

Annex 1 A. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for Africa.

| COSCAT Nr. | COSCAT name                  | A (M km <sup>2</sup> ) | Q (km <sup>3</sup> /y) (nat if avail.) | Rivers documented                | Doc. conc. of DSi (mg/l) | Ref.                                  | % of Q doc. | % of A doc. | % of Si flux doc. | DSi (mg/l) conc. used f. extrapolation | Extrapolation method      | Budget Results (SiO <sub>2</sub> ) |             |                              |       |
|------------|------------------------------|------------------------|--|----------------------------------|--------------------------|---------------------------------------|-------------|-------------|-------------------|--|---------------------------|------------------------------------|-------------|------------------------------|-------|
|            |                              |                        |  |                                  |                          |                                       |             |             |                   |  |                           | Concentration (mg/l)               | Flux (Mt/y) | Yield (t/km <sup>2</sup> /y) |       |
| 0001       | Algerian Basin               | 0.255                  | 22.00                                  | -                                | -                        |                                       | 0           | 0           | 0                 | 8.0                                    | As Sebou, Sous            | 8.0                                | 132.8       | 0.18                         | 0.69  |
| 0002       | South Ionian Sea             | 2.255                  | 1.07                                   | -                                | -                        |                                       | 0           | 0           | 0                 | 8.0                                    | As Sebou, Sous            | 8.0                                | 132.8       | 0.01                         | 0.00  |
| 0003       | East Mediterranean           | 4.525                  | 83.20                                  | Nile                             | 12.8                     | 96010                                 | 100         | 63.4        | 100               | -                                      |                           | 12.8                               | 212.5       | 1.06                         | 0.4   |
| 0004       | West Red Sea                 | 0.331                  | 4.79                                   | -                                | -                        |                                       | 0           | 0           | 0                 | 18.0                                   | As Blue Nile              | 18.0                               | 298.8       | 0.09                         | 0.26  |
| 0005       | South Aden Gulf              | 0.103                  | 0.00                                   | -                                | -                        |                                       | 0           | 0           | 0                 | 15.0                                   | Estimate                  | 15.0                               | 249.0       | 0.00                         | 0.00  |
| 0006       | Somali Coast                 | 1.357                  | 18.40                                  | Tana (Kenya)                     | 20.0                     | 95001                                 | 25.8        | 3.1         | 31.7              | 15.0                                   | Estimate                  | 16.3                               | 270.4       | 0.30                         | 0.22  |
| 0007       | Zanzibar Coast               | 0.854                  | 160.04                                 | -                                | -                        |                                       | 0           | 0           | 0                 | 15.0                                   | Mainly as Zambezi         | 15.0                               | 249.0       | 2.40                         | 2.81  |
| 0008       | North Madagascar Coast       | 0.169                  | 114.18                                 | -                                | -                        |                                       | 0           | 0           | 0                 | 15.0                                   | Mainly as Zambezi         | 15.0                               | 249.0       | 1.71                         | 10.14 |
| 0009       | Mascarenes-Madagascar Basin  | 0.208                  | 190.02                                 | -                                | -                        |                                       | 0           | 0           | 0                 | 15.0                                   | Mainly as Zambezi         | 15.0                               | 249.0       | 2.85                         | 13.70 |
| 0010       | South West Madagascar        | 0.239                  | 69.43                                  | -                                | -                        |                                       | 0           | 0           | 0                 | 15.0                                   | Mainly as Zambezi         | 15.0                               | 249.0       | 1.04                         | 4.36  |
| 0011       | Mozambique Coast             | 1.732                  | 434.64                                 | Zambezi                          | 15.5                     | 77049                                 | 24.4        | 76.8        | 25.0              | 15.0                                   | Mainly as Zambezi         | 15.1                               | 251.0       | 6.57                         | 3.79  |
| 0012       | Agulhas Basin                | 0.876                  | 37.93                                  | Limpopo                          | 17.7                     | 63024                                 | 68.5        | 50.2        | 68.5              | 17.7                                   | As Limpopo                | 17.7                               | 293.8       | 0.67                         | 0.77  |
| 0013       | Cape Basin                   | 1.295                  | 11.44                                  | Orange                           | 16.9                     | 62008                                 | 99.3        | 77.2        | 99.3              | 16.9                                   | As Orange                 | 16.9                               | 280.5       | 0.19                         | 0.15  |
| 0014       | Angola Basin                 | 4.380                  | 1505.91                                | Congo / Zaire                    | 10.4                     | 92054                                 | 79.7        | 84.4        | 77.2              | 12.0                                   | Estimate                  | 10.7                               | 177.4       | 16.09                        | 3.67  |
| 0015       | Sao Tome - Principe Basin    | 0.527                  | 418.47                                 | Sanaga, Ogooue, Nyong            | 15.5, 11.4, 7.1          | 78173, Est. van Bennekom MI 103       | 50.5        | 65.1        | 50.5              | 12.4                                   | Mean of documented values | 12.4                               | 205.4       | 5.18                         | 9.82  |
| 0016       | Niger Delta Cone             | 2.461                  | 423.62                                 | Niger                            | 14.0                     | 91096                                 | 36.4        | 48.8        | 34.8              | 15.0                                   | Estimate                  | 14.6                               | 243.0       | 6.20                         | 2.52  |
| 0017       | Guinea Basin                 | 0.778                  | 137.65                                 | Bandama, Comoe, Sassandra, Volta | 19.9, 14.9, 20.8, 17.0   | 94035, 82055, 82055, Estimate Pre-dam | 50.6        | 83.8        | 50.6              | 18.4                                   | Mean of documented values | 18.4                               | 304.8       | 2.53                         | 3.25  |
| 0018       | Sierra Leone Basin           | 0.257                  | 367.85                                 | Cavally, Konkoure                | 18.0, 5.6                | 82055, 90093                          | 9.5         | 17.4        | 9.8               | 10.0                                   | Estimate                  | 10.0                               | 166.5       | 3.69                         | 14.36 |
| 0019       | Cape Verde Basin             | 1.105                  | 122.76                                 | Senegal, Gambia                  | 11.9, 10.8               | 63024, 84072                          | 23.9        | 43.7        | 26.9              | 10.0                                   | Estimate                  | 10.4                               | 172.9       | 1.28                         | 1.16  |
| 0020       | South Canary Basin           | 2.175                  | 0.00                                   | -                                | -                        |                                       | 0           | 0           | 0                 | 10.0                                   | Estimate                  | 10.0                               | 166.0       | 0.00                         | 0.00  |
| 0021       | North Canary / Madeira Basin | 0.361                  | 9.45                                   | Sebou, Sous                      | 10.6, 7.3                | 89014, 89014                          | 70.0        | 15.2        | 70.0              | 10.4                                   | Mean of documented values | 10.4                               | 173.4       | 0.10                         | 0.27  |
| Total      | Africa                       | 23.244                 | 4132.85                                | 20 rivers documented             | 11.7                     |                                       | 46.9        | 46.3        | 43.5              | 13.4                                   |                           | 12.6                               | 209.4       | 52.14                        | 1.99  |

References : 62008 De Villiers (1962), 63024 Livingstone (1963), 77049 Hall et al. (1977), 78173 Olivry and Noah (1978), 82055 Iltis and Leveque (1982), 84072 Lesack et al. (1984), 89014 Snoussi et al. (1989), 90093 Meybeck pers. comm., 91096 Degens et al. (1991), 92054 Meybeck pers. comm., 94035 Bahire (1994), 95001 GEMS (1995), 96010 Meybeck (1996), MI 103 Meybeck pers. comm..

Annex 1 B. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006), Europe & Greenland.

| COSCAT Nr. | COSCAT name           | A (M km <sup>2</sup> ) | Q (km <sup>3</sup> /y) (nat if avail.) | Rivers documented                                 | Doc. conc. of DSi (mg/l)              | Ref.  | % of Q doc. | % of A doc. | % of Si flux doc. | DSi (mg/l) conc. used f. extrapolation | Extrapolation method      | Budget Results (SiO <sub>2</sub> ) |             |                              |      |
|------------|-----------------------|------------------------|--|---|---------------------------------------|---|-------------|-------------|-------------------|--|---------------------------|------------------------------------|-------------|------------------------------|------|
|            |                       |                        |  |   |                                       |   |             |             |                   |  |                           | Concentration (mg/l)               | Flux (Mt/y) | Yield (t/km <sup>2</sup> /y) |      |
| 0401       | Iberian-Biscay Plains | 0.819                  | 218.28                                 | Loire, Seine, Garonne, Guadalquivir, Adour, Minho | 8.0; 6.3<br>4.0<br>15.0<br>12.0; 3.6  | 83247; 94036<br>82092<br>77144<br>89014; 74111      | 41.7        | 41.2        | 43.0              | 7.0                                    | Estimate                  | 7.1                                | 118.7       | 1.56                         | 1.91 |
| 0402       | Hutton-Rockall Basin  | 0.231                  | 165.44                                 | Thjorsa, Olfusa                                   | 14.4<br>14.4                          | 94030<br>94030                                      | 16.0        | 5.8         | 21.5              | 10.0                                   | Estimate                  | 10.7                               | 177.7       | 1.77                         | 7.65 |
| 0403       | North Sea             | 0.871                  | 339.41                                 | Rhine, Elbe, Weser, Meuse, Thames, Trent          | 5.2; 3.9<br>4.0<br>8.7<br>12.3<br>7.5 | 89173; Estimate<br>81186<br>95001<br>95001<br>95001 | 35.3        | 53.8        | 36.8              | 5.0                                    | Estimate                  | 5.1                                | 85.0        | 1.74                         | 2.00 |
| 0404       | South Baltic Sea      | 0.694                  | 138.56                                 | Nemanus, Daugava, Gauja, Lielupe, Wisla, Venta    | 2.1<br>2.8<br>3.0<br>2.4<br>8.0; 2.3  | 96004<br>91035<br>96004<br>96004<br>63024; 96004    | 57.5        | 59.1        | 57.5              | 4.8                                    | Mean of documented values | 4.8                                | 80.4        | 0.67                         | 0.97 |
| 0405       | Botnian Bay           | 0.481                  | 124.63                                 | Tornionjoki, Dalalven                             | 7.1<br>4.8                            | 95001<br>95001                                      | 21.7        | 13.4        | 21.7              | 5.8                                    | Mean of documented values | 5.8                                | 96.6        | 0.73                         | 1.51 |
| 0406       | Gulf of Finland       | 0.446                  | 124.54                                 | Neva, Kymijoki                                    | 0.1<br>2.3                            | 95001<br>95001                                      | 70.7        | 71.6        | 28.7              | 2.0                                    | Estimate                  | 0.8                                | 13.6        | 0.10                         | 0.23 |
| 0407       | Norwegian Basin       | 0.237                  | 160.11                                 | -   | -                                     | -   | 0           | 0           | 0                 | 6.0                                    | Estimate                  | 6.0                                | 99.6        | 0.96                         | 4.05 |
| 0408       | Barents Sea           | 1.365                  | 397.70                                 | N. Dvina, Pechora, Mezen, Onega, Kola             | 7.5<br>6.0<br>6.1<br>7.4; 2.3         | 00100<br>00100<br>00100<br>00100; 96004             | 71.8        | 60.1        | 71.8              | 6.6                                    | Mean of documented values | 6.6                                | 110.0       | 2.63                         | 1.93 |
| 0409       | Nansen Basin          | 0.031                  | 1.44                                   | -   | -                                     | -   | 0           | 0           | 0                 | 6.6                                    | As Barents Sea            | 6.6                                | 110.0       | 0.01                         | 0.31 |
| 0411       | Azov Sea              | 0.572                  | 49.40                                  | Don, Kuban  | 4.4; 2.6                              | 95001; 95001  | 84.4        | 83.9        | 84.4              | 3.8                                    | Mean of doc. val.         | 3.8                                | 63.3        | 0.19                         | 0.33 |
| 0412       | North Black Sea       | 1.510                  | 276.96                                 | Danube, Dnepr, Dnestr                             | 5.0<br>3.4; 4.1                       | 79101<br>89060; 89060                               | 96.5        | 92.2        | 96.5              | 4.6                                    | Mean of documented values | 4.6                                | 77.1        | 1.29                         | 0.85 |
| 0413       | North East Black Sea  | 0.011                  | 2.11                                   | -   | -                                     | -   | 0           | 0           | 0                 | 4.0                                    | Estimate                  | 4.0                                | 66.4        | 0.01                         | 0.77 |
| 0414       | West Aegean Sea       | 0.213                  | 42.96                                  | -   | -                                     | -   | 0           | 0           | 0                 | 6.0                                    | Estimate                  | 6.0                                | 99.6        | 0.26                         | 1.21 |
| 0415       | North Ionian Sea      | 0.068                  | 28.87                                  | -   | -                                     | -   | 0           | 0           | 0                 | 6.0                                    | Estimate                  | 6.0                                | 99.6        | 0.17                         | 2.57 |
| 0416       | Adriatic Sea          | 0.256                  | 167.72                                 | Po  | 4.0                                   | 85200   | 27.4        | 27.4        | 27.4              | 4.0                                    | As documented             | 4.0                                | 66.4        | 0.67                         | 2.62 |
| 0417       | Tyrrhenian Basin      | 0.058                  | 22.84                                  | -   | -                                     | -   | 0           | 0           | 0                 | 4.0                                    | Estimated as Po           | 4.0                                | 66.4        | 0.09                         | 1.57 |
| 0418       | Balearic Basin        | 0.343                  | 95.58                                  | Rhone   | 4.0                                   | Estimate  | 62.7        | 27.9        | 52.7              | 6.0                                    | Estimate                  | 4.7                                | 78.5        | 0.45                         | 1.32 |
| 0501       | N. Greenland Coast    | 0.010                  | 1.29                                   | -   | -                                     | -   | 0           | 0           | 0                 | 4.0                                    | Estimate                  | 4.0                                | 66.4        | 0.01                         | 0.49 |
| 0502       | Greenland Sea         | 0.074                  | 12.83                                  | -   | -                                     | -   | 0           | 0           | 0                 | 4.0                                    | Estimate                  | 4.0                                | 66.4        | 0.05                         | 0.69 |
| 0503       | Irminger Basin        | 0.008                  | 0.91                                   | -   | -                                     | -   | 0           | 0           | 0                 | 4.0                                    | Estimate                  | 4.0                                | 66.4        | 0.00                         | 0.48 |
| 0504       | SW Greenland Coast    | 0.051                  | 24.99                                  | -   | -                                     | -   | 0           | 0           | 0                 | 4.0                                    | Estimate                  | 4.0                                | 66.4        | 0.10                         | 1.97 |
| 0505       | East Baffin Bay       | 0.089                  | 11.81                                  | -   | -                                     | -   | 0           | 0           | 0                 | 4.0                                    | Estimate                  | 4.0                                | 66.4        | 0.05                         | 0.53 |
| Total      | Europe and Greenland  | 8.439                  | 2408.38                                | 36 rivers documented                              | 5.3                                   | -   | 47.0        | 53.0        | 44.3              | 5.9                                    | -                         | 5.6                                | 93.1        | 13.51                        | 1.60 |

References : 00100 Meybeck pers. comm., 63024 Livingstone (1963), 74111 D.G.S.H. (1974), 77144 D.G.O.H. (1977), 79101 Meybeck (1979), 81186 Forstner & Whittman (1981), 82092 Meybeck pers. comm., 83247 GEMS (1983), 85200 Pettine et al. (1985), 89014 Snoussi et al. (1989), 89060 Zakrevskii et al. (1989), 89173 Van der Weijden & Middelburg (1989), 91035 Tsirkunov et al. (1991), 94030 Gislason & Armansson (1994), 94036 Cossa et al. (1994), 95001 GEMS (1995), 96004 Tsirkunov et al. (1996).

Annex 1 C. Documented and extrapolated values of DSI for the different COSCATs (numbering and names after Meybeck et al. 2006) for North America.

| COSCAT Nr. | COSCAT name                | A (M km <sup>2</sup> ) | Q (km <sup>3</sup> /y) (nat if avail.) | Rivers documented                                    | Doc. conc. of DSI (mg/l)               | Ref.  | % of Q doc. | % of A doc. | % of Si flux doc. | DSi (mg/l) conc. used f. extrapolation | Extrapolation method      | Budget Results (SiO <sub>2</sub> ) |          |             |                              |
|------------|----------------------------|------------------------|--|--|--|---|-------------|-------------|-------------------|--|---------------------------|------------------------------------|----------|-------------|------------------------------|
|            |                            |                        |  |  |  |   |             |             |                   |  |                           | Concentration                      |          | Flux (Mt/y) | Yield (t/km <sup>2</sup> /y) |
|            |                            |                        |  |  |  |   |             |             |                   |  |                           | (mg/l)                             | (μmol/l) |             |                              |
| 0801       | Panama Gulf                | 0.046                  | 53.36                                  | -  | -                                      |   | 0           | 0           | 0                 | 20.0                                   | Estimate                  | 20.0                               | 332.0    | 1.07        | 23.26                        |
| 0802       | Guatemala Basin            | 0.108                  | 106.65                                 | -  | -                                      |   | 0           | 0           | 0                 | 22.0                                   | Estimate                  | 22.0                               | 365.2    | 2.35        | 21.66                        |
| 0803       | Tehuantepec Basin          | 0.244                  | 60.60                                  | -  | -                                      |   | 0           | 0           | 0                 | 25.0                                   | Estimate                  | 25.0                               | 415.0    | 1.52        | 6.22                         |
| 0804       | Rivera Basin               | 0.269                  | 24.92                                  | Ameca  | 30.1                                   | 71022   | 12.0        | 4.5         | 12.0              | 30.1                                   | As documented             | 30.1                               | 499.7    | 0.75        | 2.79                         |
| 0805       | California Gulf            | 1.045                  | 22.73                                  | Colorado(Ari)  | 12.7                                   | 24002   | 81.4        | 61.2        | 78.7              | 15.0                                   | Estimate                  | 13.1                               | 217.3    | 0.30        | 0.28                         |
| 0806       | Baja Calif. Coast          | 0.065                  | 0.00                                   | -  | -                                      |   | 0           | 0           | 0                 | 15.0                                   | Estimate                  | 15.0                               | 249.0    | 0.00        | 0.00                         |
| 0807       | San Francisco Coast        | 0.252                  | 119.48                                 | San Joaquin, Sacramento                              | 15.8<br>23.5                           | 77068<br>24002                                  | 32.2        | 59.4        | 32.2              | 19.9                                   | Mean of doc. values       | 19.9                               | 329.9    | 2.37        | 9.40                         |
| 0808       | South Cascadia Basin       | 0.836                  | 319.88                                 | Columbia, Klamath, Rogue, Eel, Humptulips, Umpqua    | 13.5<br>18.0;21.8<br>9.4; 10.3<br>17.3 | 24002<br>77080; 77068<br>24002; GS25<br>77068   | 85.0        | 87.1        | 85.0              | 13.9                                   | Mean of documented values | 13.9                               | 230.9    | 4.45        | 5.32                         |
| 0809       | North Cascadia Basin       | 0.509                  | 405.48                                 | Fraser, Skeena, Quinault                             | 3.1; 4.8<br>4.5                        | 96035; 95001<br>GS22                            | 42.6        | 54.2        | 42.6              | 3.7                                    | Mean of doc. values       | 3.7                                | 60.6     | 1.48        | 2.91                         |
| 0810       | Gulf of Alaska             | 0.392                  | 300.46                                 | Stikine, Susitna, Matanuska                          | 6.0; 6.7<br>8.0                        | 76128; 77068<br>GS18                            | 33.4        | 27.7        | 33.4              | 6.4                                    | Mean of doc. values       | 6.4                                | 106.6    | 1.93        | 4.92                         |
| 0811       | S. Aleutian Coast          | 0.019                  | 24.00                                  | -  | -                                      |   | 0           | 0           | 0                 | 6.4                                    | As Alaska Gulf            | 6.4                                | 106.6    | 0.15        | 8.17                         |
| 0812       | East Aleutian Basin        | 0.285                  | 156.40                                 | Kuskokwim  | 7.6                                    | 76068   | 38.3        | 43.2        | 38.3              | 7.6                                    | As documented             | 7.6                                | 126.2    | 1.19        | 4.18                         |
| 0813       | Norton Gulf                | 0.920                  | 210.27                                 | Yukon  | 6.9                                    | 95001   | 95.6        | 92.3        | 95.2              | 7.6                                    | As E. Aleutian            | 6.9                                | 115.1    | 1.46        | 1.58                         |
| 0814       | East Chukchi Coast         | 0.157                  | 16.10                                  | Kobuk  | 3.4                                    | 91088   | 100.0       | 19.8        | 100.0             | 3.4                                    | As documented             | 3.4                                | 56.6     | 0.05        | 0.35                         |
| 0815       | Beaufort Sea               | 2.270                  | 345.10                                 | Mackenzie, Anderson, Peel, Arctic Red                | 3.7<br>2.7<br>3.0<br>1.3               | 95001<br>82205<br>NWT Wat. Qual. 60 73<br>86216 | 100.0       | 84.6        | 100.0             | 2.0                                    | Estimate                  | 3.6                                | 59.9     | 1.25        | 0.55                         |
| 0816       | Canadian Archipelago Basin | 1.142                  | 53.41                                  | Back, Hayes, Ellice, Coppermine                      | 0.4; 2.7<br>0.8; 0.6                   | 76128; 78172<br>82205; NWT09                    | 100.0       | 30.0        | 100.0             | 1.4                                    | Mean of doc. values       | 1.4                                | 23.1     | 0.07        | 0.07                         |
| 0817       | West Hudson Bay            | 2.412                  | 298.02                                 | Nelson, Churchill (Hud), Thelon, Kazan, Quoich, Seal | 1.4<br>1.4<br>0.5; 0.2<br>0.2; 1.7     | 78172<br>95001<br>76131; 76131<br>82205; 78172  | 61.5        | 71.8        | 61.5              | 1.1                                    | Mean of documented values | 1.1                                | 19.0     | 0.34        | 0.14                         |
| 0818       | James Bay                  | 0.727                  | 281.25                                 | La Grande, Eastmain                                  | 2.6<br>3.0                             | 86030<br>86030                                  | 29.5        | 19.8        | 29.5              | 2.7                                    | Mean of doc. values       | 2.7                                | 45.5     | 0.77        | 1.06                         |
| 0819       | East Hudson Bay            | 0.190                  | 57.68                                  | -  | -                                      |   | 0           | 0           | 0                 | 2.7                                    | As James Bay              | 2.7                                | 45.5     | 0.16        | 0.83                         |
| 0820       | Foxe Basin                 | 0.282                  | 24.79                                  | -  | -                                      |   | 0           | 0           | 0                 | NA                                     | NA                        | 0.0                                | 0.0      | 0.00        | 0.00                         |
| 0821       | Ungava Basin               | 0.438                  | 192.57                                 | Koksoak  | 2.0                                    | Estimate  | 28.1        | 30.3        | 28.1              | 2.0                                    | Estimate                  | 2.0                                | 33.2     | 0.39        | 0.88                         |
| 0822       | Frobisher&Cumberl.         | 0.097                  | 15.48                                  | -  | -                                      |   | 0           | 0           | 0                 | 2.0                                    | Estimate                  | 2.0                                | 33.2     | 0.03        | 0.32                         |
| 0823       | West Baffin Bay            | 0.289                  | 9.24                                   | -  | -                                      |   | 0           | 0           | 0                 | 2.0                                    | Estimate                  | 2.0                                | 33.2     | 0.02        | 0.06                         |
| 0824       | Labrador Coast             | 0.265                  | 147.62                                 | -  | -                                      |   | 0           | 0           | 0                 | 3.0                                    | Estimate                  | 3.0                                | 49.8     | 0.44        | 1.67                         |
| 0825       | Saint Lawrence Gulf        | 1.563                  | 629.10                                 | Saint Lawrence, Saguenay, Côte Nord rivers, Moisie   | 6.6<br>4.1<br>3.5<br>3.0               | 24002<br>70100<br>70100<br>70100                | 79.6        | 80.2        | 86.3              | 3.5                                    | Estimate                  | 5.2                                | 86.9     | 3.29        | 2.11                         |
| 0826       | Newfoundland Coast         | 0.100                  | 78.57                                  | -  | -                                      |   | 0           | 0           | 0                 | 3.5                                    | Estimate                  | 3.5                                | 58.1     | 0.27        | 2.76                         |
| 0827       | New England Coast          | 0.579                  | 310.19                                 | Susquehanna, Saint John, Hudson,                     | 4.6<br>2.7; 1.4                        | 77068<br>95001; 77068                           | 55.9        | 50.8        | 55.9              | 4.7                                    | Mean of documented        | 4.7                                | 78.1     | 1.46        | 2.52                         |

|       |                    |        |         |                      |           |               |      |      |      |      |                           |      |       |       |       |
|-------|--------------------|--------|---------|----------------------|-----------|---------------|------|------|------|------|---------------------------|------|-------|-------|-------|
|       |                    |        |         | Potomac,             | 6.0       | 95001         |      |      |      |      | values                    |      |       |       |       |
|       |                    |        |         | Connecticut,         | 5.1       | 77068         |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Delaware,            | 9.0       | 24002         |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Penobscot,           | 3.2       | 77068         |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Kennebec, James      | 3.5; 18.0 | 77068; 24002  |      |      |      |      |                           |      |       |       |       |
| 0828  | Blake-Nares Basin  | 0.452  | 113.30  | Altamaha, Santee,    | 11.5; 9.8 | 77068; 77068  | 58.6 | 31.4 | 58.6 | 14.7 | Mean of documented values | 14.7 | 244.0 | 1.67  | 3.68  |
|       |                    |        |         | Savannah,            | 23.0      | 24002         |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Cape Fear, Neuse,    | 7.7; 10.0 | 77068; 77068; |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Pee Dee              | 19.0      | 24002         |      |      |      |      |                           |      |       |       |       |
| 0829  | N. Venezuela Basin | 0.015  | 4.35    | -                    | -         |               | 0    | 0    | 0    | 10.0 | Estimate                  | 10.0 | 166.0 | 0.04  | 2.97  |
| 0830  | N. Colombia Basin  | 0.211  | 266.58  | -                    | -         |               | 0    | 0    | 0    | 12.0 | Estimate                  | 12.0 | 199.2 | 3.20  | 15.15 |
| 0831  | Yucatan-Cayman     | 0.291  | 143.16  | -                    | -         |               | 0    | 0    | 0    | 15.0 | Estimate                  | 15.0 | 249.0 | 2.15  | 7.37  |
| 0832  | Campeche Bank      | 0.326  | 200.52  | -                    | -         |               | 0    | 0    | 0    | 10.0 | Estimate                  | 10.0 | 166.0 | 2.01  | 6.15  |
|       |                    |        |         | Rio Grande (US),     | 28.9      | 24002         |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Brazos (Tex),        | 9.1       | 77068         |      |      |      |      |                           |      |       |       |       |
| 0833  | West Mexican Gulf  | 1.410  | 59.66   | Colorado (Tex),      | 10.1      | 77068         | 44.0 | 80.2 | 60.0 | 12.0 | Estimate                  | 16.8 | 278.8 | 1.00  | 0.71  |
|       |                    |        |         | Nueces               | 13.4      | 77068         |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Mississippi, Sabine, | 11.0; 8.0 | 24002; 77068  |      |      |      |      |                           |      |       |       |       |
| 0834  | North Mexican Gulf | 3.685  | 825.50  | Suwannee, Neches,    | 6.1; 9.9  | 77068; 77068  | 80.6 | 86.1 | 83.2 | 10.0 | Estimate                  | 11.6 | 192.3 | 9.56  | 2.60  |
|       |                    |        |         | Escambia,            | 7.9       | 77068         |      |      |      |      |                           |      |       |       |       |
|       |                    |        |         | Mobile / Alabama     | 22.9      | 24002         |      |      |      |      |                           |      |       |       |       |
| Total | North America      | 21.890 | 5876.42 | 65 rivers documented | 7.6       |               | 51.6 | 60.2 | 49.0 | 8.5  |                           | 8.0  | 133.3 | 47.18 | 2.16  |

NA: Not Available. References : 24002 Clarke (1924), 70100 M.R.N. (1970), 71022 Drever (1971), 76068 Meybeck pers. comm., 76128 Environment Canada (1976), 76131 Meybeck pers. comm., 77068 Briggs & Ficke (1977), 77080 Meybeck pers. comm., 78172 I.W.D. (1978), 82205 Environment Canada (1982), 86030 Messier et al. (1986), 86216 Brunskill (1986), 91088 Telang et al. (1991), 95001 GEMS (1995), 96035 Meybeck pers. comm., GS18 Meybeck pers. comm., GS22 Meybeck pers. comm., GS25 Meybeck pers. comm., NWT Wat. Qual. 60 73, NWT 09 Meybeck pers. comm..

Annex 1 D. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for South America.

| COSCAT Nr. | COSCAT name                      | A (M km <sup>2</sup> ) | Q (km <sup>3</sup> /y) (nat if avail.) | Rivers documented    | Doc. conc. of DSi (mg/l) | Ref.                  | % of Q doc. | % of A doc. | % of Si flux doc. | DSi (mg/l) conc. used f. extrapolation | Extrapolation method | Budget Results (SiO <sub>2</sub> ) |             |                              |       |
|------------|----------------------------------|------------------------|--|----------------------|--------------------------|-----------------------|-------------|-------------|-------------------|--|----------------------|------------------------------------|-------------|------------------------------|-------|
|            |                                  |                        |  |                      |                          |                       |             |             |                   |  |                      | Concentration (mg/l)               | Flux (Mt/y) | Yield (t/km <sup>2</sup> /y) |       |
| 1101       | South Colombia Bas.              | 0.359                  | 305.15                                 | Magdalena            | 12.6                     | 79101                 | 77.7        | 65.5        | 77.7              | 12.6                                   | As documented        | 12.6                               | 209.2       | 3.84                         | 10.72 |
| 1102       | South Venezuela Bas.             | 0.250                  | 69.78                                  | -                    | -                        |                       | 0           | 0           | 0                 | 12.6                                   | As Magdalena         | 12.6                               | 209.2       | 0.88                         | 3.52  |
| 1103       | North Guiana Coast               | 1.350                  | 1398.31                                | Orinoco              | 6.3                      | 89119                 | 81.2        | 81.5        | 73.1              | 10.0                                   | Estimate             | 7.0                                | 116.1       | 9.78                         | 7.25  |
| 1104       | South Guiana Coast - Amazon Cone | 7.107                  | 7557.64                                | Amazon,              | 6.9                      | 92035                 | 93.2        | 97.9        | 89.9              | 11.0                                   | Estimate             | 7.5                                | 123.9       | 56.39                        | 7.93  |
|            |                                  |                        |  | Tocantins,           | 11.6                     | 95011                 |             |             |                   |  |                      |                                    |             |                              |       |
|            |                                  |                        |  | Maroni,              | 11.5                     | 69068                 |             |             |                   |  |                      |                                    |             |                              |       |
|            |                                  |                        |  | Suriname, Approuage  | 8.7                      | 69068                 |             |             |                   |  |                      |                                    |             |                              |       |
|            |                                  |                        |  |                      | 15.0                     | 74112                 |             |             |                   |  |                      |                                    |             |                              |       |
| 1105       | Ceara Abyssal Plain              | 0.796                  | 206.67                                 | -                    | -                        |                       | 0           | 0           | 0                 | 11.0                                   | Estimate             | 11.0                               | 182.6       | 2.27                         | 2.86  |
| 1106       | North Brazilian Basin            | 1.105                  | 191.84                                 | Sao Francisco        | 10.0                     | Estimate              | 46.9        | 57.0        | 46.9              | 10.0                                   | Estimate             | 10.0                               | 166.0       | 1.92                         | 1.74  |
| 1107       | Santos Plateau                   | 0.446                  | 251.61                                 | -                    | -                        |                       | 0           | 0           | 0                 | 10.0                                   | Estimate             | 10.0                               | 166.0       | 2.52                         | 5.64  |
| 1108       | Rio de la Plata Coast            | 3.078                  | 878.70                                 | Parana, Uruguay      | 17.1                     | 91089                 | 81.1        | 98.2        | 85.7              | 12.0                                   | Estimate             | 15.8                               | 262.1       | 13.88                        | 4.51  |
|            |                                  |                        |  |                      | 15.0                     | 79101                 |             |             |                   |  |                      |                                    |             |                              |       |
| 1109       | Pampa Coast                      | 1.047                  | 62.92                                  | Negro (Arg)          | 16.3                     | Meybeck & Ragu (1995) | 46.9        | 9.3         | 46.9              | 16.3                                   | As documented        | 16.3                               | 270.6       | 1.03                         | 0.98  |
| 1110       | Patagonia Coast                  | 0.564                  | 105.66                                 | -                    | -                        |                       | 0           | 0           | 0                 | 8.0                                    | Estimate             | 8.0                                | 132.8       | 0.85                         | 1.50  |
| 1111       | Chile Trench                     | 0.202                  | 162.02                                 | -                    | -                        |                       | 0           | 0           | 0                 | 12.0                                   | Estimate             | 12.0                               | 199.2       | 1.94                         | 9.60  |
| 1112       | Mocha-Gufao Coast                | 0.291                  | 351.48                                 | Bio Bio              | 19.0                     | 91098                 | 7.2         | 8.2         | 8.9               | 15.0                                   | Estimate             | 15.3                               | 253.8       | 5.37                         | 18.47 |
| 1113       | Chile Basin                      | 0.406                  | 19.60                                  | -                    | -                        |                       | 0           | 0           | 0                 | 15.0                                   | Estimate             | 15.0                               | 249.0       | 0.29                         | 0.72  |
| 1114       | Peru Basin                       | 0.140                  | 14.34                                  | -                    | -                        |                       | 0           | 0           | 0                 | 15.0                                   | Estimate             | 15.0                               | 249.0       | 0.22                         | 1.54  |
| 1115       | Guayaquil Gulf                   | 0.099                  | 28.99                                  | -                    | -                        |                       | 0           | 0           | 0                 | 15.0                                   | Estimate             | 15.0                               | 249.0       | 0.43                         | 4.40  |
| 1116       | Galapagos Basin                  | 0.148                  | 242.01                                 | -                    | -                        |                       | 0           | 0           | 0                 | 20.0                                   | Estimate             | 20.0                               | 332.0       | 4.84                         | 32.68 |
| Total      | South America                    | 21.890                 | 5876.42                                | 12 rivers documented | 8.0                      |                       | 78.3        | 69.4        | 70.1              | 12.4                                   |                      | 9.0                                | 149.2       | 106.45                       | 6.12  |

References : 69068 Eisma & Van Bennekom (1969), 74112 Roche et al. (1974), 79101 Meybeck (1979), 89119 Lewis & Saunders (1989), 91089 Depetris & Paolini (1991), 91098 Petersen & Sangfors (1991), 92035 Probst (1992), 95011 Hieronymus et al. (1995).

Annex 1 E. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for Asia.

| COSCAT Nr. | COSCAT name          | A (M km <sup>2</sup> ) | Q (km <sup>3</sup> /y) (nat if avail.) | Rivers documented                            | Doc. conc. of DSi (mg/l)             | Ref.                                      | % of Q doc. | % of A doc. | % of Si flux doc. | DSi (mg/l) conc. used f. extrapolation | Extrapolation method | Budget Results (SiO <sub>2</sub> ) |          |             |                              |
|------------|----------------------|------------------------|--|--|--------------------------------------|---|-------------|-------------|-------------------|--|----------------------|------------------------------------|----------|-------------|------------------------------|
|            |                      |                        |  |  |                                      |   |             |             |                   |  |                      | Concentration                      |          | Flux (Mt/y) | Yield (t/km <sup>2</sup> /y) |
|            |                      |                        |  |  |                                      |   |             |             |                   |  |                      | (mg/l)                             | (μmol/l) |             |                              |
| 1301       | East Levantine Basin | 0.206                  | 52.89                                  | Manavgat                                     | 4.9                                  | 70027                                     | 7.7         | 0.6         | 7.7               | 4.9                                    | As documented        | 4.9                                | 81.3     | 0.26        | 1.26                         |
| 1302       | W Levantine Basin    | 0.092                  | 19.95                                  | -  | -                                    | -   | 0           | 0           | 0                 | 4.9                                    | As Manavgat          | 4.9                                | 81.3     | 0.10        | 1.06                         |
| 1303       | South Black Sea      | 0.321                  | 79.12                                  | Sakarya, Inguri, Rioni                       | 11.8; 4.4<br>4.4                     | 95001; 96004<br>96004                     | 26.1        | 24.2        | 22.3              | 8.0                                    | Estimate             | 7.6                                | 126.3    | 0.60        | 1.88                         |
| 1307       | West Kara Sea        | 3.666                  | 878.63                                 | Ob, Pur, Nadyrn                              | 10.2; 7.3<br>8.7                     | 00100; 00100<br>00100                     | 54.8        | 74.2        | 60.1              | 8.0                                    | Estimate             | 9.1                                | 150.4    | 7.96        | 2.17                         |
| 1308       | East Kara Sea        | 2.984                  | 699.56                                 | Yenisey                                      | 6.4                                  | 00100                                     | 88.6        | 86.9        | 86.1              | 8.0                                    | Estimate             | 6.5                                | 108.5    | 4.57        | 1.53                         |
| 1309       | West Laptev Sea      | 3.257                  | 663.40                                 | Lena, Khatanga, Olenek, Anabar               | 4.2<br>3.2<br>2.7; 2.6               | 96033<br>00100<br>00100; 00100            | 100.0       | 97.3        | 100.0             | 3.0                                    | Estimate             | 3.9                                | 65.4     | 2.62        | 0.80                         |
| 1310       | East Laptev Sea      | 0.351                  | 36.39                                  | Yana   | 3.1                                  | 00100                                     | 94.3        | 67.7        | 94.4              | 3.0                                    | Estimate             | 3.1                                | 51.4     | 0.11        | 0.32                         |
| 1311       | East Siberian Sea    | 1.317                  | 193.00                                 | Kolyma, Indigirka                            | 3.9<br>2.8                           | 00100<br>00100                            | 100.0       | 77.6        | 100.0             | 3.0                                    | Estimate             | 3.6                                | 59.0     | 0.69        | 0.52                         |
| 1312       | New Siberia Plateau  | 0.031                  | 1.92                                   | -  | -                                    | -   | 0           | 0           | 0                 | 2.0                                    | Estimate             | 2.0                                | 33.2     | 0.00        | 0.12                         |
| 1313       | West Chukchi Sea     | 0.100                  | 25.79                                  | Amguema                                      | 5.9                                  | 00100                                     | 35.7        | 29.6        | 35.7              | 5.9                                    | As documented        | 5.9                                | 97.1     | 0.15        | 1.51                         |
| 1314       | Anadyr Gulf          | 0.298                  | 65.07                                  | Anadyr                                       | 8.3                                  | SH007                                     | 97.9        | 67.0        | 97.9              | 8.3                                    | As documented        | 8.3                                | 138.0    | 0.54        | 1.81                         |
| 1315       | West Aleutian Basin  | 0.173                  | 59.67                                  | -  | -                                    | -   | 0           | 0           | 0                 | 8.0                                    | Estimate             | 8.0                                | 132.8    | 0.48        | 2.75                         |
| 1316       | SE Kamchatka Coast   | 0.109                  | 65.97                                  | Kamchatka                                    | 12.6                                 | 96004                                     | 50.2        | 51.2        | 50.2              | 12.6                                   | As documented        | 12.6                               | 209.2    | 0.83        | 7.62                         |
| 1317       | East Okhotsk Sea     | 0.411                  | 116.46                                 | Penzhina, Tauy                               | 5.4; 4.2                             | 96004; 96004                              | 29.3        | 23.5        | 20.6              | 8.0                                    | Estimate             | 7.1                                | 118.2    | 0.83        | 2.02                         |
| 1318       | NW Okhotsk Sea       | 1.989                  | 432.57                                 | Amur   | 2.2                                  | 96004                                     | 79.5        | 93.2        | 62.5              | 5.0                                    | Est. as Penzhina     | 2.7                                | 45.4     | 1.18        | 0.59                         |
| 1319       | SW Okhotsk Sea       | 0.075                  | 29.73                                  | -  | -                                    | -   | 0           | 0           | 0                 | 5.0                                    | Estimate             | 5.0                                | 83.0     | 0.15        | 2.00                         |
| 1320       | West Japan Sea       | 0.268                  | 84.27                                  | -  | -                                    | -   | 0           | 0           | 0                 | 17.1                                   | As East Japan Sea    | 17.1                               | 284.5    | 1.44        | 5.39                         |
| 1321       | East Japan Sea       | 0.150                  | 157.05                                 | Shinano, Ishikari, Agano, Mogami, Teshio     | 17.0<br>20.9<br>13.8<br>17.6<br>14.7 | 60020<br>60020<br>60020<br>60020<br>60020 | 40.8        | 31.4        | 40.8              | 17.1                                   | As documented        | 17.1                               | 284.5    | 2.69        | 17.93                        |
| 1322       | Japan Trench         | 0.119                  | 91.02                                  | Tone, Kitakami, Tokachi                      | 21.1<br>19.6<br>29.9                 | 60020<br>60020<br>60020                   | 31.4        | 29.9        | 31.4              | 24.0                                   | As documented        | 24.0                               | 397.9    | 2.18        | 18.26                        |
| 1323       | Philippines Sea      | 0.228                  | 240.00                                 | Kiso, Tenryu, Yodo                           | 15.5; 12.9<br>8.2                    | 60020; 60020<br>60020                     | 10.5        | 9.7         | 10.6              | 12.0                                   | Estimate             | 12.0                               | 199.5    | 2.88        | 12.64                        |
| 1324       | East Yellow Sea      | 0.216                  | 115.42                                 | -  | -                                    | -   | 0           | 0           | 0                 | 6.0                                    | Estimate             | 6.0                                | 99.6     | 0.69        | 3.21                         |
| 1325       | Pohai Gulf           | 1.554                  | 66.09                                  | Huang He, Liao, Luan                         | 7.7<br>1.8; 4.7                      | 82093<br>94013; 94013                     | 92.9        | 65.9        | 93.9              | 5.0                                    | Estimate             | 5.8                                | 96.7     | 0.39        | 0.25                         |
| 1326       | West Yellow Sea      | 2.288                  | 1098.37                                | Chang Jiang, Fuchun Jiang, Menjiang          | 6.5<br>4.7<br>11.7                   | 87186<br>93023<br>87186                   | 93.2        | 84.1        | 89.4              | 11.0                                   | Estimate             | 7.0                                | 116.6    | 7.71        | 3.37                         |
| 1327       | North SouthChina Sea | 0.967                  | 589.38                                 | Zhujiang, Hong, Dongjiang, Jiulong, Hanjiang | 8.5<br>10.0<br>11.2<br>17.0<br>15.4  | 94013<br>82056<br>87186<br>87186<br>87186 | 93.0        | 64.7        | 91.9              | 11.0                                   | Estimate             | 9.6                                | 159.2    | 5.65        | 5.84                         |
| 1328       | East SouthChina Sea  | 0.349                  | 636.47                                 | -  | -                                    | -   | 0           | 0           | 0                 | 12.0                                   | Est. as Mahakam      | 12.0                               | 199.2    | 7.64        | 21.89                        |
| 1329       | West SouthChina Sea  | 1.493                  | 1550.49                                | Mekong, Chao Phrya,                          | 8.9<br>15.8                          | 76129<br>59001                            | 40.4        | 68.4        | 33.8              | 15.0                                   | Estimate             | 13.5                               | 224.1    | 20.93       | 14.02                        |

|       |                     |        |          |  |   |  |      |      |      |      |                     |      |       |        |       |
|-------|---------------------|--------|----------|--|---|--|------|------|------|------|---------------------|------|-------|--------|-------|
|       |                     |        |          | Ban Pakong,<br>Musi, Kelantan,<br>Mae Klong                  | 5.4<br>24.5; 12.0<br>14.1                 | 88228<br>95001; 95001<br>59001                   |      |      |      |      |                     |      |       |        |       |
| 1330  | Sunda Strait        | 0.546  | 665.75   | Barito,<br>Mahakam,<br>Brantas,<br>Cimanuk,<br>Citarum, Solo | 9.3<br>11.8<br>45.0<br>19.2<br>30.0; 19.6 | 78170<br>84216<br>95001<br>78170<br>95001; 78170 | 31.7 | 30.9 | 31.7 | 13.9 | As documented       | 13.9 | 231.5 | 9.29   | 17.01 |
| 1331  | Sulu-Celebes Sea    | 0.356  | 424.64   | -  | -   | -  | 0    | 0    | 0    | 12.0 | Est. as Mahakam     | 12.0 | 199.2 | 5.10   | 14.32 |
| 1332  | Banda Sea           | 0.191  | 152.76   | -  | -   | -  | 0    | 0    | 0    | 12.0 | Est. as Mahakam     | 12.0 | 199.2 | 1.83   | 9.59  |
| 1333  | South Timor Coast   | 0.012  | 6.83     | -  | -   | -  | 0    | 0    | 0    | 20.0 | Estimate            | 20.0 | 332.0 | 0.14   | 11.20 |
| 1334  | Java Trench         | 0.166  | 216.59   | Citanduy,<br>Serayu  | 13.3<br>33.4                              | 78170<br>78170                                   | 4.8  | 4.4  | 4.8  | 23.3 | As documented       | 23.3 | 386.0 | 5.04   | 30.37 |
| 1335  | Andaman Sea         | 0.958  | 1059.95  | Irrawaddy  | 9.0                                       | Estimate   | 45.9 | 42.8 | 45.9 | 9.0  | Est. as Mekong      | 9.0  | 149.4 | 9.54   | 9.95  |
| 1336  | Bengal Gulf         | 1.818  | 1490.73  | Ganges,<br>Brahmaputra                                       | 8.0<br>7.8                                | 84221<br>89049                                   | 67.3 | 89.7 | 57.5 | 12.0 | Estimate            | 9.2  | 153.5 | 13.78  | 7.58  |
| 1337  | East Deccan Coast   | 1.120  | 306.07   | Godavari,<br>Krishna,<br>Mahanadi,<br>Cauweri                | 18.1<br>18.1<br>13.3<br>19.0              | 93014<br>Estimate<br>84207<br>83241              | 72.5 | 71.6 | 72.5 | 16.7 | As documented       | 16.7 | 277.6 | 5.12   | 4.57  |
| 1338  | Laccadive Basin     | 0.122  | 84.69    | Sri Lanka rivers   | 13.1                                      | 66042  | 49.6 | 53.3 | 49.6 | 13.1 | As documented       | 13.1 | 217.0 | 1.11   | 9.08  |
| 1339  | West Deccan Coast   | 0.337  | 168.06   | Narmada, Tapti   | 9.0; 16.0                                 | 83241; 83241                                     | 34.9 | 48.6 | 34.9 | 11.1 | As documented       | 11.1 | 185.0 | 1.87   | 5.55  |
| 1340  | Indus Delta Coast   | 1.390  | 154.95   | Indus  | 14.0                                      | 91091  | 58.1 | 65.9 | 58.1 | 14.0 | As documented       | 14.0 | 232.4 | 2.17   | 1.56  |
| 1341  | Oman Gulf           | 0.265  | 0.63     | -  | -   | -  | 0    | 0    | 0    | 10.0 | Estimate            | 10.0 | 166.0 | 0.01   | 0.02  |
| 1342  | Persian Gulf        | 2.469  | 118.64   | Shatt el Arab  | 6.9                                       | 79101  | 38.6 | 21.9 | 30.2 | 10.0 | Estimate            | 8.8  | 146.2 | 1.04   | 0.42  |
| 1343  | South Arabian Coast | 0.799  | 1.30     | -  | -   | -  | 0    | 0    | 0    | 30.0 | Estimate Peridotite | 30.0 | 498.0 | 0.04   | 0.05  |
| 1344  | East Red Sea        | 0.441  | 0.00     | -  | -   | -  | 0    | 0    | 0    | 18.0 | Est. as Blue Nile   | 18.0 | 298.8 | 0.00   | 0.00  |
| Total | Asia                | 34.004 | 12900.27 | 69 rivers<br>documented                                      | 8.2                                       |  | 54.6 | 63.1 | 44.7 | 12.2 |                     | 10.0 | 166.5 | 129.35 | 3.80  |

References : 00100 Meybeck pers. comm., 59001 Kobayashi (1959), 60020 Kobayashi (1960), 66042 Kobayashi (1966), 70027 Bakalowicz (1970), 76129 Carbonnel & Meybeck (1976), 78170 D.G.W.R.D. (1978), 79101 Meybeck (1979), 82056 Ming-hui et al. (1982), 82093 Degens (1982), 83241 Subramanian (1983), 84207 Ray et al. (1984), 84216 Meybeck (1984), 84221 Sarin & Krisnaswami (1984), 87186 Zhang et al. (1987), 88228 Windom et al. (1988), 89049 Sarin et al. (1989), 91091 Subramanian & Ittekkot (1991), 93014 Somayajulu et al. (1993), 93023 Shengquan et al. (1993), 94013 Zhang et al. (1994), 95001 GEMS (1995), 96004 Tsirkunov et al. (1996), 96033 Meybeck pers. comm., SH007 Meybeck pers. comm..

Annex 1 F. Documented and extrapolated values of DSi for the different COSCATs (numbering and names after Meybeck et al. 2006) for Australasia.

| COSCAT Nr. | COSCAT name               | A (M km <sup>2</sup> ) | Q (km <sup>3</sup> /y) (nat if avail.) | Rivers documented                           | Doc. conc. of DSi (mg/l)         | Ref.                                    | % of Q doc. | % of A doc. | % of Si flux doc. | DSi (mg/l) conc. used f. extrapolation | Extrapolation method | Budget Results (SiO <sub>2</sub> ) |             |                              |       |
|------------|---------------------------|------------------------|--|---|----------------------------------|---|-------------|-------------|-------------------|--|----------------------|------------------------------------|-------------|------------------------------|-------|
|            |                           |                        |  |   |                                  |   |             |             |                   |  |                      | Concentration (mg/l)               | Flux (Mt/y) | Yield (t/km <sup>2</sup> /y) |       |
| 1401       | Caroline-Bismarck Bas.    | 0.321                  | 457.70                                 | Sepik                                       | 12.5                             | 83058                                   | 26.2        | 24.5        | 26.2              | 12.5                                   | As documented        | 12.5                               | 207.5       | 5.72                         | 17.84 |
| 1402       | Salomon Sea               | 0.095                  | 134.51                                 | -   | -                                | -                                       | 0           | 0           | 0                 | 12.5                                   | Estimate as Sepik    | 12.5                               | 207.5       | 1.68                         | 17.71 |
| 1403       | Coral Sea                 | 0.659                  | 417.47                                 | Fitzroy East, Burdekin, Fly, Kikori, Purari | 15.0<br>18.5<br>9.0; 8.0<br>13.8 | 75115<br>75115<br>83058; 83058<br>83058 | 67.0        | 57.7        | 67.0              | 10.7                                   | As documented        | 10.7                               | 177.9       | 4.47                         | 6.79  |
| 1404       | North Fiji Basin          | 0.015                  | 16.55                                  | -   | -                                | -                                       | 0           | 0           | 0                 | 20.0                                   | Estimate             | 20.0                               | 332.0       | 0.33                         | 21.96 |
| 1405       | South Fiji Basin          | 0.055                  | 46.08                                  | -   | -                                | -                                       | 0           | 0           | 0                 | 20.0                                   | Estimate             | 20.0                               | 332.0       | 0.92                         | 16.66 |
| 1406       | Kermadec Basin            | 0.065                  | 36.78                                  | Waimakariri                                 | 7.0                              | 75111                                   | 10.3        | 4.9         | 10.3              | 7.0                                    | As documented        | 7.0                                | 116.2       | 0.26                         | 3.94  |
| 1407       | Campbell Basin            | 0.079                  | 41.27                                  | Clutha, Waitaki                             | 3.2<br>5.0                       | 85202<br>75111                          | 74.9        | 34.0        | 74.9              | 3.9                                    | As documented        | 3.9                                | 64.8        | 0.16                         | 2.05  |
| 1408       | New Caledonia Basin       | 0.082                  | 53.51                                  | Waikato                                     | 28.0                             | 95001                                   | 22.6        | 16.8        | 29.0              | 20.0                                   | Estimate             | 21.8                               | 362.1       | 1.17                         | 14.29 |
| 1409       | Challenger Plateau        | 0.042                  | 102.52                                 | -   | -                                | -                                       | 0           | 0           | 0                 | 3.9                                    | Est. as Campbell     | 3.9                                | 64.8        | 0.40                         | 9.45  |
| 1410       | West Tasman Sea           | 0.290                  | 41.80                                  | -   | -                                | -                                       | 0           | 0           | 0                 | 12.0                                   | Estimate             | 12.0                               | 199.2       | 0.50                         | 1.73  |
| 1411       | SE Australia Coast        | 1.198                  | 46.38                                  | Murray                                      | 18.1                             | Burdekin GLO23                          | 50.9        | 88.5        | 65.2              | 10.0                                   | Estimate             | 14.1                               | 234.2       | 0.65                         | 0.55  |
| 1412       | Great Australian Bay      | 1.053                  | 6.71                                   | -   | -                                | -                                       | 0           | 0           | 0                 | 10.0                                   | Estimate             | 10.0                               | 166.0       | 0.07                         | 0.06  |
| 1413       | West Australian Coast     | 0.472                  | 9.32                                   | -   | -                                | -                                       | 0           | 0           | 0                 | 12.0                                   | Estimate             | 12.0                               | 199.2       | 0.11                         | 0.24  |
| 1414       | Rowley Shelf              | 0.920                  | 11.27                                  | -   | -                                | -                                       | 0           | 0           | 0                 | 14.0                                   | Estimate             | 14.0                               | 232.4       | 0.16                         | 0.17  |
| 1415       | South Arafura-Timor Basin | 1.108                  | 121.53                                 | Flinders, Mitchell                          | 14.8<br>18.0                     | 75115<br>75115                          | 11.1        | 16.2        | 11.1              | 17.5                                   | As documented        | 17.5                               | 290.9       | 2.13                         | 1.92  |
| 1416       | North Arafura Sea         | 0.274                  | 360.60                                 | -   | -                                | -                                       | 0           | 0           | 0                 | 10.0                                   | Est. as Fly, Kikori  | 10.0                               | 166.0       | 3.61                         | 13.17 |
| 1417       | Pacific Islands           | 0.017                  | 12.16                                  | -   | -                                | -                                       | 0           | 0           | 0                 | 20.0                                   | Estimate             | 20.0                               | 332.0       | 0.24                         | 14.51 |
| Total      | Australasia               | 6.745                  | 1916.16                                | 13 rivers documented                        | 11.7                             | -                                       | 25.2        | 25.8        | 25.0              | 11.8                                   | -                    | 11.8                               | 195.7       | 22.59                        | 3.35  |

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