

## **Monitoring the water surface and wetland areas dynamics in the Southern Priaralie (June 2011)**

The SIC ICWC has determined the open water surface areas in the Southern Priaralie for June 2011 by means of satellite images processing (Fig. 1, Table 1).

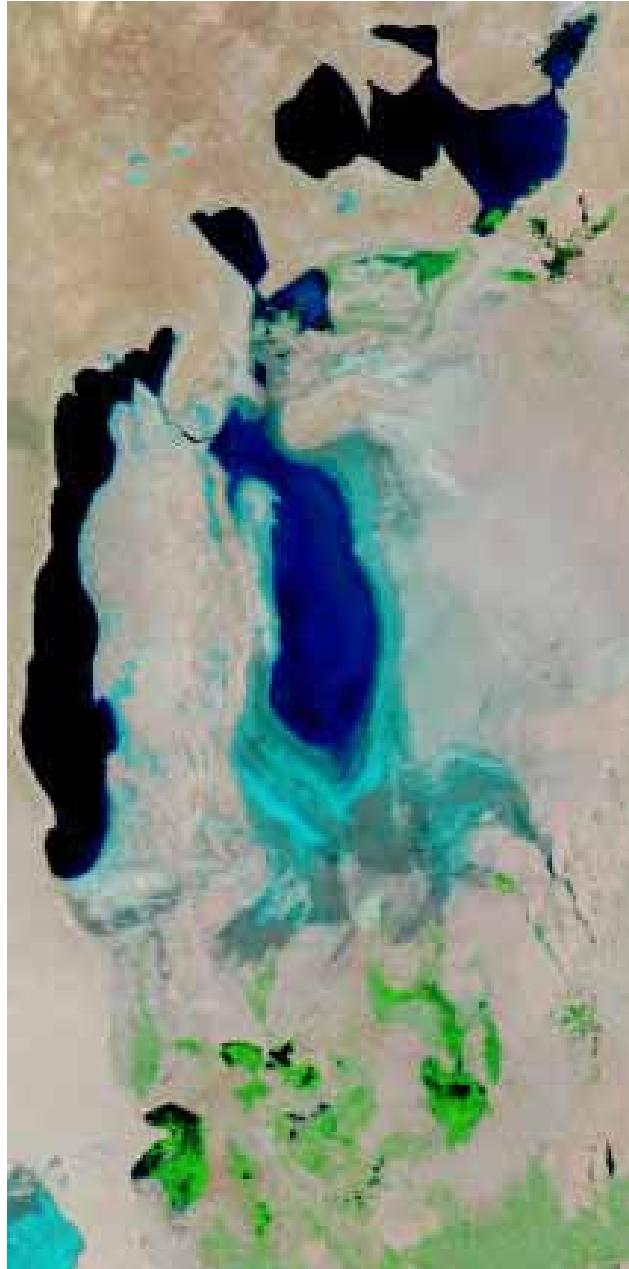
Only wetlands with open water surface as determined on the satellite images are presented in Table 1. For example, the Adjibay gulf former and the Adjibay wetland 2 etc. have no open water surface because of the relief and vegetation period in the Southern Priaralie.

Information about wetland areas in the Southern Priaralie as of June 2011 is in Table 2.

**Table 1**

**Comparison of open water areas, ha (March – June 2011)**

<b>Water body</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
Sudochie	37092,19	35913,96	33648,61	24485,28
Mejdurechenskoe	9129,81	9639,56	6782,32	4432,05
Rybachie	3794,98	5952,92	5147,21	4849,01
Muinakskoe	5182,66	5184,01	4272,57	3509,57
Djyltyrbas bounded by dam	13821,67	13976,22	10008,75	8317,50
Djyltyrbas (with the former right and left channels)	34609,06	29308,85	14233,13	11588,28
Dumalak	1506,72	1579,32	578,25	1152,46
Makpalkol	811,85	2533,15	1723,48	1871,28
Mashan-Karadjar	5269,31	6244,58	4472,06	2725,90
Wetland to the south from Muinak	2065,57	1562,82	853,12	-
Wetlands along the bed of the Kazakhdarya river	2976,06	4885,01	3139,67	1720,04
Zakirkol lake	546,38	1010,07	353,99	357,78
<b>Total</b>	<b>102984,59</b>	<b>103814,3</b>	<b>75204,41</b>	<b>56691,65</b>



**Fig. 1. Southern Priaralie and Big Aral Sea - June 2011**

Comparison of data of March (beginning of vegetation period in the Southern Priaralie) - June 2011 shows that a maximal water surface area of lakes was in April 2011.

Comparing water surface area for April and June shows some decreasing of water area:

- Sudochie – by 11,43 thousand ha;
- Mejdurechensky reservoir - by 3,21 thousand ha;
- Rybachie gulf – by 1,1 thousand ha;
- Muinaksky gulf-by 1,67 thousand ha;
- Djyltyrbas bounded by dam – by 5,66 thousand ha;
- Djyltyrbas wetland (with the former right and left channels) – by 17,72 thousand ha;
- Mashan-Karadjar lakes – by 3,52 thousand ha;

- Water area along the bed of the Kazakhdarya river – by 3,16 thousand ha.

Actually water surface area is decreased by 38.81 thousand ha from April till June, and wetland areas for the same period are increased by 86 thousand ha (Table 2).

**Table 2**

**Comparison of wetland areas, ha (March - June 2011)**

<b>Water body</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
Sudochie	-	29707,42	31547,52	33782,09
Mejdurechenskoe	-	1845,53	19181,39	18061,27
Rybachie	-	2163,22	3931,89	4247,80
Muinakskoe	-	7328,11	7830,41	9129,10
Djyltyrbas bounded by dam	-	18898,65	27340,65	33854,90
Djyltyrbas (with the former right and left channels)	-	46525,38	62930,40	84745,11
Former Adjibay gulf	12299,19	18773,25	19852,74	20320,06
Dumalak	2673,17	3403,11	10456,37	11247,56
Adjibay 2*)	-	2954,82	10785,62	11020,14
Makpalkol	375,91	415,89	9357,21	7548,23
Mashan-Karadjar	1873,21	4838,41	8596,91	9753,42
Wetland to the south from Muinak	-	6620,41	7216,25	7574,51
Wetland to the north-west from Muinak	3284,16	3372,18	3723,05	4815,21
Wetlands along the bed of the Kazakhdarya river	2784,36	5483,46	9634,70	14805,13
Zakirkol lake	734,35	1236,08	2177,82	2345,17
<b>Total</b>	<b>24024,35</b>	<b>153565,92</b>	<b>207222,28</b>	<b>239394,8</b>