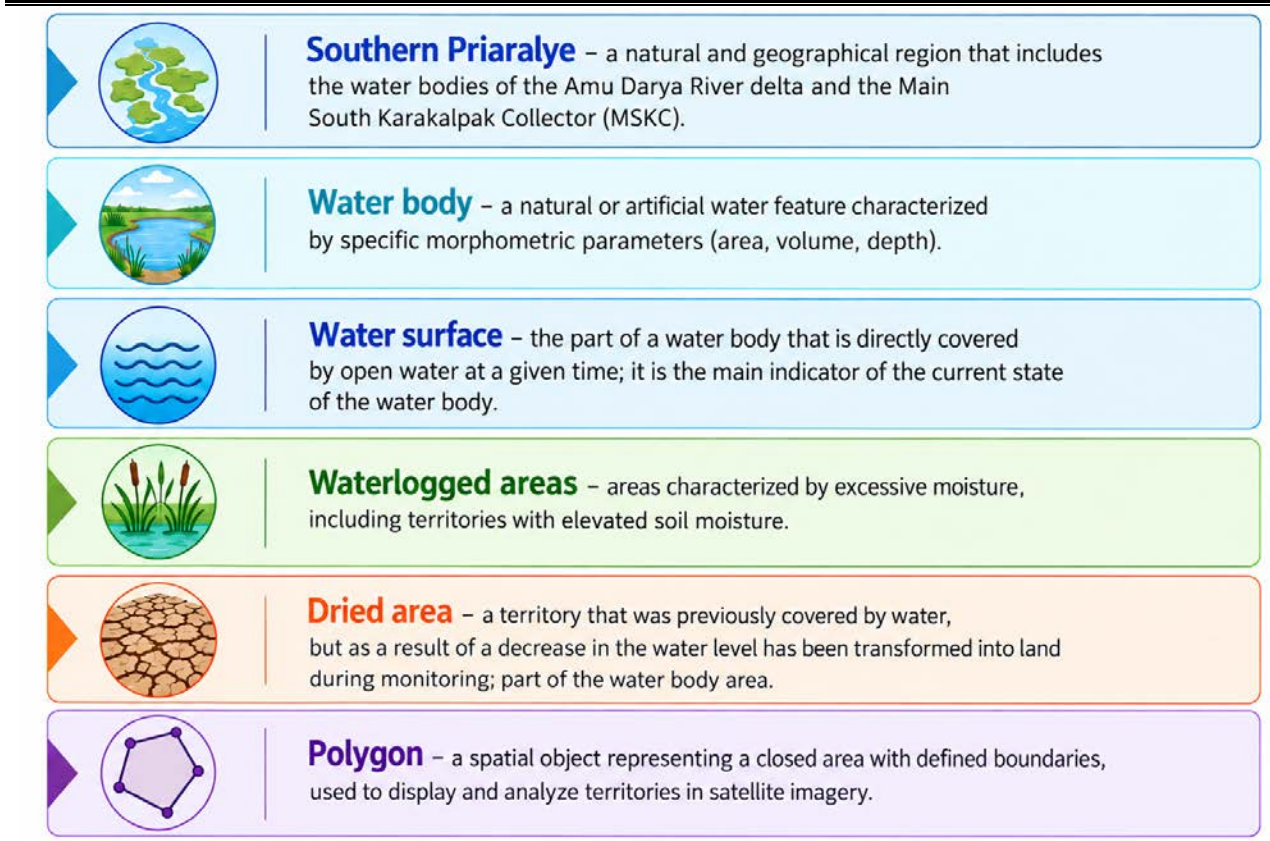
Monitoring results of changes in the water surface and waterlogged areas of the Aral Sea and the Aral Region
17 October 2026

The SIC ICWC conducts continuous remote monitoring of the Western and Eastern parts of the Greater Aral Sea and the water surface of the Southern Aral Sea region using Landsat 8,9 satellite imagery. Based on the satellite images, the areas of open water surface, waterlogged areas, and dried territories within the study polygon were determined. The monitoring results as of 17 October 2026 are presented in Figures 1–2 and Tables 1–6. Figure 3 presents the dynamics of the Amu Darya River discharge at the Samanbay gauging station.



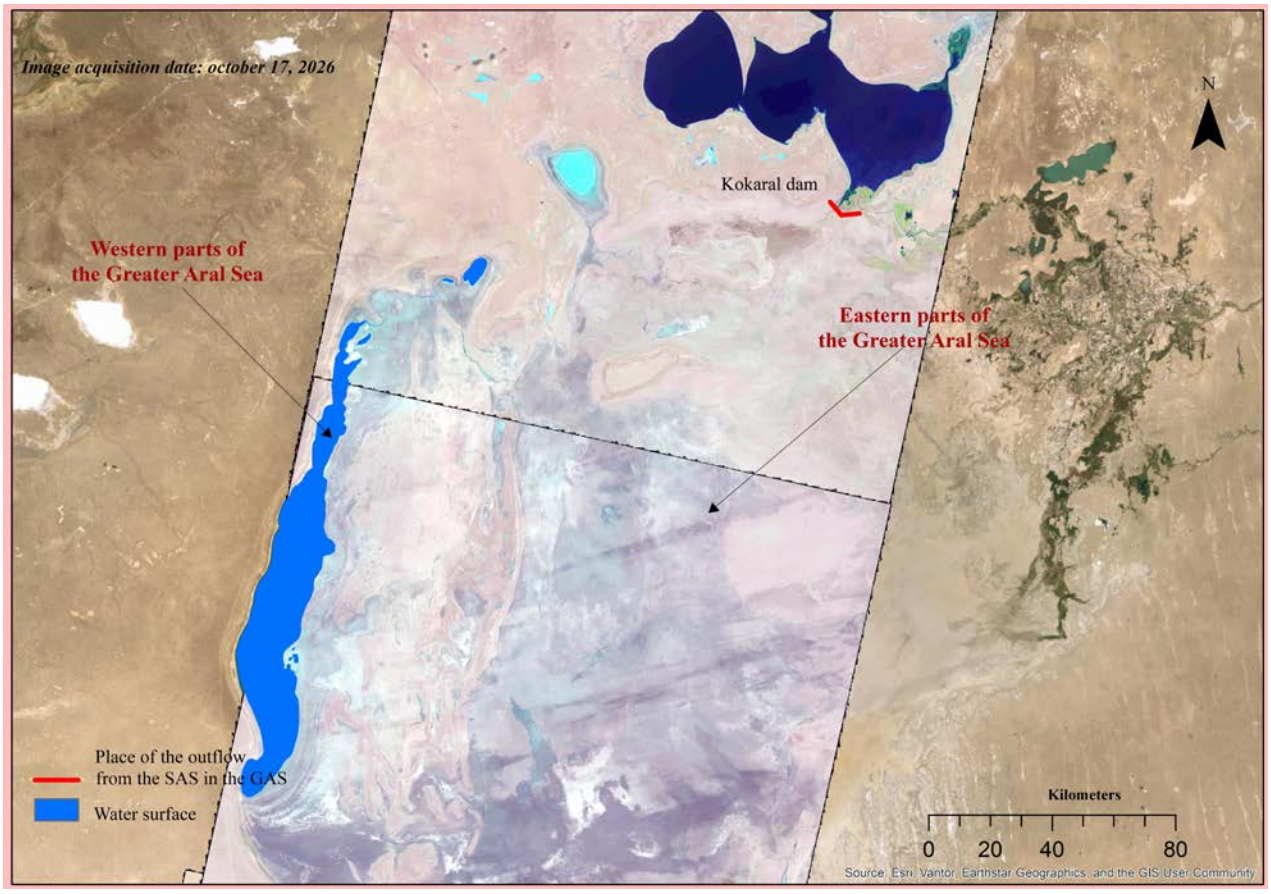


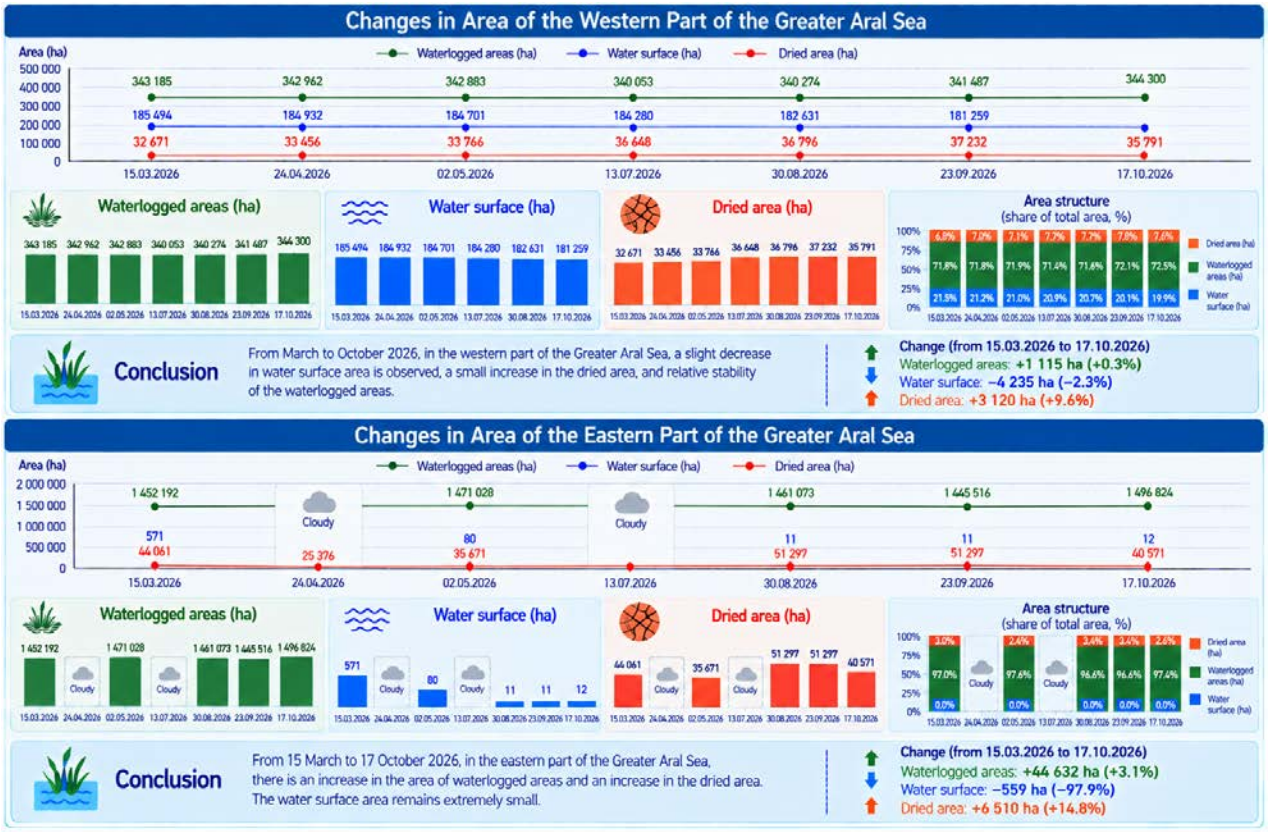
Figure 1. Western and Eastern parts of the Greater Aral Sea based on Landsat 8 imagery (October 17, 2026)

Table 1

The area of waterlogged areas, open water surfaces and dried area in the Western and Eastern parts of the Greater Aral Sea

	23.11.2025	**15.03.2026**	**24.04.2026**	**02.05.2026**	**13.07.2026**	**30.08.2026**	**23.09.2026**	**17.10.2026**
	Western part of the Aral Sea, ha							
Waterlogged areas	352274	343185	342962	342883	340056	340274	341487	344300
Water surface	186661	185494	184932	184701	184649	184280	182631	181259
Dried area	22415	32671	33456	33766	36648	36796	37232	35791
	Eastern part of the Aral Sea, ha							
Waterlogged areas	1483877	1452192	Cloudy	1471028	Cloudy	1461073	1445516	1496824
Water surface	37	571		420		80	11	12
Dried area	12910	44061		33766		35671	51297	40571

Following the regression of the Aral Sea, zones with shallow groundwater tables (0.5–3 m) formed on the desiccated seabed, facilitating capillary moisture rise and the maintenance of moist soils. These hydrogeological conditions provide the basis for the persistence of wetlands and the development of hydrophilic vegetation even in the absence of open surface water[1].



[1] Sektimenko V. The change in soil cover on the exposed bed of the Aral Sea. Journal of Marine Systems, 47(1–4), 121–125. DOI: 10.1016/j.jmarsys.2003.12.014

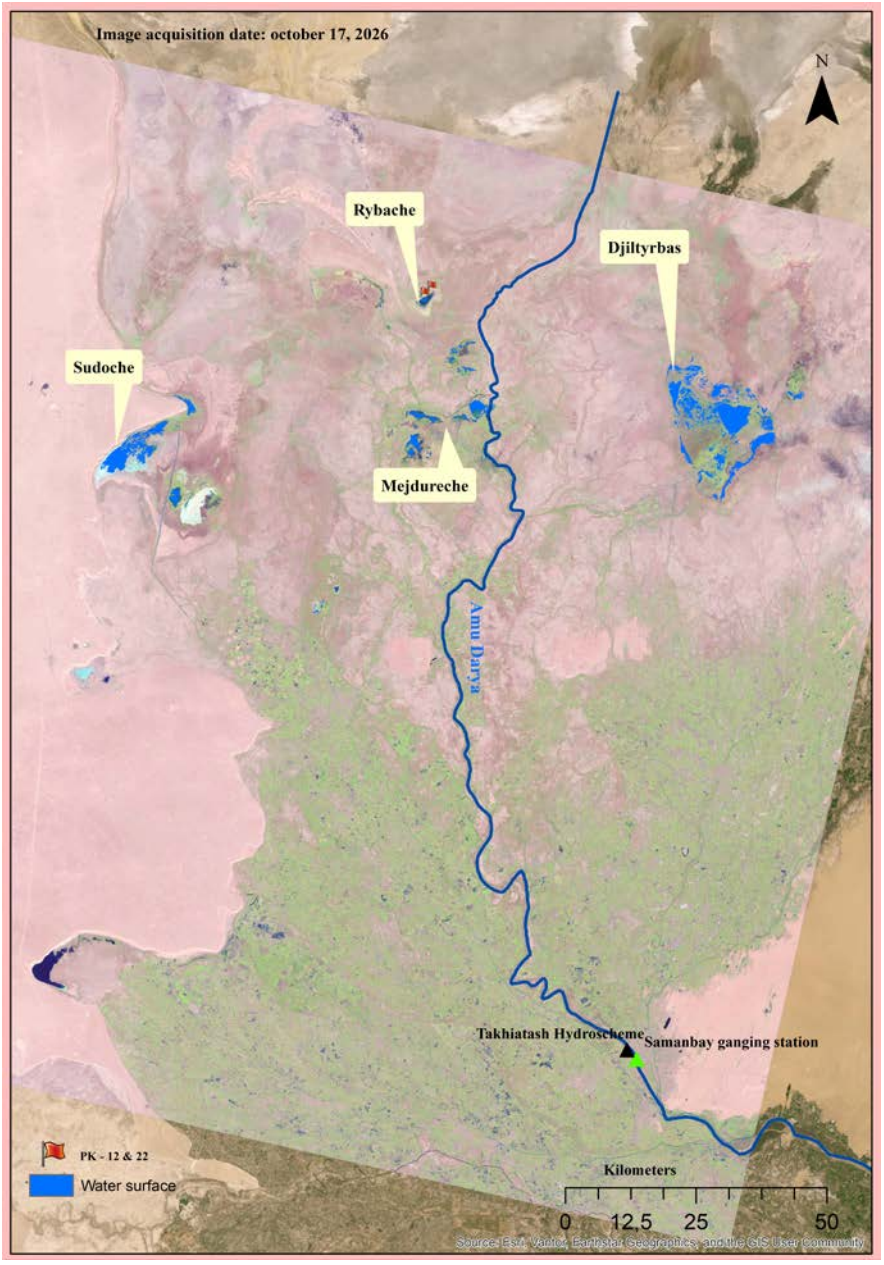


Figure 2. Southern Aral Sea region based on Landsat 9 imagery (October 17, 2026)

Table 2

Waterlogged areas of the Southern Aral Sea region, ha

Water body	**15.03.2026**	**02.05.2026**	**27.06.2026**	**13.07.2026**	**30.08.2026**	**23.09.2026**	**17.10.2026**
Sudoche	23170	8223	5280	7973	7404	8265	14384
Mejdureche	4301	715	634	805	965	985	1053
Rybache	1668	123	113	147	112	101	383
Muynak	3863	537	129	56	48	54	463
Djiltyrbas dam-terminated	17251	13167	1745	713	598	887	1826
Djiltyrbas (together with former right and left streams)	35929	6058	407	377	888	1064	1507
Dumalak	1731	21	4	4	1	0	0
Makpalkul	993	535	23	63	40	43	315
Mashan Karadjar	2826	602	206	118	75	102	689
Water surface southward of Muynak	3554	21	0	0	0	0	0
Water surface southward of Kazakhdarya	1453	10	0	0	0	0	0
Zakirkol	70	39	19	15	25	35	82
Total:	**96809**	**30051**	**8560**	**10271**	**10156**	**11536**	**20702**

Table 3

The area of open water surface in the Southern Aral Sea region, ha

Water body	**15.03.2026**	**02.05.2026**	**27.06.2026**	**13.07.2026**	**30.08.2026**	**23.09.2026**	**17.10.2026**
Sudoche	8198	12227	6228	5785	3245	2242	4137
Mejdureche	11718	9952	4182	5762	2441	2035	1645
Rybache	1543	1035	233	374	123	307	66
Muynak	1454	320	43	15	9	9	22
Djiltyrbas dam-terminated	12787	10654	5007	4741	4051	3484	3334
Djiltyrbas (together with former right and left streams)	1324	2606	69	18	28	15	257
Dumalak	2	0	0	0	0	0	0
Makpalkul	1817	817	56	128	72	100	345
Mashan Karadjar	1083	1026	284	198	48	40	121
Water surface southward of Muynak	158	0	0	0	0	0	0
Water surface southward of Kazakhdarya	0	0	0	0	0	0	0
Zakirkol	449	476	148	147	116	75	0
Total:	**40533**	**39113**	**16250**	**17168**	**10133**	**8307**	**9927**

Table 4

Dried area in the Southern Aral Sea region, ha

Water body	**15.03.2026**	**02.05.2026**	**27.06.2026**	**13.07.2026**	**30.08.2026**	**23.09.2026**	**17.10.2026**
Sudoche	41329	52247	61189	58939	62048	62190	54176
Mejdureche	21765	27117	32968	31217	34378	34764	35086
Rybache	8282	10335	11147	10972	11258	11085	11044
Muynak	10847	15307	15992	16093	16107	16101	15679
Djiltyrbas dam-terminated	17434	23651.39	40720	42018	42823	43101.39	42312
Djiltyrbas (together with former right and left streams)	61698	90287	98475	98556	98035	97872	97187
Dumalak	14317	16029	16046	16046	16049	16050	16050
Makpalkul	5874	7332	8605	8493	8572	8541	8024
Mashan Karadjar	23292	25573	26711	26885	27078	27059	26391
Water surface southward of Muynak	5893	9584	9605	9605	9605	9605	9605
Water surface southward of Kazakhdarya	3298.5	4741.5	4751.5	4751.5	4751.5	4751.5	4751.5
Zakirkol	2272.3	2276.3	2624.3	2629.3	2650.3	2681.3	2709.3
Total:	**216302**	**284480**	**328834**	**326205**	**333355**	**333801**	**323015**

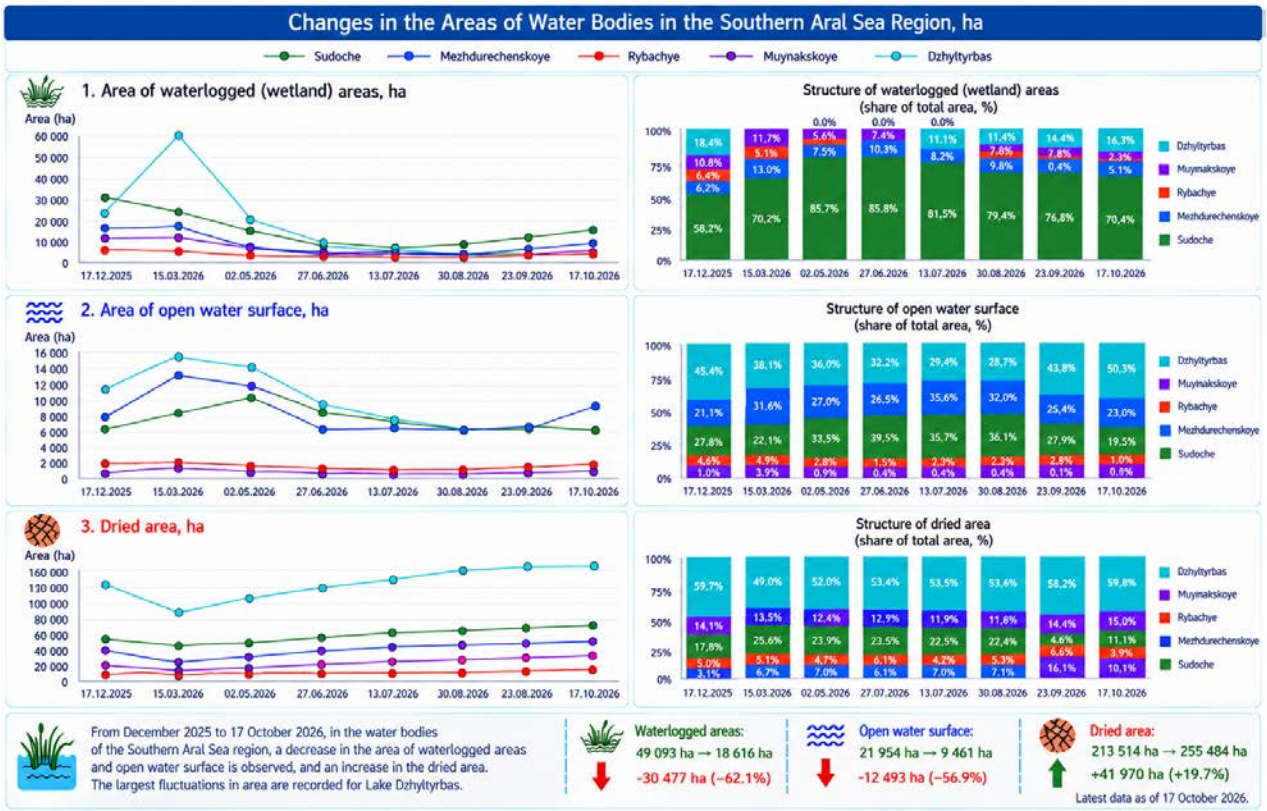


Figure 3. Dynamics of the Amu Darya River runoff at the Samanbay gauging station

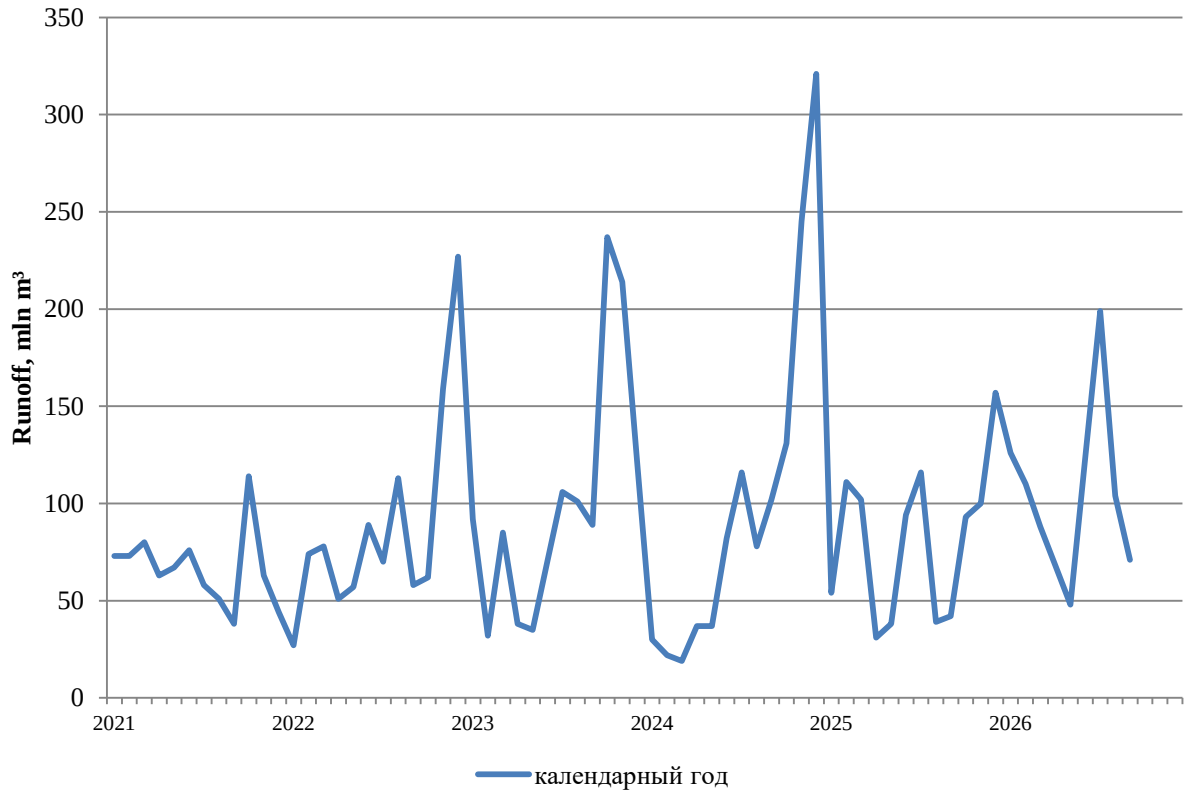


Table 5

Inflow to the Southern Aral Sea region, mln m3

Month	Delta			MSKC***	Total
	From Amu Darya River*	From canal systems**	Collector-drainage runoff**		
January	126	46	41	17	**230**
February	110	38	33	21	**202**
March	88	0	75	36	**199**
April	68	0	107	52.6	**227.6**
May	48	0	67	174.7	**289.7**
June	123	0	54	211.3	**388.3**
July	199	0	60	59.13	**318.13**
August	104	0	100	45.44	**249.44**
September	71	0	60	32.45	**163.45**

*Source: Uzhydrometeoservice (Samanbay) (fig. 2)

** Source: Ministry of Water Resources of the Republic of Uzbekistan (Suenli, Bozatau, and Kyzketken canals), (collectors KS-1, KS-3, KS-4, and KKS)

***Source: BWO “Amu Darya”

Table 6

Outflow to the Greater Aral Sea, mln m^3

Month	From Amu Darya River*	MSKC**	Outflow from SAS***	Total
January	0	17	0	**17**
February	0	21	0	**21**
March	0	36	0	**36**
April	0	52.6	0	**52.6**
May	0	174.7	0	**174.7**
June	0	211.3	0	**211.3**
July	0	59.13	0	**59.13**
August	0	45.44	0	**45.44**
September	0	32.45	0	**32.45**

* Aral Sea Delta Management Authority, Rybachye Dam, PK 12 and PK 22 (fig. 2)
**Source: BWO “Amu Darya”
*** The National Hydrometeorological Service of Kazakhstan (fig. 1)

The monitoring results are as follows:

1. **Western part of the Aral Sea.** As of 17 October 2026, compared with September 2026, the water surface area and dried area decreased by 1,372 ha and 1,441 ha, respectively, while the area of waterlogged areas increased by 2,813 ha.
2. **Eastern part of the Aral Sea.** As of 17 October 2026, compared with September 2026, the water surface area and waterlogged areas each increased by 1 ha, while the dried area decreased by 10,726 ha.
3. **Southern Aral Sea.** As of 17 October 2026, compared with September 2026, the total area of waterlogged areas increased to 20.7 thousand ha. The open water surface area increased to 9.9 thousand ha, while the dried area decreased to 323.0 thousand ha.
4. **Inflow to the Southern Aral Sea region.** In October 2026, the inflow volume amounted to 163.45 million m³. The main contribution came from the flow of the Amu Darya River, with additional water supplied by canals and the collector-drainage system.

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