| ET | Designation of ET and CLC-codes | Area [ha] | Share of total area of [%]\* | Increase/Decrease of area [ha] |
| --- | --- | --- | --- | --- |
|  |  | 2012 | 2015 | 2018 | 2012 | 2015 | 2018 | 2015 - 2012 | 2018 - 2015 | 2018 - 2012 |
| 1 | **Semi-natural open areas** | **646.555,80** | **631.287,88** | **645.545,13** | **1,81** | **1,76** | **1,80** | **-15.267,93** | **14.257,25** | **-1.010,68** |
| 11 | **Natural grassland and heathland** | **417.960,79** | **404.374,76** | **418.536,46** | **1,17** | **1,13** | **1,17** | **-13.586,04** | **14.161,71** | **575,67** |
|  | 321 | 180.959,92 | 170.056,96 | 182.614,14 | 0,51 | 0,48 | 0,51 | -10.902,96 | 12.557,18 | 1.654,21 |
|  | 322 | 237.000,87 | 234.317,80 | 235.922,33 | 0,66 | 0,66 | 0,66 | -2.683,07 | 1.604,53 | -1.078,54 |
| 12 | **Wetlands** | **178.906,99** | **178.256,34** | **180.032,60** | **0,50** | **0,50** | **0,50** | **-650,65** | **1.776,26** | **1.125,61** |
|  | 411 | 68.132,47 | 68.857,08 | 70.032,72 | 0,19 | 0,19 | 0,20 | 724,60 | 1.175,65 | 1.900,25 |
|  | 412 | 86.105,96 | 84.514,85 | 85.168,52 | 0,24 | 0,24 | 0,24 | -1.591,10 | 653,67 | -937,43 |
|  | 421 | 24.668,56 | 24.884,41 | 24.831,35 | 0,07 | 0,07 | 0,07 | 215,85 | -53,06 | 162,79 |
| 13 | **Open spaces with no or little vegetation** | **49.688,02** | **48.656,78** | **46.976,07** | **0,14** | **0,14** | **0,13** | **-1.031,24** | **-1.680,72** | **-2.711,95** |
|  | 331 | 24.026,46 | 22.864,88 | 19.886,77 | 0,07 | 0,06 | 0,06 | -1.161,58 | -2.978,11 | -4.139,69 |
|  | 332 | 10.040,73 | 10.542,59 | 10.902,96 | 0,03 | 0,03 | 0,03 | 501,87 | 360,36 | 862,23 |
|  | 333 | 15.512,79 | 15.141,29 | 16.063,13 | 0,04 | 0,04 | 0,04 | -371,50 | 921,85 | 550,34 |
|  | 334 | 0,20 | 0,20 | 15,40 | 0,00 | 0,00 | 0,00 | 0,00 | 15,20 | 15,20 |
|  | 335 | 107,84 | 107,82 | 107,80 | 0,00 | 0,00 | 0,00 | -0,02 | -0,02 | -0,04 |

Suppl. Material 3: *Table C: The area and share of main ecosystem types and sub ecosystem types (ETs, see Tab. 1)) in the German land cover model (LBM-DE) for the time periods 2012, 2015 and 2018. Linear elements such as small scale structures and infrastructures from the topographic-cartographic Information system (ATKIS) were added to the land cover model*.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ET | Designation of ET and CLC-codes | Area (ha) | Share of total area [%]\* | Increase/Decrease of area [ha] |
|  |  | **2012** | **2015** | **2018** | **2012** | **2015** | **2018** | **2015 - 2012** | **2018 - 2015** | **2018 - 2012** |
| 2 | **Forest and grove areas** | **11.309.752,39** | **11.114.363,67** | **11.114.832,58** | **31,62** | **31,07** | **31,08** | **-195.388,71** | **468,91** | **-194.919,81** |
| 21 | **Forest** | **10.492.251,28** | **10.472.073,96** | **10.437.454,49** | **29,33** | **29,28** | **29,18** | **-20.177,33** | **-34.619,47** | **-54.796,79** |
|  |  311 | 3.498.104,34 | 3.591.128,46 | 3.572.308,30 | 9,78 | 10,04 | 9,99 | 93.024,12 | -18.820,17 | 74.203,95 |
|  |  312 | 5.447.963,71 | 5.346.684,84 | 5.330.079,21 | 15,23 | 14,95 | 14,90 | -101.278,87 | -16.605,63 | -117.884,50 |
|  |  313 | 1.546.183,23 | 1.534.260,65 | 1.535.066,98 | 4,32 | 4,29 | 4,29 | -11.922,57 | 806,33 | -11.116,24 |
| 22 | **Grove 324** | **817.501,10** | **642.289,71** | **677.378,09** | **2,29** | **1,80** | **1,89** | **-175.211,39** | **35.088,38** | **-140.123,01** |
| 3 | **Agricultural land** | **18.577.860,33** | **18.448.439,84** | **18.430.122,69** | **51,94** | **51,58** | **51,53** | **-129.420,49** | **-18.317,15** | **-147.737,64** |
| 31 | **Arable land** | **12.365.456,65** | **12.306.053,04** | **12.314.672,82** | **34,57** | **34,41** | **34,43** | **-59.403,60** | **8.619,77** | **-50.783,83** |
|  | 211 | 12.023.414,90 | 11.973.817,68 | 11.982.789,78 | 33,61 | 33,48 | 33,50 | -49.597,22 | 8.972,10 | -40.625,12 |
|  |  221 | 116.319,02 | 111.761,61 | 111.805,49 | 0,33 | 0,31 | 0,31 | -4.557,40 | 43,87 | -4.513,53 |
|  |  222 | 225.722,73 | 220.473,75 | 220.077,55 | 0,63 | 0,62 | 0,62 | -5.248,98 | -396,20 | -5.645,18 |
| 32 | **Grassland** 231 | **6.212.403,68** | **6.142.386,79** | **6.115.449,87** | **17,37** | **17,17** | **17,10** | **-70.016,89** | **-26.936,92** | **-96.953,81** |
| 4 | **Water** | **3.056.598,46** | **3.055.427,12** | **3.060.914,20** | **8,55** | **8,54** | **8,56** | **-1.171,34** | **5.487,08** | **4.315,74** |
| 41 | **Streams** 511 | **263.808,03** | **261.879,65** | **266.646,76** | **0,74** | **0,73** | **0,75** | **-1.928,38** | **4.767,11** | **2.838,73** |
| 42 | **Inland water bodies** 512 | **431.226,14** | **431.505,59** | **429.634,15** | **1,21** | **1,21** | **1,20** | **279,45** | **-1.871,44** | **-1.591,98** |
| 43 | **Marine waters** | **2.361.564,29** | **2.362.041,88** | **2.364.633,29** | **6,60** | **6,60** | **6,61** | **477,59** | **2.591,41** | **3.069,00** |
|  | 521 | 115.885,52 | 115.785,01 | 115.782,76 | 0,32 | 0,32 | 0,32 | -100,51 | -2,26 | -102,76 |
|  | 522 | 19.261,34 | 22.659,98 | 22.806,96 | 0,05 | 0,06 | 0,06 | 3.398,64 | 146,98 | 3.545,63 |
|  | 523 | 1.922.611,95 | 1.920.360,55 | 1.919.580,30 | 5,38 | 5,37 | 5,37 | -2.251,40 | -780,25 | -3.031,65 |
|  | 423 | 303.805,48 | 303.236,34 | 306.463,27 | 0,85 | 0,85 | 0,86 | -569,14 | 3.226,93 | 2.657,78 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ET | Designation of ET and CLC-codes | Area [ha] | Share of total area [%]\* | Increase/Decrease of area [ha] |
|  |  | **2012** | **2015** | **2018** | **2012** | **2015** | **2018** | **2015 - 2012** | **2018 - 2015** | **2018 - 2012** |
| 5 | **Settlement and artificially modified areas** | **4.550.987,39** | **4.892.369,81** | **4.890.361,64** | **12,72** | **13,68** | **13,67** | **341.382,42** | **-2.008,17** | **339.374,25** |
| 51 | **Buildings and transportation area** | **3.945.352,81** | **4.336.537,99** | **4.329.052,99** | **11,03** | **12,12** | **12,10** | **391.185,18** | **-7.485,00** | **383.700,18** |
|  |  111 | 33.632,67 | 143.362,75 | 119.881,65 | 0,09 | 0,40 | 0,34 | 109.730,08 | -23.481,10 | 86.248,98 |
|  |  112 | 1.970.613,33 | 1.882.748,43 | 1.886.865,97 | 5,51 | 5,26 | 5,28 | -87.864,89 | 4.117,54 | -83.747,35 |
|  |  121 | 701.753,28 | 709.355,38 | 722.511,36 | 1,96 | 1,98 | 2,02 | 7.602,10 | 13.155,98 | 20.758,08 |
|  |  122 | 1.175.389,52 | 1.543.057,04 | 1.543.358,89 | 3,29 | 4,31 | 4,31 | 367.667,52 | 301,85 | 367.969,37 |
|  |  123 | 8.171,00 | 8.092,63 | 8.195,39 | 0,02 | 0,02 | 0,02 | -78,37 | 102,75 | 24,39 |
|  |  124 | 39.558,36 | 38.369,32 | 39.203,59 | 0,11 | 0,11 | 0,11 | -1.189,04 | 834,27 | -354,77 |
|  |  133 | 16.234,64 | 11.552,42 | 9.036,13 | 0,05 | 0,03 | 0,03 | -4.682,22 | -2.516,29 | -7.198,51 |
| 52 | **Mining and dumping sites** | **119.554,53** | **125.724,55** | **122.868,90** | **0,33** | **0,35** | **0,34** | **6.170,02** | **-2.855,66** | **3.314,36** |
|  |  131 | 94.048,29 | 100.756,63 | 98.137,96 | 0,26 | 0,28 | 0,27 | 6.708,34 | -2.618,67 | 4.089,67 |
|  |  132 | 25.506,24 | 24.967,92 | 24.730,93 | 0,07 | 0,07 | 0,07 | -538,32 | -236,99 | -775,31 |
| 53 | **Urban vegetated areas** | **486.080,05** | **430.107,27** | **438.439,75** | **1,36** | **1,20** | **1,23** | **-55.972,78** | **8.332,48** | **-47.640,30** |
|  | 141 | 172.596,73 | 84.046,60 | 83.315,85 | 0,48 | 0,23 | 0,23 | -88.550,13 | -730,75 | -89.280,88 |
|  | 142 | 313.483,32 | 346.060,67 | 355.123,90 | 0,88 | 0,97 | 0,99 | 32.577,35 | 9.063,24 | 41.640,59 |
|  |  |  |  |  |  |  |  |  |  |  |
|  | **SUM** | **38.141.754,36** | **38.141.888,31** | **38.141.776,23** | **106,64\*** | **106,64\*** | **106,64\*** |  |  |  |

\*The total area of Germany refers to the total area of the administrative boundary (VG25) and covers 35767570, 15 hectare (status as at 2016). The total area of the administrative boundary is slightly bigger than the total area of the German land cover model (LBM-DE). The surplus area was located in the North and Baltic Sea and thus added to the area of the CLC-class 523 (Sea and ocean). For this reason, the sum of the shares of EST is more than 100 percent.