



لشراء الطاقة والمياه  
POWER & WATER PROCUREMENT



**7** *year*  
**Statement**  
**WATER**  
(2026 – 2032)



# Contents

<b>Overview</b>	6
<b>SECTION 1 MAIN INTERCONNECTED SYSTEM</b>	7
1.1 Demand for Water	9
1.2 Water Supply Sources	11
1.3 Resources Adequacy & Development Plan	12
<b>SECTION 2 SHARQIYAH ZONE</b>	17
2.1 Demand for Water	18
2.2 Water Supply Sources	19
2.3 Resource Adequacy & Development Plan	19
<b>SECTION 3 DHO FAR ZONE</b>	21
3.1 Demand for Water	22
3.2 Water Supply Sources	23
3.3 Resource Adequacy & Development Plan	24

## List of Figures

<b>F-01</b>	The MIS average Water Demand Projections Classified by Zones	8
<b>F-02</b>	Water Demand Projections – MIS	10
<b>F-03</b>	Sources Adequacy & Development Plan – Muscat Zone	13
<b>F-04</b>	Sources Adequacy & Development Plan – Barka Zone	14
<b>F-05</b>	Sources Adequacy & Development Plan – Sohar Zone	16
<b>F-06</b>	Water Demand Projections – Sharqiyah Zone	18
<b>F-07</b>	Resource Adequacy & Development Plan – Sharqiyah Zone	20
<b>F-08</b>	Water Demand Projections – Dhofar Zone	23
<b>F-09</b>	Resource Adequacy & Development Plan – Dhofar Zone	25

## List of Tables

<b>T-01</b>	Water Desalination Plant - MIS	12
<b>T-02</b>	Water Desalination Plants - Sharqiyah Zone	19
<b>T-03</b>	Water Desalination Plants - Dhofar Water Network	24
<b>T-04</b>	Procurement Activities in 2025-2031 - Water Projects	26

## Glossary

<b>APSR</b> Authority for Public Services Regulation	<b>COD</b> Commercial Operation Date	<b>NDS</b> Nama Dhofar Services Company	<b>IWP</b> Independent Water Project
<b>IWPP</b> Independent Water and Power Project	<b>m<sup>3</sup></b> Cubic Metre(s)	<b>m<sup>3</sup>/d</b> Cubic Metres per Day	<b>MIS</b> Main Interconnected System
<b>MISC</b> Majis Industrial Services Company (SAOC)	<b>MSF</b> Multi-Stage Flash (Desalination Technology)	<b>NWS</b> Nama Water Services Company	<b>PWPA</b> Power & Water Purchase Agreement
<b>PWP</b> Nama Power and Water Procurement Company	<b>RFP</b> Request for Proposal	<b>RFQ</b> Request for Qualification	<b>RO</b> Reverse Osmosis (Desalination Technology)
	<b>SCOD</b> Scheduled Commercial Operation Date		



# Overview

## Introduction

This statement provides a 7-Year outlook for the water demand and the desalinated water supply in the Main Interconnected System (MIS), the Sharqiyah Zone, and the Dhofar Zone.

PWP annually prepares the 7-Year Statement in accordance with Condition 5 of its license. This is Issue 20, for the period from 2026 to 2032; previous issues and additional information are available at the PWP website: [www.omanpwp.om](http://www.omanpwp.om)

### Demand for Water

In the MIS, peak water demand is projected to increase at 3% per year, from 1,211 thousand m<sup>3</sup>/d in 2025 to around 1,483 thousand m<sup>3</sup>/d in 2032. In the Sharqiyah Zone, peak water demand is expected to increase at 4% per year, from 137 thousand m<sup>3</sup>/d in 2025 to 178 thousand m<sup>3</sup>/d in 2032.

In Dhofar Zone, peak water demand is expected to grow at 3% per year, from 201 thousand m<sup>3</sup>/d in 2025 to 240 thousand m<sup>3</sup>/d in 2032.

### Desalinated Water Requirements

In the MIS, Ghubrah III IWP with a capacity of 300,000 m<sup>3</sup>/d is currently under construction and is expected to commence commercial operation in 2027. Additionally, Nama Water Services (NWS) is considering the potential for an additional capacity of 150,000 m<sup>3</sup>/d in Sohar Zone, targeting an operational date of 2032.

In Dhofar Zone, Nama Dhofar Services (NDS) has requested PWP to develop the Dhofar Water 2030 IWP in Raysut with a capacity range of 80,000 m<sup>3</sup>/d to be operational by 2030.

### Procurement Activities

To address projected capacity deficits and ensure a reliable water supply, PWP is planning to procure the following IWPs over the coming years;

- 1 Dhofar Water 2030 IWP
- 2 North Batinah IWP



# Main Inter-connected System

## Main Interconnected System

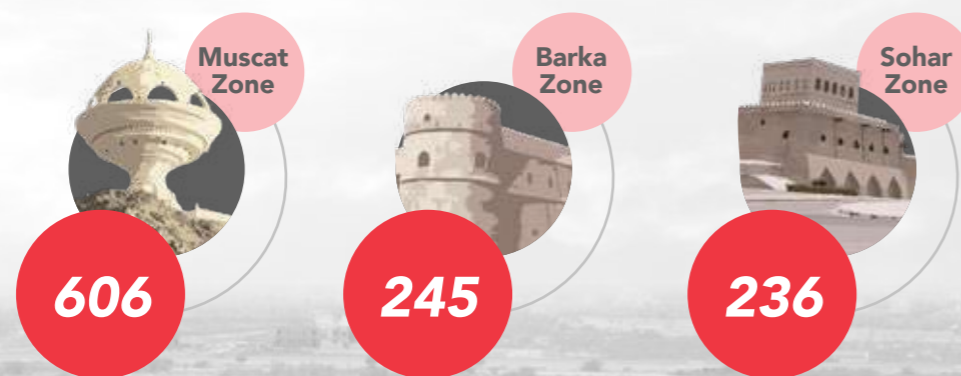
The Main Interconnected System (MIS) serves the largest population area and meets the highest potable water demand in the Sultanate of Oman. PWP supplies desalinated water to Nama Water Services (NWS), which manages transmission and distribution of potable water to end consumers.

The MIS is an integrated network supplying potable water to the Governorates of Muscat, South Al Batinah, North Al Batinah, Al Dakhiliyah, Al Buraimi, and Al Dhahirah.

The MIS consists of three supply zones (Muscat Zone, Barka Zone, and Sohar Zone), each with its own desalinated water sources contracted to PWP, additional NWS supply sources, and transmission infrastructure that enables water transfer between zones under NWS management.

As illustrated in F-01 below, the highest water demand is recorded in the Muscat Zone, while the Barka and Sohar Zones display similar demand levels.

**F-01** The MIS Average Water Demand Projections Classified by Zones



The Muscat Zone covers the potable water demand of the Muscat Governorate. Its desalinated water supply is primarily sourced from the Ghubrah II IWP, the Qurayyat IWP, and inter-zonal transfers from the Barka Zone. In addition, the Ghubrah Temporary RO Plant, Wadi Dhyqah Plant, and Qurayyat Small RO Plant are classified as NWS-operated sources, contributing approximately 30,000 m<sup>3</sup>/day, 35,000 m<sup>3</sup>/day, and 10,000 m<sup>3</sup>/day of desalinated water capacity to the network, respectively.

The Barka Zone serves the potable water demand of the South Al Batinah and Al Dakhiliyah Governorates. Its desalinated water supply is sourced from the Barka I IWPP (MSF), Barka II IWPP, Barka IV IWP, and inter-zonal transfers from the Sohar Zone.

The Sohar Zone meets the potable water demand of the North Al Batinah, Al Buraimi, and Al Dhahirah Governorates. The zone's desalinated water supply is sourced from the Sohar IV IWP and supplemented by interzonal transfers from the Barka Zone.

### 1.1 Demand for Water

NWS has provided PWP with projections for both average and peak water demand in the MIS Zone, as shown in F-02 below. Peak demand represents the average daily consumption -including network losses- during the week when the highest annual demand occurs.

The projections, presented in thousand cubic meters per day (000 m<sup>3</sup>/d), reflect the anticipated growth in water requirements driven by regional development, population expansion, and shifts in per-capita consumption trends.

The Muscat zone shows a modest but steady rise in both average and peak water demand over the projection horizon. The annual average growth rate is around 1%, consistent with a mature distribution network and stable population levels within the Governorate.

In the Barka zone, the water demand is expected to grow at an average rate of 3% per year. Aligning with the ongoing residential and commercial development in the Batinah South and Ad Dakhiliyah Governorates, supported by continued investment in infrastructure.

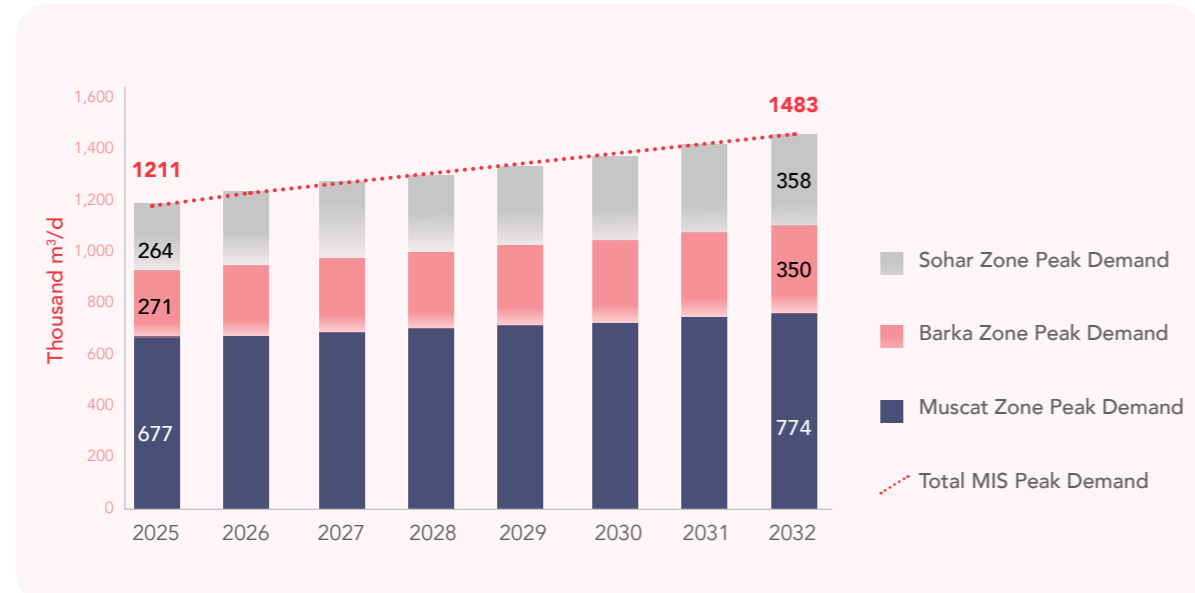
The Sohar zone records the highest average growth rate among the three, estimated at 3% annually. This reflects active industrial development in Al Buraimi, Ad Dhahirah, and Batinah North, together with population growth in emerging urban areas.

In 2025, actual average water demand in the MIS reached 1,088 thousand m<sup>3</sup>/d, exceeding the forecast by 44 thousand m<sup>3</sup>/d. For the MIS as a whole, NWS forecasts an average annual water demand growth rate of about 3% over the projection period to 2032. This aligns with last year's forecast, which also estimated a 3% annual growth rate through 2031.

This variation stems from a review of the forecasting model and its underlying assumptions, which had initially projected stronger growth rates in the early years, followed by gradual moderation in later years.



**F-02** Water Demand Projections – MIS



	2025 <sup>a</sup>	2026	2027	2028	2029	2030	2031	2032	Average Growth (%)
Thousand m³/d									
<b>Muscat Zone</b>	2%	2%	2%	2%	2%	2%	2%		
Peak Demand	677	689	701	714	728	742	758	774	2%
Average Demand	606	615	623	633	643	653	665	677	2%
<b>Barka Zone</b>	4%	4%	4%	4%	2%	4%	4%		
Peak Demand	271	281	291	303	315	322	336	350	4%
Average Demand	245	253	261	270	279	284	295	306	3%
<b>Sohar Zone</b>	4%	5%	5%	5%	3%	5%	5%		
Peak Demand	264	275	288	301	315	325	341	358	4%
Average Demand	236	246	255	266	277	284	297	310	4%
<b>Total MIS</b>									
Peak Demand	1,211	1,245	1,280	1,317	1,357	1,390	1,435	1,483	3%
Change from 2025-2031 Statement	(50)	(44)	(45)	(56)	(65)	(79)	(68)		
Average Demand	1,088	1,113	1,140	1,168	1,198	1,221	1,256	1,294	3%
Change from 2025-2031 Statement	(44)	(40)	(44)	(54)	(63)	(78)	(71)		

a - Estimated

**1.2 Water Supply Sources**

The water supply sources consist of existing water desalination plants, new desalination plants (under development or construction phases), and NWS sources. T-0 presents a summary of the desalination plants contracted with PWP within the MIS.

PWP's contracted desalinated water sources in the MIS are classified by Zone as follows:

**Muscat Zone:**

**Ghubrah II IWP.** Owned by Muscat City Desalination Company and operated under a Water Purchase Agreement (WPA) with PWP, the plant has a contracted desalination capacity of 191,000 m³/d using reverse osmosis (RO) technology.

**Qurayyat IWP.** Owned by Qurayyat Desalination Company and operated under a WPA with PWP, the plant has a contracted desalination capacity of 200,000 m³/d using RO technology.

**Ghubrah III IWP.** Awarded in November 2020 to Capital Desalination Company, and to be operated under a WPA with PWP. The plant is under construction and will have a contracted desalination capacity of 300,000 m³/d, using RO technology. The Commercial Operation Date (COD) is expected to commence in February 2027.

**Barka Zone:**

**Barka IWPP (MSF).** Owned by Barka Power and Water company a PWPA with PWP, the Barka IWPP was originally contracted with a desalination capacity of 91,200 m³/d using MSF technology. The purchase agreement for Barka IWPP was renewed on 30 May 2024. The current agreement provides contracted desalinated capacity of the MSF plant, which is intended to remain on a standby mode, to be utilised as a contingency reserve.

**Barka II IWP.** Owned by SMN Power Barka and operated under a WPA with PWP, the Barka II IWP has a capacity of 120,000 m³/d using RO technology.

**Barka IV IWP.** Owned by Barka Desalination Company and operated under a WPA with PWP, Barka IV IWP utilises RO technology with a contracted capacity of 281,000 m³/d.

**Barka V IWP.** Owned by GS Inima Barka-5 Desalination Company and operated under a WPA with PWP, the Barka V IWP has a capacity of 100,000 m³/d using RO technology.

**Sohar Zone:**

**Sohar IV IWP.** Owned by Myah Gulf Desalination Company and operated under a WPA with PWP, Sohar IV IWP utilises RO technology with a contracted capacity of 250,000 m³/d.



**T-01** Water Desalination Plant - MIS

	Contracted Capacity m <sup>3</sup> /d	Contract Type	Plant Owner	Plant Status	Tech-nology	Contract Expiry
Barka IWPP	91,200	PWPA	Barka Power and Water Co.	Operational	MSF	2032
Barka II IWPP	120,000	WPA	SMN Barka Power Co.	Operational	RO	2032
Barka IV IWP	281,000	WPA	Barka Desalination Co.	Operational	RO	2038
Barka V IWP	100,000	WPA	GS Inima Barka 5 Desalination Co.	Operational	RO	2043
Ghubrah II IWP	191,000	WPA	Muscat City Desalination Co.	Operational	RO	2034
Ghubrah III IWP	300,000	WPA	Capital Desalination Co.	Under Construction	RO	2046
Qurayyat IWP	200,000	WPA	Qurayyat Desalination Co.	Operational	RO	2037
Sohar IV IWP	250,000	WPA	Myah Gulf Desalination Co.	Operational	RO	2038

In addition to the desalinated water sources contracted with PWP, NWS operates several wellfields, temporary plant in Ghubrah, Qurayyat Small RO plant, Wadi Dhyqah across the MIS, that help reduce dependence on desalination capacity. The required production capacities from these sources are presented in aggregate by year in Figures 3, 4, and 5. In 2026, extraction from the wellfields remains necessary until the Ghubrah III IWP reaches full operational capacity in 2027. This continued reliance highlights the need to meet the increasing water demand during the transition period.

**1.3 Resources Adequacy and Development Plan**

The desalination capacity expansion plan aims to meet peak water demand, while maintaining a reserve margin (the headroom factor) to ensure supply security. NWS periodically reviews the reserve margin needed to achieve the targeted service level, which may differ by region and year. This review considers several factors, including planned and forced operational outages and uncertainties in demand forecasts. The reserve margin is projected at around 1.6% in 2026 and will increase to 3.4% by 2032, with an annual rise of approximately 0.3%.

PWP's assessment of sources adequacy and development plans is presented by the supply Zone. This approach highlights the extent of transfers between Zones, inter-zonal reserve sharing, and constraints that may not be evident in an aggregate overview of the MIS.

**Muscat Zone**

The Muscat Zone will be supplied by Ghubrah II IWP, Qurayyat IWP, NWS sources (Ghubrah Temporary, Wadi Dhayiqah, Qurayat small RO Plant and wellfields), as well as transfers from Barka Zone.

The local sources within the Muscat Zone are insufficient to meet the projected demand, making transfers from the Barka Zone essential to maintain supply balance.

There are two existing water transmission lines from the Barka Zone to the Muscat Zone: a dedicated line b Barka to Aseeb with a capacity of 100,000 m<sup>3</sup>/d, and a shared transmission line between Muscat and Ad Dakhiliyah governorate with a capacity of up to 312,000 m<sup>3</sup>/d.

The combined transfers of the available capacity of both transmission lines are approximately 242,000 m<sup>3</sup>/d, which is expected to be transferred from Barka to Muscat in 2025. This capacity is projected to decline to its lowest level in 2028 following the commercial operation of Ghubrah III IWP in 2027 and Wadi Dhayiqah in 2028. However, the transfers will rise again due to accelerating water demand growth in the Muscat Zone.

F-03 provides a summary of annual water supply requirements and supply sources for the Muscat Zone. For this Zone, transfers from Barka are required to meet the peak demand plus the "reserve" margin.

**F-03** Sources Adequacy and Development Plan – Muscat Zone





	2026	2027	2028	2029	2030	2031	2032
Muscat Zone Thousand m <sup>3</sup> /day							
Average Demand	615	623	633	643	653	665	677
Peak Demand	689	701	714	728	742	758	774
Peak Demand + Margin	699	714	730	745	762	781	800
<b>Contracted Capacity</b>	<b>391</b>	<b>691</b>	<b>691</b>	<b>691</b>	<b>691</b>	<b>691</b>	<b>691</b>
Ghubrah II IWP	191	191	191	191	191	191	191
Qurayyat IWP	200	200	200	200	200	200	200
Ghubrah III IWP <sup>a</sup>	0	300	300	300	300	300	300
NWS Sources	95	40	45	45	35	35	35
Ghubrah temporary RO-BOO	30	30	0	0	0	0	0
Wadi Dhyqah <sup>b</sup>	0	0	35	35	35	35	35
Qurayyat Small RO plant	10	10	10	10	0	0	0
Muscat wells (Khoud/Wadi)	55	0	0	0	0	0	0
<b>Planned Transfers</b>							
Transfers from Barka to Muscat (+/-)	214	-17	-6	9	36	55	74
<b>Total Muscat Zone Capacity +/- Planned Transfers</b>	<b>699</b>	<b>714</b>	<b>730</b>	<b>745</b>	<b>762</b>	<b>780</b>	<b>800</b>
Reserve including Planned Transfers over Peak Demand (shortfall)	11	13	16	17	20	23	26
Reserve including Planned Transfers over Peak Demand + Margin (shortfall)	0	0	0	0	0	0	0

a. The full capacity of 300,000 m<sup>3</sup>/d before summer 2027.

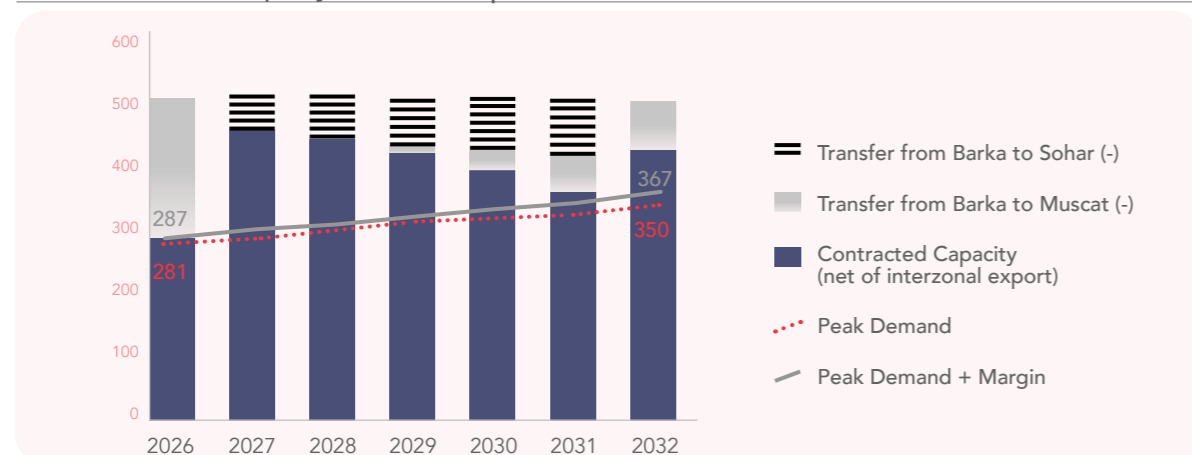
b. Wadi Dhayiqah, NDS sources with prospective capacity 35,000 m<sup>3</sup>/day, expected SCOD in 2028.

## Barka Zone

The Barka Zone is currently supplied by Barka II IWP, Barka IV IWP, Barka V, NWS wellfields source, and transfers from Sohar Zone. These sources currently exceed the Zone's demand requirements and allow transfers to support both the needs of Muscat Zone and Sohar Zone.

F-04 below presents the annual water supply requirements and sources for the Barka Zone. The Barka IWPP (MSF) PPA was renewed in 2024 for emergency support. The total contracted capacities of around 591,000 m<sup>3</sup>/d are expected to secure sufficient capacity to provide for demand growth in this supply Zone through 2032.

### F-04 Sources Adequacy and Development Plan – Barka Zone



	2026	2027	2028	2029	2030	2031	2032
Barka Zone Thousand m <sup>3</sup> /d							
Average Demand	253	261	270	279	284	295	306
Peak Demand	281	291	303	315	322	336	350
Peak Demand + Margin	287	299	312	325	335	350	367
<b>Contracted Capacity</b>	<b>501</b>	<b>501</b>	<b>501</b>	<b>501</b>	<b>501</b>	<b>501</b>	<b>501</b>
Barka I IWPP (MSF) <sup>a</sup>	-	-	-	-	-	-	-
Barka II IWP	120	120	120	120	120	120	120
Barka IV IWP	281	281	281	281	281	281	281
Barka V IWP	100	100	100	100	100	100	100
NWS Sources	0	0	0	0	0	0	0
<b>Planned Transfers From (-) /to (+) Barka</b>	<b>-214</b>	<b>-36</b>	<b>-58</b>	<b>-85</b>	<b>-114</b>	<b>-144</b>	<b>-74</b>
Transfer From Barka to Muscat (-/+)	-214	17	6	-9	-36	-55	-74
Transfer From Barka to Sohar (-)	0	-53	-64	-77	-78	-89	0
<b>Total Barka Zone Capacity</b>	<b>287</b>	<b>465</b>	<b>443</b>	<b>416</b>	<b>387</b>	<b>357</b>	<b>427</b>
Reserve including Planned Transfer over Peak Demand (shortfall)	7	174	140	101	65	21	76
Reserve including Planned Transfer over Peak Demand + Margin (shortfall)	0	166	131	90	52	7	60

a. Barka1 IWPP MSF contract was renewed in May 2024 for a period of 9 years, with a capacity of 91,000 m<sup>3</sup>/d.

## Sohar Zone

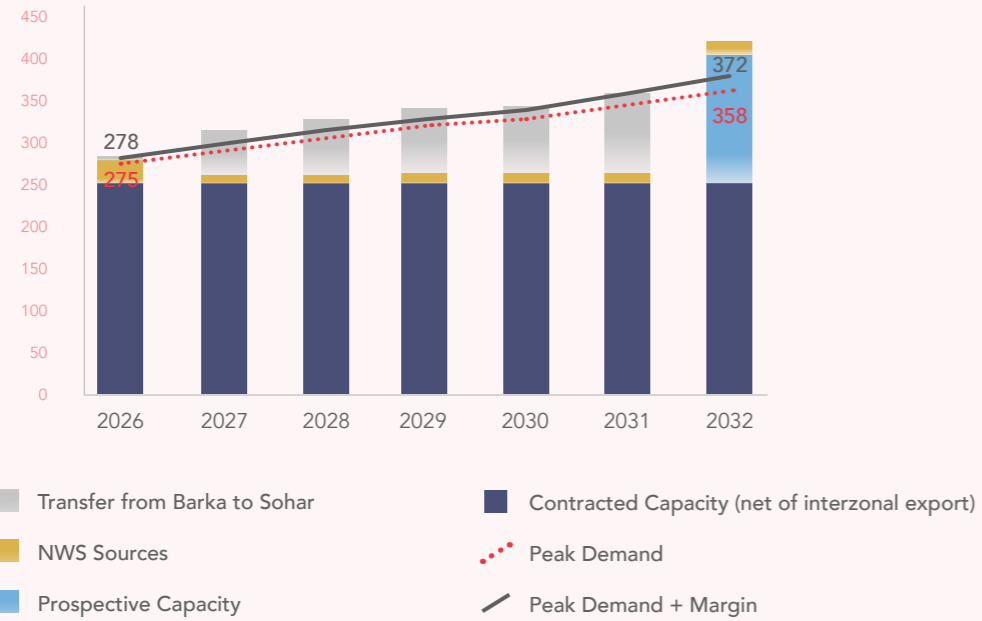
The Sohar Zone is currently supplied by the existing Sohar IV IWP, NWS sources including wellfields supply and transfers from the Barka Zone.

The available sources provide sufficient capacity to meet water requirements until 2030. NWS wellfields capacities are needed to meet the peak demand plus reserve margin.

A new North Batinah IWP with a capacity of 150,000 m<sup>3</sup>/d is being considered for 2032, which would be sufficient to cover the demand growth in the coming years. Procurement activities would begin once the pre-investment appraisal documents (PIAD) are finalized and approved by the Authority. Also, PWP is coordinating with NWS to secure a suitable site for this project. F-05 provides a summary of annual water supply requirements and supply sources for the Sohar Zone. The peak demand with the reserve margin in Sohar Zone during the years 2026 -2032 can be met with the existing and planned capacities.



## F-05 Sources Adequacy and Development Plan – Sohar Zone



	2026	2027	2028	2029	2030	2031	2032
Sohar Zone							
Thousand m <sup>3</sup> /d							
Average Demand	246	255	266	277	284	297	310
Peak Demand	275	288	301	315	325	341	358
Peak Demand + Margin	278	292	307	323	335	353	372
<b>Contracted Capacity</b>							
Sohar IV IWP	250	250	250	250	250	250	250
<b>Prospective Capacity Contracts</b>							
Northern Batinah IWP							150
<b>NWS Sources</b>							
Sohar Zone Wells Supply	28	10	11	12	12	14	16
Planned Transfers From (-) /to (+) Sohar	0	53	64	77	78	89	0
Transfers from Barka to Sohar	0	53	64	77	78	89	0
<b>Total Sohar Zone Capacity</b>	<b>278</b>	<b>313</b>	<b>325</b>	<b>338</b>	<b>341</b>	<b>353</b>	<b>416</b>
Reserve including Planned Transfers over Peak Demand (shortfall)	3	25	24	23	15	12	58
Reserve including Planned Transfers over Peak Demand + Margin (shortfall)	0	20	18	16	6	0	44



# SHARQIYAH ZONE

## Sharqiyah Zone

The Sharqiyah Zone serves the water demand of the North and South Sharqiyah Governorates, excluding Wilayat Musairah. It operates independently and is not interconnected with the Main Interconnected System (MIS).

PWP currently supplies desalinated water to NWS through two Independent Water Projects (IWPs): Sur II IWP and Aseelah IWP, which together form the primary production sources for the Zone.

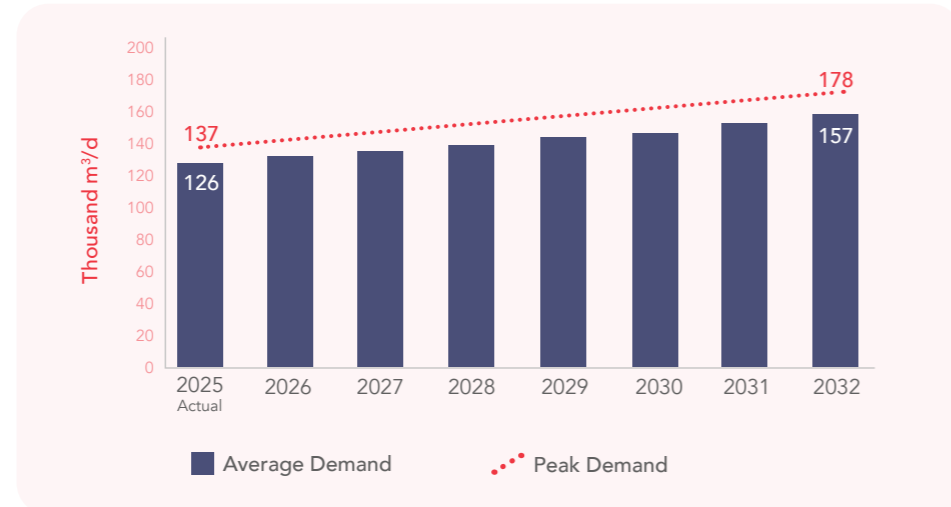
### 2.1 Demand for Water

F-06 presents the NWS water demand forecast for the Sharqiyah Zone. The Zone is supplied through the Sharqiyah Water Network, which is connected to the desalination plants operating under PWP contracts.

In 2025, the average actual water consumption in the Sharqiyah Zone is lower by 25,000 m<sup>3</sup>/d compared with the estimates provided in the previous 7-Year Statement, resulting in an average consumption of approximately 126,000 m<sup>3</sup>/d and a peak consumption of 137,000 m<sup>3</sup>/d. The notable increase in water demand anticipated for 2026 is driven by planned expansions of the distribution networks in the Wilayat of South Sharqiyah (Al-Kamil, Al-Wafi, Jalan Bani Bu Ali, and Jalan Bani Bu Hassan). Over the following years, the water demand growth is expected to slow down in the coming years due to anticipated improvement in reducing losses.

As shown in the F-06 below, the average annual water demand is projected to grow by 4% over the forecast period to reach 178,000 m<sup>3</sup>/d in 2032, peak demand is projected to increase at a rate of 3% per year, reaching 157,000 m<sup>3</sup>/d by 2032.

**F-06** Water Demand Projections – Sharqiyah Zone



	2025 <sup>a</sup>	2026	2027	2028	2029	2030	2031	2032	Average Growth (%)
Sharqiyah Zone	Thousand m <sup>3</sup> /d								
Peak Demand	137	143	149	154	160	164	171	178	4%
Change from 2024-2031 Statement	(27)	(18)	(17)	(11)	(7)	(8)	(4)		
Average Demand	126	130	134	138	143	145	151	157	3%
Change from 2025-2032 Statement	(25)	(18)	(16)	(10)	(6)	(8)	(4)		

<sup>a</sup> Estimated

### 2.2 Water Supply Sources

The supply sources available to meet water demand in the Sharqiyah Zone include desalinated water produced by plants contracted with PWP, along with groundwater resources managed by NWS. T-02 provides a summary of the contracted desalination sources, described as follows:

**Sur II IWP:** Owned and operated by the Sharqiyah Desalination Company under a Water Purchase Agreement (WPA) with PWP. The plant provides a contracted capacity of 132,000 m<sup>3</sup>/day and operates using reverse osmosis technology.

**Aseelah IWP:** Owned and operated by Al Aseelah Desalination Company under a WPA with PWP. The plant provides a contracted capacity of 80,000 m<sup>3</sup>/day and operates using reverse osmosis technology.

In addition to the desalination capacity under contract with PWP, NWS manages groundwater wellfields located at several sites within the Sharqiyah Zone. These wells can be used, to a limited extent, to supplement supply during periods when desalinated water capacity is insufficient to meet peak demand plus the required operating margin.

**T-02** Water Desalination Plants - Sharqiyah Zone

Project Name	Contracted Capacity	Contract Type	Project Company	Project Status	Technology	Contract Expiry
Sur II IWP	131,000 m <sup>3</sup> /d	WPA	Sharqiyah Desalination Company (SAOG)	Operational	RO	2036
Aseelah IWP	80,000 m <sup>3</sup> /d	WPA	Al Asilah Desalination Company (SAOC)	Operational	RO	2041

### 2.3 Resource Adequacy and Development Plan

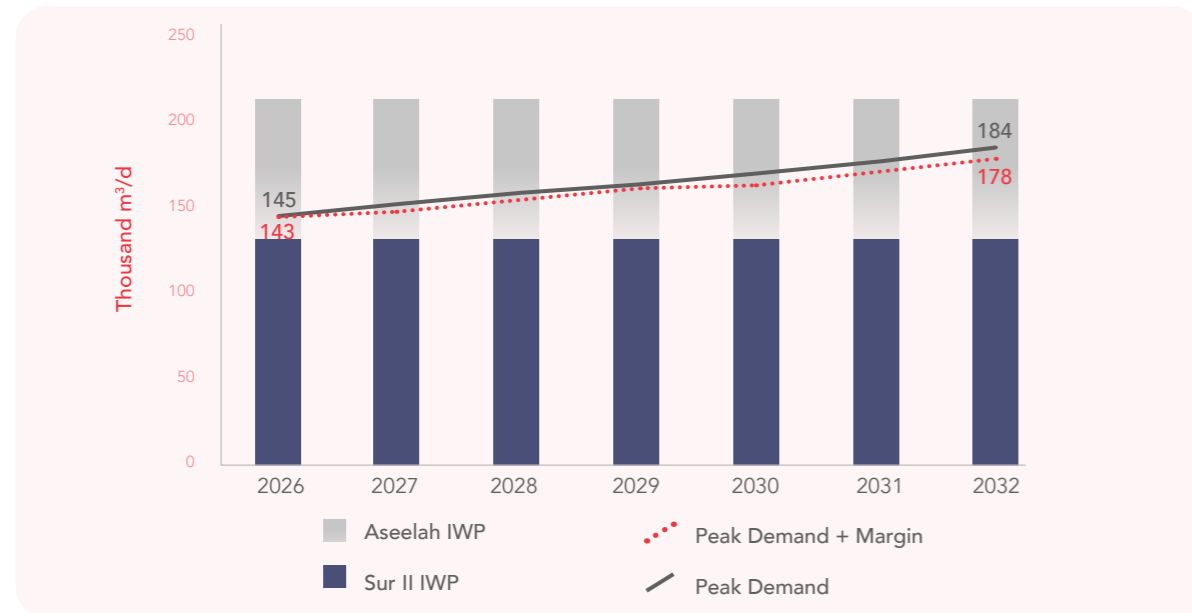
The annual average growth in the forecasted capacity requirement (peak demand plus margin) for the Sharqiyah Zone is projected at 4% over the planning horizon.



As illustrated in F-07, the currently contracted desalination capacity is sufficient to meet the capacity target through 2032. It is important to note that NWS is progressing with the expansion of its transmission and distribution networks within the Zone, which will influence future supply dynamics and overall system adequacy.

To address interim supply gaps during the network expansion period, NWS had initially considered using groundwater wells to supplement desalinated water supplies. However, based on the latest demand–supply assessment, no contribution from the wellfields is expected to be required throughout the planning horizon. The existing desalination capacity, combined with upcoming network improvements, is adequate to meet projected water demand without the need for groundwater extraction.

**F-07** Resource Adequacy and Development Plan – Sharqiyah Zone



	2026	2027	2028	2029	2030	2031	2032
<b>Sharqiyah Zone</b>							
Thousand m <sup>3</sup> /d							
Average Demand	130	134	138	143	145	151	157
Peak Demand	143	149	154	160	164	171	178
Peak Demand + Margin	145	151	157	164	169	176	184
Contracted Capacity	212	212	212	212	212	212	212
Sur II IWP	132	132	132	132	132	132	132
Aseelah IWP	80	80	80	80	80	80	80
<b>NWSC Sources</b>							
Required Wells Supply	0	0	0	0	0	0	0
<b>Total Sharqiyah Zone Capacity</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>
Reserve over Peak Demand (Shortfall)	69	63	58	52	48	41	34
Reserve over Peak Demand + Margin (Shortfall)	67	61	55	48	43	36	28

<sup>a</sup> Capacity requirement expected to be supplied by NWS to meet the Peak Demand + Margin.



# DHOFAR ZONE

## Dhofar Zone

NDS oversees the delivery of potable water to consumers and manages the development, operation, and maintenance of the Dhofar Water Network across Salalah, Taqah, and Mirbat. PWP supplies desalinated water to NDS through the Salalah IWPP and Salalah III IWP plants.

### 3.1 Demand for Water

The network's water demand projections were carefully developed and reviewed throughout 2024 and 2025, resulting in a high degree of accuracy. These projections continue to be closely monitored, with adjustments made as key factors-such as population growth and ongoing network expansion-evolve over time. The water demand projections for the Dhofar Water Network, provided by NDS and illustrated in the figure, presents the combined potable water demand for the Wilayats of Salalah, Taqah, and Mirbat.

*The forecast consists of two main components:*

**(1) Cities Demand:** Representing the water needs of Salalah, Taqah, and Mirbat cities currently supplied through the existing distribution network; and

**(2) Jabal Demand:** Covering the mountain areas of Salalah, Taqah, and Mirbat, where supply is still partially dependent on local wellfields. NDS aims to extend the water network to serve these Jabal communities throughout the forecast period.

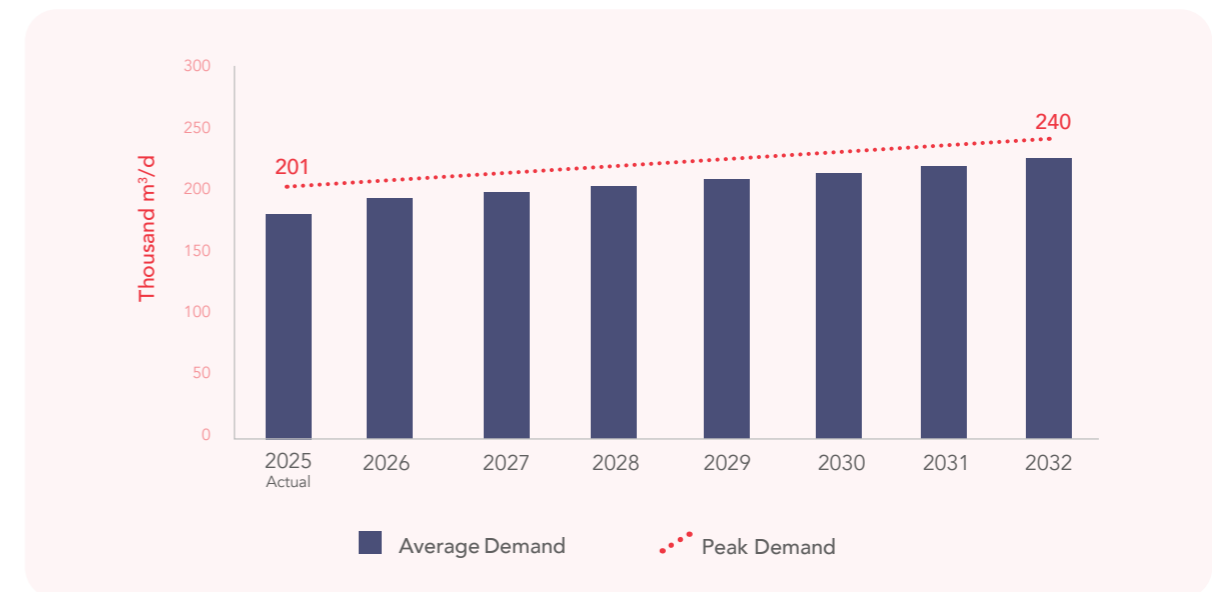
NDS had also planned to expand the existing network to cover a larger portion of the Jabal areas and to assess the feasibility of extending supply to nearby Wilayats such as Thumrait and Sadah. However, these initiatives have not yet been fully executed, and progress has been noticeably slow.

The actual average water demand (including losses) in 2025 was around 17,000 m<sup>3</sup>/day lower than projections in the previous 7-Year Statement (Issue 19). This decline indicates the need to reassess water demand forecasts through 2032 to better reflect current consumption trends. Despite this discrepancy, NDS has confirmed that its existing forecasts for the coming years will remain unchanged. As shown in F-08, average annual demand is expected to grow by 5% over the forecast horizon, reaching 225,000 m<sup>3</sup>/day by 2032, with mountain areas contributing about 33% of total demand. Peak demand is projected to increase at a slightly lower rate of 4% annually, reaching 240,000 m<sup>3</sup>/day by 2032.

PWP will continue monitoring monthly demand trends in Dhofar throughout 2025 and 2026, comparing actual consumption with forecast figures. Unless NDS updates its projections and refines its forecasting methodology, the gap between projected and actual demand is likely to widen in the coming years.

As shown in F-08, the average annual water demand is projected to grow by approximately 3% over the forecast horizon, reaching around 225,000 m<sup>3</sup>/day by 2032, with mountain areas contributing about 4% of the total demand. Peak demand is expected to increase at a slightly lower annual rate of 3%, reaching approximately 240,000 m<sup>3</sup>/day by 2032.

**F-08** Water Demand Projections – Dhofar Zone



### 3.2 Water Supply Sources

	2025a	2026	2027	2028	2029	2030	2031	2032	Average Growth (%)
<b>Peak Demand</b>									
	Thousand m <sup>3</sup> /d								
Cities	134	147	149	151	154	156	158	161	3%
Jabal	67	58	61	64	68	71	75	79	2%
Total	201	205	210	216	221	227	234	240	3%
Change from 2024-2031 Statement	(7)	(10)	(12)	(14)	(16)	(18)	(20)		
<b>Average Demand</b>									
Cities	122	137	139	141	143	146	148	150	3%
Jabal	57	55	58	61	64	68	71	75	4%
Total	179	192	197	202	207	213	219	225	3%
Change from 2024-2031 Statement	(17)	(10)	(11)	(13)	(15)	(17)	(19)		

The sources of water supply consist of desalinated water produced by plants contracted with PWP and groundwater operated by NDS. At present, PWP supplies NDS through two desalination plants, as summarized in T-03 and detailed below:

**Salalah IWPP:** This plant is owned and operated by Sembcorp Salalah Power and Water Company under a Power and Water Purchase Agreement (PWPA) with PWP. It has a contracted capacity of 68,190 m<sup>3</sup>/day (15 MIGD), using Reverse Osmosis (RO) technology, and was commissioned in 2012.

**Salalah III IWP:** This plant is owned by Dhofar Desalination Company and operating under a Water Purchase Agreement (WPA) with PWP. It has a contracted capacity of 113,650 m<sup>3</sup>/day (25 MIGD) using RO technology. It was commissioned in 2021. Alongside desalinated water, NDS operates groundwater sources to supplement supply when needed. NDS intends to prioritize desalinated water to meet both average and peak demand, while maintaining groundwater wells as a strategic reserve for emergency use only. As a core operational principle, desalinated water sources should be utilized first before relying on alternative supplies to support resource sustainability and maintain water quality standards.

### T-03 Water Desalination Plants - Dhofar Water Network

Project Name	Contracted Capacity	Contract Type	Project Company	Project Status	Technology	Contract Expiry
Salalah IWPP	68,190 m <sup>3</sup> /d	PWPA	Sembcorp Salalah Power & Water Company (SAOC)	Operational	RO	2037 <sup>a</sup>
Salalah III IWP	113,650 m <sup>3</sup> /d	WPA	Dhofar Desalination Company (SAOC)	Operational	RO	2040

### 3.3 Resource Adequacy & Development Plan

The resource adequacy analysis covers both Dhofar cities and Jabal demand, in line with NDS's proposed network expansion plan. NDS has estimated a headroom factor alongside its water demand projections, beginning at approximately 5% in 2026 and rising to around 6% by 2032.

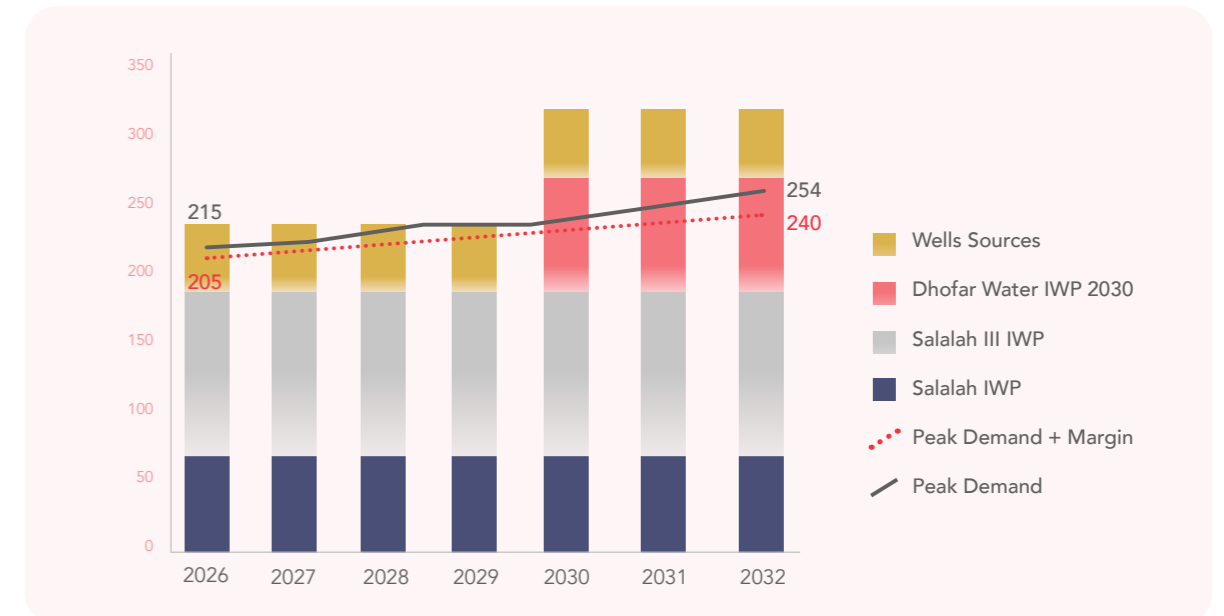
F-09 below illustrates the supply–demand balance, taking into account the planned network expansion to cover a wider share of the mountain areas. It also shows the continued reliance on groundwater sources in these regions, with a total available capacity of about 48 m<sup>3</sup>/d — representing the estimated maximum groundwater potential in the mountain area. Any additional needs beyond this level may be temporarily met through groundwater sources in nearby cities; however, this approach is not considered sustainable in the long term. It is worth noting, as shown in the figure below, that PWP has renewed the expired contract of the Salalah Sembcorp IWPP for an additional ten-year term, after its original expiry at the end of the first quarter of 2027.

On the other hand, NDS has requested an additional desalinated water capacity of 80,000 m<sup>3</sup>/d in 2030 to be located in the western region of Salalah, specifically in Raysut.

PWP is coordinating with NDS and other relevant parties to secure a suitable site for this project in the Raysut area or nearby area and to initiate the process of securing the necessary approvals prior to project development process.

In this context, PWP, in coordination with NDS, is working to obtain the required approvals from the Authority through the submission of the PIAD template for this project. PWP is also engaging with other relevant parties to identify and confirm an appropriate site in the Raysut area. In addition, the Authority has requested an additional study from NDS concerning the groundwater-based capacity available within the existing network.

### F-09 Resource Adequacy and Development Plan – Dhofar Water Network



	2026	2027	2028	2029	2030	2031	2032
Supply Requirements							
Thousand m <sup>3</sup> /d							
Peak Demand - Cities	147	149	151	154	156	158	161
Peak Demand - Jabal	58	61	64	68	71	75	79
<b>Total Peak Demand</b>	<b>205</b>	<b>210</b>	<b>216</b>	<b>221</b>	<b>227</b>	<b>234</b>	<b>240</b>
<b>Total Peak Demand + Margin</b>	<b>215</b>	<b>218</b>	<b>226</b>	<b>232</b>	<b>241</b>	<b>248</b>	<b>254</b>
Contracted Capacity							
Salalah IWPP	68	68	68	68	68	68	68
Salalah III IWP	114	114	114	114	114	114	114
Prospective Capacity							
Dhofar Water IWP 2030 <sup>a</sup>					80	80	80
NDS Sources							
Mountains Wells Supply <sup>b</sup>	38	38	38	38	38	38	38
Cities Wells Supply <sup>c</sup>	10	10	10	10	10	10	10
<b>Total Dhofar Zone Capacity including NDS Sources</b>	<b>230</b>	<b>230</b>	<b>230</b>	<b>230</b>	<b>310</b>	<b>310</b>	<b>310</b>
Reserve over Peak Demand (Shortfall)	25	20	14	9	83	77	70
Reserve over Peak Demand + Margin (Shortfall) <sup>d</sup>	15	12	4	(2)	69	63	56

a- NDS requested a capacity requirement in 2027.

b- NDS considered in its capacity planning an additional capacity requirement of 80,000 m<sup>3</sup>/d in 2030.

c- The expected capacity requirement to be supplied by NDS Mountains Wells (Salalah 21669 Tm<sup>3</sup>/d, Taqah 6820 Tm<sup>3</sup>/d and Mirbat 9288 Tm<sup>3</sup>/d).

### Procurement Activates

PWP's current and near-term procurement activities for water projects include the following, and are summarized in T-04:

For the Dhofar Water IWP 2030, the Authority confirms that development procedures cannot proceed until the completion of the hydrological study to determine the safe abstraction levels from the wellfields in the main system (Salalah, Taqah, and Mirbat), which is being carried out by Nama Dhofar Services (NDS). Following the Authority's approval, it will then confirm to the Company to proceed with the project development.

North Batinah IWP. In response to the growing demand in the Sohar Zone, PWP expects to start the procurement process after finalize PIAD study as requested from Authority for Northern Batinah IWP with a capacity of (150,000 m<sup>3</sup>/d), targeting an operational date of 2032 to address the capacity deficit in Sohar Zone. The procurement process is subjected to the PIAD study and Authority approvals.

**T-04** Procurement Activities in 2026-2032 - Water Projects

	System	Capacity (m <sup>3</sup> /day)	RFQ	RFP	Bids Due	Award Anticipated	SCOD
Dhofar Water IWP 2030	Dhofar Zone	80,000	TBD	TBD	TBD	TBD	TBD
North Batinah IWP	MIS	150,000	TBD	TBD	TBD	TBD	TBD

### Summary

The supply plan meets peak demand and margin requirements in the MIS, Sharqiyah, and Dhofar Zones throughout the forecast period across all three water networks and in different years. Dhofar Zone depends on NDS's resources (wells) to meet the peak demand even until the Dhofar water 2030 IWP is available in 2030. Similarly, Sohar Zone depends on transfers from Barka Zone to meet peak demand until the water capacity of Northern Batinah IWP becomes available in 2032.

The margin indicates the percentage rate over the peak demand. The shortfall in some years may be affected by delays in the development of planned projects, necessitating contingency plans with NWS and NDS.

PWP will collaborate with NWS and NDS to identify potential challenges and develop supply mitigation plans as necessary.





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