

Monitoring the wetlands area dynamics in the Southern Priaralie (May 2011)

The water areas in the Southern Priaralie in May 2011 were determined in the SIC ICWC by Roschenko E.M. (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 May 2011 is in Table 2.



Fig. 1. Southern Priaralie and Big Aral Sea - May 2011

Table 1

Comparison of open water areas, ha (March, April, May 2011)

Water body	March 2011	April 2011	May 2011
Sudochie	37092,19	35913,96	33648,61
Mejdurechenskoe	9129,81	9639,56	6782,32
Rybachie	3794,98	5952,92	5147,21
Muinakskoe	5182,66	5184,01	4272,57
Djyltyrbas bounded by dam	13821,67	13976,22	10008,75
Djyltyrbas (with the former right and left channels)	34609,06	29308,85	14233,13
Dumalak	1506,72	1579,32	578,25
Makpalkol	811,85	2533,15	1723,48
Mashan-Karadjar	5269,31	6244,58	4472,06
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
Zakirkol lake	546,38	1010,07	353,99
Total	102984,59	103814,3	75204,41

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

Comparing water surface area for April and May shows some decreasing of water area of the following water bodies: Rybachiyy gulf, Muynak reservoir, Makpalkol lake - less than 1000 hectares.

More decreasing of water surface area is observed in:

- Mejdurechensky reservoir - by 2,86 thousand ha;
- Djyltyrbas bounded by dam – by 3,97 thousand ha;
- Wetland Djyltyrbas (with the former right and left channels) – 15,1 thousand ha;
- Mashan-Karadjar lakes – by 1,77 thousand ha;
- Water area along the bed of the Kazakhdarya river – by 1,75 thousand ha.

Actually water surface area is decreased by 29 thousand ha, and low water area approximately is fully covered by vegetation: as of April the low water area was 34 thousand ha. The wetland area for April-May 2011 is increased by 53.7 thousand ha (Table 2).

Table 2**Comparison of wetland areas, ha (March, April, May 2011)**

Water body	wetlands March	wetlands April	wetlands May
Sudochie	-	29707,42	31547,52
Mejdurechenskoe	-	1845,53	19181,39
Rybachie	-	2163,22	3931,89
Muinakskoe	-	7328,11	7830,41
Djyltyrbas bounded by dam	-	18898,65	27340,65
Djyltyrbas (with the former right and left channels)	-	46525,38	62930,40
Former Adjibay gulf	12299,19	18773,25	19852,74
Dumalak	2673,17	3403,11	10456,37
Adjibay 2*)	-	2954,82	10785,62
Makpalkol	375,91	415,89	9357,21
Mashan-Karadjar	1873,21	4838,41	8596,91
Wetland to the south from Muinak	-	6620,41	7216,25
Wetland to the north-west from Muinak	3284,16	3372,18	3723,05
Wetlands along the bed of the Kazakhdarya river	2784,36	5483,46	9634,70
Zakirkol lake	734,35	1236,08	2177,82
Total	24024,35	153565,92	207222,28