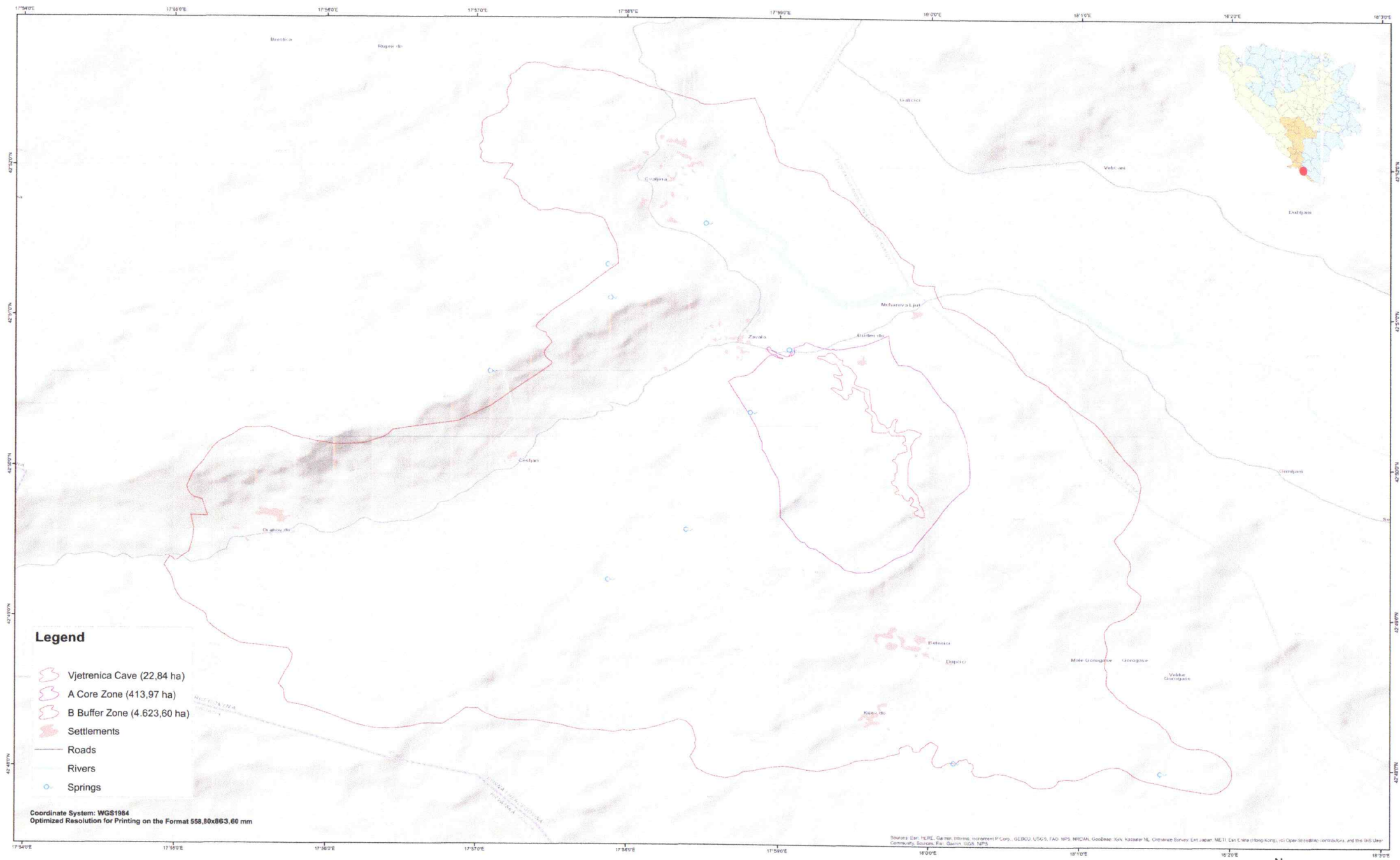
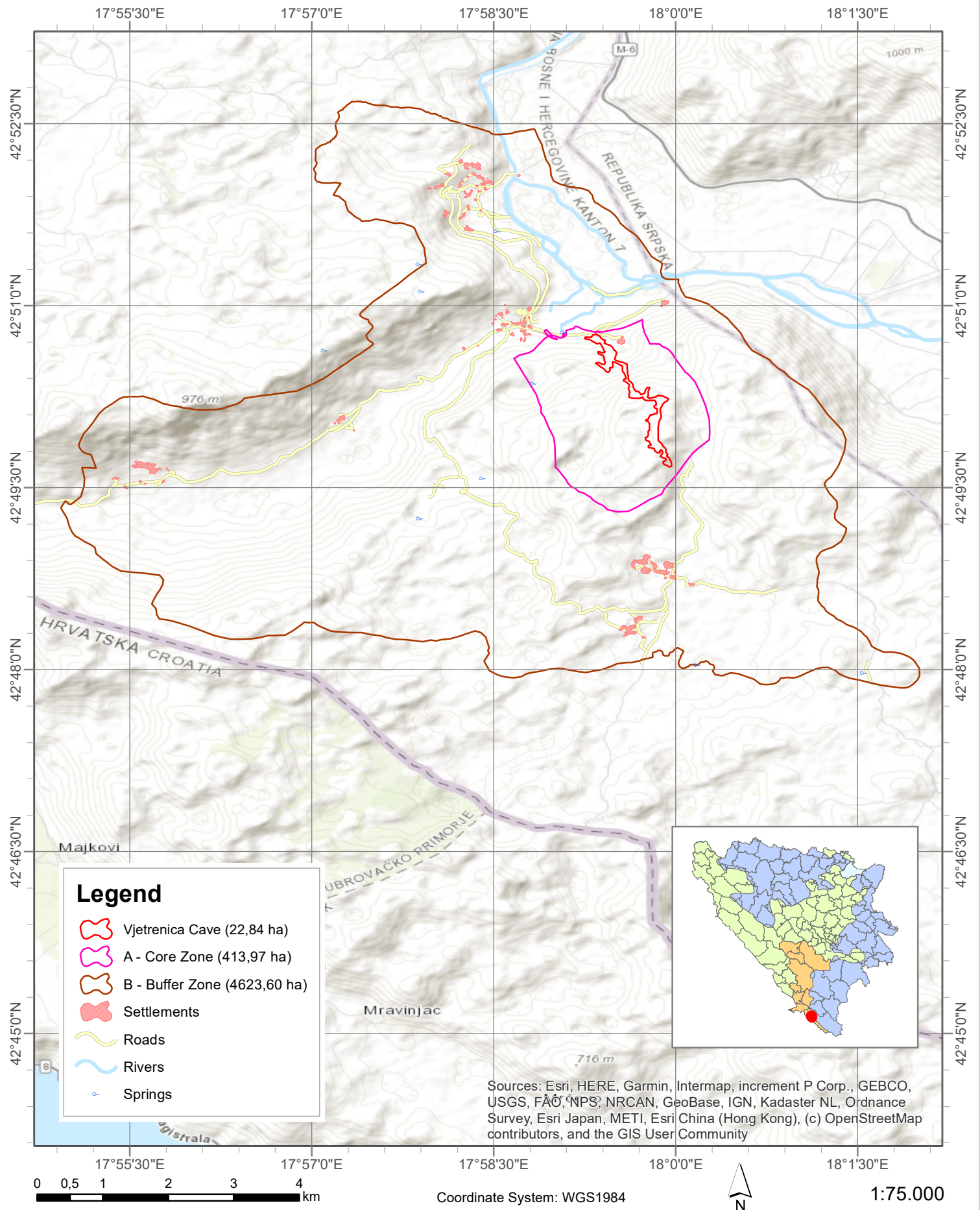




UNESCO WORLD HERITAGE LIST NOMINATION

**VJETRENICA CAVE**

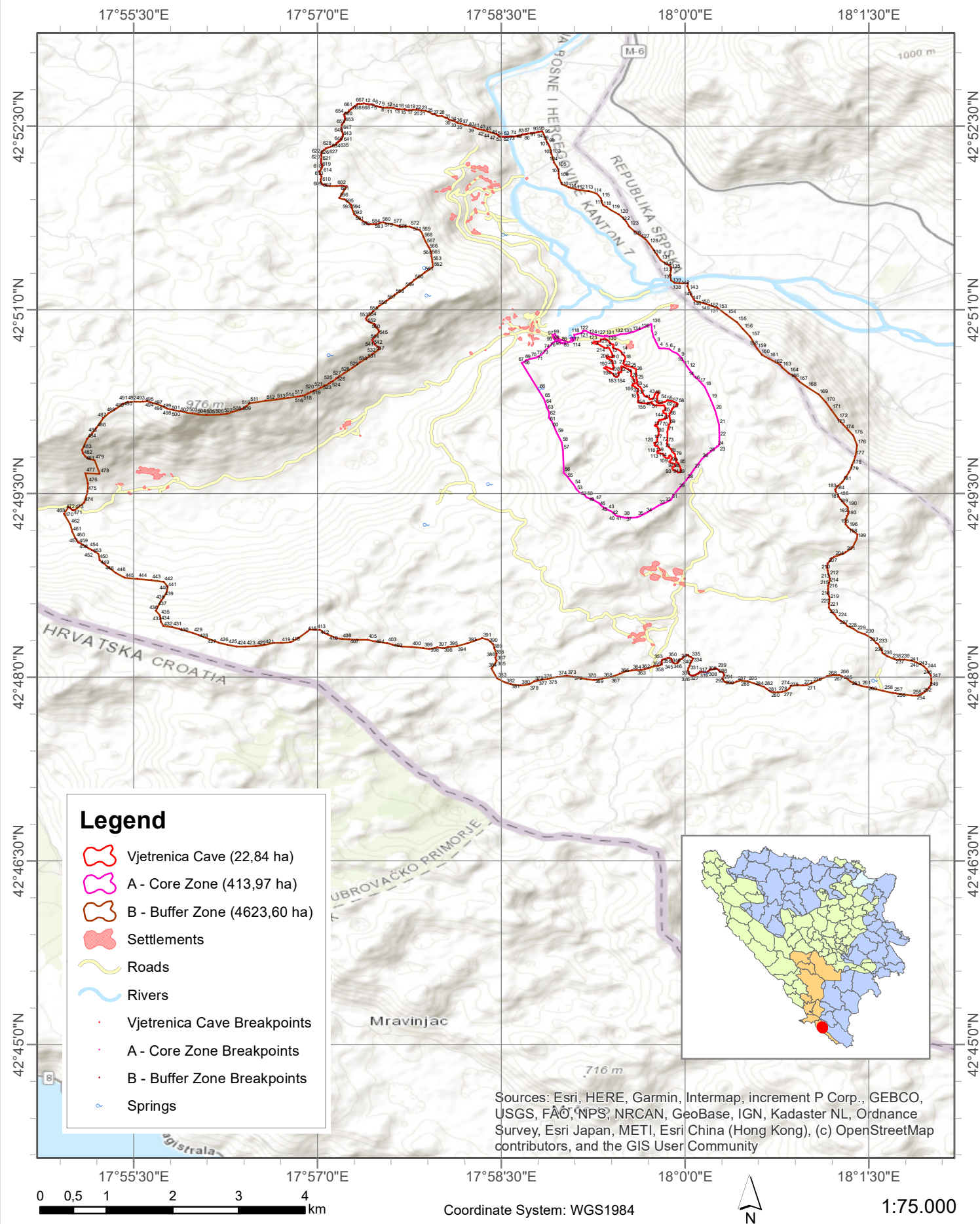
BOSNIA AND HERZEGOVINA



# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

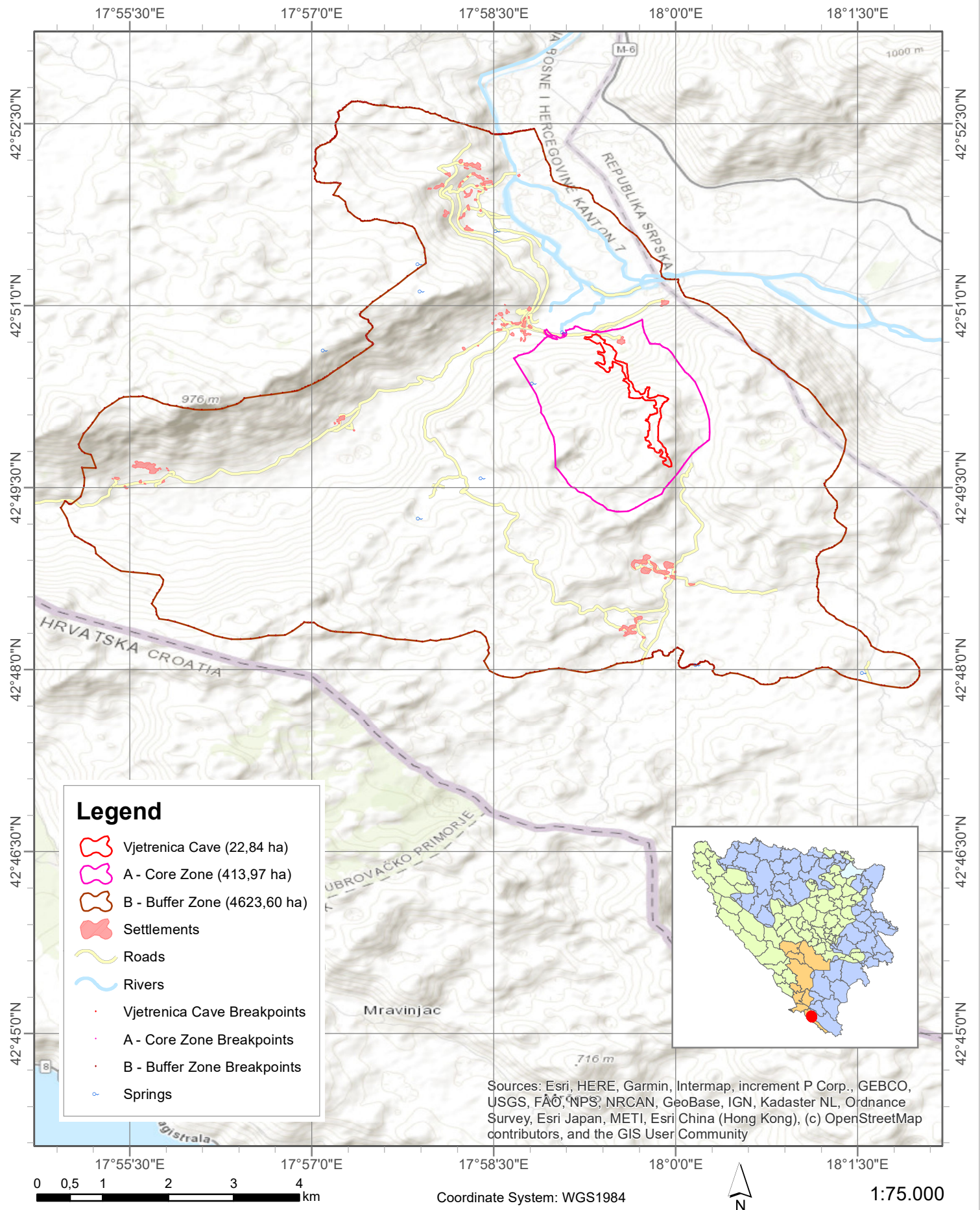
### BOSNIA AND HERZEGOVINA



UNESCO WORLD HERITAGE LIST NOMINATION

**VJETRENICA CAVE**

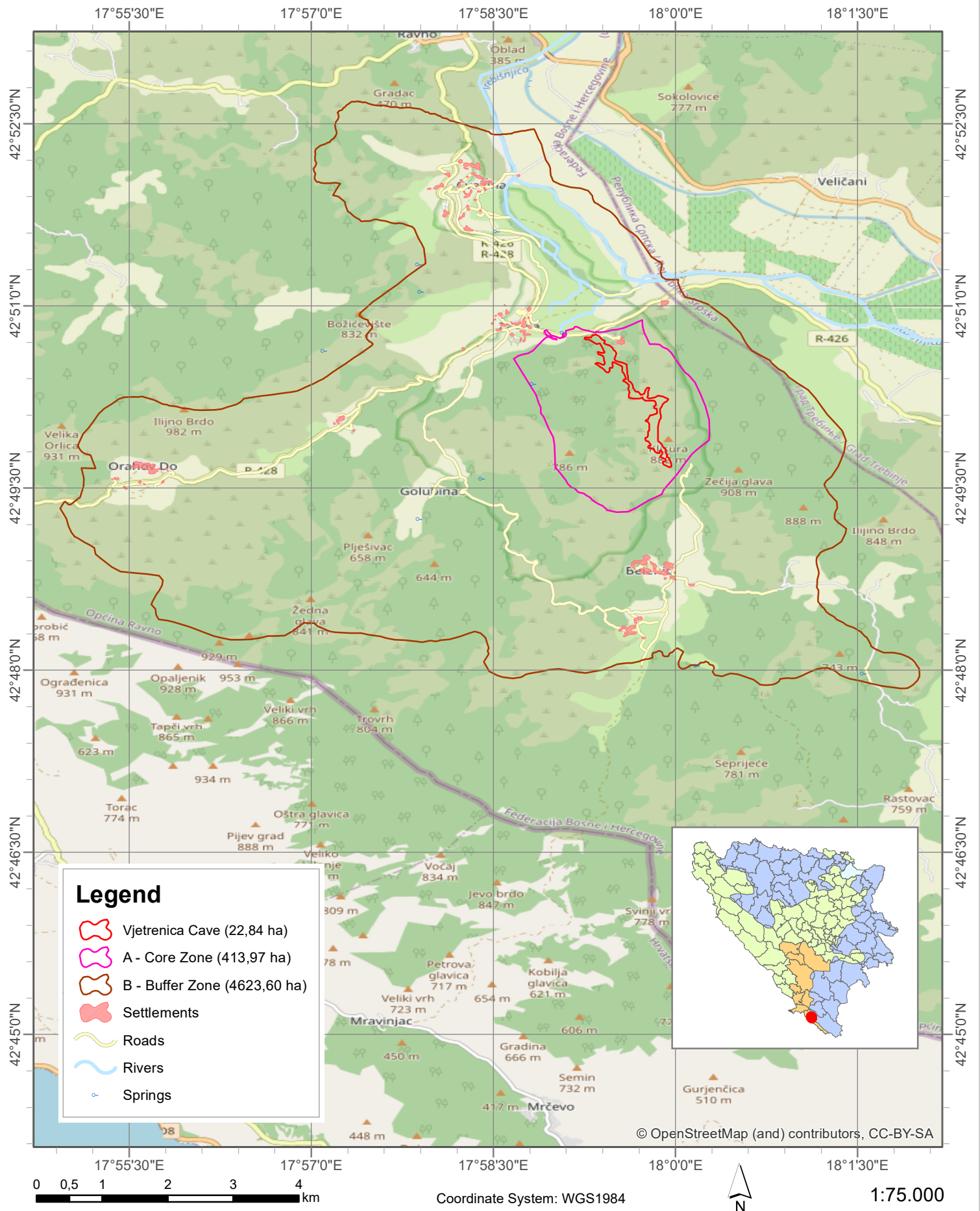
BOSNIA AND HERZEGOVINA



# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

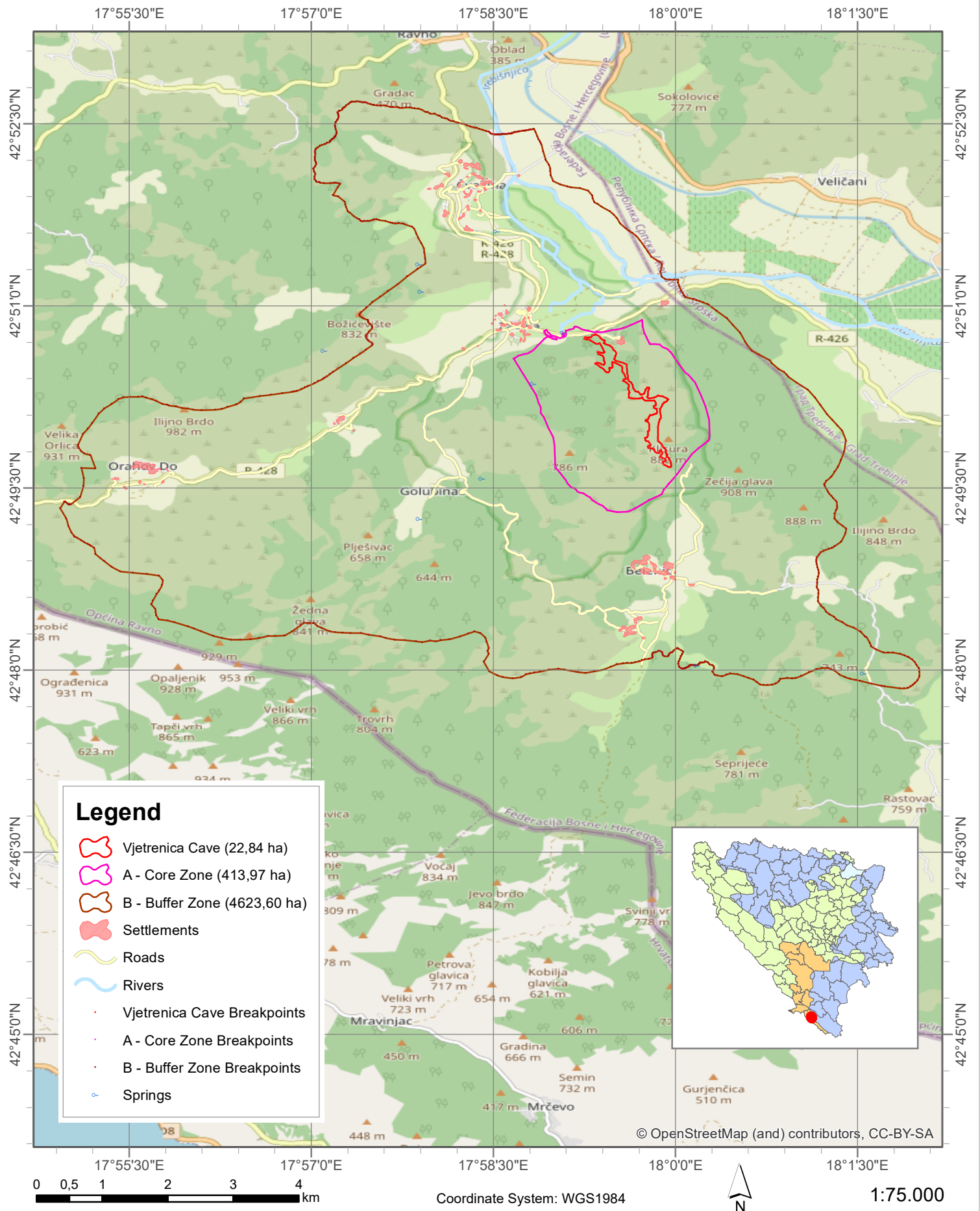
### BOSNIA AND HERZEGOVINA



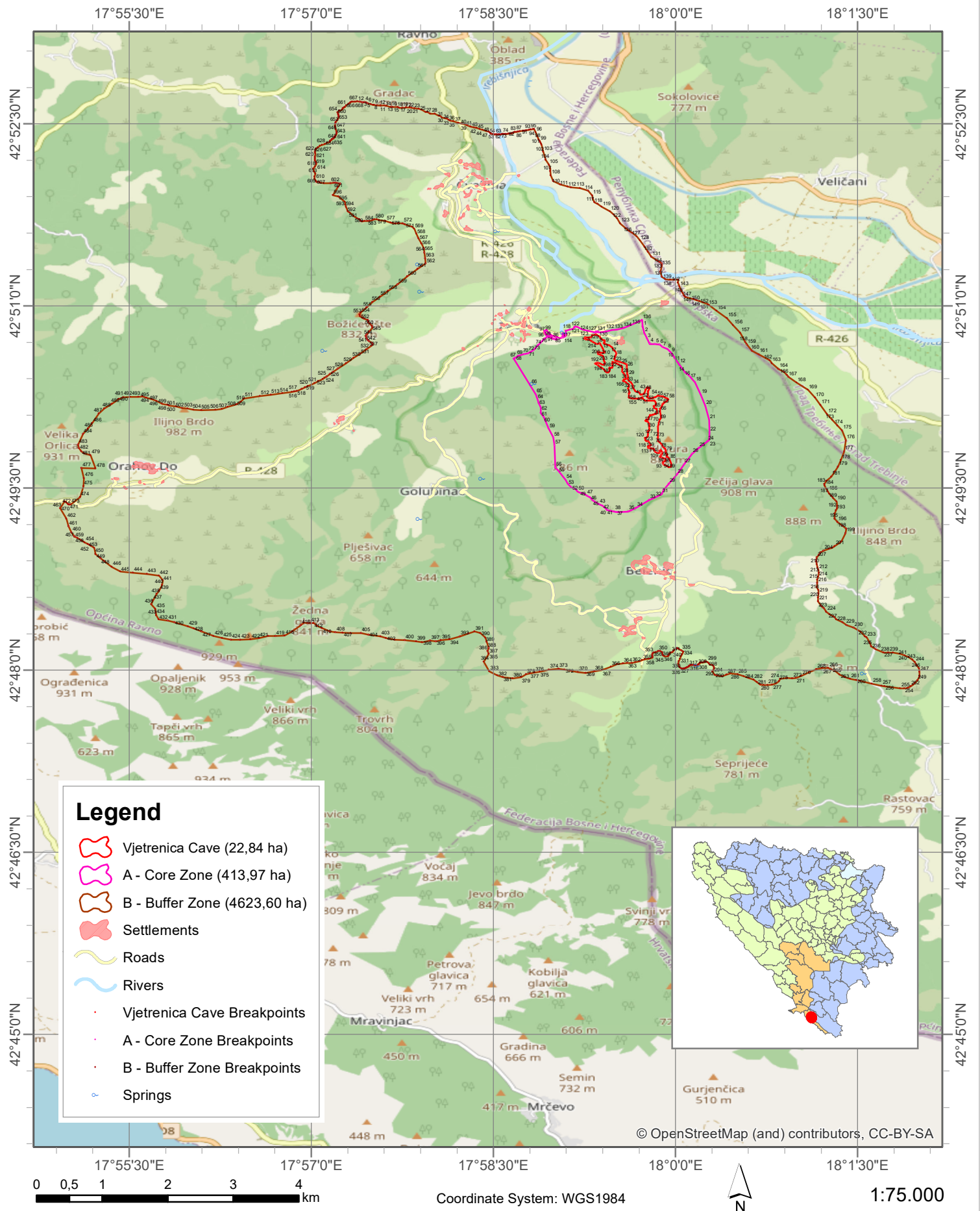
# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

### BOSNIA AND HERZEGOVINA



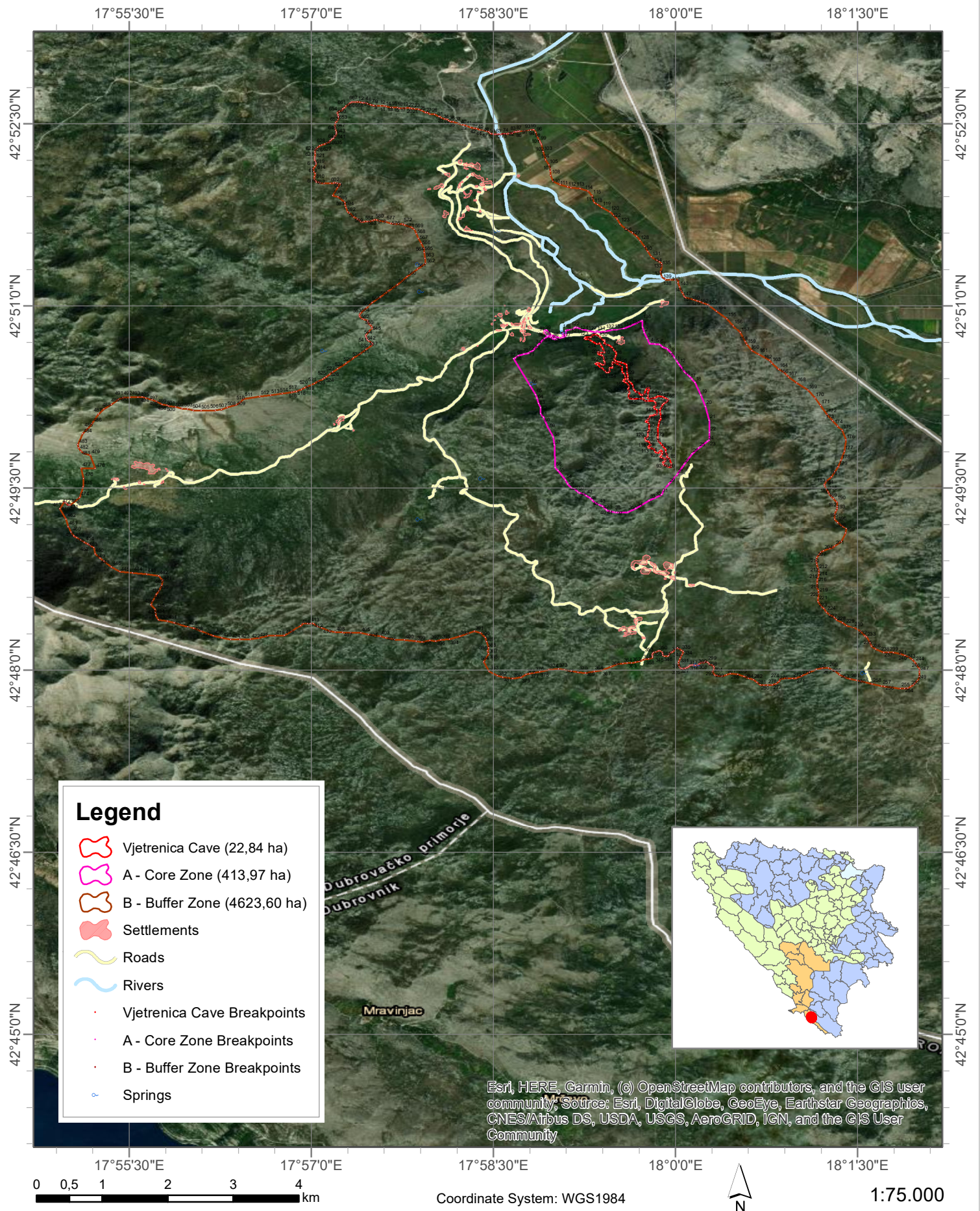
WORLD HERITAGE LIST NOMINATION  
**VJETRENICA CAVE**  
BOSNIA AND HERZEGOVINA



# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

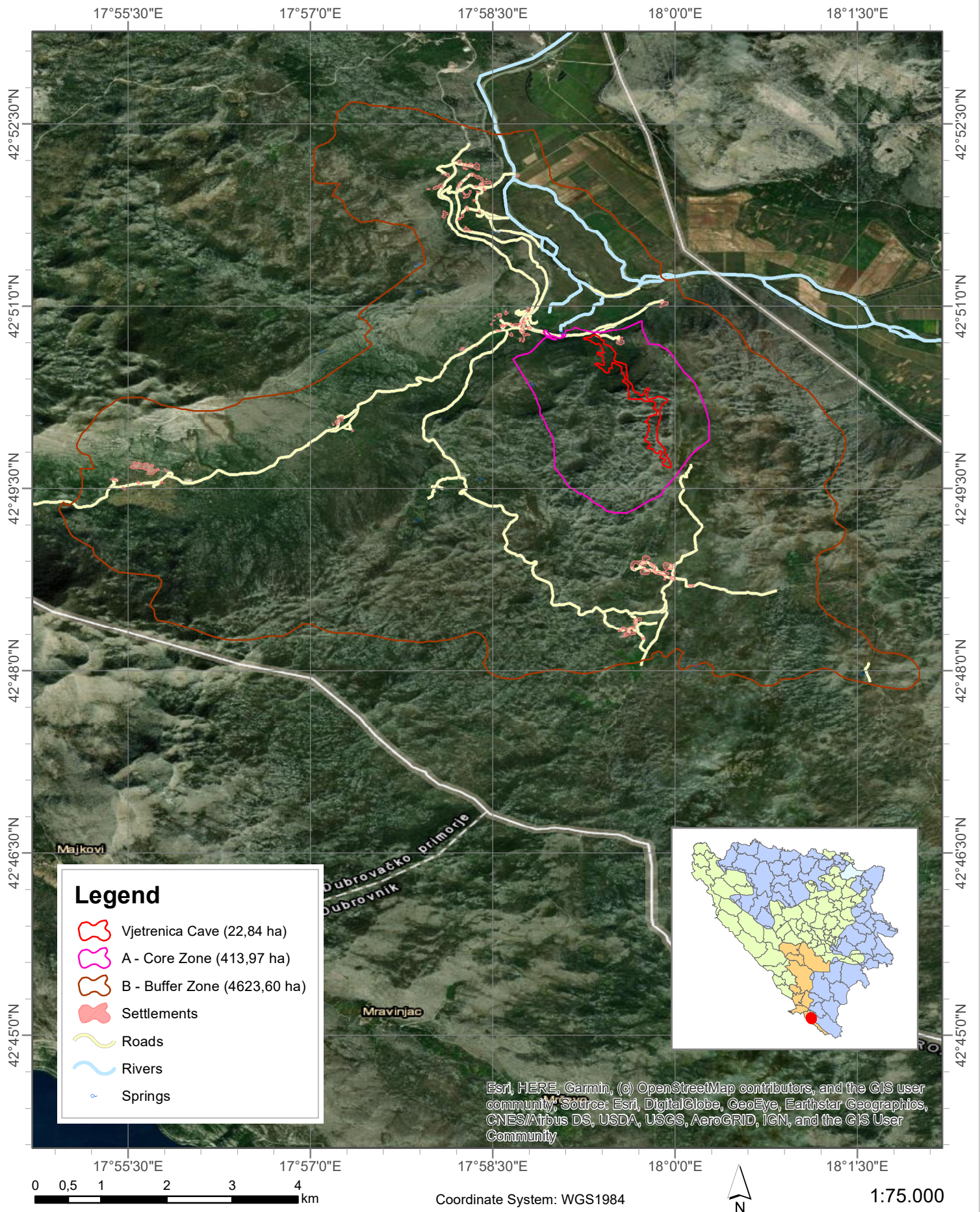
### BOSNIA AND HERZEGOVINA



# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

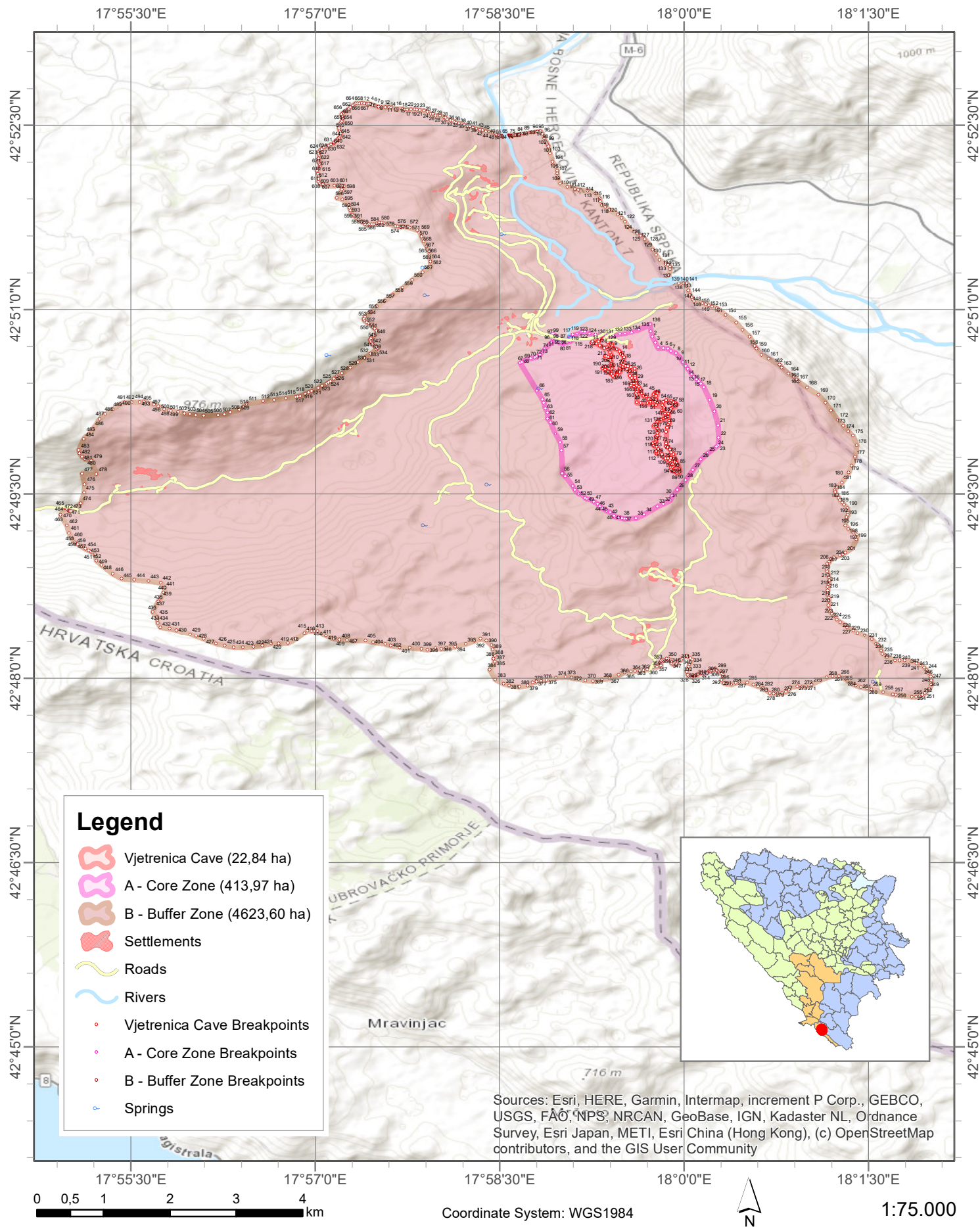
### BOSNIA AND HERZEGOVINA



# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

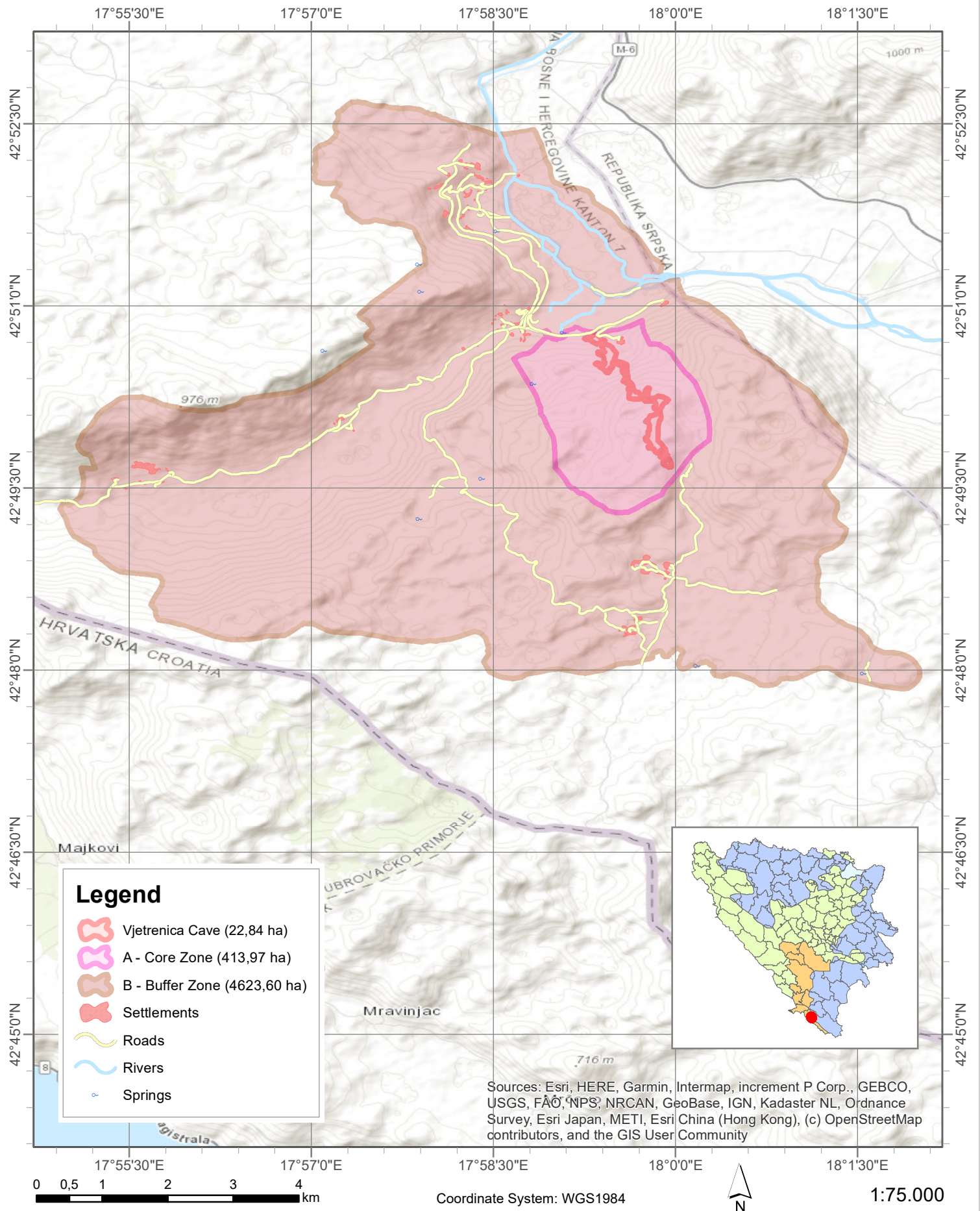
### BOSNIA AND HERZEGOVINA



UNESCO WORLD HERITAGE LIST NOMINATION

# VJETRENICA CAVE

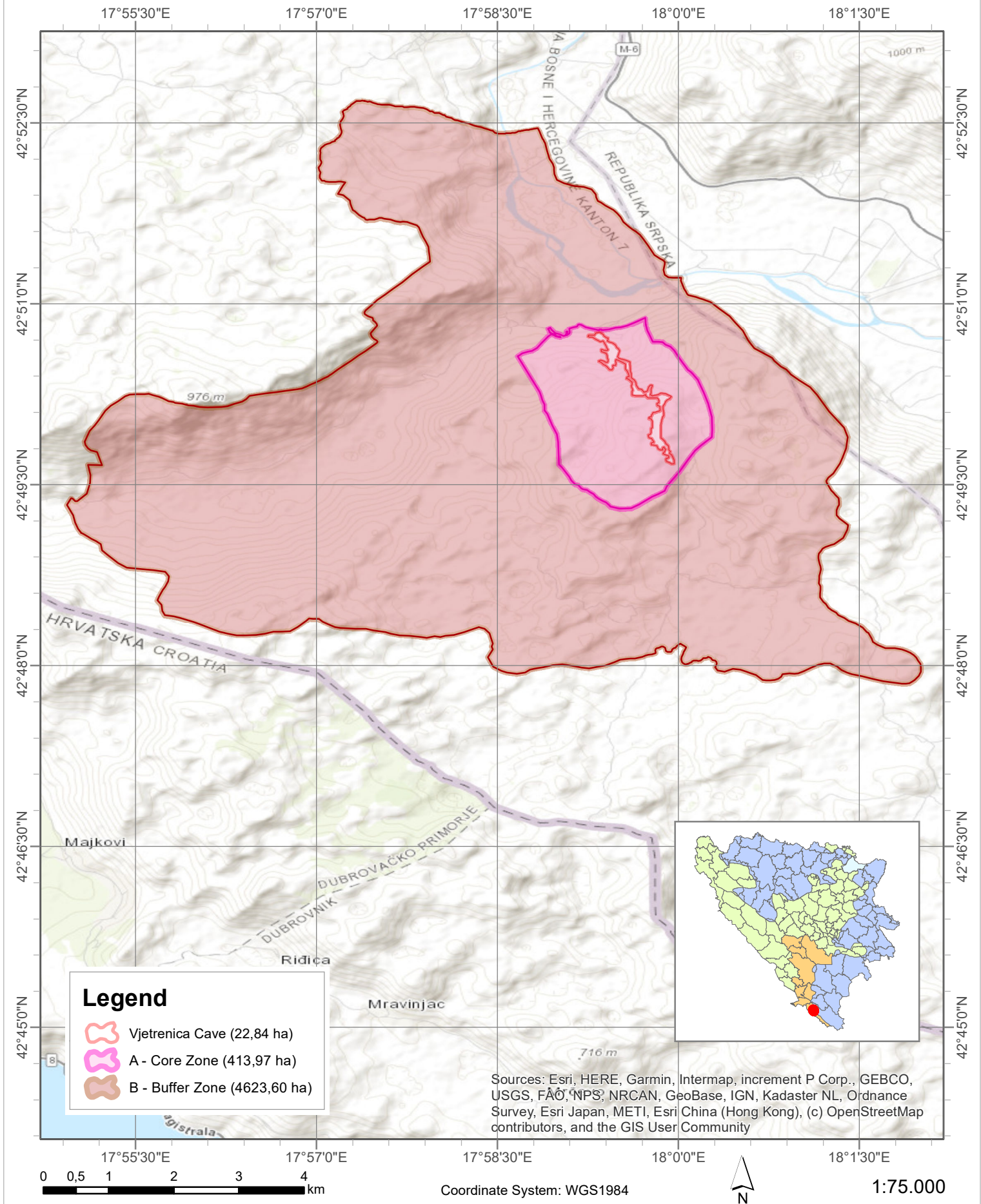
BOSNIA AND HERZEGOVINA



# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

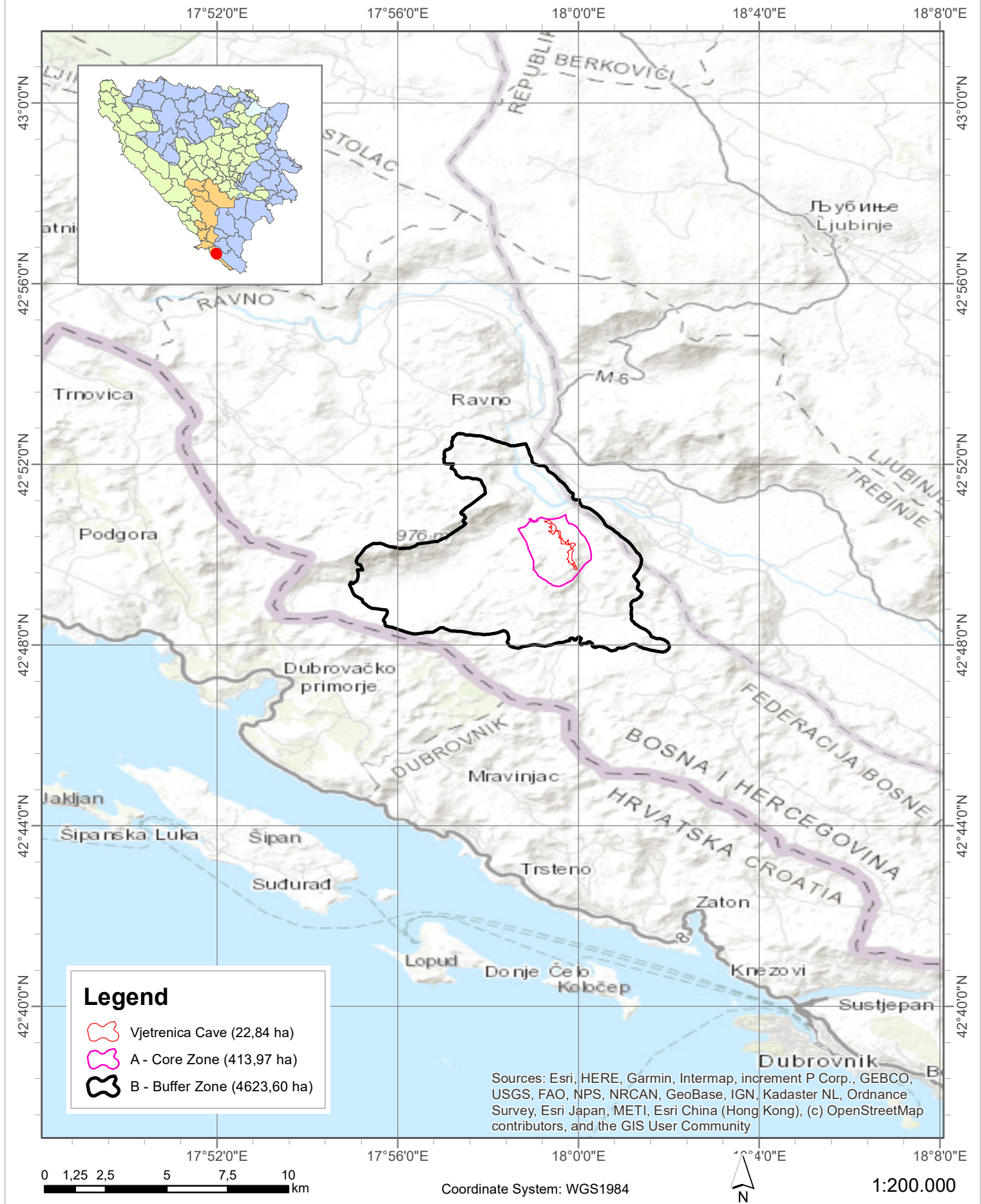
### BOSNIA AND HERZEGOVINA



# UNESCO WORLD HERITAGE LIST NOMINATION

## VJETRENICA CAVE

### BOSNIA AND HERZEGOVINA



UNESCO WORLD HERITAGE LIST NOMINATION

**VJETRENICA CAVE**

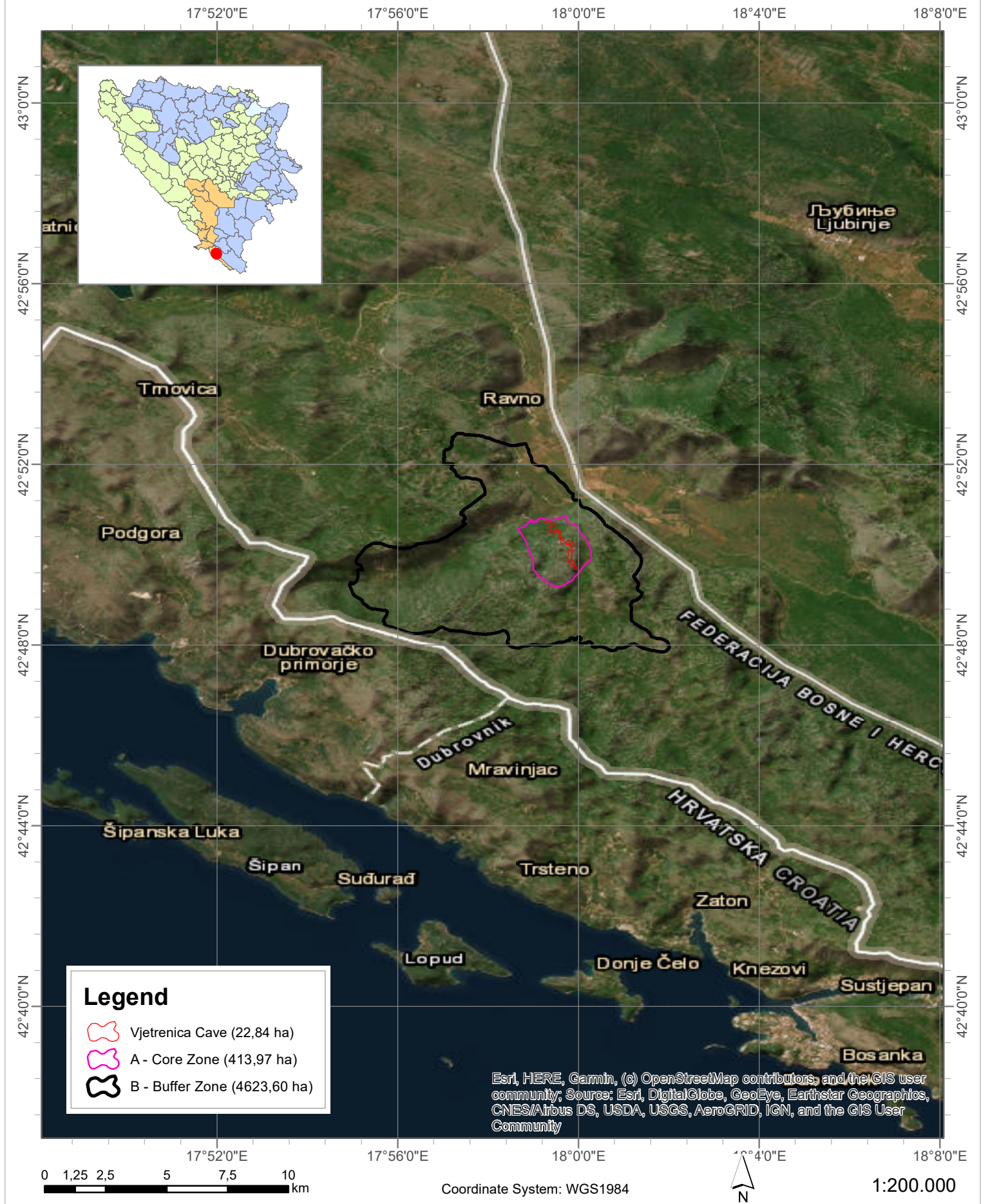
BOSNIA AND HERZEGOVINA



UNESCO WORLD HERITAGE LIST NOMINATION

**VJETRENICA CAVE**

BOSNIA AND HERZEGOVINA



**A - Core Zone**  
**Coordinates of Breakpoints**

| No | X | Y       | Z       |          |
|----|---|---------|---------|----------|
| 1  |   | 17,9955 | 42,8472 | 273,8420 |
| 2  |   | 17,9957 | 42,8463 | 315,8388 |
| 3  |   | 17,9961 | 42,8455 | 347,8083 |
| 4  |   | 17,9965 | 42,8449 | 358,0837 |
| 5  |   | 17,9972 | 42,8448 | 366,0560 |
| 6  |   | 17,9978 | 42,8447 | 381,0033 |
| 7  |   | 17,9982 | 42,8444 | 388,3779 |
| 8  |   | 17,9989 | 42,8441 | 404,5080 |
| 9  |   | 17,9994 | 42,8436 | 437,7167 |
| 10 |   | 17,9999 | 42,8429 | 485,3142 |
| 11 |   | 18,0002 | 42,8424 | 524,0104 |
| 12 |   | 18,0005 | 42,8420 | 554,0300 |
| 13 |   | 18,0010 | 42,8413 | 604,6428 |
| 14 |   | 18,0013 | 42,8409 | 636,8375 |
| 15 |   | 18,0017 | 42,8406 | 657,9045 |
| 16 |   | 18,0020 | 42,8403 | 664,9996 |
| 17 |   | 18,0023 | 42,8400 | 673,6896 |
| 18 |   | 18,0027 | 42,8395 | 697,9625 |
| 19 |   | 18,0035 | 42,8378 | 750,0000 |
| 20 |   | 18,0041 | 42,8363 | 780,4982 |
| 21 |   | 18,0046 | 42,8344 | 803,8841 |
| 22 |   | 18,0047 | 42,8326 | 841,8263 |
| 23 |   | 18,0046 | 42,8316 | 854,8999 |
| 24 |   | 18,0044 | 42,8314 | 856,4138 |
| 25 |   | 18,0032 | 42,8305 | 825,3099 |
| 26 |   | 18,0023 | 42,8297 | 858,7653 |
| 27 |   | 18,0012 | 42,8283 | 823,9297 |
| 28 |   | 18,0002 | 42,8269 | 829,9526 |
| 29 |   | 17,9991 | 42,8256 | 806,1253 |
| 30 |   | 17,9984 | 42,8248 | 796,0126 |
| 31 |   | 17,9981 | 42,8242 | 754,9387 |
| 32 |   | 17,9972 | 42,8237 | 745,3049 |
| 33 |   | 17,9964 | 42,8234 | 746,5211 |
| 34 |   | 17,9946 | 42,8223 | 783,6609 |
| 35 |   | 17,9935 | 42,8218 | 804,3277 |
| 36 |   | 17,9922 | 42,8217 | 830,6967 |
| 37 |   | 17,9919 | 42,8217 | 834,8718 |
| 38 |   | 17,9916 | 42,8218 | 830,0000 |
| 39 |   | 17,9911 | 42,8219 | 828,5961 |
| 40 |   | 17,9906 | 42,8220 | 816,3400 |
| 41 |   | 17,9905 | 42,8221 | 809,9044 |
| 42 |   | 17,9900 | 42,8226 | 781,1227 |
| 43 |   | 17,9895 | 42,8228 | 764,3216 |
| 44 |   | 17,9890 | 42,8231 | 756,6127 |
| 45 |   | 17,9886 | 42,8234 | 760,9672 |
| 46 |   | 17,9883 | 42,8237 | 781,8594 |
| 47 |   | 17,9878 | 42,8240 | 784,0492 |

|    |         |         |          |
|----|---------|---------|----------|
| 48 | 17,9874 | 42,8243 | 779,4288 |
| 49 | 17,9868 | 42,8244 | 767,5114 |
| 50 | 17,9866 | 42,8245 | 756,8953 |
| 51 | 17,9862 | 42,8250 | 744,0255 |
| 52 | 17,9857 | 42,8251 | 722,4330 |
| 53 | 17,9852 | 42,8256 | 698,3497 |
| 54 | 17,9849 | 42,8261 | 689,8817 |
| 55 | 17,9839 | 42,8274 | 682,8383 |
| 56 | 17,9835 | 42,8278 | 682,3923 |
| 57 | 17,9834 | 42,8309 | 659,8289 |
| 58 | 17,9832 | 42,8320 | 642,6133 |
| 59 | 17,9826 | 42,8332 | 641,0172 |
| 60 | 17,9819 | 42,8348 | 578,2331 |
| 61 | 17,9815 | 42,8353 | 561,9765 |
| 62 | 17,9815 | 42,8361 | 529,4219 |
| 63 | 17,9812 | 42,8367 | 504,9859 |
| 64 | 17,9810 | 42,8374 | 488,7355 |
| 65 | 17,9808 | 42,8379 | 490,7004 |
| 66 | 17,9801 | 42,8391 | 544,0624 |
| 67 | 17,9778 | 42,8428 | 346,6099 |
| 68 | 17,9780 | 42,8429 | 345,1586 |
| 69 | 17,9784 | 42,8432 | 342,9141 |
| 70 | 17,9792 | 42,8434 | 337,0520 |
| 71 | 17,9798 | 42,8435 | 335,0460 |
| 72 | 17,9801 | 42,8437 | 334,9539 |
| 73 | 17,9805 | 42,8439 | 331,8255 |
| 74 | 17,9811 | 42,8446 | 322,3466 |
| 75 | 17,9820 | 42,8455 | 311,1134 |
| 76 | 17,9824 | 42,8458 | 301,4835 |
| 77 | 17,9828 | 42,8457 | 305,9215 |
| 78 | 17,9831 | 42,8455 | 311,1817 |
| 79 | 17,9836 | 42,8454 | 318,8460 |
| 80 | 17,9837 | 42,8454 | 319,1714 |
| 81 | 17,9837 | 42,8454 | 318,3784 |
| 82 | 17,9836 | 42,8455 | 317,0240 |
| 83 | 17,9836 | 42,8455 | 316,3235 |
| 84 | 17,9835 | 42,8455 | 315,2198 |
| 85 | 17,9834 | 42,8455 | 312,1650 |
| 86 | 17,9831 | 42,8456 | 307,8498 |
| 87 | 17,9830 | 42,8458 | 304,1690 |
| 88 | 17,9825 | 42,8459 | 299,0324 |
| 89 | 17,9824 | 42,8460 | 297,2050 |
| 90 | 17,9824 | 42,8460 | 295,2864 |
| 91 | 17,9823 | 42,8460 | 293,3448 |
| 92 | 17,9823 | 42,8461 | 292,4326 |
| 93 | 17,9822 | 42,8461 | 290,7566 |
| 94 | 17,9822 | 42,8461 | 289,9514 |
| 95 | 17,9822 | 42,8462 | 288,4624 |
| 96 | 17,9821 | 42,8463 | 283,7860 |
| 97 | 17,9821 | 42,8464 | 278,9801 |

|     |         |         |          |
|-----|---------|---------|----------|
| 98  | 17,9820 | 42,8465 | 271,9877 |
| 99  | 17,9820 | 42,8466 | 270,8059 |
| 100 | 17,9823 | 42,8467 | 267,6926 |
| 101 | 17,9825 | 42,8464 | 280,0974 |
| 102 | 17,9830 | 42,8460 | 295,3693 |
| 103 | 17,9836 | 42,8458 | 307,2138 |
| 104 | 17,9841 | 42,8456 | 318,7152 |
| 105 | 17,9845 | 42,8457 | 321,4405 |
| 106 | 17,9844 | 42,8457 | 319,8965 |
| 107 | 17,9845 | 42,8459 | 312,2516 |
| 108 | 17,9845 | 42,8461 | 303,5129 |
| 109 | 17,9845 | 42,8462 | 299,1803 |
| 110 | 17,9845 | 42,8462 | 299,1842 |
| 111 | 17,9846 | 42,8462 | 299,4558 |
| 112 | 17,9846 | 42,8462 | 299,7636 |
| 113 | 17,9847 | 42,8462 | 299,6457 |
| 114 | 17,9846 | 42,8457 | 320,2029 |
| 115 | 17,9849 | 42,8459 | 316,3909 |
| 116 | 17,9850 | 42,8461 | 306,4290 |
| 117 | 17,9849 | 42,8466 | 279,9630 |
| 118 | 17,9855 | 42,8468 | 268,9720 |
| 119 | 17,9860 | 42,8469 | 261,8495 |
| 120 | 17,9861 | 42,8471 | 252,9011 |
| 121 | 17,9863 | 42,8472 | 250,0000 |
| 122 | 17,9866 | 42,8471 | 250,0000 |
| 123 | 17,9872 | 42,8468 | 250,0000 |
| 124 | 17,9880 | 42,8466 | 250,4274 |
| 125 | 17,9890 | 42,8464 | 250,8864 |
| 126 | 17,9891 | 42,8464 | 250,6546 |
| 127 | 17,9891 | 42,8465 | 250,0000 |
| 128 | 17,9894 | 42,8465 | 250,0000 |
| 129 | 17,9894 | 42,8464 | 250,0000 |
| 130 | 17,9894 | 42,8464 | 250,1273 |
| 131 | 17,9904 | 42,8465 | 250,0000 |
| 132 | 17,9913 | 42,8467 | 250,0000 |
| 133 | 17,9920 | 42,8468 | 250,0000 |
| 134 | 17,9929 | 42,8470 | 250,0000 |
| 135 | 17,9939 | 42,8474 | 250,0000 |
| 136 | 17,9954 | 42,8481 | 250,0000 |

**B - Buffer Zone**  
**Coordinates of Breakpoints**

| No | X       | Y       | Z        |          |
|----|---------|---------|----------|----------|
|    | 1       | 17,9567 | 42,8781  | 476,0986 |
|    | 2       | 17,9569 | 42,8780  | 474,5399 |
|    | 3       | 17,9571 | 42,8780  | 478,0354 |
|    | 4       | 17,9573 | 42,8780  | 481,1251 |
|    | 5       | 17,9575 | 42,8780  | 478,1811 |
|    | 6       | 17,9578 | 42,8779  | 478,1811 |
|    | 7       | 17,9582 | 42,8777  | 482,2724 |
|    | 8       | 17,9585 | 42,8776  | 482,2049 |
|    | 9       | 17,9586 | 42,8776  | 482,2049 |
| 10 | 17,9590 | 42,8775 | 484,0598 |          |
| 11 | 17,9595 | 42,8776 | 480,0000 |          |
| 12 | 17,9600 | 42,8775 | 480,0000 |          |
| 13 | 17,9603 | 42,8775 | 480,0000 |          |
| 14 | 17,9609 | 42,8773 | 484,9850 |          |
| 15 | 17,9612 | 42,8773 | 488,3387 |          |
| 16 | 17,9619 | 42,8773 | 490,0000 |          |
| 17 | 17,9621 | 42,8772 | 490,0000 |          |
| 18 | 17,9625 | 42,8772 | 490,0000 |          |
| 19 | 17,9630 | 42,8772 | 490,0000 |          |
| 20 | 17,9635 | 42,8773 | 501,4894 |          |
| 21 | 17,9638 | 42,8772 | 501,9160 |          |
| 22 | 17,9642 | 42,8771 | 493,6316 |          |
| 23 | 17,9648 | 42,8771 | 480,2687 |          |
| 24 | 17,9652 | 42,8769 | 467,8242 |          |
| 25 | 17,9657 | 42,8767 | 465,0000 |          |
| 26 | 17,9660 | 42,8766 | 465,0000 |          |
| 27 | 17,9663 | 42,8764 | 465,0000 |          |
| 28 | 17,9669 | 42,8764 | 455,9923 |          |
| 29 | 17,9675 | 42,8761 | 449,8925 |          |
| 30 | 17,9677 | 42,8761 | 442,6599 |          |
| 31 | 17,9679 | 42,8759 | 437,7381 |          |
| 32 | 17,9684 | 42,8758 | 435,7821 |          |
| 33 | 17,9686 | 42,8757 | 436,3096 |          |
| 34 | 17,9689 | 42,8755 | 442,1173 |          |
| 35 | 17,9691 | 42,8755 | 446,9290 |          |
| 36 | 17,9695 | 42,8754 | 442,5339 |          |
| 37 | 17,9702 | 42,8752 | 435,5147 |          |
| 38 | 17,9707 | 42,8751 | 433,7439 |          |
| 39 | 17,9710 | 42,8750 | 435,2101 |          |
| 40 | 17,9714 | 42,8748 | 424,2679 |          |
| 41 | 17,9719 | 42,8747 | 426,3703 |          |
| 42 | 17,9724 | 42,8745 | 432,2834 |          |
| 43 | 17,9727 | 42,8744 | 437,1878 |          |
| 44 | 17,9731 | 42,8743 | 454,5850 |          |
| 45 | 17,9736 | 42,8742 | 452,4828 |          |
| 46 | 17,9741 | 42,8740 | 439,5473 |          |
| 47 | 17,9744 | 42,8739 | 433,8869 |          |

|    |         |         |          |
|----|---------|---------|----------|
| 48 | 17,9745 | 42,8738 | 432,6896 |
| 49 | 17,9747 | 42,8737 | 436,7190 |
| 50 | 17,9749 | 42,8736 | 434,7619 |
| 51 | 17,9749 | 42,8736 | 428,3147 |
| 52 | 17,9751 | 42,8736 | 428,3147 |
| 53 | 17,9752 | 42,8736 | 419,7800 |
| 54 | 17,9753 | 42,8736 | 419,7800 |
| 55 | 17,9755 | 42,8736 | 412,7267 |
| 56 | 17,9755 | 42,8736 | 412,7267 |
| 57 | 17,9757 | 42,8736 | 404,0445 |
| 58 | 17,9757 | 42,8736 | 404,0445 |
| 59 | 17,9758 | 42,8736 | 404,0445 |
| 60 | 17,9759 | 42,8736 | 395,2401 |
| 61 | 17,9761 | 42,8736 | 395,2401 |
| 62 | 17,9762 | 42,8736 | 379,2701 |
| 63 | 17,9762 | 42,8736 | 379,2701 |
| 64 | 17,9763 | 42,8736 | 379,2701 |
| 65 | 17,9764 | 42,8736 | 379,2701 |
| 66 | 17,9764 | 42,8736 | 363,5879 |
| 67 | 17,9764 | 42,8736 | 363,5879 |
| 68 | 17,9765 | 42,8736 | 363,5879 |
| 69 | 17,9766 | 42,8736 | 363,5879 |
| 70 | 17,9767 | 42,8736 | 348,1539 |
| 71 | 17,9768 | 42,8736 | 348,1539 |
| 72 | 17,9768 | 42,8736 | 348,1539 |
| 73 | 17,9770 | 42,8737 | 337,1479 |
| 74 | 17,9772 | 42,8737 | 328,2668 |
| 75 | 17,9773 | 42,8737 | 328,2668 |
| 76 | 17,9775 | 42,8737 | 319,5579 |
| 77 | 17,9775 | 42,8737 | 319,5579 |
| 78 | 17,9776 | 42,8737 | 317,3607 |
| 79 | 17,9776 | 42,8737 | 305,6401 |
| 80 | 17,9778 | 42,8738 | 305,6401 |
| 81 | 17,9779 | 42,8739 | 294,0087 |
| 82 | 17,9780 | 42,8739 | 294,0087 |
| 83 | 17,9782 | 42,8739 | 281,0236 |
| 84 | 17,9784 | 42,8739 | 270,1933 |
| 85 | 17,9785 | 42,8740 | 270,1933 |
| 86 | 17,9786 | 42,8740 | 258,0954 |
| 87 | 17,9790 | 42,8740 | 249,2896 |
| 88 | 17,9792 | 42,8741 | 247,9536 |
| 89 | 17,9793 | 42,8741 | 247,5226 |
| 90 | 17,9795 | 42,8741 | 247,8935 |
| 91 | 17,9799 | 42,8742 | 247,8135 |
| 92 | 17,9801 | 42,8742 | 247,7735 |
| 93 | 17,9801 | 42,8742 | 247,7735 |
| 94 | 17,9805 | 42,8743 | 247,4293 |
| 95 | 17,9806 | 42,8743 | 247,3893 |
| 96 | 17,9808 | 42,8738 | 248,2619 |
| 97 | 17,9810 | 42,8733 | 248,6367 |

|     |         |         |          |
|-----|---------|---------|----------|
| 98  | 17,9812 | 42,8729 | 248,7914 |
| 99  | 17,9814 | 42,8726 | 248,7015 |
| 100 | 17,9815 | 42,8725 | 248,7789 |
| 101 | 17,9815 | 42,8723 | 248,6897 |
| 102 | 17,9816 | 42,8721 | 248,7706 |
| 103 | 17,9818 | 42,8712 | 249,0076 |
| 104 | 17,9822 | 42,8701 | 249,4239 |
| 105 | 17,9826 | 42,8694 | 249,0928 |
| 106 | 17,9828 | 42,8689 | 248,8708 |
| 107 | 17,9828 | 42,8685 | 248,8396 |
| 108 | 17,9829 | 42,8679 | 248,8078 |
| 109 | 17,9832 | 42,8672 | 248,7083 |
| 110 | 17,9842 | 42,8667 | 248,0518 |
| 111 | 17,9852 | 42,8664 | 247,2220 |
| 112 | 17,9857 | 42,8663 | 247,0671 |
| 113 | 17,9870 | 42,8662 | 246,0271 |
| 114 | 17,9880 | 42,8659 | 245,3707 |
| 115 | 17,9886 | 42,8652 | 245,0978 |
| 116 | 17,9887 | 42,8648 | 244,9613 |
| 117 | 17,9889 | 42,8643 | 245,0167 |
| 118 | 17,9893 | 42,8640 | 244,6884 |
| 119 | 17,9899 | 42,8636 | 244,2238 |
| 120 | 17,9910 | 42,8630 | 243,5858 |
| 121 | 17,9915 | 42,8625 | 243,2944 |
| 122 | 17,9920 | 42,8620 | 242,9847 |
| 123 | 17,9924 | 42,8614 | 242,7728 |
| 124 | 17,9932 | 42,8606 | 242,1781 |
| 125 | 17,9937 | 42,8603 | 242,3041 |
| 126 | 17,9941 | 42,8600 | 242,3714 |
| 127 | 17,9947 | 42,8595 | 242,5562 |
| 128 | 17,9951 | 42,8590 | 242,7409 |
| 129 | 17,9958 | 42,8582 | 243,0474 |
| 130 | 17,9962 | 42,8574 | 243,2908 |
| 131 | 17,9967 | 42,8568 | 243,9283 |
| 132 | 17,9975 | 42,8563 | 244,3734 |
| 133 | 17,9978 | 42,8561 | 244,7453 |
| 134 | 17,9981 | 42,8559 | 244,9495 |
| 135 | 17,9981 | 42,8555 | 245,1171 |
| 136 | 17,9979 | 42,8547 | 245,9184 |
| 137 | 17,9981 | 42,8540 | 246,6255 |
| 138 | 17,9986 | 42,8537 | 247,0340 |
| 139 | 17,9993 | 42,8536 | 247,1440 |
| 140 | 17,9999 | 42,8536 | 247,2540 |
| 141 | 18,0004 | 42,8536 | 247,3273 |
| 142 | 18,0004 | 42,8532 | 247,6259 |
| 143 | 18,0006 | 42,8527 | 248,1653 |
| 144 | 18,0008 | 42,8521 | 248,7047 |
| 145 | 18,0010 | 42,8517 | 249,2442 |
| 146 | 18,0012 | 42,8514 | 249,4485 |
| 147 | 18,0013 | 42,8512 | 249,6160 |

|     |         |         |          |
|-----|---------|---------|----------|
| 148 | 18,0025 | 42,8510 | 255,8978 |
| 149 | 18,0030 | 42,8508 | 269,5692 |
| 150 | 18,0034 | 42,8507 | 277,4923 |
| 151 | 18,0038 | 42,8505 | 293,9675 |
| 152 | 18,0044 | 42,8503 | 327,6083 |
| 153 | 18,0047 | 42,8501 | 344,3024 |
| 154 | 18,0057 | 42,8493 | 410,6750 |
| 155 | 18,0071 | 42,8483 | 514,1915 |
| 156 | 18,0079 | 42,8473 | 606,0392 |
| 157 | 18,0089 | 42,8463 | 689,5504 |
| 158 | 18,0096 | 42,8451 | 741,9056 |
| 159 | 18,0098 | 42,8447 | 748,9009 |
| 160 | 18,0105 | 42,8439 | 770,4351 |
| 161 | 18,0115 | 42,8434 | 763,6441 |
| 162 | 18,0130 | 42,8426 | 775,3879 |
| 163 | 18,0132 | 42,8422 | 780,0000 |
| 164 | 18,0142 | 42,8414 | 800,0000 |
| 165 | 18,0149 | 42,8409 | 780,0000 |
| 166 | 18,0153 | 42,8405 | 797,7141 |
| 167 | 18,0155 | 42,8403 | 796,9146 |
| 168 | 18,0166 | 42,8395 | 762,9641 |
| 169 | 18,0182 | 42,8385 | 743,9092 |
| 170 | 18,0192 | 42,8374 | 770,0000 |
| 171 | 18,0199 | 42,8364 | 780,0000 |
| 172 | 18,0208 | 42,8352 | 783,1915 |
| 173 | 18,0216 | 42,8343 | 798,1907 |
| 174 | 18,0223 | 42,8336 | 782,7819 |
| 175 | 18,0229 | 42,8329 | 809,4490 |
| 176 | 18,0234 | 42,8316 | 804,5844 |
| 177 | 18,0232 | 42,8300 | 820,0000 |
| 178 | 18,0227 | 42,8289 | 838,5370 |
| 179 | 18,0223 | 42,8279 | 841,7155 |
| 180 | 18,0219 | 42,8273 | 820,0490 |
| 181 | 18,0214 | 42,8266 | 808,7902 |
| 182 | 18,0207 | 42,8260 | 806,6693 |
| 183 | 18,0204 | 42,8256 | 801,0191 |
| 184 | 18,0205 | 42,8253 | 806,7309 |
| 185 | 18,0207 | 42,8249 | 813,1818 |
| 186 | 18,0210 | 42,8245 | 809,2543 |
| 187 | 18,0211 | 42,8242 | 805,1996 |
| 188 | 18,0214 | 42,8239 | 817,5943 |
| 189 | 18,0217 | 42,8236 | 832,3078 |
| 190 | 18,0221 | 42,8232 | 847,5606 |
| 191 | 18,0222 | 42,8225 | 875,3407 |
| 192 | 18,0222 | 42,8222 | 886,6968 |
| 193 | 18,0220 | 42,8219 | 870,1587 |
| 194 | 18,0219 | 42,8215 | 850,5880 |
| 195 | 18,0218 | 42,8208 | 850,0000 |
| 196 | 18,0222 | 42,8204 | 840,6789 |
| 197 | 18,0229 | 42,8199 | 845,2050 |

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| 198 | 18,0234 | 42,8194 | 840,0000 |
| 199 | 18,0234 | 42,8188 | 842,5991 |
| 200 | 18,0228 | 42,8177 | 794,0341 |
| 201 | 18,0219 | 42,8170 | 751,6853 |
| 202 | 18,0215 | 42,8168 | 745,8893 |
| 203 | 18,0211 | 42,8167 | 739,0866 |
| 204 | 18,0203 | 42,8164 | 731,1172 |
| 205 | 18,0199 | 42,8162 | 730,8854 |
| 206 | 18,0197 | 42,8158 | 719,4769 |
| 207 | 18,0194 | 42,8155 | 700,9176 |
| 208 | 18,0194 | 42,8152 | 693,4356 |
| 209 | 18,0194 | 42,8149 | 693,1378 |
| 210 | 18,0194 | 42,8145 | 698,2827 |
| 211 | 18,0195 | 42,8141 | 691,2532 |
| 212 | 18,0196 | 42,8137 | 690,1248 |
| 213 | 18,0197 | 42,8134 | 687,8824 |
| 214 | 18,0196 | 42,8128 | 682,5344 |
| 215 | 18,0195 | 42,8124 | 672,4428 |
| 216 | 18,0195 | 42,8120 | 667,9301 |
| 217 | 18,0194 | 42,8114 | 645,6080 |
| 218 | 18,0197 | 42,8110 | 629,6835 |
| 219 | 18,0197 | 42,8105 | 621,5120 |
| 220 | 18,0196 | 42,8100 | 614,2105 |
| 221 | 18,0196 | 42,8095 | 610,0000 |
| 222 | 18,0201 | 42,8088 | 609,9090 |
| 223 | 18,0204 | 42,8085 | 610,0000 |
| 224 | 18,0207 | 42,8080 | 613,6340 |
| 225 | 18,0212 | 42,8077 | 618,5399 |
| 226 | 18,0218 | 42,8073 | 619,7731 |
| 227 | 18,0221 | 42,8070 | 628,9477 |
| 228 | 18,0229 | 42,8066 | 631,5530 |
| 229 | 18,0235 | 42,8062 | 645,5820 |
| 230 | 18,0245 | 42,8059 | 650,0000 |
| 231 | 18,0255 | 42,8053 | 650,7829 |
| 232 | 18,0260 | 42,8047 | 676,4818 |
| 233 | 18,0262 | 42,8046 | 684,1345 |
| 234 | 18,0267 | 42,8038 | 703,5238 |
| 235 | 18,0269 | 42,8033 | 712,6202 |
| 236 | 18,0275 | 42,8029 | 726,2622 |
| 237 | 18,0286 | 42,8025 | 710,0000 |
| 238 | 18,0292 | 42,8024 | 703,4387 |
| 239 | 18,0299 | 42,8024 | 691,0403 |
| 240 | 18,0309 | 42,8023 | 668,8079 |
| 241 | 18,0315 | 42,8020 | 653,9673 |
| 242 | 18,0320 | 42,8018 | 652,9957 |
| 243 | 18,0325 | 42,8014 | 663,9022 |
| 244 | 18,0329 | 42,8011 | 668,7639 |
| 245 | 18,0331 | 42,8007 | 672,2282 |
| 246 | 18,0334 | 42,8003 | 689,1448 |
| 247 | 18,0335 | 42,7997 | 676,6406 |

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| 248 | 18,0335 | 42,7992 | 660,0000 |
| 249 | 18,0332 | 42,7986 | 662,1319 |
| 250 | 18,0329 | 42,7982 | 659,3896 |
| 251 | 18,0326 | 42,7980 | 655,9280 |
| 252 | 18,0323 | 42,7978 | 655,8967 |
| 253 | 18,0319 | 42,7976 | 657,8656 |
| 254 | 18,0314 | 42,7975 | 664,9515 |
| 255 | 18,0309 | 42,7975 | 667,2556 |
| 256 | 18,0287 | 42,7978 | 679,6788 |
| 257 | 18,0283 | 42,7979 | 682,9974 |
| 258 | 18,0270 | 42,7981 | 707,9600 |
| 259 | 18,0254 | 42,7985 | 703,9053 |
| 260 | 18,0249 | 42,7986 | 702,9797 |
| 261 | 18,0240 | 42,7988 | 673,8547 |
| 262 | 18,0233 | 42,7991 | 657,6257 |
| 263 | 18,0226 | 42,7994 | 643,2325 |
| 264 | 18,0219 | 42,7999 | 650,0000 |
| 265 | 18,0215 | 42,8001 | 647,3047 |
| 266 | 18,0210 | 42,8003 | 642,9233 |
| 267 | 18,0202 | 42,8003 | 645,5562 |
| 268 | 18,0194 | 42,8001 | 650,0000 |
| 269 | 18,0184 | 42,7997 | 665,6212 |
| 270 | 18,0173 | 42,7992 | 634,4678 |
| 271 | 18,0165 | 42,7989 | 616,5668 |
| 272 | 18,0160 | 42,7989 | 604,8093 |
| 273 | 18,0153 | 42,7989 | 600,0000 |
| 274 | 18,0144 | 42,7988 | 592,3159 |
| 275 | 18,0142 | 42,7985 | 589,8630 |
| 276 | 18,0138 | 42,7982 | 580,9864 |
| 277 | 18,0133 | 42,7980 | 571,7796 |
| 278 | 18,0126 | 42,7980 | 569,7751 |
| 279 | 18,0122 | 42,7980 | 569,5144 |
| 280 | 18,0116 | 42,7980 | 564,6560 |
| 281 | 18,0112 | 42,7984 | 560,0000 |
| 282 | 18,0107 | 42,7987 | 560,0000 |
| 283 | 18,0100 | 42,7989 | 557,7333 |
| 284 | 18,0094 | 42,7992 | 560,0000 |
| 285 | 18,0085 | 42,7995 | 560,0000 |
| 286 | 18,0075 | 42,7996 | 565,0000 |
| 287 | 18,0070 | 42,7994 | 561,6669 |
| 288 | 18,0064 | 42,7992 | 561,0881 |
| 289 | 18,0057 | 42,7993 | 560,0000 |
| 290 | 18,0054 | 42,7994 | 560,0000 |
| 291 | 18,0051 | 42,7998 | 560,0000 |
| 292 | 18,0052 | 42,8001 | 560,0000 |
| 293 | 18,0053 | 42,8003 | 560,0000 |
| 294 | 18,0052 | 42,8005 | 560,0000 |
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| 296 | 18,0048 | 42,8008 | 560,0000 |
| 297 | 18,0046 | 42,8009 | 560,0000 |

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| 298 | 18,0045 | 42,8011 | 560,0000 |
| 299 | 18,0044 | 42,8011 | 560,0000 |
| 300 | 18,0041 | 42,8012 | 560,0000 |
| 301 | 18,0040 | 42,8011 | 560,0000 |
| 302 | 18,0038 | 42,8011 | 558,6952 |
| 303 | 18,0036 | 42,8010 | 558,6952 |
| 304 | 18,0034 | 42,8011 | 556,5834 |
| 305 | 18,0034 | 42,8010 | 556,5834 |
| 306 | 18,0033 | 42,8009 | 553,9791 |
| 307 | 18,0032 | 42,8008 | 551,9349 |
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| 309 | 18,0031 | 42,8007 | 550,0000 |
| 310 | 18,0028 | 42,8007 | 550,0000 |
| 311 | 18,0026 | 42,8007 | 550,0000 |
| 312 | 18,0024 | 42,8007 | 550,0000 |
| 313 | 18,0023 | 42,8007 | 550,0000 |
| 314 | 18,0021 | 42,8007 | 550,0000 |
| 315 | 18,0020 | 42,8007 | 550,0000 |
| 316 | 18,0019 | 42,8006 | 550,0000 |
| 317 | 18,0018 | 42,8005 | 550,0000 |
| 318 | 18,0017 | 42,8004 | 550,0000 |
| 319 | 18,0016 | 42,8004 | 550,0000 |
| 320 | 18,0014 | 42,8003 | 550,0000 |
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| 322 | 18,0012 | 42,8003 | 550,0000 |
| 323 | 18,0012 | 42,8002 | 550,0000 |
| 324 | 18,0011 | 42,8002 | 550,0000 |
| 325 | 18,0010 | 42,8002 | 550,0000 |
| 326 | 18,0008 | 42,8003 | 550,0000 |
| 327 | 18,0006 | 42,8004 | 550,0000 |
| 328 | 18,0005 | 42,8005 | 550,0000 |
| 329 | 18,0004 | 42,8009 | 550,0000 |
| 330 | 18,0005 | 42,8012 | 550,0000 |
| 331 | 18,0006 | 42,8016 | 550,0000 |
| 332 | 18,0008 | 42,8019 | 551,6373 |
| 333 | 18,0009 | 42,8022 | 551,8431 |
| 334 | 18,0011 | 42,8025 | 554,4990 |
| 335 | 18,0008 | 42,8027 | 556,6635 |
| 336 | 18,0004 | 42,8029 | 560,0000 |
| 337 | 18,0003 | 42,8031 | 560,0000 |
| 338 | 18,0001 | 42,8029 | 563,3156 |
| 339 | 17,9998 | 42,8027 | 559,9584 |
| 340 | 17,9996 | 42,8025 | 561,6910 |
| 341 | 17,9994 | 42,8024 | 566,7582 |
| 342 | 17,9992 | 42,8022 | 567,4762 |
| 343 | 17,9991 | 42,8020 | 557,7316 |
| 344 | 17,9990 | 42,8019 | 557,7316 |
| 345 | 17,9985 | 42,8019 | 558,2336 |
| 346 | 17,9983 | 42,8020 | 560,0000 |
| 347 | 17,9982 | 42,8023 | 564,0203 |

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| 348 | 17,9982 | 42,8025 | 560,0037 |
| 349 | 17,9979 | 42,8026 | 557,4269 |
| 350 | 17,9976 | 42,8027 | 557,0593 |
| 351 | 17,9973 | 42,8025 | 551,2512 |
| 352 | 17,9970 | 42,8024 | 554,0219 |
| 353 | 17,9969 | 42,8023 | 552,7955 |
| 354 | 17,9968 | 42,8021 | 550,6280 |
| 355 | 17,9969 | 42,8019 | 551,7291 |
| 356 | 17,9969 | 42,8018 | 554,9514 |
| 357 | 17,9963 | 42,8016 | 568,0273 |
| 358 | 17,9958 | 42,8015 | 570,0000 |
| 359 | 17,9954 | 42,8014 | 572,8937 |
| 360 | 17,9950 | 42,8012 | 570,0000 |
| 361 | 17,9945 | 42,8011 | 570,9727 |
| 362 | 17,9940 | 42,8010 | 577,0078 |
| 363 | 17,9934 | 42,8010 | 580,0000 |
| 364 | 17,9928 | 42,8009 | 587,4050 |
| 365 | 17,9919 | 42,8008 | 583,8375 |
| 366 | 17,9911 | 42,8005 | 579,9080 |
| 367 | 17,9899 | 42,8001 | 589,6804 |
| 368 | 17,9888 | 42,7998 | 627,3114 |
| 369 | 17,9877 | 42,7996 | 635,2673 |
| 370 | 17,9866 | 42,7997 | 618,4937 |
| 371 | 17,9857 | 42,7999 | 600,0000 |
| 372 | 17,9848 | 42,8001 | 605,5522 |
| 373 | 17,9839 | 42,8002 | 630,0000 |
| 374 | 17,9827 | 42,8001 | 630,0000 |
| 375 | 17,9814 | 42,7998 | 634,4891 |
| 376 | 17,9807 | 42,7997 | 628,0781 |
| 377 | 17,9800 | 42,7996 | 622,0287 |
| 378 | 17,9795 | 42,7995 | 620,0000 |
| 379 | 17,9788 | 42,7991 | 627,9488 |
| 380 | 17,9777 | 42,7989 | 627,9937 |
| 381 | 17,9763 | 42,7991 | 640,0000 |
| 382 | 17,9756 | 42,7993 | 638,8198 |
| 383 | 17,9744 | 42,7999 | 627,3683 |
| 384 | 17,9737 | 42,8012 | 610,0000 |
| 385 | 17,9744 | 42,8023 | 615,8030 |
| 386 | 17,9742 | 42,8026 | 617,1293 |
| 387 | 17,9744 | 42,8031 | 611,5457 |
| 388 | 17,9741 | 42,8039 | 592,3073 |
| 389 | 17,9739 | 42,8045 | 577,6257 |
| 390 | 17,9733 | 42,8051 | 565,0000 |
| 391 | 17,9724 | 42,8054 | 570,0000 |
| 392 | 17,9716 | 42,8051 | 575,9292 |
| 393 | 17,9704 | 42,8046 | 585,8488 |
| 394 | 17,9690 | 42,8043 | 595,4799 |
| 395 | 17,9678 | 42,8041 | 606,8630 |
| 396 | 17,9671 | 42,8040 | 629,3998 |
| 397 | 17,9663 | 42,8041 | 637,1648 |

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| 398 | 17,9653 | 42,8039 | 661,2591 |
| 399 | 17,9644 | 42,8040 | 682,1066 |
| 400 | 17,9628 | 42,8041 | 661,5781 |
| 401 | 17,9615 | 42,8042 | 699,7144 |
| 402 | 17,9603 | 42,8044 | 703,4689 |
| 403 | 17,9595 | 42,8047 | 724,0031 |
| 404 | 17,9579 | 42,8049 | 761,9960 |
| 405 | 17,9568 | 42,8051 | 808,1404 |
| 406 | 17,9554 | 42,8051 | 806,1895 |
| 407 | 17,9543 | 42,8052 | 806,5147 |
| 408 | 17,9533 | 42,8052 | 805,2117 |
| 409 | 17,9526 | 42,8053 | 796,7824 |
| 410 | 17,9515 | 42,8058 | 790,0000 |
| 411 | 17,9508 | 42,8061 | 800,0000 |
| 412 | 17,9503 | 42,8065 | 815,4689 |
| 413 | 17,9499 | 42,8065 | 830,2124 |
| 414 | 17,9495 | 42,8065 | 837,7363 |
| 415 | 17,9490 | 42,8065 | 852,8453 |
| 416 | 17,9486 | 42,8062 | 860,0000 |
| 417 | 17,9474 | 42,8054 | 870,0000 |
| 418 | 17,9464 | 42,8047 | 900,5421 |
| 419 | 17,9451 | 42,8047 | 871,1824 |
| 420 | 17,9440 | 42,8047 | 879,0697 |
| 421 | 17,9429 | 42,8044 | 894,6530 |
| 422 | 17,9417 | 42,8043 | 879,1666 |
| 423 | 17,9402 | 42,8042 | 847,4238 |
| 424 | 17,9390 | 42,8042 | 841,8295 |
| 425 | 17,9378 | 42,8044 | 831,6691 |
| 426 | 17,9366 | 42,8047 | 830,9352 |
| 427 | 17,9349 | 42,8053 | 821,9661 |
| 428 | 17,9339 | 42,8057 | 822,1363 |
| 429 | 17,9331 | 42,8060 | 814,3261 |
| 430 | 17,9312 | 42,8066 | 810,0000 |
| 431 | 17,9303 | 42,8068 | 810,6664 |
| 432 | 17,9290 | 42,8070 | 805,5428 |
| 433 | 17,9287 | 42,8075 | 781,2390 |
| 434 | 17,9286 | 42,8080 | 766,7980 |
| 435 | 17,9286 | 42,8084 | 743,8964 |
| 436 | 17,9280 | 42,8091 | 725,1084 |
| 437 | 17,9282 | 42,8096 | 703,4180 |
| 438 | 17,9288 | 42,8105 | 650,5657 |
| 439 | 17,9291 | 42,8109 | 632,1005 |
| 440 | 17,9295 | 42,8117 | 603,9063 |
| 441 | 17,9296 | 42,8124 | 576,8445 |
| 442 | 17,9291 | 42,8130 | 559,3310 |
| 443 | 17,9274 | 42,8132 | 582,3680 |
| 444 | 17,9255 | 42,8134 | 595,3412 |
| 445 | 17,9238 | 42,8136 | 603,0914 |
| 446 | 17,9226 | 42,8142 | 583,7759 |
| 447 | 17,9216 | 42,8150 | 541,9910 |

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| 448 | 17,9210 | 42,8154 | 525,3973 |
| 449 | 17,9204 | 42,8159 | 485,3245 |
| 450 | 17,9202 | 42,8168 | 443,4807 |
| 451 | 17,9197 | 42,8171 | 429,2754 |
| 452 | 17,9196 | 42,8172 | 423,8524 |
| 453 | 17,9194 | 42,8173 | 418,6661 |
| 454 | 17,9189 | 42,8176 | 411,3432 |
| 455 | 17,9184 | 42,8179 | 402,2007 |
| 456 | 17,9178 | 42,8182 | 383,3458 |
| 457 | 17,9175 | 42,8183 | 371,6715 |
| 458 | 17,9175 | 42,8184 | 371,6715 |
| 459 | 17,9175 | 42,8184 | 371,6715 |
| 460 | 17,9171 | 42,8189 | 358,9018 |
| 461 | 17,9166 | 42,8198 | 356,7520 |
| 462 | 17,9164 | 42,8208 | 343,9767 |
| 463 | 17,9155 | 42,8222 | 320,0000 |
| 464 | 17,9161 | 42,8232 | 329,5668 |
| 465 | 17,9162 | 42,8231 | 329,5668 |
| 466 | 17,9163 | 42,8231 | 333,3765 |
| 467 | 17,9165 | 42,8230 | 324,9065 |
| 468 | 17,9166 | 42,8228 | 319,8365 |
| 469 | 17,9167 | 42,8228 | 319,8365 |
| 470 | 17,9167 | 42,8227 | 320,6062 |
| 471 | 17,9168 | 42,8227 | 320,6062 |
| 472 | 17,9168 | 42,8228 | 320,6062 |
| 473 | 17,9169 | 42,8228 | 320,6062 |
| 474 | 17,9182 | 42,8238 | 346,9593 |
| 475 | 17,9187 | 42,8253 | 429,9763 |
| 476 | 17,9188 | 42,8264 | 471,9947 |
| 477 | 17,9184 | 42,8278 | 532,6093 |
| 478 | 17,9204 | 42,8277 | 527,9308 |
| 479 | 17,9197 | 42,8295 | 651,1785 |
| 480 | 17,9189 | 42,8298 | 669,0810 |
| 481 | 17,9184 | 42,8300 | 681,5159 |
| 482 | 17,9181 | 42,8305 | 713,6288 |
| 483 | 17,9180 | 42,8310 | 739,4073 |
| 484 | 17,9186 | 42,8324 | 868,0441 |
| 485 | 17,9193 | 42,8332 | 914,8171 |
| 486 | 17,9199 | 42,8339 | 913,9711 |
| 487 | 17,9208 | 42,8353 | 870,3068 |
| 488 | 17,9216 | 42,8359 | 865,8491 |
| 489 | 17,9226 | 42,8366 | 829,7529 |
| 490 | 17,9236 | 42,8372 | 808,6964 |
| 491 | 17,9242 | 42,8375 | 808,7185 |
| 492 | 17,9252 | 42,8375 | 800,7766 |
| 493 | 17,9262 | 42,8375 | 810,0000 |
| 494 | 17,9268 | 42,8376 | 819,2258 |
| 495 | 17,9273 | 42,8374 | 825,1074 |
| 496 | 17,9282 | 42,8372 | 830,2994 |
| 497 | 17,9288 | 42,8369 | 831,7371 |

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| 498 | 17,9296 | 42,8366 | 830,0000 |
| 499 | 17,9302 | 42,8365 | 840,0000 |
| 500 | 17,9305 | 42,8364 | 840,0000 |
| 501 | 17,9314 | 42,8362 | 850,0000 |
| 502 | 17,9323 | 42,8360 | 855,4987 |
| 503 | 17,9331 | 42,8359 | 860,0000 |
| 504 | 17,9339 | 42,8357 | 898,6226 |
| 505 | 17,9349 | 42,8357 | 931,5090 |
| 506 | 17,9369 | 42,8358 | 972,2114 |
| 507 | 17,9377 | 42,8359 | 964,3325 |
| 508 | 17,9385 | 42,8361 | 963,4542 |
| 509 | 17,9397 | 42,8365 | 929,9152 |
| 510 | 17,9403 | 42,8369 | 939,4252 |
| 511 | 17,9408 | 42,8373 | 931,0658 |
| 512 | 17,9430 | 42,8376 | 885,2386 |
| 513 | 17,9444 | 42,8378 | 849,1712 |
| 514 | 17,9460 | 42,8381 | 830,0000 |
| 515 | 17,9474 | 42,8382 | 813,8409 |
| 516 | 17,9477 | 42,8383 | 810,0000 |
| 517 | 17,9480 | 42,8383 | 810,0000 |
| 518 | 17,9487 | 42,8386 | 789,9895 |
| 519 | 17,9492 | 42,8389 | 767,5016 |
| 520 | 17,9496 | 42,8390 | 751,0754 |
| 521 | 17,9504 | 42,8394 | 764,8434 |
| 522 | 17,9510 | 42,8397 | 803,6085 |
| 523 | 17,9516 | 42,8400 | 806,7542 |
| 524 | 17,9518 | 42,8402 | 809,6859 |
| 525 | 17,9521 | 42,8404 | 805,6667 |
| 526 | 17,9526 | 42,8407 | 792,0000 |
| 527 | 17,9529 | 42,8409 | 781,9135 |
| 528 | 17,9537 | 42,8414 | 754,5110 |
| 529 | 17,9548 | 42,8422 | 723,3550 |
| 530 | 17,9558 | 42,8429 | 694,3970 |
| 531 | 17,9567 | 42,8435 | 660,0000 |
| 532 | 17,9575 | 42,8440 | 674,5279 |
| 533 | 17,9584 | 42,8446 | 703,1315 |
| 534 | 17,9584 | 42,8448 | 711,5375 |
| 535 | 17,9583 | 42,8450 | 716,7614 |
| 536 | 17,9580 | 42,8452 | 708,0319 |
| 537 | 17,9578 | 42,8453 | 709,3053 |
| 538 | 17,9577 | 42,8454 | 703,2231 |
| 539 | 17,9576 | 42,8456 | 700,9250 |
| 540 | 17,9575 | 42,8458 | 700,0000 |
| 541 | 17,9575 | 42,8459 | 700,0000 |
| 542 | 17,9576 | 42,8461 | 702,3995 |
| 543 | 17,9579 | 42,8465 | 714,5482 |
| 544 | 17,9584 | 42,8470 | 719,6496 |
| 545 | 17,9583 | 42,8473 | 727,6799 |
| 546 | 17,9581 | 42,8475 | 736,4577 |
| 547 | 17,9578 | 42,8478 | 753,6485 |

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| 548 | 17,9578 | 42,8479 | 758,9359 |
| 549 | 17,9578 | 42,8481 | 754,6444 |
| 550 | 17,9573 | 42,8483 | 721,0964 |
| 551 | 17,9570 | 42,8484 | 708,9368 |
| 552 | 17,9567 | 42,8486 | 702,1304 |
| 553 | 17,9566 | 42,8489 | 700,0000 |
| 554 | 17,9568 | 42,8491 | 700,0000 |
| 555 | 17,9576 | 42,8498 | 736,7560 |
| 556 | 17,9584 | 42,8505 | 778,8217 |
| 557 | 17,9595 | 42,8513 | 784,6277 |
| 558 | 17,9606 | 42,8521 | 753,5861 |
| 559 | 17,9618 | 42,8530 | 750,0000 |
| 560 | 17,9632 | 42,8541 | 751,8998 |
| 561 | 17,9646 | 42,8551 | 691,2807 |
| 562 | 17,9657 | 42,8559 | 644,1218 |
| 563 | 17,9656 | 42,8565 | 637,9723 |
| 564 | 17,9655 | 42,8573 | 628,7313 |
| 565 | 17,9655 | 42,8579 | 624,2145 |
| 566 | 17,9651 | 42,8586 | 620,6589 |
| 567 | 17,9647 | 42,8593 | 609,4011 |
| 568 | 17,9644 | 42,8599 | 603,1714 |
| 569 | 17,9641 | 42,8606 | 591,0335 |
| 570 | 17,9639 | 42,8609 | 584,7265 |
| 571 | 17,9629 | 42,8612 | 570,0000 |
| 572 | 17,9626 | 42,8614 | 570,0000 |
| 573 | 17,9620 | 42,8614 | 570,0000 |
| 574 | 17,9616 | 42,8614 | 570,0000 |
| 575 | 17,9612 | 42,8614 | 570,0000 |
| 576 | 17,9609 | 42,8615 | 577,2499 |
| 577 | 17,9602 | 42,8617 | 581,9205 |
| 578 | 17,9594 | 42,8618 | 589,5878 |
| 579 | 17,9590 | 42,8619 | 588,8106 |
| 580 | 17,9587 | 42,8619 | 588,5455 |
| 581 | 17,9584 | 42,8618 | 584,8682 |
| 582 | 17,9580 | 42,8617 | 580,0000 |
| 583 | 17,9577 | 42,8617 | 580,0000 |
| 584 | 17,9573 | 42,8617 | 583,1222 |
| 585 | 17,9570 | 42,8616 | 590,1506 |
| 586 | 17,9568 | 42,8617 | 591,1908 |
| 587 | 17,9566 | 42,8619 | 588,1382 |
| 588 | 17,9563 | 42,8620 | 593,5579 |
| 589 | 17,9559 | 42,8623 | 593,7354 |
| 590 | 17,9553 | 42,8628 | 599,8565 |
| 591 | 17,9550 | 42,8630 | 601,1890 |
| 592 | 17,9548 | 42,8636 | 600,0000 |
| 593 | 17,9547 | 42,8639 | 600,0000 |
| 594 | 17,9546 | 42,8643 | 598,5875 |
| 595 | 17,9537 | 42,8650 | 590,4339 |
| 596 | 17,9529 | 42,8652 | 596,2287 |
| 597 | 17,9537 | 42,8664 | 591,3005 |

|     |         |         |          |
|-----|---------|---------|----------|
| 598 | 17,9540 | 42,8668 | 580,5798 |
| 599 | 17,9537 | 42,8669 | 579,5292 |
| 600 | 17,9534 | 42,8669 | 584,5522 |
| 601 | 17,9531 | 42,8669 | 588,0852 |
| 602 | 17,9526 | 42,8669 | 590,0000 |
| 603 | 17,9518 | 42,8669 | 585,0369 |
| 604 | 17,9513 | 42,8669 | 582,6155 |
| 605 | 17,9511 | 42,8670 | 581,4222 |
| 606 | 17,9508 | 42,8670 | 580,0000 |
| 607 | 17,9506 | 42,8672 | 580,0000 |
| 608 | 17,9504 | 42,8674 | 582,7734 |
| 609 | 17,9505 | 42,8678 | 580,0000 |
| 610 | 17,9506 | 42,8682 | 580,0000 |
| 611 | 17,9504 | 42,8685 | 578,5094 |
| 612 | 17,9503 | 42,8689 | 562,8679 |
| 613 | 17,9505 | 42,8692 | 571,0539 |
| 614 | 17,9507 | 42,8695 | 570,0000 |
| 615 | 17,9507 | 42,8697 | 570,0000 |
| 616 | 17,9506 | 42,8698 | 570,0000 |
| 617 | 17,9505 | 42,8700 | 570,0000 |
| 618 | 17,9505 | 42,8702 | 570,0000 |
| 619 | 17,9505 | 42,8704 | 570,0000 |
| 620 | 17,9505 | 42,8706 | 570,0000 |
| 621 | 17,9506 | 42,8710 | 564,6587 |
| 622 | 17,9505 | 42,8712 | 564,9472 |
| 623 | 17,9506 | 42,8714 | 569,0242 |
| 624 | 17,9507 | 42,8716 | 570,0000 |
| 625 | 17,9509 | 42,8718 | 570,0000 |
| 626 | 17,9512 | 42,8720 | 570,0000 |
| 627 | 17,9515 | 42,8721 | 570,0000 |
| 628 | 17,9519 | 42,8722 | 570,0000 |
| 629 | 17,9522 | 42,8724 | 570,0000 |
| 630 | 17,9526 | 42,8725 | 570,0000 |
| 631 | 17,9526 | 42,8726 | 570,0000 |
| 632 | 17,9526 | 42,8727 | 570,0000 |
| 633 | 17,9528 | 42,8728 | 570,0000 |
| 634 | 17,9528 | 42,8729 | 570,0000 |
| 635 | 17,9530 | 42,8730 | 565,8849 |
| 636 | 17,9531 | 42,8731 | 561,5483 |
| 637 | 17,9532 | 42,8732 | 559,5128 |
| 638 | 17,9532 | 42,8733 | 559,5128 |
| 639 | 17,9533 | 42,8733 | 559,5128 |
| 640 | 17,9534 | 42,8735 | 545,9127 |
| 641 | 17,9535 | 42,8737 | 541,0969 |
| 642 | 17,9535 | 42,8739 | 536,5625 |
| 643 | 17,9534 | 42,8743 | 529,5297 |
| 644 | 17,9533 | 42,8745 | 537,5386 |
| 645 | 17,9533 | 42,8748 | 535,6517 |
| 646 | 17,9533 | 42,8751 | 532,7080 |
| 647 | 17,9534 | 42,8753 | 522,2247 |

|     |         |         |          |
|-----|---------|---------|----------|
| 648 | 17,9535 | 42,8755 | 522,8617 |
| 649 | 17,9537 | 42,8757 | 514,2789 |
| 650 | 17,9537 | 42,8759 | 514,5501 |
| 651 | 17,9538 | 42,8761 | 510,3209 |
| 652 | 17,9537 | 42,8762 | 510,3209 |
| 653 | 17,9537 | 42,8763 | 505,6185 |
| 654 | 17,9536 | 42,8766 | 502,6544 |
| 655 | 17,9538 | 42,8768 | 504,5408 |
| 656 | 17,9539 | 42,8768 | 497,5364 |
| 657 | 17,9543 | 42,8770 | 492,6716 |
| 658 | 17,9543 | 42,8771 | 496,3166 |
| 659 | 17,9545 | 42,8773 | 488,2633 |
| 660 | 17,9546 | 42,8773 | 484,4622 |
| 661 | 17,9548 | 42,8775 | 487,0190 |
| 662 | 17,9551 | 42,8778 | 475,3079 |
| 663 | 17,9553 | 42,8779 | 470,4238 |
| 664 | 17,9555 | 42,8780 | 470,2694 |
| 665 | 17,9558 | 42,8781 | 470,0000 |
| 666 | 17,9560 | 42,8780 | 470,0000 |
| 667 | 17,9563 | 42,8781 | 471,9247 |
| 668 | 17,9567 | 42,8781 | 476,0986 |

**Vjetrenica Cave**  
**Coordinates of Breakpoints**

| No | X  | Y       | Z       |          |
|----|----|---------|---------|----------|
|    | 1  | 17,9876 | 42,8457 | 291,3934 |
|    | 2  | 17,9883 | 42,8457 | 287,8859 |
|    | 3  | 17,9884 | 42,8457 | 287,0847 |
|    | 4  | 17,9886 | 42,8460 | 265,8660 |
|    | 5  | 17,9891 | 42,8461 | 262,8308 |
|    | 6  | 17,9896 | 42,8458 | 271,9328 |
|    | 7  | 17,9897 | 42,8456 | 292,4052 |
|    | 8  | 17,9901 | 42,8453 | 299,1007 |
|    | 9  | 17,9903 | 42,8453 | 320,3080 |
|    | 10 | 17,9903 | 42,8451 | 333,8895 |
|    | 11 | 17,9902 | 42,8449 | 348,3232 |
|    | 12 | 17,9905 | 42,8447 | 359,3875 |
|    | 13 | 17,9909 | 42,8446 | 353,9174 |
|    | 14 | 17,9913 | 42,8443 | 375,3005 |
|    | 15 | 17,9915 | 42,8440 | 396,3664 |
|    | 16 | 17,9917 | 42,8438 | 406,4125 |
|    | 17 | 17,9919 | 42,8435 | 426,4565 |
|    | 18 | 17,9918 | 42,8432 | 437,5464 |
|    | 19 | 17,9917 | 42,8430 | 449,5990 |
|    | 20 | 17,9916 | 42,8427 | 469,5210 |
|    | 21 | 17,9918 | 42,8425 | 472,4219 |
|    | 22 | 17,9921 | 42,8424 | 471,8259 |
|    | 23 | 17,9924 | 42,8423 | 466,4402 |
|    | 24 | 17,9928 | 42,8422 | 462,3503 |
|    | 25 | 17,9933 | 42,8420 | 465,3585 |
|    | 26 | 17,9933 | 42,8416 | 477,5978 |
|    | 27 | 17,9934 | 42,8410 | 518,1963 |
|    | 28 | 17,9934 | 42,8407 | 527,5713 |
|    | 29 | 17,9935 | 42,8404 | 538,4223 |
|    | 30 | 17,9935 | 42,8401 | 545,9339 |
|    | 31 | 17,9935 | 42,8399 | 553,3918 |
|    | 32 | 17,9936 | 42,8397 | 558,0901 |
|    | 33 | 17,9939 | 42,8395 | 561,1454 |
|    | 34 | 17,9941 | 42,8392 | 575,9040 |
|    | 35 | 17,9942 | 42,8388 | 584,1466 |
|    | 36 | 17,9943 | 42,8386 | 591,8600 |
|    | 37 | 17,9945 | 42,8383 | 607,1084 |
|    | 38 | 17,9949 | 42,8382 | 628,3777 |
|    | 39 | 17,9952 | 42,8379 | 645,3619 |
|    | 40 | 17,9952 | 42,8378 | 664,7679 |
|    | 41 | 17,9955 | 42,8379 | 673,0194 |
|    | 42 | 17,9957 | 42,8380 | 688,7980 |
|    | 43 | 17,9959 | 42,8385 | 654,4266 |
|    | 44 | 17,9961 | 42,8388 | 647,0840 |
|    | 45 | 17,9962 | 42,8388 | 640,2909 |
|    | 46 | 17,9964 | 42,8388 | 640,2909 |
|    | 47 | 17,9964 | 42,8387 | 663,2122 |

|    |         |         |          |
|----|---------|---------|----------|
| 48 | 17,9962 | 42,8383 | 700,2266 |
| 49 | 17,9962 | 42,8379 | 713,7759 |
| 50 | 17,9962 | 42,8377 | 727,5529 |
| 51 | 17,9961 | 42,8375 | 721,3877 |
| 52 | 17,9964 | 42,8373 | 736,9615 |
| 53 | 17,9972 | 42,8375 | 777,8947 |
| 54 | 17,9976 | 42,8377 | 785,9116 |
| 55 | 17,9983 | 42,8376 | 792,8428 |
| 56 | 17,9986 | 42,8374 | 786,4783 |
| 57 | 17,9989 | 42,8373 | 790,0000 |
| 58 | 17,9990 | 42,8372 | 791,5564 |
| 59 | 17,9989 | 42,8371 | 791,5564 |
| 60 | 17,9988 | 42,8369 | 790,0000 |
| 61 | 17,9985 | 42,8368 | 791,4653 |
| 62 | 17,9984 | 42,8367 | 791,4653 |
| 63 | 17,9982 | 42,8365 | 814,1125 |
| 64 | 17,9981 | 42,8362 | 822,2909 |
| 65 | 17,9979 | 42,8359 | 836,2595 |
| 66 | 17,9979 | 42,8355 | 813,2780 |
| 67 | 17,9980 | 42,8349 | 776,3636 |
| 68 | 17,9980 | 42,8346 | 777,5604 |
| 69 | 17,9978 | 42,8344 | 786,2514 |
| 70 | 17,9977 | 42,8340 | 802,1209 |
| 71 | 17,9976 | 42,8334 | 832,2062 |
| 72 | 17,9976 | 42,8320 | 825,3410 |
| 73 | 17,9976 | 42,8318 | 802,6184 |
| 74 | 17,9976 | 42,8315 | 794,1249 |
| 75 | 17,9978 | 42,8313 | 800,2333 |
| 76 | 17,9981 | 42,8310 | 810,0000 |
| 77 | 17,9983 | 42,8307 | 828,2996 |
| 78 | 17,9986 | 42,8304 | 821,9251 |
| 79 | 17,9987 | 42,8300 | 820,0000 |
| 80 | 17,9987 | 42,8298 | 829,3560 |
| 81 | 17,9989 | 42,8296 | 837,3647 |
| 82 | 17,9988 | 42,8295 | 840,0000 |
| 83 | 17,9988 | 42,8293 | 840,0000 |
| 84 | 17,9990 | 42,8292 | 836,6070 |
| 85 | 17,9992 | 42,8289 | 830,0000 |
| 86 | 17,9994 | 42,8284 | 821,8473 |
| 87 | 17,9994 | 42,8282 | 821,8571 |
| 88 | 17,9994 | 42,8280 | 815,5573 |
| 89 | 17,9991 | 42,8279 | 807,9414 |
| 90 | 17,9989 | 42,8280 | 802,2351 |
| 91 | 17,9987 | 42,8281 | 800,0000 |
| 92 | 17,9984 | 42,8282 | 800,0000 |
| 93 | 17,9983 | 42,8284 | 800,0000 |
| 94 | 17,9983 | 42,8286 | 805,9688 |
| 95 | 17,9985 | 42,8287 | 807,9995 |
| 96 | 17,9987 | 42,8288 | 822,2317 |
| 97 | 17,9986 | 42,8290 | 830,2371 |

|     |         |         |          |
|-----|---------|---------|----------|
| 98  | 17,9984 | 42,8291 | 838,1319 |
| 99  | 17,9981 | 42,8292 | 817,9066 |
| 100 | 17,9979 | 42,8293 | 817,9066 |
| 101 | 17,9980 | 42,8295 | 823,0003 |
| 102 | 17,9981 | 42,8296 | 830,9001 |
| 103 | 17,9982 | 42,8299 | 830,0000 |
| 104 | 17,9980 | 42,8302 | 828,6591 |
| 105 | 17,9978 | 42,8301 | 822,2893 |
| 106 | 17,9978 | 42,8299 | 823,8362 |
| 107 | 17,9978 | 42,8298 | 824,2844 |
| 108 | 17,9975 | 42,8298 | 817,0190 |
| 109 | 17,9972 | 42,8300 | 807,6995 |
| 110 | 17,9970 | 42,8304 | 805,0000 |
| 111 | 17,9965 | 42,8305 | 789,2311 |
| 112 | 17,9963 | 42,8305 | 774,7053 |
| 113 | 17,9962 | 42,8307 | 777,9316 |
| 114 | 17,9963 | 42,8308 | 777,9316 |
| 115 | 17,9966 | 42,8309 | 790,0000 |
| 116 | 17,9965 | 42,8311 | 790,0000 |
| 117 | 17,9963 | 42,8314 | 788,2592 |
| 118 | 17,9960 | 42,8315 | 777,4663 |
| 119 | 17,9959 | 42,8316 | 780,2053 |
| 120 | 17,9958 | 42,8319 | 770,5322 |
| 121 | 17,9961 | 42,8320 | 787,3990 |
| 122 | 17,9962 | 42,8322 | 804,3638 |
| 123 | 17,9962 | 42,8324 | 805,3340 |
| 124 | 17,9962 | 42,8327 | 806,0840 |
| 125 | 17,9962 | 42,8328 | 805,8787 |
| 126 | 17,9964 | 42,8329 | 803,8326 |
| 127 | 17,9964 | 42,8333 | 810,1533 |
| 128 | 17,9964 | 42,8338 | 799,4359 |
| 129 | 17,9962 | 42,8341 | 787,0600 |
| 130 | 17,9959 | 42,8342 | 763,5543 |
| 131 | 17,9960 | 42,8344 | 771,6876 |
| 132 | 17,9962 | 42,8344 | 784,1406 |
| 133 | 17,9963 | 42,8346 | 782,8694 |
| 134 | 17,9964 | 42,8348 | 781,8308 |
| 135 | 17,9965 | 42,8350 | 795,5172 |
| 136 | 17,9967 | 42,8350 | 807,4548 |
| 137 | 17,9969 | 42,8351 | 810,0000 |
| 138 | 17,9972 | 42,8352 | 808,6868 |
| 139 | 17,9973 | 42,8352 | 808,6868 |
| 140 | 17,9975 | 42,8353 | 811,9483 |
| 141 | 17,9974 | 42,8359 | 825,5609 |
| 142 | 17,9971 | 42,8360 | 807,3236 |
| 143 | 17,9970 | 42,8362 | 799,6486 |
| 144 | 17,9971 | 42,8363 | 799,6486 |
| 145 | 17,9973 | 42,8364 | 800,1646 |
| 146 | 17,9973 | 42,8365 | 794,3488 |
| 147 | 17,9973 | 42,8367 | 788,5419 |

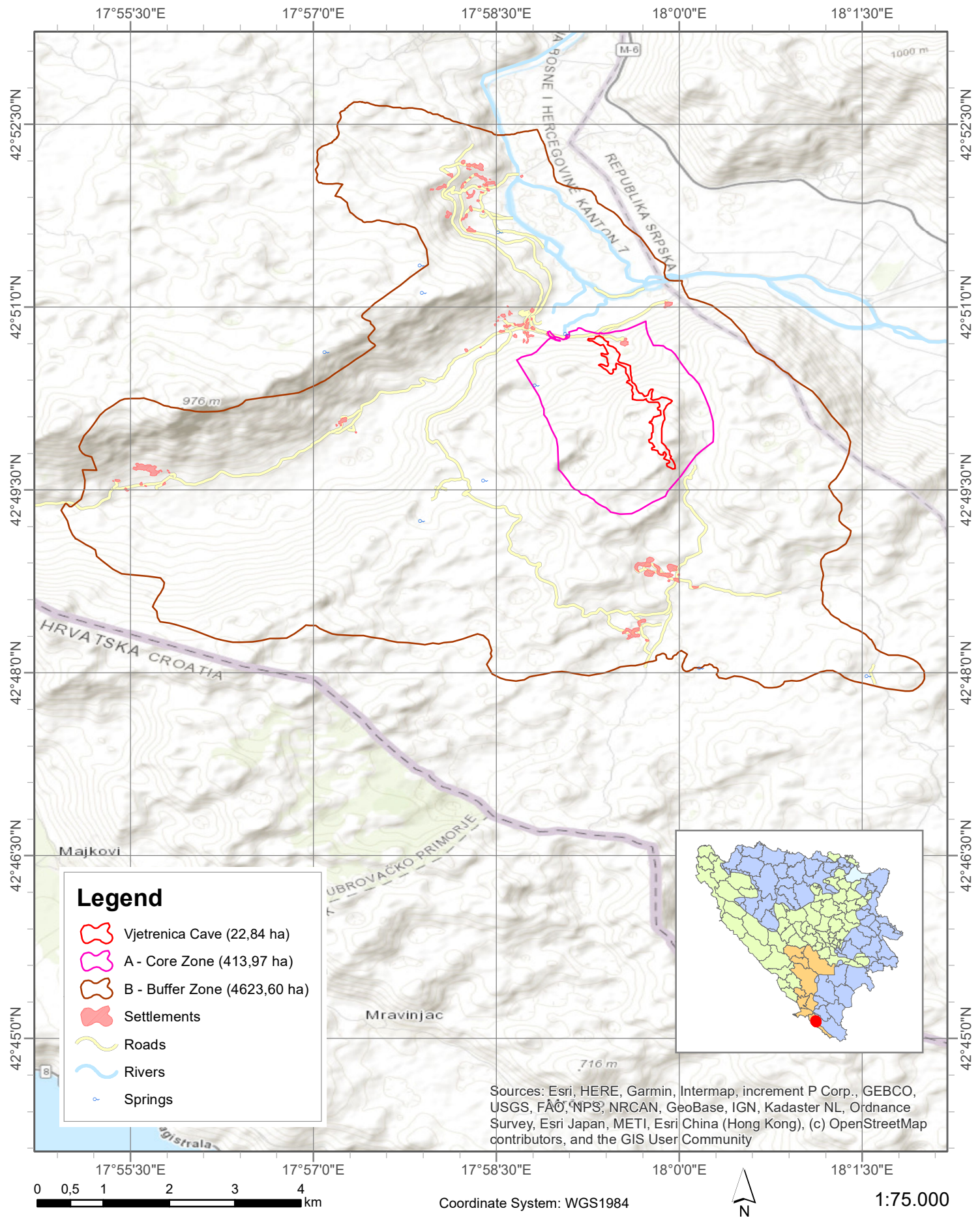
|     |         |         |          |
|-----|---------|---------|----------|
| 148 | 17,9972 | 42,8369 | 781,7559 |
| 149 | 17,9971 | 42,8370 | 771,9406 |
| 150 | 17,9962 | 42,8370 | 743,4144 |
| 151 | 17,9958 | 42,8370 | 722,7839 |
| 152 | 17,9955 | 42,8373 | 697,0533 |
| 153 | 17,9955 | 42,8375 | 690,1593 |
| 154 | 17,9951 | 42,8373 | 671,0034 |
| 155 | 17,9942 | 42,8373 | 634,2171 |
| 156 | 17,9936 | 42,8374 | 620,9845 |
| 157 | 17,9936 | 42,8380 | 595,6318 |
| 158 | 17,9937 | 42,8381 | 591,0894 |
| 159 | 17,9936 | 42,8384 | 587,5547 |
| 160 | 17,9935 | 42,8387 | 581,1135 |
| 161 | 17,9936 | 42,8389 | 577,3071 |
| 162 | 17,9936 | 42,8392 | 573,3801 |
| 163 | 17,9932 | 42,8395 | 570,0137 |
| 164 | 17,9929 | 42,8397 | 571,5057 |
| 165 | 17,9928 | 42,8397 | 569,1232 |
| 166 | 17,9929 | 42,8399 | 569,1232 |
| 167 | 17,9932 | 42,8400 | 560,3157 |
| 168 | 17,9931 | 42,8404 | 551,4656 |
| 169 | 17,9929 | 42,8407 | 534,8579 |
| 170 | 17,9927 | 42,8410 | 525,5277 |
| 171 | 17,9927 | 42,8417 | 472,8053 |
| 172 | 17,9923 | 42,8419 | 472,8310 |
| 173 | 17,9917 | 42,8422 | 485,8144 |
| 174 | 17,9914 | 42,8423 | 485,2364 |
| 175 | 17,9913 | 42,8421 | 490,6025 |
| 176 | 17,9914 | 42,8419 | 498,6395 |
| 177 | 17,9914 | 42,8417 | 506,3215 |
| 178 | 17,9913 | 42,8415 | 512,7974 |
| 179 | 17,9910 | 42,8415 | 518,6604 |
| 180 | 17,9909 | 42,8414 | 523,8760 |
| 181 | 17,9910 | 42,8413 | 524,5928 |
| 182 | 17,9910 | 42,8411 | 528,7907 |
| 183 | 17,9908 | 42,8409 | 526,3037 |
| 184 | 17,9906 | 42,8409 | 526,3037 |
| 185 | 17,9904 | 42,8410 | 529,4174 |
| 186 | 17,9902 | 42,8413 | 542,2715 |
| 187 | 17,9899 | 42,8415 | 550,0000 |
| 188 | 17,9897 | 42,8416 | 547,8993 |
| 189 | 17,9893 | 42,8419 | 532,5728 |
| 190 | 17,9890 | 42,8421 | 519,6164 |
| 191 | 17,9892 | 42,8422 | 511,0049 |
| 192 | 17,9894 | 42,8422 | 511,9217 |
| 193 | 17,9897 | 42,8421 | 511,2077 |
| 194 | 17,9899 | 42,8420 | 523,6728 |
| 195 | 17,9902 | 42,8419 | 521,9370 |
| 196 | 17,9903 | 42,8421 | 508,2502 |
| 197 | 17,9903 | 42,8423 | 494,1772 |

|     |         |         |          |
|-----|---------|---------|----------|
| 198 | 17,9902 | 42,8425 | 482,4509 |
| 199 | 17,9902 | 42,8427 | 474,3843 |
| 200 | 17,9901 | 42,8430 | 456,4350 |
| 201 | 17,9900 | 42,8432 | 446,1383 |
| 202 | 17,9897 | 42,8433 | 445,5390 |
| 203 | 17,9894 | 42,8434 | 435,0437 |
| 204 | 17,9893 | 42,8437 | 423,1917 |
| 205 | 17,9895 | 42,8437 | 423,1917 |
| 206 | 17,9898 | 42,8436 | 422,7766 |
| 207 | 17,9902 | 42,8436 | 422,0882 |
| 208 | 17,9903 | 42,8437 | 412,5773 |
| 209 | 17,9902 | 42,8438 | 412,5773 |
| 210 | 17,9900 | 42,8442 | 383,0057 |
| 211 | 17,9898 | 42,8446 | 362,2354 |
| 212 | 17,9896 | 42,8449 | 351,4849 |
| 213 | 17,9892 | 42,8448 | 352,5974 |
| 214 | 17,9886 | 42,8451 | 337,8025 |
| 215 | 17,9881 | 42,8454 | 310,7678 |
| 216 | 17,9877 | 42,8454 | 314,3272 |
| 217 | 17,9875 | 42,8455 | 303,7208 |
| 218 | 17,9876 | 42,8457 | 291,3934 |

UNESCO WORLD HERITAGE LIST NOMINATION

# VJETRENICA CAVE

BOSNIA AND HERZEGOVINA



**PUBLIC COMPANY VJETRENICA RAVNO**

**TRG RUĐERA BOŠKOVIĆA BB**

**88 370, RAVNO**

**BOSNIA AND HERZEGOVINA**

**Vjetrenica Cave, Ravno - Nominated for inclusion on the World Heritage List - supplementary informations**

**1. A confirmation of the exact and correct area of the nominated property and its buffer zone in hectares and confirmation of the encompassment**

| <b>Name of the component part</b> | <b>Region(s) /District (s)</b>                                              | <b>Cordinates of the Central Point</b> | <b>Area of the Nominated component part (ha)</b>          | <b>Area of the Buffer Zone (ha)</b> |
|-----------------------------------|-----------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------|-------------------------------------|
| <b>Vjetrenica Cave</b>            | Bosnia and Herzegovina<br>Ravno Municipality,<br>Herzegovina-Neretva Canton | N 42° 50' 45"<br>E 17° 59' 1"          | Vjetrenica Cave - 22,87 ha<br><br>A Core Zone - 413,97 ha | 4 623,60 ha                         |
| <b>Total area (in hectares)</b>   |                                                                             |                                        | <b>436,84 ha</b>                                          | <b>4 623,60 ha</b>                  |

We can **confirm** that the Protected Landscape Vjetrenica-Popovo Polje entirely encompasses both the nominated property and its associated buffer zone.

Vjetrenica Public Company Ltd. Ravno

  
Davor Baković  
Ravno

Pursuant to Article 16, Item c) and Article 39, Item f) of the Constitution of the Herzegovina Neretva Canton (Official Gazette of the Herzegovina Neretva Canton, No. 2/98, 3/98, 4/00 and 7/04 ), Article 144, Paragraph (2) of the Law on Nature Protection of the Federation of Bosnia and Herzegovina (Official Gazette of FBiH, No. 66/13), Article 86, Paragraph 1 and Article 87, Paragraph 2 of the Law on Nature Protection (Official Gazette of the Herzegovina Neretva Canton, No. 12/17), the Assembly of the Herzegovina Neretva Canton, at its session held on February 26, 2021, adopted the following

**LAW**  
**DESIGNATING THE VJETRENICA CAVE AREA WITH A PART OF THE POPOVO**  
**POLJE AS PROTECTED LANDSCAPE *VJETRENICA-POPOVO POLJE***

**I BASIC PROVISIONS**

**Article 1**  
**(Subject-Matter)**

This Law designates the Protected Landscape *Vjetrenica-Popovo Polje* (hereinafter: Protected Landscape), which includes the Vjetrenica Cave, the above-ground part of the Vjetrenica Cave and the surrounding area, and the peripheral part of Popovo Polje with a part of the Trebišnjica River in the Municipality of Ravno, determines the category of protected natural value, defines the boundaries of the spatial coverage of the Protected Landscape, the zones of the Protected Landscape, the name of the scale of the cartographic representation and the cartographic representation with precisely described boundaries of the spatial coverage/scope.

**Article 2**  
**(Protected Area Category)**

The protected area falls under category **Va) Protected Landscape (Terrestrial Landscape)**.

**Article 3**  
**(Objectives)**

- (1) A protected terrestrial landscape is a natural and cultivated area of great value for biodiversity, geodiversity and a landscape of unique features characteristic of a particular area, with exceptional aesthetic, ecological and cultural values.
- (2) The protected landscape is designated with the aim of:
  - a) Protection and preservation of natural, geomorphological and cultural-historical values of the area,
  - b) Establishing a value protection system for the permanent preservation of its properties,
  - c) Ensuring sustainable use of natural resources of the area,
  - d) Prevention of harmful interventions by humans and disturbances in nature as a consequence of development and performance of activities, and ensuring the most favourable conditions for nature conservation,
  - e) Maintaining the biodiversity of the area, both in the underground and in the above-ground part of the Protected Landscape.

## II AREA DESCRIPTION

### Article 4.

#### (Description of the boundary of the Protected Landscape)

(1) The total area covered by the Protected Landscape is **4,710.17 ha**.

(2) The outer boundaries of the Protected Landscape Vjetrenica-Popovo Polje are as follows: the boundary of the Protected Area Vjetrenica starts from point 1, as the northernmost point in the area of Vjetrenica, located on the border of two plots Cadastre Unit 2 Cadastre Municipality Čvaljina and Cadastre Unit 3698/1 Cadastre Municipality Ravne on coordinate X: 17.9573; Y: 42.878. The border continues to the east, following the cadastral border between Cadastre Municipality Čvaljina and Cadastre Municipality Ravno all the way to the River Trebišnjica and Cadastre Unit 3304/1, item X: 17.9806; Y: 42.8743. From this point, the border stretches southeast and follows the course of the Trebišnjica river to point X: 18.0004; Y: 42.8532, which is located between Cadastre Unit 131 and Cadastre Unit 4440/1 in Cadastre Municipality Zavala, and further includes the eastern borders of the plot Cadastre Unit 1754, Cadastre Unit 855 and Cadastre Unit 866 in Cadastre Municipality Zavala and passes in the middle of the local road at Cadastre Unit 1764, up to Cadastre Unit 1752/1. The border then diagonally intersects Cadastre Unit 1752/1 from point X: 18.0013; Y: 42.8512 to the point X: 18.0033, Y: 42.8508 from where it continues to follow the local road to the point 1756/1 to coordinate X: 18.0157; Y: 42.8525. The border further bends to the south and crosses Cadastre Unit 1753 and Cadastre Unit 2087 in Cadastre Municipality Zavala and passes to Cadastre Municipality Grmljani through Cadastre Unit 2088 at coordinate X: 18.0165; Y: 42.8509. From this point, the border extends south over elevation 760 and a point near Oštri vrh (X: 18.0155; Y: 42.8402) and further extends over elevation 824 Sovar to Cadastre Unit 1072/1 in Cadastre Municipality Gorogaše. The border runs further across Cadastre Unit 1072/1 bypasses the eastern slopes of the Zečija glava elevation 908 and extends over the Visoka glava elevation 890 to the elevation Polica 848 which is located at coordinate X: 18.0233; Y: 42.8188. In the south and southeast, it continues to run through Cadastre Municipality Gorogaše, passing over the eastern slopes of elevation Oštri vrh 752, over elevation Dubrava 634 to elevation Kujino osoje at elevation 742. X: 18.0275; Y: 42.8029. From this point, the border bends in a circle and includes the location of the Brijestica moors, and over elevation 709 it continues west to Gradina elevation 672, from where it enters Cadastre Municipality Belenići through Cadastre Unit 1819/1. Across Cadastre Unit 1819/1 the border passes through Cadastre Municipality Belenići to Cadastre Unit 1805/1 located in Cadastre Municipality Kijev Do north of Knež elevation to 546 at coordinate X: 18.0075; Y: 42.7996. From this point, the border continues towards the southwestern border of Cadastre Unit 1026 at coordinate X: 18.0034; Y: 42.8011 and further includes the outer borders of Cadastre Unit 1050, Cadastre Unit 1048 to the local road at Cadastre Unit 1805/1 at coordinate X: 18.0004; Y: 42.8009. The border further extends north to the northern border of Cadastre Unit 960. Further west from this point, it includes the outer borders of Cadastre Unit 962, Cadastre Unit 958, Cadastre Unit 956, Cadastre Unit 959, Cadastre Unit 945, Cadastre Unit 914/2, Cadastre Unit 913, Cadastre Unit 902/1, Cadastre Unit 897, Cadastre Unit 896, Cadastre Unit 894, Cadastre Unit 892, Cadastre Unit 891, Cadastre Unit 888, Cadastre Unit 898/2 and Cadastre Unit 899 to coordinate X: 17.9969; Y: 42.8018. From this point, it continues west across Cadastre Unit 1805/1 between the locality of Kočišta and elevation 592, and further over the elevation of Gornja peć. 650 to coordinate X: 17.9737; Y: 42.8012 from where it enters Cadastre Unit 984 in Cadastre Municipality Golubinac. The border further extends westward over the elevation of Brijegovi 653 and the elevation of Kita 829 to coordinate X: 17.949; Y: 42.8065 where it intersects Cadastre Unit 2168 and enters Cadastre Municipality

Orahov Do, from where it further extends over elevation 908, elevation Golo brdo 821, elevation 568 to Cadastre Unit 2126/1 and point X: 17.9197; Y: 42.8171. From this point, the border stretches north to the local road at Cadastre Unit 2171 and from coordinate X: 17.9169; Y: 42.8228 continues north through Cadastre Unit 860/1 to Cadastre Unit 596 at coordinate X: 17.9193; Y: 42.8332 at elevation V. Orlica 930. From point X: 17.9236; Y: 42.8372 at Cadastre Unit 596, the border extends through Cadastre Unit 860/1 over elevation Ilija brdo 987 to point X: 17.9408; Y: 17.9408 where it passes into Cadastre Municipality Zavala and Cadastre Unit 699. Along the outer border of Cadastre Unit 699, it extends all the way to point X: 17.9408; Y: 42.8373 and Cadastre Unit 3376 in Cadastre Municipality Tmčina, from which around the elevation Oštri vrh it extends north to point X: 17.9655; Y: 42.8573 where it includes the outer borders of Cadastre Unit 3268, Cadastre Unit 3266, Cadastre Unit 3254, Cadastre Unit 3554, Cadastre Unit 3253, Cadastre Unit 3236, Cadastre Unit 3235, Cadastre Unit 3231, Cadastre Unit 3230 in Cadastre Municipality Ravno. From this point, the border diagonally crosses the plot Cadastre Unit 3227 to the local road at Cadastre Unit 3226 at coordinate X: 17.9657; Y: 42.8559. Along the local road, it stretches north to coordinate X: 17.9529; Y: 42.8652, from where it intersects Cadastre Unit 2921 and Cadastre Unit 2920 to the local road at Cadastre Unit 3325, from where it extends west to Cadastre Unit 2860. From this point, the border extends to Cadastre Unit 3495, which continues north up to Cadastre Unit 3698/1 at coordinate X: 17.9551; Y: 42.8778, where it continues east to reach its starting point 1.

## **Article 5**

### **(Zones)**

(1) Depending on the degree of protection, within the borders of the Protected Landscape, four basic types of protected zones are designated as follows:

- a) Protected Zone One (Strict Protection Zone, Zone A),
- b) Protected Zone Two (Active Protection Zone, Zone B),
- c) Protected Zone Three (Usage Zone, Zone C),
- d) Protected Zone Four (Transitional Zone, Zone D).

(2) Spatial distribution of all zones with associated subzones is determined in the cartographic representation of the Protected Landscape and is an integral part of this Law (Annex I).

(3) The coordinates of all zones with associated subzones are determined in Annex II.

## **Article 6**

### **(Coverage of the Protected Zone A)**

(1) The Protected Zone A (Strict Protection Zone, Zone A) with an area of 413.79 ha, is an area of the highest natural values, which must remain fully preserved.

(2) Zone A consists of two mutually connected units, marked as A1 and A2.

(3) Zone A1 with an area of 22.98 ha is the underground zone of the Vjetrenica cave of exceptional geomorphological, speleological and hydrological value, as well as the diversity of troglodfauna for the coverage of the proposed protected area. This zone includes the underground and above-ground parts of the Vjetrenica cave, which, going from north to south, extends from the Zavala settlement in the north, to Gradac, up to elevation 570. The cave further extends between the elevation of Oštra glava and Brekova glava, from where it further bends south across (elevation 872) and all the way to the southernmost point at Klisura.

(4) Zone A2, with an area of 390.81 ha, includes the Vjetrenica cave drip line located in the above-ground part around the Vjetrenica cave, with which it forms a natural hydrogeological connection, and is located near the settlements of Zavala, Golubinac and Belenići. From the location of the entrance to the cave in the settlement of Zavala in far north, the drip line extends eastward to the settlement of Budim Do, where it further bends south through Brekovac (elevation 889) and Klisura (elevation 839), all the way to Vranić (elevation 848). The edge of the drip line continues to bend northward to elevation 787 and Krstina brdo (elevation 549), up to the local road near Zavala. The border of the drip line follows along the rest of the northern part until the end of the zone, meaning, the starting location of the entrance to the cave in the Zavala settlement. Zone A2 also includes springs Lukavac and Bitomišlja, located in the area of the drain line, and form a hydrogeological link with the cave and the wider area of Zone A2. The springs are located near the Zavala and Krstino brdo settlements.

(5) **The outer boundaries of Zone A are as follows:** borders of the Strict Protection Zone of the Protected Area Vjetrenica start from point 1, which represents the northernmost point of this zone, and is located immediately above the locality of Budim Do and includes the outer boundary of Cadastre Unit 804 in Cadastre Municipality Zavala at coordinate X: 17.9956; Y: 42.8481, from where it further bends towards the south and intersects Cadastre Units 1752/1, 1756/1, 1753, 815, 806, 807, 809 and 808 in Cadastre Municipality Zavala at coordinate X: 17.9967; Y: 42.845. From this point, the border crosses the private plots in the Budim Do settlement to the east and passes through Cadastre Units 1109, 1110, 1113, 1112, 1141, 1142, 1143, 1156, 1155, 1753 up to Cadastre Unit 1069 at coordinate X: 17.999; Y: 42.8441. The border further bends to the south and crosses Cadastre Unit 1069 to coordinate X: 18.0018; Y: 42.8406 northwest of the elevation of Brekova Gl. 880, from where it further intersects Cadastre Units 1753 and 1068 to point X: 18.0036; Y: 42.8378. The border further passes through Cadastre Unit 1819/1 in Cadastre Municipality Belenići and intersects elevation 889 and elevation 835 and extends all the way to elevation Vranić 848, which represents the southernmost point of the Strict Protection Zone at coordinates X: 17.992; Y: 42.8217. Further, the border extends to the northwest and intersects Cadastre Unit 984 in Cadastre Municipality Golubinac, elevation 787 and at coordinate X: 17.9816, Y: 42.8354 intersects Cadastre Unit 1753 in Cadastre Municipality Zavala. The border further takes north and crosses over the elevation Krstino 549 to point X: 17.9779; Y: 42.8429, from where it continues east and north direction to point X: 17.9826; Y: 42.8459 and Cadastre Unit 529. Southeast, the border intersects Cadastre Units 532, 533, 537, 1753, and further bends to the northwest and intersects Cadastre Units 534, 533, 532, 531, 594, 596 and 597. From point X: 17.9824; Y: 42.8467 the border extends east passing through plots of Cadastre Units 594, 595, 593/1, 593/2, 531, 532, 537, 535, 538/2, 528/4, 538/3, 554/2, 554/1, 4753, 553, 556 and 557 at coordinate X: 17.985; Y: 42.8467. The border further extends next to the entrance to the Vjetrenica cave and eastwards across Cadastre Units 1752/1, 752/2, 761/3, 761/1, 784/2, 779, 784/2, 781, 1769, 782, 783, 787, 792, 1752/1, 803 and Cadastre Unit 804, where it returns to the starting point at coordinate X: 17.9956; Y: 42.8481.

## **Article 7**

### **(Coverage of the Protected Zone Two)**

(1) In the Protected Zone Two (Active Protection Zone, Zone B) with an area of 464.90 ha, the original state of nature is primarily preserved and protected, and it is characterised by an active form of protection. The mentioned area includes a zone characterised by the preservation and rehabilitation of habitats and the protection of species, including the removal of invasive species. This zone includes all protected, endangered, endemic species of flora and fauna, and habitats. In

the Protected Zone Two, there are also springs and cultural-historical landmarks.

(2) Zone B consists of six spatial units, marked as: B1, B2, B3, B4, B5 and B6.

(3) Zone B1, with an area of 342.60 ha, represents a buffer zone that is connected to the cave and the drip line of the Vjetrenica cave, as a natural hydrological link in order to protect the area, but also to use the area for hunting activities, considering the awarded hunting concession in the area. The B1 zone territorially extends over the area of three settlements: Zavala, Golubinac and Belenići. The area of the buffer zone extends in the east from the settlement of Budim Do almost to the border of the protected area, from where it bends to the south east of Klisura all the way to the settlement of Belenići. From Belenić, the border extends to the Valin do, after which it extends northwest to the settlement of Golubinac and V. Gradina hill, all the way to the north and the local road in Zavala, where it connects to the cave's drip line.

(4) Zone B2, with an area of 52.25 ha, represents a mine-suspected area and is located on two separate spatial units marked as subzones B2.1 and B2.2.

(5) Subzone B2.1 is a mine-suspected area with a coverage of 13.90 ha. This subzone is located within the boundaries of the Zavala settlement, and is located at far east of the proposed protected area. The locality abuts the buffer zone of the active protection of the cave, up to the border of the protected area in the east, from where it descends to the south over Oštri vrh up to elevation 824 Sovar.

(6) Zone B2.2 is a mine-suspected area with a total coverage of 38.35 ha. The zone adjoins the boundary of the previous subzone in the Zavala unit, from where it descends south over Oštro vrh until elevation 824 Sovar, together with another separate locality located south of the previous one at the Zečija glava site.

(7) Zone B3 with an area of 38.52 ha covers the Trebišnjica river zone. This zone represents the continuous surface of the river Trebišnjica, extending over the area of two settlements, Čvaljina and Zavala. The border follows the river bed and includes the part of the river Trebišnjica located in the territory of the protected area that includes part of Popovo polje, starting from the northernmost item near Grabovac, through the settlement of Čvaljina to elevation 262 Muhareva Ljut.

(8) Zone B4 includes all natural values (endangered and/or protected and/or, endemic species of flora and fauna and important habitats for the preservation of natural values), which are established in the above-ground part of the protected area. The total area of established natural values is 21.40 ha, distributed within the boundaries of all settlements, except for Orahov Do. The identified species of flora and fauna represent species of importance for biodiversity. This zone is divided into five subzones labelled as:

- a) B4.1 (Natural values of flora, fauna and important habitats in the settlement of Čvaljina, area 3.13 ha),
- b) B4.2 (Natural values of flora, fauna and important habitats in Zavala settlement, area 10.43 ha)
- c) B4.3 (Natural values of flora, fauna and important habitats in the Belenići settlement, area 4.70 ha)
- d) B4.4 (Natural values of flora, fauna and important habitats in the Kijev Do settlement, area 1.56 ha)
- e) B4.5 (Natural values of flora, fauna and important habitats in the Golubinac settlement,

area 1.57 ha).

(9) Zone B5 with a total area of 2.00 ha includes water source locations as significant hydrological values of the protected area. This zone is located near the settlements of Čvaljina, Zavala, Golubinac and Belenići.

(10) Zone B6 with a total area of 8.13 ha includes cultural and historical landmarks, and is divided into two subzones, B6.1 and B6.2.

a) B6.1 represents a set of cultural-historical monuments, which include two sacral facilities 'Building complex of the Church of the Assumption of Mary in Zavala, Ravno Municipality' (Zavala Monastery) and the Archaeological Area of Crkvina in Zavala, Ravno Municipality, (Remains of the Pre-Romanesque Church of St. Peter), which are located in the vicinity of the Zavala settlement with an area of 2.05 ha.

b) Zone B6.2 includes cultural monuments in the form of medieval tombstones *stećak* found in the settlements of Orahov Do, Golubinac, Belenići, Zavala and Čvaljina, with an area of 6.08 ha.

(11) The spatial distribution of all zones and subzones of the Protected Zone Two B is also determined using the coordinates in Annex II of this Law.

## **Article 8**

### **(Coverage of the Protected Zone Three)**

(1) The Protected Zone Three (Usage Zone, Zone C) with an area of 1,175.94 ha is mostly a zone that corresponds to agricultural areas, but also includes two sub-zones for hospitality industry and construction of tourist complexes, as well as inhabited areas.

(2) Zone C is divided into six spatial units, marked as: C1, C2, C3, C4, C5 and C6 belonging to the following spatial units: Cadastre Municipality Čvaljina, Cadastre Municipality Zavala, Cadastre Municipality Belenići, Cadastre Municipality Grmljani, Cadastre Municipality Kijev Do, Cadastre Municipality Golubinac, Cadastre Municipality Orahov Do.

(3) Zone C1 represents the largest spatial unit within this zone with an area of 503.31 ha. This zone is located in the area of the settlement of Čvaljina, and it covers the inhabited area as well as the agrozone II (credit rating category V and VI) and agrozone III (credit rating category VII and VIII). In Zone C1, a hunting concession has been granted for the total area. Zone C1 is divided into two subzones C 1.1 and C 1.2.

a) Subzone C1.1 covers the settlement of Čvaljina with a total area of 9.45 ha, located in the northernmost part of the proposed protected area.

b) Subzone C1.2 are agricultural areas in the area of the Čvaljina settlement at 493.86 ha. The area around the Trebišnjica River includes agrozone I (credit rating category I - IV), as the most valuable agricultural land in the area, agricultural zone II (credit rating category V and VI) with a smaller surface coverage located near the settlement of Čvaljina, and in the eastern part of the broader coverage of the settlement, while other parts of this zone include agrozone III (credit rating category VII and VIII).

(4) Zone C2, with an area of 231.54 ha covers the wider area of the Zavala settlement, and includes three subzones designated as C2.1, C2.2 and C2.3.

a) Subzone C2.1 is represented by the settlement of Zavala, located near the cave, with a total

- area of 12.63 ha, in the northern and central part of the proposed protected area.
- b) Subzone C2.2 are agricultural areas in the area of the Zavala settlement with 157.36 ha. Around the river Trebišnjica agrozone I (credit rating category I - IV) and agrozone II (credit rating category V and VI) are located near the settlement of Zavala, while other parts of the settlement include agrozone III (credit rating category VII and VIII).
  - c) Subzone C2.3 is intended for hospitality-tourist complexes, in the western part of the wider area of the Zavala settlement, more precisely in the vicinity of the locality Češljari. The total area of this subzone is 61.55 ha.
- (5) Zone C3 with an area of 105.60 ha is located within the Belenići settlement, and is represented by two subzones C3.1 and C3.2.
- a) Subzone C3.1 covers the site of Belenići settlement with a total area of 5.20 ha, located in the eastern part of the proposed protected area.
  - b) Subzone C3.2 covers agricultural areas in the wider area of Belenići settlement with an area of 100.40 ha. Inhabited part of Belenići predominantly includes agrozone II (credit rating category V and VI), while agrozone III (credit rating category VII and VIII) is represented in smaller parts surrounding agrizone II.
- (6) Zone C4 with an area of 39.28ha is located within the settlement of Kijev Do, and includes two subzones C4.1 and C4.2.
- a) Subzone C4.1 is the site of the Kijev Do settlement with a total area of 4.60 ha, located in the southeastern part of the proposed protected area.
  - b) Subzone C4.2 are agricultural areas in the wider area of the settlement Kijev Do. with an area of 34.68 ha. Agricultural areas include a narrow strip next to the Kijev Do settlement, predominantly agrozone II (credit rating category V and VI), while agrozone III (credit rating category VII and VIII) is found in smaller parts in the far south of the settlement of Kijev Do.
- (7) Zone C5, with an area of 33.35 ha, is located within the settlement of Golubinac, and is divided into two subzones, namely C5.1 and C5.2.
- a) Subzone C5.1 covers the site of the Golubinac settlement with a total area of 1.90 ha, located in the central part of the proposed protected area.
  - b) Subzone C5.2 covers agricultural areas in the wider area of the Golubinac settlement with an area of 31.45 ha. Agrozone III (credit rating category VII and VIII) is found in smaller parts in the immediate surroundings of the Golubinac settlement.
- (8) Zone C6 with an area of 262.86 ha is located within the settlement of Orahov Do, with the second and third agricultural zones, and the tourist zone, resulting in the division into three subzones marked as C6.1, C6.2 and C6.3.
- a) Subzone C6.1 covers the site of the Orahov Do settlement with a total area of 5.11 ha, located in the western part of the proposed protected area.
  - b) Subzone C6.2 covers agricultural areas in the wider area of the Orahov Do settlement, with a total area of 68.95ha. These include a narrow strip next to the settlement of Orahov Do, with predominantly agrozone II (credit rating category V and VI) located south of the settlement Orahov Do, while agrozone III (credit rating category, VII and VIII) is found in smaller parts in the far north of the settlement.
  - c) Subzone C6.3 is intended for hospitality industry and tourist complexes. The total area of

this subzone is 188.80 ha, and it extends through the central part of the wider area of the Orahov Do settlement.

## **Article 9** **(Coverage of the Protected Zone Four)**

The Protected Zone Four (Transitional Zone, Zone D), with an area of 2,655.54 ha, is the territorially largest zone within the coverage of the protected area, extending to Cadastre Municipalities Čvaljina, Zavala, Belenići, Grmljani, Gorogaše, Kijev Do, Golubinac, Orahov Do, excluding the previously described zones of strict protection, active protection and usage. This zone is represented mainly by forest land covering (DI) 2,549.33 ha, while a smaller part includes infrastructure facilities such as substations, transmission lines, roads and planned tourist facilities with an area of 106.21 ha.

## **Article 10** **(Fundamental Values of the Protected Zone A)**

(1) Fundamental values of the first protected **A1 zone** are:

- a) geological and geomorphological value: Vjetrenica cave
  - I. Vjetrenica cave is a part of the karst area system, which is the most environmentally endangered type of habitat in Bosnia and Herzegovina. Vjetrenica is a complex cave system and the longest cave in Bosnia and Herzegovina, and it is also a hydrologically active flowing speleological site with active underground water flows and underground lakes. The first form of protection of Vjetrenica appeared as early as in 1952. According to all relevant planning documentation up to this day, the mentioned area of the Vjetrenica cave with the surrounding area of karst plateaus and a part of the Popovo polje is proposed to be designated for protection. Vjetrenica is a complex cave system with a channel length of 7013.90 m, making it the longest cave in Bosnia and Herzegovina.
  - II. Pits, sinkholes and the world of underground water architecture. Vjetrenica is a hydrologically active flowing speleological site with four autonomous water streams, as well as a dozen smaller, periodic streams and underground lakes.
- b) Exceptional biodiversity value of the Vjetrenica cave **with 232 species of troglofauna**
  - I. Vjetrenica cave is a type locality for 38 species of troglofauna:
    - 1. *Scutariella stammeri* Matjašič 1958 (Temnocephalida, Scutariellidae)
    - 2. *Stygodyticola hadzii* Matjašič 1958 (Temnocephalida, Scutariellidae)
    - 3. *Lanzaia vjetrenicae* Kuščer 1933 (Gastropoda, Hydrobiidae)
    - 4. *Zavalia vjetrenicae* Radoman 1973 (Gastropoda, Hydrobiidae)
    - 5. *Vitrea kiliäsi* Pinter 1972 (Pulmonata Zonitidae)
    - 6. *Eukoenenia remy* Conde 1974 (Palpigradi, Eukoeniidae)
    - 7. *Stalagtia (Stalagtia) hercegovinensis* (Nosek 1905) (Araneae, Dysderidae)
    - 8. *Stalitella noseki* Absolon & Kratochvil 1933 (Araneae, Dysderidae)
    - 9. *Tegenaria conveniens* Kulczyński 1914 (Araneae, Agelenidae)
    - 10. *Lepthyphantes spelaeorum* Kulczyński, 1914 (Araneae, Linyphiidae)
    - 11. *Chthonius (C.) occultus* Beier 1939 (Pseudoscorpiones, Chthoniidae)
    - 12. *Neobisium (Blothrus) vjetrenicae* Hadži 1933 (Pseudoscorpiones, Neobisiidae)
    - 13. *Dinaria vjetrenicae* (Hadži, 1932 ) (Laniatores, Travuniidae)

14. *Diacyclops karamani* (Kiefer 1932) (Cyclopidae)
  15. *Eucyclops inarmatus* Kiefer 1932 (Cyclopidae)
  16. *Acanthocyclops troglophilus* (Kiefer 1932) (Cyclopidae)
  17. *Pseudocypridopsis hartmanni* Petkovski et al., 2009 (Ostracoda, Cyprididae)
  18. *Troglocaris hercegovinensis* (Babić 1922) (Decapoda, Atyidae)
  19. *Troglomysis vjetrenicensis* Stammer 1936 (Mysidacea, Mysidae)
  20. *Monolistra (Pa) hercegoviniensis* Absolon 1916 (Isopoda, Sphaeromatidae)
  21. *Proasellus hercegovinensis* (S. Karaman 1933) (Isopoda, Asellidae)
  22. *Armadillidium absoloni* Strouhal 1939 (Isopoda, Armadillidiidae)
  23. *Niphargus balcanicus* (Absolon 1927) (Amphipoda Niphargidae)
  24. *Niphargus boskovici* S. Karaman 1952 (Amphipoda Niphargidae)
  25. *Niphargus vjeternicensis* S. Karaman 1932 (Amphipoda Niphargidae)
  26. *Niphargus trullipes* Sket 1958 (Amphipoda Niphargidae)
  27. *Niphargus factor* G. Karaman & Sket 1991 (Amphipoda Niphargidae)
  28. *Niphargus cvijici* S. Karaman 1950 (Amphipoda Niphargidae)
  29. *Niphargus zavalanus* S. Karaman 1950 (Amphipoda Niphargidae)
  30. *Hadzia fragilis* S. Karaman 1932 (Hadziidae, Hadziidae)
  31. *Lithobius (T.) sketi* Matic et Darabantu 1968 (Chilopoda, Lithobiidae)
  32. *Typhloiulus (A.) edentulus* Attems 1951 (Diplopoda, Julidae)
  33. *Plusiocampa (Stygiocampa) remyi* Conde 1947 (Diplura, Campodeidae)
  34. *Hadesia vasiceki* (J. Müller 1911) (Coleoptera Cholevidae)
  35. *Nauticiella stygivaga* Moravec et Mlejnek 2002 (Coleoptera Cholevidae)
  36. *Speonesiotes (S.) schweitzeri* Jeannel 1941 (Coleoptera Cholevidae)
  37. *Aphaenopsis (A.) pretneri* Scheibel 1935 (Carabidae, Trechini)
  38. *Aphaenopsis (S.) arenstorffianus* Absolon 1913 (Carabidae, Trechini)
- II. The Vjetrenica Cave is a habitat for 14 species of troglifauna specific only to the Vjetrenica locality(\*) and the following endangered (EN) and vulnerable species (VU):
1. *Aphaenopsis (Adriaphaenops) pretneri* (Scheibel, 1935\*) – **EN status on CL FBiH**
  2. *Armadillidium absoloni* (Strouhal, 1939\*)
  3. *Dinaria vjetrenicae* (Hajji, 1932)\*
  4. *Eukoenenia remy* (Conde, 1974\*)
  5. *Lanzaia vjetrenicae* (Kuscher, 1933\*)
  6. *Lephtyphantes spelaeorum* (Kulczyński, 1914\*)
  7. *Narentiana vjetrenicae* (syn. *Zavalia vjetrenicae*) (Radoman 1973\*)
  8. *Nauticiella stygivaga* (Moravec and Mlejnek, 2002\*)
  9. *Neobisium vjetrenicae* (Hajji, 1933\*)
  10. *Niphargus factor* (G. Karaman and Sket, 1991\*)
  11. *Niphargus zavalanus* (S. Karaman, 1950\*)
  12. *Scutariella stammeri* (Matjašič, 1958\*)
  13. *Troglomysis vjetrenicensis* (Stammer, 1936\*)
  14. *Typhloiulus (Attemsotyphlus) edentulus* (Attems, 1951\*)
  15. *Dinaromys bogdanovi* (Martino, 1922) – **VU status on CL FBiH**
  16. *Laemostenus (Antisphodrus) cavicola* (Schaum, 1858) - **VU status on CL FBiH**
  17. *Myotis emarginatus* (Geoffroy, 1806) – **VU status on CL FBiH**
  18. *Neotrechus suturalis* (Schaufuss 1864) – **EN status on CL FBiH**
  19. *Niphargus vjeternicensis* (f>. Karaman, 1932) - **VU status on CL FBiH**

20. *Proteus anguinus* (Laurenti, 1768) – **EN status on CL FBiH**  
 21. *Rhinolophus hipposideros* (Bechstein, 1800) – **EN status on CL FBiH**  
 22. *Squalius svallize* (Heckel & Kner, 1858) – **VU status on CL FBiH**  
 23. *Trogulus torosus* (Simon, 1885) – **VU status on CL FBiH**
- c) Geomorphological value: above-ground parts of the associated karst ecosystem above the Vjetrenica cave itself.
- (2) The fundamental values of the first protected **A2 zone** are:
- a) Hydrological values: two springs: Lukavac and Bitomišlja  
 b) hydrogeological connection of the drip line with the Vjetrenica cave.

## Article 11 (Fundamental Values of the Protected Zone Two)

- (1) The fundamental values of the B1 zone are the hydrogeological link between the drip line and the Vjetrenica cave, representing a buffer zone that connects to the cave and the drip line of the Vjetrenica cave, as a natural hydrological link in order to protect the area.
- (2) Zone **B2** does not contain natural and cultural-historical values, and covers a zone of mine-suspected surfaces (sub-zones B2.1 and B2.2) requiring urgent demining.
- (3) The fundamental value of zone **B3** is part of the watercourse of the Trebišnjica river.
- (4) **Zone B4**, with subzones **4.1, 4.2, 4.3, 4.4 and 4.5**, includes all natural values (endangered and/or protected and/or endemic species of flora and fauna and important habitats for preservation of natural values), established **in the above-ground part** of the protected areas, as follows:

| Natural Value                                                                                                                   | Latin (Common)                                                                                                                 | EN status                                            |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <b>B4.1 - Endangered and/or protected and/or endemic species of flora and fauna and important habitats in Čvaljina</b>          |                                                                                                                                |                                                      |
| Habitat                                                                                                                         | <i>Verbenion supinae</i> Slavnić 1951 - vegetation of low sedges of SE Europe (*3170)                                          | 'Natural habitats threatening to disappear in the EU |
| Habitat                                                                                                                         | <i>Carpinion orientalis</i> Horvat 1958 – downy oak forests and hornbeam (91AA)                                                | -                                                    |
| Flora                                                                                                                           | <i>Aristolochia rotunda</i> L., (Smearwort)                                                                                    | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Peucedanum coriaceum</i> Rchb.subsp. <i>pospichala</i> (Theil.) Horvatič, (Sulphurweed)                                     | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Thalictrum flavum</i> L., (Meadow rue)                                                                                      | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Veronica anagalloides</i> Guss.,                                                                                            | VU on CL FBiH                                        |
| Flora                                                                                                                           | <i>Asperula scutellaris</i> Vis.,                                                                                              | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Crocus dalmaticus</i> Vis.,                                                                                                 | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Moltkia petraea</i> (Tratt.) Griseb .                                                                                       | NT on CL FBiH                                        |
| Flora                                                                                                                           | <i>Scilla lakusicii</i> Šlić, (Lakušić's gap)                                                                                  | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Tanacetum cinerariifolium</i> (Trevir.) Sch. Bip., (Buvač)                                                                  | VU on CL FBiH                                        |
| Flora                                                                                                                           | <i>Tulipa sylvestris</i> L. subsp. <i>sylvestris</i> , (Wild Tulip)                                                            | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Crocus dalmaticus</i> Vis., (Dalmatian saffron)                                                                             | EN on CL FBiH                                        |
| Flora                                                                                                                           | <i>Crocus tommasinianus</i> Herb., (Tomasini's saffron)                                                                        | CR on CL FBiH                                        |
| <b>B4.2 - Endangered and/or protected and/or endemic species of flora and fauna and important habitats in Zavala settlement</b> |                                                                                                                                |                                                      |
| Habitat                                                                                                                         | <i>Asplenietea trichomanis</i> (Br.-Bl. in Meier et Br.-Bl. 1934) Oberd. 1977 - vegetation of cracks in carbonate rocks (8210) | -                                                    |
| Habitat                                                                                                                         | <i>Drypidetalia spinosae</i> Quézel 1964 - Eastern Mediterranean Limestone Spinosas (8140)                                     | -                                                    |
| Habitat                                                                                                                         | <i>Molinio-Hordeion secalini</i> Horvatic 1934 - Balkan Sumediterranean wet meadows (6540)                                     | -                                                    |
| Habitat                                                                                                                         | <i>Carpinion orientalis</i> Horvat 1958 - downy oak forests and hornbeam (91AA)                                                | -                                                    |
| Flora                                                                                                                           | <i>Cardamine graeca</i> L., (Seaweed)                                                                                          | CR on CL FBiH                                        |
| Flora                                                                                                                           | <i>Campanula austroadiatica</i> D. Lakušić & Kovačič, (Great Bellflower)                                                       | NT on CL FBiH,                                       |

| Natural Value | Latin (Common)                                                                                    | EN status     |
|---------------|---------------------------------------------------------------------------------------------------|---------------|
| Flora         | <i>Opopanax chironium</i> (L.) W. D. J. Koch, (Zlatocvijeta)                                      | EN on CL FBiH |
| Flora         | <i>Anthyllis vulneraria</i> L. subsp. <i>weldeniana</i> (Rchb.) Cullen (Ilirski ranjenik)         | VU on CL FBiH |
| Flora         | <i>Dianthus sylvestris</i> Wulfen subsp. <i>tergestinus</i> (Rchb.) Hayek (Šumski karanfič)       | VU on CL FBiH |
| Flora         | <i>Dittrichia viscosa</i> (L.) Greuter subsp. <i>viscosa</i> , (Ljepljivi oman)                   | EN on CL FBiH |
| Flora         | <i>Tanacetum cinerariifolium</i> (Trevir.) Sch. Bip., (Buvač)                                     | VU on CL FBiH |
| Flora         | <i>Aristolochia rotunda</i> L., (Okruglasta vučja stopa)                                          | EN on CL FBiH |
| Flora         | <i>Dittrichia viscosa</i> (L.) Greuter subsp. <i>viscosa</i> , (Ljepljivi oman)                   | EN on CL FBiH |
| Flora         | <i>Peucedanum coriaceum</i> Rchb. subsp. <i>pospichalii</i> (Thell.) Horvatič, (Kožasta pukovica) | EN on CL FBiH |
| Flora         | <i>Aristolochia rotunda</i> L., (Okruglasta vučja stopa)                                          | EN on CL FBiH |
| Flora         | <i>Veronica anagalloides</i> Guss., (Močvarna čestoslavica)                                       | VU on CL FBiH |
| Flora         | <i>Aristolochia rotunda</i> L., (Okruglasta vučja stopa)                                          | EN on CL FBiH |
| Flora         | <i>Dittrichia viscosa</i> (L.) Greuter subsp. <i>viscosa</i> , (Ljepljivi oman)                   | EN on CL FBiH |
| Flora         | <i>Euphorbia fragifera</i> Jan, (Mirisna mlječika)                                                | VU on CL FBiH |
| Flora         | <i>Peucedanum coriaceum</i> Rchb. subsp. <i>pospichala</i> (Thell.) Horvatič, (Kožasta pukovica)  | EN on CL FBiH |
| Flora         | <i>Scilla litardierei</i> Breistr., (Poljski procjepak)                                           | VU on CL FBiH |
| Flora         | <i>Crocus tommasinianus</i> Herb., (Tomazinijev šafran)                                           | CR on CL FBiH |
| Flora         | <i>Cyclamen hederifolium</i> Aitón, (Jesenja ciklama)                                             | CR na CLFBiH  |
| Flora         | <i>Cardamine graeca</i> L., (Morska režuha)                                                       | CR na CLFBiH  |
| Flora         | <i>Cyclamen hederifolium</i> Aitón, (Jesenja ciklama)                                             | CR on CL FBiH |
| Flora         | <i>Fritillaria messanensis</i> Raf. subsp. <i>gracilis</i> (Ebel) Rix, (Tamna kockavica)          | VU on CL FBiH |
| Flora         | <i>Romulea bulbocodium</i> (L.) Sebast. & Mauri, (Dugovača)                                       | EN on CL FBiH |
| Flora         | <i>Ruscus aculeatus</i> L., (Veprina)                                                             | VU on CL FBiH |
| Flora         | <i>Cardamine graeca</i> L., (Morska režuha)                                                       | CR on CL FBiH |
| Flora         | <i>Campanula austroadiatica</i> D. Lakušič & Kovačič, (Velika zvončika)                           | NT na CLFBiH  |
| Flora         | <i>Crocus tommasinianus</i> Herb., (Tomazinijev šafran)                                           | CR on CL FBiH |
| Flora         | <i>Cyclamen hederifolium</i> Aitón, (Jesenja ciklama)                                             | CR on CL FBiH |
| Flora         | <i>Dittrichia viscosa</i> (L.) Greuter subsp. <i>viscosa</i> , (Ljepljivi oman)                   | EN on CL FBiH |
| Flora         | <i>Iris tuberosa</i> L., (Gomoljasta sabljica)                                                    | CR on CL FBiH |
| Flora         | <i>Ruscus aculeatus</i> L., (Veprina)                                                             | VU na CLFBiH  |
| Fauna         | <i>Iolana iolas</i> (Ochsenheimer, 1816)                                                          | EN on CL FBiH |
| Fauna         | <i>Arida anteros</i> (Freyer, 1838)                                                               | EN na CLFBiH  |
| Fauna         | <i>Charaxes jasius</i> (Linnaeus, 1767)                                                           | VU on CL FBiH |
| Fauna         | <i>Hipparchia statilinus</i> (Hufnagel, 1766)                                                     | VU na CLFBiH  |
| Fauna         | <i>Testudo hercegovinensis</i> Werner, 1899 - čančara                                             | VU na CLFBiH  |

#### B4.3 - Endangered and/or protected and/or endemic species of flora and fauna and important habitats in Belenići

|         |                                                                                             |               |
|---------|---------------------------------------------------------------------------------------------|---------------|
| Habitat | <i>Scorzonera villosa</i> Kovačević 1959 - suvi stepski travnjaci submediterana (62A0)      | -             |
| Habitat | <i>Scorzonera villosa</i> Kovačević 1959 - suvi stepski travnjaci submediterana (62A0)      | -             |
| Flora   | <i>Anthyllis vulneraria</i> L. subsp. <i>weldeniana</i> (Rchb.) Cullen (Ilirski ranjenik)   | VU na CLFBiH  |
| Flora   | <i>Dianthus sylvestris</i> Wulfen subsp. <i>tergestinus</i> (Rchb.) Hayek (Šumski karanfič) | VU na CLFBiH  |
| Flora   | <i>Asperula scutellaris</i> Vis., (Kamenjarska lazarkinja)                                  | EN on CL FBiH |
| Flora   | <i>Euphorbia fragifera</i> Jan, (Mirisna mlječika)                                          | VU na CLFBiH  |
| Flora   | <i>Scilla lakusiai</i> Šilič, (Lakušičev procjepak)                                         | EN na CLFBiH  |
| Flora   | <i>Anthyllis vulneraria</i> L. subsp. <i>weldeniana</i> (Rchb.) Cullen (Ilirski ranjenik)   | VU on CL FBiH |
| Flora   | <i>Chaerophyllum coloratum</i> L. (Šarena kraljica)                                         | EN on CL FBiH |
| Flora   | <i>Salvia pratensis</i> L. subsp. <i>bertolonii</i> (Vis.) Soó, (Livadska kadulja)          | NT on CL FBiH |
| Flora   | <i>Anacamptis pyramidalis</i> (L.) Rich., (Piramidalni kačun)                               | NT on CL FBiH |
| Flora   | <i>Anthyllis vulneraria</i> L. subsp. <i>weldeniana</i> (Rchb.) Cullen (Ilirski ranjenik)   | VU on CL FBiH |
| Flora   | <i>Asperula scutellaris</i> Vis., (Kamenjarska lazarkinja)                                  | EN on CL FBiH |
| Flora   | <i>Chaerophyllum coloratum</i> L. (Šarena kraljica)                                         | EN on CL FBiH |
| Flora   | <i>Dittrichia viscosa</i> (L.) Greuter subsp. <i>viscosa</i> , (Ljepljivi oman)             | EN on CL FBiH |
| Flora   | <i>Helleborus hercegovinus</i> Martinis, (Hercegovački kukurijek)                           | VU on CL FBiH |

| Natural Value                                                                                                           | Latin (Common)                                                                            | EN status     |
|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------|
| Flora                                                                                                                   | <i>Moltkia petraea</i> (Tratt.) Griseb., (Modro lasinje)                                  | NT on CL FBiH |
| Flora                                                                                                                   | <i>Stachys recta</i> L., (Uspravni ranjenik)                                              | CR on CL FBiH |
| Flora                                                                                                                   | <i>Tanacetum cinerariifolium</i> (Trevir.) Sch. Bip. (Buvač)                              | VU on CL FBiH |
| Flora                                                                                                                   | <i>Trifolium pignatii</i> Fauché & Chaub., (Pinjatijeva djetelina)                        | NT on CL FBiH |
| <b>B4.4 - Endangered and/or protected and/or endemic species of flora and fauna and important habitats in Kijev Do</b>  |                                                                                           |               |
| Habitat                                                                                                                 | <i>Scorzonera villosa</i> Kovačević 1959 - suvi stepski travnjaci submediterana (62A0)    | -             |
| Flora                                                                                                                   | <i>Salvia pratensis</i> L. subsp. <i>bertolonii</i> (Vis.) Soó, (Livadska kadulja)        | NT on CL FBiH |
| Flora                                                                                                                   | <i>Crocus tommasinianus</i> Herb., (Tomazinijev šafran)                                   | CR on CL FBiH |
| Flora                                                                                                                   | <i>Petteria ramentacea</i> (Sieber) C. Presi, (Zanovijet)                                 | NT on CL FBiH |
| <b>B4.5 - Endangered and/or protected and/or endemic species of flora and fauna and important habitats in Golubinac</b> |                                                                                           |               |
| Habitat                                                                                                                 | <i>Scorzonera villosa</i> Kovačević 1959 - suvi stepski travnjaci submediterana (62A0)    | -             |
| Flora                                                                                                                   | <i>Moltkia petraea</i> (Tratt.) Griseb., (Modro lasinje)                                  | NT on CL FBiH |
| Flora                                                                                                                   | <i>Petteria ramentacea</i> (Sieber) C. Presi, (Zanovijet)                                 | NT on CL FBiH |
| Flora                                                                                                                   | <i>Seseli tomentosum</i> Vis., (Pustenasto devesilje)                                     | VU on CL FBiH |
| Flora                                                                                                                   | <i>Dittrichia viscosa</i> (L.) Greuter subsp. <i>viscosa</i> , (Ljepljivi oman)           | EN on CL FBiH |
| Flora                                                                                                                   | <i>Ruscus aculeatus</i> L., (Vepřina)                                                     | VU on CL FBiH |
| Flora                                                                                                                   | <i>Anthyllus vulneraria</i> L. subsp. <i>weldeniana</i> (Rchb.) Cullen (Ilirski ranjenik) | VU on CL FBiH |
| Flora                                                                                                                   | <i>Chaerophyllum coloratum</i> L. (Šarena krabljica)                                      | EN on CL FBiH |
| Flora                                                                                                                   | <i>Crocus tommasinianus</i> Herb., (Tomazinijev šafran)                                   | CR on CL FBiH |
| Flora                                                                                                                   | <i>Cyclamen hederifolium</i> Aitón, (Jesenja ciklama)                                     | CR on CL FBiH |
| Flora                                                                                                                   | <i>Ruscus aculeatus</i> L., (Vepřina)                                                     | VU on CL FBiH |
| Flora                                                                                                                   | <i>Tulipa sylvestris</i> L. subsp. <i>sylvestris</i> , (Buvač)                            | EN on CL FBiH |
| Fauna                                                                                                                   | <i>Gonepteryx Cleopatra</i> (Linnaeus, 1758)                                              | VU on CL FBiH |
| Fauna                                                                                                                   | <i>Gonepteryx Cleopatra</i> (Linnaeus, 1758)                                              | VU on CL FBiH |
| Fauna                                                                                                                   | <i>Aricia anteros</i> (Freyer, 1838)                                                      | EN on CL FBiH |
| Fauna                                                                                                                   | <i>Polyommatus admetus</i> Esper, 1783                                                    | EN on CL FBiH |
| Fauna                                                                                                                   | <i>Lissotriton vulgaris</i> (Linnaeus, 1758)                                              | VU on CL FBiH |
| Fauna                                                                                                                   | <i>Gonepteryx Cleopatra</i> (Linnaeus, 1758)                                              | VU on CL FBiH |
| Fauna                                                                                                                   | <i>Lucanus cervus</i> (Linnaeus, 1758) - jelenak                                          | VU on CL FBiH |
| Fauna                                                                                                                   | <i>Elaphe quatuorlineata</i> (Lacépède, 1789)                                             | VU on CL FBiH |

(5) The fundamental values of the **B5 zone** are hydrological (springs) in the area of coverage of the second protected zone, in the settlements of Čvaljina, Zavala, Golubinac and Belenići.

(6) In **zone B6** there are:

- a) Two national monuments (**sub-zone 6.1**) of the facility "Building complex of the Church of the Assumption of Mary in Zavala, Ravno Municipality, (Zavala Monastery) and the Archaeological Area of Crkvina in Zavala, Ravno Municipality, (Remains of the Pre-Romanesque Church of St. Peter)
- b) Medieval tombstones *stećak* found in the settlements of Orahov Do, Golubinac, Belenići, Zavala and Čvaljina (**subzone 6.2**).

## Article 12

### (Fundamental Values of the Protected Zone Three)

(1) Zone C also includes constructed settlements of Čvaljina, Zavala, Budim Do, Češljari, Orahov Do, Golubinac, Belenići and Kijev Do. The Usage Zone consists of the following units: **C1, C2, C3, C4, C5 and C6** with the associated subzones.

(2) Fundamental values of the Protected Zone Three are: a) development of tourist complexes (**C2.3 and C6.3**)

- b) Tourist activities (hospitality industry, accommodation) – all zones and subzones C,
- c) Agricultural areas of different credit categories, production of organic food – all zones and subzones C,
- d) Ambient values of space - all zones and subzones C.

### **Article 13** **(Fundamental Values of the Protected Zone Four)**

- (1) Protected Zone Four (Transitional Zone, Zone D) is represented mainly by forest land covered (D1), while a smaller part includes infrastructure facilities such as substations, transmission lines, roads (D2).
- (2) The fundamental values of the Protected Zone Four are:
  - a) Forest ecosystems, that is, coppice forests as well as non-reproductive forest areas, and forest areas suitable for collecting non-timber forest material and recreation (**D1**),
  - b) Maintaining the integrity of the area and other zones,
  - c) Ambient space values of all zones and subzones D,
  - d) Supporting infrastructure (**D2**).

### **Article 14** **(Natural and Architectural Units)**

- (1) The second protected sub-zone B6.1 of the Protected Landscape includes in its scope also two national monuments and architectural units with the associated immovable and movable heritage, protected under the decisions of the Commission for the Preservation of National Monuments of Bosnia and Herzegovina: Archaeological Area of Crkvina in Zavala, Ravno Municipality (Official Gazette of Bosnia and Herzegovina, No. 98/09) and the building complex of the 'Building complex of the Church of the Assumption of Mary in Zavala, Ravno Municipality' in Zavala, Ravno Municipality (Official Gazette of Bosnia and Herzegovina, No. 104/06).
- (2) The above subzone B6.1 with the associated area is defined in accordance with Article 7, Paragraph 10 of this Law.
- (3) The location of the national monument Archaeological Area of Crkvine in Zavala, Ravno Municipality (Official Gazette of Bosnia and Herzegovina, No. 98/09) within the B6.1 zone is located in the area marked as Cadastre Unit 583/1, Title Deed No. 167, Cadastre Municipality Zavala, Ravno Municipality, Federation of Bosnia and Herzegovina, Bosnia and Herzegovina.
- (4) National monument 'Building complex of the Church of the Assumption of Mary in Zavala, Ravno Municipality' within the B6.1 zone is located on the area marked as Cadastre Unit no. 411, 413 and a part of the Cadastre Unit 414 extending east of plots 411 and 413; the boundary line of the protected zone starts from the northeast corner of plot 411 and descends vertically to the road Zavala - Ravno, which covers the eastern border of the protected zone; on the southeastern side of the boundary of the protected zone, it starts from the southeastern corner of plot 413 and descends vertically to the Zavala - Ravno road; Title Deed No. 59 (103/01), Cadastre Municipality Zavala.
- (5) The protection of national monuments within the prescribed borders is carried out in accordance with the decisions referred to in paragraph (1) of this Article.

## **Article 15**

### **(Cartographic view)**

- (1) A cartographic representation with a clearly drawn border of its coverage and spatial distribution of all zones and subzones of the Protected Landscape is provided in Annex I of this Law and forms its integral part.
- (2) The cartographic presentation was prepared at a scale of 1:25,000.
- (3) The printed copy of the cartographic presentation is in A1 format.

## **111. PROTECTIVE MEASURES**

### **Article 16**

#### **(Protection measures in the Protected Zone One)**

In the Protected Zone One (Strict Protection Zone, Zone A), protection measures include the protection and preservation of specific natural features of this zone, and refer to the following:

- a) Prohibition of unauthorised entry into the area of the Vjetrenica cave,
- b) Prohibition of destroying and alienating cave decorations, minerals and raw materials from the Vjetrenica cave and the prohibition of exceeding the maximum possible daily capacity of visits for the Vjetrenica cave,
- c) Prohibition of disturbing the natural hydrological regime of water resources,
- d) Prohibition of forest felling, uprooting or any damage to trees except for cultivation and sanitary felling,
- e) Prohibition of exploitation of mineral raw materials,
- f) Ban on collecting medicinal plants,
- g) Ban on collecting mushrooms,
- h) Prohibition of collection of specimens of flora and fauna, especially endemic, endangered and protected species,
- i) Banning the planting of non-native plant communities and the introduction of non-native animal species,
- j) Prohibition of the introduction of genetically modified species,
- k) Prohibition of moving the nests and disturbing birds,
- l) Prohibition of disposal of all types of waste,
- m) Banning the use of open flames except in places designated for such purposes by the management of the protected area,
- n) Prohibition of all other activities that may violate the purpose of the protected area,
- o) Prohibition of the use of natural resources (except for the already existing use for water supply) and the exclusion of all other forms of use of space and activities, except for scientific research and controlled training,
- p) Hunting ban,
- q) Prohibition of construction activities and operations in the area, except for the purpose of ensuring the passability of paths and roads,
- r) Visits to sites of natural value must be carried out under the supervision of rangers from the Area Manager.

### **Article 17**

#### **(Protection Measures in the Protected Zone Two)**

In the Protected Zone Two (Active Protection Zone, Zone B), protection measures include the

protection and preservation of natural and cultural-historical values and the implementation of targeted (active) protection measures, and refer to the following:

- a) Prohibition of forest felling, uprooting or any damage to trees except for cultivation and sanitary felling,
- b) Prohibition of exploitation of mineral raw materials,
- c) Ban on collecting medicinal plants,
- d) Ban on collecting mushrooms,
- e) Prohibition of collection of specimens of flora and fauna, especially endemic, endangered and protected species,
- f) Prohibition of intentional introduction of invasive species,
- g) Prohibition of grazing,
- h) Prohibition of agricultural activities,
- i) Prohibition of construction, except for buildings serving the purposes of the protected area management,
- j) Banning the use of open flames, except in specially marked and regulated sites,
- k) Prohibition of waste disposal,
- l) Prohibition of the alienation of cultural and historical values,
- m) Visits to sites of natural and cultural-historical value must be carried out under the supervision of the ranger of the Area Manager.

### **Article 18** **(Protection Measures in the Protected Zone Three)**

In the Protected Zone Three (Usage Zone, Zone C), protection measures are aimed at preserving ambient values, traditional values and use of space, and refer to the following:

- a) Prohibition of forest felling, except for felling in accordance with the forest management basis,
- b) Prohibition of hunting contrary to the hunting and economic basis,
- c) Prohibition of collecting medicinal plants except with the special approval of the Protected Area Manager,
- d) Prohibition of collection of specimens of flora and fauna, especially endemic, endangered and protected species,
- e) Prohibition of the introduction of invasive species,
- f) Prohibition of construction activities in the zones of existing water and hot springs,
- g) Prohibition of construction not compatible with the surrounding,
- h) Prohibition of the use of chemical agents in agriculture, except those permitted by state institutions.

### **Article 19** **(Protection Measures in the Protected Zone Four)**

(1) In the Protected Zone Four (Transitional Zone, Zone D), protection measures are aimed at preserving the entire protected area with unprotected areas in the surroundings, and the practices of sustainable local development.

(2) Zone D protection measures are aimed at:

- a) Prohibition of forest felling, except for felling in accordance with the forest management basis,
- b) Prohibition of hunting contrary to the hunting and economic basis,

- c) Prohibition of construction not in line with the spatial planning documentation.

#### **IV. SUPERVISION**

##### **Article 20 (Supervision)**

- (1) Supervision over the implementation of the provisions of the Law and documents adopted accordingly by the Area Manager is carried out by the Ravno Municipality, through the supervision of the planning of the Area Manager's work and the supervision over reporting on the activities of the Area Manager.
- (2) Inspection supervision over the application of this Law, supervision of the fulfilment of conditions, permits, decisions and other acts in the field of nature protection, usage and use of protected parts of nature, the state of nature and the implementation of nature protection measures, is carried out by the municipal inspector, that is, cantonal inspector of nature protection with the Ministry.
- (3) Other tasks of inspection supervision in the application of other regulations are performed by the FBiH and cantonal, each within their own jurisdiction.
- (4) The inspector keeps a record of performed inspections and other actions with data on the implementation of inspection supervision.

#### **V. MANAGEMENT**

##### **Article 21 (Management Plan)**

The Management Plan for the Protected Landscape is adopted by the Ravno Municipal Council within 12 months from the date of entry into force of the Law, based on the proposal of the Municipal Mayor for a period of ten years, with a mandatory revision of the Management Plan five years into its implementation.

##### **Article 22**

Pending the establishment of a public institution for the management of the above-ground part of the Vjetrenica cave with the surrounding area and a part of Popovo polje, the management of the Protected Landscape Vjetrenica-Popovo polje in the transition period is entrusted to the existing Public Enterprise Vjetrenica Ltd. Ravno, which currently manages the Vjetrenica cave. The transitional period lasts no longer than 15 months from the date of entry into force of this Law.

##### **Article 23**

The Municipal Council is responsible for the appointment of the Manager referred to in Article 22 until a cantonal institution is established.

#### **VI. PENAL PROVISIONS**

##### **Article 24 (Penal Provisions)**

- (1) A legal person will be fined in the range from BAM 1,000.00 to BAM 10,000.00 for minor offence, and a natural person will be fined from BAM 100.00 to BAM 500.00, for performing activities contrary to the prohibitions as defined in Articles 16, 17, 18 and 19 of this Law.
- (2) For minor offence referred to in paragraph 1 of this Article, the responsible person in the legal entity shall also be fine in the amount from BAM 200.00 to BAM 1,000.00.

(3) For minor offence referred to in paragraph 1 of this Article, property gain thus acquired shall be seized under a recovery measure.

## VII FINAL PROVISIONS

### Article 25 (Coming into Effect)

This Law enters into force on the eighth day from the day of its publication in the Official Gazette of the Herzegovina Neretva Canton.

Bosnia and Herzegovina  
Federation of Bosnia and Herzegovina  
Herzegovina Neretva Canton  
ASSEMBLY  
No. 02-01-XI-035/21  
Mostar, February 26, 2021



Speaker  
Serif Špago

PUBLIC COMPANY VJETRENICA RAVNO

TRG RUĐERA BOŠKOVIĆA BB

88 370, RAVNO

BOSNIA AND HERZEGOVINA

**Vjetrenica Cave, Ravno - Nominated for inclusion on the World Heritage List - supplementary informations**

**2 (A): A table providing an overview of all conservation designations that currently provide protection to the nominated property its buffer zone and the watershed of Vjetrenica Cave, especially those that will remain in place in the long term, and which will ensure the regulation of prohibited activities and implementation of effective measures against pollution that could impact the cave system**

| Conservation Designation                      | Legal Regulation                                                                                                                                                                                                                                                                                                                                                          | Managing Institution                                                                                                                                                                                                           | Conservation Measures                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protected Landscape Vjetrenica - Popovo polje | <ul style="list-style-type: none"><li>- Nature Protection Act Federation of Bosnia and Herzegovina</li><li>- Environmental Protection Act of Federation of Bosnia and Herzegovina</li><li>- Nature Conservation Act of Federation of Bosnia and Herzegovina</li><li>- Federal Environmental Protection Strategy</li><li>- Waste Management Act of Federation of</li></ul> | <ul style="list-style-type: none"><li>- Vjetrenica Public Company Ltd</li></ul> <p><i>*close collaboration with the founder of the Vjetrenica Public Company Ltd - Municipality of Ravno and all relevant stakeholders</i></p> | <ul style="list-style-type: none"><li>- Strict prohibition of any construction activities within the landscape area</li><li>- Development and implementation of habitat and ecosystem monitoring programs</li><li>- Establishment of monitoring points for tracking visitor and activities</li><li>- Collaboration with local communities for nature conservation promotion and education</li></ul> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Bosnia and Herzegovina</p> <ul style="list-style-type: none"> <li>- Water Act of Federation of Bosnia and Herzegovina</li> <li>- Tourism Law of Federation of Bosnia and Herzegovina</li> <li>- Tourism Development Strategy of Federation of Bosnia and Herzegovina</li> <li>- Nature Conservation Act of Herzegovina-Neretva Canton</li> <li>- Environmental Protection Act of Herzegovina - Neretva Canton</li> <li>- Environmental Development Strategy of Herzegovina - Neretva Canton</li> <li>- Municipality of Ravno Regulations</li> <li>- Management Plan of Vjetrenica Public Company Ltd</li> <li>- Statute of Vjetrenica Public Company Ltd</li> </ul> | <ul style="list-style-type: none"> <li>- Restriction of access to sensitive areas to reduce human impact</li> <li>- Waste management and recycling to reduce negative environmental impact</li> <li>- Regular monitoring of water and air quality in the protected area, buffer zone and watershed of Vjetrenica</li> <li>- Establishment of control measures to prevent entry of invasive species</li> <li>- Visitor education on the importance of nature conservation and proper behavior in the cave</li> <li>- Registration and limitation of the number of visitors to reduce pressure on the ecosystem</li> <li>- ban on the destruction and alienation of cave ornaments, minerals and raw materials from the Vjetrenica cave and ban on exceeding the maximum possible daily capacity of visiting</li> </ul> |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  | <p>the Vjetrenica cave</p> <ul style="list-style-type: none"> <li>- visits to natural value sites under the supervision of rangers and area managers</li> <li>- ban on the use of natural resources and exclusion of any other forms of use of space and activities, except for scientific research and controlled education</li> <li>- Establishment of a wastewater treatment system for tourist facilities</li> <li>- Waste disposal and recycling campaigns for visitors and local residents</li> <li>- Limitation of urbanization near the landscape area to preserve nature</li> <li>- Ban on hunting and fishing within the area to preserve flora and fauna</li> <li>- Impact assessment and limitation of infrastructure interventions on the environment and ecosystem</li> <li>- prohibition of disturbance of the</li> </ul> |
|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  | <p>natural hydrological regime of water resources</p> <ul style="list-style-type: none"> <li>- prohibition of deforestation, uprooting or any damage to trees other than breeding and sanitary felling</li> <li>- Monitoring of water regime to assess changes in hydrological patterns</li> <li>- Biodiversity monitoring to track species populations and habitat health</li> <li>- Microclimatic parameter monitoring to understand environmental conditions</li> <li>- Water quality monitoring to ensure the preservation of aquatic ecosystems</li> </ul> |
|  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

Vjetrenica Public Company Ltd. Ravno

Davor Baković

*[Signature]*  
Ravno

**PUBLIC COMPANY VJETRENICA RAVNO**

**TRG RUĐERA BOŠKOVIĆA BB**

**88 370, RAVNO**

**BOSNIA AND HERZEGOVINA**

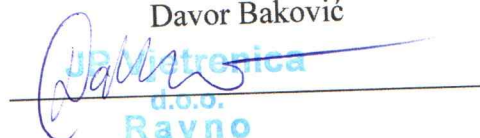
**Vjetrenica Cave, Ravno - Nominated for inclusion on the World Heritage List -  
supplementary informations**

**2 (B): A map, and GIS shapefiles for each nominated component part if  
available, showing all those protective designations that support the protection of  
the values of the nominated property, its buffer zone and the watershed of  
Vjetrenica Cave**

The requested map and GIS shapefiles for each nominated component part, displaying protective designations supporting the preservation of the values of the nominated property, its buffer zone, and the watershed of Vjetrenica Cave, are currently unavailable. This is due to the new ongoing preparations and implementation of designations across the entire protected area, a meticulous process necessitating comprehensive planning and meticulous execution. Our commitment to accuracy and thoroughness in delineating protective designations entails careful consideration of legislative regulations and prescribed protective measures for each area. As part of this endeavor, formal designations are being established to accurately demarcate the significance of the protected zones and protective measures. Furthermore, these designations will be produced in digital format upon completion, ensuring accessibility and ease of reference for stakeholders and interested parties.

Vjetrenica Public Company Ltd. Ravno

Davor Baković

  
JP Vjetrenica  
d.o.o.  
Ravno

## Power / Interest Grid for Stakeholder Analysis

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High  | <b>KEEP SATISFIED</b>                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>MANAGE CLOSELY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Power | <ul style="list-style-type: none"> <li>- Electric company Elektroprivreda HZHB,</li> <li>- Electric company Elektroprivreda RS,</li> <li>- Travel agencies,</li> <li>- Owners and investors of wind farms,</li> <li>- Owners and investors of the solar collector farm,</li> <li>- Neighboring municipalities bordering the proposed area (Dubrovnik, Slano, Ston in the Republic of Croatia, and Neum, Stolac, Čapljina, Mostar in BiH).</li> </ul> | <ul style="list-style-type: none"> <li>- Ministry of Civil Affairs of Bosnia and Herzegovina,</li> <li>- Ministry of Foreign Trade and Economic Relations,</li> <li>- Federal ministry of environment and tourism,</li> <li>- Environmental Protection Fund of Bosnia and Herzegovina,</li> <li>- Federal Ministry of Spatial Planning,</li> <li>- Ministry of Trade, Tourism and Environmental Protection of the Herzegovina-Neretva Canton,</li> <li>- Ministry of Construction and Spatial Planning of the Herzegovina-Neretva Canton and the official area manager,</li> <li>- Federal Ministry of Culture and Sports,</li> <li>- Agency for the Adriatic Sea Water Area,</li> <li>- Federal Ministry of Agriculture, Water Management and Forestry,</li> <li>- Ministry of Agriculture, Water Management and Forestry HNC,</li> <li>- Agricultural sector (Irrigation Association Popovo polje Ravno),</li> </ul> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>- Federal educational institutions and faculties,</li> <li>- Vjetrenica Public Company Ltd. Ravno.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>MONITOR (MINIMUM EFFORT)</b> <ul style="list-style-type: none"> <li>- Local population within scope,</li> <li>- Representatives of the local community and local residents,</li> <li>- Farmers,</li> <li>- Manufacturers,</li> <li>- Private landowners,</li> <li>- Owners of plots, buildings and houses within the proposed area,</li> <li>- Private sector,</li> <li>- Tourists,</li> <li>- Mountaineering, cycling and hunting associations,</li> <li>- Dubrovnik School of Tourism and Hospitality</li> </ul> | <b>KEEP INFORMED</b> <ul style="list-style-type: none"> <li>- Representatives of the authorities in the municipality,</li> <li>- Hunting Association Lisac,</li> <li>- Zavala monastery,</li> <li>- Restaurant owners,</li> <li>- Hotel owners (Hotel Stanica),</li> <li>- Catering facility Zavala,</li> <li>- Biospeleological Museum Zavala,</li> <li>- Investors (e.g. construction of an ethno-hotel is planned in Orahov Dol),</li> <li>- Protected areas in the County,</li> <li>- NGOs (Citizens' Association Stijena Ravno, Association Zavičaj Zavala Ravno, Citizens' Association Pelin Popovo polje-Ravno, Association of Beekeepers Vrijesak Ravno),</li> <li>- Citizens' Association Dilutum,</li> <li>- NGO for nature protection,</li> <li>- NGO for the protection of birds and bats,</li> <li>- County educational</li> </ul> |

|  |                                                                                                                          |
|--|--------------------------------------------------------------------------------------------------------------------------|
|  | <p>institutions and faculties,</p> <ul style="list-style-type: none"><li>- Schools in Municipality and County.</li></ul> |
|--|--------------------------------------------------------------------------------------------------------------------------|

Low

Interest

High

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JP Vjetrenica  
D.O.O.  
Ravno  
Davor Baković

# VJETRENICA

DARK SIDE OF THE KARST

PUBLIC COMPANY VJETRENICA RAVNO

TRG RUĐERA BOŠKOVIĆA BB

88 370, RAVNO

BOSNIA AND HERZEGOVINA



**Vjetrenica Cave, Ravno - Nominated for inclusion on the World Heritage List - supplementary informations**

**2 (C): A copy of the 'interest-power matrix' (see p.153 of the nomination document) and confirmation of the total number of inhabitants within the nominated area and its buffer zone, any consultation process and whether these inhabitants would be affected by any access and use restrictions in case of World Heritage listing**

**Number of inhabitants**



JP VJETRENICA — POPOVO POLJE Ravno **adresa** BA-88370 RAVNO, Trg Rudera Boškovića bb **kontakti** e-mail: info@vjetrenica.ba,  
tel/fax: +387 36/ 891-034, [www.vjetrenica.ba](http://www.vjetrenica.ba) **registracija** 12.678 (Županijski sud Mostar) **id br** 4227462190009 **pdv br** 227462190009  
**transakcijski račun** (UniCredit Bank) 3382702200419232 **broj računa** 25002990101 **iban** BA39 3382 7048 5064 0331 **swift** UNCRBA22

# VJETRENICA

## DARK SIDE OF THE KARST

Estimated number of inhabitants within: **the nominated area 0 (2013)**

**the buffer zone 678 (2013)**

*\*The latest official census conducted in Bosnia and Herzegovina dates back to the year 2013. The data herein presented are derived from the authoritative statistics provided by the Federation of Bosnia and Herzegovina. It is of paramount significance to underscore that the populace of this region predominantly gravitates towards major urban centers such as Dubrovnik and Mostar. Nevertheless, it is noteworthy to highlight that enduring ties persist between the inhabitants and the municipality.*



The implementation of protective measures and sustainability is a key component for Protected Landscape Vjetrenica - Popovo polje. In the context of the nominated area, being a World Heritage site of Bosnia and Herzegovina restrictions could include limitations on construction, tourism activities, or other human interventions in the vicinity of the Protected Landscape and wider area.

It is important to note that the specific restrictions and their impact on inhabitants would depend on the Management Plan developed for the site. Effective Management Plans strive to balance conservation goals with the well-being of local communities. Local authorities and stakeholders usually play a crucial role in the development of these plans to address concerns and find solutions that support both the preservation of the site and the sustainable use of the surrounding area.



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tel/fax: +387 36/ 891-034, www.vjetrenica.ba **registracija** 12678 (Županijski sud Mostar) **id br** 4227462190009 **pdv br** 227462190009  
**transakcijski račun** (UniCredit Bank) 3382702200419232 **broj računa** 25002990101 **iban** BA39 3382 7048 5064 0331 **swift** UNCRRBA22

# VJETRENICA

## DARK SIDE OF THE KARST

Potential access and use restrictions for inhabitants could include:

### 1. Tourism Regulations:

Controlled visitor numbers to minimize the impact on the cave and its surroundings.  
Designated pathways and viewing areas to prevent disturbance to sensitive ecosystems.

### 2. Construction Limitations:

Restrictions on new construction or development in close proximity to the cave to preserve the site's visual integrity.  
Guidelines for architectural designs that blend with the natural landscape and cultural context.

### 3. Resource Management:

Regulations on extraction of natural resources (such as water, minerals, or vegetation) to prevent depletion and environmental degradation.  
Sustainable practices for local communities regarding resource use, promoting conservation and responsible stewardship.

### 4. Cultural and natural Heritage Protection:

Measures to safeguard any cultural artifacts, engravings, or historical elements in the area surrounding the cave.  
Guidelines for the protection of any cultural practices or traditions associated with the site.



# VJETRENICA

DARK SIDE OF THE KARST

## 5. Zoning and Land Use Planning:

Establishment of specific zones delineating different levels of protection or use, considering both environmental and cultural factors.

## 6. Collaboration with local authorities to integrate the site's protection into broader land use planning strategies.

## 7. Community Engagement and Education:

Programs to involve local communities in the conservation efforts and decision-making processes. Educational initiatives to raise awareness about the importance of the site and promote a sense of ownership among inhabitants.

In summary, the goal is to strike a balance that ensures the site's sustainability while considering the needs and concerns of the local population.

Vjetrenica Public Company Ltd. Ravno

Davor Baković

  
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Ravno

# VJETRENICA

DARK SIDE OF THE KARST

PUBLIC COMPANY VJETRENICA RAVNO

TRG RUĐERA BOŠKOVIĆA BB

88 370, RAVNO

BOSNIA AND HERZEGOVINA

## Vjetrenica Cave, Ravno - Nominated for inclusion on the World Heritage List - supplementary informations

2 (D): a map detailing the ownership of the nominated property, its buffer zone and of the watershed of Vjetrenica Cave, and information providing details on whether or not these owners agree with the potential World Heritage status and respective protection requirements (this can be in a table if this is more convenient).

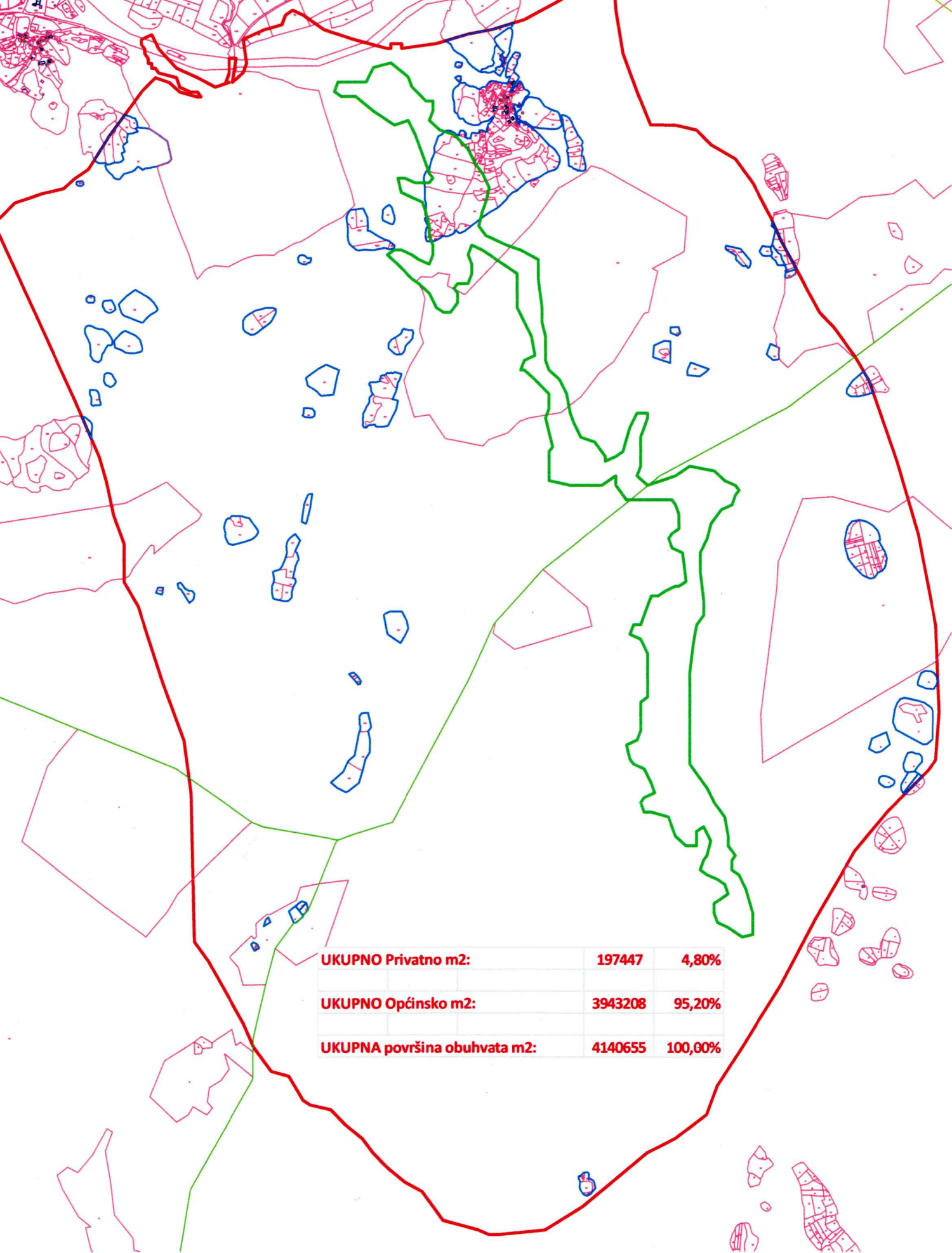
Alongside the maps, we are providing a translation of the legend for map number 2 indicating the ownership structure within the protected area.

### Map 2

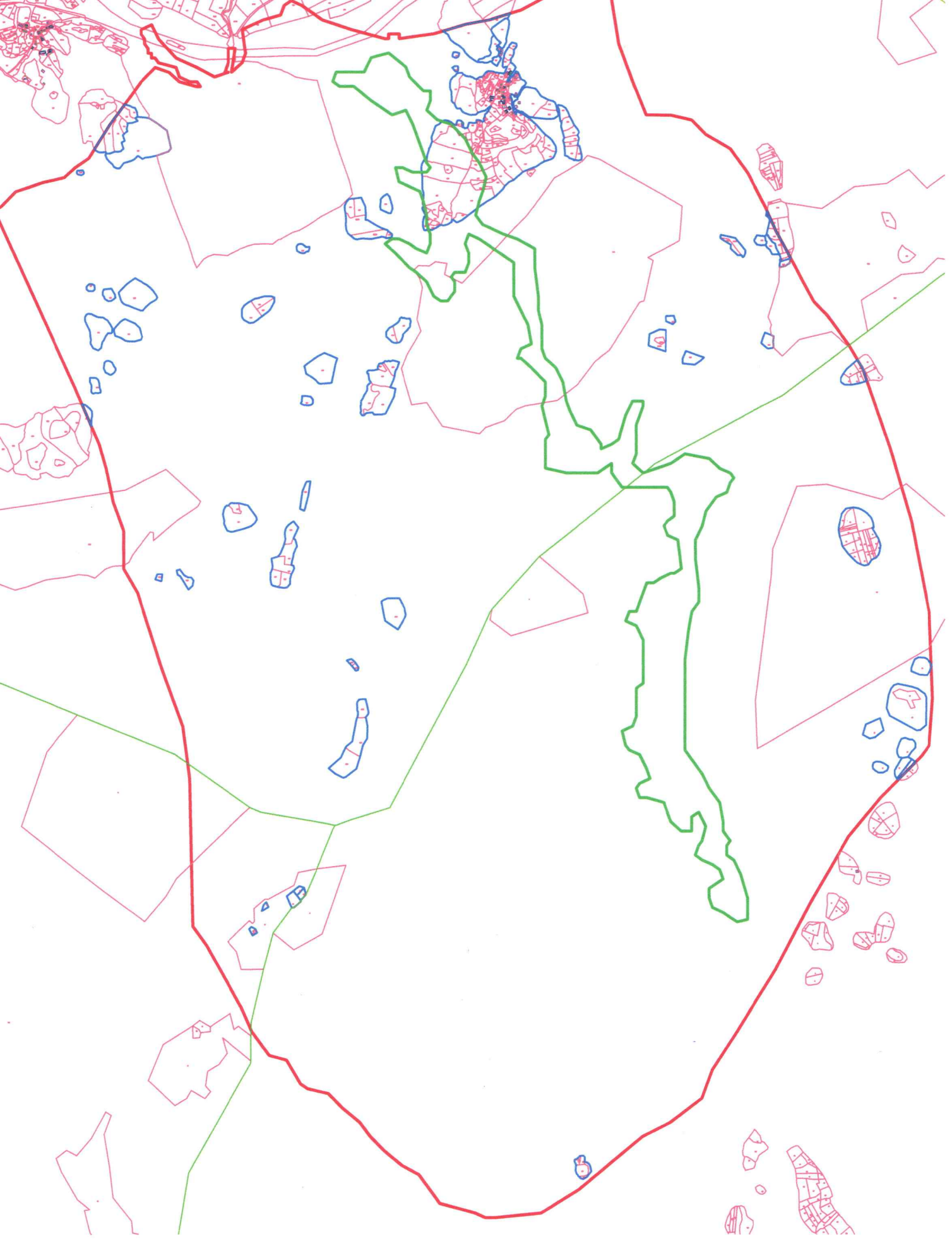
|                                         |         |         |
|-----------------------------------------|---------|---------|
| TOTAL PRIVATE m2                        | 197447  | 4,80%   |
| TOTAL MUNICIPAL m2                      | 3943208 | 95,20%  |
| TOTAL SURFACE<br>AREA ENCOMPASSES<br>m2 | 4140655 | 100,00% |

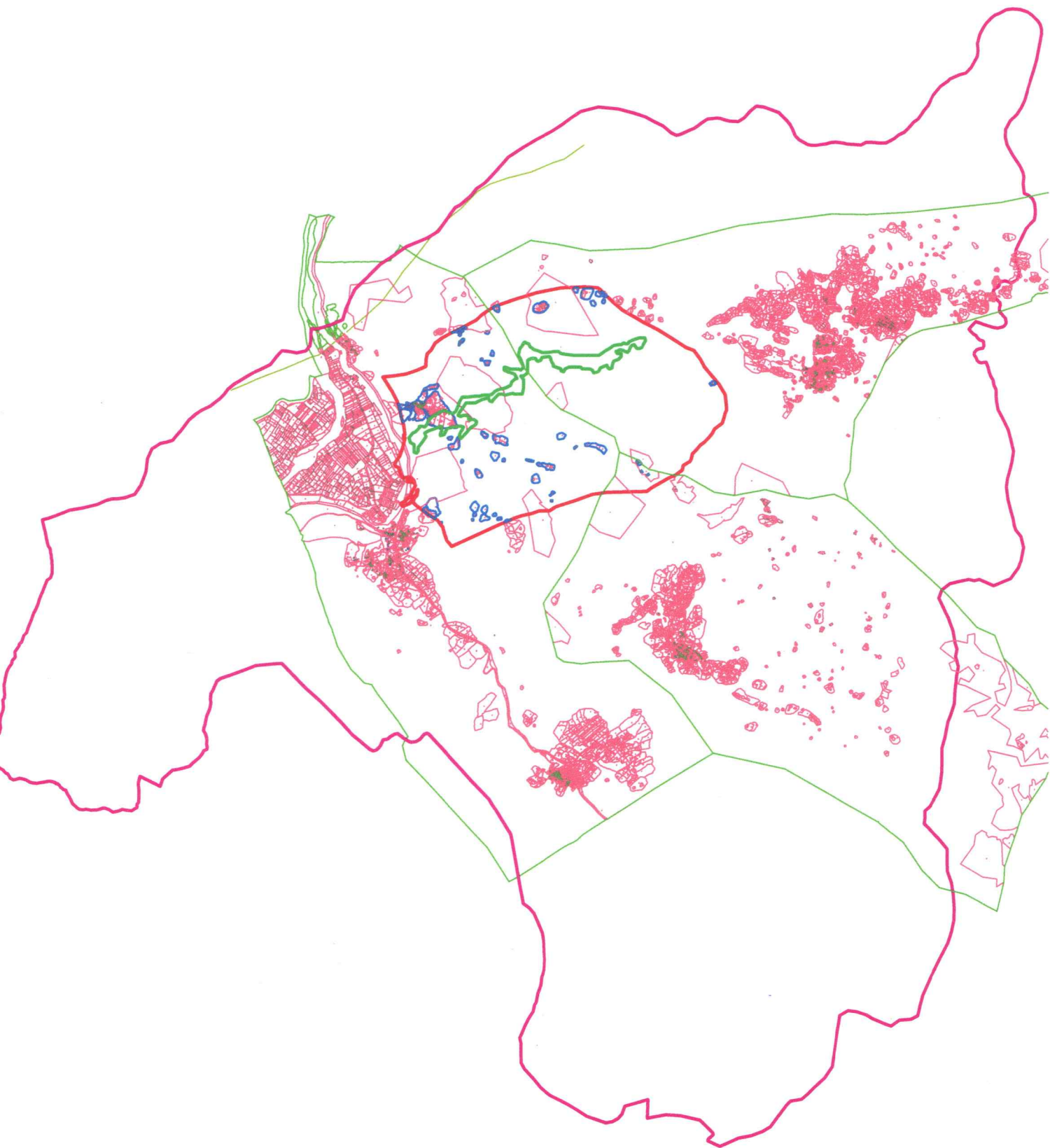
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Davor Baković



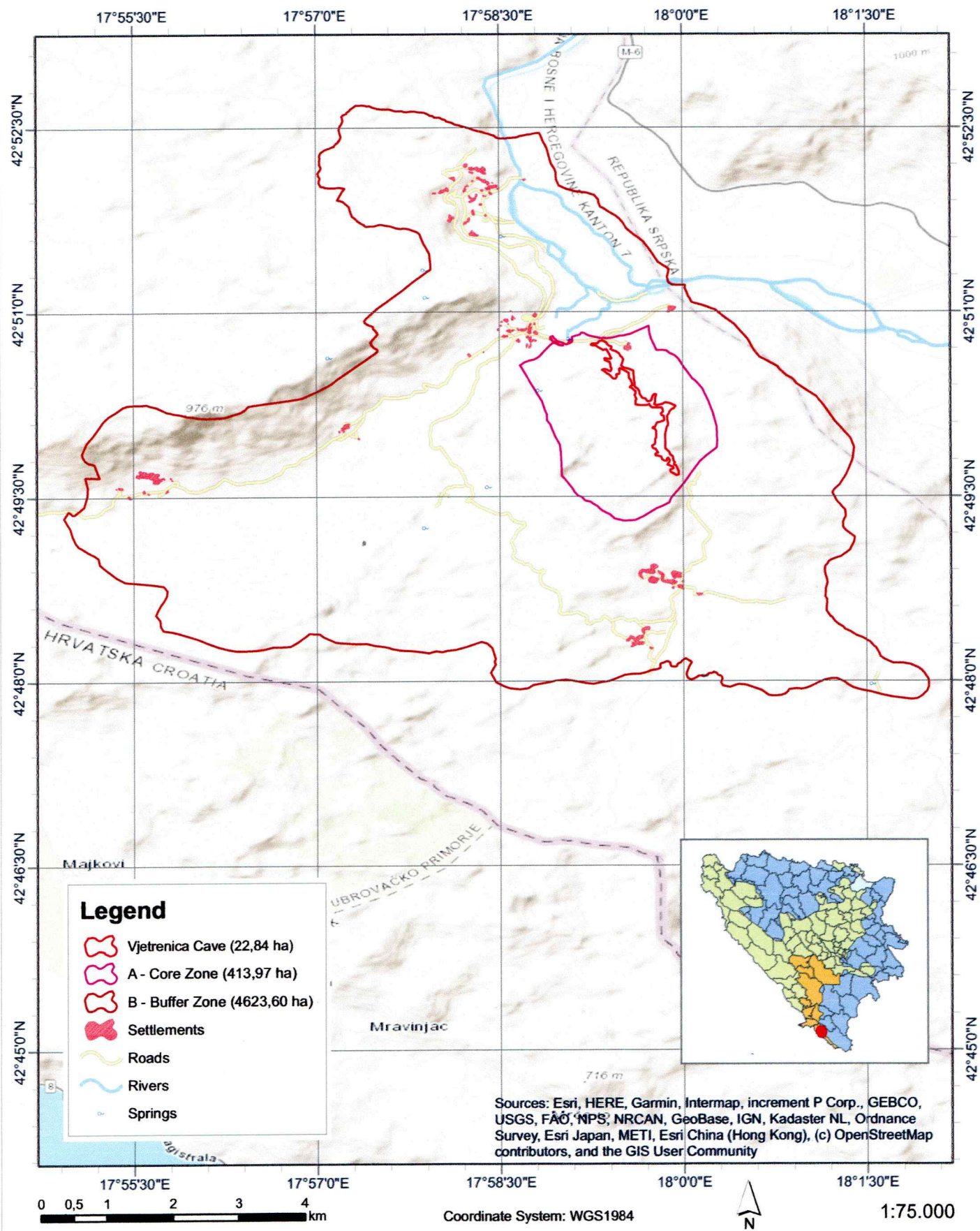
|                                     |                |                |
|-------------------------------------|----------------|----------------|
| <b>UKUPNO Privatno m2:</b>          | <b>197447</b>  | <b>4,80%</b>   |
| <b>UKUPNO Općinsko m2:</b>          | <b>3943208</b> | <b>95,20%</b>  |
| <b>UKUPNA površina obuhvata m2:</b> | <b>4140655</b> | <b>100,00%</b> |





# VJETRENICA CAVE

## BOSNIA AND HERZEGOVINA



# VJETRENICA

DARK SIDE OF THE KARST

PUBLIC COMPANY VJETRENICA RAVNO

TRG RUĐERA BOŠKOVIĆA BB

88 370, RAVNO

BOSNIA AND HERZEGOVINA

## Vjetrenica Cave, Ravno - Nominated for inclusion on the World Heritage List - supplementary informations

**3: An updated assessment of the threats currently affecting the nominated property, as the field evaluation noted that a number of threats noted in the nomination document are no longer present**

In 2021, with the decision to declare this area as a protected landscape "Vjetrenica - Popovo Polje", this area receives formal legal protection. Zoning of a protected area is a key instrument and a basic step in planning the use and management of the space, which will ensure the preservation of the value of the protected area. Having considered the formal protection of the designated area and adhering to Laws related to the protection, preservation, and sustainability of the protected landscape of Vjetrenica - Popovo Polje, there are currently no imminent threats affecting the nominated property. Pressure factors such as agriculture - use of fertilizers and pesticides, sewage system, landfills, tourism activities, existing transport infrastructure, development of transport infrastructure and illegal hunting and fishing are regulated in accordance with the legal regulations of the Municipality of Ravno, as the founder of the Public Company Vjetrenica Ravno, and relevant ministries at the county and Federation of Bosnia and Herzegovina levels. Moreover, the management of the Protected Landscape Vjetrenica - Popovo Polje, through its Management Plan, oversees and regulates all activities within the protected area. In collaboration with the Municipality of Ravno and other pertinent ministries, it ensures the sustainability and preservation of the nominated property. It is crucial to underscore that specific potential threats outlined in the nomination file, such as drainage systems, landfills, hunting and fishing, and the development of transport infrastructure, are systematically addressed through operational procedures and laws aimed at preserving the protected landscape of Vjetrenica - Popovo Polje, which holds exceptional significance for the Municipality and Bosnia and Herzegovina.

Vjetrenica Public Company Ltd. Ravno

Davor Baković

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Ravno

# VJETRENICA

DARK SIDE OF THE KARST

PUBLIC COMPANY VJETRENICA RAVNO

TRG RUĐERA BOŠKOVIĆA BB

88 370, RAVNO

BOSNIA AND HERZEGOVINA



## Vjetrenica Cave, Ravno - Nominated for inclusion on the World Heritage List - supplementary informations

**4: Information (in a table if preferred) indicating the current and planned funding and staffing for the potential World Heritage property, including information on long-term funding sources, annual funding levels needed to sustain the management of the nominated property, and funding strategies for the implementation of the management plan**

Funds for the work of the public company Vjetrenica llc Ravno are ensured from:

- Budget of the Municipality of Ravno
- Cantonal budget
- Own revenues
- Donations and NGOs
- Projects at the Federal, Cantonal and international level

# VJETRENICA

DARK SIDE OF THE KARST

## The current state on an annual basis

| Own funds                                    | Municipality                           | Relevant Ministries<br>(County and Federal level) | Donors and NGOs                                          |
|----------------------------------------------|----------------------------------------|---------------------------------------------------|----------------------------------------------------------|
| Public Company Vjetrenica<br>Ticket revenues | Funds secured by<br>the planned budget | Project-specific<br>funds                         | Donations and<br>investments funds<br>for sustainability |
| 25 %                                         | 40%                                    | 30%                                               | 5%                                                       |

## Planned annual state

| Own funds                                    | Municipality                           | Relevant Ministries<br>(County and Federal level) | Donors and NGOs                                          |
|----------------------------------------------|----------------------------------------|---------------------------------------------------|----------------------------------------------------------|
| Public Company Vjetrenica<br>Ticket revenues | Funds secured by<br>the planned budget | Project-specific<br>funds                         | Donations and<br>investments funds<br>for sustainability |
| 20 %                                         | 45%                                    | 30%                                               | 5%                                                       |

## Employee Structure - Current Situation

| Permanent Employees | Employees during the<br>main tourist season |
|---------------------|---------------------------------------------|
| 7                   | 3                                           |

# VJETRENICA

DARK SIDE OF THE KARST

\* The Public Company Vjetrenica Ravno collaborates with the scientific community and external experts (with the support of the Municipality and relevant Ministries, funds are secured for cooperation and projects)



## Planned employees in accordance with the Management Plan and Systematization Plan

| Permanent employees | Employees during the main tourist season |
|---------------------|------------------------------------------|
| 28                  | 10                                       |

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