

SWCC's Plan to Satisfy Future Water Demands in Saudi Arabia

Thursday, 19 February 2015



المؤسسة العامة لتحلية المياه المالحة
Saline Water Conversion Corporation

Main Challenges in Water and Desalination Sector

SWCC Overview

Municipal Water Demand in Saudi Arabia

SWCC's Plan to Satisfy Future Water Demands

Main Challenges Facing Water and Desalination Sector in Saudi Arabia

Decommissioning of existing desalination plants in near Future and large investments for new desalination projects

Rapid increase in population, increase in water demand, industrialization and high per-capita consumption



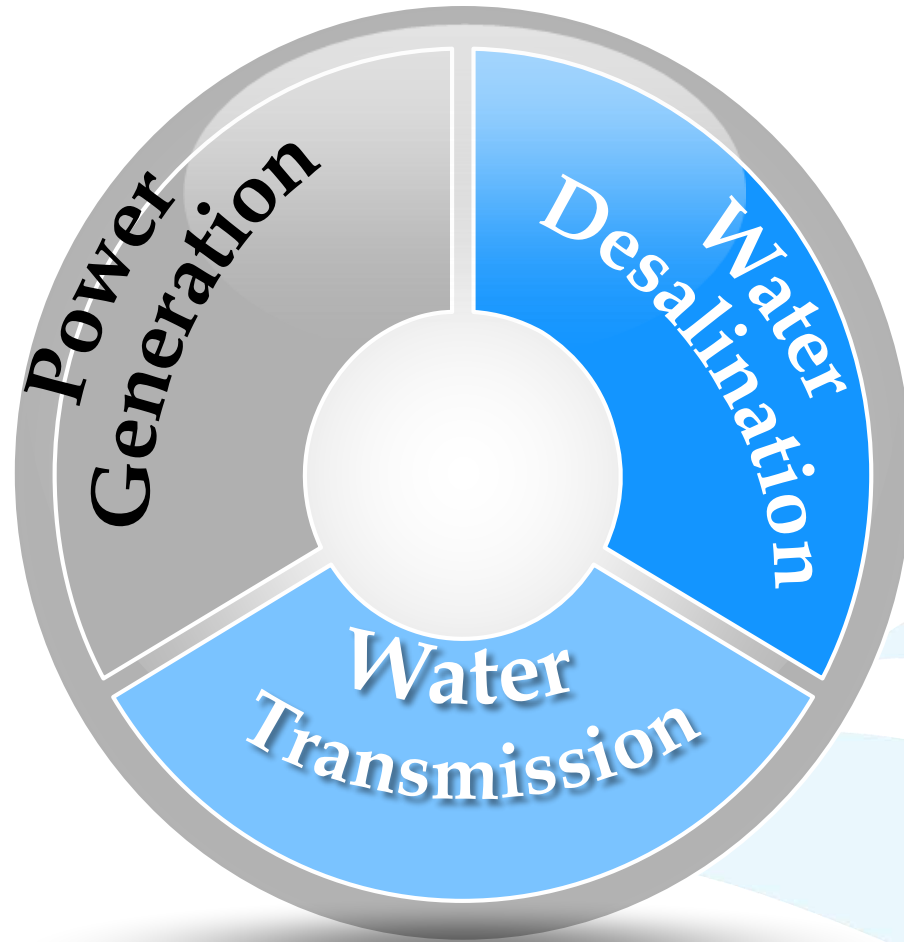
Widening gap between water demand and supply

Limited natural water sources

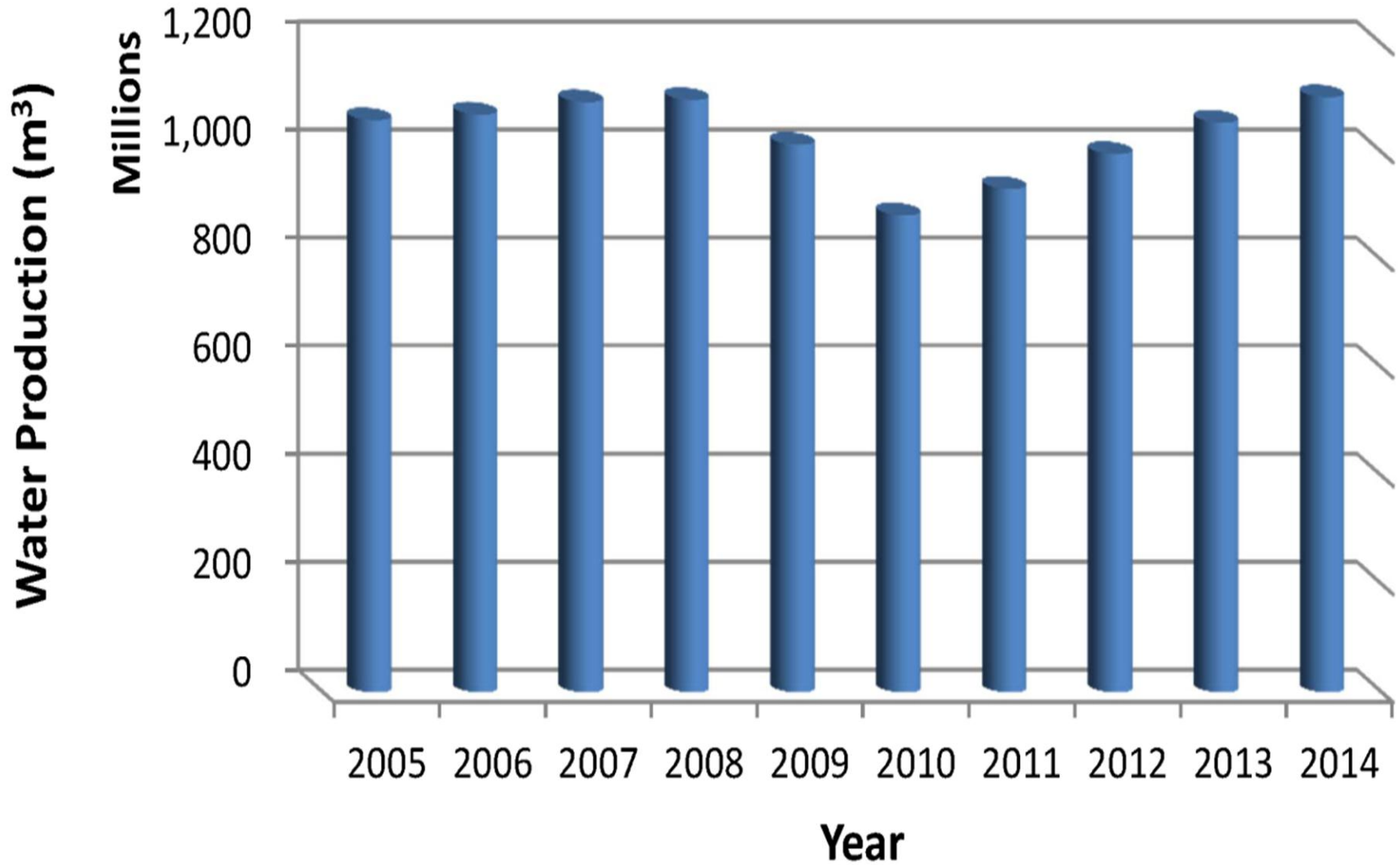


SWCC Overview

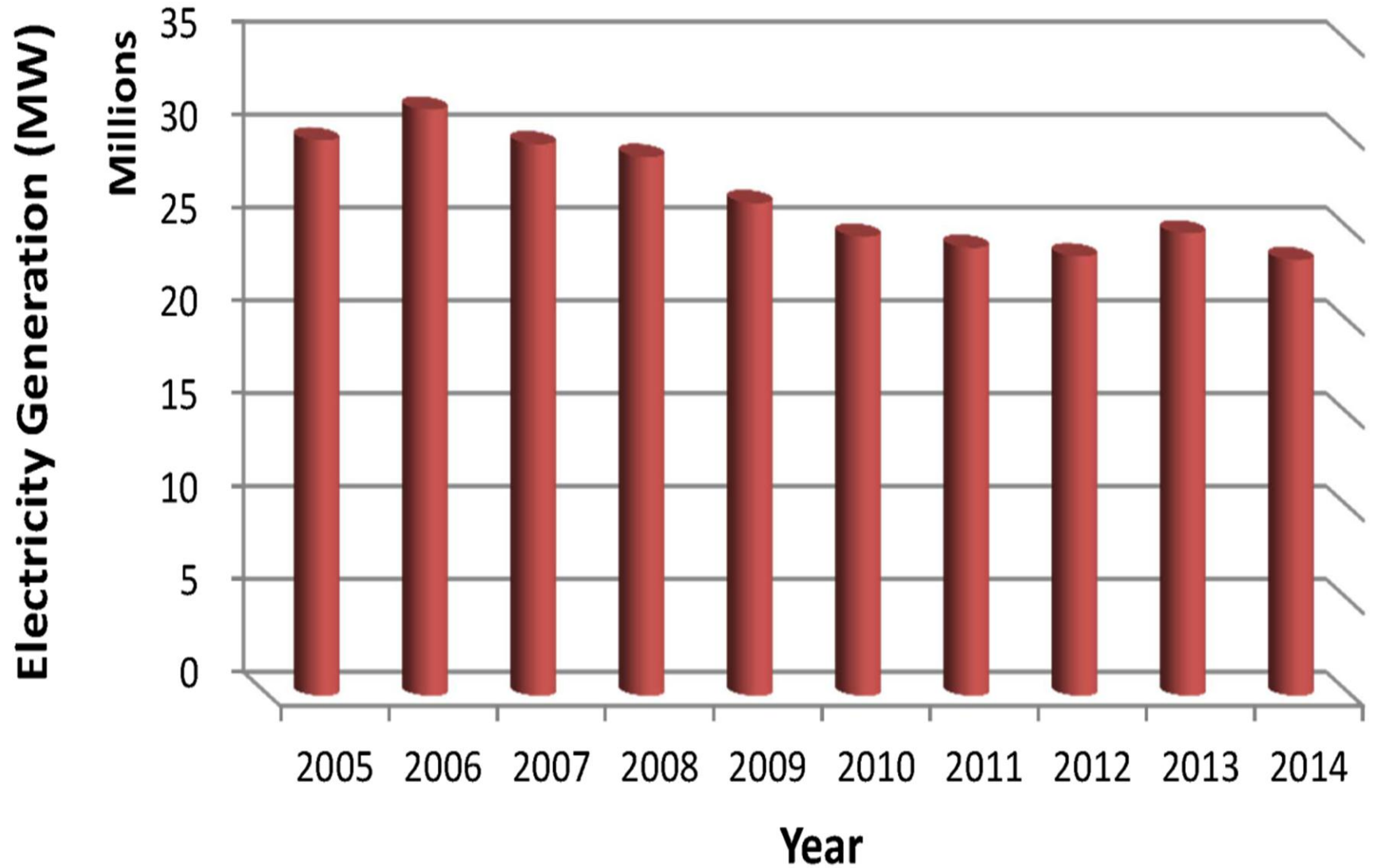
SWCC Main Activities



SWCC Annual Water Production in Last 10 Years

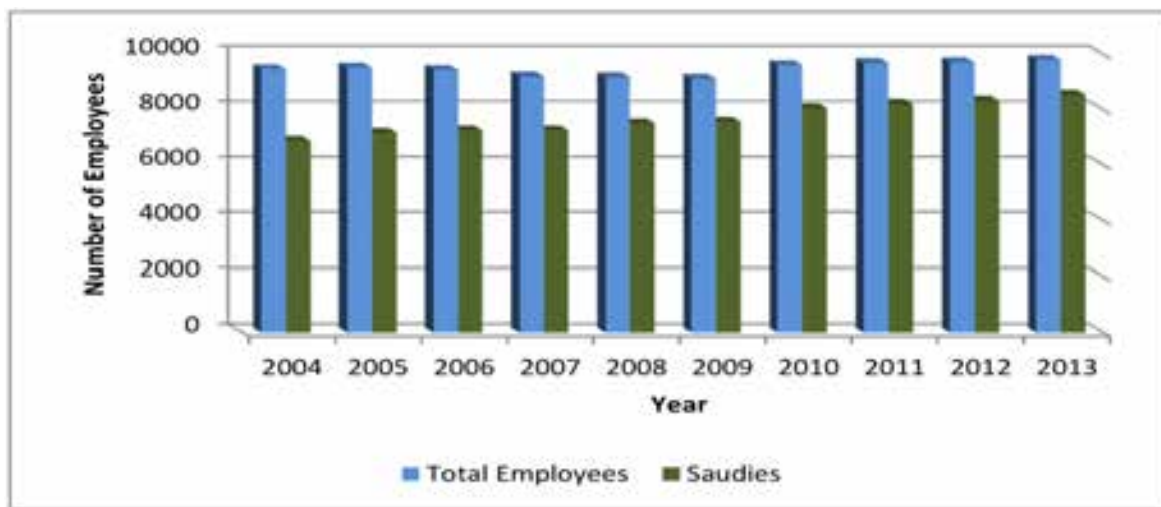
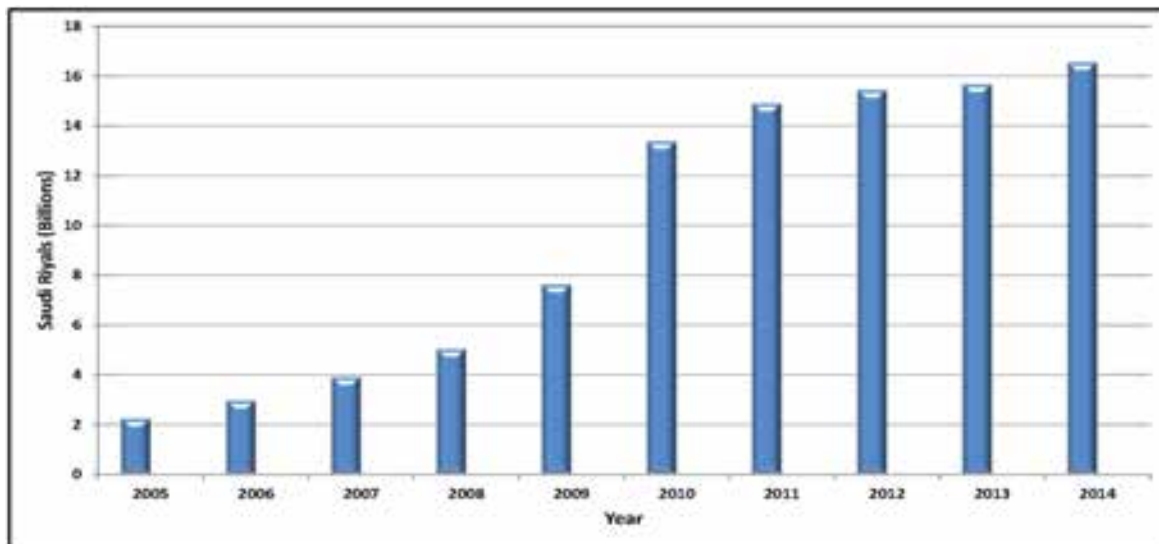


SWCC Annual Electricity Generation in Last 10 Years



SWCC Budget & Human Resources in Last 10 Years

SWCC Budget in the last ten years

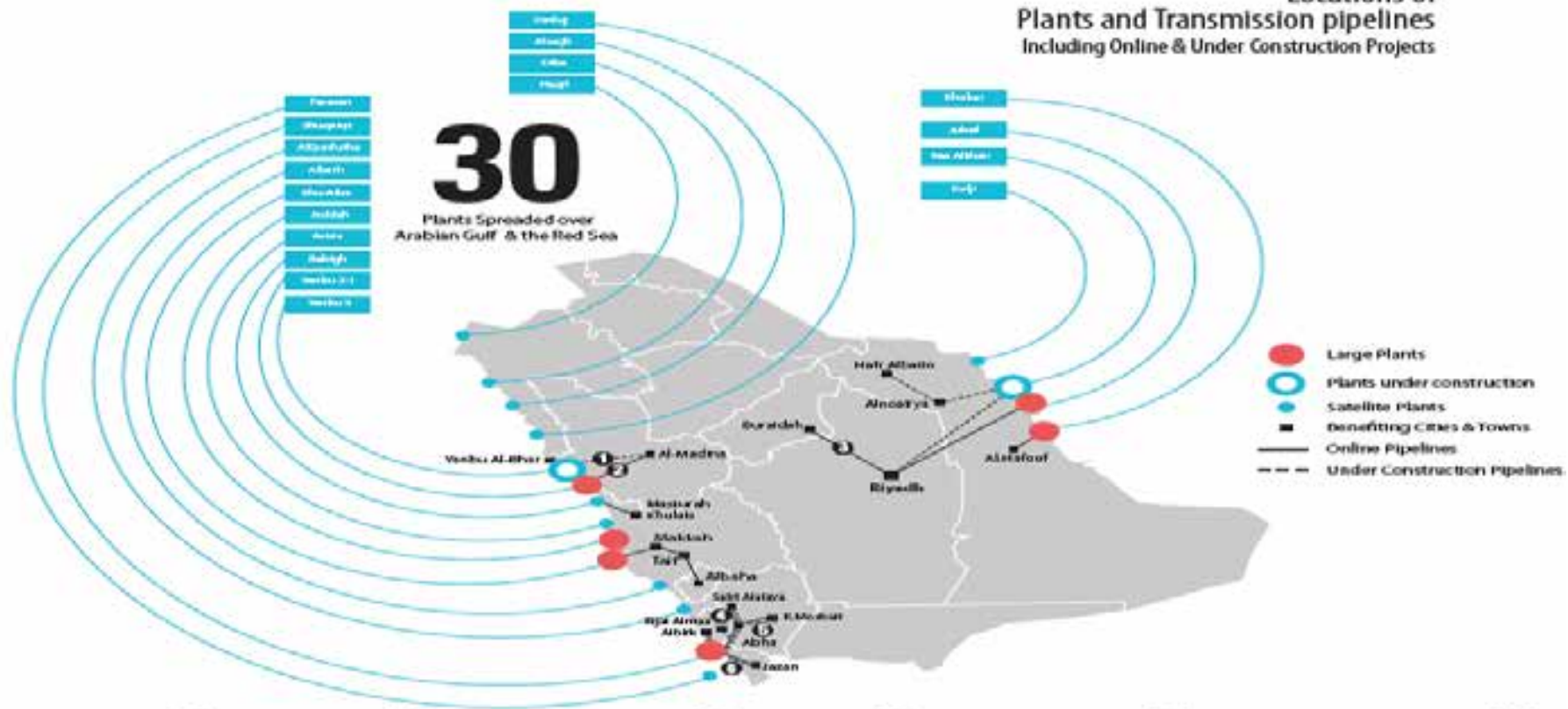


SWCC Human Resources & Saudization

SWCC's Facts

Saline Water Conversion Corporation, SWCC Kingdom of Saudi Arabia

Locations of
Plants and Transmission pipelines
Including Online & Under Construction Projects



- | | | | | | |
|--|--|---|--|--|---|
| <p>6</p> <ul style="list-style-type: none"> ■ Bosh ■ Moadiyah ■ Al-Baya ■ Sabiyah ■ Dairiyah ■ Abo-Amesh ■ Al-Fad Al-Masrah ■ Sarahah | <p>5</p> <ul style="list-style-type: none"> ■ Abd-Rofaidah ■ D. Al-Jaroodah ■ Sa'ad Obaidah ■ Al-Harjah | <p>4</p> <ul style="list-style-type: none"> ■ Al-Sarrah ■ Bari-Ar ■ Bashvoot ■ Al-Madrah ■ Nafalahar ■ Balaamar ■ Tanomah ■ Al-Namas | <p>3</p> <ul style="list-style-type: none"> ■ Al-Basrah ■ Thawbeq ■ Al-Majman ■ Akqaat ■ Shaqra ■ Al-Masrah ■ Al-Bayrah ■ Al-Masrah ■ Sedrah ■ Al-Masrah ■ Al-Basrah | <p>2</p> <ul style="list-style-type: none"> ■ Al-Ena ■ Al-Madrah ■ Al-Masrah ■ Al-Masrah ■ Al-Masrah ■ Al-Masrah ■ Al-Masrah ■ Al-Masrah ■ Al-Masrah ■ Al-Masrah ■ Al-Masrah | <p>1</p> <ul style="list-style-type: none"> ■ Wadi ■ Bosh ■ Al-Harjah ■ Al-Harjah ■ Al-Harjah ■ Al-Harjah ■ Al-Harjah ■ Al-Harjah ■ Al-Harjah ■ Al-Harjah ■ Al-Harjah |
|--|--|---|--|--|---|

Equal to the distance
between Riyadh & Tokyo

8,756 KM
Pipelines Lengths

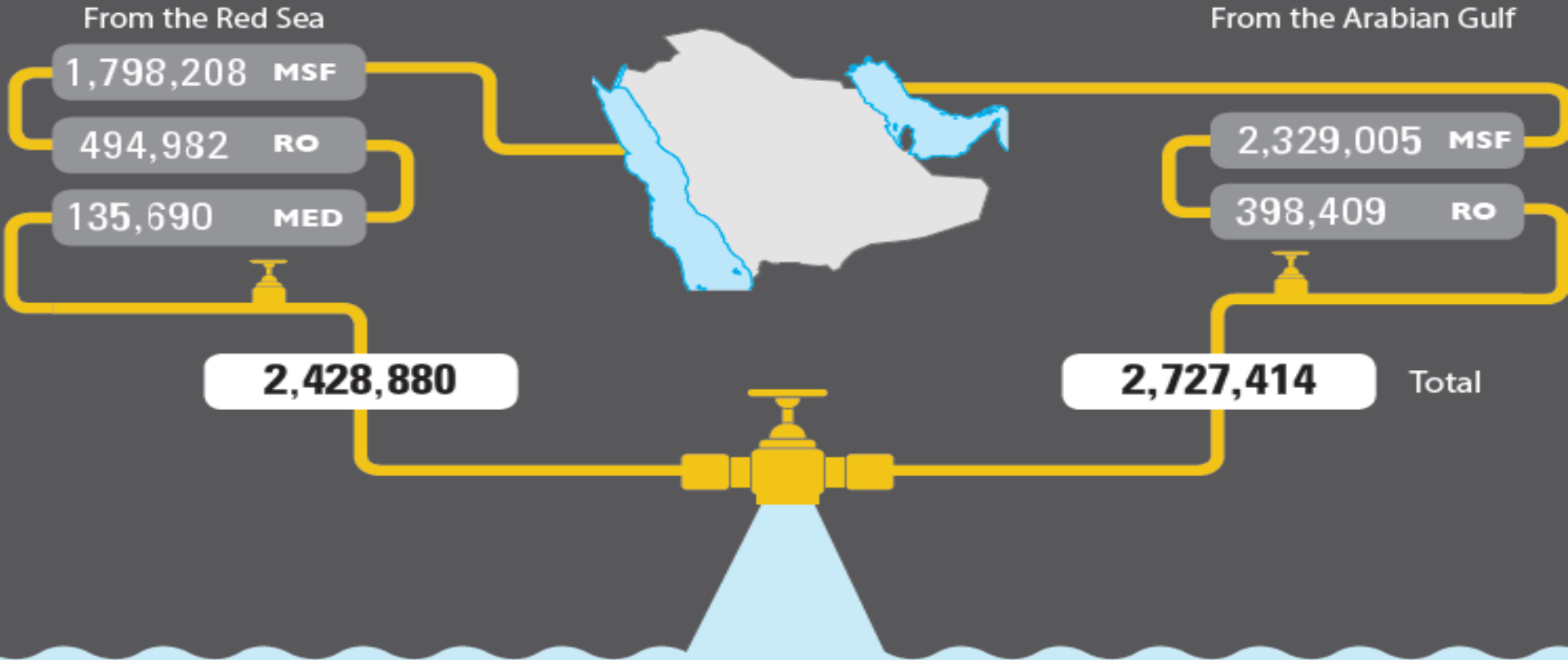
336
No. of Water storage tanks

9,673 MW
Total Production of Electricity

SWCC's Facts

Designed Production Capacity (Including Online & Under Construction Projects)

By Type of Technology
(m³/ day)



5,156,294 m³/day

Total Water Production

=

135,690
MED

+

893,391
RO

+

4,127,213
MSF

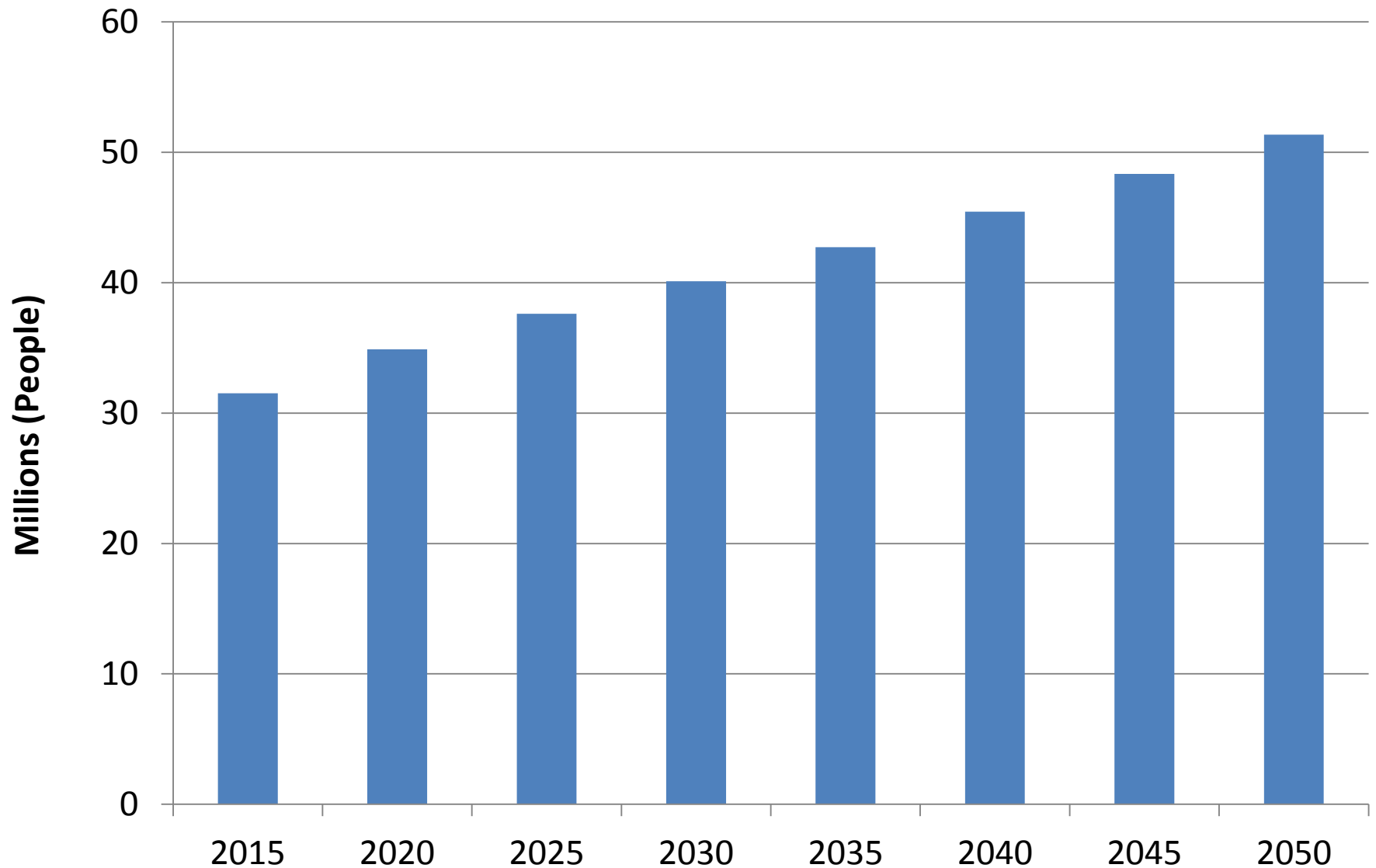
IWPP Projects in Saudi Arabia





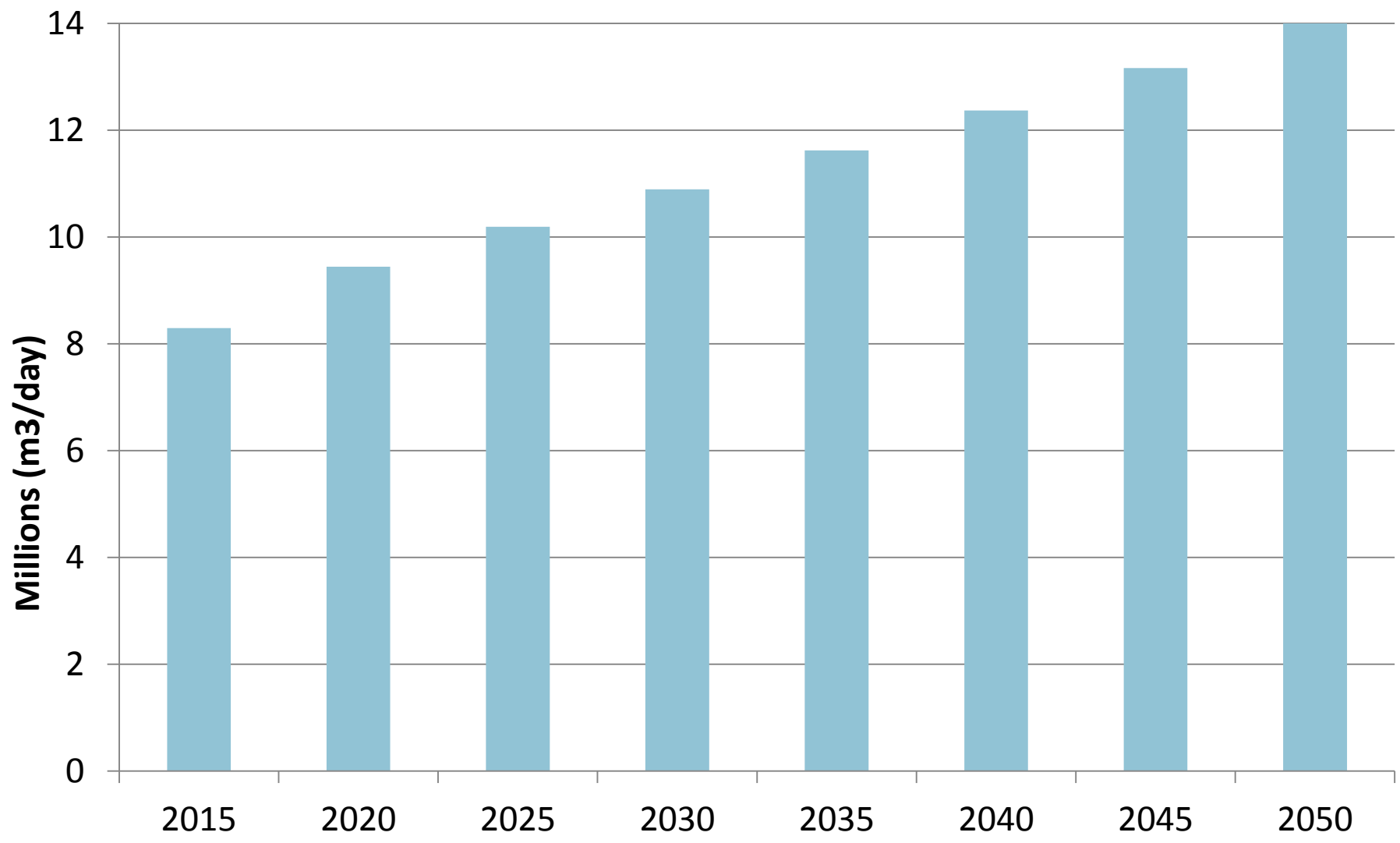
Municipal Water Demand in Saudi Arabia

Population in Saudi Arabia

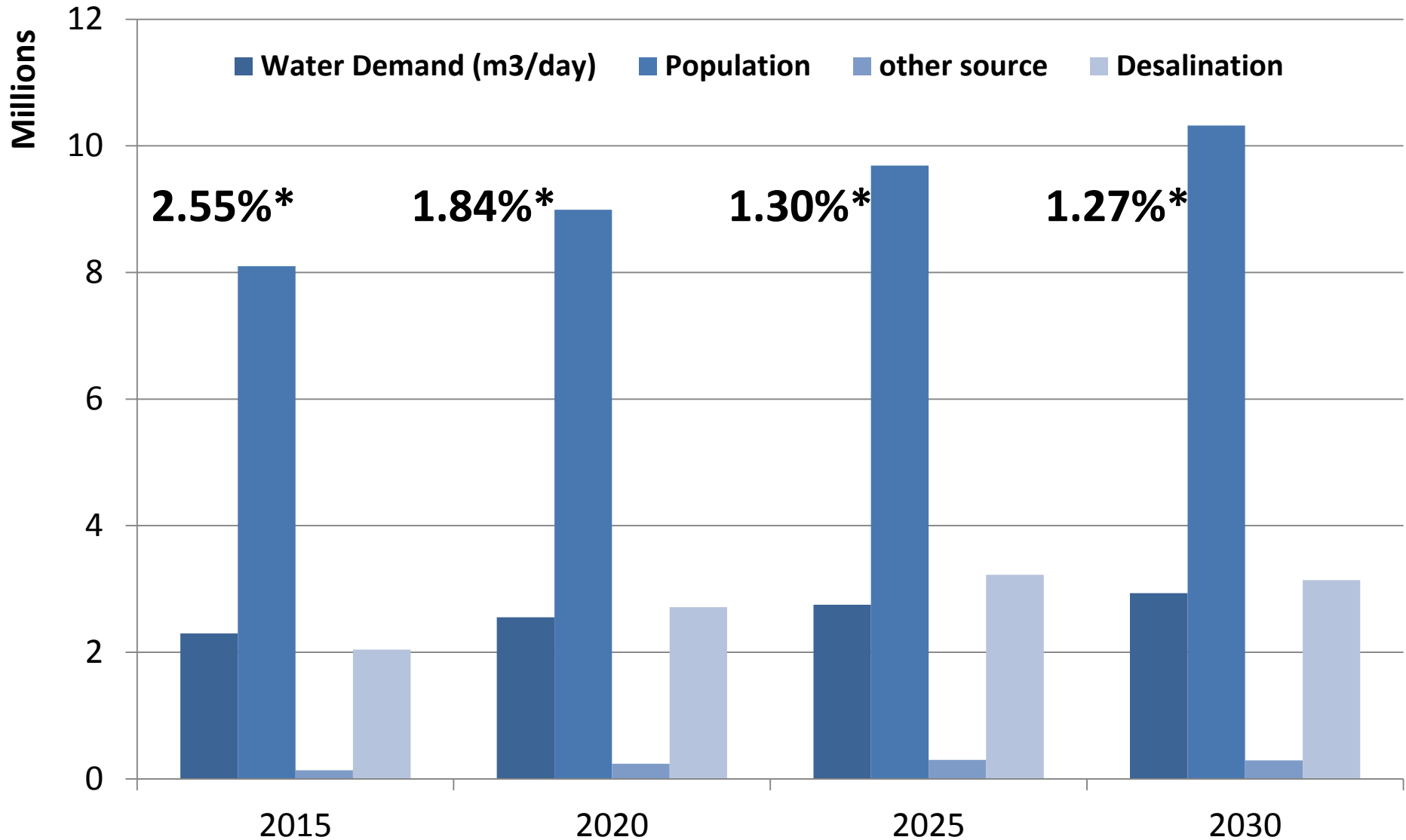




Municipal Water Demand in Saudi Arabia



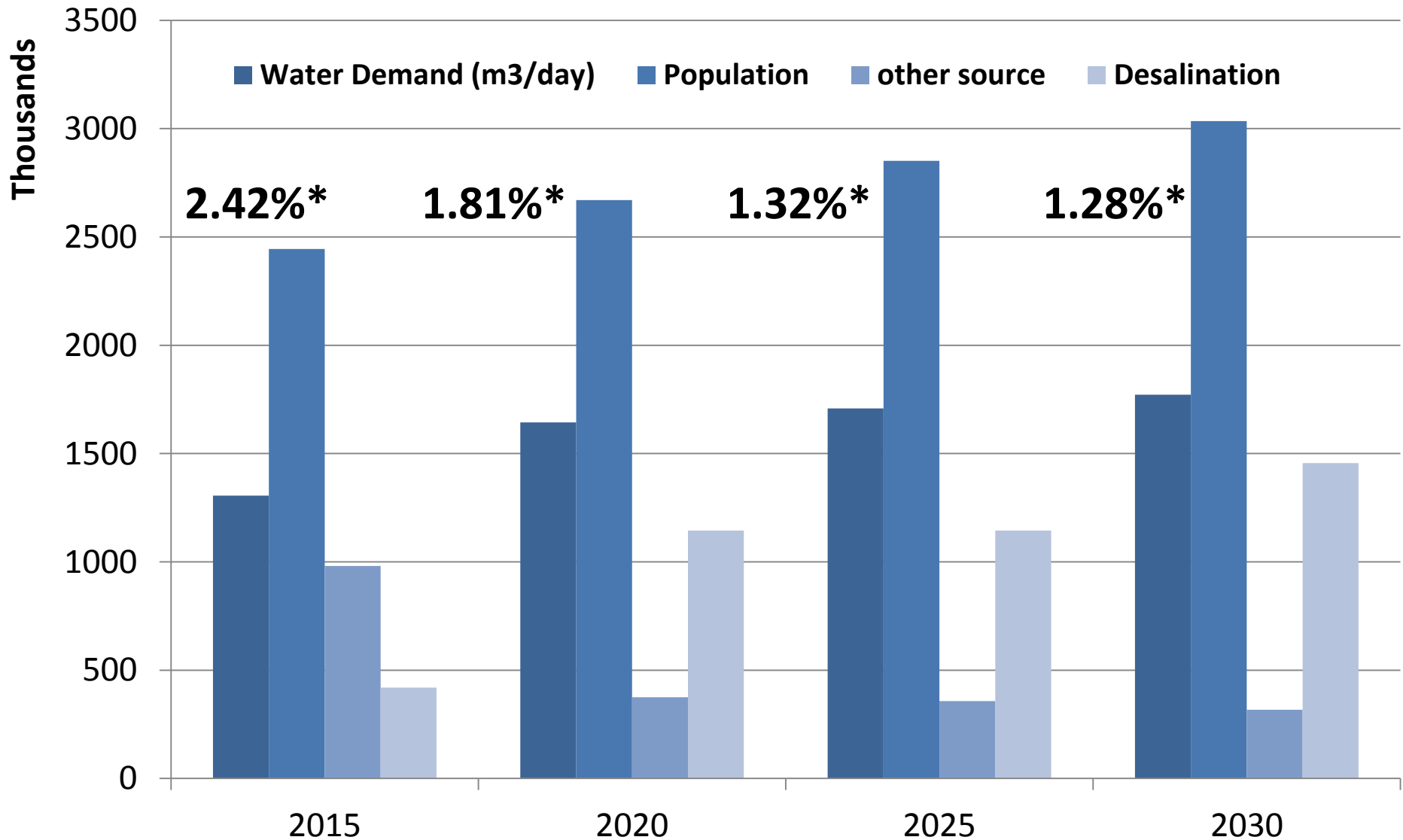
Makkah Province



* Calculated Growth rate

population and Growth rate data Based on the mid-year estimates -
Central Department of Statistics & Information

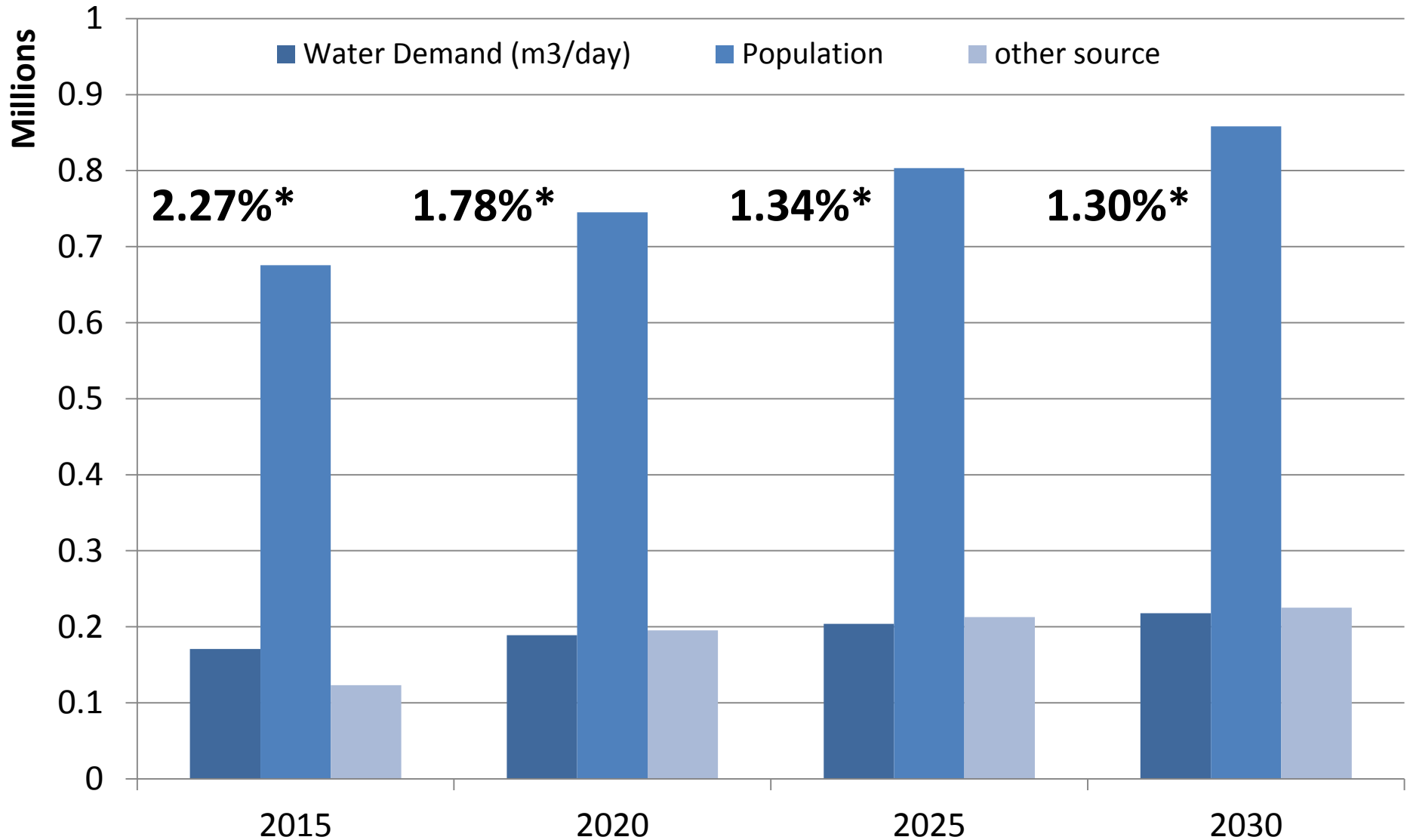
Almadinah Province



* Calculated Growth rate

population and Growth rate data Based on the mid-year estimates -
Central Department of Statistics & Information

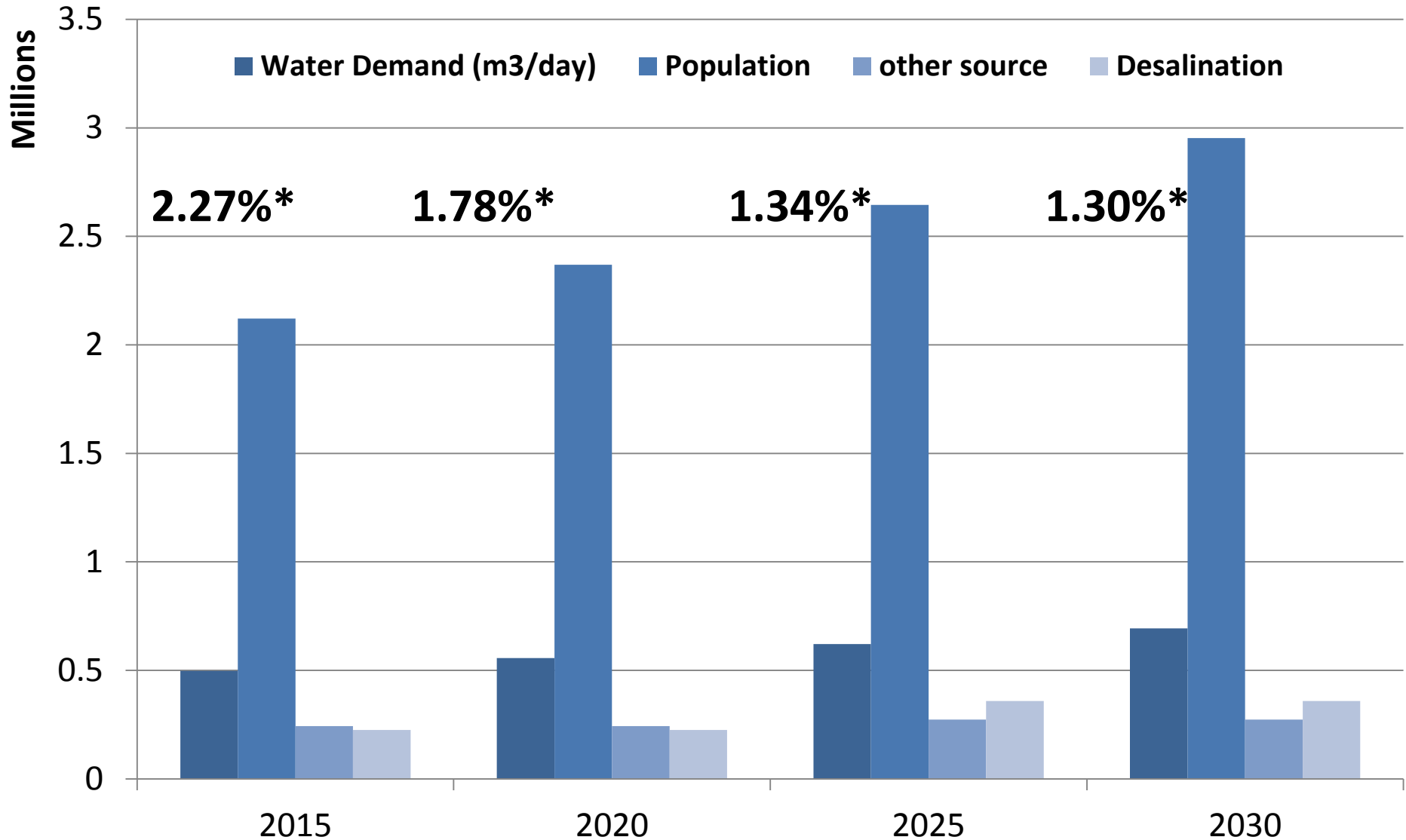
Hail Province



* Calculated Growth rate

population and Growth rate data Based on the mid-year estimates -
Central Department of Statistics & Information

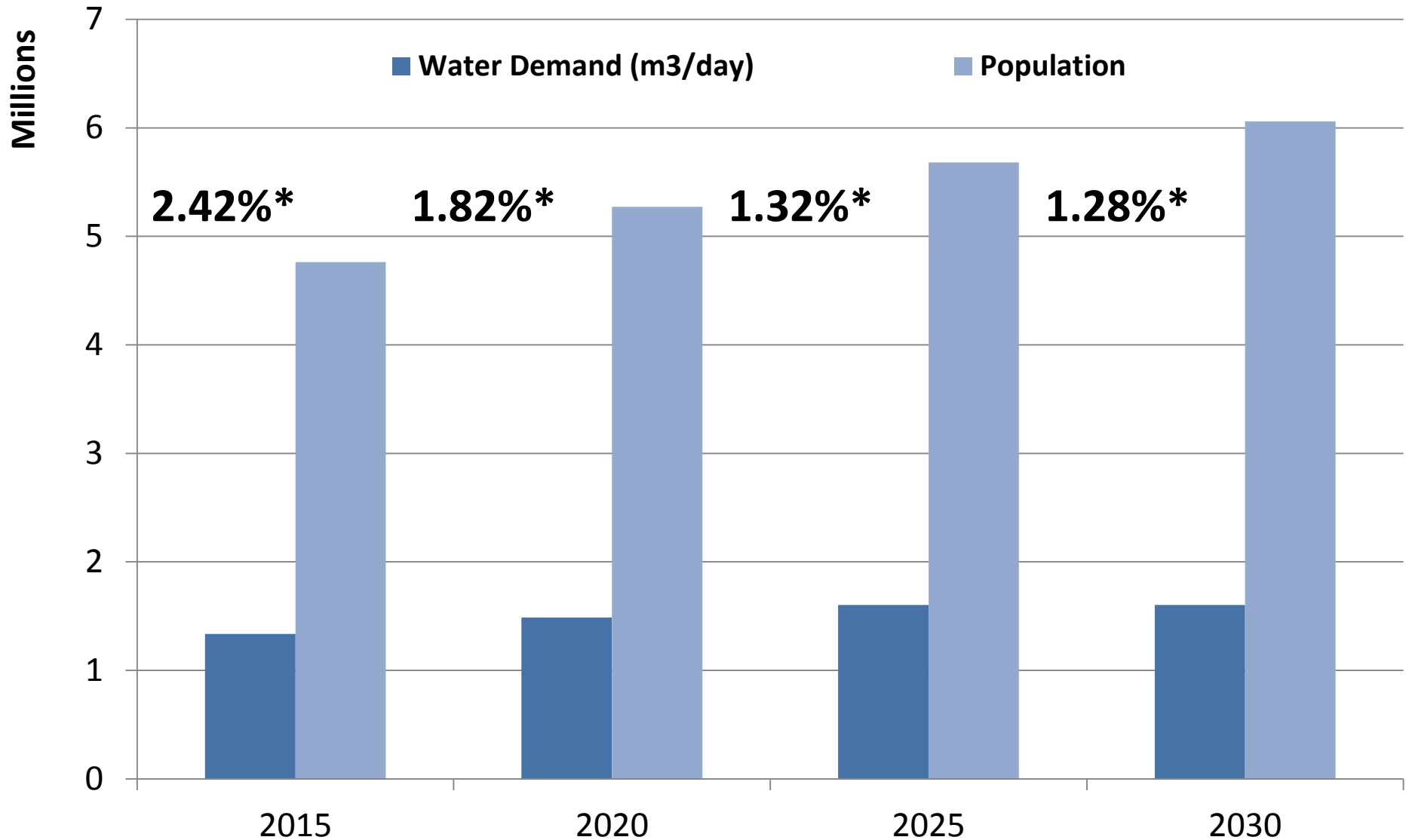
Assair Province



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population and Growth rate data Based on the mid-year estimates -
Central Department of Statistics & Information

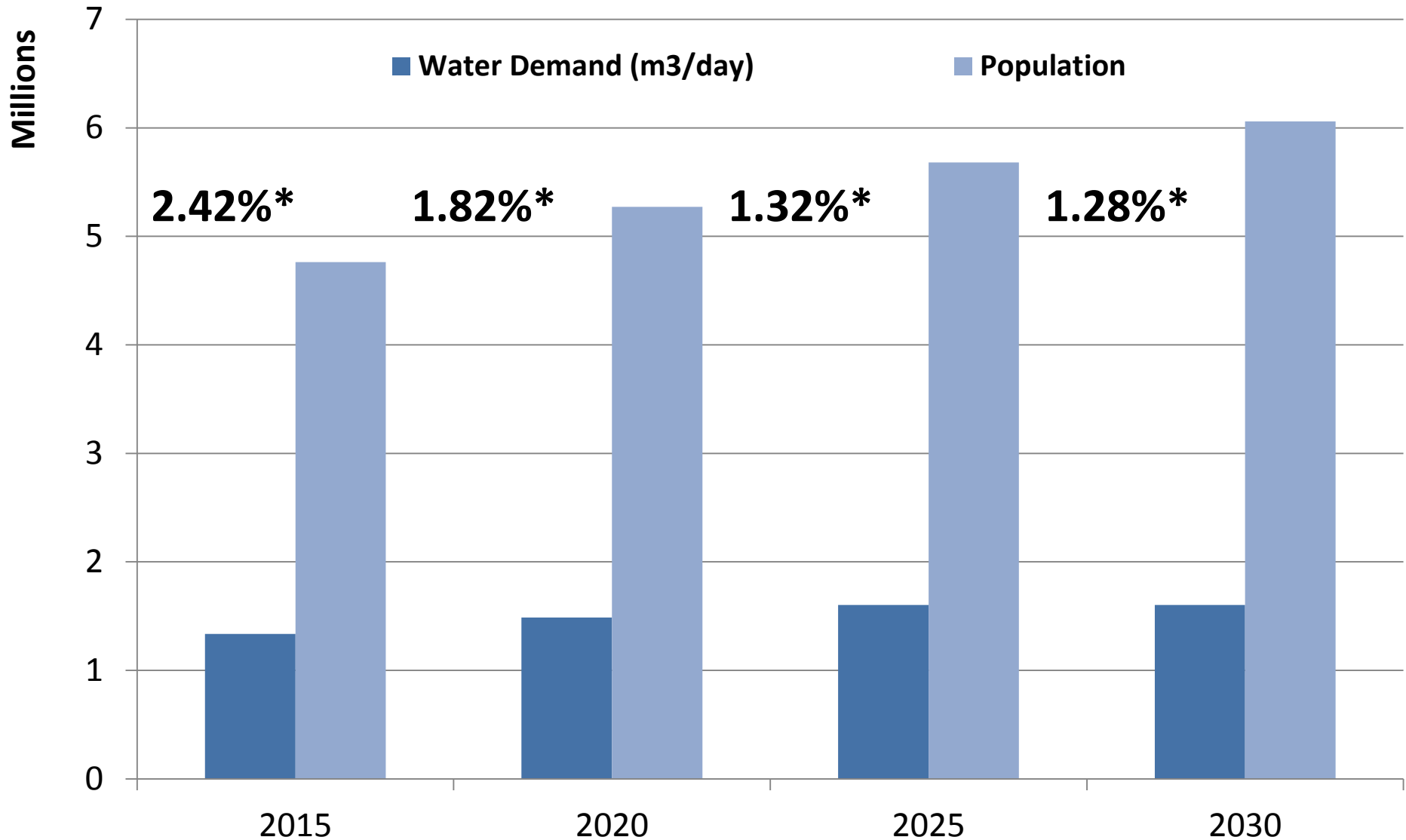
Eastern Province



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Central Department of Statistics & Information

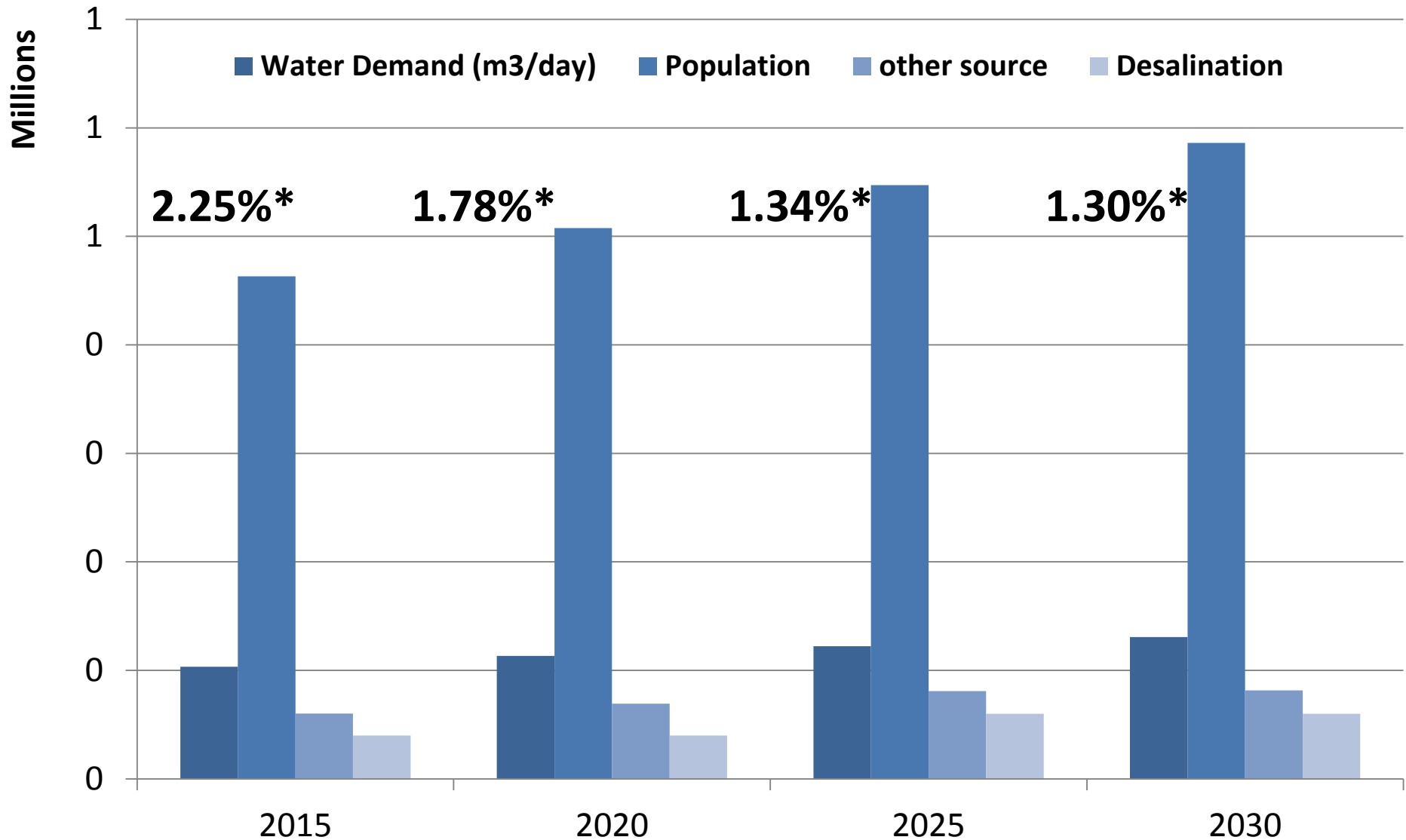
Eastern Province



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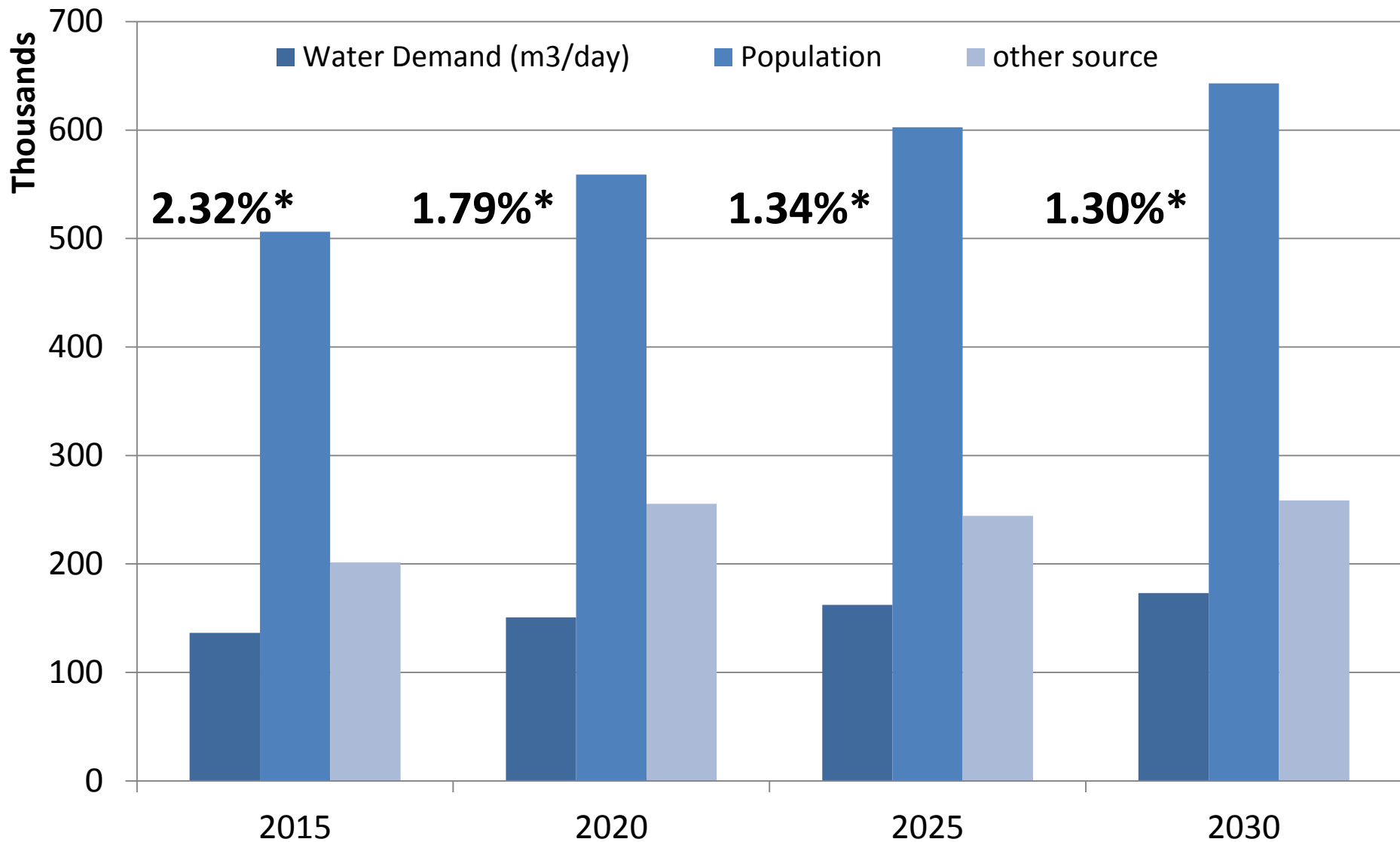
Albaha Province



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population and Growth rate data Based on the mid-year estimates -
Central Department of Statistics & Information

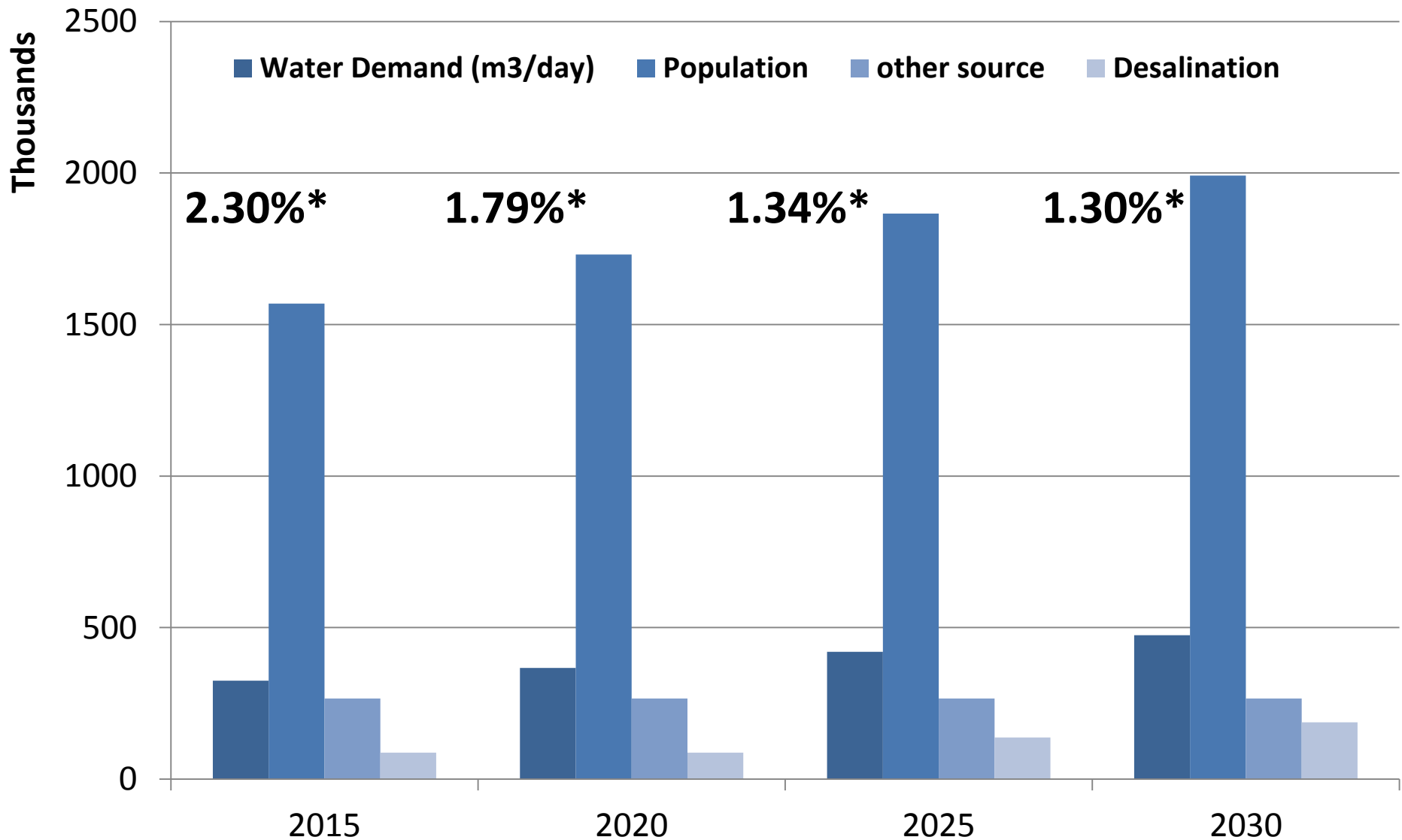
Aljouf Province



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population and Growth rate data Based on the mid-year estimates -
Central Department of Statistics & Information

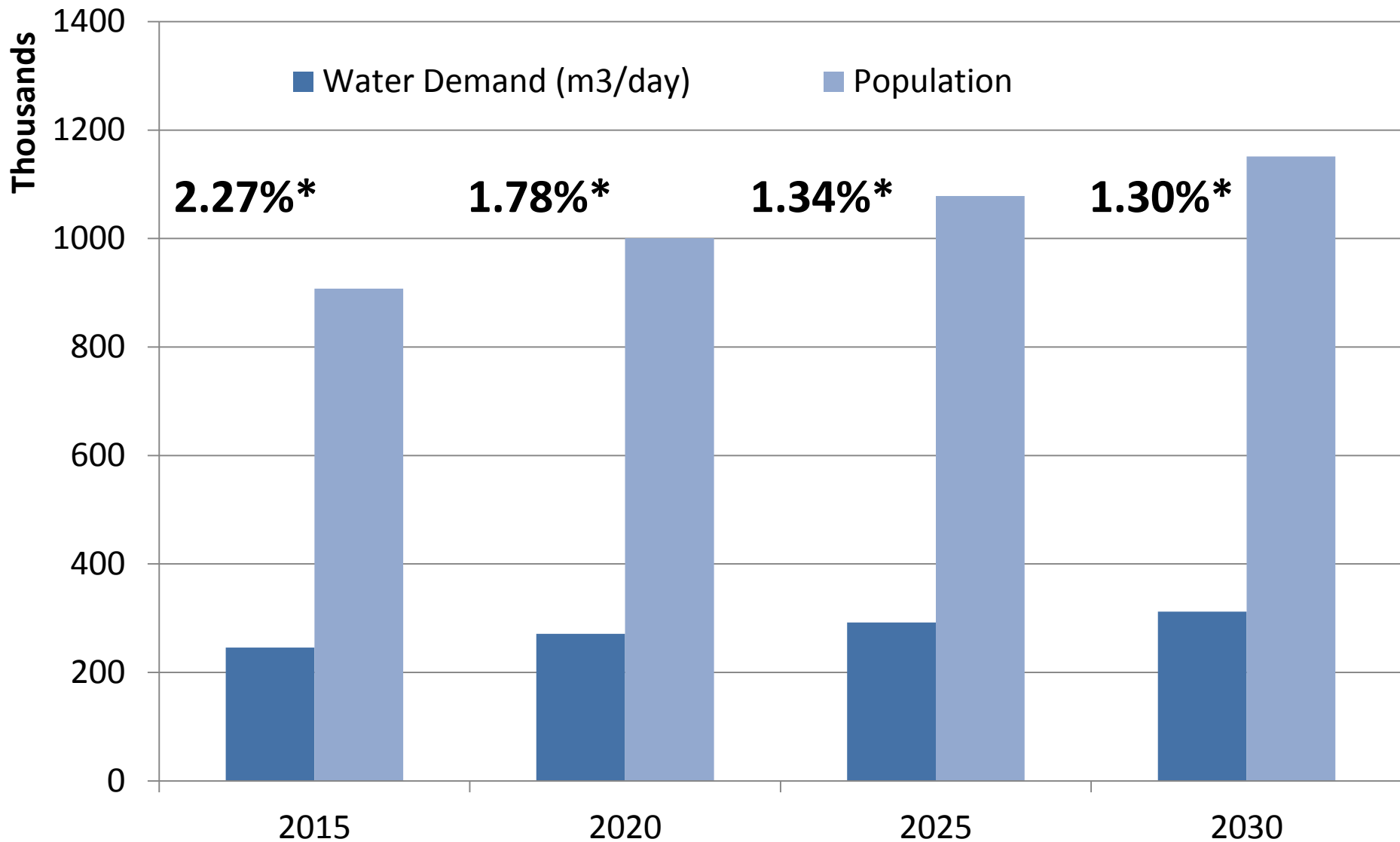
Jazan Province



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Central Department of Statistics & Information

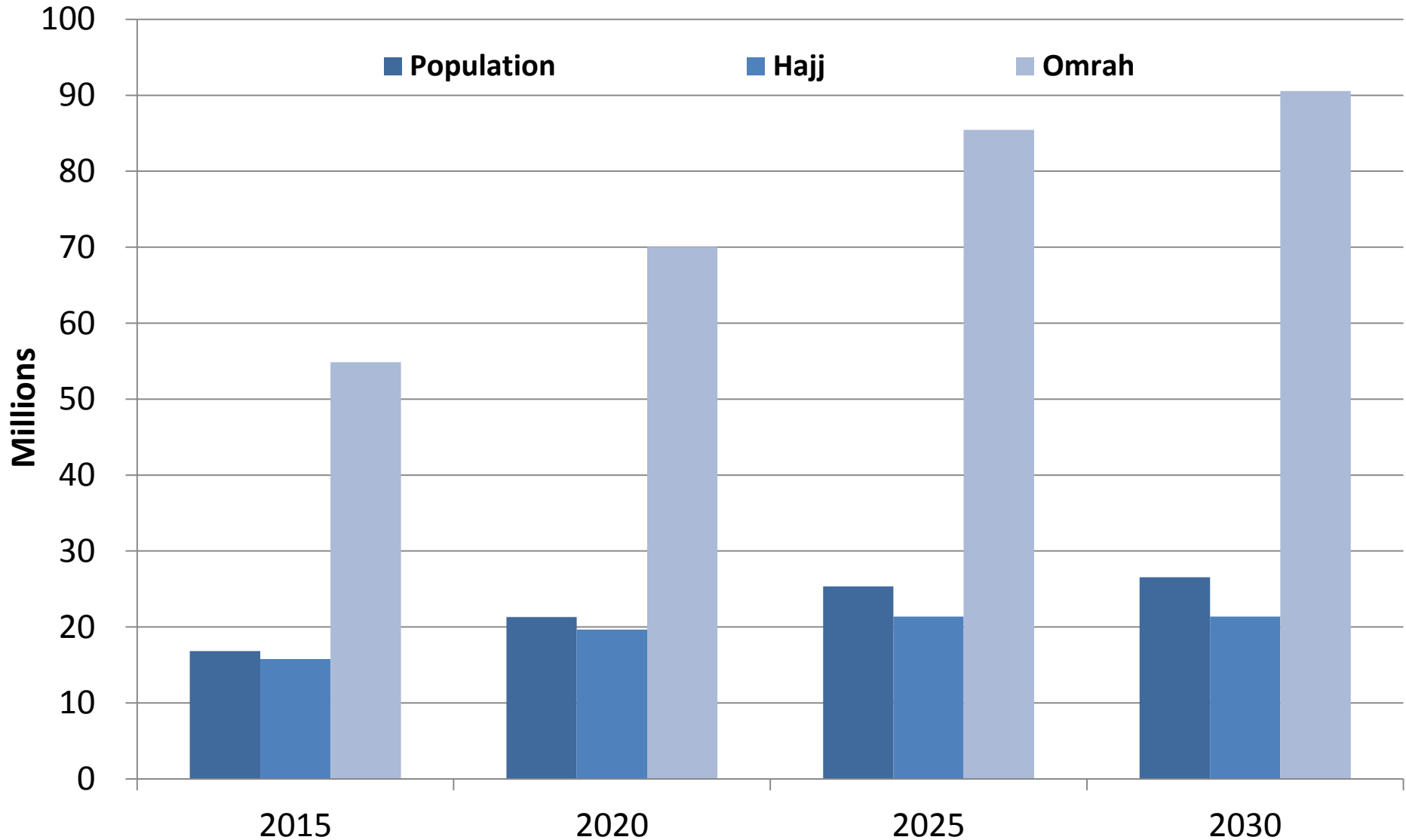
Tabuk Province



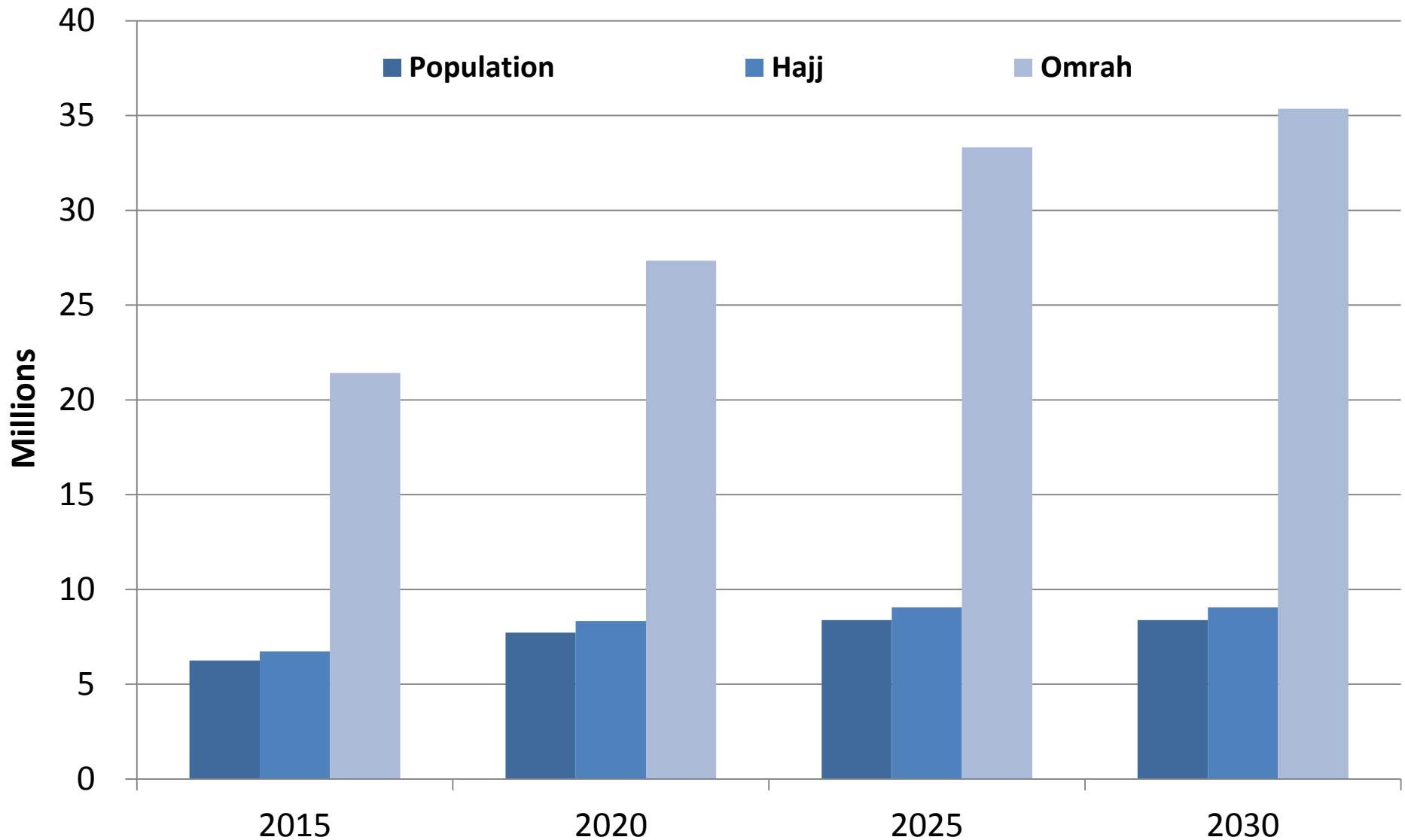
* Calculated Growth rate

population and Growth rate data Based on the mid-year estimates -
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Total annual demand for the Hajj season and Omrah (m³/year) in Makkah



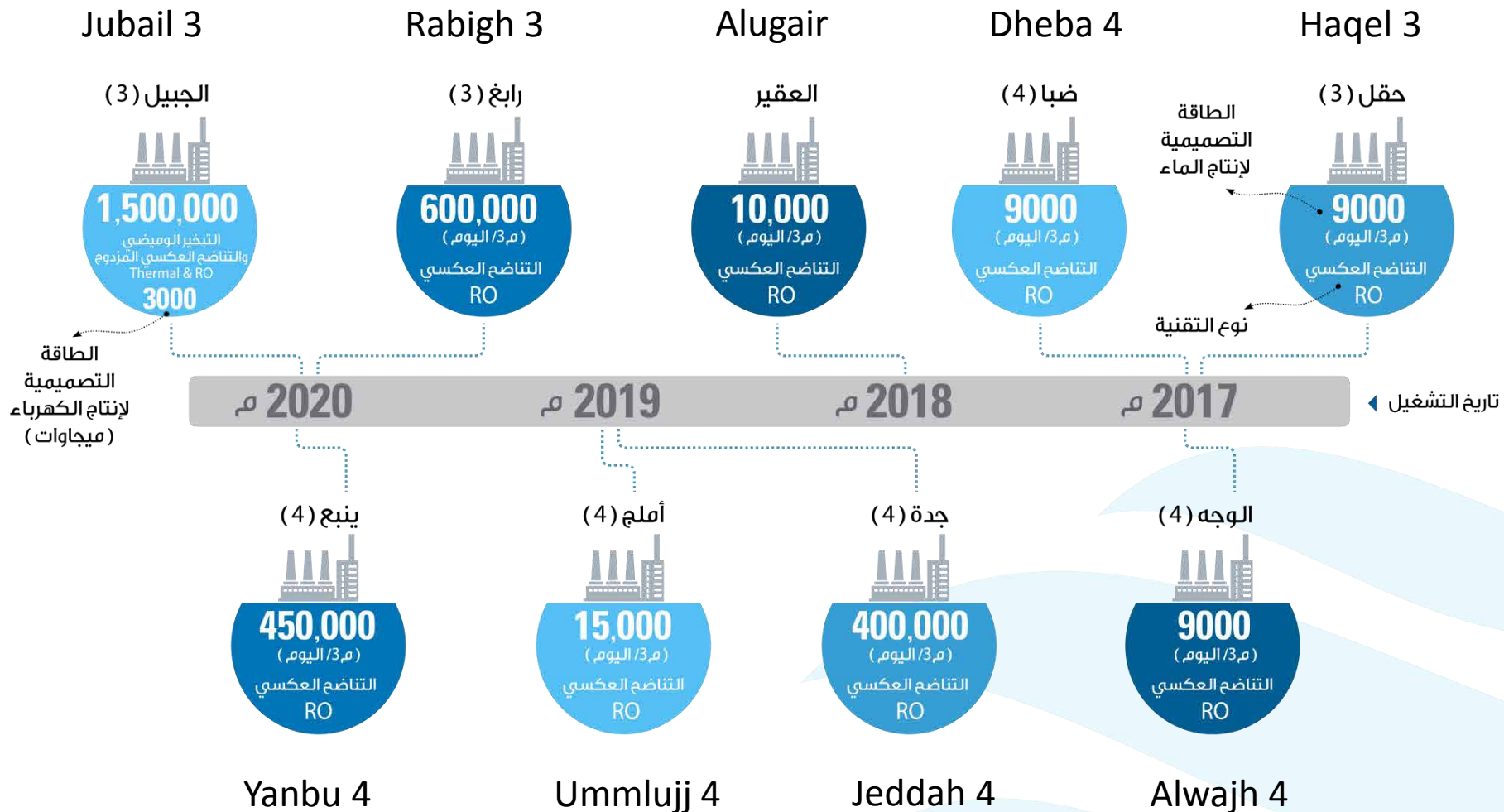
Total annual demand for the Hajj season and Omrah (m³/year) in Madinah



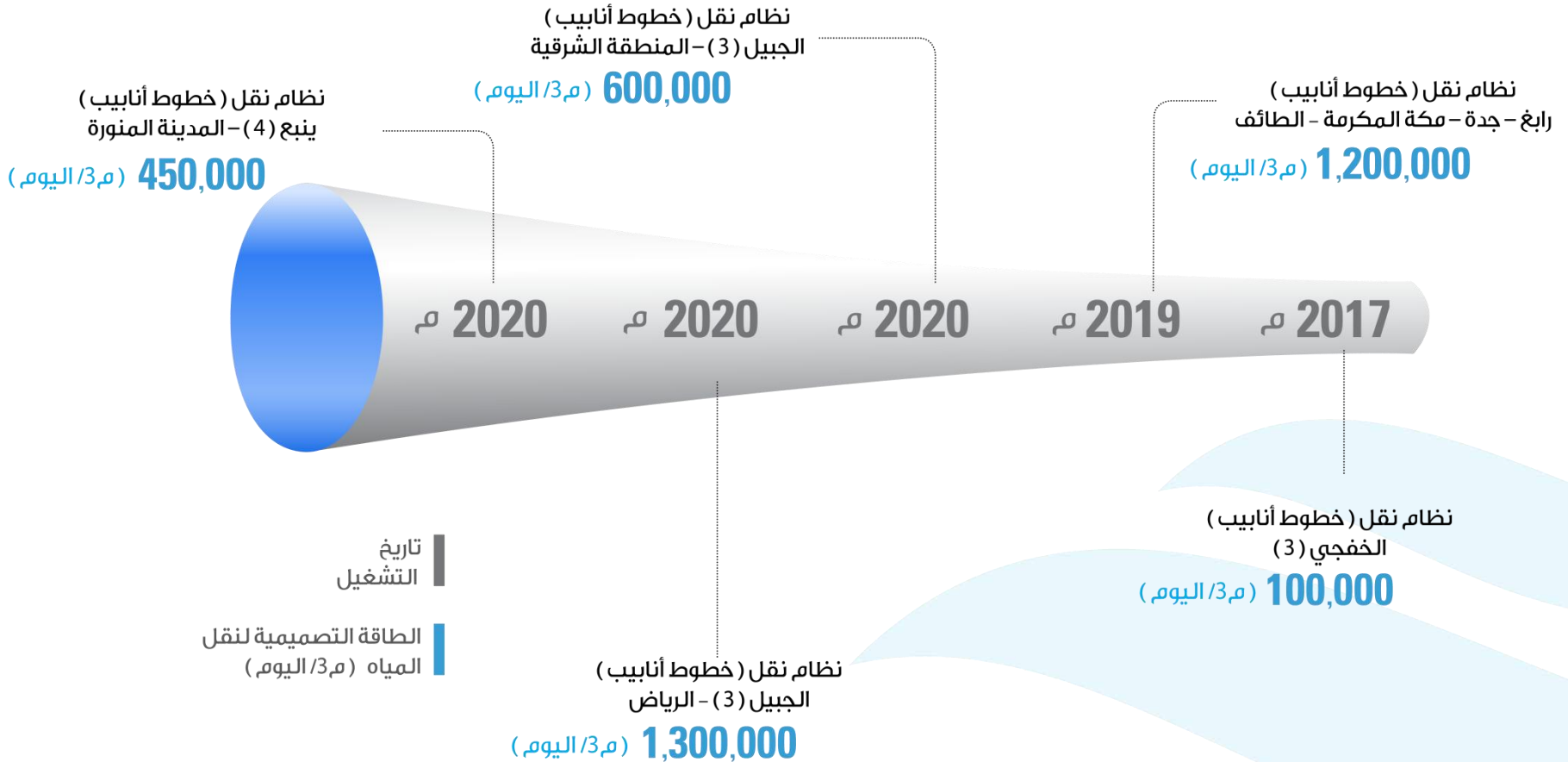


SWCC's Plan to Satisfy Future Water Demands

SWCC Plants (2015-2020)



Pipelines Under Design



SWCC Future Plants

Haqel 4

حقل (4)



7,500
(م/3 اليوم)

Dheba 5

ضبا (5)



12,000
(م/3 اليوم)

Alkhubar 4

الخبر (4)



775,000
(م/3 اليوم)

Shuqaiq 3

الشقيق (3)



325,000
(م/3 اليوم)

Shuaiba 4

الشعيبة (E)



850,000
(م/3 اليوم)

ينبع (5)



400,000
(م/3 اليوم)

رأس الخير (2)



1,000,000
(م/3 اليوم)

رابغ (4)



600,000
(م/3 اليوم)

جدة (5)



400,000
(م/3 اليوم)

Yanbu 5

Rasalkhair 2

Rabigh 4

Jeddah 5



Thank You



المؤسسة العامة لتحلية المياه المالحة
Saline Water Conversion Corporation

SWCC Vision & Mission

Strategic Goals

SWCC Vision

To pioneer and excel in seawater desalination industry and power generation

Mission

- 1 We will meet our customers' desalinated seawater and power needs
- 2 efficiently and reliably,
- 3 at the lowest cost possible and the highest economic return.
- 4 We will effectively grow and incentivize our people,
- 5 advance the desalination industry, and contribute to the social development of the Kingdom while
- 6 abiding by
- 7 security, safety and environmental regulations

Focus Areas	Strategic Goals
1 Customer Service	Meet our customers' desalinated seawater and power needs and provide our service with the highest quality and reliability
2 Operation Excellence	Enhance the operation efficiency and diversify our fuel portfolio.
3 Financial Sustainability	Achieve the highest economic return by optimizing revenues and streamlining costs
4 Human Resources	Develop, grow and incentivize employees and build local capabilities in a work environment that promotes teamwork, fairness, commitment and a sense of belonging
5 Economic Development	Participate actively in the development and localization of the desalination industry
6 Security and Safety	Conform to best practices in safety and security
7 Environment	Abide by environmental standards and regulations

التصديقات على إيصال مياه الشرب من مناطق لمكة حسب اصنافها واتجاهات جداولها في 2015م

المحطة (متر مكعب / اليوم)										
المجموع	المحطات الصغيرة (حقل - ضبا - الوجه - أمالج - رابغ - العزيزية - القنفذة - الليث - فرسان)	الخفجي	الشقيق	الشعبية	جدة	ينبع	الخبر	رأس الخير	الجبيل	المنطقة
1303800								434,000	869,800	منطقة الرياض
1,970,827	30,827			1,429,195	510,805					منطقة مكة المكرمة
412841						412,841				منطقة المدينة المنورة
926549		22,180					791,469		112,900	المنطقة الشرقية
30000									30,000	منطقة القصيم
										منطقة نجران
225000			225,000							منطقة عسير
82059	7059		75,000							منطقة جازان
40000				40,000						منطقة الباحة
										منطقة حائل
28,769	28,769									منطقة تبوك
										منطقة الجوف
										منطقة الحدود الشمالية
	66,655	22,180	300,000	1,469,195	510,805	412,841	791,469	434,000	1,012,700	المجموع

