88 0.90 0.95	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR	3.50 1.78 1.28 1.26 1.05 1.05 1.04 2.22 1.07 0.82 1.07 1.45 1.17 1.01 -	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.98 1.00 0.98 1.00 0.99 1.00 1.00 0.99 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.91 0.63 1.17 0.91 1.17 0.91 0.77 0.94 0.88 0.76 0.90	1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.90 0.76 0.94 0.87 0.90	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.63 0.93 1.32 1.08 0.67 2.13 1.53 -	1.00 1.00 1.00 1.00 1.00 1.01 1.00 1.01 1.00 0.99 1.00 0.98 1.00 0.99 1.00 0.99 1.00 1.00 1.00 1.00 1.00 0.99 1.00 0.99 1.00	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07 0.88 0.95 0.89	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88 0.90 0.53 0.88 0.90 0.95 0.88	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG SEP OCT	IQR Median IQR IQR IQR IQR Median IQR Median	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82 1.06 1.45 1.17 1.01	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.91 0.63 0.91 1.17 0.91 0.77 0.94 0.88 0.76	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.90 0.76	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.93 1.32 1.08 0.67 2.13 1.53	1.00 1.00 1.00 0.99 1.00 1.01 1.00 1.01 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07 0.88 0.91 0.95	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.98 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88 1.06 0.88 0.90 0.95	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	3.50 1.78 1.32 0.92 1.26 1.05 0.50 1.04 2.22 1.07 0.82 1.07 0.82 1.45 1.17 1.01 - - -	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.91 0.63 0.91 1.17 0.91 0.77 0.94 0.84 0.76 0.90	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.90 0.76 0.94 0.87 0.76 0.90	1.00 1.00		MAR APR JUN JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.98 0.63 0.93 1.32 1.08 0.67 2.13 1.53 - -	1.00 1.00 1.00 1.00 0.99 1.00 1.01 1.02 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 1.01 1.02 1.00 1.02 1.00 1.02 1.00 1.02 1.00 1.02 1.00 1.02 1.00 1.02 1.00 1.00 1.02 1.00 1.00 1.02 1.00	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07 0.89 0.91 0.95 0.89	1.00 1.00	0.89 1.25 0.86 0.88 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88 0.90 0.53 0.88 0.90 0.53 0.88 0.95 0.89	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR IQR IQR IQR Median IQR Median	3.50 1.78 1.28 1.26 1.05 1.05 1.04 2.22 1.07 0.82 1.07 1.45 1.17 1.01 -	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.98 1.00 0.98 1.00 0.99 1.00 1.00 0.99 1.00	0.89 0.86 0.96 0.88 0.95 0.92 1.28 0.91 0.63 1.17 0.91 1.17 0.91 0.77 0.94 0.88 0.76 0.90	1.00 1.00	0.86 0.96 0.87 0.88 0.95 0.92 1.29 0.91 0.62 0.91 1.17 0.90 0.76 0.94 0.87 0.90	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		MAR APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.01 2.67 1.79 2.02 1.24 0.75 0.96 1.35 0.98 0.63 0.63 0.93 1.32 1.08 0.67 2.13 1.53 -	1.00 1.00 1.00 1.00 1.00 1.01 1.00 1.01 1.00 0.99 1.00 0.98 1.00 0.99 1.00 0.99 1.00 1.00 1.00 1.00 1.00 0.99 1.00 0.99 1.00	1.25 0.86 0.88 0.97 0.91 1.10 0.93 1.95 0.90 0.54 0.89 1.07 0.88 0.95 0.89	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 0.89 1.25 0.86 0.88 0.96 0.91 1.12 0.93 1.99 0.90 0.53 0.88 0.90 0.53 0.88 0.90 0.95 0.88	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	

Table D.3Projected median monthly and median annual water use for parks and open space irrigation
in the Okanagan Basin. The results are based on the HadCM3 A2 and CGCM3 B1 climate
models. Baseline results are based on the period 1996 to 2006. Future projections are based
on the period 2011 to 2040. To provide an index of the variability in the projections, the
inter-quartile range (IQR) is provided.

	FOR IRRIGATIO			N JFACES													
'arameter: Climate Model	Total monthly v	water use (ML)							Parameter: Climate Model:	Total month	y water use (ML)					
innate woder	Scenario Group:	BASELINE	A	В	с	D	E	F		cenario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40		nario Number:	2	29	31	35	37	39	41
JAN	Median	0	0	0	0	0	0	0	JAN	Median	0	0	0	0	0	0	0
,,,,,	IOR	0	0	0	0	0	0	0	5744	IOR	0	0	0	0	0	0	0
FEB	Median	0	0	0	0	0	0	0	FEB	Median	0	0	0	0	0	0	0
120	IOR	0	0	0	0	0	0	0	120	IOR	0	0	0	0	0	0	0
MAR	Median	53	52	51	43	51	43	43	MAR	Median	51	52	50	41	50	41	4
101AIN	IQR	3	3	3	8	3	8	8	WAN	IOR	2	2	2	7	2	7	
APR	Median	168	253	252	209	252	209	209	APR	Median	201	320	308	252	308	252	25
Am	IQR	217	244	239	199	239	199	199	Arts	IQR	104	117	112	94	112	94	9
MAY	Median	712	682	664	558	664	558	558	MAY	Median	597	693	682	537	682	537	53
MAT	IQR	95	149	142	122	142	122	122	IVIAT	IQR	141	133	124	102	124	102	10
JUN	Median	801	828	805	684	805	684	684	JUN	Median	798	764	748	643	748	643	64
1014	IOR	104	60	59	102	59	102	102	1014	IOR	83	121	133	180	133	180	18
JUL	Median	947	980	950	801	950	801	801	JUL	Median	937	918	897	775	897	775	7
101	IQR	47	980	74	124	74	124	124	JUL	IQR	104	57	74	145	74	145	14
AUG	Median	804	862	847	719	847	719	719	AUG	Median	856	796	74	637	785	637	63
AUG	IQR	153	124	131	120	131	120	120	AUG	IQR	95	111	100	106	100	106	10
SEP	Median	153 519	124 543	131 526	448	131 526	448	448	SEP	Median	95 456	500	488	106 391	488	391	
SEP	IOR	41	543		448 99	526	99	448 99	SEP	IOR IOR	456 96		488 68	391 59	488 68	391 59	39
007				57					007			76					_
OCT	IOR IOR	155	195	190 118	169 104	190	169	169	OCT	Median	95 55	215 88	209 82	160	209 82	160 84	16
		116	120			118	104	104		IQR				84			-
NÖV	Median	0	6	6	4	6	4	4	NOV	Median	0	3	3	3	3	3	3
	IQR	0	17	17	15	17	15	15		IQR	1	17	17	13	17	13	1
DEC	Median	0	0	0	0	0	0	0	DEC	Median	0	0	0	0	0	0	(
	IQR	0	0	0	0	0	0	0		IQR	0	0	0	0	0	0	(
ANNUAL	Median	4,160	4,426	4,343	3,608	4,343	3,608	3,608	ANNUAL	Median	4,011	4,123	4,042	4,042	4,042	3,445	3,4
	IQR	141	296	397	577	397	577	577		IQR	396	186	208	208	208	511	51
arameter:	Ratio of total w	ater use betwo	een indicate	d scenarios					Parameter:	Ratio of tota	I water use b	etween indic	cated scenario	DS			
imate Model	: HadCM3 A2																
									Climate Model:								
	Ratio:		B:A	C:B	D:B	E:A	F:E		Climate Model:	Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	A:BASLINE -	B:A -	C:B -	D:B -	E:A -	F:E			Ratio: Median	A:BASLINE -	B:A -	C:B -		E:A -	F:E	
	Median IQR	-	-	-	-	-	-		Climate Model: JAN	Ratio: Median IQR	-	-	-	D:B -	-	-	
JAN FEB	Median IQR Median								Climate Model:	Ratio: Median IQR Median				D:B		-	
FEB	Median IQR Median IQR	- - -	-	-	-	-	-		JAN FEB	Ratio: Median IQR Median IQR		-	-	D:B - - -	-	-	
	Median IQR Median IQR Median	- - - 0.99	- - - 0.98	- - - 0.86		- - - 0.84	- - - 1.00		Climate Model: JAN	Ratio: Median IQR Median IQR Median	- - - 1.01	- - - 0.98		D:B - - - - 1.00	- - - 0.79	- - - 1.00	
FEB	Median IQR Median IQR Median IQR	- - - 0.99 1.00	- - - 0.98 1.00	- - - 0.86 2.67	- - - 1.00 1.00	- - - 0.84 2.67	- - - 1.00 1.00		Climate Model: JAN FEB MAR	Ratio: Median IQR Median IQR Median IQR	- - - 1.01 1.41	- - - 0.98 0.94	- - - 0.81 3.38	D:B - - - - 1.00 1.00	- - - 0.79 3.17	- - - 1.00 1.00	
FEB	Median IQR Median IQR Median IQR Median	- - 0.99 1.00 1.51	- - - 0.98 1.00 0.99	- - 0.86 2.67 0.83	- - 1.00 1.00 1.00	- - - 0.84 2.67 0.83	- - - 1.00 1.00 1.00		JAN FEB	Ratio: Median IQR Median IQR Median IQR Median	- - - 1.01 1.41 1.59	- - 0.98 0.94 0.96	- - - 0.81 3.38 0.82	D:B - - - 1.00 1.00 1.00	- - - 0.79 3.17 0.79	- - - 1.00 1.00 1.00	
FEB MAR APR	Median IQR Median IQR Median IQR Median IQR	- - 0.99 1.00 1.51 1.12	- - - 1.00 0.99 0.98	- - 0.86 2.67 0.83 0.83	- - 1.00 1.00 1.00 1.00	- - 0.84 2.67 0.83 0.82	- - 1.00 1.00 1.00 1.00		Climate Model: JAN FEB MAR APR	Ratio: Median IQR Median IQR Median IQR Median IQR	- - 1.01 1.41 1.59 1.13	- - 0.98 0.94 0.96 0.96	- - - 0.81 3.38 0.82 0.83	D:B - - 1.00 1.00 1.00 1.00	- - 0.79 3.17 0.79 0.80	- - 1.00 1.00 1.00 1.00	
FEB	Median IQR Median IQR Median IQR Median IQR Median	- - - - 1.00 1.51 1.12 0.96	- - - 1.00 0.99 0.98 0.98 0.97	- - 0.86 2.67 0.83 0.83 0.83	- - 1.00 1.00 1.00 1.00 1.00	- - 0.84 2.67 0.83 0.82 0.82	- - 1.00 1.00 1.00 1.00 1.00		Climate Model: JAN FEB MAR	Ratio: Median IQR Median IQR Median IQR Median IQR Median	- - 1.01 1.41 1.59 1.13 1.16	- - 0.98 0.94 0.96 0.96 0.98	- - 0.81 3.38 0.82 0.83 0.79	D:B - - 1.00 1.00 1.00 1.00 1.00	- - 0.79 3.17 0.79 0.80 0.77	- - 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY	Median IQR Median IQR Median IQR Median IQR Median IQR	- - - - 1.00 1.51 1.12 0.96 1.57	- - - 0.98 1.00 0.99 0.98 0.97 0.95	- - - 0.86 2.67 0.83 0.83 0.84 0.86	- - 1.00 1.00 1.00 1.00 1.00 1.00	- - 0.84 2.67 0.83 0.82 0.82 0.82	- - 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model: JAN FEB MAR APR MAY	Ratio: Median IQR	- - 1.01 1.41 1.59 1.13 1.16 0.94	- - 0.98 0.94 0.96 0.96 0.98 0.93	- - - 0.81 3.38 0.82 0.83 0.79 0.82	D:8 - - 1.00 1.00 1.00 1.00 1.00 1.00	- - - - - - - - - - - - - - - - - - -	- - 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR	Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - - 0.99 1.00 1.51 1.12 0.96 1.57 1.03	- - - 0.98 1.00 0.99 0.98 0.97 0.95 0.97	- - 0.86 2.67 0.83 0.83 0.84 0.86 0.85	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- - 0.84 2.67 0.83 0.82 0.82 0.82 0.82 0.83	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model: JAN FEB MAR APR	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - 1.01 1.41 1.59 1.13 1.16 0.94 0.96	- - 0.98 0.94 0.96 0.96 0.98 0.93 0.93	- - - 0.81 3.38 0.82 0.83 0.79 0.82 0.86	D:B - - - 1.00 1.00 1.00 1.00 1.00 1.00 1.0	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR IQR IQR IQR IQR	- - 0.99 1.00 1.51 1.12 0.96 1.57 1.03 0.58	- - - 0.98 1.00 0.99 0.99 0.99 0.95 0.97 0.98	- - 0.86 2.67 0.83 0.83 0.83 0.84 0.86 0.85 1.73	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	- - 0.84 2.67 0.83 0.82 0.82 0.82 0.82 0.83 1.70	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1		Climate Model 3 JAN FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - 1.01 1.41 1.59 1.13 1.16 0.94 0.96 1.47	- 0.98 0.94 0.96 0.96 0.98 0.93 0.98 1.09	- - 0.81 3.38 0.82 0.83 0.79 0.82 0.86 1.36	D:8 - - - - 1.00 1.00 1.00 1.00 1.00 1.00 1	- - 0.79 3.17 0.79 0.80 0.77 0.77 0.77 0.84 1.48	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - 0.99 1.00 1.51 1.12 0.96 1.57 1.03 0.58 1.03	- 0.98 1.00 0.99 0.98 0.97 0.95 0.97 0.98 0.97	- - 0.86 2.67 0.83 0.83 0.84 0.86 0.85 1.73 0.84	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	- - - 0.84 2.67 0.83 0.82 0.82 0.82 0.83 1.70 0.82	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1		Climate Model: JAN FEB MAR APR MAY	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - - 1.01 1.41 1.59 1.13 1.16 0.94 0.96 1.47 0.98	- - - 0.98 0.94 0.96 0.96 0.98 0.98 0.98 0.98 1.09 0.98	- - - 0.81 3.38 0.82 0.83 0.79 0.82 0.86 1.36 0.86	D:B - - - 1.00 1.00 1.00 1.00 1.00 1.00 1.0	- - 0.79 3.17 0.79 0.80 0.77 0.84 1.48 0.84	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN JUL	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - 0.99 1.00 1.51 1.12 0.96 1.57 1.03 0.58 1.03 2.04	- 0.98 1.00 0.99 0.98 0.97 0.95 0.97 0.98 0.97 0.77	- - 0.86 2.67 0.83 0.83 0.84 0.86 0.85 1.73 0.84 1.68	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- - - 0.84 2.67 0.83 0.82 0.82 0.82 0.82 0.83 1.70 0.82 1.29	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model : JAN FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - - - - - - - - - - - - - - - - - -	- 0.98 0.94 0.96 0.96 0.98 0.93 0.98 1.09 0.98 1.30	- - - 0.81 3.38 0.82 0.83 0.79 0.82 0.86 1.36 0.86 1.36	D:B - - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - 0.99 1.00 1.51 1.12 0.96 1.57 1.03 0.58 1.03	- 0.98 1.00 0.99 0.98 0.97 0.95 0.97 0.98 0.97	- - 0.86 2.67 0.83 0.83 0.84 0.86 0.85 1.73 0.84 1.68 0.85	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	- - - 0.84 2.67 0.83 0.82 0.82 0.82 0.82 0.83 1.70 0.82 1.29 0.83	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1		Climate Model 3 JAN FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - - 1.01 1.41 1.59 1.13 1.16 0.94 0.96 1.47 0.98	- 0.98 0.94 0.96 0.96 0.98 0.93 0.98 1.09 0.98 1.30 0.99	- - - 0.81 3.38 0.82 0.83 0.79 0.82 0.86 1.36 0.86	D:B - - - 1.00 1.00 1.00 1.00 1.00 1.00 1.0	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	
FEB MAR APR MAY JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - - - - - - - - - - - - - - - - - -	- 0.98 1.00 0.99 0.98 0.97 0.95 0.97 0.98 0.97 0.77 0.78 0.98 1.06	- - - 0.86 2.67 0.83 0.83 0.84 0.86 0.85 1.73 0.84 1.68 0.85 0.92	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model : JAN FEB MAR APR MAY JUN JUL JUL	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - - - - - - - - - - - - - - - - - -	- 0.98 0.94 0.96 0.96 0.93 0.93 0.98 1.09 0.98 1.30 0.98 0.99 0.99	- - - - - - - - - - - - - - - - - - -	D:8 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN JUL	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - - - - - - - - - - - - - - - - - -	- 0.98 1.00 0.99 0.98 0.97 0.95 0.97 0.97 0.97 0.77 0.98	- - 0.86 2.67 0.83 0.83 0.84 0.86 0.85 1.73 0.84 1.68 0.85	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	- - - 0.84 2.67 0.83 0.82 0.82 0.82 0.82 0.83 1.70 0.82 1.29 0.83	- - - - - - - - - - - - - - - - - - -		Climate Model : JAN FEB MAR APR MAY JUN	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - - - - - - - - - - - - - - - - - -	- 0.98 0.94 0.96 0.96 0.98 0.93 0.98 1.09 0.98 1.30 0.99	- - - 0.81 3.38 0.82 0.83 0.79 0.82 0.86 1.36 0.86 1.95 0.81	D:8 - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	
FEB MAR APR MAY JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - - - - - - - - - - - - - - - - - -	- 0.98 1.00 0.99 0.98 0.97 0.95 0.97 0.98 0.97 0.77 0.78 0.98 1.06	- - - 0.86 2.67 0.83 0.83 0.84 0.86 0.85 1.73 0.84 1.68 0.85 0.92	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model : JAN FEB MAR APR MAY JUN JUL JUL	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- - - - - - - - - - - - - - - - - - -	- 0.98 0.94 0.96 0.96 0.93 0.93 0.98 1.09 0.98 1.30 0.98 0.99 0.99	- - - - - - - - - - - - - - - - - - -	D:8 - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model : JAN FEB MAR APR MAY JUN JUL JUL	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - 1.01 1.41 1.59 1.13 1.16 0.94 0.96 1.47 0.98 0.55 0.93 1.18 1.10	- 0.98 0.94 0.96 0.98 0.93 0.98 1.09 0.98 1.30 0.99 0.90 0.90	- - 0.81 3.38 0.82 0.83 0.79 0.82 0.82 0.82 0.86 1.36 0.86 1.95 0.86 1.06 0.80	D:8 - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	
FEB MAR APR MAY JUN JUL AUG SEP	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR		- 0.98 1.00 0.99 0.95 0.97 0.95 0.97 0.97 0.97 0.98 1.06 0.97 0.97	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model : JAN FEB MAR APR JUN JUL JUL SEP	Ratio: Median IQR Median IQ		- 0.98 0.94 0.96 0.98 0.93 0.93 0.93 0.98 1.30 0.98 1.30 0.99 0.99 0.99 0.99	- - - - - - - - - - - - - - - - - - -	D:8 - - - - - 1.00 1.00 1.00 1.00 1.00 1.00	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN JUL AUG SEP	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- - - - - - - - - - - - - - - - - - -	- 0.98 1.00 0.99 0.98 0.97 0.97 0.97 0.97 0.98 1.06 0.97 0.97 0.98	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- - 0.84 2.67 0.82 0.82 0.82 0.82 0.83 1.70 0.82 1.29 0.83 0.97 0.83 1.68 0.87	- - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1		Climate Model : JAN FEB MAR APR JUN JUL JUL SEP	Ratio: Median (QR Median (QR Median (QR Median (QR Median (QR Median (QR Median (QR Median) (QR Median	1.01 1.41 1.59 1.13 1.16 0.96 1.47 0.98 0.55 0.93 1.18 1.10 0.79 0.79	- 0.98 0.94 0.96 0.98 0.98 1.09 0.98 1.09 0.98 0.99 0.90 0.99 0.90 0.98	- - 0.81 3.38 0.82 0.83 0.79 0.82 0.86 1.36 0.86 1.36 0.86 1.95 0.81 1.06 0.80 0.86 0.76	D:8 - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN JUL AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP	Ratio: Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R	- - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1	- - - - - - - - - - - - - - - - - - -	- - - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
FEB MAR APR MAY JUN JUL AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - 1.00	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP	Ratio: Median U2R Median U2R Median U2R Median U2R Median U2R Median U2R Median U2R Median U2R Median U2R Median U2R Median		- 0.98 0.94 0.96 0.98 0.93 1.09 0.98 1.09 0.98 1.30 0.99 0.90 0.99 0.90 0.98 0.93 0.98 0.93 0.98	- - - - - - - - - - - - - - - - - - -	D:B - - - 1.00	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	
FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP OCT	Ratio: Median 10A 10A 10A 10A 10A 10A 10A 10A 10A 10A		- - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	D:8 - - - - - - - - - - - - -		- - - - - - - - - - - - - - - - - - -	
FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP OCT	Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median		- - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	D:8 - - - - - - - - - - - - -		- - - - - - - - - - - - - - - - - - -	

Table D.4Projected median monthly and median annual water use for domestic indoor purposes in the
Okanagan Basin. The results are based on the HadCM3 A2 and CGCM3 B1 climate models.
Baseline results are based on the period 1996 to 2006. Future projections are based on the
period 2011 to 2040. To provide an index of the variability in the projections, the inter-
quartile range (IQR) is provided.

	MESTIC WATER																
Parameter:	Total monthly v	vater use (ML)							Parameter:	Total month	y water use (ML)					
Climate Model									Climate Model:								
	Scenario Group:	BASELINE	Α	В	с	D	E	F	S	cenario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40	Sce	nario Number:	2	29	31	35	37	39	41
JAN	Median	1295	1390	1734	2326	1734	2326	1921	JAN	Median	1295	1390	1734	2326	1734	2326	1921
	IQR	77	0	328	532	328	532	68		IQR	77	0	328	532	328	532	68
FEB	Median	1187	1255	1583	2121	1583	2121	1744	FEB	Median	1187	1255	1583	2121	1583	2121	1744
	IQR	69	34	313	516	313	516	53		IQR	69	34	313	516	313	516	53
MAR	Median	1295	1390	1734	2326	1734	2326	1921	MAR	Median	1295	1390	1734	2326	1734	2326	1921
	IQR	77	0	328	532	328	532	68		IQR	77	0	328	532	328	532	68
APR	Median	1254	1345	1678	2251	1678	2251	1859	APR	Median	1254	1345	1678	2251	1678	2251	1859
	IQR	75	0	318	515	318	515	65		IQR	75	0	318	515	318	515	65
MAY	Median	1295	1390	1734	2326	1734	2326	1921	MAY	Median	1295	1390	1734	2326	1734	2326	1921
	IQR	77	0	328	532	328	532	68		IQR	77	0	328	532	328	532	68
JUN	Median	1254	1345	1678	2251	1678	2251	1859	JUN	Median	1254	1345	1678	2251	1678	2251	1859
	IQR	75	0	318	515	318	515	65		IQR	75	0	318	515	318	515	65
JUL	Median	1295	1390	1734	2326	1734	2326	1921	JUL	Median	1295	1390	1734	2326	1734	2326	1921
	IQR	77	0	328	532	328	532	68		IQR	77	0	328	532	328	532	68
AUG	Median	1295	1390	1734	2326	1734	2326	1921	AUG	Median	1295	1390	1734	2326	1734	2326	1921
	IQR	77	0	328	532	328	532	68		IQR	77	0	328	532	328	532	68
SEP	Median	1254	1345	1678	2251	1678	2251	1859	SEP	Median	1254	1345	1678	2251	1678	2251	1859
	IQR	75	0	318	515	318	515	65		IQR	75	0	318	515	318	515	65
OCT	Median	1295	1390	1734	2326	1734	2326	1921	ОСТ	Median	1295	1390	1734	2326	1734	2326	1921
	IQR	77	0	328	532	328	532	68		IQR	77	0	328	532	328	532	68
NOV	Median	1254	1345	1678	2251	1678	2251	1859	NOV	Median	1254	1345	1678	2251	1678	2251	1859
	IQR	75	0	318	515	318	515	65		IOR	75	0	318	515	318	515	65
DEC	Median	1295	1390	1734	2326	1734	2326	1921	DEC	Median	1295	1390	1734	2326	1734	2326	1921
	IOR	77	0	328	532	328	532	68		IOR	77	0	328	532	328	532	68
ANNUAL	Median	15251	16360	20414	27393	20414	27393	22649	ANNUAL	Median	15251	16360	20414	27393	20414	27393	22649
	IOR	930	34	3883	6284	3883	6284	820		IOR	930	34	3883	6284	3883	6284	820
								0.20									
Parameter:	Patio of total w																
		ater use betw	een indicate	d scenarios					Parameter:	Ratio of tota	l water use b	etween indic	ated scenario	DS			
Climate Model		ater use betw	een indicate	d scenarios					Parameter: Climate Model:		l water use b	etween indic	ated scenario	DS			
Climate Model	HadCM3 A2	A:BASLINE	een indicate	d scenarios C:B	D:B	E:A	F:E			CGCM3 B1	A:BASLINE	etween indic B:A	cated scenario C:B	D:B	E:A	F:E	
JAN	HadCM3 A2				D:B 1.00	E:A 1.67	F:E 0.83			CGCM3 B1					E:A 1.67	F:E 0.83	
	HadCM3 A2 Ratio:	A:BASLINE	B:A	C:B					Climate Model:	CGCM3 B1 Ratio:	A:BASLINE	B:A	C:B	D:B			
	: HadCM3 A2 Ratio: Median	A:BASLINE 1.07	B:A	С:В 1.34	1.00		0.83		Climate Model:	CGCM3 B1 Ratio: Median	A:BASLINE 1.07	B:A	C:B 1.34	D:B 1.00		0.83	
JAN	: HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00	B:A 1.25	C:B 1.34 1.62	1.00 1.00	1.67	0.83 0.13		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR	A:BASLINE 1.07 0.00	B:A 1.25	C:B 1.34 1.62	D:B 1.00 1.00	1.67 - 1.69	0.83	
JAN FEB	HadCM3 A2 Ratio: Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49	B:A 1.25 - 1.26 9.32	C:B 1.34 1.62 1.34 1.65	1.00 1.00 1.00 1.00	1.67 - 1.69 15.36	0.83 0.13 0.82 0.10		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49	B:A 1.25 - 1.26 9.32	C:B 1.34 1.62 1.34 1.65	D:B 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36	0.83 0.13 0.82 0.10	
JAN	: HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06	B:A 1.25 - 1.26	C:B 1.34 1.62 1.34	1.00 1.00 1.00	1.67 - 1.69	0.83 0.13 0.82		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06	B:A 1.25 - 1.26	C:B 1.34 1.62 1.34	D:B 1.00 1.00 1.00	1.67 - 1.69	0.83 0.13 0.82	
JAN FEB	HadCM3 A2 Ratio: Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07	B:A 1.25 - 1.26 9.32	C:B 1.34 1.62 1.34 1.65 1.34	1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36	0.83 0.13 0.82 0.10 0.83		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07	B:A 1.25 - 1.26 9.32	C:B 1.34 1.62 1.34 1.65 1.34	D:B 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36	0.83 0.13 0.82 0.10 0.83	
JAN FEB MAR	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00	B:A 1.25 - 1.26 9.32 1.25 -	C:B 1.34 1.62 1.34 1.65 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00	B:A 1.25 1.26 9.32 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62	D:B 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13	
JAN FEB MAR	HadCM3 A2 Ratio: Median IQR IQR IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07	B:A 1.25 - 1.26 9.32 1.25 -	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07	B:A 1.25 1.26 9.32 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83	
JAN FEB MAR APR	HadCM3 A2 Ratio: Median IQR IQR IQR IQR IQR Median IQR IQR IQR IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 - 1.26 9.32 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 - 1.26 9.32 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13	
JAN FEB MAR APR	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 - 1.26 9.32 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 - 1.26 9.32 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83	
JAN FEB MAR APR MAY	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 -	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 -	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY JUN	HadCM3 A2 Ratio: Median IQR IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - - 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - - 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY	HadCM3 A2 Ratio: Median IQR IQR IQR IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 -	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 -	C:B 1.34 1.62 1.34 1.65 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 1.26 9.32 1.25 	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 1.26 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - - 1.25 - - - - - - - - - - - - -	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY JUN	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - - 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83		Climate Model JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 - 1.26 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - - 1.67 - - 1.67 -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83	
JAN FEB MAR APR MAY JUN JUL AUG	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 1.26 9.32 1.25 1.25 1.25 1.25 1.25 	C:B 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - - - - - 1.67 - - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG	CGCM3 B1 Ratio: Median UQR Median UQR Median UQR Median UQR Median UQR Median UQR Median UQR Median UQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 1.26 9.32 1.25 1.25 1.25 1.25 1.25 	C:B 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - 1.67 - - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR IQR IQR IQR IQR IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 1.07	B:A 1.25 1.26 9.32 1.25 	C:B 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - - 1.67	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 1	B:A 1.25 1.26 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - - 1.25 - - - - - - - - - - - - -	C:B 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - -	0.83 0.13 0.83 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83	
JAN FEB MAR APR MAY JUN JUL AUG SEP	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 0	B:A 1.25 9.32 1.25 1.25 1.25 1.25 1.25 1.25 	C:B 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model : JAN FEB MAR APR MAY JUN JUL AUG SEP	CGCM3 B1 Ratio: Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR	A:BASLINE 1.07 0.00 1.06 0.43 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 0.00	B:A 1.25 - 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 -	C:8 1.34 1.62 1.62 1.34 1.62	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY JUN JUL AUG	: HadCM3 A2 Ratio: Redian IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 1.07	B:A 1.25 1.26 9.32 1.25 1.25 1.25 1.25 1.25 	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - - - - - 1.67 - - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 1.26 9.32 1.25 1.25 1.25 1.25 1.25 	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - 1.67 - - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83	
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.25 9.32 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.2	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model : JAN FEB MAR APR MAY JUN JUL JUL SEP OCT	CGCM3 B1 Ratio: Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 0	B:A 1.25 9.32 1.25 	C:B 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 1.69 15.36 1.67 1.67 1.67 1.67 1.67 1.67 1.67 1.67 	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY JUN JUL AUG SEP	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	ABASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 9.32 1.25 1.25 1.25 1.25 1.25 1.25 	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83		Gimate Model : JAN FEB MAR APR MAY JUN JUL AUG SEP	CGCM3 B1 Ratio: Median (QR Median (QR Median (QR Median (QR Median (QR Median (QR Median (QR Median (QR Median) (QR Median (QR Median) (QR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.25 - 9.32 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 - 1.25 -	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83	
JAN FEB MAR APR JUN JUL AUG SEP OCT NOV	HadCM3 A2 Ratio: Redian IQR IQR Median IQR	A:BASLINE 1.07 0.00 0.00 1.07 0.00 0.00 1.07 0.00 0.00 1.07 0.00 0.00 0.00 1.07 0.00 0	B:A 1.25 	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP OCT	CGCM3 B1 Ratic: Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 1.07 0.00 0	B:A 1.25 9.32 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.2	CB 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	: HadCM3 A2 Ratio: Nedian IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 1.07 0.00 1.07 1.07 0.00 1.07 1.07 0.00 1.07 1	B:A 1.25 9.32 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.2	C:8 1.34 1.62 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 - 1.69 15.36 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - 1.67 - - 1.67 - - - - - - - - - - - - -	0.83 0.13 0.82 0.10 0.83 0.13 0.13 0.13 0.13 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83		Climate Model : JAN FEB MAR APR MAY JUN JUL JUL SEP OCT	CGCM3 B1 Ratic: Median ICR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 1.07 0.00 1.07 1	B:A 1.25 9.32 1.25 	CB 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 1.69 15.36 1.67 1.67 1.67 1.67 1.67 1.67 1.67 1.67 	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	
JAN FEB MAR APR JUN JUL AUG SEP OCT NOV	HadCM3 A2 Ratio: Redian IQR IQR Median IQR	A:BASLINE 1.07 0.00 0.00 1.07 0.00 0.00 1.07 0.00 0.00 1.07 0.00 0.00 0.00 1.07 0.00 0	B:A 1.25 	C:B 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.67 	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP OCT	CGCM3 B1 Ratic: Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 1.07 0.00 0	B:A 1.25 9.32 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.2	CB 1.34 1.62 1.34 1.65 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34 1.62 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.67 	0.83 0.13 0.82 0.10 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13 0.83 0.13	

Table D.5Projected median monthly and median annual water use for domestic outdoor purposes in
the Okanagan Basin. The results are based on the HadCM3 A2 and CGCM3 B1 climate
models. Baseline results are based on the period 1996 to 2006. Future projections are based
on the period 2011 to 2040. To provide an index of the variability in the projections, the
inter-quartile range (IQR) is provided.

	DMESTIC WATE	RUSE															
Parameter:	Total monthly v	vater use (ML))						Parameter:	Total monthl	y water use	(ML)					
Climate Model:	HadCM3 A2								Climate Model:	CGCM3 B1							
	Scenario Group:	BASELINE	Α	В	с	D	E	F	Sc	enario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40	Sce	nario Number:	2	29	31	35	37	39	41
JAN	Median	0	0	0	0	0	0	0	JAN	Median	0	0	0	0	0	0	0
	IQR	0	0	0	0	0	0	0		IQR	0	523	0	0	0	0	0
FEB	Median	0	0	0	0	0	0	0	FEB	Median	0	0	0	0	0	0	0
	IQR	0	0	0	0	0	0	0		IQR	0	580	0	0	0	0	0
MAR	Median	23	23	36	470	36	470	733	MAR	Median	23	22	34	452	34	452	685
	IQR	1	2	14	338	14	338	629		IQR	1	539	14	362	13	362	659
APR	Median	714	1,511	1,548	2,675	1,542	2,668	3,129	APR	Median	937	2,009	2,046	3,261	2,040	3,252	3,555
	IQR	2,139	2,330	2,393	3,457	2,384	3,448	3,356		IQR	894	700	884	2,074	876	2,066	2,473
MAY	Median	7,217	6,872	7,038	12,783	6,988	12,748	12,691	MAY	Median	5,760	7,018	7,250	13,474	7,217	13,433	13,350
	IQR	1,321	1,635	1,682	5,132	1,672	5,110	5,073		IQR	1,671	5,231	1,509	5,107	1,490	5,080	5,026
JUN	Median	8,121	8,617	8,875	17,137	8,812	17,089	17,010	JUN	Median	8,317	7,837	7,971	14,700	7,925	14,661	14,586
	IOR	1.231	666	677	5.413	686	5.383	5.313		IOR	937	7.513	1.187	5.945	1,203	5.908	5.817
JUL	Median	9,784	10,141	10,511	20,607	10,427	20,550	20,459	JUL	Median	9,738	9,461	9,663	18,896	9,610	18,845	18,756
	IQR	573	1,233	1,083	6,332	1,107	6,297	6,193		IQR	1,128	9,061	744	7,355	713	7,312	7,201
AUG	Median	8,257	8,943	9,051	17,094	9,033	17,046	16,964	AUG	Median	8,958	8,236	8,480	16,588	8,432	16,546	16,481
	IOR	1,683	1,315	1.507	5.626	1,469	5,596	5,517	,	IOR	1,065	7,879	1.366	7,813	1.332	7,778	7.694
SEP	Median	5,155	5,563	5,725	10,830	5,700	10,797	10,739	SEP	Median	4,606	5,120	5,280	9,289	5,252	9,263	9,215
30	IQR	494	623	742	3,851	711	3,831	3,778	561	IQR	1,127	4,133	808	3,914	782	3,892	3,826
OCT	Median	1,395	1,666	1,688	2,560	1,677	2,556	2,548	ОСТ	Median	914	2,008	2,058	2,886	2,049	2,877	2,859
001	IQR	1,192	1,287	1,298	2,260	1,294	2,254	2,249	001	IQR	510	757	806	1,646	807	1,640	1,618
NOV	Median	2	44	45	67	45	67	66	NOV	Median	0	19	19	24	19	24	24
NOV	IQR	4	155	157	190	156	190	189	NOV	IQR	9	579	142	234	140	233	232
DEC	Median	0	0	0	0	0	0	0	DEC	Median	0	0	0	0	0	0	0
DEC	IOR	0	0	0	0	0	0	0	DEC	IOR	0	559	0	0	0	0	0
		41,035	43,479	44,894	86,755	44,580	86,525				39,222			78,866	41,473	78,656	78,733
ANNUAL	Median IOR	1,804	3,435	3,648	30,680	3,692	30,495	86,611 30,719	ANNUAL	Median IOR	4,609	40,464 32,409	41,777 2,415	30.652	2.354	30,481	30,692
Parameter:																	
	Ratio of total w	ater use betw	een indicate	d scenarios					Parameter:		l water use b	etween indic	ated scenario	os			
Parameter: Climate Model:	HadCM3 A2								Parameter: Climate Model:	CGCM3 B1							
Climate Model:	HadCM3 A2 Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E		Climate Model:	CGCM3 B1 Ratio:		B:A	ated scenaric C:B	D:B	E:A	F:E	
	: HadCM3 A2 Ratio: Median				D:B -	E:A -	F:E -			CGCM3 B1 Ratio: Median					E:A -	F:E -	
Climate Model: JAN	: HadCM3 A2 Ratio: Median IQR	A:BASLINE -	B:A	C:B	1	1			Climate Model: JAN	CGCM3 B1 Ratio: Median IQR	A:BASLINE	B:A	C:B	D:B	8	-	
Climate Model:	: HadCM3 A2 Ratio: Median	A:BASLINE	B:A	C:B	1	1			Climate Model:	CGCM3 B1 Ratio: Median	A:BASLINE	B:A	C:B	D:B	8	-	
Climate Model: JAN FEB	: HadCM3 A2 Ratio: Median IQR	A:BASLINE - - -	B:A - - -	C:B - - -	-	-	-		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR	A:BASLINE - - - -	B:A - - -	C:B - - -	D:B - - -	-	-	
Climate Model: JAN	: HadCM3 A2 Ratio: Median IQR Median	A:BASLINE -	B:A -	C:B -	-	-	-		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR Median	A:BASLINE - -	B:A -	C:B -	D:B -	-	-	
Climate Model: JAN FEB MAR	HadCM3 A2 Ratio: Median IQR Median IQR	A:BASLINE 1.00 2.63	B:A - - - 1.57 9.00	C:B - - - 13.14 23.84	- - - 1.00 0.99	- - - 20.60 214.43	- - - 1.56 1.86		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR	A:BASLINE 0.98 628.26	B:A - - - 1.52 0.03	C:B - - - 13.39 26.80	D:B - - -	- - - 20.33 0.67	- - - 1.52 1.82	
Climate Model: JAN FEB	HadCM3 A2 Ratio: Median IQR Median IQR Median	A:BASLINE 1.00	B:A - - - - 1.57	C:B - - - - 13.14	- - - 1.00				Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR Median	A:BASLINE - - - - 0.98	B:A - - - - 1.52	C:B - - - 13.39	D:B - - - - 0.99			
Climate Model: JAN FEB MAR	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR	A:BASLINE 1.00 2.63	B:A - - - 1.57 9.00	C:B - - - 13.14 23.84	- - - 1.00 0.99	- - - 20.60 214.43	- - - 1.56 1.86		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR	A:BASLINE 0.98 628.26	B:A - - - 1.52 0.03	C:B - - - 13.39 26.80	D:B - - - 0.99 0.99	- - - 20.33 0.67	- - - 1.52 1.82	
JAN FEB MAR	HadCM3 A2 Ratio: Median IQR IQR IQR Median IQR Median	A:BASLINE 1.00 2.63 2.12	B:A - - 1.57 9.00 1.02	C:B - - 13.14 23.84 1.73	- - 1.00 0.99 1.00	- - 20.60 214.43 1.77	- - 1.56 1.86 1.17		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median	A:BASLINE - - 0.98 628.26 2.14	B:A - - 1.52 0.03 1.02	C:B - - - 13.39 26.80 1.59	D:8 - - - 0.99 0.99 1.00	- - 20.33 0.67 1.62	- - 1.52 1.82 1.09	
Climate Model: JAN FEB MAR APR	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.00 2.63 2.12 1.09	B:A - - 1.57 9.00 1.02 1.03	C:B - - 13.14 23.84 1.73 1.44	- - - 0.99 1.00 1.00	- 20.60 214.43 1.77 1.48	- - 1.56 1.86 1.17 0.97		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE 0.98 628.26 2.14 0.78	B:A - - 1.52 0.03 1.02 1.26	C:B - - 13.39 26.80 1.59 2.35	D:B - - 0.99 0.99 1.00 0.99	- - 20.33 0.67 1.62 2.95	- - 1.52 1.82 1.09 1.20	
Climate Model: JAN FEB MAR APR	HadCM3 A2 Ratio: Nedian IQR Median IQR Median IQR Median IQR Median	A:BASLINE - - - 1.00 2.63 2.12 1.09 0.95	B:A - - 1.57 9.00 1.02 1.03 1.02	C:B - - - 13.14 23.84 1.73 1.44 1.82	- - 1.00 0.99 1.00 1.00 0.99	- 20.60 214.43 1.77 1.48 1.86	- - 1.56 1.86 1.17 0.97 1.00		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 0.98 628.26 2.14 0.78 1.22	B:A - - 1.52 0.03 1.02 1.26 1.03	C:B - - - 13.39 26.80 1.59 2.35 1.86	D:B - - 0.99 0.99 1.00 0.99 1.00	- - 20.33 0.67 1.62 2.95 1.91	- - 1.52 1.82 1.09 1.20 0.99	
Glimate Model: JAN FEB MAR APR MAY	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.00 2.63 2.12 1.09 0.95 1.24	B:A - - 1.57 9.00 1.02 1.03 1.02 1.03	C:8 - - - - - - - - - - - - - - - - - - -	- - 1.00 0.99 1.00 1.00 0.99 0.99	- - 20.60 214.43 1.77 1.48 1.86 3.13	- - 1.56 1.86 1.17 0.97 1.00 0.99		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 0.98 628.26 2.14 0.78 1.22 3.13	B:A - - 1.52 0.03 1.02 1.26 1.03 0.29	C:B - - - 13.39 26.80 1.59 2.35 1.86 3.39	D:8 - - 0.99 0.99 0.99 1.00 0.99 1.00	- - 20.33 0.67 1.62 2.95 1.91 0.97	- - 1.52 1.82 1.09 1.20 0.99	
Glimate Model: JAN FEB MAR APR MAY	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE - - - 1.00 2.63 2.12 1.09 0.95 1.24 1.06	B:A - - 1.57 9.00 1.02 1.03 1.02 1.03 1.03	C:B - - 13.14 23.84 1.73 1.44 1.82 3.05 1.93	- - - 0.99 1.00 1.00 0.99 0.99 0.99	- - 20.60 214.43 1.77 1.48 1.86 3.13 1.98	- - 1.56 1.86 1.17 0.97 1.00 0.99 1.00		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE - - - 0.98 628.26 2.14 0.78 1.22 3.13 0.94	B:A - - 1.52 0.03 1.02 1.26 1.03 0.29 1.02	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.00 0.99 0.99	- - 20.33 0.67 1.62 2.95 1.91 0.97 1.87	- - 1.52 1.82 1.09 1.20 0.99 0.99	
Imate Model: JAN FEB MAR APR MAY JUN	HadCM3 A2 Ratio: Median IQR	A:BASLINE - - 1.00 2.63 2.12 1.09 0.95 1.24 1.06 0.54	B:A - - - - - - - - - - - - - - - - - - -	C:B - - 13.14 23.84 1.73 1.44 1.82 3.05 1.93 8.00	- - - 1.00 0.99 1.00 1.00 0.99 0.99 0.99 1.01	- 20.60 214.43 1.77 1.48 3.13 1.98 8.09	- - - 1.56 1.86 1.17 0.97 1.00 0.99 1.00 0.99		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - - 0.98 628.26 2.14 0.78 1.22 3.13 0.94 8.02	B:A - - - 1.52 0.03 1.02 1.26 1.03 0.29 1.02 0.16	C:B - - - - - - - - - - - - - - - - - - -	D:B - - 0.99 0.99 1.00 0.99 1.00 0.99 0.99 1.01	- - 20.33 0.67 1.62 2.95 1.91 0.97 1.87 0.79	- - 1.52 1.82 1.09 1.20 0.99 0.99 0.99	
Imate Model: JAN FEB MAR APR MAY JUN	HadCM3 A2 Ratio: Ratio: Median IQR Median	A:BASLINE - - - 1.00 2.63 2.63 2.63 2.63 2.63 2.63 2.12 1.09 0.95 1.24 1.06 0.54 1.04	B:A - - 1.57 9.00 1.02 1.03 1.02 1.03 1.02 1.03	C:B - - - - - - - - - - - - - - - - - - -	- - - - 1.00 0.99 1.00 1.00 0.99 0.99 0.99 1.01 0.99	- 20.60 214.43 1.77 1.48 1.86 3.13 1.98 8.09 2.03	- - - 1.56 1.86 1.17 0.97 1.00 0.99 1.00 0.99 1.00		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE - - 0.98 628.26 2.14 0.78 1.22 3.13 0.94 8.02 0.97	B:A - - - - - - - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.00 0.99 0.99 1.01 0.99	- 20.33 0.67 1.62 2.95 1.91 0.97 1.87 0.79 1.99	- - 1.52 1.82 1.09 1.20 0.99 0.99 0.99 0.99	
JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR	A:BASLINE	B:A - - - - - - - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 1.86 3.13 1.98 8.09 2.03 5.11	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - - - - - - - - - - - - - - - - - - -	C:8 - - - - 26.80 1.59 2.35 1.86 3.39 1.84 5.01 1.96 9.89	D:B - - - 0.99 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.01 0.99 0.99	- 20.33 0.67 1.62 2.95 1.91 0.97 1.87 0.97 1.87 0.79 1.99 0.81	- - - 1.52 1.82 1.09 1.20 0.99 0.99 0.99 0.99 0.98 1.00 0.98	
JAN JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR Median Median IQR Median IQR Median Median IQR Median Median Median Median Median Median	A:BASLINE	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 3.13 1.98 8.09 2.03 5.11 1.91	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - - - - - - - - - - - -	- 20.33 0.67 1.62 2.95 1.91 0.97 1.87 0.79 1.99 0.81 2.01	- - 1.52 1.82 1.09 1.20 0.99 0.99 0.99 0.99 0.98 1.00 0.98 1.00	
Climate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	- - 1.00 0.99 1.00 1.00 0.99 0.99 0.99 1.01 0.99 1.02 1.00 0.99	- - - 20.60 214.43 1.77 1.48 1.86 3.13 1.98 8.09 2.03 5.11 1.91 4.25	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR JUN JUL AUG	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - 0.98 628.26 2.14 0.78 1.22 3.13 0.94 8.02 0.97 8.04 0.92 0.92 7.40	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.00 0.99 1.01 0.99 0.99	- - - 20.33 0.67 1.62 2.95 1.91 0.97 1.87 0.79 1.87 0.79 0.81 0.99	- - - 1.52 1.82 1.09 1.20 0.99 0.99 0.99 0.99 0.98 1.00 0.98 1.00 0.99	
Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE	B:A - - - 1.57 9.00 1.02 1.03 1.01 1.03 1.02 1.03 1.01 1.03 1.02 1.03 1.01 1.03 1.01 1.03 1.01 1.03 1.01 1.03 1.01 1.03 1.01 1.03 1.01 1.15 1.03 1.03 1.03 1.03 1.01 1.15 1.03 1.03 1.03 1.03 1.03 1.03 1.04 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.04 1.03 1.03 1.03 1.03 1.03 1.03 1.04 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.15 1.15 1.19	C:8 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 1.86 3.13 1.98 8.09 2.03 5.11 1.91 4.25 1.94 6.15	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR JUN JUL AUG SEP	CGCM3 B1 Ratio: Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR	A:BASLINE - - 0.98 628.26 2.14 0.78 0.78 0.78 0.78 0.94 8.02 0.94 8.02 0.94 8.02 0.94 8.02 0.94 8.02 0.94 8.02 0.94 8.02 0.94 8.02 0.92 7.40 1.11 3.67	B:A 	C:8 - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.01 0.99 1.01 0.99 0.96 0.99 0.96 0.99 0.98 0.99	- - - - - - - - - - - - - - - - - - -	- - - 1.52 1.09 1.20 0.99 0.99 0.98 1.00 0.98 1.00 0.99 0.98	
Climate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG	HadCM3 A2 Ratio: Median IQR	A:BASLINE - - - 1.00 2.63 2.12 1.09 0.95 1.24 1.06 0.54 1.24 1.06 0.54 1.24 1.06 0.58 1.24 1.08 1.28 1.28 1.28 1.28 1.28 1.29 1.24 1.08 1.28 1.28 1.28 1.28 1.28 1.29 1.24 1.08 1.24 1.08 1.29 1.28 1.29 1.28 1.29	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - -	- - 1.00 0.99 1.00 1.00 1.00 0.99 1.01 0.99 1.01 0.99 1.00 0.97 1.00 0.97	- 20.60 214.43 1.77 1.48 1.86 3.13 1.98 8.09 2.03 5.11 1.91 4.25 1.94 6.15 1.53	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR JUN JUL AUG	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.00 0.99 1.01 0.99 0.99	- - - - - - - - - - - - - - - - - - -	- - - 1.52 1.69 1.20 0.99 0.99 0.99 0.98 1.00 0.98 1.00 0.98 1.00 0.99 0.99 0.99	
dimate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	HadCM3 A2 Ratio: Median IQR Median IQR	A:BASLINE - - - - - - - - - - - - -	B:A - - - 1.57 9.00 1.02 1.03 1.03 1.03 1.03 1.04 1.01 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.02 1.04 1.03 1.02 1.04 1.05 1.02 1.03 1.03 1.04 1.03 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01	C:B - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 3.13 1.98 8.09 2.03 5.11 1.91 4.25 1.94 6.15 1.53 1.75	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE - - 0.98 628.26 2.14 0.78 1.22 3.23 0.94 8.02 0.97 8.04 0.92 7.40 0.92 7.40 0.92 7.40 1.11 3.67 2.20 1.48	B:A - - 1.52 0.03 1.02 1.26 1.03 0.29 1.02 0.16 1.02 0.08 1.03 0.03 0.17 1.03 0.20 1.03 1.07	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.00 0.99 0.99 0.99	- - - - - - - - - - - - - - - - - - -	- - - 1.52 1.82 1.09 1.20 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0	
Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE - - - - - - - - - - - - -	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 3.13 1.98 8.09 2.03 5.11 1.91 4.25 1.91 4.25 1.53 1.75	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR JUN JUL AUG SEP	CGCM3 B1 Ratio: Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.00 0.99 0.99 0.99	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - -	
Jimate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP OCT NOV	HadCM3 A2 Ratio: Median IQR	A:BASLINE	B:A - - - 1.57 9.00 1.02 1.03 1.03 1.03 1.03 1.03 1.03 1.04 0.88 1.01 1.15 1.03 1.15 1.03 1.04 0.88 1.01 1.01 1.01	C:B - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 3.13 1.98 8.09 2.03 5.11 1.91 4.25 1.94 6.15 1.53 1.75 1.53 1.75 1.23	- - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	CGCM3 B1 Ratio: Median 1028 Me	A:BASLINE - - - - - - - - - - - - -	B:A - - - 1.52 0.03 1.02 1.26 1.02 0.16 1.02 0.08 1.02 0.08 1.02 0.08 1.02 0.08 1.02 0.09 1.02 0.08 1.03 1.03 1.00 1.03 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.03 1.00 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.00 1.00 1.03 1.00	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	
dimate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE - - - - - - - - - - - - -	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 3.13 1.98 8.09 2.03 5.11 1.91 4.25 1.91 4.25 1.53 1.75	- - - - - - - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	CGCM3 B1 Ratio: Median U2R Median Median Median Median U2R Median Med	A:BASLINE - - - - - - - - - - - - - - - - - - -	B:A - - - - - - - - - - - - -	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - 0.99 0.99 1.00 0.99 1.00 0.99 0.99 0.99	- - - - 20.33 0.67 1.62 2.95 1.91 0.97 1.87 0.79 1.99 0.81 2.01 0.99 1.81 0.94 1.43 2.17 1.24	- - - - - - - - - - - - - -	
dimate Model: JAN FEB MAR APR MAY JUN JUL JUL AUG SEP OCT OCT	HadCM3 A2 Ratio: Median IQR	A:BASLINE	B:A - - - 1.57 9.00 1.02 1.03 1.03 1.03 1.03 1.03 1.03 1.04 0.88 1.01 1.15 1.03 1.15 1.03 1.04 0.88 1.01 1.01 1.01	C:B - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- 20.60 214.43 1.77 1.48 3.13 1.98 8.09 2.03 5.11 1.91 4.25 1.94 6.15 1.53 1.75 1.53 1.75 1.23	- - - - - - - - - - - - - -		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	CGCM3 B1 Ratio: Median 1028 Me	A:BASLINE - - - - - - - - - - - - -	B:A - - - 1.52 0.03 1.02 1.26 1.02 0.16 1.02 0.08 1.02 0.08 1.02 0.08 1.02 0.08 1.02 0.09 1.02 0.08 1.03 1.03 1.00 1.03 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.03 1.00 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.03 1.00 1.00 1.00 1.00 1.03 1.00	C:B - - - - - - - - - - - - - - - - - - -	D:8 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	

Table D.6Projected median monthly and median annual water use for institutional, commercial, and
industrial purposes in the Okanagan Basin. The results are based on the HadCM3 A2 and
CGCM3 B1 climate models. Baseline results are based on the period 1996 to 2006. Future
projections are based on the period 2011 to 2040. To provide an index of the variability in
the projections, the inter-quartile range (IQR) is provided.

	COMMERCIAL	& INSTITUT		ATER LISE													
Parameter:	Total monthly v								Parameter:	Total month	y water use (MI)					
Climate Model:		water use (ivit	1						Climate Model:		y water use (
crimate woder.	Scenario Group:	BASELINE	A	В	с	D	E	F		cocivis B1	BASELINE	А	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40		nario Number:	2	29	31	35	37	39	41
JAN	Median	1,303	1,398	1,737	2,330	1,737	2,483	1,923	JAN	Median	1,303	1,398	1,737	2,330	1,737	2,348	1,923
	IQR	78	0	322	524	322	563	61		IQR	78	0	322	524	322	556	61
FEB	Median	1,194	1,263	1,586	2,124	1,586	2,274	1,746	FEB	Median	1,194	1,263	1,586	2,124	1,586	2,140	1,746
	IQR	69	34	307	508	307	549	48		IQR	69	34	307	508	307	539	48
MAR	Median	1,303	1,398	1,737	2,330	1,737	2,483	1,923	MAR	Median	1,303	1,398	1,737	2,330	1,737	2,348	1,923
	IQR	78	0	322	524	322	563	61		IQR	78	0	322	524	322	556	61
APR	Median	1,261	1,353	1,681	2,255	1,681	2,413	1,861	APR	Median	1,261	1,353	1,681	2,255	1,681	2,272	1,861
	IQR	75	0	312	507	312	546	59		IQR	75	0	312	507	312	538	59
MAY	Median	1,303	1,398	1,737	2,330	1,737	2,471	1,923	MAY	Median	1,303	1,398	1,737	2,330	1,737	2,348	1,923
	IQR	78	0	322	524	322	563	61		IQR	78	0	322	524	322	556	61
JUN	Median	1,261	1,353	1,681	2,255	1,681	2,413	1,861	JUN	Median	1,261	1,353	1,681	2,255	1,681	2,272	1,861
	IQR	75	0	312	507	312	546	59		IQR	75	0	312	507	312	538	59
JUL	Median	1,303	1,398	1,737	2,330	1,737	2,480	1,923	JUL	Median	1,303	1,398	1,737	2,330	1,737	2,348	1,923
	IQR	78	0	322	524	322	561	61		IQR	78	0	322	524	322	556	61
AUG	Median	1,303	1,398	1,737	2,330	1,737	2,487	1,923	AUG	Median	1,303	1,398	1,737	2,330	1,737	2,348	1,923
	IQR	78	0	322	524	322	563	61		IQR	78	0	322	524	322	556	61
SEP	Median	1,261	1,353	1,681	2,255	1,681	2,406	1,861	SEP	Median	1,261	1,353	1,681	2,255	1,681	2,272	1,861
	IQR	75	0	312	507	312	544	59		IQR	75	0	312	507	312	538	59
OCT	Median	1,303	1,398	1,737	2,330	1,737	2,487	1,923	OCT	Median	1,303	1,398	1,737	2,330	1,737	2,348	1,923
	IQR	78	0	322	524	322	563	61		IQR	78	0	322	524	322	556	61
NOV	Median	1,261	1,353	1,681	2,255	1,681	2,413	1,861	NOV	Median	1,261	1,353	1,681	2,255	1,681	2,272	1,861
	IQR	75	0	312	507	312	546	59		IQR	75	0	312	507	312	538	59
DEC	Median	1,303	1,398	1,737	2,330	1,737	2,480	1,923	DEC	Median	1,303	1,398	1,737	2,330	1,737	2,348	1,923
	IQR	78	0	322	524	322	561	61		IQR	78	0	322	524	322	556	61
ANNUAL	Median IOR	15,343 935	16,458 34	20,449 3,809	27,432 6,187	20,449 3,809	29,272 6,650	22,671 735	ANNUAL	Median IOR	15,343 935	16,458 34	20,449 3,809	27,432 6,187	20,449 3,809	27,645 6,564	22,671 735
	IQK	930	34	3,809	0,187	3,809	0,050	/35		IQK	935	34	3,809	0,187	3,809	0,504	/30
. .																	
Parameter:	Ratio of total w	ater use betw	een indicate	d scenarios					Parameter:	Ratio of tota	l water use b	etween indic	ated scenario	5			
Parameter: Climate Model:	Ratio of total w HadCM3 A2	ater use betw	veen indicate	d scenarios					Parameter: Climate Model:		l water use b	etween indic	cated scenario	os			
Parameter: Climate Model:	HadCM3 A2		een indicate B:A	d scenarios C:B	D:B	E:A	F:E		Parameter: Climate Model:	CGCM3 B1		etween indio B:A	cated scenario	D:B	E:A	F:E	
	: HadCM3 A2 Ratio:	A:BASLINE			D:B 1.00	E:A 1.78	F:E 0.77			CGCM3 B1	I water use b A:BASLINE 1.07					F:E 0.82	
Climate Model:	HadCM3 A2	A:BASLINE	B:A	C:B					Climate Model:	CGCM3 B1 Ratio:	A:BASLINE	B:A	C:B	D:B	E:A 1.68		
Climate Model:	: HadCM3 A2 Ratio: Median	A:BASLINE 1.07	B:A	С:В 1.34	1.00		0.77		Climate Model:	CGCM3 B1 Ratio: Median	A:BASLINE 1.07	B:A	C:B 1.34	D:B 1.00		0.82	
Climate Model: JAN	: HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00	B:A 1.24	C:B 1.34 1.63	1.00 1.00	1.78	0.77		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR	A:BASLINE 1.07 0.00	B:A 1.24	C:B 1.34 1.63	D:B 1.00 1.00	1.68	0.82	
Climate Model: JAN	: HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06	B:A 1.24 - 1.26	C:B 1.34 1.63 1.34	1.00 1.00 1.00	1.78 - 1.80	0.77 0.11 0.77		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06	B:A 1.24 - 1.26	C:B 1.34 1.63 1.34	D:B 1.00 1.00 1.00	1.68 - 1.69	0.82 0.11 0.82	
Climate Model: JAN FEB	: HadCM3 A2 Ratio: Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49	B:A 1.24 - 1.26 9.08	C:B 1.34 1.63 1.34 1.65	1.00 1.00 1.00 1.00	1.78 - 1.80 16.24	0.77 0.11 0.77 0.09		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49	B:A 1.24 - 1.26 9.08	C:B 1.34 1.63 1.34 1.65	D:B 1.00 1.00 1.00 1.00	1.68 - 1.69 15.95	0.82 0.11 0.82 0.09	
Climate Model: JAN FEB	: HadCM3 A2 Ratio: Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07	B:A 1.24 - 1.26 9.08	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24	0.77 0.11 0.77 0.09 0.77		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07	B:A 1.24 - 1.26 9.08	C:B 1.34 1.63 1.34 1.65 1.34	D:B 1.00 1.00 1.00 1.00 1.00	1.68 - 1.69 15.95	0.82 0.11 0.82 0.09 0.82	
Climate Model: JAN FEB MAR APR	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 - 1.26 9.08 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 -	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 - 1.26 9.08 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63	D:B 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 1.69 15.95 1.68 - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11	
Climate Model: JAN FEB MAR	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 - 1.26 9.08 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 -	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 - 1.26 9.08 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34	D:B 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 1.69 15.95 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82	
Climate Model 3 JAN FEB MAR APR MAY	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.77	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 1.69 15.95 1.68 - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11	
Climate Model: JAN FEB MAR APR	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 - 1.26 9.08 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.65 1.34 1.63 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 -	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.77		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 - 1.26 9.08 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 1.69 15.95 1.68 - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82	
Climate Model : JAN FEB MAR APR MAY JUN	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 - 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.77 - 1.77	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 1.69 15.95 1.68 - - 1.68 - - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11	
Climate Model 3 JAN FEB MAR APR MAY	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.77	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.77 0.11 0.77		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34	D:B 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.68 - 1.69 15.95 1.68 - 1.68 - 1.68	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82	
Climate Model : JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 1.26 9.08 1.24 1.24 1.24 1.24 	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.77 - 1.78 - 1.77 - 1.77 -	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.77 0.11 0.78 0.11		Climate Model: JAN FEB MAR APR JUN JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 1.26 9.08 1.24 - 1.24 - 1.24 - 1.24 - 1.24 - 1.24 -	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 1.69 15.95 1.68 - 1.68 - 1.68 - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11	
Climate Model : JAN FEB MAR APR MAY JUN	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.06 1.06 1.06 1.07 1.06 1.07 1.06 1.07 1.06 1.07 1.06 1.07 1.06 1.07 1	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 - 1.24 - 1.24 -	C8 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.77 - 1.77	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.07 1	B:A 1.24 - 1.26 9.08 1.24 - 1.24 - 1.24 - 1.24 - 1.24	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34	D:8 1.00	1.68 - 1.69 15.95 1.68 - - 1.68 - - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82	
Climate Model JAN FEB MAR APR MAY JUN JUN JUL AUG	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 1.07 0.00 0	B:A 1.24 9.08 1.24 - 1.24 - 1.24 - 1.24 - 1.24 - 1.24 -	CB 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.78 - 1.78 - 1.78 - 1.78 - 1.78 - 1.78	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.78 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR JUN JUL JUL	CGCM3 B1 Ratio: Median UQR Median UQR Median UQR Median UQR Median UQR Median UQR Median UQR Median UQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 9.08 1.24 	C:8 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 16.99 15.95 1.68 - 1.68 - 1.68 - 1.68 - 1.68 - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11	
Climate Model : JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR IQR IQR IQR IQR IQR IQR IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 1.26 9.08 1.24 1.24 1.24 1.24 	CB 1.34 1.63 1.44 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.77 - 1.78 - 1.77 - 1.77 -	0.77 0.11 0.09 0.77 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.78 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0		Climate Model: JAN FEB MAR APR JUN JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 1.26 9.08 1.24 - 1.24 - 1.24 - 1.24 - 1.24 - 1.24 -	C:8 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 1.69 15.95 1.68 - 1.68 - 1.68 - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82	
Climate Model JAN FEB MAR APR MAY JUN JUL AUG SEP	HadCM3 A2 Ratio: Ratio: Ratio: Median IQR IQR IQR Median IQR IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 0	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 	CB 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR JUN JUN JUN JUL SEP	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 1.07 0.00 1.07 1	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 1.24	C:B 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 1.69 15.95 1.68 1.68 1.68 1.68 1.68 	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11	
Climate Model JAN FEB MAR APR MAY JUN JUN JUL AUG	HadCM3 A2 Ratio: Median IQR Median	A:BASUNE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 9.08 1.24 - 1.24 - 1.24 - 1.24 - 1.24 - 1.24 -	CB 1.34 1.63 1.44 1.65 1.34 1.65 1.34 1.63 1.34 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.54	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78 - 1.78 - 1.78 - 1.78 - 1.78 - 1.78 - 1.78	0.77 0.11 0.77 0.09 0.77 0.11 0.78 0.11 0.78 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77		Climate Model: JAN FEB MAR APR JUN JUL JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 1.07	B:A 1.24 9.08 1.24 	C:8 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 - 16.99 15.95 1.68 - 1.68 - 1.68 - 1.68 - 1.68 - 1.68 -	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82	
Climate Model: JAN FEB MAR APR MAY JUN JUN JUN JUL AUG SEP OCT	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 0	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 	CB 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.78 0.11 0.77 0.11 0.77 0.11		Climate Model: JAN FEB APR APR JUN JUN AUG SEP OCT	CGCM3 B1 Ratio: Median 108 Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 0.00	B:A 1.24 9.08 9.08 1.24 1.24 1.24 1.24 1.24 1.24 	C8 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11	
Climate Model JAN FEB MAR APR MAY JUN JUL AUG SEP	HadCM3 A2 Ratio: Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 0	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 	CB 1.34 1.63 1.65 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 - 1.80 16.24 1.78 - 1.78	0.77 0.11 0.09 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR JUN JUN JUN JUL SEP	CGCNR B1 Ratio: Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median	A:8ASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 1.07 0.00 1.07	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 1.24	C:8 1.34 1.63 1.34 1.65 1.34 1.63 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 1.69 15.95 1.68 1.68 1.68 1.68 1.68 	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82	
Climate Model JAN FEB MAR APR MAY JUN JUN JUL AUG SEP OCT NOV	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 1.07 0.00 0	B:A 1.24 	CB 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 1.80 16.24 1.78 1.78 1.78 1.77 1.77 1.77 1.77 1.78 1.77 1.78 1.77 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.78 1.77 1.77 1.78 1.77 1.78 1.77 1.78 1.77 1.78 1.78 1.77 1.78 1.78 1.78 1.77 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.77 0.11 0.77 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR JUN JUN JUN SEP OCT	CGCM3 B1 Ratio: Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028	A:BASLINE 1.07 0.00 1.07 0.00 1.06 0.01 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 1.24	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.63 1.34 1.63 1.65	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 1.69 15.95 1.68 1.68 1.68 1.68 1.68 1.68 1.68 1.68	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11	
Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	: HadCM3 A2 Ratio: Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 0.00 0.07 0.00 0.07 0.00 0.07 0.00 0.07 0.00 0.07 0.00 0.07 0.	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 	C8 1.34 1.63 1.34 1.65 1.34 1.63 1.34	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 	0.77 0.11 0.77 0.09 0.77 0.11 0.78 0.11 0.78 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.11 0.77 0.77		Climate Model: JAN FEB APR APR JUN JUN AUG SEP OCT	CGCNA B1 Ratio: Median 108 Median	ABASLINE 1.07 0.00 1.06 0.49 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07	B:A 1.24 9.08 9.08 1.24 1.24 1.24 1.24 1.24 1.24 	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82	
Climate Model JAN FEB MAR APR MAY JUN JUN JUL AUG SEP OCT NOV	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.07 0.00 1.06 0.49 1.07 0.00 0.00 1.07 0.00 0	B:A 1.24 	CB 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.78 1.80 16.24 1.78 1.78 1.78 1.77 1.77 1.77 1.77 1.78 1.77 1.78 1.77 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.78 1.77 1.77 1.78 1.77 1.78 1.77 1.78 1.77 1.78 1.78 1.77 1.78 1.78 1.78 1.77 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 1.78 	0.77 0.11 0.77 0.09 0.77 0.11 0.77 0.11 0.78 0.11 0.78 0.11 0.78 0.11 0.77 0.11 0.77 0.11 0.77 0.11		Climate Model: JAN FEB MAR APR JUN JUN JUN SEP OCT	CGCM3 B1 Ratio: Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028	A:BASLINE 1.07 0.00 1.07 0.00 1.06 0.01 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00 1.07 0.00	B:A 1.24 9.08 1.24 1.24 1.24 1.24 1.24 1.24 1.24 1.24	C:B 1.34 1.63 1.34 1.65 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.34 1.63 1.63 1.34 1.63 1.65	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.68 1.69 15.95 1.68 1.68 1.68 1.68 1.68 1.68 1.68 1.68	0.82 0.11 0.82 0.09 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11 0.82 0.11	



Table E.1Projected median monthly and median annual surface water extraction for the Okanagan
Basin overall. The results are based on the HadCM3 A2 and CGCM3 B1 climate models.
Baseline results are based on the period 1996 to 2006. Future projections are based on the
period 2011 to 2040. To provide an index of the variability in the projections, the inter-
quartile range (IQR) is provided.

	a: TOTAL OKAN	IAGAN BASI	IN														
rameter:	Total surface w	ater extractior	n (ML)						Parameter:	Total surface	e water extra	ction (ML)					
mate Model:									Climate Model:								
	Scenario Group:		A	В	c	D	E	F		enario Group:	BASELINE	A	В	c	D	E	F
	Scenario Number:	1	28	30	34	36	38	40		nario Number:	2	29	31	35	37	39	41
JAN	IOR IOR	2,294 137	2,460 0	3,065 576	4,117 918	3,065 576	4,117 918	3,395 101	JAN	Median IOR	2,327 149	2,460 0	3,065 576	4,117 918	3,065 576	4,161 954	3,395 101
FEB	Median	2,111	2,233	2,811	3,766	2,811	3,766	3,093	FEB	Median	2,112	2,233	2,809	3,764	2,816	3,804	3,095
FEB	IOR	121	61	550	3,700	550	3,700	3,093	FEB	IOR	123	59	547	3,704 887	547	924	3,095
MAR	Median	3,636	3,828	4,421	5,755	4,639	5,973	5,484	MAR	Median	3,644	3,824	4,378	5,705	4,575	5,943	5,353
IVIAN	IQR	155	90	689	1.199	4,035	1,380	836	IVIAN	IQR	102	92	662	1,271	4,575	1,506	782
APR	Median	5.356	7.544	7.969	9,999	8.265	10.302	9,726	APR	Median	5.987	92 8.345	8,789	10.758	9.013	1,506	10.713
AFN	IOR	4.175	4.957	4,765	5,789	5.003	5.595	6.012	Arn	IOR	1.733	1.999	2.028	3.269	2,129	3.413	3.076
MAY	Median	19,505	21,203	21,348	27,194	22,289	28,241	26,980	MAY	Median	16,158	21,262	21,848	26,418	22,759	27,557	26,383
IVIAT	IQR	5,786	6.257	5.656	7,411	6.484	9.351	8,136	IVIAT	IQR	4,908	5.132	4,712	8.831	5,890	9.695	9,212
JUN	Median	29,897	32,017	31,777	39.738	34,289	44.271	41,955	JUN	Median	29,528	29,398	28,834	36,865	31,790	40.029	38,228
1014	IOR	2,899	3.933	3.908	5.717	4.112	8.299	6.539	5014	IOR	3.923	4.976	4.871	7.702	5.003	10.389	8.711
JUL	Median	40,760	41,994	40,955	50,837	44,732	55,941	53,587	JUL	Median	40,595	39,722	39,018	46,721	41,728	52,896	49,378
102	IQR	2.847	41,994	3.925	6.710	44,732	10.301	8,261	301	IOR	40,393	3,158	3.288	40,721	3,787	9.232	6,380
AUG	Median	36,011	38,790	38,301	46,268	41,078	50,854	49,020	AUG	Median	38,869	36,414	35,930	43,069	38,669	49,128	45,492
A00	IQR	6,416	5,731	5,358	7,268	5.809	10,074	8,320	400	IQR	4,297	4,840	4.062	9.057	6,475	13,445	11,098
SEP	Median	23,365	25.146	24.843	29.515	26.913	32,589	31.097	SEP	Median	21.554	23.367	23.104	28.150	25,426	30,886	29.342
521	IQR	1,480	3,267	2,932	4,071	3,478	6,731	4,847	501	IQR	4,499	2,968	2,857	3,376	3,307	6,519	3,970
OCT	Median	7,612	9,320	9,474	11,210	10,001	12,039	11,202	ОСТ	Median	5,922	10,513	10,747	12,350	11,204	13,035	12,475
001	IOR	4.887	4.651	4.302	4,845	4.305	5.412	5.323	001	IOR	2.310	3.884	3,727	4,145	4.035	5.268	4,346
NOV	Median	2,256	2,561	3,181	4,259	3,182	4,270	3,480	NOV	Median	2,221	2,452	3,226	4,313	3,228	4,377	3,378
	IOR	136	588	647	1,134	684	1,135	470		IOR	212	524	748	1,042	784	1.045	627
DEC	Median	2,294	2,460	3,065	4,117	3,065	4,117	3,395	DEC	Median	2,294	2,460	3,065	4,117	3,065	4,161	3,395
DLC			0	577	919	577	919	101	010	IOR	137	0	576	918	576	954	104
	IOR																
ΔΝΝΠΔΙ	IQR Median	137 177 987							ΔΝΝΠΔΙ								
ANNUAL	IQR Median IQR	137 177,987 6,792	189,187 13,638	191,674 12,567	238,186 29,281	207,796 22,481	259,818 47,088	244,624 32,666	ANNUAL	Median IQR	170,749 14,532	177,876 6,721	180,229 7,438	228,084 33,092	194,994 19,142	249,540 54,166	
ANNUAL	Median	177,987	189,187	191,674	238,186	207,796	259,818	244,624	ANNUAL	Median	170,749	177,876	180,229	228,084	194,994	249,540	234,021
ANNUAL	Median IQR	177,987 6,792	189,187 13,638	191,674 12,567	238,186 29,281	207,796	259,818	244,624	ANNUAL Parameter:	Median IQR	170,749 14,532	177,876 6,721	180,229	228,084 33,092	194,994 19,142	249,540	234,021
	Median IQR Ratio of total s	177,987 6,792	189,187 13,638	191,674 12,567	238,186 29,281	207,796	259,818	244,624		Median IQR Ratio of tota	170,749 14,532	177,876 6,721	180,229 7,438	228,084 33,092	194,994 19,142	249,540	234,021
rameter:	Median IQR Ratio of total st HadCM3 A2	177,987 6,792	189,187 13,638	191,674 12,567	238,186 29,281	207,796	259,818	244,624	Parameter:	Median IQR Ratio of tota CGCM3 B1	170,749 14,532	177,876 6,721	180,229 7,438	228,084 33,092	194,994 19,142	249,540	234,021
rameter:	Median IQR Ratio of total st HadCM3 A2	177,987 6,792 urface water ex	189,187 13,638 xtraction be	191,674 12,567 tween indicat	238,186 29,281 ted scenarios	207,796 22,481	259,818 47,088	244,624	Parameter:	Median IQR Ratio of tota CGCM3 B1	170,749 14,532	177,876 6,721 er extraction	180,229 7,438 between ind	228,084 33,092 icated scenar	194,994 19,142 ios	249,540 54,166	234,021
rameter: mate Model:	Median IQR Ratio of total so HadCM3 A2 Ratio:	177,987 6,792 urface water ex A:BASLINE	189,187 13,638 xtraction be B:A	191,674 12,567 tween indicat	238,186 29,281 ted scenarios D:B	207,796 22,481 E:A	259,818 47,088 F:E	244,624	Parameter: Climate Model:	Median IQR Ratio of tota CGCM3 B1 Ratio:	170,749 14,532 I surface wat	177,876 6,721 er extraction B:A	180,229 7,438 between ind C:B	228,084 33,092 icated scenar D:B	194,994 19,142 ios E:A	249,540 54,166 F:E	234,021
rameter: mate Model:	Median IQR Ratio of total su HadCM3 A2 Ratio: Median	177,987 6,792 urface water ex A:BASLINE 1.07	189,187 13,638 xtraction be B:A	191,674 12,567 tween indicat C:B 1.34	238,186 29,281 ted scenarios D:B 1.00	207,796 22,481 E:A	259,818 47,088 F:E 0.82	244,624	Parameter: Climate Model:	Median IQR Ratio of tota CGCM3 B1 Ratio: Median	170,749 14,532 I surface wat A:BASLINE 1.06	177,876 6,721 er extraction B:A	180,229 7,438 between ind C:B 1.34	228,084 33,092 icated scenar D:B 1.00	194,994 19,142 ios E:A	249,540 54,166 F:E 0.82	234,021
rameter: mate Model: JAN	Median IQR Ratio of total su HadCM3 A2 Ratio: Median IQR	177,987 6,792 urface water ex A:BASLINE 1.07 0.00	189,187 13,638 xtraction be B:A 1.25	191,674 12,567 tween indicat C:B 1.34 1.59	238,186 29,281 ted scenarios D:B 1.00 1.00	207,796 22,481 E:A 1.67	259,818 47,088 F:E 0.82 0.11	244,624	Parameter: Climate Model: JAN	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR	170,749 14,532 I surface wat A:BASLINE 1.06 0.00	177,876 6,721 er extraction B:A 1.25	180,229 7,438 between ind C:B 1.34 1.59	228,084 33,092 icated scenar D:B 1.00 1.00	194,994 19,142 ios E:A 1.69	249,540 54,166 F:E 0.82 0.11	234,021
rameter: mate Model: JAN	Median IQR Ratio of total su HadCM3 A2 Ratio: Median IQR Median	177,987 6,792 urface water ex A:BASLINE 1.07 0.00 1.06	189,187 13,638 xtraction bel B:A 1.25 - 1.26	191,674 12,567 tween indicat C:B 1.34 1.59 1.34	238,186 29,281 ted scenarios D:B 1.00 1.00 1.00	207,796 22,481 E:A 1.67 - 1.69	259,818 47,088 F:E 0.82 0.11 0.82	244,624	Parameter: Climate Model: JAN	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06	177,876 6,721 er extraction B:A 1.25 - 1.26	180,229 7,438 between ind C:B 1.34 1.59 1.34	228,084 33,092 icated scenar D:B 1.00 1.00 1.00	194,994 19,142 ios E:A 1.69 - 1.70	249,540 54,166 F:E 0.82 0.11 0.81	234,021
rameter: mate Model: JAN FEB	Median IQR Ratio of total su HadCM3 A2 Ratio: Median IQR Median IQR	177,987 6,792 urface water er A:BASLINE 1.07 0.00 1.06 0.50	189,187 13,638 xtraction be B:A 1.25 - 1.26 9.02	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62	238,186 29,281 ted scenarios D:B 1.00 1.00 1.00 1.00	207,796 22,481 E:A 1.67 - 1.69 14.59	259,818 47,088 F:E 0.82 0.11 0.82 0.09	244,624	Parameter: Climate Model: JAN FEB	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48	177,876 6,721 er extraction B:A 1.25 - 1.26 9.27	180,229 7,438 between ind C:B 1.34 1.59 1.34 1.62	228,084 33,092 icated scenar D:B 1.00 1.00 1.00 1.00	194,994 19,142 ios E:A 1.69 - 1.70 15.66	249,540 54,166 F:E 0.82 0.11 0.81 0.09	234,021
rameter: mate Model: JAN FEB	Median IQR Ratio of total su HadCM3 A2 Ratio: Median IQR Median IQR Median	177,987 6,792 urface water er 1.07 0.00 1.06 0.50 1.05	189,187 13,638 xtraction be B:A 1.25 - 1.26 9.02 1.15	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30	238,186 29,281 ted scenarios D:B 1.00 1.00 1.00 1.00 1.00	207,796 22,481 E:A 1.67 - 1.69 14.59 1.56	259,818 47,088 F:E 0.82 0.11 0.82 0.09 0.92	244,624	Parameter: Climate Model: JAN FEB	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05	177,876 6,721 er extraction B:A 1.25 - 1.26 9.27 1.15	180,229 7,438 between ind C:B 1.34 1.59 1.34 1.62 1.30	228,084 33,092 icated scenar D:B 1.00 1.00 1.00 1.00 1.00	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55	249,540 54,166 F:E 0.82 0.11 0.81 0.09 0.90	234,021
rameter: mate Model: JAN FEB MAR	Median IQR Ratio of total s s HadCM3 A2 Ratio: Median IQR Median IQR Median IQR	177,987 6,792 urface water ex- A:BASLINE 1.07 0.00 1.06 0.50 1.05 0.58	189,187 13,638 xtraction ber B:A 1.25 - 1.26 9.02 1.15 7.66	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74	238,186 29,281 ted scenarios 1.00 1.00 1.00 1.00 1.05 1.24	207,796 22,481 E:A 1.67 - 1.69 14.59 1.56 15.33	259,818 47,088 F:E 0.82 0.11 0.82 0.09 0.92 0.61	244,624	Parameter: Climate Model: JAN FEB MAR	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 0.90	177,876 6,721 er extraction B:A 1.25 - 1.26 9.27 1.15 7.20	180,229 7,438 between ind C:B 1.34 1.59 1.34 1.62 1.30 1.92	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.00 1.04 1.30	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37	249,540 54,166 F:E 0.82 0.11 0.81 0.09 0.90 0.52	234,021
rameter: mate Model: JAN FEB MAR	Median IQR Ratio of total su HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median	177,987 6,792 urface water er A:BASLINE 1.07 0.00 1.06 0.50 1.05 0.58 1.41	189,187 13,638 xtraction ber B:A 1.25 - - 1.26 9.02 1.15 7.66 1.06	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74 1.25	238,186 29,281 ted scenarios D:B 1.00 1.00 1.00 1.00 1.05 1.24 1.04	207,796 22,481 E:A 1.67 - - 1.69 14.59 1.56 15.33 1.37	259,818 47,088 F:E 0.82 0.11 0.82 0.09 0.92 0.61 0.94	244,624	Parameter: Climate Model: JAN FEB MAR	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 0.90 1.39	177,876 6,721 er extraction B:A 1.25 - - - - - - - - - - - - - - - - - - -	180,229 7,438 between ind 1.34 1.59 1.34 1.62 1.30 1.92 1.22	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.00 1.04 1.30 1.03	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37 1.33	249,540 54,166 F:E 0.82 0.11 0.81 0.09 0.90 0.90 0.52 0.97	234,021
rameter: mate Model: JAN FEB MAR APR MAY	Median IQR Ratio of total sr HadKM3 A2 Ratio: Median IQR Median	177,987 6,792 urface water e: A:BASLINE 1.07 0.00 1.06 0.50 1.05 0.58 1.41 1.19 1.09 1.08	189,187 13,638 xtraction be B:A 1.25 - 1.26 9.02 1.15 7.66 1.06 0.96 1.01 0.90	191,674 12,567 tween indicat 0.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31	238,186 29,281 ted scenarios D:B 1.00 1.00 1.00 1.00 1.00 1.05 1.24 1.04 1.05 1.04 1.15	207,796 22,481 E:A 1.67 - - 14.59 1.56 15.33 1.37 1.13 1.33 1.49	259,818 47,088 F:E 0.82 0.11 0.82 0.09 0.92 0.61 0.94 1.07 0.96 0.87	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR	170,749 14,532 I surface wat 1.06 0.00 1.06 0.48 1.05 0.90 1.39 1.15 1.32 1.05	177,876 6,721 er extraction B:A 1.25 - 1.26 9.27 1.15 7.20 1.05 1.01 1.03 0.92	180,229 7,438 between ind 1.34 1.59 1.34 1.62 1.30 1.92 1.22 1.61 1.22 1.87	228,084 33,092 icated scenar 0:8 1.00 1.00 1.00 1.00 1.00 1.04 1.30 1.03 1.03 1.04 1.25	194,994 19,142 ios E:A 1.69 - 15,66 1.55 16.37 1.33 1.71 1.30 1.89	249,540 54,166 F:E 0.82 0.11 0.81 0.09 0.90 0.52 0.97 0.90 0.96 0.95	234,021
rameter: mate Model: JAN FEB MAR APR	Median IQR Ratio of total st HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	177,987 6,792 urface water ex- 1.07 0.00 1.06 0.50 1.05 0.58 1.41 1.19 1.09 1.08 1.07	189,187 13,638 xtraction be B:A 1.25 - 1.26 9.02 1.15 7.66 1.06 0.96 1.06 0.96 1.01 0.90 0.99	191,674 12,567 wween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25	238,186 29,281 D:B 1.00 1.00 1.00 1.00 1.00 1.00 1.02 1.24 1.04 1.05 1.04 1.15	207,796 22,481 E:A 1.67 1.69 14.59 15.33 1.37 1.13 1.33 1.49 1.38	259,818 47,088 F:E 0.82 0.09 0.92 0.61 0.94 1.07 0.96 0.87 0.95	244,624	Parameter: Climate Model: JAN FEB MAR APR	Median IQR Ratio of tota CGCM3 B1 Ratio: IQR Median IQR Median IQR Median IQR Median IQR Median	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 1.39 1.15 1.32 1.05 1.00	177,876 6,721 er extraction B:A 1.25 - 1.26 9.27 1.15 7.20 1.05 1.01 1.03 0.92 0.98	180,229 7,438 between ind C:B 1.34 1.59 1.34 1.62 1.30 1.92 1.22 1.61 1.21 1.87 1.28	228,084 33,092 icated scenar 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37 1.33 1.71 1.33 1.71 1.30 1.89 1.36	249,540 54,166 	234,021
rameter: mate Model: JAN FEB MAR APR MAY	Median IQR Ratio of total sr HadKM3 A2 Ratio: Median IQR Median	177,987 6,792 A:BASLINE 1.07 0.00 1.06 0.50 1.05 0.58 1.41 1.19 1.09 1.08 1.07 1.36	189,187 13,638 xtraction be B:A 1.25 - 1.26 9.02 1.15 7.66 0.96 1.01 0.96 1.01 0.99 0.99 0.99	191,674 12,567 ween indicat 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25 1.46	238,186 29,281 ted scenarios 1.00 1.00 1.00 1.05 1.24 1.04 1.05 1.04 1.05	207,796 22,481 E:A 1.67 1.56 15.33 1.37 1.13 1.33 1.49 1.38 2.11	259,818 47,088 F:E 0.82 0.11 0.82 0.92 0.61 1.07 0.96 0.87 0.95 0.79	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY JUN	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 1.05 1.32 1.05 1.05 1.05 1.05 1.05	177,876 6,721 er extraction B:A 1.25 9.27 1.15 7.20 1.05 1.01 1.03 0.92 0.98	180,229 7,438 between ind 1.34 1.59 1.34 1.62 1.30 1.92 1.61 1.21 1.87 1.28 1.58	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.00 1.04 1.30 1.05 1.04 1.25 1.04 1.25 1.04 1.25	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37 1.33 1.71 1.30 1.89 1.36 2.09	249,540 54,166 75 0.82 0.11 0.81 0.99 0.90 0.52 0.97 0.90 0.96 0.95 0.95 0.84	234,021
rameter: mate Model: JAN FEB MAR APR MAY	Median IQR Ratio of total sr HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	177,987 6,792 urface water er A:BASLINE 1.07 0.00 1.06 0.50 1.05 0.50 1.41 1.19 1.09 1.08 1.07 1.36 1.03	189,187 13,638 xtraction bet 8:A 1.25 - 1.26 9.02 1.15 7.66 1.06 0.96 1.01 0.90 0.99 0.99 0.98	191,674 12,567 wween indicat 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25 1.46 1.24	238,186 29,281 ted scenarios 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	207,796 22,481 1.67 - 1.59 1.53 1.37 1.13 1.33 1.49 1.38 2.11 1.33	259,818 47,088 0.82 0.11 0.82 0.09 0.92 0.61 0.94 1.07 0.96 0.87 0.95 0.79 0.96	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 0.90 1.39 1.15 1.32 1.05 1.00 1.27 0.98	177,876 6,721 er extraction B:A 1.25 - 1.26 9.27 1.15 7.20 1.05 1.01 1.03 0.92 0.98 0.98	180,229 7,438 between ind 1.34 1.59 1.34 1.62 1.30 1.92 1.22 1.61 1.21 1.87 1.28 1.28 1.28 1.20	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.04 1.30 1.03 1.03 1.04 1.25 1.10 1.03 1.03	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37 1.33 1.71 1.30 1.89 1.36 2.09 1.33	249,540 54,166 0.82 0.11 0.81 0.09 0.52 0.97 0.90 0.95 0.95 0.95 0.95 0.84 0.84 0.93	234,021
rameter: mate Model: JAN FEB MAR APR APR JUN JUL	Median ICR Ratio of total s HadCMS A2 Ratio: Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR	177,987 6,792 uface water ex- A:BASLINE 1.07 0.00 1.06 1.05 1.05 1.05 1.05 1.05 1.09 1.09 1.08 1.07 1.36 1.03 1.53	189,187 13,638 xtraction be' B:A 1.25 - - 1.26 9.02 1.15 7.66 0.96 1.01 0.90 0.99 0.99 0.99 0.99 0.90	191,674 12,567 ween indical 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25 1.46 1.24 1.71	238,186 29,281 ted scenarios 1.00 1.00 1.00 1.05 1.24 1.04 1.15 1.08 1.05 1.09 1.13	207,796 22,481 E:A 1.67 - - 9 14.59 1.56 15.33 1.37 1.13 1.33 1.49 1.38 2.11 1.38 2.11	259,818 47,088 F:E 0.82 0.11 0.82 0.09 0.92 0.61 1.07 0.96 0.87 0.95 0.79 0.95 0.79	244,624	Parameter: Climate Model: JAN FEB MAR APR MAR JUN JUN	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 0.90 1.15 1.39 1.15 1.32 1.05 1.00 1.27 0.98 0.71	177,876 6,721 er extraction B:A 1.25 - - 1.26 9.27 1.15 1.01 1.05 1.01 1.05 1.01 1.03 0.92 0.98 0.98 0.98 1.04	180,229 7,438 between ind 1.34 1.59 1.34 1.62 1.30 1.92 1.22 1.61 1.21 1.87 1.28 1.58 1.20 1.43	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.00 1.04 1.05 1.04 1.25 1.10 1.03 1.03 1.03 1.03	194,994 19,142 ios E:A 1.69 - - 1.70 15.66 1.55 16.37 1.33 1.71 1.30 1.89 1.36 2.09 1.33 2.92	249,540 54,166 F:E 0.82 0.11 0.81 0.09 0.59 0.90 0.95 0.95 0.95 0.96 0.84 0.93 0.69	234,021
rameter: mate Model: JAN FEB MAR APR MAY JUN	Median IQR IQR Ratio of total st HadCM3 A2 Ratio: Median IQR Median	177,987 6,792 wface water ex- A:BASLINE 1.07 0.00 1.06 0.50 1.06 0.58 1.41 1.19 1.09 1.08 1.03 1.36 1.03 1.53 1.08	189,187 13,638 xtraction be' B:A 1.25 - 1.25 7.66 1.06 0.96 1.01 0.99 0.99 0.99 0.99 0.99 0.99 0.99	191,674 12,567 tween indicat c:B 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25 1.46 1.24 1.71 1.21	238,186 29,281 ted scenarios 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	207,796 22,481 E:A 1.67 1.59 14.59 15.33 1.37 1.13 1.33 1.49 1.38 2.11 1.33 2.37 1.33	259,818 47,088 7,088 0,11 0,82 0,09 0,92 0,61 0,94 1,07 0,96 0,87 0,95 0,79 0,96 0,80 0,96	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY JUN	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 1.39 1.15 1.32 1.05 1.05 1.05 1.05 1.02 1.27 0.98 0.71 0.94	177,876 6,721 er extraction 1.25 9.27 1.05 1.01 1.03 0.92 0.98 0.98 0.98 0.99	180,229 7,438 between ind 1.34 1.59 1.34 1.62 1.34 1.62 1.32 1.22 1.61 1.22 1.67 1.28 1.58 1.58 1.20	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	194,994 19,142 ios E:A 1.69 - - 15.66 1.55 16.37 1.33 1.71 1.30 1.89 2.09 1.36 2.09 1.33 2.92 1.35	249,540 54,166 78,2 0,11 0,81 0,09 0,90 0,95 0,95 0,95 0,95 0,95 0,95	234,021
rameter: mate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG	Median IQR Ratio of total sr HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	177,987 6,792 uface water er 1.07 0.00 1.06 0.58 1.41 1.09 1.09 1.09 1.09 1.09 1.09 1.03 1.03 1.03 1.03 0.88 1.03	189,187 13,638 xtraction be' B:A 1.25 - 1.26 9.02 1.15 7.66 0.96 1.01 0.90 0.99 0.99 0.99 0.99 0.99 0.99 0.90 0.	191,674 12,567 tween indicat 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25 1.46 1.24 1.71 1.21 1.36	238,186 29,281 ted scenarios 1.00 1.00 1.00 1.00 1.05 1.24 1.04 1.05 1.04 1.05 1.08 1.05 1.09 1.13 1.09 1.13	207,796 22,481 E:A 1.67	259,818 47,088 0.82 0.11 0.82 0.61 0.92 0.61 0.94 1.07 0.96 0.87 0.95 0.79 0.96 0.89 0.99 0.80 0.99 0.80 0.80	244,624	Parameter: Climate Model: JAN FEB MAR APR JUN JUL JUL AUG	Median IQR Ratio of tota CGCM3 B1 IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 0.90 1.39 1.15 1.32 1.05 1.00 1.27 0.98 0.71 0.98 0.71 1.33	177,876 6,721 er extraction B:A 1.25 - 1.26 9.27 1.15 7.20 1.05 1.01 1.03 0.92 0.98 0.98 0.98 1.04 0.98 0.84	180,229 7,438 between ind 1.34 1.59 1.34 1.62 1.30 1.92 1.22 1.61 1.21 1.87 1.28 1.58 1.20 1.43 1.20 1.43 1.20 1.43	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	194,994 19,142 ios E:A 1.69 1.70 15.66 1.55 16.37 1.33 1.71 1.89 1.36 2.09 1.33 2.92 1.33 2.92 2.78	249,540 54,166 	234,021
rameter: mate Model: JAN FEB MAR APR APR JUN JUL	Median ICR Ratio of total s HadCMS A2 Ratio: Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median	177,987 6,792 A:BASLINE 1.07 0.00 1.06 0.50 1.05 0.58 1.01 1.09 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.03 1.53 1.08 0.89 1.08	189,187 13,638 xtraction be: B:A 1.25 1.26 9.02 1.15 1.06 0.96 1.01 0.99 0.99 0.99 0.99 0.99 0.99	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25 1.46 1.24 1.71 1.21 1.36 1.19	238,186 29,281 ted scenarios 1.00 1.00 1.00 1.00 1.02 1.24 1.04 1.05 1.04 1.05 1.09 1.13 1.07 1.08	207,796 22,481 E:A 1.69 14.59 15.33 1.37 1.13 1.33 1.49 1.38 2.11 1.33 2.37 1.31 1.76 1.30	259,818 47,088 7,088 0,11 0,82 0,01 0,92 0,61 0,94 1,07 0,96 0,87 0,95 0,79 0,96 0,80 0,96 0,80 0,95	244,624	Parameter: Climate Model: JAN FEB MAR APR MAR JUN JUN	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 1.05 1.32 1.05 1.32 1.05 1.27 0.90 1.27 0.94 1.13 1.08	177,876 6,721 er extraction B:A 1.25 1.26 9.27 1.15 7.20 1.05 1.01 1.03 0.92 0.98 0.98 0.98 0.99 0.84 0.99	180,229 7,438 between ind 1.34 1.59 1.24 1.62 1.30 1.92 1.21 1.87 1.28 1.58 1.58 1.20 2.23 1.20 2.23 1.22	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.04 1.30 1.05 1.04 1.25 1.10 1.03 1.07 1.15 1.10 1.08 1.59 1.10	194,994 19,142 ios E:A 1.69 1.70 15.66 1.55 16.37 1.33 1.71 1.30 1.89 1.36 2.09 1.33 2.92 1.35 2.78 1.32	249,540 54,166 F:E 0.82 0.11 0.81 0.09 0.52 0.97 0.90 0.96 0.95 0.96 0.84 0.93 0.69 0.93 0.69 0.93	234,021
rameter: mate Model: JAN FEB MAR APR APR JUN JUL AUG SEP	Median IQR Ratio of total st HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	177,987 6,792 A:BASLINE 107 0.00 1.06 0.50 1.05 0.58 1.41 1.19 1.09 1.09 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.03 1.53 1.08 0.89 1.08 2.21	189,187 13,638 xtraction be' B:A 1.25 9.02 1.15 7.66 1.06 0.96 1.01 0.90 0.99 0.99 0.98 0.99 0.99 0.93 0.99 0.93 0.99 0.93	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.27 1.31 1.25 1.46 1.24 1.71 1.24 1.71 1.24 1.71 1.24 1.36	238,186 29,281 29,281 100 1.00 1.00 1.00 1.00 1.00 1.00 1.0	207,796 22,481 	259,818 47,088 F:E 0.82 0.011 0.82 0.09 0.62 0.61 0.92 0.61 0.94 1.07 0.96 0.87 0.95 0.79 0.96 0.80 0.95 0.79 0.96 0.83 0.95 0.72	244,624	Parameter: Climate Model: JAN FEB MAR APR JUN JUL AUG SEP	Median IQR Ratio of tota CGCM3 B11 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	170,749 14,532 I surface wat 1.06 0.00 1.06 0.48 1.05 0.99 1.15 1.39 1.15 1.39 1.05 1.00 1.27 0.98 0.71 0.98 0.71 1.33 1.13 1.05 0.94 0.71 0.94 0.66	177,876 6,721 er extraction B:A 1.25 - - 1.26 9.27 1.15 7.20 1.01 1.03 1.01 1.03 0.92 0.98 0.98 0.98 0.98 0.99 0.98 0.99 0.98	180,229 7,438 between ind C:B 1.54 1.59 1.34 1.62 1.30 1.92 1.22 1.61 1.27 1.87 1.28 1.58 1.20 1.43 1.20 1.43 1.20 1.43 1.20 1.43 1.20 1.43	228,084 33,092 icated scenar 0:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	194,994 19,142 ios E:A 1.69 - - 1.70 15.66 1.55 16.37 1.33 1.70 1.89 1.36 2.09 1.33 2.92 1.33 2.78 1.32 2.78	249,540 54,166 F:E 0.82 0.11 0.83 0.99 0.52 0.97 0.90 0.95 0.95 0.95 0.96 0.95 0.96 0.84 0.93 0.69 0.83 0.93 0.61	234,021
rameter: mate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG	Median ICR Ratio of total st HadCMS A2 Ratio: Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median ICR Median	177,987 6,792 4,792 1,792 1,07 0,00 0,00 0,05 0,05 0,05 0,05 0,05 0	189,187 13,638 xtraction ber 8:A 1.25 - 1.26 9.02 1.15 7.66 1.06 0.96 1.01 0.99 0.90 0.99 0.90 0.00 0.	191,674 12,567 tween indicat 1.59 1.34 1.69 1.34 1.62 1.30 1.74 1.25 1.46 1.21 1.27 1.31 1.25 1.46 1.71 1.21 1.26 1.24 1.71 1.21 1.30 1.39 1.39 1.39 1.39 1.39 1.39 1.39 1.39	238,186 29,281 29,281 0,00 1,00 1,00 1,00 1,00 1,00 1,00 1,	207,796 22,481 	259,818 47,088 7,088 0.01 0.02 0.09 0.92 0.61 0.92 0.92 0.95 0.95 0.80 0.95 0.80 0.95 0.83 0.95 0.72 0.93	244,624	Parameter: Climate Model: JAN FEB MAR APR JUN JUL JUL AUG	Median 1/2R Ratio of tota CGGM3 81 Ratio: Median 1/2R 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2	170,749 14,532 I surface wat A:BASLINE 1.06 0.00 1.06 0.48 1.05 0.90 1.15 1.32 1.05 1.32 1.00 1.27 0.98 0.71 0.94 1.13 1.08 0.66	177,876 6,721 er extraction B:A 1.25 - - 1.26 9.27 1.15 7.20 1.05 1.01 1.03 0.92 0.98 0.98 0.98 1.04 0.99 0.84 0.99 0.99 0.99	180,229 7,438 between ind C.8 1.34 1.59 1.34 1.62 1.22 1.61 1.21 1.21 1.21 1.23 1.22 1.63 1.20 1.43 1.20 2.23 1.22 1.43 1.20 1.43 1.20 1.43 1.58 1.20 1.43 1.59 1.43 1.58 1.20 1.43 1.59 1.22 1.58 1.20 1.43 1.59 1.22 1.58 1.59 1.22 1.58 1.59 1.22 1.58 1.59 1.22 1.58 1.59 1.22 1.20 1.22 1.58 1.59 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.20 1.22 1.22	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.04 1.30 1.05 1.04 1.25 1.10 1.05 1.10 1.15 1.09 1.15 1.09 1.10 1.10 1.09	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37 1.33 1.71 1.30 1.89 2.09 1.33 2.92 1.33 2.78 1.32 2.78 1.32 2.78	249,540 54,166 0.82 0.11 0.81 0.09 0.52 0.97 0.90 0.52 0.97 0.96 0.95 0.96 0.84 0.93 0.69 0.84 0.93 0.69 0.93 0.69 0.93 0.93 0.69 0.95	234,021
rameter: mate Model: JAN FEB MAR APR APR JUN JUL AUG SEP OCT	Median IQR IQR Ratio of total st HadCMS A2 Ratio: Median IQR	177,987 6,792 A:BASLINE 1.07 0.00 1.06 0.58 1.07 1.05 1.05 1.05 1.05 1.05 1.05 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.08 1.09 1.08 1.03 1.53 1.08 1.08 1.08 1.03 1.53 1.08	189,187 13,638 xtraction be: 8:A 1.25 1.26 9.02 1.15 1.06 0.96 1.01 1.06 0.99 0.90	191,674 12,567 ::::::::::::::::::::::::::::::::::::	238,186 29,281 29,281 1.00 1.00 1.00 1.00 1.00 1.00 1.05 1.24 1.04 1.05 1.04 1.05 1.04 1.05 1.09 1.13 1.07 1.08 1.107 1.08 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.108 1.109 1.109 1.109 1.109 1.109 1.109 1.109 1.109 1.109 1.109 1.109 1.109 1.00 1.00	207,796 22,481 E:A 1.67	259,818 47,088 F:E 0.82 0.11 0.82 0.09 0.92 0.61 0.94 0.96 0.87 0.95 0.87 0.96 0.87 0.96 0.80 0.96 0.83 0.95 0.72 0.93	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	Median IQR Ratio of tota CGCM3 B1 IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	170,749 14,532 1 surface wat 1 surface wat 1.06 0.00 1.06 0.48 1.05 0.90 1.39 1.15 1.32 1.05 1.00 1.27 0.98 0.71 0.94 1.13 1.05 1.00 94 1.13 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05	177,876 6,721 er extraction B:A 1.25 	180,229 7,438 between ind C:B 1.54 1.59 1.34 1.59 1.34 1.62 1.22 1.61 1.21 1.87 1.28 1.58 1.20 1.43 1.20 1.43 1.20 2.23 1.22 1.18 1.15	228,084 33,092 icated scenar 0:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	194,994 19,142 19,142 E:A 1.69 - - 15,66 1.55 16,37 1.33 1.71 1.36 2.09 1.33 2.92 1.35 2.78 1.33 2.78 1.35 2.78 1.35 2.78 1.35	249,540 54,166 54,166 0.82 0.11 0.82 0.90 0.90 0.90 0.90 0.95 0.96 0.95 0.96 0.93 0.69 0.93 0.69 0.93 0.69 0.93 0.61 0.96 0.82	234,021
rameter: mate Model: JAN FEB MAR APR APR JUN JUL AUG SEP	Median IQR Ratio of total st HadCM3 A2 Ratio: Median IQR Median	177,987 6,792 4,792 4,792 4,792 4,792 4,792 1,07 0,00 1,05 0,58 1,07 1,09 1,08 2,21 1,09 1,08 2,21 1,22 0,99 1,08 2,21 1,22 0,99 1,08 2,21 1,22 0,99 1,08 2,21 1,22 0,99 1,08 2,21 1,22 1,24 1,24 1,24 1,24 1,24 1,25	189,187 13,638 xtraction ber 8:A 1.25 - 1.26 9.02 1.15 7.66 1.06 0.96 1.01 0.90 0.99 0.99 0.99 0.99 0.99 0.93 0.99 0.93 0.99 0.93 0.99 0.93 0.99 0.93 0.99 1.02 1.24	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74 1.21 1.27 1.31 1.25 1.46 1.21 1.27 1.31 1.25 1.46 1.12 1.30 1.12 1.34	238,186 29,281 29,281 100 1.00 1.00 1.00 1.00 1.05 1.24 1.05 1.04 1.05 1.04 1.05 1.08 1.09 1.13 1.09 1.13 1.09 1.00 1.00 1.00 1.00 1.00 1.00 1.00	207,796 22,481 	259,818 47,088 7;E 0.82 0.01 0.82 0.09 0.92 0.61 0.94 0.94 0.94 0.95 0.79 0.95 0.79 0.95 0.80 0.95 0.83 0.95 0.72 0.93 0.93 0.93 0.93	244,624	Parameter: Climate Model: JAN FEB MAR APR JUN JUL AUG SEP	Median IQR Ratio of tota CGCM3 B1 Ratio: Median IQR Median	170,749 14,532 I surface wat 1.06 0.00 1.06 0.48 1.05 1.05 1.05 1.05 1.05 1.00 1.15 1.32 1.05 1.00 1.27 0.98 0.71 0.98 0.71 1.3 1.08 0.71 0.98 0.71 1.3 1.08 1.13 1.08 1.13 1.08 1.13 1.13 1.13 1.13 1.14 1.14 1.14 1.14	177,876 6,721 er extraction B:A 1.25 - - 1.26 9.27 1.05 1.01 1.03 1.03 1.03 0.92 0.98 0.98 1.04 0.99 0.84 0.99 0.84 0.99 0.96 1.02 0.96 1.32	180,229 7,438 between ind 159 1.34 1.59 1.30 1.92 1.22 1.61 1.21 1.87 1.28 1.58 1.20 1.43 1.20 2.23 1.20 2.23 1.20 1.43 1.15 1.11 1.14	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.00 1.04 1.25 1.10 1.05 1.04 1.25 1.10 1.05 1.04 1.25 1.10 1.05 1.04 1.25 1.10 1.05 1.00 1.00 1.00 1.00 1.00 1.0	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37 1.33 1.71 1.30 1.36 2.09 1.33 2.92 1.33 2.92 1.33 2.92 1.33 2.78 1.32 2.20 1.24 1.36 1.79	249,540 54,166 54,166 0.82 0.11 0.81 0.09 0.52 0.97 0.90 0.95 0.95 0.95 0.95 0.95 0.95 0.93 0.69 0.83 0.95 0.61 0.95 0.61 0.95 0.69 0.95 0.61 0.95 0.69 0.95 0.61 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.69 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.9	234,021
rameter: mate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	Median IQR IQR Ratio of total su Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	177,987 6,792 6,792 A:BASLINE 1.07 0.00 0.00 1.06 0.50 1.05 1.05 1.05 1.05 1.09 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.03 1.53 1.08 0.89 1.03 1.53 1.08 2.21 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.09 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.09 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.08 1.09 1.08 1.03 1.53 1.08 1.08 1.09 1.08 1.08 1.08 1.08 1.08 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.02 1.04 1.24	189,187 13,638 xtraction be: 8:A 1.25 	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.24 1.71 1.21 1.25 1.24 1.71 1.25 1.24 1.74 1.25 1.25 1.25 1.31 1.25 1.31 1.25 1.31 1.25 1.31 1.25 1.32 1.31 1.25 1.32 1.32 1.32 1.32 1.33 1.25 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.25 1.25 1.27 1.31 1.25 1.24 1.74 1.25 1.24 1.74 1.25 1.24 1.71 1.25 1.24 1.71 1.25 1.24 1.71 1.25 1.24 1.71 1.25 1.24 1.71 1.25 1.39 1.72 1.39 1.39 1.39 1.39 1.33 1.39 1.39 1.39 1.34 1.39 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.34 1.39 1.34 1.34 1.34 1.39 1.34 1.34 1.34 1.34 1.39 1.34 1.35 1.34 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.35 1.34 1.35 1.34 1.35 1.34 1.35 1.34 1.35	238,186 29,281 29,281 1,00 1,00 1,00 1,00 1,05 1,24 1,04 1,05 1,04 1,05 1,04 1,05 1,04 1,05 1,04 1,05 1,03 1,00 1,00 1,00 1,00 1,00 1,00 1,00	207,796 22,481 E:A 1.67 - - 1.69 14.59 1.56 15.33 1.37 1.33 1.49 1.38 2.11 1.33 2.37 1.31 1.76 1.30 2.06 1.30 2.06 1.16 1.67	259,818 47,088 F:E 0.82 0.11 0.82 0.92 0.61 0.94 0.92 0.92 0.92 0.94 0.96 0.87 0.96 0.87 0.96 0.87 0.96 0.83 0.95 0.72 0.98 0.98 0.98 0.98 0.98	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	Median (2R Ratio of tota CGCM3 B1 Ratio: Median (2R) (2R) Median (2R) Median (2R) Median (2R) Median (2R) Median (2R) Median (2R) Median (2R)	170,749 14,532 1 surface wat 1 surface wat 1.06 0.00 1.06 0.48 1.05 0.90 1.15 1.32 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.27 0.98 0.71 1.05 1.05 1.05 1.27 0.94 1.13 1.08 1.10 1.27 0.94 1.13 1.08 0.71 1.05 0.71 1.05 0.71 1.05 0.71 0.24 7 1.05 0.74 0.24 7 0.24 0.24 0.24 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	177,876 6,721 er extraction B:A 1.25 	180,229 7,438 between ind C:8 1.59 1.34 1.59 1.32 1.61 1.61 1.22 1.61 1.22 1.61 1.21 1.87 1.28 1.20 2.23 1.43 1.20 2.23 1.15 1.11 1.13 1.39	228,084 33,092 (cated scenar 1.00 1.00 1.00 1.00 1.04 1.30 1.05 1.04 1.25 1.04 1.25 1.04 1.25 1.03 1.07 1.15 1.08 1.59 1.10 1.16 1.08 1.08 1.08 1.08	194,994 19,142 19,142 19,142 10,5 10,5 15,66 1,55 16,37 1,55 16,37 1,55 16,37 1,55 16,37 1,55 16,37 1,55 1,55 1,55 1,55 1,55 1,55 1,55 1,5	249,540 54,166 54,166 0.82 0.11 0.82 0.90 0.90 0.90 0.90 0.90 0.90 0.95 0.96 0.95 0.95 0.95 0.93 0.93 0.93 0.83 0.93 0.83 0.95 0.60	234,021
rameter: mate Model: JAN FEB MAR APR APR JUN JUL AUG SEP OCT	Median IQR IQR Ratio of total st HadCM3 A2 Ratio: IQR IQR Median IQR Median	177,987 6,792 4,792 4,792 4,792 4,792 1,07 0,00 1,06 0,50 1,05 1,05 1,05 1,09 1,08 2,21 1,22	189,187 13,638 xtraction ber 8:A 1.25 - 1.26 9.02 1.15 7.66 1.06 0.96 1.01 0.90 0.99 0.99 0.99 0.99 0.99 0.93 0.99 0.93 0.99 0.93 0.99 0.93 0.99 0.93 0.99 1.02 1.24	191,674 12,567 tween indicat c.8 1,34 1,59 1,34 1,62 1,30 1,74 1,25 1,21 1,27 1,27 1,27 1,27 1,27 1,27 1,21 1,25 1,24 1,24 1,71 1,25 1,36 1,24 1,24 1,24 1,24 1,24 1,25 1,36 1,39 1,39 1,39 1,39 1,34 1,34 1,34 1,34 1,34 1,34 1,34 1,34	238,186 29,281 29,281 100 1.00 1.00 1.00 1.00 1.00 1.00 1.0	207,796 22,481 	259,818 47,088 7;E 0.82 0.011 0.82 0.092 0.61 0.92 0.61 0.94 1.07 0.96 0.87 0.95 0.79 0.96 0.80 0.95 0.79 0.96 0.83 0.95 0.72 0.93 0.93 0.93 0.93 0.93	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	Median IQR Ratio of tota CGCM3 B11 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	170,749 14,532 1 surface wat 1 surface wat 1.06 0.00 1.06 0.48 1.05 1.05 1.09 1.15 1.39 1.15 1.39 1.15 1.39 0.71 0.98 0.71 0.98 0.71 0.98 0.71 0.94 1.13 1.05 1.05 1.00 1.27 1.39 0.54 1.13 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05	177,876 6,721 er extraction B:A 1.25 - - 1.26 9.27 1.05 1.01 1.03 1.03 1.03 0.92 0.98 0.98 1.04 0.99 0.84 0.99 0.84 0.99 0.96 1.02 0.96 1.32	180,229 7,438 between ind 1.59 1.34 1.59 1.34 1.62 1.30 1.92 1.22 1.61 1.21 1.87 1.28 1.58 1.20 1.43 1.58 1.20 1.43 1.20 1.43 1.20 1.43 1.20 1.43 1.20 1.43 1.20 1.43 1.20 1.43 1.20 1.34 1.55 1.20 1.23 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.24 1.55 1.25 1.25 1.25 1.25 1.25 1.25 1.25	228,084 33,092 icated scenar 1.00 1.00 1.00 1.00 1.04 1.03 1.05 1.04 1.05 1.04 1.05 1.04 1.05 1.04 1.05 1.03 1.07 1.15 1.08 1.59 1.10 1.16 1.16 1.04 1.04 1.00 1.00 1.00 1.00 1.00 1.00	194,994 19,142 ios E:A 1.69 - 1.70 15.66 1.55 16.37 1.33 1.71 1.30 1.36 2.09 1.33 2.92 1.33 2.92 1.33 2.92 1.33 2.78 1.32 2.20 1.24 1.36 1.79	249,540 54,166 54,166 0.82 0.11 0.82 0.90 0.52 0.97 0.90 0.95 0.95 0.95 0.95 0.95 0.95 0.95	234,021
rameter: mate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT	Median IQR IQR Ratio of total su Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	177,987 6,792 6,792 A:BASLINE 1.07 0.00 0.00 1.06 0.50 1.05 1.05 1.05 1.05 1.09 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.07 1.08 1.03 1.53 1.08 0.89 1.03 1.53 1.08 2.21 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.09 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.09 1.08 1.03 1.53 1.08 1.03 1.53 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.08 1.09 1.08 1.03 1.53 1.08 1.08 1.09 1.08 1.08 1.08 1.08 1.08 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.08 1.08 1.03 1.53 1.08 1.08 1.02 1.04 1.24	189,187 13,638 xtraction be: 8:A 1.25 	191,674 12,567 tween indicat C:B 1.34 1.59 1.34 1.62 1.30 1.74 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.21 1.25 1.24 1.71 1.21 1.25 1.24 1.71 1.25 1.24 1.74 1.25 1.25 1.24 1.25 1.31 1.25 1.31 1.25 1.31 1.25 1.32 1.32 1.33 1.25 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.59 1.34 1.25 1.21 1.25 1.24 1.25 1.24 1.25 1.24 1.25 1.24 1.74 1.25 1.24 1.74 1.25 1.24 1.71 1.25 1.24 1.71 1.25 1.24 1.71 1.25 1.24 1.71 1.25 1.39 1.72 1.39 1.39 1.39 1.39 1.39 1.39 1.33 1.39 1.39 1.39 1.39 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.39 1.34 1.34 1.34 1.39 1.34 1.34 1.34 1.39 1.34 1.34 1.34 1.39 1.34 1.35 1.34 1.34 1.34 1.34 1.35 1.34 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.34 1.35 1.34 1.35 1.34 1.35 1.34 1.35 1.34 1.35	238,186 29,281 29,281 1,00 1,00 1,00 1,00 1,05 1,24 1,04 1,05 1,04 1,05 1,04 1,05 1,04 1,05 1,04 1,05 1,03 1,00 1,00 1,00 1,00 1,00 1,00 1,00	207,796 22,481 E:A 1.67 - - 1.69 14.59 1.56 15.33 1.37 1.33 1.49 1.38 2.11 1.33 2.37 1.31 1.76 1.30 2.06 1.29 1.16 1.67	259,818 47,088 F:E 0.82 0.11 0.82 0.92 0.61 0.94 0.92 0.92 0.92 0.94 0.96 0.87 0.96 0.87 0.96 0.87 0.96 0.83 0.95 0.72 0.98 0.98 0.98 0.98 0.98	244,624	Parameter: Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	Median (2R Ratio of tota CGCM3 B1 Ratio: Median (2R) (2R) Median (2R) Median (2R) Median (2R) Median (2R) Median (2R) Median (2R) Median (2R)	170,749 14,532 1 surface wat 1 surface wat 1.06 0.00 1.06 0.48 1.05 0.90 1.15 1.32 1.05 1.05 1.05 1.05 1.05 1.05 1.27 0.98 0.71 1.05 1.05 1.27 0.94 1.13 1.05 1.27 0.94 1.13 1.08 0.71 1.08 0.71 1.08 0.71 1.08 0.71 1.08 0.71 1.05 0.71 0.24 7 1.05 0.74 0.24 7 0.24 0.24 0.24 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	177,876 6,721 er extraction B:A 1.25 	180,229 7,438 between ind C:8 1.59 1.34 1.59 1.32 1.61 1.61 1.22 1.61 1.22 1.61 1.21 1.87 1.28 1.20 2.23 1.43 1.20 2.23 1.15 1.11 1.13 1.39	228,084 33,092 (cated scenar 1.00 1.00 1.00 1.00 1.04 1.30 1.05 1.04 1.25 1.04 1.25 1.04 1.25 1.03 1.07 1.15 1.08 1.59 1.10 1.16 1.08 1.08 1.08 1.08	194,994 19,142 19,142 19,142 10,5 10,5 15,66 1,55 16,37 1,55 16,37 1,55 16,37 1,55 16,37 1,55 16,37 1,55 1,55 1,55 1,55 1,55 1,55 1,55 1,5	249,540 54,166 54,166 0.82 0.11 0.82 0.90 0.90 0.90 0.90 0.90 0.95 0.95 0.95	234,021

Table E.2Projected median monthly and median annual surface water extraction from all sources in
the Okanagan Lake drainage area. The results are based on the HadCM3 A2 and CGCM3 B1
climate models. Baseline results are based on the period 1996 to 2006. Future projections
are based on the period 2011 to 2040. To provide an index of the variability in the
projections, the inter-quartile range (IQR) is provided.

Drainage Are	a: OKANAGAN	LAKE															
Parameter:	Total surface w	ater extractio	n (ML)						Parameter:	Total surface	e water extra	ction (ML)					
Climate Model	: HadCM3 A2								Climate Model:	CGCM3 B1							
	Scenario Group:	BASELINE	А	В	с	D	E	F	Sc	enario Group:	BASELINE	А	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40	Scer	nario Number:	2	29	31	35	37	39	41
JAN	Median	2,213	2,374	2,960	3,952	2,960	3,952	3,258	JAN	Median	2,213	2,374	2,960	3,952	2,960	4,005	3,258
	IQR	132	0	559	869	559	869	86		IQR	132	0	559	869	559	905	86
FEB	Median	2,035	2,152	2,712	3,613	2,712	3,613	2,967	FEB	Median	2,035	2,152	2,710	3,612	2,710	3,660	2,968
	IQR	117	58	534	841	534	841	72		IQR	118	57	532	838	532	871	71
MAR	Median	3,257	3,401	3,997	5,211	4,185	5,398	4,929	MAR	Median	3,253	3,397	3,941	5,142	4,103	5,359	4,801
	IQR	158	62	634	1,092	786	1,249	721		IQR	99	63	638	1,156	807	1,364	681
APR	Median	4,684	6,759	7,266	9,046	7,518	9,305	8,751	APR	Median	4,684	6,759	7,266	9,046	7,518	9,305	8,751
	IQR	3,870	4,614	4,545	5,171	4,671	5,016	5,409		IQR	3,870	4,614	4,545	5,171	4,671	5,016	5,409
MAY	Median	17,068	18,594	18,789	23,319	19,599	24,198	23,090	MAY	Median	14,251	18,472	19,271	23,061	19,748	24,161	22,835
	IQR	4,881	5,335	5,074	6,460	5,600	7,741	6,780		IQR	4,489	3,988	4,029	6,978	4,994	8,070	7,189
JUN	Median	25,160	26,921	26,967	32,967	29,217	36,656	34,876	JUN	Median	24,925	24,178	24,377	31,064	27,079	33,506	32,136
	IQR	2,656	3,276	3,207	4,429	3,487	6,692	5,260		IQR	3,515	4,219	3,943	6,470	4,432	7,890	7,169
JUL	Median	33,319	34,456	34,186	41,994	37,374	46,073	44,423	JUL	Median	33,210	32,289	32,123	38,656	34,568	43,090	40,950
	IQR	2,296	3,448	3,149	6,002	3,797	8,390	7,429		IQR	3,938	2,283	2,123	4,144	3,314	7,671	5,687
AUG	Median	28,908	31,617	31,476	37,956	34,384	41,484	40,200	AUG	Median	31,570	29,510	29,480	35,299	31,810	39,849	37,578
	IQR	5,613	4,546	4,395	6,196	5,052	8,293	6,981		IQR	3,505	4,069	3,967	7,902	6,002	11,021	9,443
SEP	Median	18,864	20,529	20,660	24,563	22,435	26,672	25,660	SEP	Median	17,457	18,845	19,021	23,347	21,189	25,489	24,174
	IQR	1,488	2,385	2,385	3,304	3,009	5,315	4,071		IQR	3,784	2,880	2,813	3,031	2,832	5,433	3,570
OCT	Median	6,842	7,909	8,134	9,821	8,667	10,666	9,601	OCT	Median	5,055	8,924	9,284	10,800	9,685	11,438	10,772
	IQR	4,077	4,183	3,849	4,307	3,889	4,650	4,668		IQR	1,559	2,900	2,875	3,612	3,239	4,530	3,627
NOV	Median	2,177	2,477	3,075	4,095	3,077	4,105	3,300	NOV	Median	2,142	2,368	3,118	4,113	3,119	4,179	3,243
	IQR	131	533	765	1,101	803	1,108	474		IQR	204	468	742	990	777	1,008	560
DEC	Median	2,213	2,374	2,960	3,952	2,960	3,952	3,258	DEC	Median	2,213	2,374	2,960	3,952	2,960	4,005	3,258
	IQR	132	0	560	869	560	869	86		IQR	132	0	559	869	559	905	88
ANNUAL	Median	149,700	158,562	164,385	202,296	176,260	217,762	207,038	ANNUAL	Median	142,162	149,173	154,483	193,858	166,997	210,634	197,585
	IQR	5,190	11,159	10,221	26,078	20,572	38,924	26,723		IQR	12,936	5,289	8,884	30,149	20,498	45,770	30,140
Parameter:	Ratio of total s	urface water e	extraction betw	een indicated s	cenarios				Parameter:	Ratio of tota	I surface wat	er extraction	between ind	icated scenar	ios		
Climate Model	: HadCM3 A2								Climate Model:								
	Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E				A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	1.07	1.25	1.34	1.00	1.66	0.82		JAN	Median	1.07	1.25	1.34	1.00	1.69	0.81	
	IQR	0.00	-	1.55	1.00	-	0.10			IQR	0.00	-	1.55	1.00	-	0.10	
FEB	Median	1.06	1.26	1.33	1.00	1.68	0.82		FEB	Median	1.06	1.26	1.33	1.00	1.70	0.81	
	IQR	0.50	9.21	1.57	1.00	14.50	0.09			IQR	0.48	9.33	1.58	1.00	15.28	0.08	
MAR	Median	1.04	1.18	1.30	1.05	1.59	0.91		MAR	Median	1.04	1.16	1.30	1.04	1.58	0.90	
	IQR	0.39	10.23	1.72	1.24	20.15	0.58			IQR	0.64	10.13	1.81	1.26	21.65	0.50	
APR	Median	1.44	1.07	1.24	1.03	1.38	0.94		APR	Median	1.44	1.07	1.24	1.03	1.38	0.94	
	IQR	1.19	0.99	1.14	1.03	1.09	1.08			IQR	1.19	0.99	1.14	1.03	1.09	1.08	
		1.09	1.01	1.24	1.04	1.30	0.95		MAY	Median	1.30	1.04	1.20	1.02	1.31	0.95	
MAY	Median								1961			1.01	1.73	1.24	2.02	0.89	
	IQR	1.09	0.95	1.27	1.10	1.45	0.88			IQR	0.89						
JUN	IQR Median	1.07	1.00	1.22	1.08	1.36	0.95		JUN	IQR Median	0.97	1.01	1.27	1.11	1.39	0.96	
JUN	IQR Median IQR	1.07 1.23	1.00 0.98	1.22 1.38	1.08 1.09	1.36 2.04	0.95 0.79		NUL	IQR Median IQR	0.97 1.20	1.01 0.93	1.27 1.64	1.12	1.87	0.91	
	IQR Median IQR Median	1.07 1.23 1.03	1.00 0.98 0.99	1.22 1.38 1.23	1.08 1.09 1.09	1.36 2.04 1.34	0.95 0.79 0.96			IQR Median IQR Median	0.97 1.20 0.97	1.01 0.93 0.99	1.27 1.64 1.20	1.12 1.08	1.87 1.33	0.91	
JUN	IQR Median IQR Median IQR	1.07 1.23 1.03 1.50	1.00 0.98 0.99 0.91	1.22 1.38 1.23 1.91	1.08 1.09 1.09 1.21	1.36 2.04 1.34 2.43	0.95 0.79 0.96 0.89		JUL	IQR Median IQR Median IQR	0.97 1.20 0.97 0.58	1.01 0.93 0.99 0.93	1.27 1.64 1.20 1.95	1.12 1.08 1.56	1.87 1.33 3.36	0.91 0.95 0.74	
JUN	IQR Median IQR Median IQR Median	1.07 1.23 1.03 1.50 1.09	1.00 0.98 0.99 0.91 1.00	1.22 1.38 1.23 1.91 1.21	1.08 1.09 1.21 1.09	1.36 2.04 1.34 2.43 1.31	0.95 0.79 0.96 0.89 0.97		NUL	IQR Median IQR Median IQR Median	0.97 1.20 0.97 0.58 0.93	1.01 0.93 0.99 0.93 1.00	1.27 1.64 1.20 1.95 1.20	1.12 1.08 1.56 1.08	1.87 1.33 3.36 1.35	0.91 0.95 0.74 0.94	
JUN JUL AUG	IQR Median IQR Median IQR Median IQR	1.07 1.23 1.03 1.50 1.09 0.81	1.00 0.98 0.99 0.91 1.00 0.97	1.22 1.38 1.23 1.91 1.21 1.41	1.08 1.09 1.21 1.09 1.21	1.36 2.04 1.34 2.43 1.31 1.82	0.95 0.79 0.96 0.89 0.97 0.84		JUN JUL AUG	IQR Median IQR Median IQR Median IQR	0.97 1.20 0.97 0.58 0.93 1.16	1.01 0.93 0.99 0.93 1.00 0.97	1.27 1.64 1.20 1.95 1.20 1.99	1.12 1.08 1.56 1.08 1.51	1.87 1.33 3.36 1.35 2.71	0.91 0.95 0.74 0.94 0.86	
JUN	IQR Median IQR Median IQR Median IQR Median	1.07 1.23 1.03 1.50 1.09 0.81 1.09	1.00 0.98 0.99 0.91 1.00 0.97 1.01	1.22 1.38 1.23 1.91 1.21 1.41 1.19	1.08 1.09 1.21 1.09 1.15 1.09	1.36 2.04 1.34 2.43 1.31 1.82 1.30	0.95 0.79 0.96 0.89 0.97 0.84 0.96		JUL	IQR Median IQR Median IQR Median IQR Median	0.97 1.20 0.97 0.58 0.93 1.16 1.08	1.01 0.93 0.99 0.93 1.00 0.97 1.01	1.27 1.64 1.20 1.95 1.20 1.99 1.23	1.12 1.08 1.56 1.08 1.51 1.11	1.87 1.33 3.36 1.35 2.71 1.35	0.91 0.95 0.74 0.94 0.86 0.95	
JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR	1.07 1.23 1.03 1.50 1.09 0.81 1.09 1.60	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39	1.08 1.09 1.21 1.09 1.15 1.09 1.26	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23	0.95 0.79 0.96 0.89 0.97 0.84 0.96 0.77		JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08	1.12 1.08 1.56 1.08 1.51 1.11 1.01	1.87 1.33 3.36 1.35 2.71 1.35 1.89	0.91 0.95 0.74 0.94 0.86 0.95 0.66	
JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median	1.07 1.23 1.03 1.50 1.09 0.81 1.09 1.60 1.16	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00 1.03	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39 1.21	1.08 1.09 1.21 1.09 1.15 1.09 1.26 1.07	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23 1.35	0.95 0.79 0.96 0.89 0.97 0.84 0.96 0.77 0.90		JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76 1.77	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98 1.04	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08 1.16	1.12 1.08 1.56 1.08 1.51 1.11 1.01 1.04	1.87 1.33 3.36 1.35 2.71 1.35 1.89 1.28	0.91 0.95 0.74 0.94 0.86 0.95 0.66 0.94	
JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR	1.07 1.23 1.03 1.50 1.09 0.81 1.09 1.60 1.16 1.03	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00 1.03 0.92	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39 1.21 1.12	1.08 1.09 1.21 1.09 1.15 1.09 1.26 1.07 1.01	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23 1.35 1.11	0.95 0.79 0.96 0.89 0.97 0.84 0.96 0.77 0.90 1.00		JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76 1.77 1.86	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98 1.04 0.99	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08 1.16 1.26	1.12 1.08 1.56 1.08 1.51 1.11 1.01 1.04 1.13	1.87 1.33 3.36 1.35 2.71 1.35 1.89 1.28 1.56	0.91 0.95 0.74 0.94 0.86 0.95 0.66 0.94 0.80	
JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.07 1.23 1.03 1.50 0.81 1.09 1.60 1.16 1.03 1.14	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00 1.03 0.92 1.24	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39 1.21 1.12 1.33	1.08 1.09 1.21 1.09 1.15 1.09 1.26 1.07 1.01 1.00	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23 1.35 1.11 1.66	0.95 0.79 0.96 0.89 0.97 0.84 0.96 0.77 0.90 1.00 0.80		JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76 1.77 1.86 1.11	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98 1.04 0.99 1.32	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08 1.16 1.26 1.32	1.12 1.08 1.56 1.08 1.51 1.11 1.01 1.04 1.13 1.00	1.87 1.33 3.36 1.35 2.71 1.35 1.89 1.28 1.56 1.76	0.91 0.95 0.74 0.94 0.86 0.95 0.66 0.94 0.80 0.78	
JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.07 1.23 1.03 1.50 1.09 0.81 1.09 1.60 1.16 1.03 1.14 4.07	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00 1.03 0.92 1.24 1.44	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39 1.21 1.12 1.33 1.44	1.08 1.09 1.09 1.21 1.09 1.15 1.09 1.26 1.07 1.01 1.00 1.05	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23 1.35 1.11 1.66 2.08	0.95 0.79 0.96 0.89 0.97 0.84 0.96 0.77 0.90 1.00 0.80 0.43		JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76 1.77 1.86 1.11 2.29	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98 1.04 0.99 1.32 1.59	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08 1.16 1.26 1.32 1.33	1.12 1.08 1.56 1.08 1.51 1.11 1.01 1.04 1.13 1.00 1.05	1.87 1.33 3.36 1.35 2.71 1.35 1.89 1.28 1.56 1.76 2.15	0.91 0.95 0.74 0.94 0.86 0.95 0.66 0.94 0.80 0.78 0.56	
JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.07 1.23 1.03 1.50 1.09 0.81 1.09 1.60 1.16 1.03 1.14 4.07 1.07	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00 1.03 0.92 1.24	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39 1.21 1.12 1.33 1.44 1.34	1.08 1.09 1.21 1.09 1.15 1.09 1.26 1.07 1.01 1.00 1.05 1.00	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23 1.35 1.11 1.66	0.95 0.79 0.96 0.89 0.97 0.84 0.96 0.77 0.90 1.00 0.80 0.43 0.82		JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76 1.77 1.86 1.11 2.29 1.07	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98 1.04 0.99 1.32	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08 1.16 1.26 1.32 1.33 1.34	1.12 1.08 1.56 1.08 1.51 1.11 1.01 1.04 1.13 1.00 1.05 1.00	1.87 1.33 3.36 1.35 2.71 1.35 1.89 1.28 1.56 1.76	0.91 0.95 0.74 0.94 0.86 0.95 0.66 0.94 0.94 0.80 0.78 0.56 0.81	
JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.07 1.23 1.03 1.50 1.09 0.81 1.09 1.60 1.16 1.03 1.14 4.07 1.07 0.00	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00 1.03 0.92 1.24 1.44	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39 1.21 1.12 1.33 1.44 1.34 1.55	1.08 1.09 1.09 1.21 1.09 1.15 1.09 1.26 1.07 1.01 1.00 1.05 1.00 1.00	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23 1.35 1.11 1.66 2.08 1.66	0.95 0.79 0.96 0.89 0.89 0.97 0.84 0.96 0.77 0.90 1.00 0.80 0.43 0.82 0.10		JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76 1.77 1.86 1.11 2.29 1.07 0.00	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98 1.04 0.99 1.32 1.59 1.25	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08 1.16 1.26 1.32 1.33 1.34 1.55	1.12 1.08 1.56 1.08 1.51 1.11 1.01 1.04 1.13 1.00 1.05 1.00 1.00	1.87 1.33 3.36 1.35 2.71 1.35 1.89 1.28 1.56 1.76 2.15 1.69	0.91 0.95 0.74 0.94 0.86 0.95 0.66 0.94 0.80 0.78 0.78 0.56 0.81 0.10	
JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.07 1.23 1.03 1.50 1.09 0.81 1.09 1.60 1.16 1.03 1.14 4.07 1.07	1.00 0.98 0.99 0.91 1.00 0.97 1.01 1.00 1.03 0.92 1.24 1.44	1.22 1.38 1.23 1.91 1.21 1.41 1.19 1.39 1.21 1.12 1.33 1.44 1.34	1.08 1.09 1.21 1.09 1.15 1.09 1.26 1.07 1.01 1.00 1.05 1.00	1.36 2.04 1.34 2.43 1.31 1.82 1.30 2.23 1.35 1.11 1.66 2.08	0.95 0.79 0.96 0.89 0.97 0.84 0.96 0.77 0.90 1.00 0.80 0.43 0.82		JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	0.97 1.20 0.97 0.58 0.93 1.16 1.08 0.76 1.77 1.86 1.11 2.29 1.07	1.01 0.93 0.99 0.93 1.00 0.97 1.01 0.98 1.04 0.99 1.32 1.59	1.27 1.64 1.20 1.95 1.20 1.99 1.23 1.08 1.16 1.26 1.32 1.33 1.34	1.12 1.08 1.56 1.08 1.51 1.11 1.01 1.04 1.13 1.00 1.05 1.00	1.87 1.33 3.36 1.35 2.71 1.35 1.89 1.28 1.56 1.76 2.15	0.91 0.95 0.74 0.94 0.86 0.95 0.66 0.94 0.94 0.80 0.78 0.56 0.81	

Table E.3Projected median monthly and median annual surface water extraction from all sources in
the Okanagan River drainage area (downstream of Okanagan Lake). The results are based
on the HadCM3 A2 and CGCM3 B1 climate models. Baseline results are based on the period
1996 to 2006. Future projections are based on the period 2011 to 2040. To provide an index
of the variability in the projections, the inter-quartile range (IQR) is provided.

-	a: OKANAGAN			IVI OF OKAN	NAGAN LAI	(E)											
Parameter:	Total surface w	ater extraction	n (ML)						Parameter:		water extra	tion (ML)					
Climate Model:									Climate Model:								
	Scenario Group:	BASELINE	Α	В	с	D	E	F		enario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40		ario Number:	2	29	31	35	37	39	41
JAN	Median	5	86 0	105 17	165 50	105 17	165 50	137 14	JAN	Median	5	86 0	105 17	165 50	105 17	156 49	137 14
FEB	IQR Median	76	81	99	153	99	153	14	FEB	IQR Median	5	81	98	152	1/	144	14
FEB		76 4							FEB		4	2	98				
	IQR		2	16	48	16	48	12		IQR		-		48	18	47	12
MAR	Median	424	431	447	564	473	591	575	MAR	Median	422	428	443	554	469	576	565
	IQR	5	10	27	111	56	136	110		IQR	11	23	22	100	48	135	102
APR	Median	672	786	809	1,036	838	1,060	1,053	APR	Median	670	903	927	1,255	963	1,306	1,281
	IQR	368	439	446	798	435	811	803		IQR	199	276	282	515	302	508	512
MAY	Median	2,437	2,567	2,430	3,759	2,622	3,983	3,850	MAY	Median	1,967	2,624	2,549	3,727	2,665	3,967	3,791
	IQR	954	1,107	1,014	1,376	1,070	1,607	1,472		IQR	613	1,034	949	1,375	1,055	1,630	1,495
JUN	Median	4,737	5,193	4,925	6,212	5,213	7,107	6,579	JUN	Median	4,386	4,923	4,465	5,880	4,852	6,576	6,128
	IQR	342	762	740	1,143	792	1,634	1,276		IQR	835	968	809	1,376	872	1,974	1,459
JUL	Median	7,441	7,568	6,970	8,823	7,434	10,150	9,425	JUL	Median	7,386	7,352	6,806	8,277	7,292	9,724	8,898
	IQR	374	849	633	875	726	2,005	1,117		IQR	657	824	1,096	572	946	1,556	963
AUG	Median	7,254	7,304	6,768	8,094	7,305	9,557	8,731	AUG	Median	7,209	6,909	6,187	7,778	6,817	9,017	8,365
	IQR	823	1,296	982	1,154	1,331	1,765	1,486		IQR	1,046	689	795	1,068	572	2,374	1,572
SEP	Median	4,268	4,650	4,169	5,153	4,640	6,081	5,479	SEP	Median	4,136	4,301	3,944	4,844	4,347	5,561	5,141
	IQR	606	694	708	687	669	1,471	916		IQR	832	654	634	761	702	1,025	576
OCT	Median	847	1,057	1,042	1,198	1,072	1,320	1,236	OCT	Median	679	1,441	1,370	1,587	1,461	1,829	1,652
	IQR	741	766	640	944	814	1,006	1,000		IQR	552	1,125	954	1,190	1,115	1,329	1,221
NOV	Median	81	84	107	175	107	175	136	NOV	Median	78	84	108	173	108	165	137
	IQR	6	11	21	55	22	55	15		IQR	5	43	38	49	38	58	34
DEC	Median	81	86	105	165	105	165	137	DEC	Median	81	86	105	165	105	156	137
	IQR	5	0	17	50	17	50	14		IQR	5	0	17	50	17	49	14
ANNUAL	Median	28,925	30,484	28,195	36,432	30,314	41,786	38,387	ANNUAL	Median	27,149	28,696	26,777	34,162	28,756	38,906	36,008
	IQR	1.133	2.640	2,408	4.634	2,818	8.897	5,879		IQR	2.338	1.737	2.335	4.103	1.504	9,113	5.338
														1			
Parameter:	Ratio of total su	urface water e	xtraction be	tween indicat	ed scenarios				Parameter:	Ratio of tota	I surface wat	er extractior	between indi	cated scenar	ios		
Climate Model:									Climate Model:	CGCM3 B1							
		A:BASLINE	B:A	C:B	D:B	E:A	F:E				A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	1.07	1.21	1.57	1.00	1.90	0.83		JAN	Median	1.07	1.21	1.57	1.00	1.80	0.88	-
1011	IQR	0.00	1.21	2.94	1.00	1.50	0.28		1011	IQR	0.00	1.21	2.94	1.00	1.00	0.29	
FEB	Median	1.07	1.22	1.55	1.00	1.89	0.28		FEB	Median	1.06	1.22	1.55	1.02	1.78	0.23	
160	IOR	0.50	8.00	3.00	1.00	24.00	0.25		160	IOR	0.50	8.00	3.00	1.13	23.50	0.26	
MAR	Median	1.02	1.04	1.26	1.06	1.37	0.23		MAR	Median	1.02	1.04	1.25	1.06	1.35	0.28	
IVIAN		2.00	2.70	4.11	2.07							1.04	1.25				
APR	IQR								ivi ut			0.00	4.55	2.10			
						13.60	0.81			IQR	2.09	0.96	4.55	2.18	5.87	0.76	
AFN	Median	1.17	1.03	1.28	1.04	1.35	0.99		APR	IQR Median	2.09 1.35	1.03	1.35	1.04	5.87 1.45	0.76 0.98	
	IQR	1.17 1.19	1.03 1.02	1.28 1.79	1.04 0.98	1.35 1.85	0.99 0.99		APR	IQR Median IQR	2.09 1.35 1.39	1.03 1.02	1.35 1.83	1.04 1.07	5.87 1.45 1.84	0.76 0.98 1.01	
MAY	IQR Median	1.17 1.19 1.05	1.03 1.02 0.95	1.28 1.79 1.55	1.04 0.98 1.08	1.35 1.85 1.55	0.99 0.99 0.97			IQR Median IQR Median	2.09 1.35 1.39 1.33	1.03 1.02 0.97	1.35 1.83 1.46	1.04 1.07 1.05	5.87 1.45 1.84 1.51	0.76 0.98 1.01 0.96	
MAY	IQR Median IQR	1.17 1.19 1.05 1.16	1.03 1.02 0.95 0.92	1.28 1.79 1.55 1.36	1.04 0.98 1.08 1.06	1.35 1.85 1.55 1.45	0.99 0.99 0.97 0.92		APR MAY	IQR Median IQR Median IQR	2.09 1.35 1.39 1.33 1.69	1.03 1.02 0.97 0.92	1.35 1.83 1.46 1.45	1.04 1.07 1.05 1.11	5.87 1.45 1.84 1.51 1.58	0.76 0.98 1.01 0.96 0.92	
	IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10	1.03 1.02 0.95 0.92 0.95	1.28 1.79 1.55 1.36 1.26	1.04 0.98 1.08 1.06 1.06	1.35 1.85 1.55 1.45 1.37	0.99 0.99 0.97 0.92 0.93		APR	IQR Median IQR Median IQR Median	2.09 1.35 1.39 1.33 1.69 1.12	1.03 1.02 0.97 0.92 0.91	1.35 1.83 1.46 1.45 1.32	1.04 1.07 1.05 1.11 1.09	5.87 1.45 1.84 1.51 1.58 1.34	0.76 0.98 1.01 0.96 0.92 0.93	
MAY JUN	IQR Median IQR Median IQR	1.17 1.19 1.05 1.16 1.10 2.23	1.03 1.02 0.95 0.92 0.95 0.97	1.28 1.79 1.55 1.36 1.26 1.54	1.04 0.98 1.08 1.06 1.06 1.07	1.35 1.85 1.55 1.45 1.37 2.14	0.99 0.99 0.97 0.92 0.93 0.78		APR MAY JUN	IQR Median IQR Median IQR Median IQR	2.09 1.35 1.39 1.33 1.69 1.12 1.16	1.03 1.02 0.97 0.92 0.91 0.84	1.35 1.83 1.46 1.45 1.32 1.70	1.04 1.07 1.05 1.11 1.09 1.08	5.87 1.45 1.84 1.51 1.58 1.34 2.04	0.76 0.98 1.01 0.96 0.92 0.93 0.74	
MAY	IQR Median IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10 2.23 1.02	1.03 1.02 0.95 0.92 0.95 0.97 0.92	1.28 1.79 1.55 1.36 1.26 1.54 1.27	1.04 0.98 1.08 1.06 1.06 1.07 1.07	1.35 1.85 1.55 1.45 1.37 2.14 1.34	0.99 0.99 0.97 0.92 0.93 0.78 0.93		APR MAY	IQR Median IQR Median IQR Median IQR Median	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00	1.03 1.02 0.97 0.92 0.91 0.84 0.93	1.35 1.83 1.46 1.45 1.32 1.70 1.22	1.04 1.07 1.05 1.11 1.09 1.08 1.07	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92	
MAY JUN JUL	IQR Median IQR Median IQR Median IQR	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.92 0.75	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38	1.04 0.98 1.08 1.06 1.06 1.07 1.07 1.15	1.35 1.85 1.45 1.37 2.14 1.34 2.36	0.99 0.99 0.97 0.92 0.93 0.78 0.93 0.56		APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR IQR	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92 0.62	
MAY JUN	IQR Median IQR Median IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.75 0.93	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20	1.04 0.98 1.08 1.06 1.06 1.07 1.07 1.15 1.08	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31	0.99 0.99 0.97 0.92 0.93 0.78 0.93 0.56 0.91		APR MAY JUN	IQR Median IQR Median IQR Median IQR Median IQR Median	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92 0.62 0.93	
MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.75 0.93 0.76	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18	1.04 0.98 1.08 1.06 1.06 1.07 1.07 1.15 1.08 1.36	1.35 1.85 1.55 1.45 2.14 1.37 2.14 1.34 2.36 1.31 1.36	0.99 0.99 0.97 0.92 0.93 0.78 0.93 0.56 0.91 0.84		APR MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92 0.62 0.93 0.66	
MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.75 0.93 0.76 0.90	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.24	1.04 0.98 1.08 1.06 1.06 1.07 1.07 1.07 1.15 1.08 1.36 1.11	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31 1.36 1.31	0.99 0.99 0.97 0.92 0.93 0.78 0.93 0.56 0.91 0.84 0.90		APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92 0.62 0.93 0.66 0.92	
MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.97 0.92 0.75 0.93 0.76 0.90 1.02	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.24 0.97	1.04 0.98 1.08 1.06 1.07 1.07 1.07 1.15 1.08 1.36 1.11 0.94	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31 1.36 1.31 2.12	0.99 0.99 0.97 0.92 0.93 0.78 0.93 0.56 0.91 0.84 0.90 0.62		APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04 0.79	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23 1.20	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 1.11	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92 0.62 0.93 0.66 0.92 0.56	
MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15 1.25	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.75 0.93 0.76 0.90 1.02 0.99	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.24 0.97 1.15	1.04 0.98 1.08 1.06 1.06 1.07 1.15 1.08 1.36 1.36 1.11 0.94 1.03	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31 1.36 1.31 2.12 1.25	0.99 0.99 0.92 0.93 0.78 0.93 0.78 0.93 0.56 0.91 0.84 0.90 0.62 0.94		APR MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04 0.79 2.12	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97 0.95	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23 1.20 1.16	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 1.11 1.07	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57 1.27	0.76 0.98 1.01 0.92 0.92 0.74 0.92 0.62 0.93 0.66 0.93 0.66 0.92 0.56 0.90	
MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.97 0.92 0.75 0.93 0.76 0.90 1.02	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.24 0.97	1.04 0.98 1.08 1.06 1.07 1.07 1.07 1.15 1.08 1.36 1.11 0.94	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31 1.36 1.31 2.12	0.99 0.99 0.97 0.92 0.93 0.78 0.93 0.56 0.91 0.84 0.90 0.62		APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04 0.79	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23 1.20	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 1.11	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92 0.62 0.93 0.66 0.92 0.56	
MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15 1.25	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.75 0.93 0.76 0.90 1.02 0.99	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.24 0.97 1.15	1.04 0.98 1.08 1.06 1.06 1.07 1.15 1.08 1.36 1.36 1.11 0.94 1.03	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31 1.36 1.31 2.12 1.25	0.99 0.99 0.92 0.93 0.78 0.93 0.78 0.93 0.56 0.91 0.84 0.90 0.62 0.94		APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04 0.79 2.12	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97 0.95	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23 1.20 1.16	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 1.11 1.07	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57 1.27	0.76 0.98 1.01 0.92 0.92 0.74 0.92 0.62 0.93 0.66 0.93 0.66 0.92 0.56 0.90	
MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15 1.25 1.03	1.03 1.02 0.95 0.92 0.95 0.97 0.92 0.75 0.93 0.76 0.90 1.02 0.99 0.84	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.24 0.97 1.15 1.48	1.04 0.98 1.08 1.06 1.07 1.07 1.15 1.08 1.36 1.11 0.94 1.03 1.27	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31 1.36 1.31 2.12 1.25 1.31	0.99 0.99 0.92 0.93 0.78 0.93 0.78 0.93 0.56 0.91 0.84 0.90 0.62 0.94 0.99		APR MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04 0.79 2.12 2.04	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97 0.95 0.85	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23 1.20 1.16 1.25	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 1.11 1.07 1.11	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57 1.27 1.18	0.76 0.98 1.01 0.96 0.92 0.74 0.92 0.62 0.93 0.66 0.92 0.56 0.90 0.92	
MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15 1.25 1.03 1.04	1.03 1.02 0.95 0.92 0.97 0.97 0.92 0.75 0.93 0.76 0.90 1.02 0.99 0.84 1.28	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.20 1.18 1.24 0.97 1.15 1.48 1.64	1.04 0.98 1.08 1.06 1.06 1.07 1.07 1.15 1.08 1.36 1.11 0.94 1.03 1.27 1.00	1.35 1.85 1.55 1.45 1.37 2.14 1.34 2.36 1.31 1.36 1.31 2.12 1.25 1.31 2.09	0.99 0.99 0.97 0.92 0.93 0.78 0.93 0.56 0.91 0.84 0.90 0.62 0.94 0.99 0.77		APR MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	2.09 1.35 1.39 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04 0.79 2.12 2.04 1.07	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97 0.95 0.85 1.29	1.35 1.83 1.45 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23 1.20 1.16 1.25 1.60	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 1.11 1.07 1.17 1.00	5.87 1.45 1.84 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57 1.27 1.18 1.96	0.76 0.98 1.01 0.92 0.93 0.74 0.92 0.62 0.93 0.66 0.92 0.56 0.92 0.56 0.92 0.83	
MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15 1.25 1.03 1.04 1.83	1.03 1.02 0.95 0.95 0.97 0.92 0.75 0.93 0.76 0.90 1.02 0.99 0.84 1.28 1.91	1.28 1.79 1.55 1.36 1.26 1.54 1.27 1.38 1.20 1.18 1.24 0.97 1.15 1.48 1.64 2.62	1.04 0.98 1.08 1.06 1.07 1.07 1.07 1.15 1.08 1.36 1.11 0.94 1.03 1.27 1.00 1.05	1.35 1.85 1.55 1.37 2.14 1.34 2.36 1.31 2.12 1.36 1.31 2.12 1.31 2.09 5.00	0.99 0.99 0.97 0.93 0.93 0.78 0.93 0.56 0.93 0.56 0.94 0.62 0.62 0.94 0.90 0.77 0.27		APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	2.09 1.35 1.39 1.69 1.12 1.16 1.00 1.25 0.96 0.96 0.66 1.04 0.79 2.12 2.04 1.07 8.60	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97 0.95 0.85 1.29 0.88	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.23 1.20 1.16 1.25 1.60 1.29	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 1.11 1.07 1.17 1.00 1.00	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57 1.27 1.17 1.27 1.35	0.76 0.98 1.01 0.96 0.92 0.93 0.74 0.92 0.62 0.93 0.66 0.92 0.56 0.92 0.56 0.90 0.92 0.56	
MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.19 1.05 1.16 1.10 2.23 1.02 2.27 1.01 1.57 1.09 1.15 1.25 1.03 1.04 1.83 1.07	1.03 1.02 0.95 0.95 0.97 0.92 0.75 0.93 0.76 0.90 1.02 0.99 0.84 1.28 1.91	1.28 1.79 1.55 1.36 1.26 1.54 1.28 1.20 1.18 1.20 1.18 1.20 1.18 1.20 1.18 1.20 1.18 1.20 1.18 1.20 1.18 1.20 1.18 1.20 1.18 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	1.04 0.98 1.08 1.06 1.07 1.07 1.15 1.08 1.36 1.31 1.09 4 1.03 1.27 1.00 1.05 1.00	1.35 1.85 1.55 1.37 2.14 1.34 2.36 1.31 2.12 1.36 1.31 2.12 1.31 2.09 5.00	0.99 0.99 0.92 0.93 0.78 0.93 0.56 0.91 0.84 0.90 0.62 0.94 0.99 0.77 0.27 0.83		APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	2.09 1.35 1.33 1.69 1.12 1.16 1.00 1.25 0.96 0.66 1.04 0.79 2.12 2.04 1.07	1.03 1.02 0.97 0.92 0.91 0.84 0.93 1.33 0.90 1.15 0.92 0.97 0.95 0.85 1.29 0.88	1.35 1.83 1.46 1.45 1.32 1.70 1.22 0.52 1.26 1.34 1.20 1.16 1.25 1.60 1.29 1.57	1.04 1.07 1.05 1.11 1.09 1.08 1.07 0.86 1.10 0.72 1.10 0.72 1.10 1.11 1.07 1.17 1.00 1.00	5.87 1.45 1.84 1.51 1.58 1.34 2.04 1.32 1.89 1.31 3.45 1.29 1.57 1.27 1.17 1.27 1.35	0.76 0.98 1.01 0.96 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92	

Table E.4Projected median monthly and median annual surface water extraction from all sources in
the Mission Creek drainage area. The results are based on the HadCM3 A2 and CGCM3 B1
climate models. Baseline results are based on the period 1996 to 2006. Future projections
are based on the period 2011 to 2040. To provide an index of the variability in the
projections, the inter-quartile range (IQR) is provided.

Climate Model: HadCM3 A2 C F Climate Model: CGCM3 B1 C C C C	•	a: MISSION CR																
Scenarologics Modeland MA B C D E F JAN Modeland MA 153 285 198 285 201 18 300 255 31 35 37 40 31 35 37 40 32 31 35 37 40 32 31 35 37 40 32 31 35 30 37 40 32 31 35 30 37 40 41 43 43 44 40 <t< th=""><th>Parameter:</th><th></th><th>ater extractio</th><th>n (ML)</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>e water extra</th><th>ction (ML)</th><th></th><th></th><th></th><th></th><th></th></t<>	Parameter:		ater extractio	n (ML)								e water extra	ction (ML)					
beaub	Climate Model	: HadCM3 A2																
MAI Median Hall																		
FEB Medion 134 142 145 145 145 145 145 145 145 145 145 145 145 145 145 145 145 145 145 145 145 155<			142	153		245		245	203			142	153	198		198		203
Index <th< td=""><td></td><td>IQR</td><td>8</td><td>0</td><td>42</td><td>59</td><td>42</td><td>59</td><td>10</td><td></td><td>IQR</td><td>8</td><td>0</td><td>42</td><td>59</td><td>42</td><td>57</td><td>10</td></th<>		IQR	8	0	42	59	42	59	10		IQR	8	0	42	59	42	57	10
MARMedian18940144851277971718513513A'RMedian62784996298894510.21995106153416170711161M'RMedian2.2772.532.532.532.572.132.812.81M'RMedian61.92.97111010.43074.81307M'RMedian4.954.50 <td>FEB</td> <td>Median</td> <td>134</td> <td>142</td> <td>185</td> <td>228</td> <td>185</td> <td>228</td> <td>189</td> <td>FEB</td> <td>Median</td> <td>134</td> <td>142</td> <td>185</td> <td>227</td> <td>185</td> <td>212</td> <td>188</td>	FEB	Median	134	142	185	228	185	228	189	FEB	Median	134	142	185	227	185	212	188
ImageImaImaImaImaImaImaImaImaImaImaImaImaImaImaImaImaIma		IQR	7	4	41	58	41	58	8		IQR	8	4	40	57	40	54	8
AHR Median 6.27 649 902 988 946 1032 993 MV Median 6.27 2.57 5.77 <th5.75< th=""> <th5.77< th=""> <th5.77< th=""></th5.77<></th5.77<></th5.75<>	MAR	Median	389	401	448	512	479	544	513	MAR	Median	387	402	441	503	471	518	506
India Sold Sold <t< td=""><td></td><td>IQR</td><td>15</td><td>8</td><td>50</td><td>75</td><td>71</td><td>98</td><td>59</td><td></td><td>IQR</td><td>6</td><td>15</td><td>48</td><td>83</td><td>79</td><td>111</td><td>69</td></t<>		IQR	15	8	50	75	71	98	59		IQR	6	15	48	83	79	111	69
MAY Median 2,272 2,513 2,813 2,816 2,774 1,203 9,883 1,713 9,78	APR	Median	627	849	902	988	945	1,032	995	APR	Median	658	927	965	1,029	993	1,034	1,040
I/08 1/08 1/08 9/08 9/08 1/02 1/08 1/08 4/08 4/08 4/08 4/08 4/08 4/08 1/08 <th< td=""><td></td><td>IQR</td><td>502</td><td>604</td><td>593</td><td>612</td><td>578</td><td>597</td><td>613</td><td></td><td>IQR</td><td>249</td><td>299</td><td>317</td><td>360</td><td>345</td><td>368</td><td>367</td></th<>		IQR	502	604	593	612	578	597	613		IQR	249	299	317	360	345	368	367
JNN Median 4,246 6,452 4,544 6,470 6,421 4,470 4,623 4,414 5,104 4,889 JNL Median 6,070 6,531 6,672 7,561 6,070 6,731 5,631 6,672 7,561 7,78 7,77 7,78 7,78 7,77 7,78 7,78 7,77 7,78 7,78 7,78 7,78 7,78 7,78 7,78 7,78 7,78 7,78 7,78 7,78 7,77 7,78 7,78 7,77 7,78 7,78 7,78 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,77 7,7	MAY	Median	2,272	2,519	2,513	2,823	2,572	2,918	2,816	MAY	Median	1,944	2,469	2,467	2,734	2,496	2,818	2,726
Idit 40sion 60.70 67.41 66.42 77.7 92.0 81.9 JUL Medion 6.70 6.331 6.692 7.34 7.13 1.90 1.91 Mode 6.287 6.518 6.287 6.517 6.528 6.549 7.72 8.33 1.206 1.92 1.92 1.92 1.92 1.92 1.93 6.287 6.537 6.518 6.547 5.578 5.624 6.574 <t< td=""><td></td><td>IQR</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		IQR																
JUL Median 6.070 6.831 6.070 6.921 7.84 7.181 AUG Median 5.56 5.849 7.71 6.112 6.037 5.562 5.365 5.731 6.515 6.21 7.78 8.84 8.28 AUG 1.181	JUN	Median	4,246	4,652	4,504	4,887	4,779	5,493	5,219	JUN	Median	4,304	4,271	4,057	4,623	4,414	5,104	4,889
AUG AUG <td></td> <td>1.000</td> <td>100</td> <td></td> <td></td> <td></td> <td></td> <td>020</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.00</td>		1.000	100					020										0.00
Ald Median 5,566 5,949 5,721 6,132 6,349 7,087 6,790 GP 1,941 1,080 1,381 1,181 1,181 1,485 1,312 1,485 1,312 1,485 1,312 1,481 1,312 1,481 1,312 1,481 1,312 1,481 1,312 1,481 1,312 1,481 1,312 1,481 1,412 1,481 1,412 </td <td>JUL</td> <td>Median</td> <td></td> <td>6,333</td> <td></td> <td>6,621</td> <td></td> <td></td> <td></td> <td>JUL</td> <td>Median</td> <td></td> <td></td> <td>5,841</td> <td>6,267</td> <td>6,261</td> <td></td> <td></td>	JUL	Median		6,333		6,621				JUL	Median			5,841	6,267	6,261		
indication indicat																		
SEP Median 3.661 3.950 3.771 4.063 4.109 4.907 4.007 4.007 4.00 508 521 Corr Median 1.089 1.391 1.375 1.480 1.391 1.375 1.480 1.22 1.081 1.22 1.081 1.22 1.081 1.22 1.081 1.22 1.081 1.22 1.081 1.431 1.381 1.431 1.381 1.475 1.499 1.522 1.522 NOV Median 1.42 1.023 1.012 1.014 1.025 1.52 1.081 1.43 1.381 1.443 1.381 1.443 1.381 1.443 1.381 1.443 1.381 1.443 1.381 1.443 1.431	AUG									AUG								
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OCT Median 1.989 1.931 1.975 1.480 1.489 1.981 1.475 1.480 1.881 1.475 1.480 1.881 1.475 1.480 1.881 1.475 1.480 1.881 1.475 1.480 1.65 1.22 1.014 1.025 1.125 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.02 1.016 1.016 1.02 1.016 1.016 1.02 1.016 1.016 1.02 1.016 1.02 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.016 1.026 1.016 1.026 1.016 1.026 1.016 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 1.026 </td <td>SEP</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>SEP</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	SEP								1	SEP								
IQR IQ2 I_027 I_0													-					
NV Median 142 148 210 263 199 NV Median 138 148 206 237 206 240 199 DEC Median 142 153 198 245 198 245 203 100 10 50 92 122 94 129 92 ANNUAL Median 24,875 26,64 25,774 28,444 28,279 32,047 30,188 100 1.60 1.283 24,463 24,463 3,224 Total 1.08 1.311 2,476 2,052 2,038 4,466 3,224 Tameter: Ratio Median 1.07 1.30 1.24 1.03 1.28 2,397 4,693 3,324 Tameter: Ratio Massime BA CB PA FE Median 1.03 1.24 1.03 1.24 1.03 1.24 1.03 1.24 1.03 1.24 1.03 1.14 0.03	OCT									OCT								
Idd 8 76 83 102 85 107 69 Id7 107 50 92 112 94 129 52 DEC Median 142 153 198 245 031 MUAL Median 2,376 2,660 2,574 2,023 2,039 2,039 3,043 MUAL Median 1,311 2,476 2,560 2,681 2,039 4,465 3,324 Parameter: Ratio of total surface water straction strate water strate water strate water strate s				1														
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Jinate Model: HadCM3 A2 - - - - - - Climate Model: GG(CM3 B1 - 0.3 1.24 1.00 1.43 1.00 1.43 0.03 1.24 1.00 1.45 0.33 1.00 1.30 1.24 1.00 1.43 0.03 0.33 0.51 1.41 1.04 1.07 1.30 1.12 1.01 1.12 1.01 1.12 1.01 1.12 1.01 1.12 1.01 1.12 1.01 1.12 1.01 1.11 1.01 1.11 1.01 1.11 1.01 1.11 1.02 <td></td>																		
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ANNUAL Median 1.06 0.97 1.10 1.10 1.21 0.94 ANNUAL Median 1.06 0.99 1.09 1.07 1.20 0.95	OCT	Median IQR Median IQR Median IQR	1.22 1.28 0.92 1.04 9.50	0.99 0.98 1.42 1.09	1.05 1.00 1.25 1.23	1.05 1.01 1.00 1.02	1.15 1.08 1.78 1.41	0.93 0.97 0.76 0.64		NOV	IQR Median IQR	1.61 1.07 5.00	0.92 1.39 1.84	1.08 1.25 1.22	1.16 1.00 1.02	1.04 1.62 2.58	0.91 1.05 0.83 0.40	
	OCT	Median IQR Median IQR Median IQR Median	1.22 1.28 0.92 1.04 9.50 1.07	0.99 0.98 1.42 1.09	1.05 1.00 1.25 1.23 1.24	1.05 1.01 1.00 1.02 1.00	1.15 1.08 1.78 1.41	0.93 0.97 0.76 0.64 0.83		NOV	IQR Median IQR Median	1.61 1.07 5.00 1.07	0.92 1.39 1.84	1.08 1.25 1.22 1.24	1.16 1.00 1.02 1.00	1.04 1.62 2.58	0.91 1.05 0.83 0.40 0.89	
	OCT NOV DEC	Median IQR Median IQR Median IQR Median IQR	1.22 1.28 0.92 1.04 9.50 1.07 0.00	0.99 0.98 1.42 1.09 1.30	1.05 1.00 1.25 1.23 1.24 1.43	1.05 1.01 1.00 1.02 1.00 1.00	1.15 1.08 1.78 1.41 1.61	0.93 0.97 0.76 0.64 0.83 0.16		NOV	IQR Median IQR Median IQR	1.61 1.07 5.00 1.07 0.00	0.92 1.39 1.84 1.30	1.08 1.25 1.22 1.24 1.43	1.16 1.00 1.02 1.00 1.00	1.04 1.62 2.58 1.49	0.91 1.05 0.83 0.40 0.89 0.17	

Table E.5Projected median monthly and median annual surface water extraction from all sources in
the Trout Creek drainage area. The results are based on the HadCM3 A2 and CGCM3 B1
climate models. Baseline results are based on the period 1996 to 2006. Future projections
are based on the period 2011 to 2040. To provide an index of the variability in the
projections, the inter-quartile range (IQR) is provided.

	a: TROUT CREE	К															
Parameter:	Total surface w	ater extractio	n (ML)						Parameter:	Total surface	water extra	ction (ML)					
Climate Model:									Climate Model:								
	Scenario Group:	BASELINE	Α	В	с	D	E	F	So	cenario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40	Sce	nario Number:	2	29	31	35	37	39	41
JAN	Median	110	118	135	190	135	190	158	JAN	Median	110	118	135	190	135	209	158
	IQR	7	0	16	30	16	30	5		IQR	7	0	16	30	16	27	5
FEB	Median	102	108	124	175	124	175	145	FEB	Median	102	108	124	175	124	191	145
	IQR	6	3	15	28	15	28	4		IQR	6	3	14	28	14	25	4
MAR	Median	203	212	223	287	239	301	276	MAR	Median	205	213	228	289	243	326	283
	IQR	10	10	25	45	39	56	35		IQR	8	4	20	40	34	50	26
APR	Median	301	496	502	564	509	584	563	APR	Median	380	539	555	665	578	692	665
	IQR	293	302	313	377	328	380	372		IQR	77	184	165	174	153	164	177
MAY	Median	1,184	1,251	1,250	1,464	1,272	1,529	1,461	MAY	Median	947	1,218	1,214	1,461	1,259	1,553	1,463
	IQR	276	292	274	373	346	466	419		IQR	243	329	316	331	352	370	372
JUN	Median	1,789	1,901	1,833	2,119	2,034	2,324	2,256	JUN	Median	1,758	1,740	1,703	1,944	1,843	2,122	2,052
	IQR	191	170	162	197	265	466	380		IQR	235	321	323	312	338	463	393
JUL	Median	2.484	2,474	2,435	2.747	2,739	3,213	3,058	JUL	Median	2,271	2,362	2,291	2,552	2,551	2,941	2,803
	IQR	158	267	241	267	306	501	362		IQR	304	184	215	237	303	525	409
AUG	Median	2,308	2,409	2,342	2,574	2,632	3,043	2,893	AUG	Median	2,308	2,213	2,139	2,404	2,434	2,807	2,645
	IQR	308	313	355	310	395	570	482		IQR	248	314	259	385	502	696	570
SEP	Median	1,574	1,595	1,546	1,775	1,830	2,050	1,959	SEP	Median	1,536	1,495	1,460	1,652	1,665	1,888	1,797
36	IQR	103	1,393	1,540	146	204	378	276	JLI	IQR	288	232	205	214	193	328	233
OCT	Median	602	770	760	847	826	960	893	ОСТ	Median	422	770	761	843	852	998	899
001	IQR	182	246	247	261	224	276	270	001	IQR	179	153	151	170	201	256	208
NOV	Median	102	118	142	201	142	204	158	NOV	Median	107	127	148	211	149	225	166
NOV	IQR	6	73	78	98	93	118	83	NOV	IQR	107	65	67	66	74	77	69
DEC	Median	110	118	135	190	135	110	158	DEC	Median	110	118	135	190	135	209	158
DEC	IOR	7	0	135	32	135	32	5	DEC	IOR	7	0	135	30	135	209	5
				-													
ANNUAL	Median IOR	10,890 610	11,622 995	11,534 1,111	13,430 1,429	12,833 1.513	14,693 2,747	14,145 1,921	ANNUAL	Median IOR	10,378 989	10,795 573	10,713 574	12,449 1.280	11,873 1.450	14,064 2,308	13,095 1,768
Parameter:																	
Climate Model:									Parameter: Climate Model:	CGCM3 B1	l surface wat						
Climate Model:	HadCM3 A2 Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E		Climate Model:	CGCM3 B1 Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E	
	: HadCM3 A2 Ratio: Median	A:BASLINE 1.08		C:B 1.41	D:B 1.00	E:A 1.61	0.83			CGCM3 B1 Ratio: Median	A:BASLINE 1.07		C:B 1.41	D:B 1.00		0.75	
Climate Model: JAN	: HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.08 0.00	B:A 1.14	C:B 1.41 1.88	D:B 1.00 1.00	1.61	0.83		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR	A:BASLINE 1.07 0.00	B:A 1.14	C:B 1.41 1.88	D:B 1.00 1.00	E:A 1.77	0.75	
Climate Model:	: HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.08 0.00 1.06	B:A 1.14 - 1.15	C:B 1.41 1.88 1.41	D:B 1.00 1.00 1.00	1.61 - 1.62	0.83 0.17 0.83		Climate Model:	CGCM3 B1 Ratio: Median IQR Median	A:BASLINE 1.07 0.00 1.06	B:A 1.14 - 1.15	C:B 1.41 1.88 1.41	D:B 1.00 1.00 1.00	E:A 1.77 - 1.77	0.75 0.19 0.76	
Climate Model: JAN FEB	E HadCM3 A2 Ratio: Median IQR Median IQR	A:BASLINE 1.08 0.00 1.06 0.50	B:A 1.14 - 1.15 5.00	C:B 1.41 1.88 1.41 1.87	D:B 1.00 1.00 1.00 1.00	1.61 - 1.62 9.33	0.83 0.17 0.83 0.14		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50	B:A 1.14 - 1.15 4.67	C:B 1.41 1.88 1.41 2.00	D:B 1.00 1.00 1.00 1.00	E:A 1.77 - 1.77 8.33	0.75 0.19 0.76 0.16	
Climate Model: JAN	HadCM3 A2 Ratio: Median IQR Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04	B:A 1.14 - 1.15 5.00 1.05	C:B 1.41 1.88 1.41 1.87 1.29	D:B 1.00 1.00 1.00 1.00 1.07	1.61 - 9.33 1.42	0.83 0.17 0.83 0.14 0.92		Climate Model: JAN	CGCM3 B1 Ratio: Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.50 1.04	B:A 1.14 - 1.15 4.67 1.07	C:B 1.41 1.88 1.41 2.00 1.27	D:B 1.00 1.00 1.00 1.00 1.07	E:A 1.77 - 1.77 8.33 1.53	0.75 0.19 0.76 0.16 0.87	
Climate Model: JAN FEB MAR	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00	B:A 1.14 - 1.15 5.00 1.05 2.50	C:B 1.41 1.88 1.41 1.87 1.29 1.80	D:B 1.00 1.00 1.00 1.00 1.07 1.56	1.61 - 9.33 1.42 5.60	0.83 0.17 0.83 0.14 0.92 0.63		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50	B:A 1.14 - 1.15 4.67 1.07 5.00	C:B 1.41 1.88 1.41 2.00 1.27 2.00	D:B 1.00 1.00 1.00 1.00 1.07 1.70	E:A 1.77 - 1.77 8.33 1.53 12.50	0.75 0.19 0.76 0.16 0.87 0.52	
Climate Model: JAN FEB	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12	D:8 1.00 1.00 1.00 1.00 1.07 1.56 1.01	1.61 - 9.33 1.42 5.60 1.18	0.83 0.17 0.83 0.14 0.92 0.63 0.96		Climate Model: JAN FEB	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20	D:8 1.00 1.00 1.00 1.00 1.07 1.70 1.04	E:A 1.77 - 1.77 8.33 1.53 12.50 1.28	0.75 0.19 0.76 0.16 0.87 0.52 0.96	
Climate Model: JAN FEB MAR APR	HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20	D:B 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05	1.61 - 9.33 1.42 5.60 1.18 1.26	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05	D:B 1.00 1.00 1.00 1.00 1.07 1.70 1.04 0.93	E:A 1.77 - 1.77 8.33 1.53 12.50 1.28 0.89	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08	
Climate Model: JAN FEB MAR	HadCM3 A2 Ratio: Nedian IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17	D:B 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.02	1.61 - 9.33 1.42 5.60 1.18 1.26 1.22	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96		Climate Model: JAN FEB MAR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.29	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.00	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.20 1.20	D:8 1.00 1.00 1.00 1.00 1.07 1.07 1.04 0.93 1.04	E:A 1.77 - 1.77 8.33 1.53 12.50 1.28 0.89 1.27	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94	
Climate Models JAN FEB MAR APR MAY	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94	C:8 1.41 1.88 1.41 1.87 1.29 1.12 1.20 1.12 1.20 1.17 1.36	D:8 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.02 1.26	1.61 - 9.33 1.42 5.60 1.18 1.26 1.22 1.60	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.90		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.04 2.39 1.29 1.29	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.00 0.96	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05 1.20 1.05	D:8 1.00 1.00 1.00 1.00 1.07 1.70 1.04 0.93 1.04 1.11	E:A 1.77 - 1.77 8.33 1.53 1.250 1.28 0.89 1.27 1.12	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94 1.01	
Climate Model: JAN FEB MAR APR	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06 1.06 1.06	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.96	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.16	D:8 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.05 1.02 1.26 1.11	1.61 - 9.33 1.42 5.60 1.18 1.26 1.22 1.60 1.22	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.90 0.97		Climate Model: JAN FEB MAR APR	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.29 1.35 0.99	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.00 0.96 0.98	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05 1.20 1.05 1.14	D:B 1.00 1.00 1.00 1.00 1.00 1.07 1.70 1.04 0.93 1.04 1.11 1.08	E:A 1.77 - 1.77 8.33 1.53 12.50 1.28 0.89 1.27 1.12 1.22	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94 1.01 0.97	
Climate Model : JAN FEB MAR APR MAY JUN	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06 1.06 0.89	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.96 0.95	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.16 1.22	D:8 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.02 1.26 1.11 1.64	1.61 - 9.33 1.42 5.60 1.18 1.26 1.22 1.60 1.22 2.74	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.98 0.90 0.90 0.97 0.82		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.29 1.35 0.99 1.37	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.00 0.96 0.98 1.01	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05 1.20 1.05 1.14 0.97	D:8 1.00 1.00 1.00 1.00 1.07 1.07 1.04 0.93 1.04 1.11 1.08 1.05	E:A 1.77 - 1.77 8.33 1.53 12.50 1.28 0.89 1.27 1.12 1.22 1.44	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94 1.01 0.97 0.85	
Climate Models JAN FEB MAR APR MAY	HadCM3 A2 Ratio: Ratio: Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.04 1.00 0.94 0.95 0.98	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.16 1.22 1.13	D:8 1.00 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.02 1.26 1.11 1.64 1.12	1.61 9.33 1.42 5.60 1.18 1.26 1.22 1.60 1.22 2.74 1.30	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.96 0.96 0.96 0.90 0.97 0.82 0.95		Climate Model: JAN FEB MAR APR MAY	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.29 1.35 0.99 1.37 1.04	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.00 0.96 0.98 1.01 0.97	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.27 2.00 1.20 1.05 1.20 1.05 1.20 1.05 1.14 0.97 1.11	D:8 1.00 1.00 1.00 1.00 1.00 1.07 1.07 1.04 0.93 1.04 1.11 1.08 1.05 1.11	E:A 1.77 - 1.77 8.33 1.53 12.50 1.28 0.89 1.27 1.12 1.22 1.44 1.25	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94 1.01 0.97 0.85 0.95	
Climate Model JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.00 1.06 1.000 1.00	B:A 1.14 - - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.96 0.95 0.98 0.90	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.16 1.22 1.13 1.11	D:8 1.00 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.02 1.26 1.11 1.64 1.12 1.27	1.61 9.33 1.42 5.60 1.18 1.26 1.22 1.60 1.22 2.74 1.30 1.88	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.96 0.96 0.96 0.90 0.97 0.97 0.95 0.72		Climate Model: JAN FEB MAR APR MAY JUN JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 2.39 1.42 2.39 1.35 0.99 1.35 0.99 1.37 1.04 0.61	B:A 1.14 1.15 4.67 1.07 5.00 1.07 5.00 1.00 0.96 0.98 1.01 0.97 1.17	C:B 1.41 1.83 1.41 2.00 1.27 2.00 1.27 2.00 1.27 1.20 1.05 1.20 1.05 1.20 1.05 1.14 0.97 1.11 1.10	D:8 1.00 1.00 1.00 1.07 1.07 1.04 0.93 1.04 1.11 1.08 1.05 1.11 1.11 1.41	E:A 1.77 1.77 8.33 1.53 1.2.50 1.28 0.89 1.27 1.12 1.22 1.41 1.22 2.85	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78	
Climate Model : JAN FEB MAR APR MAY JUN	HadCM3 A2 Ratio: Median IQR Median Median IQR Median IQR Median Median IQR Median Median Median Median Median Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06 0.89 1.00 1.69 1.04	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.96 0.95 0.99 0.99 0.99	C:B 1.41 1.88 1.41 1.87 1.20 1.12 1.20 1.12 1.20 1.16 1.22 1.13 1.11 1.10	D:8 1.00 1.00 1.00 1.00 1.55 1.01 1.05 1.02 1.26 1.11 1.64 1.12 1.27 1.12	1.61 - 1.62 9.33 1.42 5.60 1.18 1.26 1.22 1.60 1.22 2.74 1.30 1.88 1.26	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.90 0.97 0.82 0.95 0.72 0.95		Climate Model: JAN FEB MAR APR MAY JUN	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.04 1.37 1.37 0.99 1.37 1.04 0.61 0.96	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.03 0.90 0.96 0.98 1.01 0.97	C:B 1.41 1.88 1.41 2.00 1.20 1.14 0.97 1.14 0.97 1.10	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	E:A 1.77 8.33 1.53 1.2.50 1.28 0.89 1.27 1.12 1.22 1.44 1.22 1.44	0.75 0.19 0.76 0.87 0.52 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78 0.94	
Climate Model: JAN FEB MAR APR MAY JUN JUL AUG	HadCM3 A2 Ratio: Median IQR IQR IQR	A:BASLINE 1.08 0.00 0.00 1.06 0.50 1.04 1.00 1.65 1.06 1.06 1.06 0.00 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.07	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 0.94 0.94 0.95 0.98 0.99 0.99 0.99 0.99 0.97 1.13	C:8 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.16 1.16 1.22 1.13 1.11 0.87	D:8 1.00 1.00 1.00 1.07 1.56 1.01 1.26 1.11 1.64 1.12 1.27 1.12 1.11	1.61 - 1.62 9.33 1.42 5.60 1.18 1.26 1.22 2.74 1.30 1.82 1.26 1.82	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.90 0.97 0.82 0.97 0.82 0.95 0.75		Climate Model: JAN FEB MAR APR JUN JUL AUG	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 0.00 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.35 0.99 1.37 1.04 0.61 0.96 1.27	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.00 0.90 1.00 0.98 1.01 0.97 0.82	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.49	D:8 1.00 1.00 1.00 1.07 1.70 1.04 0.93 1.04 1.11 1.04 1.05 1.11 1.44 1.94	E:A 1.77 - 1.77 8.33 12.50 1.28 0.89 1.27 1.12 1.22 1.44 1.25 2.85 1.27 2.22	0.75 0.19 0.76 0.16 0.87 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78 0.94 0.82	
Climate Model JAN FEB MAR APR MAY JUN JUL	HadCM3 A2 Ratio: Median IQR Median Median IQR Median IQR Median Median IQR Median Median Median Median Median Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06 0.89 1.00 1.69 1.04	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.96 0.95 0.99 0.99 0.99	C:B 1.41 1.88 1.41 1.87 1.20 1.12 1.20 1.12 1.20 1.16 1.22 1.13 1.11 1.10	D:8 1.00 1.00 1.00 1.00 1.05 1.01 1.05 1.02 1.26 1.11 1.64 1.12 1.27 1.12	1.61 - 1.62 9.33 1.42 5.60 1.18 1.26 1.22 1.60 1.22 2.74 1.30 1.88 1.26	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.90 0.97 0.82 0.95 0.72 0.95		Climate Model: JAN FEB MAR APR MAY JUN JUL	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.04 0.50 1.42 2.39 1.42 2.39 1.42 1.35 0.99 1.37 1.04 0.61 0.61 0.61 0.65 0.65 0.55 0	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.03 0.90 0.96 0.98 1.01 0.97	C:B 1.41 1.88 1.41 2.00 1.20 1.14 0.97 1.14 0.97 1.10	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	E:A 1.77 8.33 1.53 1.2.50 1.28 0.89 1.27 1.12 1.22 1.44 1.22 1.44	0.75 0.19 0.76 0.87 0.52 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78 0.94	
Climate Model: JAN FEB MAR APR MAY JUN JUL AUG	HadCM3 A2 Ratio: Median IQR IQR IQR	A:BASLINE 1.08 0.00 0.00 1.06 0.50 1.04 1.00 1.65 1.06 1.06 1.06 0.00 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.07	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 0.94 0.94 0.95 0.98 0.99 0.99 0.99 0.99 0.97 1.13	C:8 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.16 1.16 1.22 1.13 1.11 0.87	D:8 1.00 1.00 1.00 1.07 1.56 1.01 1.26 1.11 1.64 1.12 1.27 1.12 1.11	1.61 - 1.62 9.33 1.42 5.60 1.18 1.26 1.22 2.74 1.30 1.82 1.26 1.82	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.90 0.97 0.82 0.97 0.82 0.95 0.75		Climate Model: JAN FEB MAR APR JUN JUL AUG	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 0.00 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.35 0.99 1.37 1.04 0.61 0.96 1.27	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 1.00 0.90 1.00 0.98 1.01 0.97 0.82	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.49	D:8 1.00 1.00 1.00 1.07 1.70 1.04 0.93 1.04 1.11 1.04 1.05 1.11 1.44 1.94	E:A 1.77 - 1.77 8.33 12.50 1.28 0.89 1.27 1.12 1.22 1.44 1.25 2.85 1.27 2.22	0.75 0.19 0.76 0.16 0.87 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78 0.94 0.82	
Climate Model: JAN FEB MAR APR MAY JUN JUL AUG	HadCM3 A2 Ratio: Median IQR IQR IQR IQR IQR IQR IQR Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.04 1.02 1.01	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 0.94 0.96 0.95 0.98 0.90 0.99 0.97	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.16 1.22 1.13 1.11 1.10 0.87 1.15	D:8 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.02 1.26 1.11 1.64 1.12 1.27 1.12 1.27 1.12	1.61 - 1.62 9.33 1.42 5.60 1.12 1.26 1.22 1.60 1.22 2.74 1.30 1.88 1.26 1.82 1.29	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.90 0.97 0.82 0.95 0.72 0.95 0.85 0.96		Climate Model: JAN FEB MAR APR JUN JUL AUG	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median Median Median Median Median	A:BASLINE 1.07 0.00 1.06 0.50 1.04 1.04 1.29 1.35 0.99 1.37 0.99 1.37 1.04 0.61 0.61 0.61 0.96 1.27 0.97	B:A 1.14 - 1.15 4.67 1.07 5.00 1.03 0.90 0.96 0.98 1.01 0.97 1.17 0.97 1.17 0.82 0.98	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.49 1.13	D:8 1.00 1.00 1.00 1.07 1.70 1.04 0.93 1.04 1.11 1.08 1.05 1.11 1.11 1.41 1.41 1.94 1.14	E:A 1.77 - 1.77 8.33 12.50 1.28 0.89 1.27 1.12 1.22 1.41 1.22 2.85 1.27 2.85 1.27 1.26	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78 0.95	
Climate Model JAN FEB MAR APR MAY JUN JUL AUG SEP	: HadCM3 A2 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 0.50 1.04 1.00 1.64 1.03 1.06 1.06 0.89 1.00 1.69 1.02 1.02 1.02 1.01	B:A 1.14 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.95 0.99 0.99 0.99 0.99 0.99 1.13	C:8 1.41 1.88 1.41 1.89 1.29 1.80 1.12 1.20 1.17 1.36 1.22 1.13 1.11 1.10 0.87 1.16	D:8 1.00 1.00 1.00 1.07 1.55 1.07 1.55 1.02 1.25 1.02 1.26 1.11 1.64 1.12 1.12 1.12 1.11 1.12 1.12 1.12	1.61 1.62 9.33 1.42 5.60 1.18 1.26 1.22 2.74 1.30 1.22 2.74 1.30 1.88 1.26 1.88 1.26 1.88 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 2.74 1.38 1.26 1.22 1.38 1.22 1.38 1.22 1.38 1.22 1.38 1.22 1.38 1.26 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.62 1.22 1.88 1.26 1.22 1.22 1.88 1.26 1.22 1.22 1.88 1.26 1.22 1.29 1.88 1.26 1.22 1.29 1.38 1.26 1.22 1.29 1.38 1.29 1.38 1.29 1.38 1.29 1.38 1.29 1.29 1.38 1.29 1.29 1.38 1.29 1.38 1.29 1.29 1.38 1.29 1.38 1.29 1.38 1.29 1.38 1.29 1.38 1.29	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.96 0.96 0.90 0.97 0.87 0.95 0.72 0.95 0.72 0.95 0.95 0.73		Climate Model: JAN FEB MAR APR JUN JUL AUG SEP	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.29 1.37 1.04 0.61 0.96 1.27 0.96 0.81	B:A 1.14 1.15 4.67 5.00 1.07 5.00 1.00 0.90 1.00 0.93 1.00 0.93 1.01 0.93 1.01 0.97 0.82 0.88	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.05 1.20 1.05 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.49 1.49 1.04	D:8 1.00 1.00 1.00 1.07 1.70 1.07 1.04 1.11 1.08 1.05 1.11 1.41 1.14 1.94 1.14	E:A 1.77 1.77 8.33 1.53 1.2.50 1.28 0.89 1.27 1.12 1.44 1.25 2.85 1.27 2.22 1.44 1.27 1.27 1.22 1.44	0.75 0.19 0.76 0.16 0.87 0.96 1.08 0.96 1.08 0.94 1.01 0.97 0.85 0.97 0.85 0.78 0.94 0.82 0.95 0.71	
Climate Model JAN FEB MAR APR MAY JUN JUL AUG SEP	HadCM3 A2 Ratio: Median IQR Median Median IQR Median I I I I I I I I I I I I I I I I I I I	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.03 1.06 1.06 1.06 1.06 1.00 1.69 1.00 1.69 1.00 1.69 1.00 1.02 1.01 1.02 1.02 1.02 1.03 1.02 1.04 1.02 1.03 1.04 1.05 1.00 1.05 1.00 1.05 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.02 1.02 1.02 1.03 1.02 1.03 1.02 1.03 1.02 1.03 1.02 1.03 1.02 1.03 1.03 1.03 1.02 1.03 1.03 1.03 1.02 1.03 1.03 1.03 1.02 1.03 1.03 1.03 1.03 1.02 1.03 1.28	B:A 1.14 - - 1.05 2.50 1.05 2.50 1.01 1.04 0.94 0.95 0.98 0.99 0.97 1.13 0.97 1.13 0.99	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.12 1.20 1.16 1.16 1.21 1.13 1.11 1.10 0.87 1.15 1.11	D:8 1.00 1.00 1.00 1.07 1.56 1.01 1.26 1.11 1.26 1.12 1.27 1.12 1.12 1.12 1.11 1.18 1.62 1.09	1.61 1.62 9.33 1.42 5.60 1.18 1.26 1.22 2.74 1.30 1.82 1.26 1.82 1.26 1.82 1.29 3.38 1.25	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.97 0.82 0.97 0.82 0.95 0.72 0.85 0.95 0.85 0.96 0.73 0.93		Climate Model: JAN FEB MAR APR JUN JUL AUG SEP	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.29 1.35 0.99 1.37 1.29 1.35 1.29 1.35 1.29 1.35 1.29 1.35 1.29 1.37 1.04 0.61 0.61 0.99 0.61 1.27 0.97 0.81 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.2	B:A 1.14 1.15 4.67 1.07 5.00 1.03 0.99 1.00 0.96 0.98 1.01 0.97 0.97 0.82 0.88 0.88 0.89	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.27 1.05 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.49 1.13 1.04 1.11	D:8 1.00 1.00 1.00 1.00 1.07 1.70 1.04 0.93 1.04 1.01 1.11 1.14 1.14 1.14 1.14 1.14	E:A 1.77 1.77 8.33 1.53 1.250 1.28 0.89 1.27 1.12 1.22 1.44 1.25 2.85 1.27 2.22 1.26 1.41 1.25 1.28 1.25 1.26 1.26 1.25 1.26 1.26 1.26 1.26 1.26 1.25 1.26	0.75 0.19 0.76 0.16 0.87 0.52 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78 0.94 0.82 0.95 0.71 0.99	
Climate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG SEP OCT	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.05 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.09 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.09 1.04 1.05 1.04 1.05 1.35	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.96 0.95 0.99 0.99 0.99 1.13 0.97 1.13 0.97 1.13	C:8 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.12 1.12 1.13 1.14 1.16 1.22 1.11 1.11 1.10 0.87 1.15 1.16 1.11 1.16	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.07 1.55 1.02 1.26 1.11 1.62 1.27 1.12 1.11 1.18 1.62 0.91	1.61 9.33 1.42 5.60 1.22 2.74 1.30 1.88 1.26 1.22 2.74 1.30 1.88 1.26 1.82 1.82 1.82 1.29 3.38 1.29	0.83 0.17 0.83 0.14 0.92 0.93 0.96 0.96 0.90 0.97 0.85 0.72 0.95 0.72 0.95 0.72 0.95 0.73 0.96 0.73 0.98		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL SEP OCT	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.42 2.39 1.42 0.99 1.33 0.99 1.37 1.37 0.99 1.37 0.99 1.37 0.99 1.37 0.99 1.37 0.61 0.06 1.27 0.95 0.81 1.82 0.85	B:A 1.14 4.57 1.07 5.00 1.03 0.90 1.00 0.96 0.98 1.01 0.97 0.87 0.97 0.88 0.99 0.99	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.05 1.20 1.05 1.10 1.05 1.14 0.97 1.11 1.10 1.12 1.49 1.13 1.04	D:8 1.00 1.00 1.00 1.00 1.00 1.07 1.70 1.04 1.11 1.08 1.05 1.11 1.41 1.41 1.44 1.14 0.94 1.12 1.33	E:A 1.77 8.33 1.53 1.250 1.27 1.27 1.22 1.42 1.22 1.44 1.25 2.85 1.27 2.22 2.26 1.41 1.30 1.67	0.75 0.19 0.76 0.16 0.87 0.56 1.08 0.95 1.08 0.95 0.97 0.97 0.95 0.78 0.95 0.78 0.95 0.71 0.99 0.81	
Climate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG SEP OCT	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.00 1.09 1.28 1.32 1.09 1.28 1.32 1.09 1.09 1.09 1.09 1.07	B:A 1.14 - - 1.05 2.50 1.01 1.05 2.50 1.01 1.04 0.94 0.95 0.98 0.99 0.99 0.99 0.99 1.13 0.99 1.13 0.99 1.13 0.99 1.20	C:B 1.41 1.88 1.41 1.87 1.29 1.87 1.29 1.87 1.12 1.12 1.12 1.13 1.16 1.22 1.13 1.11 1.00 0.87 1.15 1.16 1.11 1.10 0.87 1.15 1.16 1.14 1.11 1.10 0.87 1.15 1.16 1.14 1.16 1.12 1.12 1.13 1.11 1.10 0.87 1.12 1.12 1.12 1.13 1.11 1.10 0.87 1.12 1.12 1.12 1.13 1.11 1.10 0.87 1.12 1.12 1.13 1.11 1.10 0.87 1.12 1.12 1.13 1.11 1.10 0.87 1.15 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.10 0.87 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.17 1.16 1.16 1.16 1.17 1.16 1.44	D:8 1.00 1.00 1.00 1.00 1.07 1.56 1.01 1.05 1.26 1.11 1.26 1.12 1.27 1.12 1.12 1.12 1.12 1.12 1.12	1.61 9.33 1.42 5.60 1.18 1.22 1.60 1.22 2.74 1.30 1.82 1.25 1.82 1.25 1.12 1.73	0.83 0.17 0.83 0.14 0.92 0.63 0.96 0.98 0.96 0.99 0.97 0.82 0.97 0.82 0.97 0.82 0.95 0.72 0.95 0.73 0.98 0.73 0.98 0.73		Climate Model: JAN FEB MAR APR MAY JUN JUL JUL SEP OCT	CGCM3 B1 Ratio: Median 108 Median	A:BASLINE 1.07 0.00 1.06 0.50 0.50 1.04 2.39 1.42 2.39 1.42 2.39 1.42 1.35 0.99 1.37 1.04 0.61 0.96 1.27 0.97 0.81 0.81 0.81 1.82 0.85 1.19	B:A 1.14 - - 1.15 4.67 1.07 5.00 1.03 0.90 1.00 0.96 0.98 1.01 0.97 0.82 0.99 0.99 0.88 0.88 0.99 0.99 0.99 1.16	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05 1.12 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.49 1.13 1.04 1.11 1.13 1.43	D:B 1.00 1.00 1.00 1.00 1.07 1.70 1.04 0.93 1.04 1.11 1.08 1.05 1.11 1.14 1.94 1.14 1.194 1.12 1.33 1.01	E:A 1.77 - .7 1.77 .8 .8 .8 .8 .8 .2 .50 1.28 0.89 1.27 1.22 1.12 1.22 1.44 1.25 2.85 .2 .27 1.27 1.22 1.44 1.30 1.61 .27 .222 1.26 .27 .27 .27 .27 .27 .27 .27 .27	0.75 0.19 0.76 0.16 0.87 0.96 1.08 0.94 1.01 0.97 0.85 0.98 0.95 0.78 0.94 0.82 0.94 0.82 0.97 0.71 0.90 0.71	
Climate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG SEP OCT NOV	HadCM3 A2 Ratio: Median IQR	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.06 1.06 1.06 0.89 1.00 1.69 1.09 1.69 1.04 1.02 1.04 1.05 1.06 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.01 1.01 1.05 1.00 1.28 1.35 1.07 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.277 1.277 1.277 1.277 1.277 1.277 1.277 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.277	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.95 0.95 0.95 0.99 0.99 0.99 0.99 1.03 0.97 1.13 0.97 1.10 1.00	C:B 1.41 1.88 1.41 1.87 1.29 1.80 1.12 1.20 1.17 1.36 1.22 1.13 1.16 1.15 1.16 1.11 1.06 1.44 1.26	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.61 9.33 1.42 5.60 1.18 1.22 1.60 1.22 2.74 1.30 1.88 1.82 1.82 1.82 1.82 1.29 3.38 1.25 1.12 1.25 1.12 1.25 1.12 1.60 1.82 1.82 1.62	0.83 0.17 0.83 0.14 0.92 0.96 0.96 0.96 0.96 0.99 0.97 0.82 0.95 0.72 0.85 0.85 0.73 0.95 0.73 0.93 0.93 0.98		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	CGCM3 B1 Ratio: Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	A:BASLIN 1.07 0.00 1.06 0.50 1.04 0.50 1.42 2.39 1.32 1.29 1.33 0.99 1.37 1.04 0.99 1.37 1.04 0.96 1.37 1.04 0.96 0.99 1.37 1.04 0.50 0.50 1.35 0.99 1.37 1.04 0.50 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.50 1.42 0.59 1.35 0.99 1.37 1.06 0.50 0.50 1.35 0.99 1.37 1.06 0.50 0.50 1.37 1.06 0.50 0.50 1.29 1.37 1.06 0.50 0.50 1.37 1.06 0.50 0.50 0.50 1.29 1.35 0.99 1.37 1.06 0.50 0.56 0.50 0.55	B:A 1.14 - - 1.07 5.00 1.03 0.90 1.03 0.96 0.98 1.01 0.97 1.17 0.97 1.17 0.97 0.82 0.98 0.88 0.89 0.99 0.99 0.99 1.16 0.99 1.03	C:B 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.05 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.41 1.41 1.43 1.04 1.13 1.04 0.99	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	E:A 1.77 1.77 8.33 1.53 1.2.50 1.28 0.89 1.27 1.12 1.22 1.44 1.25 2.85 1.27 2.22 1.26 1.41 1.30 1.67 1.77	0.75 0.19 0.76 0.16 0.87 0.96 1.08 0.94 1.01 0.97 0.85 0.95 0.78 0.95 0.78 0.95 0.78 0.95 0.71 0.82 0.95 0.71 0.90	
Climate Model: JAN FEB MAR APR MAY JUN JUN JUL AUG SEP OCT NOV	HadCM3 A2 Ratio: Median IQR Median	A:BASLINE 1.08 0.00 1.06 0.50 1.04 1.00 1.65 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.00 1.09 1.00 1.02 1.01 1.02 1.01 1.02 1.02 1.02 1.02 1.02 1.05 1.06 1.00 1.06 1.06 1.00 1.06 1.00 1.06 1.00 1.06 1.00 1.06 1.00 1.00 1.00 1.06 1.00 1.06 1.00 1.00 1.06 1.00 1.07	B:A 1.14 - 1.15 5.00 1.05 2.50 1.01 1.04 1.00 0.94 0.95 0.95 0.95 0.99 0.99 0.99 0.99 1.03 0.97 1.13 0.97 1.10 1.00	C:B 1.41 1.88 1.41 1.87 1.20 1.10 1.12 1.20 1.16 1.16 1.22 1.13 1.16 1.22 1.13 1.11 1.10 0.87 1.15 1.16 1.11 1.10 0.87 1.15 1.16 1.41 1.41 1.41 1.42 1.44 1.26 1.44 1.26	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.56 1.01 1.26 1.11 1.64 1.12 1.11 1.64 1.62 0.91 0.91 1.00 1.10	1.61 9.33 1.42 5.60 1.18 1.22 1.60 1.22 2.74 1.30 1.88 1.82 1.82 1.82 1.82 1.29 3.38 1.25 1.12 1.25 1.12 1.25 1.12 1.60 1.82 1.82 1.62	0.83 0.17 0.83 0.14 0.92 0.96 0.96 0.96 0.96 0.99 0.97 0.82 0.95 0.72 0.95 0.72 0.95 0.73 0.95 0.73 0.98 0.98 0.98 0.77 0.70 0.98		Climate Model: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	CGCM3 B1 Ratio: Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median	ABASLINE 1.07 0.00 1.06 0.50 1.04 0.50 1.04 2.39 1.25 0.99 1.37 1.04 0.61 0.99 1.37 1.04 0.61 0.99 0.81 1.07 0.81 0.82 0.82 1.19 1.19 1.19 1.19 1.19 1.10	B:A 1.14 - - 1.07 5.00 1.03 0.90 1.03 0.96 0.98 1.01 0.97 1.17 0.97 1.17 0.97 0.82 0.98 0.88 0.89 0.99 0.99 0.99 1.16 0.99 1.03	C:B 1.41 1.88 1.41 1.88 1.41 2.00 1.27 2.00 1.20 1.20 1.05 1.14 0.97 1.11 1.10 1.12 1.43 1.04 1.13 1.43 0.99 1.44	D:8 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.02 1.03 1.04 1.05 1.11 1.04 1.05 1.11 1.41 1.94 1.41 1.94 1.14 1.94 1.13 1.03 1.01 1.01 1.00	E:A 1.77 1.77 8.33 1.53 1.2.50 1.28 0.89 1.27 1.12 1.22 1.44 1.25 2.85 1.27 2.22 1.26 1.41 1.30 1.67 1.77	0.75 0.19 0.76 0.16 0.82 0.96 1.08 0.94 1.01 0.97 0.85 0.94 0.85 0.78 0.95 0.78 0.94 0.82 0.71 0.90 0.81 0.74 0.90 0.76	

Table E.6Projected median monthly and median annual surface water extraction from all sources in
the Vaseux Creek drainage area. The results are based on the HadCM3 A2 and CGCM3 B1
climate models. Baseline results are based on the period 1996 to 2006. Future projections
are based on the period 2011 to 2040. To provide an index of the variability in the
projections, the inter-quartile range (IQR) is provided.

Drainage Are	a: VASEUX CRE	EK															
Parameter:	Total surface w	ater extractio	n (ML)						Parameter:	Total surface	water extrac	tion (ML)					
Climate Model	HadCM3 A2								Climate Model:	CGCM3 B1							
	Scenario Group:	BASELINE	Α	В	с	D	E	F		cenario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	1	28	30	34	36	38	40		nario Number:	2	29	31	35	37	39	41
JAN	Median	0.4	0.5	0.5	0.6	0.5	0.6	0.5	JAN	Median	0.4	0.5	0.5	0.6	0.5	0.6	0.5
	IQR	0.0	0.0	0.0	0.0	0.0	0.0	0.0		IQR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FEB	Median	0.4	0.4	0.4	0.6	0.4	0.6	0.5	FEB	Median	0.4	0.4	0.4	0.6	0.4	0.5	0.5
	IQR	0.0	0.0	0.0	0.0	0.0	0.0	0.0		IQR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAR	Median	1.2	1.3	1.3	1.4	1.3	1.4	1.4	MAR	Median	1.2	1.3	1.3	1.4	1.3	1.4	1.3
	IQR	0.0	0.0	0.0	0.0	0.0	0.0	0.0		IQR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
APR	Median	2.0	3.3	3.3	3.7	3.3	3.7	3.5	APR	Median	1.8	3.2	3.2	4.4	3.2	4.4	4.2
	IQR	4.0	5.0	4.0	5.0	4.0	5.0	5.0		IQR	2.0	3.0	3.0	3.0	3.0	3.0	3.0
MAY	Median	13.0	13.1	12.7	13.8	12.7	14.4	13.7	MAY	Median	10.4	12.5	12.4	13.2	12.4	13.6	13.0
	IQR	2.0	5.0	4.0	4.0	4.0	5.0	4.0		IQR	6.0	4.0	3.0	4.0	3.0	5.0	4.0
JUN	Median	18.3	18.3	17.2	18.7	17.2	19.7	18.5	JUN	Median	16.0	16.8	15.6	17.6	15.6	18.8	17.4
	IQR	2.0	3.0	2.0	2.0	2.0	3.0	2.0		IQR	4.0	3.0	3.0	4.0	3.0	5.0	3.0
JUL	IOR IOR	22.8 1.0	23.4 2.0	21.8 3.0	23.5	21.8 3.0	24.4 3.0	23.5 2.0	JUL	Median IOR	22.6	22.0	21.5 4.0	22.3 3.0	21.5 4.0	23.5	22.1 3.0
4110		1.0	18.4	17.7	18.9	3.0	3.0 19.4		4110		18.4	17.7	-		4.0	18.7	
AUG	IQR IQR		18.4 5.0	17.7	18.9	17.7	19.4 5.0	18.8 5.0	AUG	Median	2.0	3.0	16.7	17.8	2.0	3.0	17.6 3.0
650		4.0				10.0			650	IQR			2.0	3.0			
SEP	Median	9.8 2.0	10.1 2.0	2.0	2.0	2.0	10.9 2.0	10.5 2.0	SEP	Median IOR	9.2 3.0	9.5	9.4 2.0	2.0	9.4 2.0	2.0	10.1 2.0
OCT	IQR Median	1.1	2.0	2.0	2.0	2.0	2.0	2.0	ОСТ	Median	3.0	2.0 2.5	2.0	2.0	2.0	2.0	2.0
001	IQR	3.0	2.5	2.0	3.0	2.0	3.0	3.0	UCI	IQR	1.0	3.0	3.0	3.0	3.0	3.0	3.0
NOV	-	0.4	0.4	0.5	0.6	0.5	0.6	0.5	NOV	-	0.4	0.4	0.5		0.5	0.6	0.5
NOV	IOR IOR	0.4	0.4	0.5	0.6	0.5	0.0	0.5	NOV	IOR IOR	0.4	0.4	0.5	0.6	0.5	0.0	0.5
DEC	Median	0.0	0.5	0.5	0.6	0.5	0.6	0.5	DEC	Median	0.0	0.5	0.5	0.6	0.5	0.6	0.0
DEC	IQR	0.4	0.5	0.5	0.0	0.5	0.0	0.0	DEC	IOR	0.4	0.0	0.0	0.0	0.0	0.0	0.0
	Median	89.0	93.0	90.0	96.0	90.0	102.0	95.0	ANNUAL	Median	84.0	86.0	84.0	90.0	84.0	94.0	89.0
ANNUAL	IOR	2.0	6.0	7.0	96.0	7.0	102.0	7.0	ANNUAL	IOR	10.0	6.0	84.0	90.0	84.0	12.0	89.0
	ngn	2.0	0.0	7.0	5.0	7.0	13.0	7.0		ngn	10.0	0.0	0.0	5.0	0.0	12.0	0.0
Parameter:	Ratio of total su	irface water e	vtraction bet	ween indicat	ed scenarios				Parameter:	Ratio of tota	surface wate	er extraction	hetween ind	licated scena	ios		
Climate Model		indee water e	Autocion bei	incen mareat	ica secnarios				Climate Model:		Surface Mat	. cxudedon	betweening	literce section	105		
	Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E	-		Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	1.07	1.07	1.24	1.00	1.33	0.86	-	JAN	Median	1.07	1.07	1.24	1.00	1.28	0.89	
	IOR									IOR							
FEB	Median	1.06	1.08	1.24	1.00	1.34	0.86		FEB		4.00	1.08	1.24	1.00	1.29	0.89	
	IQR									Median							
MAR		-	-				-		FEB	Median IOR	1.06	1.00			-	-	
	Median	1.03	- 1.02	- 1.10	- 1.00	-				IQR		-	- 1.09	-			
MAN	Median IOR	1.03	1.02	1.10	1.00	1.12	0.95		MAR		1.06	- 1.08	1.09	1.00	1.09	0.97	
APR	Median IQR Median	1.03 - 1.61	- 1.02 - 1.00	- 1.10 - 1.12	- 1.00 - 1.00	-				IQR Median		-	1.09	-			
	IQR				-	1.12	- 0.95 -		MAR	IQR Median IQR	1.03	- 1.02	-	- 1.00 -	- 1.09 -	0.97	
	IQR Median	1.61	1.00	1.12	1.00	1.12 - 1.12	0.95 - 0.96		MAR	IQR Median IQR Median	1.03 - 1.78	1.02 - 1.02	1.34	- 1.00 - 1.00	1.09 - 1.37	0.97 - 0.96	
APR	IQR Median IQR	- 1.61 1.25	- 1.00 0.80	- 1.12 1.25	- 1.00 1.00	- 1.12 - 1.12 1.00	0.95 - 0.96 1.00		APR	IQR Median IQR Median IQR	1.03 - 1.78 1.50	- 1.02 - 1.02 1.00	- 1.34 1.00	- - 1.00 1.00	- 1.09 - 1.37 1.00	- 0.97 - 0.96 1.00	
APR	IQR Median IQR Median	1.61 1.25 1.01	1.00 0.80 0.97	- 1.12 1.25 1.08	- 1.00 1.00 1.00	- 1.12 - 1.12 1.00 1.10	0.95 - 0.96 1.00 0.95		APR	IQR Median IQR Median IQR Median	1.03 - 1.78 1.50 1.20	1.02 - 1.02 1.00 0.99	1.34 1.00 1.07	- 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10	0.97 - 0.96 1.00 0.95	
APR MAY	IQR Median IQR Median IQR	- 1.61 1.25 1.01 2.50	1.00 0.80 0.97 0.80	1.12 1.25 1.08 1.00	- 1.00 1.00 1.00 1.00	- 1.12 - 1.00 1.10 1.00	0.95 0.96 1.00 0.95 0.80		APR MAY	IQR Median IQR Median IQR Median IQR	1.03 1.78 1.50 1.20 0.67	1.02 - 1.02 1.00 0.99 0.75	- 1.34 1.00 1.07 1.33	- 1.00 1.00 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10 1.25	0.97 - 0.96 1.00 0.95 0.80	
APR MAY	IQR Median IQR Median IQR Median	- 1.61 1.25 1.01 2.50 1.00	- 1.00 0.80 0.97 0.80 0.94	1.12 1.25 1.08 1.00 1.09	- 1.00 1.00 1.00 1.00 1.00	- 1.12 - 1.00 1.10 1.00 1.07	0.95 - 0.96 1.00 0.95 0.80 0.94		APR MAY	IQR Median IQR Median IQR Median IQR Median	1.03 - 1.78 1.50 1.20 0.67 1.05	1.02 1.02 1.00 0.99 0.75 0.93	- 1.34 1.00 1.07 1.33 1.13	- 1.00 - 1.00 1.00 1.00 1.00 1.00	1.09 - 1.37 1.00 1.10 1.25 1.12	0.97 - 0.96 1.00 0.95 0.80 0.93	
APR MAY JUN	IQR Median IQR Median IQR Median IQR	- 1.61 1.25 1.01 2.50 1.00 1.50	- 1.00 0.80 0.97 0.80 0.94 0.67	1.12 1.25 1.08 1.00 1.09 1.00	- 1.00 1.00 1.00 1.00 1.00 1.00	- 1.12 1.00 1.10 1.00 1.00 1.07 1.00	- 0.95 - 0.96 1.00 0.95 0.80 0.94 0.67		MAR APR MAY JUN	IQR Median IQR Median IQR Median IQR Median IQR	1.03 - 1.78 1.50 1.20 0.67 1.05 0.75	1.02 1.02 1.00 0.99 0.75 0.93 1.00	- 1.34 1.00 1.07 1.33 1.13 1.33	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10 1.25 1.12 1.67	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60	
APR MAY JUN	IQR Median IQR Median IQR Median IQR Median	1.61 1.25 1.01 2.50 1.00 1.50 1.03	- 1.00 0.80 0.97 0.80 0.94 0.67 0.93	1.12 1.25 1.08 1.00 1.09 1.00 1.08	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.12 1.00 1.10 1.00 1.00 1.07 1.00 1.04	- 0.95 - 1.00 0.95 0.80 0.94 0.67 0.96		MAR APR MAY JUN	IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.03 - 1.78 1.50 1.20 0.67 1.05 0.75 0.97	- 1.02 1.02 1.00 0.99 0.75 0.93 1.00 0.98	1.34 1.00 1.07 1.33 1.13 1.33 1.03	- 1.00 - 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10 1.25 1.12 1.67 1.07	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.94	
APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR	- 1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00	- 1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50	- 1.12 1.25 1.08 1.00 1.09 1.00 1.08 0.67	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.12 1.00 1.10 1.00 1.00 1.00 1.00 1.04 1.50	- 0.95 - 0.96 1.00 0.95 0.80 0.94 0.67 0.96 0.67		MAR APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	- 1.03 - 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00	- 1.02 1.00 0.99 0.75 0.93 1.00 0.98 2.00	1.34 1.00 1.07 1.33 1.13 1.33 1.03 0.75	- 1.00 - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.00	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50	
APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00 1.00	- 1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97	- 1.12 1.25 1.08 1.00 1.09 1.00 1.08 0.67 1.06	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.12 1.00 1.10 1.00 1.00 1.00 1.00 1.04 1.50 1.06	0.95 0.96 1.00 0.95 0.80 0.94 0.67 0.96 0.67 0.97		MAR APR MAY JUN JUL	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	- 1.03 - 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96	1.02 1.02 1.00 0.99 0.75 0.93 1.00 0.98 2.00 0.94	1.34 1.00 1.07 1.33 1.13 1.33 1.03 0.75 1.06	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.00 1.00	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94	
APR MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR	1.61 1.25 1.01 2.50 1.00 1.50 1.50 1.03 2.00 1.00 1.25	- 1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97 1.00	- 1.12 1.25 1.08 1.00 1.09 1.00 1.00 0.67 1.06 1.00	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.12 1.00 1.10 1.00 1.07 1.00 1.04 1.50 1.06 1.00	0.95 - 0.96 1.00 0.95 0.80 0.94 0.67 0.96 0.67 0.97 1.00		MAR APR MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.03 - 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96 1.50	- 1.02 1.00 0.99 0.75 0.93 1.00 0.98 2.00 0.94 0.67	1.34 1.00 1.07 1.33 1.13 1.33 1.03 0.75 1.06 1.50	- 1.00 - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.00 1.00 1.00 1.00	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94 1.00	
APR MAY JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00 1.00 1.25 1.04	- 1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97 1.00 0.99	- 1.12 1.25 1.08 1.00 1.09 1.00 1.08 0.67 1.06 1.00 1.00	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.12 1.00 1.10 1.00 1.00 1.00 1.00 1.04 1.50 1.06 1.00 1.00 1.00	0.95 - 0.96 1.00 0.95 0.80 0.94 0.67 0.96 0.67 0.97 1.00 0.96		MAR APR MAY JUN JUL AUG	IQR Median IQR Median	1.03 - 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96 1.50 1.50 1.04	1.02 1.02 1.00 0.99 0.75 0.93 1.00 0.98 2.00 0.94 0.67 0.98	1.34 1.00 1.07 1.33 1.13 1.33 1.03 0.75 1.06 1.50 1.09	- 1.00 - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.09 - 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.00 1.00 1.00 1.00 1.00 1.00	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94 1.00 0.94 1.00 0.94	
APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00 1.00 1.25 1.04 1.00	- 1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97 1.00 0.99 1.00	1.12 1.25 1.08 1.00 1.09 1.00 1.08 0.67 1.06 1.00 1.00 1.00 1.00	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.12 1.12 1.00 1.10 1.00 1.07 1.00 1.04 1.50 1.06 1.00 1.07 1.00	- 0.95 - 0.96 1.00 0.95 0.80 0.94 0.67 0.96 0.67 0.97 1.00 0.96 1.00		MAR APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.03 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96 1.50 1.04 0.67	- 1.02 1.00 0.99 0.75 0.93 1.00 0.98 2.00 0.94 0.67 0.98 1.00	- 1.34 1.00 1.07 1.33 1.13 1.33 1.03 0.75 1.06 1.50 1.09 1.00	- 1.00 - 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.09 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.00 1.00 1.00 1.09 1.00	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94 1.00 0.97 1.00	
APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00 1.00 1.25 1.04 1.00 2.23	1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97 1.00 0.99 1.00 0.99	- 1.12 1.25 1.08 1.00 1.09 1.00 1.09 1.00 1.06 1.00 1.00 1.00 1.00 1.00 1.00 1.00	- 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.12 1.12 1.00 1.10 1.00 1.07 1.00 1.04 1.50 1.06 1.00 1.07 1.00 1.10			MAR APR MAY JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.03 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96 1.50 1.50 1.04 0.67 1.55	- 1.02 1.02 1.00 0.99 0.75 0.93 1.00 0.98 2.00 0.94 0.67 0.98 1.00 0.99 1.00 0.99 1.00 0.99 0.75 0.93 1.00 0.99 0.75 0.93 1.00 0.99 0.75 0.93 0.99 0.99 0.75 0.93 1.00 0.99 0.99 0.75 0.93 1.00 0.99 0.90 0.99 0.90 0.00 0.00 0.00 0.00 0.0	1.34 1.00 1.07 1.33 1.13 1.33 1.03 0.75 1.06 1.50 1.09 1.00 1.15	- 1.00 1.00	1.09 1.00 1.10 1.25 1.12 1.67 1.00 1.00 1.00 1.00 1.00 1.00 1.14	- 0.97 - 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94 1.50 0.94 1.00 0.97	
APR MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00 1.00 1.25 1.04 1.00 2.23 0.67	1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97 1.00 0.99 1.00 0.99 1.00	1.12 1.25 1.08 1.00 1.09 1.00 1.08 0.67 1.06 1.00 1.06 1.00 1.00 1.10 1.50	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.12 1.00 1.10 1.00 1.07 1.00 1.04 1.50 1.06 1.00 1.07 1.00 1.07 1.00			MAR APR JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.03 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96 1.50 1.50 1.50 1.51 1.55 3.00	1.02 1.02 1.00 0.99 0.75 1.00 0.93 1.00 0.98 2.00 0.98 0.94 0.67 0.98 1.00 0.99 1.00	1.34 1.00 1.07 1.33 1.13 1.33 0.75 1.06 1.50 1.09 1.09 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.09 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.00 1.06 1.00 1.09 1.00 1.14 1.00	0.97 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94 1.00 0.97 1.00	
APR MAY JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00 1.00 1.25 1.04 1.00 2.23 0.67	1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97 1.00 0.99 1.00 0.99 1.00	1.12 1.25 1.08 1.00 1.09 1.00 1.08 0.67 1.06 1.00 1.06 1.00 1.00 1.10 1.50	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.12 1.00 1.10 1.00 1.07 1.00 1.04 1.50 1.06 1.00 1.07 1.00 1.07 1.00			MAR APR JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.03 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96 1.50 1.50 1.50 1.51 1.55 3.00	1.02 1.02 1.00 0.99 0.75 1.00 0.93 1.00 0.98 2.00 0.98 0.94 0.67 0.98 1.00 0.99 1.00	1.34 1.00 1.07 1.33 1.13 1.33 0.75 1.06 1.50 1.09 1.09 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.09 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.00 1.06 1.00 1.09 1.00 1.14 1.00	0.97 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94 1.00 0.97 1.00	
APR MAY JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.61 1.25 1.01 2.50 1.00 1.50 1.03 2.00 1.25 1.00 1.25 1.00 2.23 0.67 1.07	1.00 0.80 0.97 0.80 0.94 0.63 1.50 0.93 1.50 0.93 1.00 0.99 1.00 0.99 1.00 1.00	1.12 1.25 1.08 1.00 1.25 1.2	- 1.00	1.12 1.12 1.00 1.00 1.00 1.07 1.00 1.04 1.50 1.06 1.00 1.07 1.00 1.07 1.00 1.07 1.00 1.07 1.00 1.07 1.00 1.03 1.03 1.03 1.33	0.95 - 0.96 1.00 0.95 0.80 0.94 0.67 0.96 0.67 0.96 0.67 0.96 1.00 0.96 1.00 0.94 1.00 0.95 - 0.95		MAR APR JUN JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.03 1.78 1.50 1.20 0.67 1.05 0.97 1.00 0.96 1.50 1.50 1.50 1.50 1.50 1.55 3.00 1.67 1.55 3.00 1.67 1.55 3.00 1.67 1.55 3.00 1.55 3.00 1.55 1.55 3.00 1.55 1	1.02 1.02 1.00 0.93 1.00 0.93 1.00 0.93 2.00 0.94 0.67 0.98 1.00 0.98 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.99 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.93 1.00 0.94 0.94 0.95 1.00 0.94 1.00 0.94 1.00 0.94 1.00 0.94 1.00 0.94 1.00 0.94 1.00 0.94 1.00 0.94 1.00 0.99 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.09 1.00 0.00 1.00 0.00 1.00	1.34 1.00 1.07 1.33 1.13 1.03 0.75 1.06 1.50 1.09 1.00 1.00 1.27 - - 1.24 3.56	- 1.00 - 1.00	1.09 1.37 1.00 1.10 1.25 1.12 1.67 1.07 1.06 1.00 1.06 1.00 1.00 1.00 1.14 1.00 1.34 -	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.94 1.50 0.94 1.00 0.94 1.00 0.97 1.00 0.97 1.00 0.85 - - - - - - - - - - - - -	
APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.61 1.25 1.01 2.50 1.00 1.03 2.00 1.03 2.00 1.00 1.25 1.04 1.00 2.23 0.67 1.07	1.00 0.80 0.97 0.80 0.94 0.67 0.93 1.50 0.97 1.00 0.99 1.00 0.99 1.00	1.12 1.25 1.08 1.00 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.24 1.25 1.24 1.2	- 1.00	1.12 1.12 1.00 1.10 1.00 1.07 1.00 1.07 1.00 1.06 1.00 1.00 1.10 1.50 1.50	0.95 - 0.96 1.00 0.95 0.80 0.94 0.67 0.96 0.67 0.97 1.00 0.96 1.00 0.96 1.00 0.96 - 0.09 - 0.95 - 0.97 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.96 - 0.95 - 0.96 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.98 - 0.986 - 0.986 - 0.986 - 0.986 - 0.986 - 0.986 - 0.985 - 0.986 - 0.985 - 0.986 - 0.985 - 0.986 - 0.985 - 0.986 - 0.95 - 0.95 - 0.95 - 0.95 - 0.95 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.967 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.9777 - 0.97777 - 0.97777 - 0.97777 - 0.97777 - 0.9777777 - 0.977777 - 0.9777777777777777777777777777777777777		MAR APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.03 1.78 1.50 1.20 0.67 1.05 0.75 0.97 1.00 0.96 1.50 1.50 1.50 1.50 1.55 3.00 1.07 -	1.02 1.02 1.00 0.99 0.75 0.93 1.00 0.93 1.00 0.94 0.67 0.94 1.00 0.99 1.00 0.99 1.00	1.34 1.00 1.07 1.33 1.13 1.33 1.03 0.75 1.06 1.50 1.09 1.00 1.15 1.00 1.15 1.00	- 1.00 - - 1.00	1.00 1.37 1.37 1.00 1.10 1.25 1.12 1.67 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.14 1.00 1.00 1.00 1.14 1.00 1.00 1.00 1.14 1.00	- 0.97 - 0.96 1.00 0.95 0.80 0.93 0.60 0.93 1.50 0.94 1.50 0.94 1.50 0.94 1.50 0.97 1.00 0.97 - 0.00 0.85 - 0.97 - 0.00 - 0.97 - 0.00 - 0.97 - 0.00 - 0.97 - 0.00 - 0.97 - 0.00 - 0.97 - 0.00 - 0.97 - 0.00 - 0.97 - 0.00 - 0.97 - 0.85 - - 0.89 - - 0.89 - - 0.89 - - 0.89 - - 0.89 - - - - - - - - - - - - -	



Table F.1Projected median monthly and median annual net inflow to Kalamalka-Wood Lake. The
results are based on the HadCM3 A2 and CGCM3 B1 climate models. Baseline results are
based on the period 1996 to 2006. Future projections are based on the period 2011 to 2040.
To provide an index of the variability in the projections, the inter-quartile range (IQR) is
provided.

		cenario Group: nario Number: Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median	BASELINE 66 1,740 1,043 1,026 2,007 2,820 5,422 5,753 10,104 9,175 3,240 7,932 -1,032 1,003 -1,120 2,007 7,932 -1,032 1,509 -222 2,073 773 1,504	A 29 2,338 1,966 3,115 4,213 5,150 5,842 10,118 11,016 10,281 10,037 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,229	B 31 1,923 3,072 4,173 5,030 5,937 10,026 10,023 11,026 10,232 10,023 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	C 35 2,141 1,902 2,919 4,146 4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 1,297 1,297 1,297 1,297 2,2368 1,319 -546 2,2146	D 37 2,301 1,924 3,072 4,172 4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,325 -2,060 1,335 -325 2,108	E 39 2,104 1,893 2,882 4,138 4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833 2,200	F 41 2,200 1,970 2,992 4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,2466 1,304 -2,2466
Scenario Group: BASELINE A B C D E F Scenario Number: 65 28 30 34 36 38 40 JAN Median 2,129 3,690 3,392 3,596 3,396 3,560 JAN Median 1,669 2,275 2,638 2,458 2,639 2,456 2,609 I/QR 2,226 2,714 2,748 2,727 2,749 5,733 5,745 5,748 5,725 5,749 5,733 5,749	Sce Sce JAN FEB MAR APR JUN JUL JUL AUG SEP OCT NOV	cenario Group: nario Number: Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median 1028 Median	66 1,740 1,443 1,026 2,007 2,820 5,422 5,753 10,104 9,175 3,240 7,932 -1,032 1,093 -1,032 1,504	29 2,338 1,966 3,115 4,213 5,150 5,842 10,118 11,016 10,281 10,397 4,6963 -1,603 1,382 -1,603 1,382 -1,603 1,382 -1,289 -32 1,289 -32 1,289 -32 1,289 -32	31 2,301 1,923 3,072 4,173 5,937 5,937 10,060 11,026 10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 2,020	35 2,141 1,902 2,919 4,146 4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	37 2,301 1,924 4,172 4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	39 2,104 1,893 2,882 4,138 4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	41 2,200 1,970 2,992 4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,456 1,428
Scenario Number: 65 28 30 34 36 38 40 JAN Median 2,129 3,690 3,591 3,392 3,596 3,396 3,500 I/R 2,027 5,002 5,014 5,023 5,015 5,022 5,002 FEB Median 1,669 2,725 2,638 2,458 2,639 2,456 2,609 I/OR 2,296 2,714 2,727 2,748 2,727 1,748 1,628 6,633 6,133 </th <th>Scei JAN FEB MAR APR JUN JUL AUG SEP OCT NOV</th> <th>nario Number: Median (DR Median) (DR (DR Median) (DR Median) (DR (DR (DR (DR (DR (DR (DR (DR (DR (DR</th> <th>66 1,740 1,443 1,026 2,007 2,820 5,422 5,753 10,104 9,175 3,240 7,932 -1,032 1,093 -1,032 1,504</th> <th>29 2,338 1,966 3,115 4,213 5,150 5,842 10,118 11,016 10,281 10,397 4,6963 -1,603 1,382 -1,603 1,382 -1,603 1,382 -1,289 -32 1,289 -32 1,289 -32 1,289 -32</th> <th>31 2,301 1,923 3,072 4,173 5,937 5,937 10,060 11,026 10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 2,020</th> <th>35 2,141 1,902 2,919 4,146 4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546</th> <th>37 2,301 1,924 4,172 4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325</th> <th>39 2,104 1,893 2,882 4,138 4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833</th> <th>41 2,200 1,970 2,992 4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428</th>	Scei JAN FEB MAR APR JUN JUL AUG SEP OCT NOV	nario Number: Median (DR Median) (DR (DR Median) (DR Median) (DR (DR (DR (DR (DR (DR (DR (DR (DR (DR	66 1,740 1,443 1,026 2,007 2,820 5,422 5,753 10,104 9,175 3,240 7,932 -1,032 1,093 -1,032 1,504	29 2,338 1,966 3,115 4,213 5,150 5,842 10,118 11,016 10,281 10,397 4,6963 -1,603 1,382 -1,603 1,382 -1,603 1,382 -1,289 -32 1,289 -32 1,289 -32 1,289 -32	31 2,301 1,923 3,072 4,173 5,937 5,937 10,060 11,026 10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 2,020	35 2,141 1,902 2,919 4,146 4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	37 2,301 1,924 4,172 4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	39 2,104 1,893 2,882 4,138 4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	41 2,200 1,970 2,992 4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
JAN Median 2,129 3,690 3,591 3,392 3,596 3,366 3,560 IQR 2,027 5,002 5,014 5,023 5,015 5,022 5,002 FEB Median 1,669 2,725 2,638 2,458 2,639 2,456 2,609 IQR 2,226 2,714 2,748 2,727 2,714 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,748 2,727 2,712 2,713 3,737 7,237 7,010 7,197 6,963 7,083 6,272 10,031 1,031 1,031 1,355 1,512	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	Median (QR (QR (QR (QR (QR (QR (QR (QR	1,740 1,073 1,043 2,007 2,820 5,753 10,104 9,175 3,240 7,932 1,093 -1,120 1,504	2,338 1,966 3,115 5,150 5,842 10,018 11,016 10,281 10,397 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,229 1,279	2,301 1,923 3,072 4,173 5,030 5,927 10,060 11,026 10,232 10,323 3,856 6,971 1,391 -1,678 1,391 -1,926 1,277 -97 2,020	2,141 1,902 2,919 4,146 4,798 5,994 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	2,301 1,924 3,072 4,172 4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	2,104 1,893 2,882 4,138 4,766 5,980 9,812 10,063 2,938 -2,404 1,320 -2,571 1,502 -833	2,200 1,970 2,992 4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
IQR 2,027 5,002 5,014 5,023 5,015 5,022 5,002 FEB Median 1,669 2,725 2,638 2,458 2,639 2,466 2,609 I/QR 2,296 2,714 2,727 2,748 3,737 7,737 7,7010 7,197 6,663 7,083 1,030 1,932 1,003 1,531 1,632	FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1,073 1,443 1,026 2,007 2,820 5,422 5,753 10,104 7,932 -1,093 -1,120 1,093 -1,120 1,503 -222 2,073 773 1,504	1,966 3,115 4,213 5,150 5,842 10,118 11,016 10,281 10,397 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 -3,979 1,129	1,923 3,072 4,173 5,030 5,927 10,060 11,066 11,066 10,232 10,323 3,856 6,971 1,928 1,391 -1,678 1,391 -1,926 1,277 -97 2,020	1,902 2,919 4,146 4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	1,924 3,072 4,172 4,999 5,950 10,053 11,031 10,070 9,919 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	1,893 2,882 4,138 4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	1,970 2,992 4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
FEB Median 1,669 2,725 2,638 2,458 2,639 2,456 2,609 I(DR 2,226 2,714 2,748 2,727 2,712 2,712 2,712 MAR Median 1,859 6,507 6,442 6,426 6,423 6,228 6,304 I(DR 5,085 5,245 5,248 5,225 5,239 5,249 APR Median 5,984 7,337 7,210 7,197 6,963 7,083 IQR 5,638 10,030 9,933 9,935 9,927 9,972 10,031 MAY Median 7,553 6,133 6,112 6,115 6,112 6,122 1,921 1,930 2,678 2,860 JUN Median 1,355 -250 -290 -859 -572 -1,192 -1,040 I/DR -1,800 -2,285 -2,534 -3,205 -2,940 -3,512 -3,298 I/DR 1,561 1,561	MAR APR MAY JUN JUL AUG SEP OCT NOV	Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median	1,443 1,026 2,007 5,422 5,753 10,104 9,175 3,240 7,932 1,093 -1,120 1,509 -222 2,073 1,504	3,115 4,213 5,842 10,118 11,016 10,281 10,397 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,979 1,279	3,072 4,173 5,030 5,927 10,060 11,026 10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	2,919 4,146 4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	3,072 4,172 4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	2,882 4,138 4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	2,992 4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
IQR 2,296 2,714 2,748 2,727 2,748 2,727 2,748 2,727 2,712 MAR Median 1,859 6,507 6,442 6,246 6,423 6,228 6,304 IQR 5,085 5,245 5,245 5,225 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,249 5,253 5,219 1,031 1,031 1,031 1,031 1,031 5,020 1,031 1,031 5,020 1,021 1,102 1,152 1,040 1,047 1,555 1,040 1,028 1,216 1,190 1,555 1,011 1,597 1,555 1,041	MAR APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1,026 2,007 2,820 5,422 5,753 10,104 9,175 3,240 7,932 -1,032 -1,032 1,093 -1,120 1,509 -222 2,073 1,504	4,213 5,150 5,842 10,118 11,016 10,281 10,397 3,874 6,963 1,382 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	4,173 5,030 5,927 10,060 11,026 10,223 3,856 6,971 -1,678 1,391 -1,926 1,227 -97 2,020	4,146 4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	4,172 4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	4,138 4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	4,217 4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
MAR Median 1,859 6,507 6,442 6,246 6,423 6,228 6,304 IQR 5,085 5,245 5,248 5,254 5,249 5,254 5,249 APR Median 5,984 7,337 7,237 7,010 7,197 6,963 7,083 IQR 5,638 10,030 9,933 9,937 9,927 9,972 10,031 MAY Median 7,553 6,133 6,112 6,115 6,151 6,251 6,272 JUN Median 1,355 -256 -290 -859 -572 -1,192 -1,040 IQR 4,414 3,185 3,167 2,212 2,900 2,678 2,860 JUL Median -1,326 -2,257 -2,766 -2,476 -3,156 -2,996 IQR 1.650 1,216 1,190 1,525 1,401 1,597 1,600 IQR 1.526 -2,227 -2,766 -2,476	APR MAY JUN JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	2,007 2,820 5,753 10,104 9,175 3,240 7,932 -1,032 1,093 -1,120 1,509 -222 2,073 1,504	5,150 5,842 10,118 11,016 10,281 10,397 4,6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	5,030 5,927 10,060 11,026 10,232 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	4,798 5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	4,999 5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	4,766 5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	4,921 5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
I/OR 5,085 5,248 5,229 5,249 5,233 5,249 APR Median 5,984 7,337 7,237 7,010 7,197 6,963 7,083 I/OR 5,638 10,030 9,935 9,937 9,927 9,972 1,031 MAY Median 7,533 5,119 5,192 4,982 5,179 4,971 5,020 I/OR 7,653 6,133 6,112 6,115 6,151 6,272 -1,040 I/OR 4,414 3,185 3,167 2,920 -3,512 -3,298 I/U Median -1,800 -2,253 -2,274 -3,205 -2,940 -3,512 -3,298 I/U Median -1,260 -2,223 -2,276 -2,476 -3,156 -2,956 I/U 1,650 1,216 1,190 1,552 1,401 1,557 1,555 I/U Median -1,260 -2,223 -2,276 -2,476 -3,156 -	APR MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	2,820 5,422 5,753 10,104 9,175 3,240 7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	5,842 10,118 11,016 10,281 10,397 3,874 6,963 -1,603 1,382 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	5,927 10,060 11,026 10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	5,994 9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	5,950 10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	5,980 9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	5,898 9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
APR Median 5,984 7,337 7,237 7,010 7,197 6,963 7,083 IQR 5,638 10,030 9,933 9,935 9,927 10,031 MAY Median 7,533 5,219 5,192 4,982 5,179 4,971 5,020 IQR 7,653 6,133 6,112 6,115 6,511 6,521 6,272 JUN Median 1,355 -256 -290 -859 -572 -1,192 -1,040 IQR -4,614 3,185 3,167 2,921 2,930 2,678 2,860 JUL Median -1,266 -2,254 -3,205 -2,940 -3,512 -3,288 IQR 1,650 1,216 1,190 1,555 1,401 1,597 1,565 AUG Median -1,326 -2,223 -2,2766 -2,476 -3,156 -2,956 IQR 1,561 1,681 1,690 1,928 1,812 1,1555	MAY JUN JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	5,422 5,753 10,104 9,175 3,240 7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	10,118 11,016 10,281 10,397 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	10,060 11,026 10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	9,917 11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	10,053 11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	9,881 11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	9,917 11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
I/OR 56.88 10.030 9.933 9.937 9.927 9.972 10.031 MAY Median 7,533 5,219 5,192 4,982 5,179 4,971 5,020 I/OR 7,653 6,133 6,112 6,115 6,151 6,251 6,272 JUN Median 1,355 -256 -290 -859 -572 -1,192 -1,040 I/OR 4,414 3,185 3,167 2,212 2,900 -2,678 2,860 JUL Median -1,800 -2,485 -2,534 -3,205 -2,940 -3,512 -3,288 I/OR 1,650 1,215 1,190 1,552 1,401 1,597 1,565 I/OR Median -1,326 -2,276 -2,476 -3,156 -2,996 I/OR 1,561 1,681 1,690 1,523 1,433 -1,798 -1,600 I/OR 735 986 982 919 919 921	MAY JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	5,753 10,104 9,175 3,240 7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	11,016 10,281 10,397 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	11,026 10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	11,048 9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	11,031 10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	11,054 9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	11,035 9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
MAY Median 7,533 5,219 5,192 4,982 5,179 4,971 5,020 I/R 7,653 6,113 6,115 6,151 6,151 6,151 6,151 6,121 6,132 6,120 6,132 6,120 6,132 6,120 6,132 6,283 6,253 7,254 2,2930 2,278 2,860 JUL Median -1,800 -2,485 -2,534 -3,205 -2,940 -3,512 -3,298 I(QR 1,512 1,190 1,552 1,401 1,597 1,565 1,565 AUG Median -1,226 -2,223 -2,276 -2,476 -3,156 -2,956 I/QR 1,561 1,681 1,690 1,1903	JUN JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	10,104 9,175 3,240 7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	10,281 10,397 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	10,232 10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	9,823 9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	10,070 9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	9,612 10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	9,766 9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
IQR 7,653 6,133 6,112 6,115 6,151 6,251 6,251 JUN Median 1,355 -256 -290 -859 -572 -1,192 -1,040 IQR 4,414 3,185 3,167 2,212 2,900 2,678 JUL Median -1,800 -2,485 -2,534 -3,205 -2,940 -3,512 -3,298 I/QR 1.650 1.216 1,190 1,552 1.401 1.597 1.565 AUG Median -1,326 -2,223 -2,257 -2,766 -2,476 -3,156 -2,996 I/QR 1,561 1,681 1,690 1,528 1,613 1,690 1,928 1,812 1,956 1,935 SEP Median -3,266 982 919 919 921 957 OCT Median 8,76 602 597 439 571 350 481 I/QR 783 1,463 1,524	JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	9,175 3,240 7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	10,397 3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	10,323 3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	9,913 3,317 7,045 -2,187 1,297 -2,368 1,319 -546	9,919 3,578 7,002 -1,940 1,329 -2,060 1,335 -325	10,063 2,938 7,178 -2,404 1,320 -2,571 1,502 -833	9,917 3,164 7,072 -2,290 1,304 -2,466 1,428
JUN Median 1,355 -256 -290 -859 -572 -1,192 -1,040 I/R 4,414 3,185 3,167 2,921 2,930 2,678 2,860 JUL Median -1,800 2,485 -2,534 -3,205 -2,940 -3,512 -3,298 I/QR 1,650 1,216 1,190 1,552 1,401 1,597 1,565 AUG Median -1,226 -2,223 -2,276 -2,476 -3,156 -2,956 I/QR 1,561 1,681 1,690 1,928 1,812 1,956 1,935 SEP Median -386 -1,299 -1,306 -1,503 -1,788 -1,600 I/QR 735 986 982 919 919 921 957 OCT Median 876 6002 597 439 571 350 481 I/QR 783 1,463 1,524 1,605 1,501 1,572	JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median	3,240 7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	3,874 6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	3,856 6,971 -1,678 1,391 -1,926 1,277 -97 2,020	3,317 7,045 -2,187 1,297 -2,368 1,319 -546	3,578 7,002 -1,940 1,329 -2,060 1,335 -325	2,938 7,178 -2,404 1,320 -2,571 1,502 -833	3,164 7,072 -2,290 1,304 -2,466 1,428
I/QR 4,414 3,185 3,167 2,921 2,930 2,678 2,880 JUL Median -1,800 -2,485 -2,534 -3,205 -2,940 -3,512 -3,298 I/QR 1,650 1,216 1,190 1,555 1,401 1,597 1,565 AUG Median -1,326 -2,223 -2,276 -2,766 -2,156 -2,936 I/QR 1,561 1,681 1,690 1,928 1,812 1,956 -2,936 SEP Median -386 -1,299 -1,306 -1,503 -1,353 -1,798 -1,600 I/QR 735 986 982 919 919 921 957 OCT Median 1,980 4,242 4,182 4,009 4,811 4,012 4,112 I/QR 783 1,463 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009	JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median	7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	6,971 -1,678 1,391 -1,926 1,277 -97 2,020	7,045 -2,187 1,297 -2,368 1,319 -546	7,002 -1,940 1,329 -2,060 1,335 -325	7,178 -2,404 1,320 -2,571 1,502 -833	7,072 -2,290 1,304 -2,466 1,428
I/QR 4,414 3,185 3,167 2,921 2,930 2,678 2,880 JUL Median -1,800 -2,485 -2,534 -3,205 -2,940 -3,512 -3,298 I/QR 1,650 1,216 1,190 1,555 1,401 1,597 1,565 AUG Median -1,326 -2,223 -2,276 -2,766 -2,156 -2,936 I/QR 1,561 1,681 1,690 1,928 1,812 1,956 -2,936 SEP Median -386 -1,299 -1,306 -1,503 -1,353 -1,798 -1,600 I/QR 735 986 982 919 919 921 957 OCT Median 1,980 4,242 4,182 4,009 4,811 4,012 4,112 I/QR 783 1,463 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009	AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median	7,932 -1,032 1,093 -1,120 1,509 -222 2,073 773 1,504	6,963 -1,603 1,382 -1,915 1,289 -32 1,979 1,129	6,971 -1,678 1,391 -1,926 1,277 -97 2,020	7,045 -2,187 1,297 -2,368 1,319 -546	7,002 -1,940 1,329 -2,060 1,335 -325	7,178 -2,404 1,320 -2,571 1,502 -833	7,072 -2,290 1,304 -2,466 1,428
JUL Median -1,800 -2,835 -2,534 -3,205 -2,940 -3,512 -3,288 IQR 1,650 1,215 1,190 1,552 1,401 1,597 1,565 AUG Median -1,326 -2,277 -2,766 -2,476 -3,156 -2,956 IQR 1,551 1,681 1,690 1,528 1,411 1,956 1,935 SEP Median -1,326 -2,2237 -2,766 -2,476 -3,156 -2,956 IQR 1,561 1,681 1,690 1,528 1,812 1,956 1,935 SEP Median -3366 -1,298 1,330 -1,798 -1,600 IQR 725 965 982 919 919 921 957 OCT Median 876 602 597 439 571 350 481 IQR 2,226 6,950 6,967 6,962 6,969 6,946 IQR	AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median	1,093 -1,120 1,509 -222 2,073 773 1,504	1,382 -1,915 1,289 -32 1,979 1,129	1,391 -1,926 1,277 -97 2,020	-2,187 1,297 -2,368 1,319 -546	-1,940 1,329 -2,060 1,335 -325	-2,404 1,320 -2,571 1,502 -833	-2,290 1,304 -2,466 1,428
IQR 1.650 1.216 1.190 1.552 1.401 1.597 1.565 AUG Median -1.326 -2.223 -2.257 -2.766 -2.476 -3.316 -2.956 IQR 1.561 1.681 1.690 1.928 1.812 1.956 1.935 SEP Median -386 -1.299 -1.306 -1.503 -1.333 -1.788 -1.600 IQR 735 986 982 919 919 921 957 OCT Median 876 602 597 439 571 350 481 I/QR 783 1.463 1.524 1.605 1.586 1.701 1.572 NOV Median 1.980 4.242 4.182 4.009 4.181 4.012 4.112 I/QR 7.83 1.663 1.567 6.962 6.969 6.946 DEC Median 1.936 2.397 2.349 2.187 2.350 <t< td=""><td>AUG SEP OCT NOV</td><td>IQR Median IQR Median IQR Median IQR Median</td><td>1,093 -1,120 1,509 -222 2,073 773 1,504</td><td>1,382 -1,915 1,289 -32 1,979 1,129</td><td>1,391 -1,926 1,277 -97 2,020</td><td>1,297 -2,368 1,319 -546</td><td>1,329 -2,060 1,335 -325</td><td>1,320 -2,571 1,502 -833</td><td>1,304 -2,466 1,428</td></t<>	AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median	1,093 -1,120 1,509 -222 2,073 773 1,504	1,382 -1,915 1,289 -32 1,979 1,129	1,391 -1,926 1,277 -97 2,020	1,297 -2,368 1,319 -546	1,329 -2,060 1,335 -325	1,320 -2,571 1,502 -833	1,304 -2,466 1,428
AUG Median -1,326 -2,223 -2,2760 -2,766 -2,476 -3,156 -2,956 IQR 1,561 1,661 1,660 1,928 1,812 1,815 1,935 SEP Median -386 -1,299 1,306 -1,503 -1,333 -1,798 1,600 IQR 735 986 982 919 919 921 957 OCT Median 876 602 597 439 571 350 481 IQR 783 1,463 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009 4,181 4,012 4,112 IQR 2,226 6,950 6,967 6,962 6,969 6,946 DEC Median 1,328 4,008 3,987 4,015 3,987 4,015 4,015 4,009 ANNUAL Median 2,266 36,911 3,5995	SEP OCT NOV	Median IQR Median IQR Median IQR Median	-1,120 1,509 -222 2,073 773 1,504	-1,915 1,289 -32 1,979 1,129	-1,926 1,277 -97 2,020	-2,368 1,319 -546	-2,060 1,335 -325	-2,571 1,502 -833	-2,466 1,428
IQR 1,561 1,681 1,690 1,928 1,812 1,956 1,935 SEP Median -386 -1,299 -1,306 -1,503 -1,738 -1,600 I/OR 735 986 982 919 919 921 957 OCT Median 876 602 597 439 571 350 481 I/QR 783 1,463 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009 4,181 4,012 4,112 I/QR 2,226 6,950 6,961 6,967 6,962 6,969 6,946 DEC Median 1,936 2,397 2,349 2,187 2,350 2,166 2,264 I/QR 1,328 4,008 3,987 4,015 3,987 4,015 4,009 MRIAI Median 32,968 36,911 35,995 31,743 34,527	SEP OCT NOV	IQR Median IQR Median IQR Median	1,509 -222 2,073 773 1,504	1,289 -32 1,979 1,129	1,277 -97 2,020	1,319 -546	1,335 -325	1,502 -833	1,428
SEP Median -386 -1,299 -1,306 -1,503 -1,353 -1,798 -1,600 IQR 735 965 982 919 919 921 957 OCT Median 876 602 597 439 571 350 481 IQR 783 1,663 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009 4,181 4,012 4,112 IQR 2,226 6,950 6,961 6,967 6,962 6,969 6,946 DEC Median 1,936 2,397 2,349 2,187 2,350 2,186 2,264 IQR 1,328 4,008 3,987 4,015 3,967 4,015 4,005 ANNUAL Median 2,968 36,911 35,995 31,743 34,527 30,155 32,096	OCT NOV	Median IQR Median IQR Median	-222 2,073 773 1,504	-32 1,979 1,129	-97 2,020	-546	-325	-833	
I/OR 735 986 982 919 919 921 957 OCT Median 876 602 597 439 571 350 481 I/OR 783 1,463 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009 4,181 4,012 4,112 I/OR 2,226 6,950 6,961 6,967 6,962 6,969 6,946 DEC Median 1,328 4,003 3,987 4,015 3,987 4,015 3,987 4,015 3,987 4,015 3,987 4,015 3,987 4,015 3,987 4,015 3,987 4,015 3,987 3,015 4,009 ANNUAL Median 32,968 36,911 31,743 34,527 30,155 32,096	OCT NOV	IQR Median IQR Median	2,073 773 1,504	1,979 1,129	2,020				
OCT Median 876 602 597 439 571 350 481 IQR 783 1,463 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009 4,181 4,012 4,112 IQR 2,226 6,950 6,961 6,967 6,962 6,969 6,946 DEC Median 1,936 2,397 2,349 2,187 2,350 2,186 2,264 IQR 1.328 4,008 3,987 4,015 3,987 4,015 4,009 ANNUAL Median 32,968 36,911 35,995 31,743 34,527 30,155 32,096	NOV	Median IQR Median	773 1,504	1,129		2,140			2.198
I/QR 783 1,463 1,524 1,605 1,586 1,701 1,572 NOV Median 1,980 4,242 4,182 4,009 4,181 4,012 4,112 (QR 2,226 6,950 6,961 6,967 6,962 6,969 6,946 DEC Median 1,936 2,397 2,349 2,187 2,350 2,186 2,264 /QR 1,328 4,008 3,987 4,015 3,987 4,015 3,987 4,015 3,987 4,015 3,987 3,04527 30,0155 32,096	NOV	IQR Median	1,504			763	901	667	827
NOV Median 1,980 4,242 4,182 4,009 4,181 4,012 4,112 I/OR 2,226 6,950 6,961 6,967 6,962 6,969 6,946 DEC Median 1,936 2,397 2,349 2,187 2,350 2,186 2,264 I/OR 1,328 4,008 3,897 4,015 3,987 4,015 3,097 ANNUAL Median 32,968 36,911 35,995 31,743 34,527 30,155 32,096		Median			1,018	1,924	1,937	1,904	2,035
IQR 2,225 6,950 6,961 6,967 6,962 6,969 6,946 DEC Median 1,936 2,397 2,349 2,187 2,330 2,186 2,264 I/QR 1,328 4,008 3,987 4,015 3,987				1,955 2,397			2,353		
DEC Median 1.936 2.397 2.349 2,187 2.350 2.186 2.264 IQR 1.328 4,005 3,987 4,015<	DEC		2,553		2,353	2,190		2,151	2,270
IQR 1,328 4,008 3,987 4,015 3,987 4,015 4,009 ANNUAL Median 32,968 36,911 35,995 31,743 34,527 30,155 32,096	DEC	IQR	2,440	5,496	5,506	5,508	5,503	5,510	5,498
ANNUAL Median 32,968 36,911 35,995 31,743 34,527 30,155 32,096		Median	1,633	2,405	2,313	2,098	2,313	2,098	2,273
		IQR	1,714	2,966	2,993	2,973	2,993	2,966	2,964
IQR 25,396 38,317 39,412 42,133 41,071 43,734 41,400	ANNUAL	Median	33,862	55,587	54,585	49,875	52,634	47,823	50,176
		IQR	21,396	20,800	20,486	20,442	20,291	20,722	20,379
	Parameter:		inflow betwee	en indicated	scenarios				
	Climate Mode								
Ratio: A:BASLINE B:A C:B D:B E:A F:E		Ratio:		B:A	C:B	D:B	E:A	F:E	
JAN Median 1.73 0.97 0.94 1.00 0.92 1.05	JAN	Median	1.34	0.98	0.93	1.00	0.90	1.05	
IQR 2.47 1.00 1.00 1.00 1.00 1.00		IQR	1.83	0.98	0.99	1.00	0.96	1.04	
FEB Median 1.63 0.97 0.93 1.00 0.90 1.06	FEB	Median	2.16	0.99	0.95	1.00	0.93	1.04	
IQR 1.18 1.01 0.99 1.00 1.00 0.99		IQR	4.11	0.99	0.99	1.00	0.98	1.02	
MAR Median 3.50 0.99 0.97 1.00 0.96 1.01	MAR	Median	2.57	0.98	0.95	0.99	0.93	1.03	
IQR 1.03 1.00 1.00 1.00 1.00 1.00		IQR	2.07	1.01	1.01	1.00	1.02	0.99	
APR Median 1.23 0.99 0.97 0.99 0.95 1.02	APR	Median	1.87	0.99	0.99	1.00	0.98	1.00	
IQR 1.78 0.99 1.00 1.00 0.99 1.01		IQR	1.91	1.00	1.00	1.00	1.00	1.00	
MAY Median 0.69 0.99 0.96 1.00 0.95 1.01	MAY	Median	1.02	1.00	0.96	0.98	0.93	1.02	
IQR 0.80 1.00 1.00 1.01 1.02 1.00		IQR	1.13	0.99	0.96	0.96	0.97	0.99	
JUN Median -0.19 1.13 2.97 1.98 4.65 0.87	JUN	Median	1.20	1.00	0.86	0.93	0.76	1.08	
IQR 0.72 0.99 0.92 0.93 0.84 1.07		IQR	0.88	1.00	1.01	1.00	1.03	0.99	
JUL Median 1.38 1.02 1.26 1.16 1.41 0.94	JUL	Median	1.55	1.05	1.30	1.16	1.50	0.95	1
IQR 0.74 0.98 1.30 1.18 1.31 0.98		IQR	1.26	1.01	0.93	0.96	0.96	0.99	
AUG Median 1.68 1.02 1.23 1.10 1.42 0.94	AUG	Median	1.71	1.01	1.23	1.07	1.34	0.96	
100 100 100 100 100 100 100 100 100 100		IQR	0.85	0.99	1.03	1.05	1.16	0.95	
SEP Median 3.37 1.01 1.15 1.04 1.38 0.89	SEP	Median	0.15	2.98	5.65	3.36	25.67	0.73	1
IOR 1.34 1.00 0.94 0.94 0.93 1.04	52.	IOR	0.95	1.02	1.06	1.04	1.11	1.00	
OCT Median 0.69 0.99 0.74 0.96 0.58 1.37	ост	Median	1.46	0.90	0.75	0.89	0.59	1.00	-
Image: Notestating Image:	001	IOR	1.40	1.00	0.99	0.89	0.97	1.24	
	NOV		0.94	0.98	0.99	1.00			
NOV Median 2.14 0.99 0.96 1.00 0.95 1.02	NOV	Median IQR	2.25	1.00			0.90	1.06	
IQR 3.12 1.00 1.00 1.00 1.00 1.00					1.00	1.00	1.00	1.00	

DEC

ANNUAL

Median

IQR

Median IOR 1.24

1.12

0.98

0.98

0.93

0.88

1.00

0.96

0.91

0.82

1.04

1.06

DEC

ANNUAL

Median

Median

1.47

1.64

0.96

0.98

0.91

0.91

1.00

0.96

0.87

0.86

1.08

1.05 0.98

Table F.2Projected median monthly and median annual net inflow to Okanagan Lake. The results are
based on the HadCM3 A2 and CGCM3 B1 climate models. Baseline results are based on the
period 1996 to 2006. Future projections are based on the period 2011 to 2040. To provide
an index of the variability in the projections, the inter-quartile range (IQR) is provided.

Parameter: Climate Model: S JAN FEB MAR	Scenario Group: Scenario Number:	BASELINE							Parameter:	Net Inflow (I	ML)						
JAN FEB	Scenario Group: Scenario Number:	BASELINE															
JAN FEB	Scenario Number:	BASELINE							Climate Model:								
JAN FEB			Α	В	с	D	E	F		enario Group:	BASELINE	A	В	с	D	E	F
FEB		65	28	30	34	36	38	40		nario Number:	66	29	31	35	37	39	41
	Median	27,133 18,056	41,195 66,019	40,684	39,418	40,416	38,451	39,452	JAN	Median	23,901 12.092	32,282	31,799 27,349	31,031	31,841	30,885	31,731
	IQR Median	23,161	38,730	66,169	66,574 37,910	66,225	66,682	66,435	FEB	IQR		27,878		27,176	27,556	27,510	27,272 47,595
MAR	IQR	25,553	26,807	38,414 27,335	27,778	38,458 26,889	37,515 27,882	38,128 26,862	FEB	Median IQR	20,649 9,541	48,350 42,511	48,095 42,508	47,576 44,003	48,018 42,512	46,814 43,983	47,595
1975IN	Median	28,678	54,331	54,204	53,691	54,108	53,643	53,652	MAR	Median	26,417	56,641	56,305	55,472	56,182	55,201	55,563
	IOR	37.851	47,485	47.883	48.985	48.046	48.923	48.381	WAN	IOR	36.126	40.921	40.890	41.255	41.312	41.365	41.175
APR	Median	63,634	86,041	85,792	83,188	85,687	81,139	82,233	APR	Median	62,866	102,114	103,875	97,950	100,907	96,384	97,531
7410	IQR	55,172	99,399	99,479	101,021	99,728	100,836	100,858	7411	IQR	70,318	73,393	74,079	72,489	71,910	71,203	71,746
MAY	Median	95,933	95,114	95,266	91,220	94,433	90,503	90,905	MAY	Median	128,015	122,682	122,604	120,300	122,377	119,517	120,081
	IQR	95,169	63,265	63,415	64,218	63,508	64,659	64,725		IQR	78,159	105,689	105,706	107,308	104,388	108,521	107,470
JUN	Median	49.974	30,816	30.830	28,759	30,696	25,400	26,913	JUN	Median	83,503	81.899	82,128	76,254	80,312	73,617	75,127
	IQR	71,339	46,128	45,957	46,511	46,162	45,943	46,280		IQR	81,177	97,174	96,970	99,610	99.047	99,203	99,514
JUL	Median	5,592	-3,180	-3,043	-5,362	-3,536	-6,898	-6,122	JUL	Median	11,601	6,694	6,556	4,153	6,125	3,002	3,569
	IQR	23,424	17,589	17,733	17,520	17,509	17,291	17,361		IQR	23,258	22,737	22,780	20,712	21,858	19,503	20,233
AUG	Median	-2,670	-4,915	-4,952	-6,908	-5,175	-7,408	-7,184	AUG	Median	-2,401	-4,188	-4,215	-5,471	-4,392	-5,792	-5,630
	IQR	8,445	12,671	12,844	12,109	11,295	12,445	12,328		IQR	11,481	5,731	5,741	7,451	6,293	7,471	7,649
SEP	Median	3,088	-212	-278	-1,530	-458	-1,785	-1,687	SEP	Median	3,813	5,151	5,066	3,699	5,003	3,233	3,440
	IQR	4,634	5,074	5,034	4,974	4,844	4,652	4,754		IQR	10,852	12,513	12,375	11,587	11,728	10,375	11,371
OCT	Median	11,442	11,217	11,038	10,492	10,887	10,314	10,570	OCT	Median	11,177	12,468	12,381	11,415	11,769	11,193	11,319
	IQR	7,367	11,249	11,415	10,588	10,436	10,671	10,624		IQR	12,794	20,235	20,547	20,005	20,392	19,541	20,016
NOV	Median	19,115	39,997	39,870	39,452	39,866	39,468	39,583	NOV	Median	22,404	27,974	27,667	27,008	27,598	26,827	27,355
	IQR	12,503	67,722	68,242	68,537	68,800	68,660	68,302		IQR	15,173	49,308	49,436	49,424	49,480	49,463	49,171
DEC	Median	-2,670	27,747	27,592	27,183	27,576	27,163	27,311	DEC	Median	23,372	29,973	29,653	29,269	29,647	29,238	29,569
	IQR	8,445	37,453	37,221	36,637	37,217	36,098	36,588		IQR	14,091	48,578	48,743	48,571	48,344	48,253	48,516
ANNUAL	Median	488,670	551,288	549,534	512,711	539,553	498,630	509,147	ANNUAL	Median	461,575	684,758	682,553	654,153	671,847	648,065	651,527
	IQR	221,783	519,021	520,213	520,024	518,816	514,615	516,131		IQR	292,085	277,561	278,868	295,361	285,957	299,338	296,400
Parameter:	Ratio of net infl	ow between ir	adicated scena	arios					Parameter:	Patio of pat	inflow betwe	on indicated	contrios				
		ow between i	luicateu scene	1103					Climate Model:		Innow betwe	en mulcateu	scenarios				
cimilate moder.		A:BASLINE	B:A	C:B	D:B	E:A	F:E		cimate model.		A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	1.52	0.99	0.97	0.99	0.93	1.03	1	JAN	Median	1.35	0.99	0.98	1.00	0.96	1.03	-
	IQR	3.66	1.00	1.01	1.00	1.01	1.00			IQR	2.31	0.98	0.99	1.01	0.99	0.99	
FEB	Median	1.67	0.99	0.99	1.00	0.97	1.02		FEB	Median	2.34	0.99	0.99	1.00	0.97	1.02	1
	IQR	1.05	1.02	1.02	0.98	1.04	0.96			IQR	4.46	1.00	1.04	1.00	1.03	0.97	
MAR	Median	1.89	1.00	0.99	1.00	0.99	1.00		MAR	Median	2.14	0.99	0.99	1.00	0.97	1.01	1
	IQR	1.25	1.01	1.02	1.00	1.03	0.99			IQR	1.13	1.00	1.01	1.01	1.01	1.00	
APR	Median	1.35	1.00	0.97	1.00	0.94	1.01		APR	Median	1.62	1.02	0.94	0.97	0.94	1.01	
	IQR	1.80	1.00	1.02	1.00	1.01	1.00			IQR	1.04	1.01	0.98	0.97	0.97	1.01	
MAY	Median	0.99	1.00	0.96	0.99	0.95	1.00		MAY	Median	0.96	1.00	0.98	1.00	0.97	1.00	
	IQR	0.66	1.00	1.01	1.00	1.02	1.00			IQR	1.35	1.00	1.02	0.99	1.03	0.99	
JUN	Median	0.62	1.00	0.93	1.00	0.82	1.06		JUN	Median	0.98	1.00	0.93	0.98	0.90	1.02	
	IQR	0.65	1.00	1.01	1.00	1.00	1.01			IQR	1.20	1.00	1.03	1.02	1.02	1.00	
JUL	Median	-0.57	0.96	1.76	1.16	2.17	0.89		JUL	Median	0.58	0.98	0.63	0.93	0.45	1.19	
	IQR	0.75	1.01	0.99	0.99	0.98	1.00			IQR	0.98	1.00	0.91	0.96	0.86	1.04	
AUG	Median	1.84	1.01	1.39	1.05	1.51	0.97		AUG	Median	1.74	1.01	1.30	1.04	1.38	0.97	
	IQR	1.50	1.01	0.94	0.88	0.98	0.99			IQR	0.50	1.00	1.30	1.10	1.30	1.02	
SEP	Median	-0.07	1.31	5.50	1.64	8.40	0.94		SEP	Median	1.35	0.98	0.73	0.99	0.63	1.06	
007	IQR	1.09	0.99	0.99	0.96	0.92	1.02		007	IQR	1.15	0.99	0.94	0.95	0.83	1.10	-
OCT	Median	0.98	0.98	0.95	0.99	0.92	1.02		OCT	Median	1.12	0.99	0.92	0.95	0.90	1.01	
NOV	IQR	1.53	1.01	0.93	0.91	0.95	1.00		NOV	IQR	1.58	1.02	0.97	0.99	0.97	1.02	-
NOV	Median	2.09	1.00	0.99	1.00	0.99	1.00 0.99		NOV	Median	1.25	0.99	0.98	1.00	0.96	1.02	
	IQR Modian	5.42 -10.39	1.01 0.99	1.00 0.99	1.01	1.01			DEC	IQR Modian	3.25	1.00	1.00	1.00	2.00	0.99	
	Median IQR	-10.39	0.99	0.99	1.00	0.98	1.01		DEC	Median IQR	1.28 3.45	0.99 1.00	0.99 1.00	0.99	0.98	1.01	
DEC			0.33	0.30	1.00	0.90				IUN	5.4J	1.00	1.00	0.33	0.99	1.01	
ANNUAL	Median	1.13	1.00	0.93	0.98	0.90	1.02		ANNUAL	Median	1.48	1.00	0.96	0.98	0.95	1.01	

Table F.3 Projected median monthly and median annual net inflow to Skaha Lake. The results are based on the HadCM3 A2 and CGCM3 B1 climate models. Baseline results are based on the period 1996 to 2006. Future projections are based on the period 2011 to 2040. To provide an index of the variability in the projections, the inter-quartile range (IQR) is provided.

SKAHA LAKE																	
Parameter:	Net Inflow (ML								Parameter:	Net Inflow (I	ML)						
limate Model:									Climate Model								
	Scenario Group:		А	В	с	D	E	F		cenario Group:		А	В	с	D	E	F
	Scenario Number:	65	28	30	34	36	38	40		enario Number:	66	29	31	35	37	39	41
JAN	Median	21,706	30,535	30,560	32,083	28,801	30,991	32,229	JAN	Median	20,717	51,730	49,248	48,436	39,856	34,934	38,256
FEB	IQR Median	7,010 18,731	130,936 29,266	130,325 28,259	122,763 28,560	125,276 28,825	94,761 30,349	95,674 28,279	FEB	IQR Median	17,561 19,174	65,743 24,938	73,036 24,780	64,741 25,300	82,349 25,758	64,653 24,822	76,862 24,890
FEB	IOR	8,773	17.244	17.333	18.009	16.102	16.973	13,506	FEB	IOR	3.587	21.031	17.994	18.016	25,758	17.947	24,890
MAR	Median	21,265	25,762	25,962	25,885	25,922	25,906	25,931	MAR	Median	21,804	27,016	26,894	26,934	26,890	26,810	26,871
WIGH.	IQR	5,248	15,621	15,711	14,687	15,528	15,384	14,346	WAN	IQR	8,631	6,593	6,690	6,736	6,792	6,695	6,808
APR	Median	23,240	29,070	29,042	28,720	29,016	29,790	29,182	APR	Median	24,480	30,430	30,431	30,196	30,370	29,938	30,310
	IQR	8,953	29,434	29,351	28,165	29,450	28,125	28,461		IQR	12,353	11,593	11,603	11,573	11,417	11,027	11,816
MAY	Median	30,454	32,709	32,524	31,755	32,497	31,924	31,709	MAY	Median	31,103	40,736	40,748	40,112	40,591	39,881	39,976
	IQR	12,077	73,676	63,936	65,379	59,208	55,346	65,252		IQR	8,571	80,483	69,408	70,450	69,525	65,850	67,716
JUN	Median	25,060	25,756	25,770	24,321	25,469	24,571	24,582	JUN	Median	29,432	41,341	42,090	40,086	41,271	39,194	39,442
	IQR	12,076	16,613	16,419	27,691	30,113	22,417	26,575		IQR	16,558	70,215	71,214	70,565	71,244	67,365	59,164
JUL	Median	21,355	22,283	22,260	21,138	22,160	20,309	20,414	JUL	Median	24,111	74,280	73,320	58,453	70,675	61,325	60,019
	IQR	12,589	34,944	36,822	23,585	37,215	23,308	23,575		IQR	42,610	82,629	84,817	74,397	82,065	74,500	75,017
AUG	Median	19,873	18,482	18,466	17,813	18,369	17,665	17,792	AUG	Median	21,660	26,015	25,994	25,180	25,499	24,607	25,647
	IQR	6,890	8,324	8,162	7,255	7,607	7,244	7,247		IQR	10,283	5,883	6,380	7,116	7,398	7,849	6,904
SEP	Median	18,583	17,557	17,558	16,805	17,289	16,671	16,797	SEP	Median	19,014	19,953	19,969	19,566	19,830	19,408	19,423
	IQR	3,431	3,399	3,396	3,178	3,524	3,898	3,497		IQR	3,934	3,063	3,177	2,744	2,630	2,827	2,807
OCT	Median	19,237	19,377	19,355	18,967	19,297	19,043	19,092	OCT	Median	19,796	20,850	20,873	20,480	20,724	20,420	20,434
NOV	IQR Median	3,481 19,214	3,279 21,689	3,209 21,683	3,549 21,296	3,345 21,655	4,321 21,214	4,365 21,290	NOV	IQR Median	3,909 19,751	10,992 21,521	12,607 21,491	11,022 21,128	11,511 21,715	11,345 20,990	8,389 21,080
NOV	IQR	2,872	11,713	11,891	5,637	12,211	6,828	8,006	NOV	IQR	3,665	12,362	12,226	8,845	12,267	8,835	8,810
DEC	Median	19,365	23,042	23,235	21,569	22,888	21,521	24,259	DEC	Median	19,554	23,730	23,720	23,576	23,680	23,523	23,561
DEC	IOR	2,420	15,064	15,129	14,893	14,984	14,096	14,149	DEC	IQR	2.640	53,216	54,948	53,180	51.078	51.193	50.990
ANNUAL	Median	286,147	332,575	331,659	298,089	312,184	293,243	293,787	ANNUAL	Median	279,728	566,380	567,008	540,756	558,771	530,488	532,635
ANNOAL	IQR	125.054	430,371	433,261	417,215	431,476	396,921	410,444	ANNOAL	IOR	249,730	384,366	381,843	364,886	376,922	367,873	361,146
	IQN	123,034	430,371	455,201	417,215	431,470	550,521	410,444		ngn	245,750	50%,500	301,043	504,000	570,522	307,073	501,140
Parameter:	Ratio of net inf	ow between i	ndicated scena	arios					Parameter:	Ratio of net	inflow betwe	en indicated	scenarios				
Climate Model:									Climate Model								
	Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E			Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	1.41	1.00	1.05	0.94	1.01	1.04		JAN	Median	2.50	0.95	0.98	0.81	0.68	1.10	
	IQR	18.68	1.00	0.94	0.96	0.72	1.01			IQR	3.74	1.11	0.89	1.13	0.98	1.19	
FEB	Median	1.56	0.97	1.01	1.02	1.04	0.93		FEB	Median	1.30	0.99	1.02	1.04	1.00	1.00	
	IQR	1.97	1.01	1.04	0.93	0.98	0.80			IQR	5.86	0.86	1.00	1.21	0.85	1.01	
MAR	Median	1.21	1.01	1.00	1.00	1.01	1.00		MAR	Median	1.24	1.00	1.00	1.00	0.99	1.00	
	IQR	2.98	1.01	0.93	0.99	0.98	0.93			IQR	0.76	1.01	1.01	1.02	1.02	1.02	
APR	Median	1.25	1.00	0.99	1.00	1.02	0.98		APR	Median	1.24	1.00	0.99	1.00	0.98	1.01	
	IQR	3.29	1.00	0.96	1.00	0.96	1.01			IQR	0.94	1.00	1.00	0.98	0.95	1.07	
												1.00	0.98	1.00	0.98	1.00	
MAY	Median	1.07	0.99	0.98	1.00	0.98	0.99		MAY	Median	1.31		1.02	4.00	0.02		
	Median IQR	6.10	0.87	1.02	0.93	0.75	1.18			IQR	9.39	0.86	1.02	1.00	0.82	1.03	
MAY JUN	Median IQR Median	6.10 1.03	0.87 1.00	1.02 0.94	0.93 0.99	0.75 0.95	1.18 1.00		JUN	IQR Median	9.39 1.40	0.86	0.95	0.98	0.95	1.01	
JUN	Median IQR Median IQR	6.10 1.03 1.38	0.87 1.00 0.99	1.02 0.94 1.69	0.93 0.99 1.83	0.75 0.95 1.35	1.18 1.00 1.19		JUN	IQR Median IQR	9.39 1.40 4.24	0.86 1.02 1.01	0.95 0.99	0.98 1.00	0.95 0.96	1.01 0.88	
	Median IQR Median IQR Median	6.10 1.03 1.38 1.04	0.87 1.00 0.99 1.00	1.02 0.94 1.69 0.95	0.93 0.99 1.83 1.00	0.75 0.95 1.35 0.91	1.18 1.00 1.19 1.01			IQR Median IQR Median	9.39 1.40 4.24 3.08	0.86 1.02 1.01 0.99	0.95 0.99 0.80	0.98 1.00 0.96	0.95 0.96 0.83	1.01 0.88 0.98	
JUL	Median IQR Median IQR Median IQR	6.10 1.03 1.38 1.04 2.78	0.87 1.00 0.99 1.00 1.05	1.02 0.94 1.69 0.95 0.64	0.93 0.99 1.83 1.00 1.01	0.75 0.95 1.35 0.91 0.67	1.18 1.00 1.19 1.01 1.01		JUL	IQR Median IQR Median IQR	9.39 1.40 4.24 3.08 1.94	0.86 1.02 1.01 0.99 1.03	0.95 0.99 0.80 0.88	0.98 1.00 0.96 0.97	0.95 0.96 0.83 0.90	1.01 0.88 0.98 1.01	
JUN	Median IQR Median IQR Median IQR Median	6.10 1.03 1.38 1.04 2.78 0.93	0.87 1.00 0.99 1.00 1.05 1.00	1.02 0.94 1.69 0.95 0.64 0.96	0.93 0.99 1.83 1.00 1.01 0.99	0.75 0.95 1.35 0.91 0.67 0.96	1.18 1.00 1.19 1.01 1.01 1.01		JUN	IQR Median IQR Median IQR Median	9.39 1.40 4.24 3.08 1.94 1.20	0.86 1.02 1.01 0.99 1.03 1.00	0.95 0.99 0.80 0.88 0.97	0.98 1.00 0.96 0.97 0.98	0.95 0.96 0.83 0.90 0.95	1.01 0.88 0.98 1.01 1.04	
JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR	6.10 1.03 1.38 1.04 2.78 0.93 1.21	0.87 1.00 0.99 1.00 1.05 1.00 0.98	1.02 0.94 1.69 0.95 0.64 0.96 0.89	0.93 0.99 1.83 1.00 1.01 0.99 0.93	0.75 0.95 1.35 0.91 0.67 0.96 0.87	1.18 1.00 1.19 1.01 1.01 1.01 1.00		JUN JUL AUG	IQR Median IQR Median IQR Median IQR	9.39 1.40 4.24 3.08 1.94 1.20 0.57	0.86 1.02 1.01 0.99 1.03 1.00 1.08	0.95 0.99 0.80 0.88 0.97 1.12	0.98 1.00 0.96 0.97 0.98 1.16	0.95 0.96 0.83 0.90 0.95 1.33	1.01 0.88 0.98 1.01 1.04 0.88	
JUL	Median IQR Median IQR Median IQR Median	6.10 1.03 1.38 1.04 2.78 0.93	0.87 1.00 0.99 1.00 1.05 1.00	1.02 0.94 1.69 0.95 0.64 0.96	0.93 0.99 1.83 1.00 1.01 0.99	0.75 0.95 1.35 0.91 0.67 0.96	1.18 1.00 1.19 1.01 1.01 1.01		JUL	IQR Median IQR Median IQR Median	9.39 1.40 4.24 3.08 1.94 1.20	0.86 1.02 1.01 0.99 1.03 1.00	0.95 0.99 0.80 0.88 0.97	0.98 1.00 0.96 0.97 0.98	0.95 0.96 0.83 0.90 0.95	1.01 0.88 0.98 1.01 1.04	
JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median	6.10 1.03 1.38 1.04 2.78 0.93 1.21 0.94	0.87 1.00 0.99 1.00 1.05 1.00 0.98 1.00	1.02 0.94 1.69 0.95 0.64 0.96 0.89 0.96	0.93 0.99 1.83 1.00 1.01 0.99 0.93 0.98	0.75 0.95 1.35 0.91 0.67 0.96 0.87 0.95	1.18 1.00 1.19 1.01 1.01 1.01 1.00 1.01		JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median	9.39 1.40 4.24 3.08 1.94 1.20 0.57 1.05	0.86 1.02 1.01 0.99 1.03 1.00 1.08 1.00	0.95 0.99 0.80 0.88 0.97 1.12 0.98	0.98 1.00 0.96 0.97 0.98 1.16 0.99	0.95 0.96 0.83 0.90 0.95 1.33 0.97	1.01 0.88 0.98 1.01 1.04 0.88 1.00	
JUN JUL AUG SEP	Median IQR Median IQR Median IQR Median IQR Median IQR	6.10 1.03 1.38 1.04 2.78 0.93 1.21 0.94 0.99	0.87 1.00 0.99 1.00 1.05 1.00 0.98 1.00 1.00	1.02 0.94 1.69 0.95 0.64 0.96 0.89 0.96 0.94	0.93 0.99 1.83 1.00 1.01 0.99 0.93 0.98 1.04	0.75 0.95 1.35 0.91 0.67 0.96 0.87 0.95 1.15	1.18 1.00 1.19 1.01 1.01 1.01 1.00 1.01 0.90		JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR	9.39 1.40 4.24 3.08 1.94 1.20 0.57 1.05 0.78	0.86 1.02 1.01 0.99 1.03 1.00 1.08 1.00 1.04	0.95 0.99 0.80 0.88 0.97 1.12 0.98 0.86	0.98 1.00 0.96 0.97 0.98 1.16 0.99 0.83	0.95 0.96 0.83 0.90 0.95 1.33 0.97 0.92	1.01 0.88 0.98 1.01 1.04 0.88 1.00 0.99	
JUN JUL AUG SEP	Median IQR Median IQR Median IQR Median IQR Median IQR Median	6.10 1.03 1.38 1.04 2.78 0.93 1.21 0.94 0.99 1.01	0.87 1.00 0.99 1.00 1.05 1.00 0.98 1.00 1.00 1.00	1.02 0.94 1.69 0.95 0.64 0.96 0.89 0.96 0.94 0.98	0.93 0.99 1.83 1.00 1.01 0.99 0.93 0.98 1.04 1.00	0.75 0.95 1.35 0.91 0.67 0.96 0.87 0.95 1.15 0.98	1.18 1.00 1.19 1.01 1.01 1.01 1.00 1.01 0.90 1.00		JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median	9.39 1.40 4.24 3.08 1.94 1.20 0.57 1.05 0.78 1.05	0.86 1.02 1.01 0.99 1.03 1.00 1.08 1.00 1.04 1.00	0.95 0.99 0.80 0.88 0.97 1.12 0.98 0.86 0.98	0.98 1.00 0.96 0.97 0.98 1.16 0.99 0.83 0.99	0.95 0.96 0.83 0.90 0.95 1.33 0.97 0.92 0.98	1.01 0.88 0.98 1.01 1.04 0.88 1.00 0.99 1.00	
JUN JUL AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	6.10 1.03 1.38 1.04 2.78 0.93 1.21 0.94 0.99 1.01 0.94	0.87 1.00 0.99 1.00 1.05 1.00 0.98 1.00 1.00 1.00 0.98	1.02 0.94 1.69 0.95 0.64 0.96 0.96 0.96 0.94 0.98 1.11	0.93 0.99 1.83 1.00 1.01 0.99 0.93 0.98 1.04 1.00 1.04	0.75 0.95 1.35 0.91 0.67 0.96 0.87 0.95 1.15 0.98 1.32	1.18 1.00 1.19 1.01 1.01 1.01 1.00 1.00 0.90 1.00 1.00		JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	9.39 1.40 4.24 3.08 1.94 1.20 0.57 1.05 0.78 1.05 2.81	0.86 1.02 1.01 0.99 1.03 1.00 1.08 1.00 1.04 1.00 1.15	0.95 0.99 0.80 0.88 0.97 1.12 0.98 0.86 0.98 0.87	0.98 1.00 0.96 0.97 0.98 1.16 0.99 0.83 0.99 0.91	0.95 0.96 0.83 0.90 1.33 0.97 0.92 0.98 1.03	1.01 0.88 0.98 1.01 1.04 0.88 1.00 0.99 1.00 0.74	
JUN JUL AUG SEP OCT	Median IQR Median	6.10 1.03 1.38 1.04 2.78 0.93 1.21 0.94 0.99 1.01 0.94 1.13	0.87 1.00 0.99 1.00 1.05 1.00 0.98 1.00 1.00 1.00 0.98 1.00 1.00 1.00 0.98 1.00	1.02 0.94 1.69 0.95 0.64 0.96 0.89 0.96 0.94 0.98 1.11 0.98	0.93 0.99 1.83 1.00 1.01 0.99 0.93 0.98 1.04 1.00 1.04 1.00	0.75 0.95 1.35 0.91 0.67 0.96 0.87 0.95 1.15 0.98 1.32 0.98	1.18 1.00 1.19 1.01 1.01 1.01 1.00 1.01 1.00 1.00 1.00 1.01 1.00		JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	9.39 1.40 4.24 3.08 1.94 1.20 0.57 1.05 0.78 1.05 2.81 1.09	0.86 1.02 1.01 0.99 1.03 1.00 1.08 1.00 1.04 1.00 1.15 1.00	0.95 0.99 0.80 0.88 0.97 1.12 0.98 0.86 0.98 0.87 0.98	0.98 1.00 0.96 0.97 0.98 1.16 0.99 0.83 0.99 0.91 1.01	0.95 0.96 0.83 0.90 1.33 0.97 0.92 0.98 1.03 0.98	1.01 0.88 0.98 1.01 1.04 0.88 1.00 0.99 1.00 0.74 1.00	
JUN JUL AUG SEP OCT NOV DEC	Median IQR Median IQR	6.10 1.03 1.38 1.04 2.78 0.93 1.21 0.94 0.99 1.01 0.94 1.13 4.08 1.19 6.23	0.87 1.00 0.99 1.00 1.05 1.00 0.98 1.00 1.00 1.00 0.98 1.00 0.98 1.00 1.00 1.00 1.02 1.01 1.01 1.00	1.02 0.94 1.69 0.95 0.64 0.96 0.96 0.96 0.94 0.98 1.11 0.98 0.47 0.93 0.98	0.93 0.99 1.83 1.00 0.99 0.93 0.98 1.04 1.00 1.04 1.00 1.04 1.00 0.99 0.99	0.75 0.95 1.35 0.91 0.67 0.96 0.87 0.95 1.15 0.98 1.32 0.98 0.58 0.58 0.93 0.94	1.18 1.00 1.19 1.01 1.01 1.01 1.00 1.01 1.00 1.01 1.00 1.17 1.13 1.00		JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	9.39 1.40 4.24 3.08 1.94 1.20 0.57 1.05 0.57 1.05 2.81 1.09 3.37 1.21 20.16	0.86 1.02 1.01 0.99 1.03 1.00 1.08 1.00 1.04 1.00 1.15 1.00 0.99 1.00 1.03	0.95 0.99 0.80 0.88 0.97 1.12 0.98 0.86 0.98 0.87 0.98 0.72 0.99 0.97	0.98 1.00 0.96 0.97 0.98 1.16 0.99 0.83 0.99 0.91 1.01 1.00 1.00 0.93	0.95 0.96 0.83 0.90 1.33 0.97 0.92 0.98 1.03 0.98 0.71 0.99 0.96	1.01 0.88 0.98 1.01 1.04 0.88 1.00 0.99 1.00 0.74 1.00 1.00 1.00	
JUN JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	6.10 1.03 1.38 1.04 2.78 0.93 1.21 0.94 0.99 1.01 0.94 1.13 4.08 1.19	0.87 1.00 0.99 1.00 1.05 1.00 0.98 1.00 1.00 0.98 1.00 1.00 0.98 1.00 1.02 1.01	1.02 0.94 1.69 0.95 0.64 0.96 0.96 0.94 0.98 1.11 0.98 0.47 0.93	0.93 0.99 1.83 1.00 1.01 0.99 0.93 0.98 1.04 1.00 1.04 1.00 1.03 0.99	0.75 0.95 1.35 0.91 0.67 0.96 0.87 0.95 1.15 0.98 1.32 0.98 0.58 0.93	1.18 1.00 1.19 1.01 1.01 1.01 1.00 1.01 1.00 1.00 1.01 1.00 1.17 1.13		JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	9.39 1.40 4.24 3.08 1.94 1.20 0.57 1.05 0.78 1.05 2.81 1.09 3.37 1.21	0.86 1.02 1.01 0.99 1.03 1.00 1.08 1.00 1.04 1.00 1.15 1.00 0.99 1.00	0.95 0.99 0.80 0.88 0.97 1.12 0.98 0.86 0.98 0.87 0.98 0.72 0.99	0.98 1.00 0.96 0.97 0.98 1.16 0.99 0.83 0.99 0.91 1.01 1.00 1.00	0.95 0.96 0.83 0.90 0.95 1.33 0.97 0.92 0.98 1.03 0.98 0.71 0.99	1.01 0.88 0.98 1.01 1.04 0.88 1.00 0.99 1.00 0.74 1.00 1.00	

Table F.4Projected median monthly and median annual net inflow to Vaseux Lake. The results are based
on the HadCM3 A2 and CGCM3 B1 climate models. Baseline results are based on the period
1996 to 2006. Future projections are based on the period 2011 to 2040. To provide an index of
the variability in the projections, the inter-quartile range (IQR) is provided.

VASEUX LAKE Parameter:									Do romotori	Not Inflor: /	(AL)						
'arameter: limate Model:	Net Inflow (ML)								Parameter: Climate Model:	Net Inflow (I	VILJ						
annate woulder.	Scenario Group:	BASELINE	А	В	с	D	F	F		enario Group:	BASELINE	А	в	с	D	E	F
	Scenario Group: Scenario Number:	65	28	30	34	36	38	40		ario Number:	66	29	31	35	37	39	41
JAN	Median	24,744	32,545	33,145	33,198	30,726	33,465	34,727	JAN	Median	22,590	56,371	53.825	50,718	44,529	38,941	39,420
	IQR	11,045	133,623	131,485	130,054	130,722	100,726	103,169		IQR	18,913	67,209	75,741	67,278	83,460	65,966	77,949
FEB	Median	19,947	32,049	31,873	31,970	31,628	31,470	31,117	FEB	Median	20,203	27,295	27,362	27,459	27,475	27,278	27,265
	IQR	11,958	19,346	19,847	15,147	18,564	14,960	12,982		IQR	4,070	25,258	24,388	24,631	26,057	24,678	24,604
MAR	Median	22,191	28,109	28,099	27,635	28,055	27,855	28,625	MAR	Median	23,054	29,620	29,462	29,148	29,128	29,020	29,290
	IQR	6,003	19,357	19,542	18,027	19,450	18,934	18,298		IQR	10,462	8,332	8,474	8,442	8,383	8,393	8,389
APR	Median	23,866	31,487	31,239	29,455	31,240	31,098	31,273	APR	Median	26,053	32,908	32,908	32,238	32,951	32,110	32,409
	IQR	11,050	34,018	37,583	33,048	34,999	30,651	31,911		IQR	17,313	14,891	14,226	15,194	14,504	14,413	14,435
MAY	Median	31,405	33,878	33,836	31,403	33,840	32,727	32,689	MAY	Median	32,528	45,150	46,012	44,839	45,583	43,921	44,209
	IQR	14,263	71,590	60,964	63,497	56,813	54,424	64,939		IQR	11,201	81,098	71,845	70,626	71,098	66,772	68,485
JUN	Median	24,417	24,241	24,372	23,667	24,534	23,586	23,723	JUN	Median	30,165	41,198	44,410	40,513	39,215	38,127	38,830
	IQR	14,500	17,276	17,167	26,340	28,550	21,111	25,760		IQR	18,458	71,024	71,126	71,225	72,837	69,472	58,874
JUL	Median	18,074	20,179	20,233	18,440	20,116	17,046	17,349	JUL	Median	22,357	72,038	71,553	56,092	70,686	58,453	57,415
	IQR	12,833	35,370	38,078	23,602	38,844	24,112	24,137		IQR	43,754	81,833	84,239	73,347	80,566	73,250	72,750
AUG	Median	16,302	15,221	15,268	14,917	15,224	14,776	14,878	AUG	Median	18,889	23,261	23,278	21,940	22,400	20,964	22,372
	IQR	5,527	7,648	7,206	6,539	6,137	6,689	6,107		IQR	10,135	8,793	9,304	7,718	9,403	8,804	7,577
SEP	Median	16,499	14,825	14,865	14,534	14,822	14,402	14,592	SEP	Median	17,416	18,385	18,511	18,210	18,328	17,746	17,770
	IQR	3,697	4,526	4,105	4,312	4,030	3,965	3,858		IQR	4,635	5,036	5,517	3,730	4,927	4,155	4,033
OCT	Median	19,247	18,531	18,373	17,646	18,510	16,625	17,207	OCT	Median	19,685	20,636	20,995	20,284	20,650	20,450	20,357
	IQR	3,692	4,598	5,126	5,448	5,425	6,072 20.587	5,942		IQR	4,281	11,651	13,321	12,622	13,221	12,015	10,112
NOV	Median	20,419	22,470	22,694	20,614	21,789		20,680	NOV	Median	20,751	23,198	23,504	22,422	23,001	22,471	22,625
DEC	IQR Median	3,333 20,836	10,051 25,924	10,814 25,776	8,580 24,083	11,459 24,970	7,596 22,854	10,252	DEC	IQR	4,515 21,385	10,836 26,934	11,566 26,851	9,647 26,662	11,032 26,758	10,225 26,531	10,230 26,836
DEC		20,836	15.835				10,739	26,926	DEC	Median	3.994			55.549	53,514		26,836
ANNUAL	IQR Median	2,837	15,835 342,478	14,918 344.042	11,382 306.720	14,875 322.928	10,739 292.804	10,487 295.245	ANNUAL	IQR Median	3,994	53,648 587.876	57,368 588,434	55,549 553,600	53,514 579,196	53,404 542.475	53,689 550.048
ANNUAL	IOR	136.284	465.648	465.125	439.275	464,845	415.927	431.879	ANNOAL	IOR	265,345	403.567	402.426	369.801	394,880	373.240	365.067
	IQA	130,204	403,040	403,123	433,273	404,045	413,927	431,073		IQN	203,543	405,307	402,420	509,601	534,000	373,240	505,007
Parameter:	Ratio of net infl	ow between in	ndicated scena	arios					Parameter:	Ratio of net	inflow betwe	en indicated	scenarios				
Climate Model:									Climate Model:								
		A:BASLINE	B:A	C:B	D:B	E:A	F:E				A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	1.32	1.02	1.00	0.93	1.03	1.04		JAN	Median	2.50	0.95	0.94	0.83	0.69	1.01	
	IQR	12.10	0.98	0.99	0.99	0.75	1.02			IOR	3.55	1.13	0.89	1.10	0.98	1.18	
FEB	Median	1.61	0.99	1.00	0.99	0.98	0.99		FEB	Median	1.35	1.00	1.00	1.00	1.00	1.00	
	IQR	1.62	1.03	0.76	0.94	0.77	0.87			IQR	6.21	0.97	1.01	1.07	0.98	1.00	
MAR	Median	1.27	1.00	0.98	1.00	0.99	1.03		MAR	Median	1.28	0.99	0.99	0.99	0.98	1.01	
	IQR	3.22	1.01	0.92	1.00	0.98	0.97			IQR	0.80	1.02	1.00	0.99	1.01	1.00	
APR	Median	1.32	0.99	0.94	1.00	0.99	1.01		APR	Median	1.26	1.00	0.98	1.00	0.98	1.01	
	IQR	3.08	1.10	0.88	0.93	0.90	1.04			IQR	0.86	0.96	1.07	1.02	0.97	1.00	
	Median	1.08	1.00	0.93	1.00	0.97	1.00		MAY	Median	1.39	1.02	0.97	0.99	0.97	1.01	
MAY	IQR	5.02	0.85	1.04	0.93	0.76	1.19			IQR	7.24	0.89	0.98	0.99	0.82	1.03	
MAY		0.99	1.01	0.97	1.01	0.97	1.01		JUN	Median	1.37	1.08	0.91	0.88	0.93	1.02	
JUN	Median	0.99									3.85	1.00	1.00	1.02	0.98	0.85	
	Median IQR	1.19	0.99	1.53	1.66	1.22	1.22			IQR	3.85						
			0.99	1.53 0.91	1.66 0.99	1.22 0.84	1.22 1.02		JUL	IQR Median	3.85	0.99	0.78	0.99	0.81	0.98	
JUN	IQR Median IQR	1.19 1.12 2.76	1.00 1.08	0.91	0.99 1.02	0.84	1.02 1.00			Median IQR	3.22 1.87	1.03	0.87	0.96	0.90	0.99	
JUN	IQR Median IQR Median	1.19 1.12 2.76 0.93	1.00 1.08 1.00	0.91 0.62 0.98	0.99 1.02 1.00	0.84 0.68 0.97	1.02 1.00 1.01		JUL	Median IQR Median	3.22 1.87 1.23	1.03 1.00	0.87 0.94	0.96 0.96	0.90 0.90	0.99 1.07	
JUN JUL AUG	IQR Median IQR	1.19 1.12 2.76	1.00 1.08	0.91	0.99 1.02	0.84 0.68 0.97 0.87	1.02 1.00 1.01 0.91		AUG	Median IQR	3.22 1.87 1.23 0.87	1.03 1.00 1.06	0.87 0.94 0.83	0.96 0.96 1.01	0.90 0.90 1.00	0.99 1.07 0.86	
JUN	IQR Median IQR Median IQR Median	1.19 1.12 2.76 0.93 1.38 0.90	1.00 1.08 1.00 0.94 1.00	0.91 0.62 0.98 0.91 0.98	0.99 1.02 1.00 0.85 1.00	0.84 0.68 0.97 0.87 0.97	1.02 1.00 1.01 0.91 1.01			Median IQR Median IQR Median	3.22 1.87 1.23 0.87 1.06	1.03 1.00 1.06 1.01	0.87 0.94 0.83 0.98	0.96 0.96 1.01 0.99	0.90 0.90 1.00 0.97	0.99 1.07 0.86 1.00	
JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR	1.19 1.12 2.76 0.93 1.38 0.90 1.22	1.00 1.08 1.00 0.94 1.00 0.91	0.91 0.62 0.98 0.91 0.98 1.05	0.99 1.02 1.00 0.85 1.00 0.98	0.84 0.68 0.97 0.87 0.97 0.88	1.02 1.00 1.01 0.91 1.01 0.97		AUG	Median IQR Median IQR Median IQR	3.22 1.87 1.23 0.87 1.06 1.09	1.03 1.00 1.06 1.01 1.10	0.87 0.94 0.83 0.98 0.68	0.96 0.96 1.01 0.99 0.89	0.90 0.90 1.00 0.97 0.83	0.99 1.07 0.86 1.00 0.97	
JUN JUL AUG	IQR Median IQR Median IQR Median IQR Median	1.19 1.12 2.76 0.93 1.38 0.90 1.22 0.96	1.00 1.08 1.00 0.94 1.00 0.91 0.99	0.91 0.62 0.98 0.91 0.98 1.05 0.96	0.99 1.02 1.00 0.85 1.00 0.98 1.01	0.84 0.68 0.97 0.87 0.97 0.88 0.90	1.02 1.00 1.01 0.91 1.01 0.97 1.04		AUG	Median IQR Median IQR Median IQR Median	3.22 1.87 1.23 0.87 1.06 1.09 1.05	1.03 1.00 1.06 1.01 1.10 1.02	0.87 0.94 0.83 0.98 0.68 0.97	0.96 0.96 1.01 0.99 0.89 0.98	0.90 0.90 1.00 0.97 0.83 0.99	0.99 1.07 0.86 1.00 0.97 1.00	
JUN JUL AUG SEP OCT	IQR Median IQR Median IQR IQR Median IQR	1.19 1.12 2.76 0.93 1.38 0.90 1.22 0.96 1.25	1.00 1.08 1.00 0.94 1.00 0.91 0.99 1.11	0.91 0.62 0.98 0.91 0.98 1.05 0.96 1.06	0.99 1.02 1.00 0.85 1.00 0.98 1.01 1.06	0.84 0.68 0.97 0.87 0.97 0.88 0.90 1.32	1.02 1.00 1.01 0.91 1.01 0.97 1.04 0.98		AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR	3.22 1.87 1.23 0.87 1.06 1.09 1.05 2.72	1.03 1.00 1.06 1.01 1.10 1.02 1.14	0.87 0.94 0.83 0.98 0.68 0.97 0.95	0.96 0.96 1.01 0.99 0.89 0.98 0.98	0.90 0.90 1.00 0.97 0.83 0.99 1.03	0.99 1.07 0.86 1.00 0.97 1.00 0.84	
JUN JUL AUG SEP	IQR Median IQR Median IQR Median IQR Median IQR Median	1.19 1.12 2.76 0.93 1.38 0.90 1.22 0.96 1.25 1.10	1.00 1.08 1.00 0.94 1.00 0.91 0.99 1.11 1.01	0.91 0.62 0.98 0.91 0.98 1.05 0.96 1.06 0.91	0.99 1.02 1.00 0.85 1.00 0.98 1.01 1.06 0.96	0.84 0.68 0.97 0.87 0.97 0.88 0.90 1.32 0.92	1.02 1.00 1.01 0.91 1.01 0.97 1.04 0.98 1.00		AUG	Median IQR Median IQR Median IQR Median IQR Median	3.22 1.87 1.23 0.87 1.06 1.09 1.05 2.72 1.12	1.03 1.00 1.06 1.01 1.10 1.02 1.14 1.01	0.87 0.94 0.83 0.98 0.68 0.97 0.95 0.95	0.96 0.96 1.01 0.99 0.89 0.98 0.98 0.99 0.98	0.90 0.90 1.00 0.97 0.83 0.99 1.03 0.97	0.99 1.07 0.86 1.00 0.97 1.00 0.84 1.01	
JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR	1.19 1.12 2.76 0.93 1.38 0.90 1.22 0.96 1.25 1.10 3.02	1.00 1.08 1.00 0.94 1.00 0.91 0.99 1.11 1.01 1.08	0.91 0.62 0.98 0.91 0.98 1.05 0.96 1.06 0.91 0.79	0.99 1.02 1.00 0.85 1.00 0.98 1.01 1.06 0.96 1.06	0.84 0.68 0.97 0.87 0.97 0.88 0.90 1.32 0.92 0.76	1.02 1.00 1.01 0.91 1.01 0.97 1.04 0.98 1.00 1.35		AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR	3.22 1.87 1.23 0.87 1.06 1.09 1.05 2.72 1.12 2.40	1.03 1.00 1.06 1.01 1.10 1.02 1.14 1.01 1.07	0.87 0.94 0.83 0.98 0.68 0.97 0.95 0.95 0.95	0.96 0.96 1.01 0.99 0.89 0.98 0.98 0.99 0.98 0.99	0.90 0.90 1.00 0.97 0.83 0.99 1.03 0.97 0.94	0.99 1.07 0.86 1.00 0.97 1.00 0.84 1.01 1.00	
JUN JUL AUG SEP OCT	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.19 1.12 2.76 0.93 1.38 0.90 1.22 0.96 1.25 1.10 3.02 1.24	1.00 1.08 1.00 0.94 1.00 0.91 0.99 1.11 1.01 1.08 0.99	0.91 0.62 0.98 0.91 0.98 1.05 0.96 1.06 0.91 0.79 0.93	0.99 1.02 1.00 0.85 1.00 0.98 1.01 1.06 0.96 1.06 0.97	0.84 0.68 0.97 0.87 0.97 0.88 0.90 1.32 0.92 0.76 0.88	1.02 1.00 1.01 0.91 1.01 0.97 1.04 0.98 1.00 1.35 1.18		AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR Median	3.22 1.87 1.23 0.87 1.06 1.09 1.05 2.72 1.12 2.40 1.26	1.03 1.00 1.06 1.01 1.10 1.02 1.14 1.01 1.07 1.00	0.87 0.94 0.83 0.98 0.68 0.97 0.95 0.95 0.95 0.83 0.99	0.96 0.96 1.01 0.99 0.89 0.98 0.99 0.98 0.99 0.98 0.95 1.00	0.90 0.90 1.00 0.97 0.83 0.99 1.03 0.97 0.94 0.99	0.99 1.07 0.86 1.00 0.97 1.00 0.84 1.01 1.00 1.01	
JUN JUL AUG SEP OCT NOV DEC	IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.19 1.12 2.76 0.93 1.38 0.90 1.22 0.96 1.25 1.10 3.02 1.24 5.58	1.00 1.08 1.00 0.94 1.00 0.91 0.99 1.11 1.01 1.08 0.99 0.94	0.91 0.62 0.98 0.91 0.98 1.05 0.96 1.06 0.91 0.79 0.93 0.76	0.99 1.02 1.00 0.85 1.00 0.98 1.01 1.06 0.96 1.06 0.97 1.00	0.84 0.68 0.97 0.87 0.97 0.88 0.90 1.32 0.92 0.76 0.88 0.68	1.02 1.00 1.01 0.91 1.01 0.97 1.04 0.98 1.00 1.35 1.18 0.98		AUG SEP OCT NOV DEC	Median IQR Median IQR Median IQR Median IQR Median IQR	3.22 1.87 1.23 0.87 1.06 1.09 1.05 2.72 1.12 2.40 1.26 13.43	1.03 1.00 1.06 1.01 1.10 1.02 1.14 1.01 1.07 1.00 1.07	0.87 0.94 0.83 0.98 0.68 0.97 0.95 0.95 0.83 0.99 0.99	0.96 0.96 1.01 0.99 0.89 0.98 0.99 0.98 0.95 1.00 0.93	0.90 0.90 1.00 0.97 0.83 0.99 1.03 0.97 0.94 0.99 1.00	0.99 1.07 0.86 1.00 0.97 1.00 0.84 1.01 1.00 1.01	
JUN JUL AUG SEP OCT NOV	IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.19 1.12 2.76 0.93 1.38 0.90 1.22 0.96 1.25 1.10 3.02 1.24	1.00 1.08 1.00 0.94 1.00 0.91 0.99 1.11 1.01 1.08 0.99	0.91 0.62 0.98 0.91 0.98 1.05 0.96 1.06 0.91 0.79 0.93	0.99 1.02 1.00 0.85 1.00 0.98 1.01 1.06 0.96 1.06 0.97	0.84 0.68 0.97 0.87 0.97 0.88 0.90 1.32 0.92 0.76 0.88	1.02 1.00 1.01 0.91 1.01 0.97 1.04 0.98 1.00 1.35 1.18		AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median	3.22 1.87 1.23 0.87 1.06 1.09 1.05 2.72 1.12 2.40 1.26	1.03 1.00 1.06 1.01 1.10 1.02 1.14 1.01 1.07 1.00	0.87 0.94 0.83 0.98 0.68 0.97 0.95 0.95 0.95 0.83 0.99	0.96 0.96 1.01 0.99 0.89 0.98 0.99 0.98 0.99 0.98 0.95 1.00	0.90 0.90 1.00 0.97 0.83 0.99 1.03 0.97 0.94 0.99	0.99 1.07 0.86 1.00 0.97 1.00 0.84 1.01 1.00 1.01	

Table F.5Projected median monthly and median annual net inflow to Osoyoos Lake. The results are based
on the HadCM3 A2 and CGCM3 B1 climate models. Baseline results are based on the period
1996 to 2006. Future projections are based on the period 2011 to 2040. To provide an index of
the variability in the projections, the inter-quartile range (IQR) is provided.

OSOYOOS LA Parameter:	Net Inflow (ML								Parameter:	Net Inflow (I	MI)						
Climate Model									Climate Model:		VILJ						
annate would	Scenario Group:	BASELINE	Α	В	с	D	E	F		enario Group:	BASELINE	Α	В	с	D	E	F
	Scenario Number:	65	28	30	34	36	38	40		nario Number:	66	29	31	35	37	39	41
JAN	Median	33,608	67,174	56,812	56,245	56,624	55,530	55,897	JAN	Median	25,790	65,445	64,928	56,197	65,235	47,408	50,515
	IQR	38,939	130,141	129,190	131,277	128,515	127,473	127,148		IQR	22,700	87,256	78,870	85,543	85,744	76,809	80,446
FEB	Median	25,553	38,456	38,506	41,157	37,004	41,042	39,475	FEB	Median	23,128	41,381	41,677	41,395	41,564	41,622	41,564
	IQR	29,419	26,848	26,591	25,026	28,103	24,758	23,626		IQR	8,440	48,190	49,077	48,774	48,236	48,547	48,775
MAR	Median	30,175	41,953	41,602	41,535	41,604	41,459	42,127	MAR	Median	34,626	47,437	47,442	47,431	47,386	47,301	47,199
	IQR	11,544	41,827	41,894	42,397	40,540	39,816	39,811		IQR	21,935	25,594	20,829	25,701	25,203	18,001	17,894
APR	Median	41,256	47,014	47,530	46,652	47,526	48,076	48,194	APR	Median	39,196	57,951	58,006	57,002	58,017	57,328	57,232
	IQR	27,887	39,040	38,396	43,912	44,812	42,506	42,989		IQR	37,258	58,003	57,803	54,984	57,606	56,870	57,569
MAY	Median	55,331	57,179	58,395	55,504	58,299	59,012	59,269	MAY	Median	54,084	86,441	86,952	85,594	86,704	75,548	85,206
	IQR	37,375	67,927	60,123	58,837	60,402	59,515	61,767		IQR	22,098	91,633	91,652	86,427	84,967	71,082	79,128
JUN	Median	40,268	33,556	33,708	33,208	33,580	33,006	33,084	JUN	Median	50,931	63,286	63,377	57,209	62,929	49,413	52,428
	IQR	38,207	30,748	28,226	29,327	32,205	22,794	28,648		IQR	42,762	77,629	79,533	77,634	78,753	79,907	66,354
JUL	Median	22,040	22,353	22,738	20,662	22,236	19,656	20,217	JUL	Median	26,549	73,018	73,692	60,946	72,518	57,442	57,064
	IQR	19,451	34,810	37,264	24,646	37,613	25,401	25,429		IQR	48,253	82,453	86,335	74,377	84,181	76,292	73,540
AUG	Median	16,224	14,881	16,006	15,813	15,087	13,412	15,535	AUG	Median	20,784	24,149	24,418	23,838	23,368	21,907	23,195
	IQR	9,865	13,716	11,416	10,932	11,117	11,772	10,317		IQR	13,016	10,602	12,340	9,339	9,364	9,823	9,718
SEP	Median	16,818	14,995	15,415	14,602	14,946	13,677	14,195	SEP	Median	16,896	19,784	19,879	19,458	19,629	18,944	18,906
	IQR	7,457	6,076	5,576	6,050	5,927	4,516	4,788		IQR	6,200	5,669	5,810	5,340	6,991	6,046	5,567
OCT	Median	20,363	20,339	20,437	18,998	20,152	17,305	18,540	OCT	Median	20,537	23,137	23,254	22,608	22,786	22,612	22,475
	IQR	4,800	5,995	6,132	6,669	6,562	7,449	7,140		IQR	5,841	14,292	15,078	13,729	13,712	14,251	13,797
NOV	Median	23,092	27,944	27,901	27,061	27,850	26,400	26,089	NOV	Median	22,733	29,118	29,235	27,303	29,203	26,928	27,107
	IQR	5,835	31,917	31,710	31,317	32,543	32,081	31,717		IQR	6,365	28,102	26,516	29,800	24,723	28,414	29,468
DEC	Median	24,963	31,766	31,718	33,344	31,512	30,453	31,984	DEC	Median	24,229	35,890	37,097	36,821	35,542	34,720	36,829
	IQR	11,654	31,434	29,723	29,502	29,529	27,734	24,952		IQR	7,489	52,552	55,928	66,099	53,321	51,691	54,870
ANNUAL	Median	386,490	475,208	474,142	443,832	456,418	425,458	433,845	ANNUAL	Median	378,131	759,242	760,981	724,904	751,273	710,523	720,351
	IQR	165,948	606,579	618,560	559,736	603,152	548,008	541,676		IQR	295,466	447,430	444,449	461,785	468,087	456,493	459,928
Parameter: Climate Model	Ratio of net infl HadCM3 A2	ow between in	ndicated scena	arios					Parameter: Climate Model:		inflow betwe	en indicated	scenarios				
Innate Model	Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E		crimate woder:	Ratio:	A:BASLINE	B:A	C:B	D:B	E:A	F:E	
JAN	Median	2.00	0.85	0.99	1.00	0.83	1.01		JAN	Median	2.54	0.99	0.87	1.00	0.72	1.07	-
JAN	IOR	3.34	0.99	1.02	0.99	0.98	1.00		JAIN	IOR	3.84	0.90	1.08	1.00	0.88	1.05	
FEB	Median	1.50	1.00	1.02	0.96	1.07	0.96		FEB	Median	1.79	1.01	0.99	1.00	1.01	1.00	
100	IOR	0.91	0.99	0.94	1.06	0.92	0.95		160	IOR	5.71	1.02	0.99	0.98	1.01	1.00	
MAR	Median	1.39	0.99	1.00	1.00	0.92											
									MAR	1.660.1.1	1 37	1.00		1.00	1.00		
	IOR						1.02		MAR	Median	1.37	0.81	1.00	1.00	1.00	1.00	
	IQR Median	3.62	1.00	1.01	0.97	0.95	1.00			Median IQR	1.17	0.81	1.23	1.21	0.70	0.99	
APR	Median	3.62 1.14	1.00 1.01	1.01 0.98		0.95	1.00 1.00		APR	Median	1.17 1.48	0.81	1.23 0.98	1.21 1.00	0.70 0.99	0.99	
APR	Median IQR	3.62 1.14 1.40	1.00 1.01 0.98	1.01 0.98 1.14	0.97 1.00 1.17	0.95 1.02 1.09	1.00 1.00 1.01		APR	Median IQR Median IQR	1.17 1.48 1.56	0.81 1.00 1.00	1.23 0.98 0.95	1.21 1.00 1.00	0.70 0.99 0.98	0.99 1.00 1.01	
	Median	3.62 1.14	1.00 1.01	1.01 0.98	0.97 1.00	0.95	1.00 1.00			Median IQR Median	1.17 1.48	0.81	1.23 0.98	1.21 1.00	0.70 0.99 0.98 0.87	0.99	
APR	Median IQR Median	3.62 1.14 1.40 1.03	1.00 1.01 0.98 1.02	1.01 0.98 1.14 0.95	0.97 1.00 1.17 1.00	0.95 1.02 1.09 1.03	1.00 1.00 1.01 1.00		APR	Median IQR Median IQR Median	1.17 1.48 1.56 1.60	0.81 1.00 1.00 1.01	1.23 0.98 0.95 0.98	1.21 1.00 1.00 1.00	0.70 0.99 0.98	0.99 1.00 1.01 1.13	
APR MAY	Median IQR Median IQR	3.62 1.14 1.40 1.03 1.82	1.00 1.01 0.98 1.02 0.89	1.01 0.98 1.14 0.95 0.98	0.97 1.00 1.17 1.00 1.00	0.95 1.02 1.09 1.03 0.88	1.00 1.00 1.01 1.00 1.04		APR	Median IQR Median IQR Median IQR	1.17 1.48 1.56 1.60 4.15	0.81 1.00 1.00 1.01 1.00	1.23 0.98 0.95 0.98 0.94	1.21 1.00 1.00 0.93	0.70 0.99 0.98 0.87 0.78	0.99 1.00 1.01 1.13 1.11	
APR MAY JUN	Median IQR Median IQR Median IQR	3.62 1.14 1.40 1.03 1.82 0.83 0.80	1.00 1.01 0.98 1.02 0.89 1.00 0.92	1.01 0.98 1.14 0.95 0.98 0.99 1.04	0.97 1.00 1.17 1.00 1.00 1.00 1.14	0.95 1.02 1.09 1.03 0.88 0.98 0.74	1.00 1.00 1.01 1.00 1.04 1.00 1.26		APR MAY JUN	Median IQR Median IQR Median IQR Median IQR	1.17 1.48 1.56 1.60 4.15 1.24 1.82	0.81 1.00 1.01 1.00 1.00 1.00 1.02	1.23 0.98 0.95 0.98 0.94 0.90 0.98	1.21 1.00 1.00 0.93 0.99 0.99	0.70 0.99 0.98 0.87 0.78 0.78 1.03	0.99 1.00 1.01 1.13 1.11 1.06 0.83	
APR MAY	Median IQR Median IQR Median	3.62 1.14 1.40 1.03 1.82 0.83	1.00 1.01 0.98 1.02 0.89 1.00	1.01 0.98 1.14 0.95 0.98 0.99	0.97 1.00 1.17 1.00 1.00 1.00	0.95 1.02 1.09 1.03 0.88 0.98	1.00 1.00 1.01 1.00 1.04 1.00		APR	Median IQR Median IQR Median IQR Median	1.17 1.48 1.56 1.60 4.15 1.24	0.81 1.00 1.01 1.00 1.00 1.00	1.23 0.98 0.95 0.98 0.94 0.90	1.21 1.00 1.00 0.93 0.99	0.70 0.99 0.98 0.87 0.78 0.78	0.99 1.00 1.01 1.13 1.11 1.06	
APR MAY JUN	Median IQR Median IQR Median IQR Median	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02	1.01 0.98 1.14 0.95 0.98 0.99 1.04 0.91	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88	1.00 1.01 1.01 1.04 1.00 1.26 1.03		APR MAY JUN	Median IQR Median IQR Median IQR Median IQR Median	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75	0.81 1.00 1.01 1.00 1.00 1.00 1.02 1.01	1.23 0.98 0.95 0.98 0.94 0.90 0.98 0.83	1.21 1.00 1.00 0.93 0.99 0.99 0.98	0.70 0.99 0.98 0.87 0.78 0.78 1.03 0.79	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99	
APR MAY JUN JUL	Median IQR Median IQR Median IQR Median IQR	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.02 1.07	1.01 0.98 1.14 0.95 0.98 0.99 1.04 0.91 0.66	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88 0.73	1.00 1.01 1.01 1.04 1.00 1.26 1.03 1.00		APR MAY JUN JUL	Median IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71	0.81 1.00 1.01 1.00 1.00 1.00 1.02 1.01 1.05	1.23 0.98 0.95 0.98 0.94 0.90 0.98 0.83 0.86	1.21 1.00 1.00 0.93 0.99 0.99 0.98 0.98	0.70 0.99 0.98 0.87 0.78 0.78 1.03 0.79 0.93	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96	
APR MAY JUN JUL	Median IQR Median IQR Median IQR Median IQR Median	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.02 1.07 1.08	1.01 0.98 1.14 0.95 0.99 1.04 0.91 0.66 0.99	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.94	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88 0.73 0.90	1.00 1.00 1.01 1.04 1.00 1.26 1.03 1.00 1.16		APR MAY JUN JUL	Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71 1.16	0.81 1.00 1.01 1.00 1.00 1.00 1.02 1.01 1.05 1.01	1.23 0.98 0.95 0.98 0.94 0.90 0.98 0.83 0.86 0.98	1.21 1.00 1.00 0.93 0.99 0.99 0.99 0.98 0.98 0.98	0.70 0.99 0.98 0.87 0.78 0.78 1.03 0.79 0.93 0.91	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 1.06	
APR MAY JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median IQR	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92 1.39	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.07 1.08 0.83	1.01 0.98 1.14 0.95 0.98 0.99 1.04 0.91 0.66 0.99 0.96	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.94 0.97	0.95 1.02 1.09 1.03 0.88 0.74 0.74 0.73 0.90 0.86	1.00 1.00 1.01 1.00 1.04 1.26 1.03 1.00 1.16 0.88		APR MAY JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71 1.16 0.81	0.81 1.00 1.01 1.00 1.00 1.00 1.02 1.01 1.05 1.01 1.16	1.23 0.98 0.95 0.94 0.90 0.98 0.83 0.83 0.86 0.98 0.76	1.21 1.00 1.00 0.93 0.99 0.99 0.98 0.98 0.98 0.96 0.76	0.70 0.99 0.98 0.87 0.78 0.78 1.03 0.79 0.93 0.91 0.93	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 1.06 0.99	
APR MAY JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median IQR Median	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92 1.39 0.89	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.02 1.07 1.08 0.83 1.03	1.01 0.98 1.14 0.95 0.99 1.04 0.91 0.66 0.99 0.96 0.95	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.94 0.97 0.97	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88 0.73 0.90 0.86 0.91	1.00 1.01 1.01 1.00 1.04 1.00 1.26 1.03 1.00 1.16 0.88 1.04		APR MAY JUN JUL AUG	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71 1.16 0.81 1.17	0.81 1.00 1.01 1.00 1.00 1.00 1.02 1.01 1.05 1.01 1.16 1.00	1.23 0.98 0.95 0.94 0.90 0.98 0.83 0.86 0.98 0.76 0.98	1.21 1.00 1.00 0.93 0.99 0.99 0.98 0.98 0.98 0.96 0.76 0.99	0.70 0.99 0.98 0.87 0.78 1.03 0.79 0.93 0.91 0.93 0.91	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 1.06 0.99 1.00	
APR MAY JUN JUL AUG SEP	Median IQR Median IQR Median IQR Median IQR Median IQR	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92 1.39 0.89 0.81	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.00 1.07 1.08 0.83 1.03 0.92	1.01 0.98 1.14 0.95 0.98 0.99 1.04 0.66 0.99 0.96 0.95 1.09	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.94 0.97 0.97 1.06	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88 0.73 0.90 0.86 0.91 0.74	1.00 1.00 1.01 1.00 1.04 1.00 1.26 1.03 1.00 1.16 0.88 1.04 1.04 1.04		APR MAY JUN JUL AUG SEP	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71 1.16 0.81 1.17 0.91	0.81 1.00 1.01 1.00 1.00 1.00 1.02 1.01 1.05 1.01 1.16 1.00 1.02	1.23 0.98 0.95 0.98 0.94 0.90 0.98 0.83 0.86 0.98 0.76 0.98 0.76 0.98	1.21 1.00 1.00 0.93 0.99 0.99 0.98 0.98 0.98 0.96 0.76 0.99 1.20	0.70 0.99 0.98 0.78 0.78 1.03 0.79 0.93 0.93 0.93 0.91 0.93 0.96 1.07	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 1.06 0.99 1.00 0.92	
APR MAY JUN JUL AUG SEP	Median IQR Median	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92 1.39 0.89 0.81 1.00	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.07 1.08 0.83 1.03 0.92 1.00	1.01 0.98 1.14 0.95 0.98 0.99 1.04 0.91 0.66 0.99 0.96 0.95 1.09 0.93	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.94 0.97 0.97 1.06 0.99	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88 0.73 0.90 0.86 0.91 0.74 0.85	1.00 1.00 1.01 1.04 1.04 1.00 1.26 1.03 1.00 1.16 0.88 1.04 1.06 1.07		APR MAY JUN JUL AUG SEP	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71 1.16 0.81 1.17 0.91 1.13	0.81 1.00 1.01 1.00 1.00 1.02 1.01 1.05 1.01 1.16 1.00 1.02 1.01 1.16 1.00 1.02 1.01	1.23 0.98 0.95 0.98 0.94 0.90 0.98 0.83 0.86 0.98 0.98 0.76 0.98 0.76 0.98 0.92	1.21 1.00 1.00 0.93 0.99 0.99 0.98 0.98 0.96 0.76 0.99 1.20 0.98	0.70 0.99 0.98 0.87 0.78 0.78 1.03 0.79 0.93 0.91 0.93 0.96 1.07 0.98	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 1.06 0.99 1.00 0.92 0.99	
APR MAY JUN JUL AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92 1.39 0.89 0.81 1.00 1.25	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.02 1.07 1.08 0.83 1.03 0.92 1.03 0.92 1.00 1.02	1.01 0.98 1.14 0.95 0.99 1.04 0.91 0.66 0.99 0.96 0.95 1.09 0.93 1.09	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.94 0.97 0.97 0.97 1.06 0.99 1.07	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88 0.73 0.90 0.86 0.91 0.74 0.85 1.24	1.00 1.00 1.01 1.00 1.26 1.03 1.00 1.26 1.03 1.00 1.16 0.88 1.04 1.06 1.07 0.96		APR MAY JUN JUL AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71 1.16 0.81 1.17 0.91 1.13 2.45	0.81 1.00 1.01 1.00 1.00 1.02 1.01 1.05 1.01 1.16 1.00 1.02 1.01 1.16 1.00 1.02 1.01 1.16 1.00	1.23 0.98 0.95 0.94 0.90 0.98 0.83 0.86 0.98 0.76 0.98 0.76 0.98 0.92 0.97 0.91	1.21 1.00 1.00 0.93 0.99 0.99 0.98 0.98 0.98 0.76 0.99 1.20 0.98 0.99	0.70 0.99 0.98 0.78 0.78 1.03 0.79 0.93 0.91 0.93 0.96 1.07 0.98 1.00	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 1.06 0.99 1.00 0.92 0.99 0.97	
APR MAY JUN JUL AUG SEP OCT	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92 1.39 0.89 0.81 1.00 1.25 1.21	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.07 1.08 0.83 1.03 0.92 1.03 0.92 1.00 1.03 0.92 1.00	1.01 0.98 1.14 0.95 0.99 1.04 0.91 0.66 0.99 0.96 0.95 1.09 0.93 1.09 0.93	0.97 1.00 1.17 1.00 1.00 1.00 1.00 1.14 0.98 1.01 0.94 0.97 0.97 1.06 0.99 1.07 1.00	0.95 1.02 1.09 1.03 0.88 0.98 0.74 0.88 0.73 0.90 0.86 0.91 0.74 0.85 1.24 0.94	1.00 1.00 1.01 1.00 1.04 1.00 1.26 1.03 1.00 1.16 0.88 1.04 1.06 1.07 0.96 0.99		APR MAY JUN JUL AUG SEP OCT	Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median	1.17 1.48 1.56 1.60 4.15 1.24 1.82 2.75 1.71 1.16 0.81 1.17 0.91 1.13 2.45 1.28	0.81 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.16 1.00 1.02 1.01 1.16 1.00 1.02 1.01 1.16 1.00	1.23 0.98 0.95 0.98 0.94 0.90 0.98 0.88 0.88 0.98 0.98 0.98 0.98	1.21 1.00 1.00 0.93 0.99 0.99 0.99 0.98 0.98 0.98 0.96 0.76 0.76 0.99 1.20 0.99 1.20 0.99	0.70 0.99 0.87 0.78 1.03 0.79 0.93 0.91 0.93 0.96 1.07 0.98 1.00 0.92	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 0.99 1.00 0.92 0.97 1.01	
APR MAY JUN JUL AUG SEP OCT NOV	Median IQR Median IQR	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.92 1.39 0.89 0.89 0.81 1.00 1.25 1.21 5.47	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.07 1.08 0.83 1.03 0.92 1.00 1.00 0.92 1.00 0.99	1.01 0.98 0.98 0.99 1.04 0.99 0.99 0.99 0.99 0.99 0.96 0.95 1.09 0.93 1.09 0.93	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.94 0.97 0.97 1.06 0.99 1.07 1.00 1.03	0.95 1.02 1.09 1.03 0.88 0.74 0.88 0.74 0.88 0.73 0.90 0.86 0.91 0.74 0.85 1.24 0.94 1.01	1.00 1.00 1.01 1.00 1.04 1.00 1.26 1.03 1.00 1.16 0.88 1.04 1.06 1.07 0.96 0.99 0.99		APR MAY JUN JUL AUG SEP OCT NOV	Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R Median 10R	1.17 1.48 1.56 4.15 1.24 1.82 2.75 1.71 1.16 0.81 1.17 0.91 1.13 2.45 1.28 4.41	0.81 1.00 1.01 1.01 1.00 1.00 1.00 1.01 1.05 1.01 1.05 1.01 1.05 1.01 1.00 1.00 1.02 1.01 1.00 0.94	1.23 0.98 0.95 0.94 0.90 0.98 0.94 0.90 0.98 0.88 0.98 0.98 0.92 0.97 0.97 0.93 1.12	1.21 1.00 1.00 0.93 0.99 0.98 0.98 0.98 0.98 0.96 0.76 0.99 1.20 0.98 0.99 1.20 0.98	0.70 0.99 0.98 0.87 0.78 0.78 0.78 0.78 0.79 0.93 0.91 0.93 0.95 1.07 0.98 1.00 0.92	0.99 1.00 1.01 1.13 1.11 1.06 0.83 0.99 0.96 1.06 0.99 1.00 0.92 0.99 1.00 0.92 0.99 1.01	
APR MAY JUN JUL AUG SEP OCT NOV	Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median IQR Median	3.62 1.14 1.40 1.03 1.82 0.83 0.80 1.01 1.79 0.89 0.89 0.89 0.89 0.89 0.89 0.89 1.00 1.25 1.27	1.00 1.01 0.98 1.02 0.89 1.00 0.92 1.02 1.07 1.08 0.83 1.03 0.92 1.00 1.00 1.00 1.00 1.00	1.01 0.98 1.14 0.95 0.98 0.99 1.04 0.91 0.96 0.99 0.96 0.95 1.09 0.93 1.09 0.93 1.09 0.99 1.05	0.97 1.00 1.17 1.00 1.00 1.00 1.14 0.98 1.01 0.97 0.97 1.06 0.99 1.07 1.00 1.03 0.99	0.95 1.02 1.03 1.03 0.88 0.74 0.88 0.74 0.88 0.74 0.88 0.74 0.88 0.74 0.90 0.86 0.91 0.74 0.99 0.85 1.24 0.94 1.01 0.96	1.00 1.00 1.01 1.00 1.04 1.00 1.26 1.03 1.00 1.16 0.88 1.04 1.06 1.07 0.96 0.99 0.99 1.05		APR MAY JUN JUL AUG SEP OCT NOV	Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median 108 Median	1.17 1.48 1.56 4.15 1.20 2.75 1.71 1.16 0.81 1.17 0.91 1.13 2.45 1.24 1.44 1.48	0.81 1.00 1.01 1.01 1.00 1.02 1.01 1.02 1.01 1.16 1.00 1.02 1.01 1.16 1.00 1.02 1.01 1.05 1.01 1.06 1.00 1.00 1.00 1.01 1.01 1.00 1.01 1.00 1.01 1.00 1.02 1.01 1.01 1.02 1.01 1.01 1.02 1.01 1.02 1.01 1.01 1.02 1.01 1.05 1.16 1.05 1.16 1.00 1.05 1.16 1.00 1.00 1.00 1.01 1.05 1.16 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.16 1.00	1.23 0.98 0.95 0.94 0.94 0.94 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	1.21 1.00 1.00 0.93 0.99 0.98 0.96 0.76 0.76 0.76 0.99 1.20 0.98 0.99 1.20 0.98 0.99 1.20 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0	0.70 0.99 0.98 0.87 0.78 1.03 0.79 0.93 0.91 0.93 0.93 0.96 1.07 0.98 1.00 0.92 1.01	0.99 1.00 1.01 1.13 1.13 1.11 1.06 0.83 0.99 0.96 1.06 0.99 1.00 0.99 0.97 1.01 1.01 1.04 1.04 1.04 1.04 1.04 1.04 1.05 1.05 1.05 1.01 1.00	



Phase 3 Demand Modeling Assumptions and Methodologies

Memo, RHF Systems

March 31, 2012

Aside from climate change, the scenarios modeled for Phase 3 of the Okanagan Supply and Demand Project looked at different population change trends, an expansion of lands used for agriculture, and change in efficiencies for both indoor water use and crop irrigation. Several of the methodologies used for exploring these changes were the same as those implemented in Phase 2; they are briefly outlined here, but described in more detail in documentation produced during the Phase 2 process.

Other processes are new for Phase 3, and they are outlined in more detail in this discussion.

Population Growth

In the Phase 2 scenarios (and as part of the Phase 3 modeling as well), there were different techniques used to account for population growth. As part of her thesis work, Nathalie Maurer looked at different urban growth patterns in the 4 major population centres in the Valley (Vernon, Kelowna, Penticton and Osoyoos). She created a series of templates representing a medium density population pattern (including combinations of single and multi-family dwellings), and placed the templates on a digital map in areas where the Official Community Plans indicated likelihood of future development. Nathalie's projection was limited to the 4 main centres and it extended only to the year 2025; enough templates were positioned (at times representing developments in new areas and in other cases standing as redevelopment of existing neighborhoods under higher densities) to meet the population projections to 2025. Later, Liyang Zhang of the Ministry of Agriculture and Lands extended Nathalie's work to match the population estimates to 2035, and to include the smaller population centres as well (e.g. Summerland, Oliver, Okanagan Falls, Naramata).

Indoor water use within the water demand model isn't actually represented by population, but instead through a daily use associated with each parcel according to the actual use codes provided by the BC Assessment Authority. A single family dwelling, for example, has an associated daily indoor use of 0.45716 cubic metres. To model the increased use due to population growth between 2006 (the base year for the cadastral fabric within the water demand model) and 2035 (the highest year of the spatially located growth templates), a lookup table was developed containing a key to each new development shape and a randomly selected year of development between 2006 and 2035. As each year was modeled, properties with development years up to the processing year were added into the residential set along with their associated daily water use amounts. The template properties included both an indoor use value and a percentage representing the amount of the shape's area that would likely be irrigated for landscaping; the irrigated area was added to the <u>domestic</u> crop type and assumed to use a <u>Landscapesprinkler</u> irrigation system.

Between 2036 and 2040 (and to 2070 in some of the Phase 2 scenarios), the population, as represented by the amount of water used for indoor residential use, was scaled up statistically since there were no spatially located growth templates beyond 2035. Each of the following municipalities and regional districts were assigned different growth extrapolation equations based on the figures used as part of Nathalie's and Liyang's work:

Kelowna Lake Country NORD Peachland Penticton Regional District of Okanagan Similkameen (RDOS) Summerland Vernon The equations were the trend lines describing the graphs of each area's growth as a function of the year being model between 2011 and 2035 (the 2011 to 2035 uses plotted and used to derive the equations); for example, Kelowna's extrapolation equation was

(1.600865703 + -0.000287428 * modelingYear) ^ modelingYear - 2035

For years beyond 2035, the 2035 daily indoor uses were scaled up by multiplying them by each area's extrapolation coefficients. Note that this represents adding density to the same locations rather than performing any additional spatial developments beyond 2035.

A different technique was used for the Industrial, Commercial and Institutional indoor water uses since none of the growth templates included ICI development, The ICI daily use was multiplied by the ratio of the new residential daily use for each year compared to the residential daily use of 2006, the base year for the population calculations. The total daily volume for residential indoor use as of 2006 is designated in the water demand model databases as 41841 cubic metres. If in 2020, the population growth and/or indoor use efficiency changes resulted in a new residential indoor use total of 50000, then the daily industrial, commercial and institutional indoor uses were multiplied by 1.195 (50000 / 41841). Note that while this is representative of the overall change in water use at the full valley level, it doesn't provide a good representation of changing ICI use when viewed at local levels. It doesn't, for example, reflect the fact that a new hospital might be built to service an expanded population in a specific area; it simply increases the water use at the existing hospitals to match the overall population increase, regardless of where that growth has occurred.

High Sprawl Growth

Some of the Phase 3 scenarios attempted to model a high sprawl growth scenario – continuing to develop new lands using similar lot sizes and proportions of outdoor irrigated areas as we currently have in the valley. Since there hadn't been any work done to investigate how and where that type of development could take place, it was modeled by implementing rules-based approach to identifying possible areas of development and potential lot sizes and landscaping ratios.

Data from several sources, from a detailed regional growth strategy in the North Okanagan to data from a MetroQuest presentation application that categorized development in various areas as "strongly encourage", "encourage", and "neutral", was combined and intersected with the land use layer to produce candidate polygons for the sprawl scenario. These candidate polygons were then classified by elevation strata and assigned a lot size according to:

Elevation (m)	Lots per Ha	Percentage Landscaping
< 550	3.3	0.37
550 - 650	1.1	0.37
750 - 750	1	0.37
750 - 850	1	0.37
> 850	1	0.3

These categories, sizes and landscaping proportions were derived by analyzing the current breakdown of residential parcels. Note that in the first few attempts, the results appeared to be unrealistic in terms of the vast amounts of areas going into outdoor landscaping, likely because of the small numbers of sample properties in some the categories in the current cadastral set; the maximum property sizes and proportions of landscaped area were adjusted to try to bring a more reasonable perspective to the high sprawl scenario.

A similar technique to the other urban growth methodologies was used, whereby a lookup table with randomly selected development years between 2007 and 2040 controlled the timing of the new properties coming on stream.

Population Rewind

To simulate the valley's population growth over the 1971 to 2006 period, the water use in the population-dependent categories (residential, commercial, industrial and institutional indoor use and residential outdoor landscaping) was estimated for 2006 and then scaled backwards according to the municipal and regional district population statistics available through:

and http://www.bcstats.gov.bc.ca/data/pop/pop/mun/Mun1921_2006.asp http://www.bcstats.gov.bc.ca/data/dd/handout/hist_cen.pdf

All of the local government designations within the water demand model source database had corresponding records in one of the sources above except for the District of Lake Country, which wasn't incorporated until 1995. The district's communities (Winfield, Okanagan Centre, Oyama, and Carr's Landing) weren't listed on the municipal population reports available at that site either. Lake Country had a similar population in 2006 to Summerland (approx. 10,700); the Summerland population estimates were therefore used as representative of Lake Country for modeling these scenarios.

For the municipalities, the populations were listed for each of the 5-year census events from 1921 through to and including 2006; for the regional districts, however, the covered period is only 1941 to 1986. The 2006 populations for the districts were available from the earlier work done for the Phase 2 scenarios, and these were added into the tables for this modeling.

To scale the water demand to reflect population change between 1970 and 2006, each year's population was estimated by interpolating linearly between the specified values for the corresponding municipality or regional district. Outside of the listed year ranges, the algorithms extrapolate linearly using the outermost specified data points (this didn't come into play for these 1971 – 2006 modeling runs since this period is covered for all of the local government designations). The estimated population for the modeling year was then divided by the 2006 population for that area and the resulting ratio used to scale back the 2006 water use. For example, Kelowna's 1981 population of 59196 over the 2006 value of 106707 resulted in a multiplier of 0.555. The 1981 indoor water use was then calculated as 0.555 times the 2006 use. To account for fewer houses, the outdoor landscaping area for each property was also scaled back by the same multiplier.

Water Use Efficiencies

Two options were modeled for water use efficiency:

- present conditions (no improvement in water use efficiency)
- standard improvement a 33% reduction in water use over the 2010 2040 period

To model the efficiency improvements for indoor water use, the daily use volumes for each residential property were multiplied by a factor that decreased from 1.0 in 2010 to 0.67 in 2040:

indoorReductionPct = 1 - (33 / 30 * (modelingYear - 2010) / 100)

The technique used to scale up the Industrial, Commercial and Institutional indoor water use (multiplying it by the ratio of the modeling year's residential use to that of 2006) meant that efficiencies in indoor residential use were automatically reflected as the same kind of improvement in ICI indoor use.

For residential outdoor landscaping, the irrigation management classification, which affects the amount of water lost to deep percolation due to overwatering, was assumed to improve from a "poor" rating now to an average rating by 2040. To model the improvement, a lookup table was created that associated each residential landscaping area (areas with a crop type designation of "domestic") with a randomly assigned year of improvement between 2010 and 2040. As each year in the period was modeled, any properties with improvement years less than or equal to the current year were switched from poor management to average.

For agricultural crops, efficiency improvements were modeled as replacement of current irrigation system types to more efficient types (from gun to sprinkler for alfalfa and grass and to drip or microsprinkler for most other crop types). Once again, a lookup table was used to associate each property and crop type to a new irrigation system type and a randomly selected year of conversion between 2010 and 2040. As each year was modeled, the properties with equal or earlier conversion years were switched to the more efficient systems.

Agricultural Landbase

Areas suitable for agricultural expansion were mapped out by MAL and subsequently overlaid with the source database to produce a list of intersected polygon identifiers. Using a similar process to the urban growth phase-in, the agricultural polygons were assigned random years between 2010 and 2040 and brought on stream accordingly over the modeling period. New agricultural properties in zone 4 (Winfield and north) were designated as growing *alfalfa* under *sprinkler* irrigation; properties south of Wood Lake were treated as *medium density apples* under *microsprinkler*.