

## Monitoring the wetlands area dynamics in the Southern Priaralie

The wetland areas and opened water surface area in the Southern Priaralie for May 2012 are determined by SIC ICWC (Fig. 1, Tables 1,2).



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

**Table 1**

**Opened water surface area, ha  
(March, April, May 2012)**

| <b>Water Body</b>                                    | <b>March<br/>2012</b> | <b>April<br/>2012</b> | <b>May<br/>2012</b> |
|--|-----------------------|-----------------------|---------------------|
| Sudochie   | 14975,3               | 23067,14              | 16543,9             |
| Mejdurechenskoe                                      | 6546,5                | 9837,59               | 11693,9             |
| Rybacheie  | 3489,4                | 3390,12               | 4317,4              |
| Muinakskoe   | 1551,8                | 3128,61               | 1273,5              |
| Djyltyrbas bounded by dam                            | 10334,23              | 11496,17              | 13471,5             |
| Djyltyrbas (with the former right and left channels) | 12269,7               | 19721,56              | 15126,3             |
| Dumalak  | -                     | 1558,7                | -                   |
| Makpalkol  | 696,2                 | 4329,96               | 3958,4              |
| Mashan-Karadjar                                      | 671,5                 | 3197,72               | 3182,6              |
| Wetland to the south from Muinak                     | -                     | 284,51                | -                   |
| Wetlands along the bed of the Kazakhdarya river      | -                     | -                     | -                   |
| Zakirkol lake  | -                     | 384,61                | 157,2               |
| <b>Total</b>   | <b>50534,63</b>       | <b>68900,52</b>       | <b>69724,7</b>      |

Wetland areas for 2012 in the Southern Priaralie are given in Table 2. Data for April and May 2012 is given in Table 2 because in March 2012 there was no vegetation in growing stage in the Southern Priaralie.

**Table 2**  
**Wetland areas, ha (April, May 2012)**

| Water body   | Wetlands<br>April | Wetlands<br>May |
|--|-------------------|-----------------|
| Sudochie   | 27884,58          | 35723,4         |
| Mejdurechenskoe                                      | 2413,87           | 8892,2          |
| Rybacheie  | 1347,91           | 4392,7          |
| Muinakskoe   | 3589,87           | 7328,1          |
| Djyltyrbas bounded by dam                            | 27423,56          | 32758,5         |
| Djyltyrbas (with the former right and left channels) | 42581,47          | 70354,1         |
| Former Adjibay gulf                                  | 11351,59          | 11986,3         |
| Dumalak  | 1423,54           | 3681,7          |
| Adjibay 2*)  | 4225,36           | 6831,4          |
| Makpalkol  | 773,41            | 4026,7          |
| Mashan-Karadjar                                      | 2871,43           | 10082,3         |
| Wetland to the south from Muinak                     | 521,32            | 625,7           |
| Wetland to the north-west from Muinak                | 3498,10           | 3516,7          |
| Wetlands along the bed of the Kazakhdarya river      | 283,52            | 854,7           |
| Zakirkol lake  | 124,17            | 789,2           |
| <b>Total</b>   | <b>102890,1</b>   | <b>201843,7</b> |

Water surface area of the Eastern and Western parts of the Big Aral Sea was estimated using satellite images:

- Eastern Sea – 2137,4 km<sup>2</sup>
- Western Sea – 3821,9 km<sup>2</sup>

According the bathymetric chart the estimated areas correspond to the following levels:

- Eastern Sea: May 2012 ≈ 27,5 m; Volume at the level ≈ 2,75 km<sup>3</sup>
- Western Sea: May 2012 ≈ 27,5 m; Volume at the level ≈ 52,1 km<sup>3</sup>