

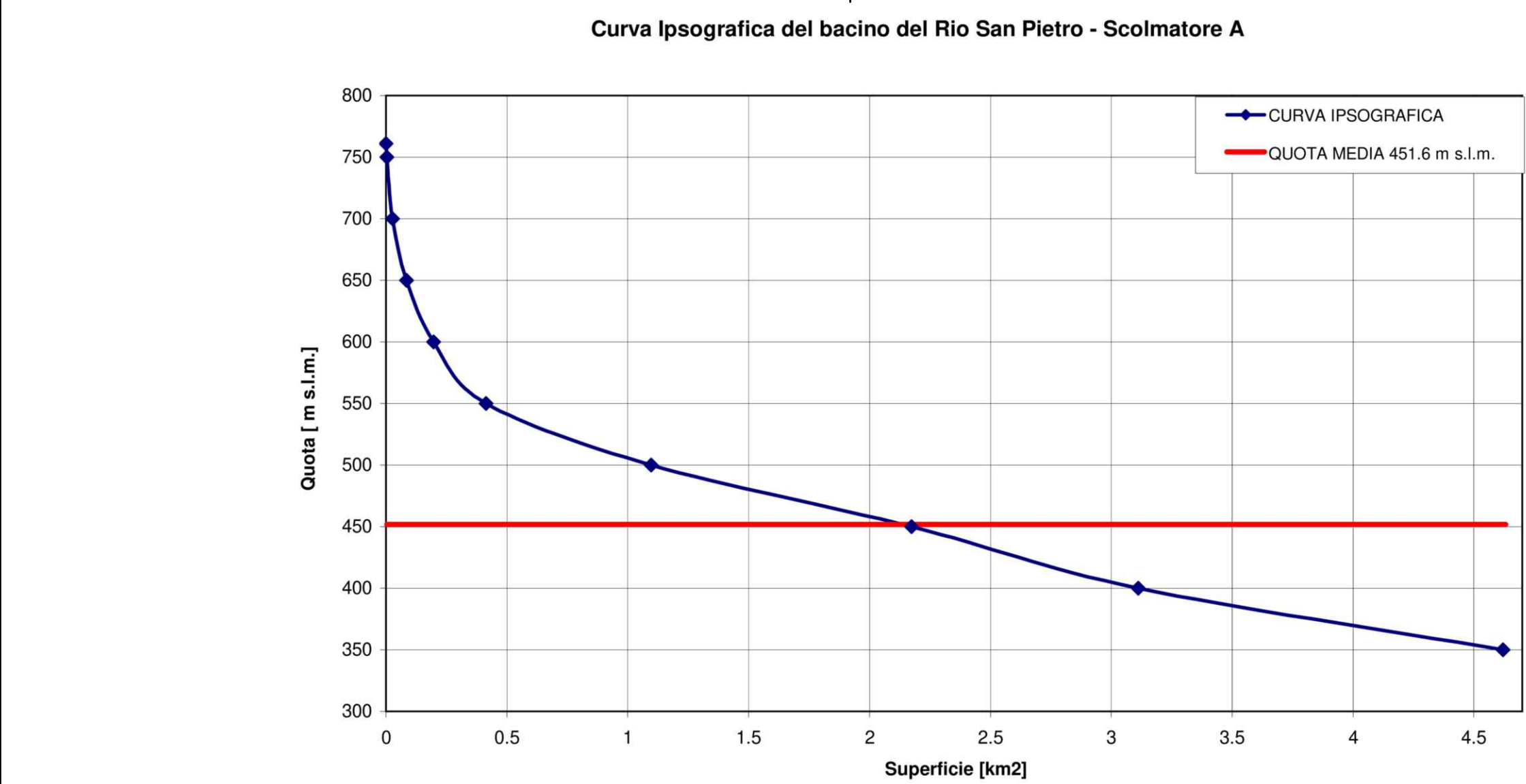


TABELLA E DATI PER LA DETERMINAZIONE DELLA PENDENZA MEDIA DELL'ASTA

| $h_{min}$<br>[m s.l.m.] | $h_{max}$<br>[m s.l.m.] | $\Delta h$<br>[m s.l.m.] | $Li$<br>[km] | $Li$<br>[m] | $i_i$<br>[‰] | Radq i      | $Li/Radq\ i$ |
|-------------------------|-------------------------|--------------------------|--------------|-------------|--------------|-------------|--------------|
| 349                     | 350                     | 1                        | 0.203        | 202.73      | 0.005        | 0.070       | 2886.5       |
| 351                     | 400                     | 50                       | 2.107        | 2106.66     | 0.024        | 0.154       | 13674.4      |
| 401                     | 450                     | 50                       | 0.564        | 563.58      | 0.089        | 0.298       | 1892.1       |
| 451                     | 500                     | 50                       | 0.552        | 551.95      | 0.091        | 0.301       | 1833.8       |
| 501                     | 550                     | 50                       | 0.249        | 248.72      | 0.201        | 0.448       | 554.7        |
| 551                     | 600                     | 50                       | 0.122        | 121.81      | 0.410        | 0.641       | 190.1        |
| 601                     | 650                     | 50                       | 0.148        | 148.31      | 0.337        | 0.581       | 255.4        |
| 651                     | 700                     | 50                       | 0.103        | 103.18      | 0.485        | 0.696       | 148.2        |
| 701                     | 750                     | 50                       | 0.085        | 85.43       | 0.585        | 0.765       | 111.7        |
| 751                     | 761                     | 11                       | 0.049        | 48.75       | 0.226        | 0.475       | 102.6        |
| $\Sigma$                |                         |                          | 4.181        | 4181.11     | $\Sigma$     |             |              |
|                         |                         |                          |              |             |              | $i_{media}$ | 0.037        |
|                         |                         |                          |              |             |              |             | 3.73%        |

DATI E TABELLA PER LA DETERMINAZIONE DELLA CURVA IPSOGRAFICA E DELLA QUOTA MEDIA

| Intervallo tra le isoipse |                         | Superfici parziali               |                   | Superfici progressive                                 |                       | Quota media<br>[m s.l.m.] |
|---------------------------|-------------------------|----------------------------------|-------------------|-------------------------------------------------------|-----------------------|---------------------------|
| $h_{max}$<br>[m s.l.m.]   | $h_{min}$<br>[m s.l.m.] | $\Delta S$<br>[km <sup>2</sup> ] | $\Delta S$<br>[%] | $S_{cumulata}$<br>[km <sup>2</sup> ]                  | $S_{cumulata}$<br>[%] |                           |
| 761                       | 750                     | 0.00                             | 0.1%              | 0.00                                                  | 0.1%                  | 2.7                       |
| 750                       | 700                     | 0.02                             | 0.5%              | 0.03                                                  | 0.6%                  | 16.7                      |
| 700                       | 650                     | 0.06                             | 1.2%              | 0.08                                                  | 1.8%                  | 39.0                      |
| 650                       | 600                     | 0.11                             | 2.4%              | 0.20                                                  | 4.3%                  | 70.8                      |
| 600                       | 550                     | 0.22                             | 4.7%              | 0.41                                                  | 8.9%                  | 124.3                     |
| 550                       | 500                     | 0.68                             | 14.7%             | 1.10                                                  | 23.7%                 | 358.4                     |
| 500                       | 450                     | 1.08                             | 23.3%             | 2.17                                                  | 46.9%                 | 511.6                     |
| 450                       | 400                     | 0.94                             | 20.3%             | 3.11                                                  | 67.2%                 | 398.6                     |
| 400                       | 350                     | 1.51                             | 32.6%             | 4.62                                                  | 99.8%                 | 565.9                     |
| 350                       | 349                     | 0.01                             | 0.2%              | 4.63                                                  | 100.0%                | 3.8                       |
| $\Sigma$                  |                         | 4.63                             | 100.00%           | $\Sigma (h_{media} \times \Delta S)$                  |                       | 2091.7                    |
|                           |                         |                                  |                   | Quota media $[S (h_{media} \times \Delta S)/S_{tot}]$ |                       | 451.6                     |

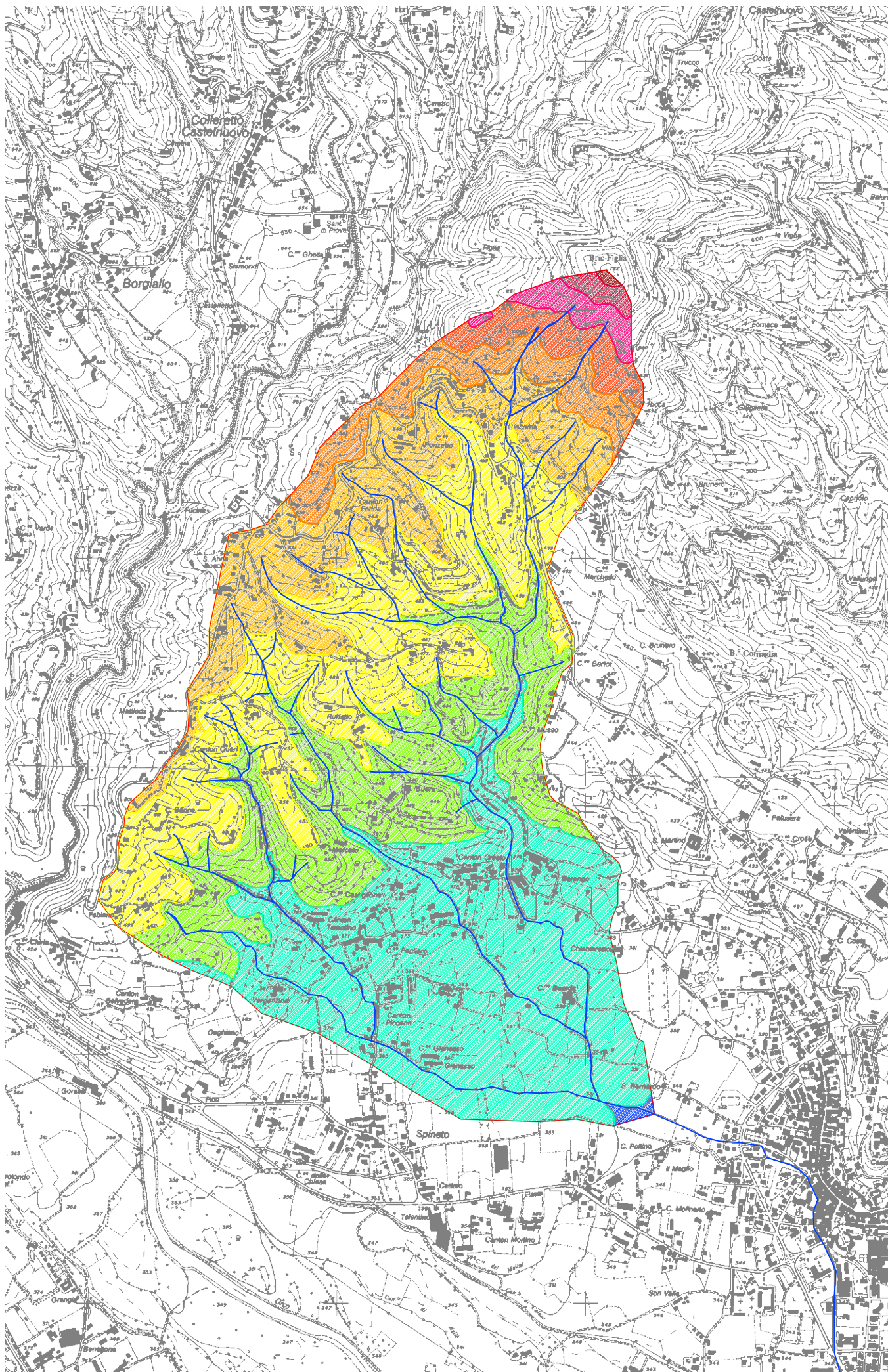
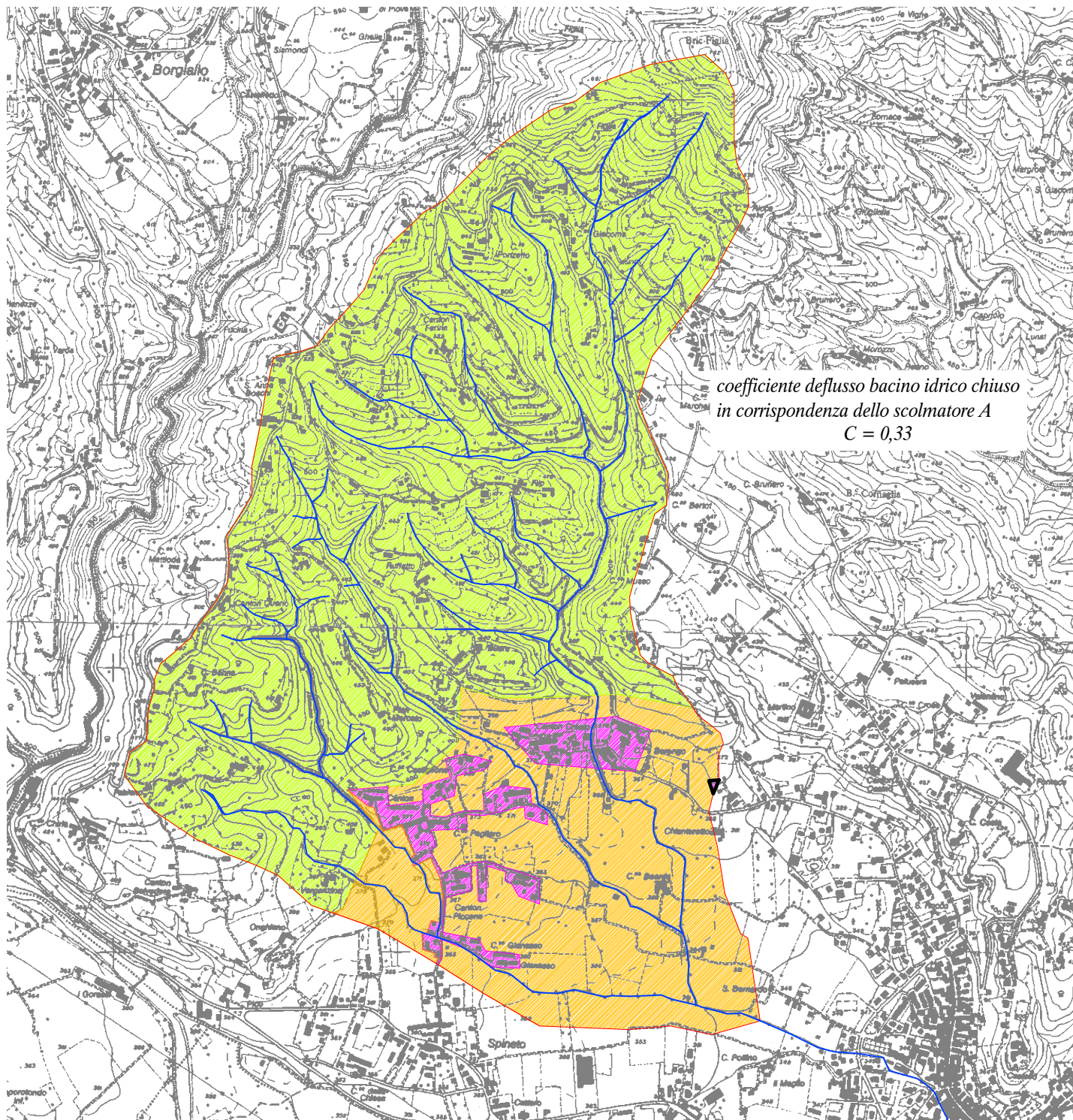
Rio San Pietro chiuso a quota 349 m s.l.m.

|                                         |       |
|-----------------------------------------|-------|
| L Lunghezza asta principale [km]        | 4.18  |
| i Pendenza media asta                   | 3.73% |
| Hmax Quota massima [m s.l.m.]           | 761   |
| Hm Quota media [m s.l.m.]               | 452   |
| Ho quota sezione di chiusura [m s.l.m.] | 349   |
| Tempo di corrivazione [h]               | 1.77  |
| Coefficiente di deflusso                | 0.33  |
| Coefficiente di laminazione             | 1.00  |
| Superficie bacino [km <sup>2</sup> ]    | 4.63  |
| Valor medio                             |       |

| Tempo di Ritorno               | Tr 20 | Tr 100 | Tr 200 | Tr 500 |
|--------------------------------|-------|--------|--------|--------|
| a (PAI) Raggiagliato al bacino | 55.77 | 72.02  | 78.96  | 88.12  |
| n (PAI) Raggiagliato al bacino | 0.34  | 0.34   | 0.34   | 0.33   |
| a'                             | 55.63 | 71.85  | 78.77  | 87.91  |
| n'                             | 0.34  | 0.34   | 0.34   | 0.34   |
| h [mm]                         | 67.8  | 87.2   | 95.5   | 106.5  |
| Q [m3/s]                       | 16.2  | 20.9   | 22.9   | 25.5   |
| Q base [m3/s]                  | 4.9   | 6.3    | 6.9    | 7.6    |
| Q totale [m3/s]                | 21.1  | 27.1   | 29.7   | 33.1   |

CARTA PER LA DETERMINAZIONE DEL COEFFICIENTE DI DEFLUSSO IN FUNZIONE DELLE CARATTERISTICHE DEL BACINO

scala 1:20 000



CALCOLO DI  $a$ ,  $n$  PONDERATI

|       |   | Tr 20 | Tr 100 | Tr 200 | Tr 500 | m2         | Tr 20 | Tr 100 | Tr 200 | Tr 500 |
|-------|---|-------|--------|--------|--------|------------|-------|--------|--------|--------|
| AW 85 | a | 55.71 | 71.89  | 78.8   | 87.92  | 223871.58  | 2.69  | 3.47   | 3.81   | 4.25   |
|       | n | 0.357 | 0.352  | 0.35   | 0.349  |            | 0.017 | 0.017  | 0.017  | 0.017  |
| AW 86 | a | 55.88 | 72.18  | 79.13  | 88.31  | 2803517.46 | 33.82 | 43.69  | 47.90  | 53.45  |
|       | n | 0.345 | 0.339  | 0.337  | 0.336  |            | 0.209 | 0.205  | 0.204  | 0.203  |
| AW 87 | a | 55.74 | 71.98  | 78.92  | 88.07  | 1289060.55 | 15.51 | 20.03  | 21.97  | 24.51  |
|       | n | 0.339 | 0.334  | 0.332  | 0.33   |            | 0.094 | 0.093  | 0.092  | 0.092  |
| AX 85 | a | 54.74 | 70.67  | 77.48  | 86.47  | 76425.92   | 0.90  | 1.17   | 1.28   | 1.43   |
|       | n | 0.348 | 0.343  | 0.341  | 0.34   |            | 0.006 | 0.006  | 0.006  | 0.006  |
| AX 86 | a | 55    | 71.02  | 77.87  | 86.9   | 78409.98   | 0.93  | 1.20   | 1.32   | 1.47   |
|       | n | 0.338 | 0.332  | 0.33   | 0.328  |            | 0.006 | 0.006  | 0.006  | 0.006  |
| AX 87 | a | 54.94 | 70.94  | 77.77  | 86.79  | 160292.53  | 1.90  | 2.46   | 2.69   | 3.00   |
|       | n | 0.332 | 0.326  | 0.324  | 0.322  |            | 0.011 | 0.011  | 0.011  | 0.011  |
|       |   |       |        |        |        | 4631578.02 | Tr 20 | Tr 100 | Tr 200 | Tr 500 |
|       |   |       |        |        |        | a          | 55.77 | 72.02  | 78.96  | 88.12  |
|       |   |       |        |        |        | n          | 0.34  | 0.34   | 0.34   | 0.33   |

GRIGLIA PAI (celle 2 km x 2 km)

scala 1:50 000

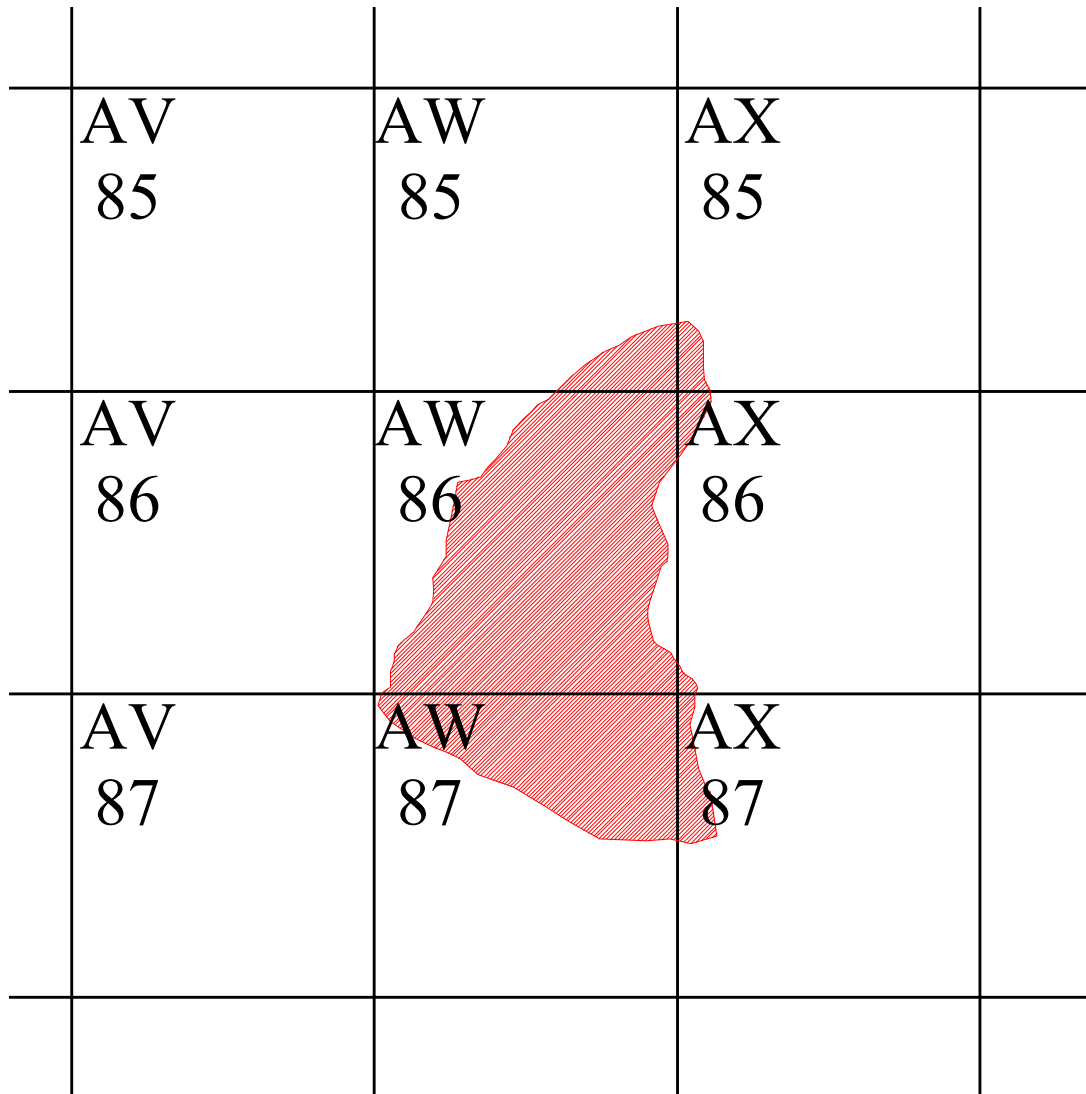


TABELLA E DATI PER LA DETERMINAZIONE DELLA PENDENZA MEDIA DEI VERSANTI

| Isoipsa - h<br>[m s.l.m.] | Li - Sviluppo Isoipsa<br>[km] | $\Delta h$<br>[m s.l.m.] | $Li \times \Delta h$ |
|---------------------------|-------------------------------|--------------------------|----------------------|
| 349                       | 2.467                         | 2467.1                   | 2467.09335           |
| 350                       | 4.957                         | 4957.4                   | 247868.035           |
| 400                       | 6.410                         | 6410.0                   | 320498.325           |
| 450                       | 6.419                         | 6419.5                   | 320973.0575          |
| 500                       | 3.695                         | 3695.0                   | 184748.3775          |
| 550                       | 1.760                         | 1759.7                   | 87985.0725           |
| 600                       | 0.978                         | 978.0                    | 48899.5925           |
| 650                       | 0.591                         | 591.0                    | 29552.3425           |
| 700                       | 0.245                         | 245.0                    | 12250.73             |
| 750                       | 0.067                         | 67.5                     | 742.1007             |
| $\Sigma$                  |                               |                          | 1255984.73           |

Area tot m<sup>2</sup>

4631353.34

Pendenza media versanti

im

27.12%