APPENDICE I - REPORT HEC RAS DI MODELLAZIONE IDRAULICA

MODELLAZIONE PRE-OPERA

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                    HEC-RAS 5.0.7 March 2019
                    U.S. Army Corps of Engineers
                    Hydrologic Engineering Center
                    609 Second Street
                    Davis, California

X     X   XXXXXX    XXXX        XXXX       XX      XXXX
X     X   X        X    X       X   X     X  X     X
X     X   X        X            X   X     X    X   X
XXXXXXX   XXXX     X       XXX  XXXX      XXXXXX    XXXX
X     X   X        X            X  X      X    X        X
X     X   X        X    X       X   X     X    X        X
X     X   XXXXXX    XXXX        X    X    X    X   XXXXX

PROJECT DATA
Project Title: Fella pre opera

Project in SI units

PLAN DATA
Plan Title: pre-opera
          Geometry Title: Geom Fella pre-opera
          Flow Title    : 480 m3/s

Plan Summary Information:
Number of:  Cross Sections =   62    Multiple Openings  =    0
            Culverts       =    0    Inline Structures  =    0
            Bridges        =    0    Lateral Structures =    0

Computational Information
    Water surface calculation tolerance  =  0.0001
    Critical depth calculation tolerance =  0.0001
    Maximum number of iterations         =  40
    Maximum difference tolerance         =  0.1
    Flow tolerance factor                =  0.0001

Computation Options
    Critical depth computed at all cross sections
    Conveyance Calculation Method: At breaks in n values only
    Friction Slope Method:         Program Selects Appropriate method
    Computational Flow Regime:     Mixed Flow

FLOW DATA
Flow Title: 480 m3/s
Flow Data (m3/s)
  River           Reach           RS                  PF 1
  fiume Fella     fiume Fella     23                   480

Boundary Conditions
  River           Reach           Profile                  Upstream              Downstream
  fiume Fella     fiume Fella     PF 1                 Normal S = 0.019      Normal S = 0.016


GEOMETRY DATA
Geometry Title: Geom Fella pre-opera

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 23

INPUT
Description: sezione 23
Station Elevation Data    num=      31
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  681.67    6.04  679.29    9.41  679.79   10.74  679.26   13.71  679.27
   20.32  678.47   22.27  678.31   27.13  677.82   31.55  678.04   35.52  678.05
   37.99  678.28   46.93  678.09   55.54  677.87   65.88  678.17   71.99  676.28
   74.37  675.97   80.63     676   82.48  676.03   87.54  676.59   93.48  677.03
   98.23  677.43   98.72  677.79  100.39  678.16  103.81  679.56  108.39  680.83
  109.76  680.87     115  680.41  120.81  680.42  124.27  680.41  125.09  680.67
  125.09  681.12
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Manning's n Values         num=       2
     Sta   n Val      Sta   n Val
       0    .055    13.71    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         13.71  103.81            9.074   8.544   8.762            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           679.77    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.65    Wt. n-Val.                        0.045
  W.S. Elev (m)           679.13    Reach Len. (m)            9.07      8.54       8.76
  Crit W.S. (m)           679.04    Flow Area (m2)                    134.81
  E.G. Slope (m/m)      0.014683    Area (m2)                         134.81
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            87.84    Top Width (m)                      87.84
  Vel Total (m/s)           3.56    Avg. Vel. (m/s)                    3.56
  Max Chl Dpth (m)          3.16    Hydr. Depth (m)                    1.53
  Conv. Total (m3/s)      3961.3    Conv. (m3/s)                      3961.3
  Length Wtd. (m)           8.54    Wetted Per. (m)                    88.66
  Min Ch El (m)           675.97    Shear (N/m2)                      218.94
  Alpha                     1.00    Stream Power (N/m s)              779.57
  Frctn Loss (m)            0.12    Cum Volume (1000 m3)               60.61
  C & E Loss (m)            0.01    Cum SA (1000 m2)                   46.69


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 22.800*

INPUT
Description:
Station Elevation Data     num=      61
     Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev
       0   681.65      .51   681.5     5.25   679.33     6.29   679.13     9.79   679.72
    12.6   679.16    12.62   679.16   13.82   679.13     14.7   679.11    18.88   679.16
    20.1   679.01    25.04   678.44   26.68    678.3    26.86   678.29    31.39   677.87
    35.8   678.05    39.77   678.06    41.2   678.17    42.24   678.24    50.12   678.05
   51.18   678.03    59.58   677.83   59.78   677.83    70.12   678.09    71.48   677.67
   73.63   677.16    75.67   676.41   77.06    676.1    77.72   676.04    79.76   675.81
   81.17   675.88    82.23   675.86   83.75   675.89    85.42   675.93    86.62   675.98
   88.65   676.13    88.76   676.14   90.71   676.31    92.67   676.38    93.98    676.5
    94.2   676.54     95.4    676.7   99.06    676.9   100.01   677.06   100.71   677.09
  105.92    677.4   106.46   677.73  106.81   677.82    108.3   678.09   109.58   678.49
  112.07   679.51   115.74   680.53  116.98   680.56   121.76   680.22   123.44   680.23
  127.05   680.24   128.68   680.24  130.21   680.27   130.94   680.49   130.95   680.61
  130.95   680.97

Manning's n Values         num=       2
     Sta   n Val      Sta   n Val
       0    .055    18.88    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         18.88  112.07            9.074   8.544   8.762            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           679.64    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.62    Wt. n-Val.                        0.045
  W.S. Elev (m)           679.02    Reach Len. (m)            9.07      8.54       8.76
  Crit W.S. (m)           678.92    Flow Area (m2)                    137.44
  E.G. Slope (m/m)      0.014375    Area (m2)                         137.44
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            90.84    Top Width (m)                      90.84
  Vel Total (m/s)           3.49    Avg. Vel. (m/s)                    3.49
  Max Chl Dpth (m)          3.21    Hydr. Depth (m)                    1.51
  Conv. Total (m3/s)      4003.5    Conv. (m3/s)                      4003.5
  Length Wtd. (m)           8.54    Wetted Per. (m)                    91.58
  Min Ch El (m)           675.81    Shear (N/m2)                      211.55
  Alpha                     1.00    Stream Power (N/m s)              738.83
  Frctn Loss (m)            0.12    Cum Volume (1000 m3)               59.45
  C & E Loss (m)            0.01    Cum SA (1000 m2)                   45.92


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 22.600*

INPUT
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Description:
Station Elevation Data    num=      61
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  681.62     .53  681.52    5.45  679.09    6.53  678.97   10.18  679.65
   14.47  679.06   14.49  679.06   16.32  679.01   17.66  678.96   24.04  679.05
   25.18  678.91   29.76   678.4   31.27  678.23   31.44  678.26   35.64  677.92
   40.06  678.06   44.03  678.07   45.45  678.15   46.49  678.19   54.37  677.98
   55.43  677.96   63.83  677.79   64.03  677.73   74.36  678.02   75.88  677.55
   78.29  677.12   80.57  676.15   82.13  675.92   82.87  675.87   85.15  675.65
   86.69  675.79   87.84  675.75   89.49  675.79   91.31  675.86   92.62  675.97
   94.82  676.18   94.94   676.2   97.06  676.35   99.19   676.3  100.62  676.44
  100.86  676.49  102.16  676.74  106.15  676.83  107.18  677.13  107.94  677.16
  113.61  677.36   114.2  677.68  114.58  677.73  116.21  678.01  117.61  678.34
  120.33  679.46  123.08  680.22  124.21  680.26  128.52  680.03  130.03  680.05
   133.3  680.06  134.76  680.06  136.14  680.13   136.8  680.32  136.82  680.55
  136.82  680.82

Manning's n Values        num=      2
     Sta   n Val     Sta   n Val
       0    .055   24.04    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         24.04  120.33            9.074   8.544   8.762            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           679.51    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.60    Wt. n-Val.                        0.045
  W.S. Elev (m)           678.91    Reach Len. (m)            9.07      8.54      8.76
  Crit W.S. (m)           678.81    Flow Area (m2)                    140.25
  E.G. Slope (m/m)      0.014037    Area (m2)                         140.25
  Q Total (m3/s)           480.00   Flow (m3/s)                       480.00
  Top Width (m)             93.86   Top Width (m)                      93.86
  Vel Total (m/s)            3.42   Avg. Vel. (m/s)                     3.42
  Max Chl Dpth (m)           3.26   Hydr. Depth (m)                     1.49
  Conv. Total (m3/s)       4051.4   Conv. (m3/s)                      4051.4
  Length Wtd. (m)            8.54   Wetted Per. (m)                    94.62
  Min Ch El (m)           675.65    Shear (N/m2)                      204.02
  Alpha                      1.00   Stream Power (N/m s)              698.26
  Frctn Loss (m)             0.12   Cum Volume (1000 m3)               58.26
  C & E Loss (m)             0.01   Cum SA (1000 m2)                   45.13


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 22.400*

INPUT
Description:
Station Elevation Data    num=      61
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   681.6     .55  681.54    5.66  678.79    6.78   678.8   10.56  679.59
   16.33  678.96   16.37  678.95   18.82  678.83   20.63  678.81   29.21  678.94
   30.26  678.82   34.47  678.37   35.87  678.25   36.03  678.24    39.9  677.98
   44.31  678.07   48.28  678.08   49.71  678.13   50.74  678.15   58.61  677.92
   59.67   677.9   68.07  677.74   68.27  677.74    78.6  677.94   80.29  677.42
   82.95  677.07   85.48   675.9   87.19  675.74   88.02   675.7   90.54  675.49
    92.2  675.69   93.45  675.63   95.23  675.69   97.19  675.79   98.61  675.95
     101  676.23  101.12  676.25  103.41  676.33  105.72  676.23  107.26  676.37
  107.52  676.44  108.93  676.77  113.24  676.87  114.35  677.21  115.18  677.22
   121.3  677.33  121.94  677.62  122.35  677.75  124.12  677.94  125.64  678.19
   128.6  679.41  130.43  679.92  131.43  679.95  135.28  679.84  136.63  679.87
  139.54  679.88  140.85  679.88  142.08  679.99  142.67  680.15  142.68  680.48
  142.68  680.66

Manning's n Values        num=      2
     Sta   n Val     Sta   n Val
       0    .055   29.21    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         29.21  128.6             9.074   8.544   8.762            .1       .3
Left Levee      Station=   29.21      Elevation=  678.94

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           679.39    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.58    Wt. n-Val.                        0.045
  W.S. Elev (m)           678.81    Reach Len. (m)            9.07      8.54      8.76
  Crit W.S. (m)           678.69    Flow Area (m2)                    142.58
  E.G. Slope (m/m)      0.013846    Area (m2)                         142.58
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Q Total (m3/s)	480.00	Flow (m3/s)	480.00
Top Width (m)	96.78	Top Width (m)	96.78
Vel Total (m/s)	3.37	Avg. Vel. (m/s)	3.37
Max Chl Dpth (m)	3.32	Hydr. Depth (m)	1.47
Conv. Total (m3/s)	4079.3	Conv. (m3/s)	4079.3
Length Wtd. (m)	8.54	Wetted Per. (m)	97.59
Min Ch El (m)	675.49	Shear (N/m2)	198.36
Alpha	1.00	Stream Power (N/m s)	667.81
Frctn Loss (m)	0.12	Cum Volume (1000 m3)	57.05
C & E Loss (m)	0.00	Cum SA (1000 m2)	44.32

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, energy was used.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 22.200*

INPUT
Description:
Station Elevation Data num= 61

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	681.57	.57	681.57	5.86	678.49	7.03	678.64	10.95	679.52
18.19	678.86	18.24	678.85	21.33	678.75	23.59	678.65	34.37	678.83
35.33	678.72	39.19	678.34	40.47	678.23	40.61	678.22	44.15	678.03
48.57	678.08	52.53	678.09	53.96	678.12	55	678.11	62.86	677.85
63.92	677.84	72.32	677.7	72.52	677.7	82.84	677.87	84.69	677.3
87.61	677.02	90.38	675.65	92.26	675.56	93.16	675.54	95.93	675.33
97.72	675.6	99.05	675.52	100.97	675.59	103.08	675.73	104.6	675.93
107.17	676.29	107.3	676.31	109.77	676.42	112.24	676.15	113.9	676.31
114.18	676.38	115.69	676.81	120.32	676.85	121.52	677.28	122.41	677.28
128.99	677.29	129.68	677.57	130.13	677.71	132.04	677.87	133.67	678.05
136.86	679.36	137.77	679.61	138.66	679.65	142.04	679.65	143.22	679.68
145.79	679.7	146.93	679.7	148.02	679.85	148.53	679.97	148.55	680.42
148.55	680.51								

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	34.37	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
34.37	136.86	9.074	8.544	8.762	.1 .3

Left Levee Station= 34.37 Elevation= 678.83

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	679.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.56	Wt. n-Val.		0.045	
W.S. Elev (m)	678.70	Reach Len. (m)	9.07	8.54	8.76
Crit W.S. (m)	678.58	Flow Area (m2)		144.30	
E.G. Slope (m/m)	0.013861	Area (m2)		144.30	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	99.72	Top Width (m)		99.72	
Vel Total (m/s)	3.33	Avg. Vel. (m/s)		3.33	
Max Chl Dpth (m)	3.37	Hydr. Depth (m)		1.45	
Conv. Total (m3/s)	4077.1	Conv. (m3/s)		4077.1	
Length Wtd. (m)	8.54	Wetted Per. (m)		100.64	
Min Ch El (m)	675.33	Shear (N/m2)		194.88	
Alpha	1.00	Stream Power (N/m s)		648.26	
Frctn Loss (m)	0.12	Cum Volume (1000 m3)		55.83	
C & E Loss (m)	0.00	Cum SA (1000 m2)		43.48	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 22

INPUT
Description: sezione 22
Station Elevation Data num= 39

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	681.55	.59	681.59	6.07	678.19	11.33	679.45	20.11	678.75
23.83	678.62	26.56	678.5	39.54	678.72	40.41	678.62	45.07	678.2
48.41	678.08	58.21	678.1	67.11	677.79	76.56	677.65	87.08	677.79
89.09	677.17	92.27	676.97	95.28	675.4	98.31	675.37	101.32	675.17
103.23	675.5	104.66	675.4	106.71	675.49	108.97	675.66	113.48	676.36
116.12	676.46	118.77	676.08	120.54	676.24	122.46	676.84	127.41	676.83
128.69	677.36	136.68	677.26	137.9	677.67	141.7	677.9	145.12	679.31

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  149.82   679.5  153.02  679.52   154.4   679.3  154.41  680.36

Manning's n Values         num=       2
     Sta   n Val     Sta   n Val
       0    .055   39.54    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         39.54  145.12             7.35    6.94   6.918           .1       .3
Left Levee       Station=   39.54      Elevation=  678.72

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           679.14    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.55    Wt. n-Val.                        0.045
  W.S. Elev (m)           678.59    Reach Len. (m)            7.35      6.94      6.92
  Crit W.S. (m)           678.47    Flow Area (m2)                    146.07
  E.G. Slope (m/m)      0.013850    Area (m2)                         146.07
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           102.64    Top Width (m)                     102.64
  Vel Total (m/s)           3.29    Avg. Vel. (m/s)                     3.29
  Max Chl Dpth (m)          3.42    Hydr. Depth (m)                     1.42
  Conv. Total (m3/s)      4078.6    Conv. (m3/s)                      4078.6
  Length Wtd. (m)           6.94    Wetted Per. (m)                   103.70
  Min Ch El (m)           675.17    Shear (N/m2)                      191.31
  Alpha                     1.00    Stream Power (N/m s)              628.67
  Frctn Loss (m)            0.10    Cum Volume (1000 m3)               54.59
  C & E Loss (m)            0.01    Cum SA (1000 m2)                   42.61

Note:    Multiple critical depths were found at this location.  The critical depth with the lowest, valid,
energy was used.


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 21.750*

INPUT
Description:
Station Elevation Data     num=      71
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  681.43     .67  681.41     .95  681.23    4.24  679.17    6.91  678.03
    9.19   678.5   13.52   679.2    18.9  678.81   21.47  678.64   24.84  678.55
   27.31  678.46   27.38  678.47   39.07  678.61   39.98  678.52   44.34  678.19
   44.87  678.15   48.38  678.02   50.03  678.03    51.1  678.09   56.68  678.12
   58.08  678.11    66.9   677.8   66.95   677.3   76.26  677.63   76.65  677.63
   86.68  677.76   88.08  677.31   88.95  677.12    89.5  677.09   92.55  677.08
   93.04  676.64   94.35  675.97   95.49  675.41   95.63  675.36   97.46  675.34
   98.74  675.31   98.96  675.29  101.82  675.14  103.68   675.4  103.74  675.41
  105.19  675.38  105.63  675.41  107.26  675.47  109.18  675.58  109.54  675.61
  114.09  676.27  116.78  676.32   116.8  676.32  117.53   676.2  119.53     676
  121.35  676.13  121.61  676.19  123.33  676.73  127.34  676.76  129.32  676.65
  130.67  677.09  132.13  677.13   135.1  677.13  138.68  677.17  139.11  677.17
  140.39   677.5  144.41  677.72  147.49  679.24  151.63  679.42     152  679.43
  154.51  679.45  155.07  679.45  155.49  679.51   156.4   679.7   156.4  679.73
  156.41  680.28

Manning's n Values         num=       2
     Sta   n Val     Sta   n Val
       0    .055   39.07    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         39.07  147.49             7.35    6.94   6.918           .1       .3
Left Levee       Station=   39.07      Elevation=  678.61

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           679.04    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.53    Wt. n-Val.                        0.045
  W.S. Elev (m)           678.51    Reach Len. (m)            7.35      6.94      6.92
  Crit W.S. (m)           678.38    Flow Area (m2)                    148.53
  E.G. Slope (m/m)      0.013652    Area (m2)                         148.53
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           105.88    Top Width (m)                     105.88
  Vel Total (m/s)           3.23    Avg. Vel. (m/s)                     3.23
  Max Chl Dpth (m)          3.37    Hydr. Depth (m)                     1.40
  Conv. Total (m3/s)      4108.1    Conv. (m3/s)                      4108.1
  Length Wtd. (m)           6.94    Wetted Per. (m)                   106.98
  Min Ch El (m)           675.14    Shear (N/m2)                      185.89
  Alpha                     1.00    Stream Power (N/m s)              600.72
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)               53.56
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  C & E Loss (m)            0.01     Cum SA (1000 m2)                  41.89


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 21.500*

INPUT
Description:
Station Elevation Data     num=      71
     Sta    Elev      Sta    Elev      Sta    Elev      Sta    Elev      Sta    Elev
       0  681.32      .75  681.23     1.06  681.11     4.75  678.69     7.75  677.86
   10.49  678.38     15.7  678.95    20.53  678.64    22.83  678.53    25.85  678.48
   28.06  678.43    28.12  678.43     38.6  678.49    39.55  678.42    44.12  678.14
   44.67   678.1    48.34  677.96    49.98  678.03    51.04   678.1    56.56  678.14
   57.95  678.12    66.68  677.81    66.74   677.3    75.95  677.61    76.35  677.61
   86.27  677.73    87.84  677.21    88.81  677.07    89.42  677.04    92.83  677.19
   93.33  676.57    94.68  675.88    95.84  675.35    95.98  675.32    97.86  675.31
   99.16  675.24    99.39  675.23   102.32  675.11   104.19  675.32   104.26  675.33
  105.72  675.37   106.17   675.4    107.8  675.45   109.74  675.53    110.1  675.56
   114.7  676.18   117.46  676.19   117.49  676.19   118.23  676.03   120.29  675.92
  122.16  676.03   122.43  676.07   124.19  676.72   128.91  676.68   131.23  676.47
  132.65  676.83   134.19  676.92   137.31  677.05   141.08  677.07   141.53  677.08
  142.89  677.32   147.11  677.55   149.86  679.17   153.83  679.36   154.18  679.37
  156.59  679.38   157.13  679.37   157.53  679.41   158.39   679.6    158.4  679.65
   158.4   680.2

Manning's n Values         num=       2
     Sta   n Val      Sta   n Val
       0    .055     38.6    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          38.6  149.86             7.35    6.94   6.918            .1       .3
Left Levee      Station=    38.6      Elevation=  678.49

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           678.94    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.51    Wt. n-Val.                        0.045
  W.S. Elev (m)           678.43    Reach Len. (m)            7.35       6.94       6.92
  Crit W.S. (m)           678.29    Flow Area (m2)                     151.18
  E.G. Slope (m/m)      0.013421    Area (m2)                          151.18
  Q Total (m3/s)          480.00    Flow (m3/s)                        480.00
  Top Width (m)           109.15    Top Width (m)                      109.15
  Vel Total (m/s)           3.17    Avg. Vel. (m/s)                      3.17
  Max Chl Dpth (m)          3.32    Hydr. Depth (m)                      1.39
  Conv. Total (m3/s)      4143.3    Conv. (m3/s)                       4143.3
  Length Wtd. (m)           6.94    Wetted Per. (m)                    110.39
  Min Ch El (m)           675.11    Shear (N/m2)                       180.25
  Alpha                     1.00    Stream Power (N/m s)               572.28
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)                52.52
  C & E Loss (m)            0.01    Cum SA (1000 m2)                    41.15


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 21.250*

INPUT
Description:
Station Elevation Data     num=      71
     Sta    Elev      Sta    Elev      Sta    Elev      Sta    Elev      Sta    Elev
       0  681.21      .83  681.05     1.18  680.95     5.27  678.21     8.59   677.7
    11.8  678.25    17.89  678.69    22.15  678.47    24.19  678.43    26.86  678.41
   28.81  678.39    28.87   678.4    38.12  678.38    39.12  678.33    43.89  678.08
   44.47  678.05    48.31  677.91    49.93  678.03    50.98   678.1    56.45  678.16
   57.82  678.12    66.47  677.81    66.52  677.81    75.65  677.59    76.04  677.58
   85.86  677.71     87.6  677.11    88.67  677.02    89.35     677    93.11  677.31
   93.62  676.49       95   675.8    96.19  675.29    96.34  675.27    98.25  675.27
   99.59  675.18    99.82  675.16   102.81  675.03   104.71  675.23   104.77  675.24
  106.24  675.35    106.7   675.4   108.35  675.43   110.31  675.47   110.67  675.51
   115.3  676.09   118.15  676.05   118.17  676.05   118.94  675.87   121.05  675.84
  122.98  675.92   123.25  675.94   125.06  676.67   130.47  676.61   133.13  676.29
  134.63  676.56   136.24  676.71   139.53  676.93   143.49  676.98   143.96  676.99
  145.38  677.15   149.82  677.37   152.23  679.09   156.02  679.29   156.36   679.3
  158.66  679.32   159.18   679.3   159.56  679.31   160.39  679.51   160.39  679.58
   160.4  680.11

Manning's n Values         num=       2
```

```
     Sta   n Val     Sta   n Val
       0    .055   38.12    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         38.12  152.23             7.35    6.94   6.917           .1       .3
Left Levee      Station=   38.12      Elevation=  678.38

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           678.84    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.49    Wt. n-Val.                        0.045
  W.S. Elev (m)           678.35    Reach Len. (m)           7.35       6.94      6.92
  Crit W.S. (m)           678.20    Flow Area (m2)                    154.30
  E.G. Slope (m/m)       0.013080   Area (m2)                         154.30
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           112.47    Top Width (m)                     112.47
  Vel Total (m/s)           3.11    Avg. Vel. (m/s)                     3.11
  Max Chl Dpth (m)          3.27    Hydr. Depth (m)                     1.37
  Conv. Total (m3/s)      4197.0    Conv. (m3/s)                      4197.0
  Length Wtd. (m)           6.94    Wetted Per. (m)                   113.95
  Min Ch El (m)           675.08    Shear (N/m2)                      173.69
  Alpha                     1.00    Stream Power (N/m s)              540.32
  Frctn Loss (m)            0.10    Cum Volume (1000 m3)               51.46
  C & E Loss (m)            0.02    Cum SA (1000 m2)                   40.38

Note:    Multiple critical depths were found at this location.  The critical depth with the lowest, valid,
energy was used.


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella          RS: 21

INPUT
Description: sezione 21
Station Elevation Data     num=      46
     Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev
       0   681.09     1.29   680.78     5.78   677.73     9.43   677.54    13.1   678.13
   20.08   678.44    23.78    678.3    29.61   678.36    37.65   678.27   43.67   678.03
   48.27   677.85    49.88   678.08    50.92   678.11    56.33   678.18   66.31   677.82
   75.73   677.56    85.46   677.68    87.36   677.01    89.27   676.95   93.39   677.42
   93.91   676.41    95.32   675.71    96.54   675.23    98.65   675.23  100.25    675.1
  103.31   675.05   105.22   675.15   107.23   675.39   110.87   675.42  115.91      676
  118.83   675.92   119.64   675.71   124.07   675.82   125.93   676.61  132.04   676.53
  135.04   676.11    138.3    676.5   141.74    676.3   145.89   676.88  152.53   677.19
   154.6   679.02   158.22   679.23   160.74   679.25    161.6   679.21  162.39   679.41
   162.4   680.03

Manning's n Values         num=       2
     Sta   n Val     Sta   n Val
       0    .055   56.33    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         37.65   154.6             4.718   4.537   4.847           .1       .3
Left Levee      Station=   56.33      Elevation=  678.18

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           678.72    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.69    Wt. n-Val.                        0.045
  W.S. Elev (m)           678.03    Reach Len. (m)           4.72       4.54      4.85
  Crit W.S. (m)           678.03    Flow Area (m2)                    130.39
  E.G. Slope (m/m)       0.017884   Area (m2)                         130.39
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            92.92    Top Width (m)                      92.92
  Vel Total (m/s)           3.68    Avg. Vel. (m/s)                     3.68
  Max Chl Dpth (m)          2.98    Hydr. Depth (m)                     1.40
  Conv. Total (m3/s)      3589.3    Conv. (m3/s)                      3589.3
  Length Wtd. (m)           4.54    Wetted Per. (m)                    94.58
  Min Ch El (m)           675.05    Shear (N/m2)                      241.78
  Alpha                     1.00    Stream Power (N/m s)              890.02
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)               50.48
  C & E Loss (m)            0.01    Cum SA (1000 m2)                   39.66

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth,
the calculated water surface came back below critical depth.  This indicates that there is not a valid
subcritical answer.  The program defaulted to critical depth.


CROSS SECTION
```

RIVER: fiume Fella
REACH: fiume Fella RS: 20.750*

INPUT
Description:
Station Elevation Data num= 75

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	680.42	1.09	680.17	4.88	677.83	7.96	677.65	11.5	678.09
18.22	678.33	21	678.22	25.37	678.27	31.4	678.2	36.67	677.97
40.69	677.8	42.32	677.98	43.38	678.01	46.62	678.07	48.87	678.17
56.32	677.91	59.27	677.81	63.72	677.63	69.08	677.54	70.9	677.55
79.22	677.65	81.09	676.95	82.52	676.91	87.43	677.34	87.97	676.41
88.41	676.12	89.41	675.65	90.66	675.16	92.83	675.15	93.62	675.1
94.47	675.02	95.19	675	95.41	674.99	97.61	674.96	99.44	675.08
99.53	675.08	101.55	675.3	102.66	675.33	105.21	675.36	105.37	675.37
109.89	675.89	110.28	675.93	112.74	675.89	113.21	675.85	113.97	675.66
114.02	675.65	117.42	675.68	118.48	675.73	120.35	676.52	123.02	676.38
125.17	676.43	126.97	676.42	128.49	676.23	130.22	676.02	130.62	676.03
132.53	676.31	134.38	676.52	135.56	676.62	136.48	676.7	138.35	676.82
140.49	676.83	142.39	676.85	146.42	677	148.55	677.46	148.86	677.49
150.88	679.01	153.19	679.14	154.38	679.19	156.31	679.2	156.82	679.2
157.5	679.17	157.65	679.18	158.41	679.38	158.41	679.4	158.42	679.99

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	56.32	.045

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
31.4 150.88 4.718 4.537 4.847 .01 .3
Left Levee Station= 48.87 Elevation= 678.17

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	678.63	Element			
Vel Head (m)	0.74	Wt. n-Val.		0.045	
W.S. Elev (m)	677.88	Reach Len. (m)	4.72	4.54	4.85
Crit W.S. (m)	677.94	Flow Area (m2)		125.60	
E.G. Slope (m/m)	0.020016	Area (m2)		125.60	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	92.25	Top Width (m)		92.25	
Vel Total (m/s)	3.82	Avg. Vel. (m/s)		3.82	
Max Chl Dpth (m)	2.92	Hydr. Depth (m)		1.36	
Conv. Total (m3/s)	3392.8	Conv. (m3/s)		3392.8	
Length Wtd. (m)	4.54	Wetted Per. (m)		93.71	
Min Ch El (m)	674.96	Shear (N/m2)		263.07	
Alpha	1.00	Stream Power (N/m s)		1005.40	
Frctn Loss (m)	0.09	Cum Volume (1000 m3)		49.90	
C & E Loss (m)	0.00	Cum SA (1000 m2)		39.24	

Note: Program found supercritical flow starting at this cross section.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 20.500*

INPUT
Description:
Station Elevation Data num= 75

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	679.74	.89	679.56	3.98	677.94	6.49	677.76	9.89	678.06
16.36	678.21	18.21	678.15	21.12	678.17	25.15	678.13	29.66	677.91
33.11	677.75	34.77	677.89	35.84	677.92	39.12	677.98	41.4	678.16
49.16	677.91	52.22	677.8	56.86	677.66	62.44	677.52	64.32	677.51
72.99	677.61	74.82	676.9	75.77	676.86	81.48	677.26	82.03	676.42
82.47	676.04	83.5	675.59	84.79	675.1	87.01	675.07	87.81	675.02
88.69	674.95	89.42	674.9	89.65	674.9	91.91	674.88	93.75	675.01
93.84	675.01	95.87	675.21	96.99	675.25	99.55	675.29	99.71	675.3
104.25	675.83	104.64	675.86	107.11	675.84	107.59	675.78	108.35	675.6
108.41	675.59	111.83	675.57	112.89	675.75	114.76	676.43	117.64	676.18
119.96	676.31	121.9	676.31	123.54	676.23	125.4	675.93	126.2	675.94
128.37	676.31	130.46	676.53	131.8	676.66	132.84	676.75	134.96	676.83
137.04	676.81	138.89	676.83	142.81	676.92	144.89	677.75	145.19	677.8
147.15	679	149.38	679.12	150.54	679.15	152.4	679.15	152.89	679.15
153.55	679.12	153.7	679.14	154.43	679.36	154.44	679.4	154.45	679.96

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	49.16	.045	154.45	.045

```
Bank Sta: Left   Right     Lengths: Left Channel   Right     Coeff Contr.   Expan.
         25.15  147.15              4.718   4.537   4.847           .01      .03
Left Levee       Station=    41.4       Elevation=  678.16

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           678.53    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.77    Wt. n-Val.                        0.045
  W.S. Elev (m)           677.77    Reach Len. (m)           4.72       4.54       4.85
  Crit W.S. (m)           677.85    Flow Area (m2)                    123.88
  E.G. Slope (m/m)      0.020790    Area (m2)                         123.88
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            91.75    Top Width (m)                      91.75
  Vel Total (m/s)           3.87    Avg. Vel. (m/s)                    3.87
  Max Chl Dpth (m)          2.89    Hydr. Depth (m)                    1.35
  Conv. Total (m3/s)      3329.0    Conv. (m3/s)                      3329.0
  Length Wtd. (m)           4.54    Wetted Per. (m)                   93.16
  Min Ch El (m)           674.88    Shear (N/m2)                     271.11
  Alpha                     1.00    Stream Power (N/m s)            1050.49
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)              49.33
  C & E Loss (m)            0.00    Cum SA (1000 m2)                  38.83

Note:    Multiple critical depths were found at this location.  The critical depth with the lowest, valid,
energy was used.


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 20.250*

INPUT
Description:
Station Elevation Data    num=      75
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  679.07     .69  678.95    3.08  678.04    5.02  677.87    8.29  678.02
    14.5   678.1   15.43  678.07   16.88  678.03   18.89  678.06   22.66  677.86
   25.54   677.7   27.21  677.79    28.3  677.82   31.63   677.9   33.94  678.14
   41.99   677.9   45.18  677.79   49.99  677.64   55.79   677.5   57.75  677.48
   66.75  677.58   68.55  676.84   69.03  676.82   75.53  677.17   76.08  676.42
   76.54  675.96    77.6  675.53   78.91  675.03   81.18  674.99   82.01  674.95
   82.91  674.87   83.66  674.81    83.9  674.81   86.21   674.8   88.06  674.94
   88.15  674.94   90.19  675.12   91.31  675.13   93.89  675.23   94.05  675.24
   98.62  675.77   99.01  675.79  101.49   675.3  101.97  675.71  102.74  675.53
  102.79  675.53  106.23  675.46  107.29  675.71  109.18  676.34  112.27  675.99
  114.75  676.19  116.83  676.21  118.59  676.17  120.59  675.85  121.78  675.86
   124.2  676.31  126.54  676.55  128.04  676.69   129.2  676.79  131.57  676.85
   133.6   676.8   135.4   676.8  139.21  676.85  141.22  678.03  141.52   678.1
  143.43  678.99  145.58   679.1  146.69  679.11   148.5   679.1  148.97  679.09
  149.61  679.08  149.75  679.11  150.46  679.33  150.46  679.39  150.47  679.93

Manning's n Values        num=       2
     Sta   n Val     Sta   n Val
       0    .055   41.99    .045

Bank Sta: Left   Right     Lengths: Left Channel   Right     Coeff Contr.   Expan.
         18.89  143.43              4.718   4.538   4.847           .01      .03
Left Levee       Station=   33.94       Elevation=  678.14

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           678.44    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.77    Wt. n-Val.                        0.045
  W.S. Elev (m)           677.67    Reach Len. (m)           4.72       4.54       4.85
  Crit W.S. (m)           677.74    Flow Area (m2)                    123.28
  E.G. Slope (m/m)      0.021055    Area (m2)                         123.28
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            91.45    Top Width (m)                      91.45
  Vel Total (m/s)           3.89    Avg. Vel. (m/s)                    3.89
  Max Chl Dpth (m)          2.87    Hydr. Depth (m)                    1.35
  Conv. Total (m3/s)      3308.0    Conv. (m3/s)                      3308.0
  Length Wtd. (m)           4.54    Wetted Per. (m)                   92.92
  Min Ch El (m)           674.80    Shear (N/m2)                     273.95
  Alpha                     1.00    Stream Power (N/m s)            1066.64
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)              48.77
  C & E Loss (m)            0.00    Cum SA (1000 m2)                  38.41


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 20
```

```
INPUT
Description: sezione 20
Station Elevation Data    num=      44
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0   678.4    3.55  677.98   12.64  677.99   17.96  677.65   24.13  677.81
   26.47  678.13   34.83  677.89   43.13  677.62   51.18  677.44   60.52  677.54
   62.28  676.78   69.57  677.09   70.61  675.88   73.03  674.97   76.21  674.88
    77.9  674.72   78.14  674.72   80.51  674.71   82.37  674.87   85.64  675.11
   88.39  675.17   92.98  675.71   95.87  675.75   97.12  675.47  100.63  675.35
   103.6  676.25  106.89  675.79  109.54  676.07  113.64  676.12  115.77  675.76
  117.36  675.77  120.04  676.31  124.28  676.73  125.56  676.84  128.18  676.87
  130.15  676.78   135.6  676.77  137.56  678.32   139.7  678.98  141.78  679.08
  144.59  679.05  145.66  679.03  146.48  679.31  146.49  679.89

Manning's n Values        num=       2
     Sta   n Val     Sta   n Val
       0    .055   60.52    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         12.64   139.7            28.31    18.8   10.67            .01      .03
Left Levee      Station=   60.52      Elevation=  677.54

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           678.36    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.82    Wt. n-Val.                        0.045
  W.S. Elev (m)           677.54    Reach Len. (m)            28.31    18.80      10.67
  Crit W.S. (m)           677.65    Flow Area (m2)                    119.73
  E.G. Slope (m/m)      0.018244    Area (m2)                         119.73
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            76.04    Top Width (m)                      76.04
  Vel Total (m/s)           4.01    Avg. Vel. (m/s)                    4.01
  Max Chl Dpth (m)          2.83    Hydr. Depth (m)                    1.57
  Conv. Total (m3/s)      3553.7    Conv. (m3/s)                      3553.7
  Length Wtd. (m)          18.80    Wetted Per. (m)                    77.57
  Min Ch El (m)           674.71    Shear (N/m2)                      276.16
  Alpha                     1.00    Stream Power (N/m s)             1107.11
  Frctn Loss (m)            0.39    Cum Volume (1000 m3)               48.22
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   38.03

Warning: The energy equation could not be balanced within the specified number of iterations.  The program
selected the water surface that had the least amount of error between computed and assumed values.


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 19

INPUT
Description: sezione 19
Station Elevation Data    num=      48
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  678.14     4.3     678    8.18  678.04   12.32  677.63   18.46  677.67
   23.52  677.24   23.68  677.34   24.15  677.39   30.57  677.36   33.85  676.93
    39.4  677.09    46.9  676.85   55.18  676.95   65.07  677.15   67.31  675.89
    68.5  675.75   70.92  676.51    76.6   676.5   78.36  674.98   81.79   674.8
   83.45  674.48   84.74  674.35   87.09  674.13   89.17  674.52   91.75  674.77
   97.26  674.98   98.61  675.36  101.72  675.41  105.18  675.05  106.07  674.79
  108.38  675.06  110.74  676.05  115.94  676.04   117.6  675.65  122.24   675.8
  123.95  675.38  129.29  676.01  130.34  676.53   136.2   676.5  141.84  676.53
  147.65  676.53  149.93  678.35  151.25   678.7  154.38  678.85  156.94  678.86
  158.08  678.85  159.01  679.09  159.02  679.57

Manning's n Values        num=       2
     Sta   n Val     Sta   n Val
       0    .055   30.57    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         18.46  151.25           5.957     5.95    6.24            .01      .03
Left Levee      Station=   65.07      Elevation=  677.15

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           677.96    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.89    Wt. n-Val.                        0.045
  W.S. Elev (m)           677.07    Reach Len. (m)             5.96     5.95       6.24
  Crit W.S. (m)           677.27    Flow Area (m2)                    114.92
  E.G. Slope (m/m)      0.023631    Area (m2)                         114.92
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
```

Top Width (m)	83.12	Top Width (m)	83.12
Vel Total (m/s)	4.18	Avg. Vel. (m/s)	4.18
Max Chl Dpth (m)	2.94	Hydr. Depth (m)	1.38
Conv. Total (m3/s)	3122.5	Conv. (m3/s)	3122.5
Length Wtd. (m)	5.95	Wetted Per. (m)	84.99
Min Ch El (m)	674.13	Shear (N/m2)	313.33
Alpha	1.00	Stream Power (N/m s)	1308.76
Frctn Loss (m)	0.14	Cum Volume (1000 m3)	46.01
C & E Loss (m)	0.00	Cum SA (1000 m2)	36.53

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 18.750*

INPUT
Description:
Station Elevation Data num= 86

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	678.2	1.9	678.02	3.79	677.92	4.52	677.83	5.66	677.72
6.41	677.72	8.6	677.77	8.71	677.77	12.95	677.49	13.45	677.5
19.4	677.57	24.06	677.24	24.21	677.31	24.64	677.35	26.9	677.33
30.55	677.25	33.56	676.87	38.84	677.05	39.96	677.03	45.96	676.88
49.35	676.92	53.56	676.93	53.83	676.93	63.22	677.11	64.77	676.64
65.94	676.06	66.74	675.83	68.07	675.72	68.62	675.71	72.42	676.38
76.68	676.37	77.18	675.86	78.39	674.94	79.04	674.85	81.73	674.69
83.34	674.41	84.6	674.29	85.55	674.21	86.88	674.02	88.45	674.24
89.09	674.38	89.75	674.47	91.02	674.61	91.83	674.67	95.5	674.8
97.67	674.96	99.1	675.31	102.29	675.35	104.85	675.02	105.7	674.95
106.57	674.76	107.25	674.82	108.85	674.99	109.27	675.14	111.17	675.93
114.76	675.96	116.6	675.95	118.33	675.65	122.49	675.71	122.66	675.7
124.26	675.27	124.77	675.28	128.18	675.61	129.24	675.91	130.21	676.48
133.74	676.43	136.66	676.32	136.75	676.32	139.69	676.4	143.04	676.44
145.23	676.47	149.52	676.43	151.2	677.32	152.07	678.01	152.9	678.38
153.54	678.56	154.71	678.63	156.78	678.72	157.25	678.73	159.44	678.74
159.68	678.74	160.62	678.73	160.72	678.75	161.59	678.97	161.59	679.02
161.6	679.42								

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	33.56	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
19.4	153.54	5.957	5.95	6.24	.01 .03

Left Levee Station= 63.22 Elevation= 677.11

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	677.82	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.045	
W.S. Elev (m)	676.97	Reach Len. (m)	5.96	5.95	6.24
Crit W.S. (m)	677.17	Flow Area (m2)		117.49	
E.G. Slope (m/m)	0.023159	Area (m2)		117.49	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	86.85	Top Width (m)		86.85	
Vel Total (m/s)	4.09	Avg. Vel. (m/s)		4.09	
Max Chl Dpth (m)	2.95	Hydr. Depth (m)		1.35	
Conv. Total (m3/s)	3154.2	Conv. (m3/s)		3154.2	
Length Wtd. (m)	5.95	Wetted Per. (m)		88.49	
Min Ch El (m)	674.02	Shear (N/m2)		301.55	
Alpha	1.00	Stream Power (N/m s)		1231.94	
Frctn Loss (m)	0.14	Cum Volume (1000 m3)		45.32	
C & E Loss (m)	0.00	Cum SA (1000 m2)		36.03	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 18.500*

INPUT
Description:
Station Elevation Data num= 86

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	678.27	2	677.96	3.97	677.82	4.74	677.66	5.93	677.43
6.72	677.42	9.02	677.51	9.13	677.5	13.58	677.35	14.1	677.36
20.34	677.47	24.6	677.23	24.73	677.23	25.13	677.3	27.2	677.28
30.52	677.14	33.28	676.82	38.27	677.01	39.33	677.02	45.02	676.92
48.24	676.94	52.22	676.91	52.47	676.91	61.37	677.08	63.49	676.68
65.09	675.94	66.18	675.76	67.99	675.66	68.73	675.66	73.93	676.24
76.76	676.23	77.25	675.67	78.43	674.89	79.06	674.75	81.67	674.57

```
   83.24  674.35   84.46  674.24   85.38  674.15   86.68   673.9   88.33  674.08
   89.01  674.23   89.71  674.37   91.05  674.53   91.91  674.58   95.78   674.7
   98.09  674.94    99.6  675.26  102.87  675.23  105.38   674.9  106.21  674.85
  107.08  674.72  107.74  674.76  109.31  674.92  109.73  675.03   111.6  675.81
  115.35  675.88  117.26  675.86  119.07  675.66  122.92  675.63  123.08  675.61
  124.56  675.16  125.04  675.12  128.21  675.34  129.18   675.8  130.09  676.44
  133.98  676.34  137.21  676.14   137.3  676.14  140.54  676.29  144.24  676.36
  146.65   676.4  151.39  676.33  153.25   676.9   154.2  677.67  155.12  678.22
  155.82  678.43  157.04  678.51  159.19  678.59  159.67   678.6  161.94  678.61
  162.18  678.61  163.16  678.61  163.27  678.62  164.16  678.85  164.17  678.89
  164.18  679.27

Manning's n Values         num=       2
     Sta   n Val     Sta   n Val
       0    .055   33.28    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          20.34  155.82           5.957    5.95    6.24          .01      .03
Left Levee      Station=   61.37      Elevation=  677.08

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           677.68    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.81    Wt. n-Val.                        0.045
  W.S. Elev (m)           676.88    Reach Len. (m)            5.96       5.95       6.24
  Crit W.S. (m)           676.97    Flow Area (m2)                     120.56
  E.G. Slope (m/m)      0.022486    Area (m2)                          120.56
  Q Total (m3/s)          480.00    Flow (m3/s)                        480.00
  Top Width (m)            90.71    Top Width (m)                       90.71
  Vel Total (m/s)           3.98    Avg. Vel. (m/s)                      3.98
  Max Chl Dpth (m)          2.98    Hydr. Depth (m)                      1.33
  Conv. Total (m3/s)      3201.0    Conv. (m3/s)                       3201.0
  Length Wtd. (m)           5.95    Wetted Per. (m)                     92.31
  Min Ch El (m)           673.90    Shear (N/m2)                       287.99
  Alpha                     1.00    Stream Power (N/m s)              1146.63
  Frctn Loss (m)            0.13    Cum Volume (1000 m3)                44.61
  C & E Loss (m)            0.00    Cum SA (1000 m2)                    35.50


Note:    Multiple critical depths were found at this location.  The critical depth with the lowest, valid,
energy was used.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 18.250*

INPUT
Description:
Station Elevation Data     num=      86
     Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev
       0   678.33     2.09   677.89     4.16   677.72     4.96   677.49     6.21   677.14
    7.03   677.12     9.43   677.24     9.56   677.24    14.21   677.22    14.76   677.23
   21.29   677.37    25.14   677.23    25.26   677.25    25.62   677.26    27.49   677.24
    30.5   677.03    32.99   676.76    37.71   676.97    38.71      677    44.08   676.95
   47.12   676.97    50.88   676.89    51.12   676.89    59.52   677.05     62.2   676.73
   64.23   675.82    65.61    675.7     67.9   675.59    68.85   675.62    75.43    676.1
   76.85    676.1    77.32   675.47    78.46   674.85    79.07   674.65    81.61   674.46
   83.13   674.28    84.32   674.18    85.22    674.1    86.47   673.78    88.22   673.91
   88.93   674.09    89.67   674.26    91.08   674.44    91.98   674.48    96.07    674.6
    98.5   674.92    100.1   675.21   103.44   675.22   105.91   674.78   106.73   674.76
  107.58   674.69   108.23   674.71   109.78   674.85   110.19   674.93   112.02   675.69
  115.93   675.79   117.92   675.77   119.81   675.66   123.36   675.55   123.51   675.51
  124.87   675.05   125.31   674.95   128.23   675.07   129.13    675.7   129.96   676.39
  134.22   676.25   137.75   675.96   137.85   675.97    141.4   676.17   145.45   676.27
  148.08   676.34   153.27   676.23   155.29   676.49   156.34   677.34   157.34   678.05
  158.11   678.29   159.37   678.38   161.59   678.46   162.09   678.48   164.44   678.49
  164.69   678.49   165.71   678.49   165.81    678.5   166.74   678.74   166.74   678.75
  166.75   679.11

Manning's n Values         num=       2
     Sta   n Val     Sta   n Val
       0    .055   37.71    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          21.29  158.11           5.958    5.95    6.24          .01      .03
Left Levee      Station=   59.52      Elevation=  677.05

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           677.55    Element                Left OB    Channel   Right OB
```

Vel Head (m)	0.77	Wt. n-Val.			0.045				
W.S. Elev (m)	676.78	Reach Len. (m)		5.96	5.95		6.24		
Crit W.S. (m)	676.86	Flow Area (m2)			123.30				
E.G. Slope (m/m)	0.021875	Area (m2)			123.30				
Q Total (m3/s)	480.00	Flow (m3/s)			480.00				
Top Width (m)	93.84	Top Width (m)			93.84				
Vel Total (m/s)	3.89	Avg. Vel. (m/s)			3.89				
Max Chl Dpth (m)	3.00	Hydr. Depth (m)			1.31				
Conv. Total (m3/s)	3245.4	Conv. (m3/s)			3245.4				
Length Wtd. (m)	5.95	Wetted Per. (m)			95.64				
Min Ch El (m)	673.78	Shear (N/m2)			276.53				
Alpha	1.00	Stream Power (N/m s)			1076.55				
Frctn Loss (m)	0.13	Cum Volume (1000 m3)			43.89				
C & E Loss (m)	0.00	Cum SA (1000 m2)			34.95				

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 18

INPUT
Description: sezione 18
Station Elevation Data num= 51

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	678.39	2.18	677.83	4.34	677.62	6.48	676.85	7.34	676.82
9.98	676.98	15.41	677.09	22.23	677.27	27.78	677.19	32.71	676.7
38.09	676.98	46	676.99	49.54	676.87	57.67	677.01	60.92	676.77
63.37	675.7	67.82	675.52	76.93	675.97	77.39	675.28	79.09	674.55
85.05	674.05	86.27	673.67	88.1	673.75	89.63	674.15	91.11	674.36
96.36	674.5	100.59	675.16	104.01	675.16	106.44	674.66	108.72	674.66
110.65	674.82	112.45	675.57	116.51	675.71	120.54	675.66	123.79	675.47
125.58	674.79	128.25	674.8	129.84	676.34	134.46	676.16	138.29	675.78
142.25	676.06	149.51	676.27	157.34	676.07	159.56	677.89	160.4	678.15
161.7	678.26	164.51	678.35	167.2	678.37	168.36	678.37	169.32	678.62
169.33	678.96								

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	57.67	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
22.23	160.4	10.463	8	5.307	.01	.03

Left Levee Station= 57.67 Elevation= 677.01

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	677.42	Element	Left OB	Channel	Right OB	
Vel Head (m)	0.74	Wt. n-Val.		0.045		
W.S. Elev (m)	676.68	Reach Len. (m)	10.46	8.00	5.31	
Crit W.S. (m)	676.74	Flow Area (m2)		125.88		
E.G. Slope (m/m)	0.021408	Area (m2)		125.88		
Q Total (m3/s)	480.00	Flow (m3/s)		480.00		
Top Width (m)	96.96	Top Width (m)		96.96		
Vel Total (m/s)	3.81	Avg. Vel. (m/s)		3.81		
Max Chl Dpth (m)	3.01	Hydr. Depth (m)		1.30		
Conv. Total (m3/s)	3280.6	Conv. (m3/s)		3280.6		
Length Wtd. (m)	8.00	Wetted Per. (m)		99.11		
Min Ch El (m)	673.67	Shear (N/m2)		266.63		
Alpha	1.00	Stream Power (N/m s)		1016.73		
Frctn Loss (m)	0.13	Cum Volume (1000 m3)		43.15		
C & E Loss (m)	0.00	Cum SA (1000 m2)		34.38		

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 17.667*

INPUT
Description:
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	678.16	1.43	677.95	2.07	677.79	4.12	677.48	5.91	676.89
6.15	676.83	6.96	676.83	9.3	676.96	9.47	676.97	14.62	677.05
17.66	677.11	21.09	677.18	25.56	676.96	26.55	676.95	26.8	676.94
30.53	676.59	31.4	676.53	36.69	676.72	38.88	676.72	42.81	676.76
44.47	676.75	47.96	676.64	50.32	676.66	55.95	676.75	57.47	676.68
59.15	676.37	60.01	675.99	61.56	675.52	65.94	675.35	66.75	675.37
74.9	675.79	75.35	675.34	76.37	675.06	77.02	674.64	77.26	674.55

78.17	674.35	82.37	673.97	82.88	673.92	84.08	673.6	85.97	673.65
87.41	673.9	87.54	673.93	88.86	674.14	89.07	674.17	90.38	674.26
92.74	674.26	94.48	674.33	95.23	674.42	97.59	674.8	98.84	674.93
100.39	674.94	102.36	674.9	102.64	674.85	104.86	674.57	105.38	674.57
107.21	674.65	108.65	674.78	109.2	674.91	109.83	675.2	111.05	675.53
115.24	675.61	116.49	675.6	119.39	675.56	122.27	675.44	122.74	675.35
124	674.85	124.58	674.7	126.51	674.69	127.33	674.75	128.84	675.79
128.97	675.89	131.28	676.24	132.12	676.17	133.5	675.98	133.73	675.97
136.45	675.83	137.67	675.77	140.58	675.95	141.75	676.02	145.79	676.13
149.23	676.22	150.17	676.21	154.86	676.1	157.3	676.05	158.31	676.58
159.58	677.62	160.45	678.04	161.46	678.13	161.78	678.15	164.66	678.23
165	678.23	167.41	678.25	167.58	678.25	168.6	678.25	168.88	678.29
169.58	678.52	169.58	678.53	169.59	678.86				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	21.09	.045	160.45	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
21.09	160.45	10.463	5.307	.1	.3

Left Levee Station= 55.95 Elevation= 676.75

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	677.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.58	Wt. n-Val.		0.045	
W.S. Elev (m)	676.70	Reach Len. (m)	10.46	8.00	5.31
Crit W.S. (m)	676.62	Flow Area (m2)		141.79	
E.G. Slope (m/m)	0.015164	Area (m2)		141.79	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	101.45	Top Width (m)		101.45	
Vel Total (m/s)	3.39	Avg. Vel. (m/s)		3.39	
Max Chl Dpth (m)	3.10	Hydr. Depth (m)		1.40	
Conv. Total (m3/s)	3897.9	Conv. (m3/s)		3897.9	
Length Wtd. (m)	8.00	Wetted Per. (m)		103.05	
Min Ch El (m)	673.60	Shear (N/m2)		204.61	
Alpha	1.00	Stream Power (N/m s)		692.66	
Frctn Loss (m)	0.12	Cum Volume (1000 m3)		42.08	
C & E Loss (m)	0.04	Cum SA (1000 m2)		33.59	

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 17.333*

INPUT
Description:
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	677.93	1.36	677.9	1.96	677.74	3.9	677.35	5.59	676.84
5.82	676.82	6.59	676.83	8.8	676.96	8.96	676.96	13.83	677.01
16.71	677.05	19.96	677.1	24.35	676.71	25.32	676.72	25.57	676.71
29.23	676.4	30.09	676.37	35.3	676.46	37.44	676.46	41.31	676.52
42.95	676.5	46.37	676.42	48.69	676.4	54.23	676.49	55.72	676.47
57.38	675.96	58.23	675.6	59.75	675.34	64.05	675.19	64.85	675.19
72.86	675.61	73.31	675.39	74.31	675.23	74.95	674.74	75.18	674.57
76.08	674.25	80.21	673.85	80.72	673.73	81.9	673.52	83.84	673.56
85.32	673.69	85.46	673.72	86.82	673.96	87.03	673.99	88.38	674.13
90.8	674.07	92.6	674.16	93.37	674.22	95.8	674.62	97.08	674.7
98.68	674.73	100.71	674.63	100.99	674.6	103.28	674.47	103.81	674.48
105.7	674.63	107.19	674.79	107.75	675.01	108.39	675.32	109.66	675.49
113.96	675.52	115.26	675.5	118.23	675.46	121.2	675.38	121.68	675.23
122.98	674.7	123.58	674.62	125.56	674.59	126.41	674.69	127.97	675.36
128.1	675.44	130.47	676.22	131.34	676.13	132.76	675.78	132.99	675.78
135.79	675.75	137.06	675.76	140.05	675.93	141.25	675.97	145.41	676.08
148.95	676.16	149.92	676.17	154.74	676.07	157.26	676.04	158.29	676.3
159.61	677.35	160.5	677.92	161.54	678.03	161.86	678.04	164.81	678.11
165.15	678.12	167.62	678.12	167.79	678.12	168.84	678.12	169.12	678.15
169.85	678.41	169.86	678.75						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	19.96	.045	141.25	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
19.96	160.5	10.463	5.307	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	677.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.045	
W.S. Elev (m)	676.67	Reach Len. (m)	10.46	8.00	5.31
Crit W.S. (m)	676.57	Flow Area (m2)		158.60	
E.G. Slope (m/m)	0.014311	Area (m2)		158.60	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	132.65	Top Width (m)		132.65	
Vel Total (m/s)	3.03	Avg. Vel. (m/s)		3.03	
Max Chl Dpth (m)	3.15	Hydr. Depth (m)		1.20	
Conv. Total (m3/s)	4012.4	Conv. (m3/s)		4012.4	
Length Wtd. (m)	8.00	Wetted Per. (m)		134.14	
Min Ch El (m)	673.52	Shear (N/m2)		165.93	
Alpha	1.00	Stream Power (N/m s)		502.18	
Frctn Loss (m)	0.10	Cum Volume (1000 m3)		40.87	
C & E Loss (m)	0.02	Cum SA (1000 m2)		32.65	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 17

INPUT
Description: sezione 17
Station Elevation Data num= 52

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	677.7	1.28	677.85	5.27	676.79	8.3	676.95	15.76	676.99
18.82	677.01	23.14	676.46	24.34	676.49	27.94	676.2	36.01	676.2
39.81	676.29	47.07	676.15	53.98	676.26	56.44	675.2	62.95	675
72.25	675.5	73.11	674.59	73.99	674.15	78.05	673.73	79.71	673.45
83.23	673.47	84.77	673.77	86.38	674	88.87	673.88	91.51	674.03
94.01	674.45	96.97	674.51	99.35	674.35	102.25	674.39	105.72	674.8
106.96	675.45	114.02	675.41	120.13	675.32	121.96	674.55	124.62	674.48
127.09	674.93	129.67	676.21	130.56	676.03	132.02	675.59	135.14	675.68
139.52	675.9	145.03	676.04	149.67	676.13	154.63	676.04	158.28	676.01
160.55	677.81	161.61	677.93	165.31	678	168.01	678	169.37	678
170.11	678.31	170.12	678.65						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	18.82	.045	149.67	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
18.82	160.55	10.063	7.133	3.093	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	677.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.		0.045	
W.S. Elev (m)	676.62	Reach Len. (m)	10.06	7.13	3.09
Crit W.S. (m)	676.42	Flow Area (m2)		174.24	
E.G. Slope (m/m)	0.011110	Area (m2)		174.24	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	137.16	Top Width (m)		137.16	
Vel Total (m/s)	2.75	Avg. Vel. (m/s)		2.75	
Max Chl Dpth (m)	3.17	Hydr. Depth (m)		1.27	
Conv. Total (m3/s)	4553.9	Conv. (m3/s)		4553.9	
Length Wtd. (m)	7.13	Wetted Per. (m)		139.05	
Min Ch El (m)	673.45	Shear (N/m2)		136.52	
Alpha	1.00	Stream Power (N/m s)		376.09	
Frctn Loss (m)	0.08	Cum Volume (1000 m3)		39.54	
C & E Loss (m)	0.00	Cum SA (1000 m2)		31.57	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 16.667*

INPUT
Description:
Station Elevation Data num= 81

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	677.54	.85	677.64	3.51	676.93	4.36	677.08	6.14	677.18
11.18	677.17	12.87	677.05	12.96	677.05	15.76	677.08	17.24	676.79
19.64	676.53	20.72	676.54	23.95	676.31	31.19	676.24	34.61	676.27
35.29	676.26	41.13	676.17	47.33	676.23	49.8	675.34	50.15	675.3
53.62	674.97	56.34	674.92	61.45	675.1	65.67	675.34	66.51	674.52
67.12	674.16	67.37	674.06	71.34	673.59	72.96	673.32	73.93	673.41
76.43	673.4	77.56	673.54	77.95	673.61	79.5	673.82	79.54	673.82

```
   81.99  673.75   84.59  673.86   85.13  673.93   87.06  674.28   87.53  674.32
   89.57   674.4   89.98  674.39   91.69  674.25   92.32  674.23   95.18   674.3
   97.03  674.47    98.6   674.8   99.82  675.39  107.67  675.34  107.93  675.33
  114.95  675.21  115.94  674.78  117.03  674.43  117.67  674.45  120.05  674.52
  120.19  674.54   121.7  674.93  122.86  675.03   125.8  676.02  127.15  675.94
  129.38  675.63  132.22   675.7   136.2  675.85  137.46  675.87  141.22  675.95
  144.68  676.01  145.44  676.02  149.96  675.97  152.77  675.95  153.28  676.06
  155.35   677.7   156.4   677.9  156.48  677.91  160.09  677.98  160.35  677.98
  162.71  677.97  162.78  677.97  163.84  677.97  164.14     678  164.88  678.28
  164.89  678.66

Manning's n Values          num=       3
     Sta   n Val      Sta   n Val      Sta   n Val
       0    .055    15.76    .045   144.68    .055

Bank Sta: Left   Right     Lengths: Left Channel   Right      Coeff Contr.    Expan.
          15.76  155.35            10.063   7.133   3.093              .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           676.92    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.42    Wt. n-Val.                        0.045
  W.S. Elev (m)           676.50    Reach Len. (m)          10.06      7.13       3.09
  Crit W.S. (m)           676.34    Flow Area (m2)                   166.59
  E.G. Slope (m/m)      0.012229    Area (m2)                        166.59
  Q Total (m3/s)          480.00    Flow (m3/s)                      480.00
  Top Width (m)           132.50    Top Width (m)                    132.50
  Vel Total (m/s)           2.88    Avg. Vel. (m/s)                    2.88
  Max Chl Dpth (m)          3.18    Hydr. Depth (m)                    1.26
  Conv. Total (m3/s)      4340.6    Conv. (m3/s)                     4340.6
  Length Wtd. (m)           7.13    Wetted Per. (m)                  133.99
  Min Ch El (m)           673.32    Shear (N/m2)                     149.09
  Alpha                     1.00    Stream Power (N/m s)             429.59
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)              38.33
  C & E Loss (m)            0.01    Cum SA (1000 m2)                  30.61



CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella          RS: 16.333*

INPUT
Description:
Station Elevation Data      num=      81
     Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev
       0   677.37      .43   677.42     1.76   677.07     2.48   677.31     3.98   677.41
    8.55   677.35    10.08   677.12    10.16   677.12     12.7   677.16    14.01   676.77
   16.14    676.6    17.09   676.59    19.95   676.41    26.38   676.29     29.4   676.26
   30.01   676.24    35.18   676.18    40.69    676.2    43.16   675.47    43.52   675.42
   46.99   674.86    49.72   674.84    54.86   674.93    59.09   675.19    59.91   674.45
    60.5   674.04    60.75   673.97    64.63   673.45    66.21    673.2    67.16   673.36
   69.63   673.33    70.75   673.38    71.13   673.44    72.65   673.64    72.69   673.64
   75.11   673.62    77.68    673.7    78.21   673.73     80.1   674.11    80.57   674.17
   82.58   674.29    82.98   674.27    84.67    674.1    85.29   674.11    88.11   674.21
   89.94   674.34    91.48    674.8    92.69   675.34   101.54   675.26   101.84   675.26
  109.76    675.1   110.87    674.6    112.1   674.41   112.81   674.37   115.49   674.56
  115.64   674.57   117.34   675.11   118.64   675.23   121.93   675.82   123.75    675.8
  126.73   675.68   129.29   675.71   132.89    675.3   134.02   675.81   137.41   675.87
  140.53   675.91   141.22   675.92   145.29    675.9   147.82   675.89   148.28   676.11
  150.14    677.6    151.2   677.87   151.28   677.89   154.87   677.96   155.13   677.97
  157.49   677.94   157.56   677.94   158.61   677.93   158.91   677.99   159.64   678.25
  159.65   678.68

Manning's n Values          num=       3
     Sta   n Val      Sta   n Val      Sta   n Val
       0    .055    12.7     .045   123.75    .055

Bank Sta: Left   Right     Lengths: Left Channel   Right      Coeff Contr.    Expan.
          12.7   150.14            10.063   7.133   3.093              .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           676.82    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.48    Wt. n-Val.                        0.045
  W.S. Elev (m)           676.35    Reach Len. (m)          10.06      7.13       3.09
  Crit W.S. (m)           676.18    Flow Area (m2)                   157.13
  E.G. Slope (m/m)      0.013072    Area (m2)                        157.13
  Q Total (m3/s)          480.00    Flow (m3/s)                      480.00
  Top Width (m)           125.35    Top Width (m)                    125.35
```

Vel Total (m/s)	3.05	Avg. Vel. (m/s)	3.05
Max Chl Dpth (m)	3.15	Hydr. Depth (m)	1.25
Conv. Total (m3/s)	4198.3	Conv. (m3/s)	4198.3
Length Wtd. (m)	7.13	Wetted Per. (m)	126.68
Min Ch El (m)	673.20	Shear (N/m2)	159.00
Alpha	1.00	Stream Power (N/m s)	485.72
Frctn Loss (m)	0.10	Cum Volume (1000 m3)	37.17
C & E Loss (m)	0.01	Cum SA (1000 m2)	29.69

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 16

INPUT
Description: sezione 16
Station Elevation Data num= 43

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	677.21	.59	677.55	1.82	677.64	5.92	677.54	7.29	677.18
9.64	677.23	10.78	676.76	15.96	676.52	24.73	676.22	34.04	676.17
36.88	675.53	40.37	674.75	48.26	674.76	52.51	675.03	53.89	673.92
59.46	673.07	60.4	673.31	63.93	673.23	65.81	673.46	71.28	673.54
73.61	674.03	75.59	674.19	77.65	673.96	82.84	674.2	85.55	675.28
95.42	675.19	104.58	674.99	105.81	674.43	107.96	674.29	111.09	674.61
112.97	675.29	118.06	675.63	124.09	675.72	130.58	675.75	136.38	675.81
142.87	675.83	144.94	677.49	146.07	677.87	149.91	677.95	152.26	677.91
153.38	677.9	154.41	678.22	154.42	678.69				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	9.64	.045	118.06	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
9.64	144.94	3.493	3.435	3.24	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	676.71	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.045	
W.S. Elev (m)	676.09	Reach Len. (m)	3.49	3.44	3.24
Crit W.S. (m)	676.09	Flow Area (m2)		137.40	
E.G. Slope (m/m)	0.015415	Area (m2)		137.40	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	108.78	Top Width (m)		108.78	
Vel Total (m/s)	3.49	Avg. Vel. (m/s)		3.49	
Max Chl Dpth (m)	3.02	Hydr. Depth (m)		1.26	
Conv. Total (m3/s)	3866.0	Conv. (m3/s)		3866.0	
Length Wtd. (m)	3.44	Wetted Per. (m)		110.09	
Min Ch El (m)	673.07	Shear (N/m2)		188.68	
Alpha	1.00	Stream Power (N/m s)		659.11	
Frctn Loss (m)	0.06	Cum Volume (1000 m3)		36.12	
C & E Loss (m)	0.01	Cum SA (1000 m2)		28.86	

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 15.750*

INPUT
Description:
Station Elevation Data num= 73

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	677.18	.7	677.46	2.15	677.57	2.88	677.58	4.79	677.58
6.51	677.61	7	677.59	8.62	677.3	11.61	677.35	12.74	676.93
15.48	676.66	17.88	676.55	23.59	676.34	26.57	676.24	30.58	676.18
35.81	676.17	38.77	675.37	40.36	674.95	42.42	674.65	47.96	674.74
50.68	674.75	55.12	674.97	56.4	673.94	57.65	673.59	61.59	673.05
62.55	673.24	64.74	673.23	66.15	673.23	66.47	673.26	68.07	673.38
69.5	673.38	72.52	673.43	73.65	673.43	76.03	673.92	78.05	674.1
79.88	673.88	80	673.87	83.45	674.04	84.92	674.2	87.49	675.2
93.43	675.16	98.06	675.14	98.76	675.13	103.13	675.03	107.87	674.93
108.48	674.67	109.44	674.41	112.18	674.29	114.52	674.64	115.01	674.69
115.02	674.7	116.71	675.24	117.95	675.34	121.31	675.63	127.11	675.66
128.37	675.65	133.35	675.68	133.77	675.63	138.93	675.7	139.02	675.7
145.17	675.73	147.53	676.77	148.59	677.43	149.67	677.81	149.72	677.82
153.21	677.87	153.56	677.88	155.91	677.85	155.95	677.85	157.03	677.84

```
  157.14  677.87  158.05  678.16  158.07  678.61

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   11.61    .045  121.31    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         11.61  148.59            3.493   3.435    3.24           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           676.64    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.70    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.94    Reach Len. (m)            3.49      3.44      3.24
  Crit W.S. (m)           676.02    Flow Area (m2)                    129.47
  E.G. Slope (m/m)      0.018506    Area (m2)                         129.47
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           109.00    Top Width (m)                     109.00
  Vel Total (m/s)           3.71    Avg. Vel. (m/s)                     3.71
  Max Chl Dpth (m)          2.89    Hydr. Depth (m)                     1.19
  Conv. Total (m3/s)      3528.5    Conv. (m3/s)                      3528.5
  Length Wtd. (m)           3.44    Wetted Per. (m)                   110.16
  Min Ch El (m)           673.05    Shear (N/m2)                      213.27
  Alpha                     1.00    Stream Power (N/m s)              790.72
  Frctn Loss (m)            0.07    Cum Volume (1000 m3)               35.66
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   28.48

Note:    Program found supercritical flow starting at this cross section.


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 15.500*

INPUT
Description:
Station Elevation Data    num=      73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  677.15     .81  677.36    2.49   677.5    3.32  677.53    5.54  677.57
    7.52  677.67    8.09  677.65    9.96  677.42   13.58  677.47    14.7   677.1
   17.42  676.68   19.79  676.58   25.46  676.36   28.41  676.25   32.39  676.17
   37.57  676.16   40.67  675.21   42.32   674.7   44.48  674.54   50.26  674.71
   53.09  674.74   57.73  674.91   58.92  673.96   60.07  673.47   63.72  673.04
   64.69  673.18   66.94  673.21   68.37  673.22    68.7  673.25   70.33   673.3
   71.79  673.28   74.87  673.34   76.03  673.42   78.45  673.81   80.51  674.02
   82.24  673.79   82.36  673.78   85.61  673.95      87  674.21   89.43  675.12
   95.76  675.08   100.7  675.09  101.45  675.09   106.1  674.97  111.15  674.86
   111.9  674.56  113.07  674.38   116.4  674.29   118.5  674.73  118.93  674.77
  118.94  674.78  120.45   675.2  121.56   675.3  124.56  675.62  130.12   675.6
  131.34  675.58  136.12  675.61  136.52  675.61  141.48  675.59  141.56  675.59
  147.47  675.63  150.76  676.57  152.24  677.43  153.32  677.77  153.37  677.77
  156.86   677.8  157.21   677.8  159.55  677.79   159.6  677.79  160.67  677.79
  160.79   677.8   161.7   678.1  161.71  678.54

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   13.58    .045  124.56    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         13.58  152.24            3.493   3.435    3.24           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           676.58    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.74    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.84    Reach Len. (m)            3.49      3.44      3.24
  Crit W.S. (m)           675.95    Flow Area (m2)                    126.29
  E.G. Slope (m/m)      0.020196    Area (m2)                         126.29
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           109.59    Top Width (m)                     109.59
  Vel Total (m/s)           3.80    Avg. Vel. (m/s)                     3.80
  Max Chl Dpth (m)          2.80    Hydr. Depth (m)                     1.15
  Conv. Total (m3/s)      3377.6    Conv. (m3/s)                      3377.6
  Length Wtd. (m)           3.44    Wetted Per. (m)                   110.73
  Min Ch El (m)           673.04    Shear (N/m2)                      225.89
  Alpha                     1.00    Stream Power (N/m s)              858.53
  Frctn Loss (m)            0.07    Cum Volume (1000 m3)               35.22
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   28.11
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CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella          RS: 15.250*

INPUT
Description:
Station Elevation Data    num=      72
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  677.12     .91  677.27    2.82  677.42    3.77  677.49    6.28  677.56
    8.53  677.73    9.17   677.7    11.3  677.54   15.54   677.6   16.65  677.26
   19.35  676.71   21.71   676.6   27.32  676.33   30.26  676.27    34.2  676.15
   39.33  676.16   42.56  675.05   44.29  674.46   46.53  674.44   52.55  674.69
   55.51  674.73   60.34  674.85   61.43  673.93   62.49  673.35   65.84  673.02
   66.84  673.11   69.13  673.18   70.59  673.22   70.92  673.24   72.59  673.22
   74.08  673.17   77.22  673.25    78.4  673.36   80.87  673.71   82.98  673.93
    84.6  673.69   84.71  673.69   87.78  673.87   89.09  674.21   91.37  675.05
    98.1  675.01  103.34  675.04  104.13  675.04  109.08  674.92  114.44   674.8
  115.32  674.46  116.69  674.36  120.63  674.29  122.47  674.82  122.85  674.86
  124.19  675.15  125.16  675.26   127.8  675.62  133.14  675.53   134.3  675.51
  138.89  675.54  139.28  675.54  144.02  675.43  144.11  675.48  149.77  675.53
  153.99  676.37   155.9  677.47  156.97  677.72  157.02  677.73  160.51  677.72
  160.86  677.73   163.2  677.74  163.24  677.74  164.32  677.73  164.43  677.74
  165.35  678.05  165.35  678.47

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   15.54    .045   127.8    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         15.54   155.9            3.493   3.435    3.24           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           676.51    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.74    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.76    Reach Len. (m)            3.49       3.44      3.24
  Crit W.S. (m)           675.87    Flow Area (m2)                      125.66
  E.G. Slope (m/m)      0.020892    Area (m2)                           125.66
  Q Total (m3/s)          480.00    Flow (m3/s)                         480.00
  Top Width (m)           110.44    Top Width (m)                       110.44
  Vel Total (m/s)           3.82    Avg. Vel. (m/s)                       3.82
  Max Chl Dpth (m)          2.74    Hydr. Depth (m)                       1.14
  Conv. Total (m3/s)      3320.9    Conv. (m3/s)                        3320.9
  Length Wtd. (m)           3.44    Wetted Per. (m)                     111.66
  Min Ch El (m)           673.02    Shear (N/m2)                        230.57
  Alpha                     1.00    Stream Power (N/m s)                880.72
  Frctn Loss (m)            0.07    Cum Volume (1000 m3)                 34.79
  C & E Loss (m)            0.00    Cum SA (1000 m2)                     27.73


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella          RS: 15

INPUT
Description: sezione 15
Station Elevation Data    num=      45
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  677.09    4.21  677.44    7.02  677.55    9.54  677.79   12.63  677.66
   17.51  677.72   21.29  676.73   29.19   676.4   36.01  676.14    41.1  676.16
   46.25  674.21   54.85  674.67   62.95  674.79   64.91  673.23   67.97     673
   71.32  673.15   73.15  673.23   76.37  673.07   79.57  673.16   85.44  673.85
   86.96   673.6   89.94  673.78   93.31  674.97  100.43  674.94  106.82     675
  112.05  674.86  117.73  674.74  118.74  674.35  124.85  674.29  126.44  674.91
  126.78  674.94  128.77  675.22  131.05  675.62  137.27  675.44  142.03  675.47
  146.65  675.37  152.07  675.43  157.22  676.17  159.55  677.47  160.62  677.68
  164.16  677.65  166.89  677.68  168.08  677.67  168.99  677.99     169  678.39

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   17.51    .045   131.05    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         17.51  159.55            7.67    7.26   12.96           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           676.43    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.75    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.68    Reach Len. (m)            7.67       7.26      12.96
```

Crit W.S. (m)	675.80	Flow Area (m2)	125.31
E.G. Slope (m/m)	0.021486	Area (m2)	125.31
Q Total (m3/s)	480.00	Flow (m3/s)	480.00
Top Width (m)	111.48	Top Width (m)	111.48
Vel Total (m/s)	3.83	Avg. Vel. (m/s)	3.83
Max Chl Dpth (m)	2.68	Hydr. Depth (m)	1.12
Conv. Total (m3/s)	3274.6	Conv. (m3/s)	3274.6
Length Wtd. (m)	7.26	Wetted Per. (m)	112.87
Min Ch El (m)	673.00	Shear (N/m2)	233.93
Alpha	1.00	Stream Power (N/m s)	896.05
Frctn Loss (m)	0.19	Cum Volume (1000 m3)	34.36
C & E Loss (m)	0.00	Cum SA (1000 m2)	27.35

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 14

INPUT
Description: sezione 14
Station Elevation Data num= 49

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	677.61	.62	677.62	4.61	677.53	9.41	677.25	11.29	676.69
18.69	676.47	25.63	676.28	30.66	674.31	38.15	674.47	44.39	674.61
50.72	674.73	55.85	674.82	58.51	673.22	61.3	672.95	65.46	672.99
66.8	673.11	72.16	673.22	73.63	673.19	76.05	673.45	78.8	673.84
81.28	673.55	83.95	674.53	88.26	674.23	90.43	674.73	92.58	674.57
94.03	674.53	95.02	674.7	103.86	674.79	108.75	674.81	113.59	674.26
120.19	674.13	121.04	674.82	121.2	674.75	123.51	675.23	124.21	675.21
128.59	675.3	133.57	675.1	139.22	675.14	139.68	675.2	146.04	675.31
146.12	675.28	152.4	675.23	154.38	677.23	155.43	677.42	159.08	677.52
161.58	677.54	162.89	677.51	163.41	677.77	163.42	678.16		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	9.41	.045	128.59	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
9.41	154.38	9.01	7.377	4.267	.01	.03

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	676.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.82	Wt. n-Val.		0.045	
W.S. Elev (m)	675.43	Reach Len. (m)	9.01	7.38	4.27
Crit W.S. (m)	675.62	Flow Area (m2)		119.75	
E.G. Slope (m/m)	0.029750	Area (m2)		119.75	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	124.78	Top Width (m)		124.78	
Vel Total (m/s)	4.01	Avg. Vel. (m/s)		4.01	
Max Chl Dpth (m)	2.48	Hydr. Depth (m)		0.96	
Conv. Total (m3/s)	2782.9	Conv. (m3/s)		2782.9	
Length Wtd. (m)	7.38	Wetted Per. (m)		126.21	
Min Ch El (m)	672.95	Shear (N/m2)		276.81	
Alpha	1.00	Stream Power (N/m s)		1109.57	
Frctn Loss (m)	0.18	Cum Volume (1000 m3)		33.47	
C & E Loss (m)	0.01	Cum SA (1000 m2)		26.49	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 13.667*

INPUT
Description:
Station Elevation Data num= 82

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	677.37	.58	677.38	4.33	677.36	5.22	677.31	8.83	676.76
11.66	676.74	13.46	676.34	20.57	676.12	20.74	676.11	27.23	676.05
31.2	674.05	32.27	674.03	35.97	674.31	39.68	674.4	41.63	674.45
45.86	674.55	46.49	674.57	52.13	674.62	52.31	674.63	57.21	674.67
58.15	674.08	60.38	673.25	62.43	673.07	63.71	672.86	66.91	672.91
68.21	672.94	68.75	672.98	69.67	673.03	73.61	673.1	75.46	673.15
77.06	673.15	77.59	673.19	79.68	673.77	79.82	673.82	82.66	674.13
83.03	674.11	85.35	673.81	87.76	674.22	88.24	674.32	92.9	674.07
94.69	674.43	95.03	674.48	97.13	674.41	98.1	674.41	98.56	674.4
99.53	674.51	100.81	674.51	106.31	674.63	108.18	674.66	109.38	674.65
111.41	674.71	112.97	674.72	114.21	674.62	116.65	674.3	117.72	674.21
124.18	674.08	124.89	674.64	125.03	674.61	126.97	675.2	127.67	675.18
130.97	675.19	132.05	675.2	136.27	675.03	137.03	675.05	141.13	675.04

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  142.67  675.07  143.13  675.12  145.42   675.2  149.49  675.23  149.57  675.21
  149.83  675.21  155.85  675.17  158.09  677.21  159.13  677.38  159.15  677.38
  161.81  677.46  162.73  677.48  164.52  677.49   165.2   677.5  166.49  677.49
  167.01  677.67  167.02  678.15

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   27.23    .045  132.05    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         11.66  158.09             9.01   7.377   4.267            .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           676.06    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.61    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.45    Reach Len. (m)            9.01      7.38       4.27
  Crit W.S. (m)           675.49    Flow Area (m2)                    138.88
  E.G. Slope (m/m)      0.019276    Area (m2)                         138.88
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           127.75    Top Width (m)                     127.75
  Vel Total (m/s)           3.46    Avg. Vel. (m/s)                     3.46
  Max Chl Dpth (m)          2.59    Hydr. Depth (m)                     1.09
  Conv. Total (m3/s)      3457.3    Conv. (m3/s)                      3457.3
  Length Wtd. (m)           7.38    Wetted Per. (m)                   129.11
  Min Ch El (m)           672.86    Shear (N/m2)                      203.34
  Alpha                     1.00    Stream Power (N/m s)              702.78
  Frctn Loss (m)            0.13    Cum Volume (1000 m3)               32.52
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   25.56


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 13.333*

INPUT
Description:
Station Elevation Data    num=      83
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  677.13     .54  677.13    4.04  677.13    4.87  677.11    8.25  676.26
   13.91  676.22   15.64     676   22.45  675.76   22.61  675.76   28.83  675.83
   31.74  673.79   33.87  673.76   37.54  674.24   41.22  674.33   43.15  674.38
   47.33   674.5   47.95  674.51   53.54  674.52   53.72  674.52   58.57  674.52
   59.67  673.81   62.25  673.28   64.63  673.03   66.12  672.78   69.57  672.85
   70.97  672.89   71.54  672.92   72.53  672.96   76.77  673.01   78.77  673.08
   80.49  673.11   81.06  673.13   83.31   674.1   83.47  674.16   86.52  674.42
   86.92  674.43   89.41  674.08   92.01  674.03   92.52  674.11   97.55  673.86
   99.29   674.2   99.63  674.24  101.69  674.26  102.64  674.28  103.08  674.27
  104.03  674.31  105.29   674.3  110.68  674.53  112.51  674.53  113.68   674.5
  115.66  674.61   117.2  674.62  118.41  674.53  120.79  674.21  121.84  674.15
  128.17  674.04  128.75  674.46  128.86  674.43  130.43  675.17  131.13  675.15
  134.43  675.09  135.51   675.1  139.72  675.02  140.48     675  144.59  674.94
  146.13  675.01  146.59  675.05  148.87  675.15  152.94  675.15  153.02  675.14
  153.28  675.13  159.29  675.11   161.8  677.14  162.82  677.34  162.84  677.34
  165.48  677.42  166.38  677.44  168.15  677.44  168.82  677.46   170.1  677.47
   170.6  677.57   170.6  677.59  170.61  678.13

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   28.83    .045  131.13    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         13.91   161.8             9.01   7.377   4.267            .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           675.94    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.57    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.37    Reach Len. (m)            9.01      7.38       4.27
  Crit W.S. (m)           675.38    Flow Area (m2)                    143.89
  E.G. Slope (m/m)      0.016966    Area (m2)                         143.89
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           130.12    Top Width (m)                     130.12
  Vel Total (m/s)           3.34    Avg. Vel. (m/s)                     3.34
  Max Chl Dpth (m)          2.59    Hydr. Depth (m)                     1.11
  Conv. Total (m3/s)      3685.1    Conv. (m3/s)                      3685.1
  Length Wtd. (m)           7.38    Wetted Per. (m)                   131.68
  Min Ch El (m)           672.78    Shear (N/m2)                      181.80
  Alpha                     1.00    Stream Power (N/m s)              606.48
  Frctn Loss (m)            0.12    Cum Volume (1000 m3)               31.47
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C & E Loss (m)	0.00	Cum SA (1000 m2)	24.61

Warning: The energy equation could not be balanced within the specified number of iterations. The program selected the water surface that had the least amount of error between computed and assumed values.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 13

INPUT
Description: sezione 13
Station Elevation Data num= 47

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.89	4.53	676.91	7.67	675.77	16.16	675.71	24.48	675.4
30.43	675.6	32.28	673.53	35.48	673.43	39.11	674.16	44.66	674.32
49.42	674.46	55.13	674.41	59.93	674.37	61.18	673.54	66.83	673.09
68.53	672.69	72.22	672.78	74.34	672.87	79.94	672.92	82.08	673.01
84.53	673.08	87.11	674.51	90.81	674.74	96.26	673.93	102.19	673.65
103.9	673.97	107.17	674.15	109.77	674.09	115.04	674.49	117.98	674.35
119.92	674.52	122.61	674.54	124.94	674.12	132.16	673.99	133.89	675.14
137.89	675	143.18	674.97	148.04	674.85	152.32	675.11	156.73	675.06
162.74	675.05	165.51	677.07	166.54	677.3	169.14	677.39	171.78	677.4
174.2	677.47	174.21	678.12						

Manning's n values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	30.43	.045	133.89	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
16.16	165.51	6.95	6.703	6.78	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	675.82	Element			
Vel Head (m)	0.55	Wt. n-Val.		0.045	
W.S. Elev (m)	675.26	Reach Len. (m)	6.95	6.70	6.78
Crit W.S. (m)	675.27	Flow Area (m2)		145.77	
E.G. Slope (m/m)	0.016395	Area (m2)		145.77	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	132.30	Top Width (m)		132.30	
Vel Total (m/s)	3.29	Avg. Vel. (m/s)		3.29	
Max Chl Dpth (m)	2.57	Hydr. Depth (m)		1.10	
Conv. Total (m3/s)	3748.8	Conv. (m3/s)		3748.8	
Length Wtd. (m)	6.70	Wetted Per. (m)		134.44	
Min Ch El (m)	672.69	Shear (N/m2)		174.32	
Alpha	1.00	Stream Power (N/m s)		574.01	
Frctn Loss (m)	0.12	Cum Volume (1000 m3)		30.41	
C & E Loss (m)	0.00	Cum SA (1000 m2)		23.64	

Warning: The energy equation could not be balanced within the specified number of iterations. The program selected the water surface that had the least amount of error between computed and assumed values.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 12.667*

INPUT
Description:
Station Elevation Data num= 73

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.78	4.67	676.77	5.73	676.37	9.54	675.92	12.68	675.6
13.19	675.4	21.57	675.63	27.11	675.42	31.08	675.56	34.96	674.29
35.83	673.42	39.5	673.45	42.37	674.11	47.24	674.26	47.79	674.27
51.42	674.32	56.43	674.25	60.64	674.19	61.91	673.39	66.04	673.16
69	672.95	71.13	672.63	73.79	672.69	74.37	672.7	76.22	672.78
80.27	672.83	81.14	672.84	83.01	672.91	85.16	672.96	87.95	673.85
89.13	674.39	91.6	674.54	96.18	674.14	97.69	673.99	101.43	673.83
104.31	673.61	106.01	673.89	107.18	673.93	109.26	674	109.84	673.97
111.84	673.94	113.77	674.03	117.08	674.24	118.82	674.21	120.01	674.19
121.94	674.33	124.61	674.38	126.89	674.07	131.5	673.96	133.96	673.76
135.97	674.69	136.95	674.76	137.42	674.93	141.22	674.88	145.78	674.85
146.25	674.84	150.88	674.74	154.99	674.93	156.57	674.92	159.23	674.9
160.45	674.9	165.01	674.93	167.61	676.93	168.62	677.15	168.81	677.16
171.16	677.22	171.28	677.22	173.75	677.21	173.84	677.22	174.92	677.24
176.12	677.37	176.12	677.38	176.13	678.03				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val

```
       0    .055   35.83    .045  136.95    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         21.57  167.61             6.95   6.703    6.78           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           675.70    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.59    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.11    Reach Len. (m)            6.95      6.70      6.78
  Crit W.S. (m)           675.15    Flow Area (m2)                    141.21
  E.G. Slope (m/m)      0.018029    Area (m2)                         141.21
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           132.78    Top Width (m)                     132.78
  Vel Total (m/s)           3.40    Avg. Vel. (m/s)                     3.40
  Max Chl Dpth (m)          2.48    Hydr. Depth (m)                     1.06
  Conv. Total (m3/s)      3574.8    Conv. (m3/s)                      3574.8
  Length Wtd. (m)           6.70    Wetted Per. (m)                   134.32
  Min Ch El (m)           672.63    Shear (N/m2)                      185.87
  Alpha                     1.00    Stream Power (N/m s)              631.82
  Frctn Loss (m)            0.12    Cum Volume (1000 m3)               29.44
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   22.75


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 12.333*

INPUT
Description:
Station Elevation Data    num=      73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  676.66    4.81  676.63    6.54  675.93   12.76  675.58   17.88  675.36
    18.7  675.02   26.97  675.55   29.75  675.45   31.73  675.51   37.99  674.66
   39.39   673.3   43.52  673.43   45.62  674.06   49.82  674.19   50.29  674.21
   53.41  674.19   57.72  674.09   61.35     674   62.64  673.24    67.6  673.03
   71.16  672.81   73.73  672.56   76.01  672.61   76.51  672.63   78.11  672.69
   81.58  672.76   82.33  672.76   83.94   672.3   85.79  672.83   89.55  673.61
   91.16  674.27   92.39  674.35   97.45  674.16   99.11  674.05  103.24  673.89
  106.42  673.58  108.11  673.81  109.28  673.92  111.35  673.85  111.93  673.81
  113.92  673.78  115.83  673.82  119.13     674  120.86  674.02  122.03  674.03
  123.95  674.14  126.61  674.21  128.84  674.02  133.35  673.89  135.77  673.52
  138.04  674.24     140  674.38  140.94  674.82  144.55  674.75  148.88  674.72
  149.33  674.71  153.71  674.62  157.67  674.75  159.18  674.76  161.74  674.74
   162.9  674.74  167.29  674.81   169.7  676.88  170.69     677  170.88  677.01
  173.18  677.05   173.3  677.05  175.71  677.03  175.81  677.03  176.86  677.04
  178.03  677.27  178.03   677.3  178.04  677.93

Manning's n Values        num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   26.97    .045     140    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         26.97   169.7              6.95   6.703    6.78           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           675.58    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.57    Wt. n-Val.                        0.045
  W.S. Elev (m)           675.00    Reach Len. (m)            6.95      6.70      6.78
  Crit W.S. (m)           675.03    Flow Area (m2)                    143.10
  E.G. Slope (m/m)      0.017694    Area (m2)                         143.10
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           132.06    Top Width (m)                     132.06
  Vel Total (m/s)           3.35    Avg. Vel. (m/s)                     3.35
  Max Chl Dpth (m)          2.44    Hydr. Depth (m)                     1.08
  Conv. Total (m3/s)      3608.5    Conv. (m3/s)                      3608.5
  Length Wtd. (m)           6.70    Wetted Per. (m)                   133.57
  Min Ch El (m)           672.56    Shear (N/m2)                      185.90
  Alpha                     1.00    Stream Power (N/m s)              623.55
  Frctn Loss (m)            0.12    Cum Volume (1000 m3)               28.49
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   21.87


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 12

INPUT
Description: sezione 12
```

Station Elevation Data num= 46

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.55	4.95	676.49	7.35	675.53	15.97	675.24	23.08	675.12
24.22	674.65	32.38	675.47	41.01	675.04	42.94	673.19	47.54	673.4
48.88	674.01	52.79	674.14	62.06	673.82	63.37	673.09	69.17	672.91
76.33	672.5	78.24	672.54	82.9	672.63	86.42	672.71	91.16	673.37
93.18	674.15	98.72	674.17	105.06	673.95	108.54	673.54	111.38	673.87
114.01	673.65	117.89	673.61	122.89	673.82	128.61	674.05	135.21	673.81
137.57	673.29	140.12	673.79	143.06	674	144.47	674.66	151.98	674.59
156.55	674.51	161.79	674.59	165.36	674.53	169.56	674.69	171.8	676.79
172.95	676.86	175.32	676.88	177.77	676.84	178.8	676.84	179.95	677.17
179.96	677.84								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	32.38	.045	144.47	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
32.38	171.8	7.24	6.883	.01	.03

Left Levee Station= 32.38 Elevation= 675.47

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	675.46	Element			
Vel Head (m)	0.61	Wt. n-Val.		0.045	
W.S. Elev (m)	674.85	Reach Len. (m)	7.24	6.88	6.78
Crit W.S. (m)	674.90	Flow Area (m2)		139.18	
E.G. Slope (m/m)	0.018812	Area (m2)		139.18	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	128.52	Top Width (m)		128.52	
Vel Total (m/s)	3.45	Avg. Vel. (m/s)		3.45	
Max Chl Dpth (m)	2.35	Hydr. Depth (m)		1.08	
Conv. Total (m3/s)	3499.6	Conv. (m3/s)		3499.6	
Length Wtd. (m)	6.88	Wetted Per. (m)		130.12	
Min Ch El (m)	672.50	Shear (N/m2)		197.33	
Alpha	1.00	Stream Power (N/m s)		680.52	
Frctn Loss (m)	0.15	Cum Volume (1000 m3)		27.54	
C & E Loss (m)	0.00	Cum SA (1000 m2)		20.99	

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, energy was used.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 11.667*

INPUT
Description:
Station Elevation Data num= 80

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.49	.47	676.49	2.84	676.43	6.72	676.37	8.53	675.67
15.04	675.11	21.11	675.19	24.35	675.12	24.63	675.05	25.84	674.58
30.47	674.81	38.23	675.17	43.98	674.83	45.77	672.93	47.81	673.27
50.16	673.39	51.44	673.82	53.92	673.92	55.16	673.94	56.78	673.88
59.93	673.52	64.01	673.48	65.11	673.07	65.26	673.01	70.79	672.7
71.32	672.66	72.84	672.61	75	672.47	76.22	672.36	77.62	672.29
79.58	672.33	81.9	672.39	84.01	672.45	84.37	672.48	87.99	672.71
88.11	672.72	90.88	673.1	92.86	673.23	93.15	673.35	94.94	674.06
101.09	674.01	101.92	673.98	107.77	673.3	108.14	673.77	112.01	673.29
116.31	673.7	118.33	673.49	121.31	673.36	122.15	673.36	124.3	673.53
126.33	673.57	128.57	673.62	131.11	673.77	131.63	673.77	136.62	673.49
138.59	673.09	141.15	673.59	143.61	673.83	144.1	673.92	145.52	674.43
151.78	674.41	155.59	674.37	158.34	674.47	161.71	674.49	162.63	674.49
165.88	674.42	168.02	674.5	171.26	674.59	173.54	676.68	174.32	676.75
174.67	676.77	176.87	676.8	176.98	676.3	179.16	676.76	179.37	676.76
180.37	676.76	180.41	676.77	181.49	677.12	181.49	677.13	181.5	677.75

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	38.23	.045	151.78	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
38.23	173.54	7.24	6.883	.01	.03

Left Levee Station= 38.23 Elevation= 675.17

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	675.31	Element			
Vel Head (m)	0.70	Wt. n-Val.		0.045	

W.S. Elev (m)	674.61	Reach Len. (m)	7.24	6.88	6.78
Crit W.S. (m)	674.73	Flow Area (m2)		129.67	
E.G. Slope (m/m)	0.023532	Area (m2)		129.67	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	127.05	Top Width (m)		127.05	
Vel Total (m/s)	3.70	Avg. Vel. (m/s)		3.70	
Max Chl Dpth (m)	2.32	Hydr. Depth (m)		1.02	
Conv. Total (m3/s)	3129.1	Conv. (m3/s)		3129.1	
Length Wtd. (m)	6.88	Wetted Per. (m)		128.51	
Min Ch El (m)	672.29	Shear (N/m2)		232.85	
Alpha	1.00	Stream Power (N/m s)		861.92	
Frctn Loss (m)	0.16	Cum Volume (1000 m3)		26.62	
C & E Loss (m)	0.00	Cum SA (1000 m2)		20.11	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 11.333*

INPUT
Description:
Station Elevation Data num= 80

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.44	.6	676.44	3.58	676.43	8.48	676.25	9.71	675.76
14.1	674.99	21.61	675.21	25.61	675.11	25.97	675.08	27.46	674.5
33.67	674.67	44.08	674.86	46.96	674.72	48.6	672.68	50.54	673.26
52.77	673.38	53.99	673.63	56.35	673.75	57.54	673.73	59.07	673.67
62.08	673.07	65.95	673.15	67.01	672.96	67.14	672.93	72.41	672.49
72.91	672.44	74.36	672.43	76.42	672.29	77.58	672.14	78.9	672.09
80.92	672.12	83.31	672.17	85.47	672.23	85.84	672.27	89.56	672.7
89.68	672.72	92.52	673.11	94.56	673.19	94.86	673.22	96.69	673.97
103.47	673.84	104.37	673.81	110.81	673.63	111.22	673.59	115.47	673.03
121.23	673.54	122.64	673.32	124.72	673.1	126.42	673.12	128.14	673.35
129.77	673.33	131.57	673.31	133.61	673.5	134.02	673.52	138.03	673.17
139.62	672.88	142.19	673.4	144.66	673.79	145.15	673.85	146.57	674.2
151.58	674.23	154.62	674.24	157.77	674.4	161.62	674.39	162.68	674.38
166.39	674.25	169.01	674.37	172.96	674.5	175.29	676.57	176.05	676.67
176.38	676.68	178.53	676.71	178.63	676.71	180.76	676.67	180.96	676.68
181.94	676.69	181.98	676.69	183.04	677.06	183.04	677.09	183.05	677.66

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	44.08	.045	151.58	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
44.08	175.29	7.24	6.883	6.783	.01	.03

Left Levee Station= 44.08 Elevation= 674.86

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	675.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.70	Wt. n-Val.		0.045	
W.S. Elev (m)	674.45	Reach Len. (m)	7.24	6.88	6.78
Crit W.S. (m)	674.56	Flow Area (m2)		129.88	
E.G. Slope (m/m)	0.022298	Area (m2)		129.88	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	124.40	Top Width (m)		124.40	
Vel Total (m/s)	3.70	Avg. Vel. (m/s)		3.70	
Max Chl Dpth (m)	2.36	Hydr. Depth (m)		1.04	
Conv. Total (m3/s)	3214.5	Conv. (m3/s)		3214.5	
Length Wtd. (m)	6.88	Wetted Per. (m)		125.99	
Min Ch El (m)	672.09	Shear (N/m2)		225.41	
Alpha	1.00	Stream Power (N/m s)		833.06	
Frctn Loss (m)	0.09	Cum Volume (1000 m3)		25.73	
C & E Loss (m)	0.00	Cum SA (1000 m2)		19.25	

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, energy was used.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 11

INPUT
Description: sezione 11
Station Elevation Data num= 52

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.38	.72	676.38	4.33	676.39	10.25	676.13	13.17	674.86
22.11	675.24	27.3	675.1	29.08	674.43	36.87	674.52	49.93	674.62

```
   51.43  672.42   53.27  673.24   58.79  673.53   61.37  673.47   64.22  672.62
    68.9  672.86    74.5  672.22   75.88  672.25   77.83   672.1   78.93  671.92
   80.19  671.88   84.71  671.95   86.93  672.01   91.25  672.72   94.17  673.11
   96.57  673.09   98.45  673.88  106.83  673.65  113.85  673.47  118.94  672.78
  126.16  673.37  128.14  672.85  130.68  672.87  131.98  673.16  134.57     673
  136.42  673.27  140.64  672.68   145.7   673.7  147.62  673.97  153.66   674.1
   157.2  674.32  162.73  674.28  166.91  674.09     170  674.24  174.66   674.4
  177.03  676.46  177.77  676.58  180.19  676.63  182.36  676.59  183.55  676.61
  184.58  677.01  184.59  677.57

Manning's n Values         num=       3
     Sta   n Val      Sta   n Val      Sta   n Val
       0    .055    49.93    .045   157.2    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         49.93  177.03             5.773    6.56   7.817           .1       .3
Left Levee       Station=   49.93       Elevation=  674.62

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           675.02    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.42    Wt. n-Val.                        0.045
  W.S. Elev (m)           674.60    Reach Len. (m)            5.77      6.56       7.82
  Crit W.S. (m)           674.42    Flow Area (m2)                    166.66
  E.G. Slope (m/m)      0.010596    Area (m2)                         166.66
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           124.95    Top Width (m)                     124.95
  Vel Total (m/s)           2.88    Avg. Vel. (m/s)                     2.88
  Max Chl Dpth (m)          2.72    Hydr. Depth (m)                     1.33
  Conv. Total (m3/s)      4663.1    Conv. (m3/s)                      4663.1
  Length Wtd. (m)           6.56    Wetted Per. (m)                   127.18
  Min Ch El (m)           671.88    Shear (N/m2)                      136.17
  Alpha                     1.00    Stream Power (N/m s)              392.18
  Frctn Loss (m)            0.07    Cum Volume (1000 m3)               24.71
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   18.39

Note:    Hydraulic jump has occurred between this cross section and the previous upstream section.


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 10.667*

INPUT
Description:
Station Elevation Data    num=      79
     Sta    Elev      Sta    Elev      Sta    Elev      Sta    Elev      Sta    Elev
       0  676.35      .77  676.36     1.28  676.36     4.22  676.36     4.61  676.36
   10.91  676.15    14.67  674.79    24.28  675.15    27.74  675.06    29.67  674.42
   30.41  674.36    38.09  674.38    38.25  674.38    45.09  674.47    52.21  674.53
   53.21  673.11    54.43  673.65    58.11  673.83    61.22  673.25    61.61  673.11
   64.64  672.51    65.17  672.51    70.27  672.82    72.42  672.41    75.96  672.02
   76.48  672.01    77.36  671.96    77.89   671.9    79.34  671.82    80.46   671.7
   81.74  671.67    83.94   671.8    85.68  671.85    87.61  671.93    88.21  672.01
   91.37  672.52    93.86  672.87    93.92  672.83    95.51  672.97    96.01  673.02
   97.64  673.73   104.22  673.61   109.73  673.52   112.45  673.25   117.78  672.87
  124.26  673.11   126.44  673.11   128.82  672.66   131.34   672.6   132.47  672.83
  134.71   672.8   135.12  672.86   136.31  672.99   139.97  672.61   144.48  673.42
  145.25  673.61   146.11  673.79   147.25  673.93   147.97  673.97   153.55  674.08
  154.35  674.12   157.25  674.24   158.88  674.24   163.02  674.22   163.87  674.19
  167.38  674.07   169.89  674.13   170.61  674.15   175.47  674.23      178  676.41
  178.73  676.49   180.84  676.52   181.11  676.52   183.25  676.48   183.63  676.48
  184.43   676.5   184.54  676.53   185.44  676.83   185.45  677.41

Manning's n Values         num=       3
     Sta   n Val      Sta   n Val      Sta   n Val
       0    .055    52.21    .045   158.88    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         52.21     178             5.773    6.56   7.817           .1       .3
Left Levee       Station=   52.21       Elevation=  674.53

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           674.95    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.46    Wt. n-Val.                        0.045
  W.S. Elev (m)           674.49    Reach Len. (m)            5.77      6.56       7.82
  Crit W.S. (m)           674.34    Flow Area (m2)                    160.54
  E.G. Slope (m/m)      0.011731    Area (m2)                         160.54
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
```

Top Width (m)	123.54	Top Width (m)	123.54
Vel Total (m/s)	2.99	Avg. Vel. (m/s)	2.99
Max Chl Dpth (m)	2.82	Hydr. Depth (m)	1.30
Conv. Total (m3/s)	4431.6	Conv. (m3/s)	4431.6
Length Wtd. (m)	6.56	Wetted Per. (m)	125.19
Min Ch El (m)	671.67	Shear (N/m2)	147.53
Alpha	1.00	Stream Power (N/m s)	441.08
Frctn Loss (m)	0.08	Cum Volume (1000 m3)	23.63
C & E Loss (m)	0.00	Cum SA (1000 m2)	17.57

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 10.333*

INPUT
Description:
Station Elevation Data num= 80

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.31	.81	676.33	1.35	676.35	4.48	676.33	4.88	676.33
11.56	676.18	16.16	674.71	26.46	675.07	28.19	675.02	30.26	674.42
31.06	674.27	39.31	674.25	39.48	674.25	46.84	674.41	54.48	674.51
54.98	673.79	55.6	674.07	57.44	674.13	61.06	673.02	61.52	672.85
65.07	672.41	65.68	672.38	71.64	672.73	73.83	672.21	77.42	671.83
77.95	671.8	78.84	671.67	79.38	671.53	80.85	671.54	81.99	671.48
83.29	671.47	85.17	671.69	86.64	671.76	88.29	671.84	88.8	671.9
91.5	672.33	93.62	672.63	93.66	672.64	95.02	672.84	95.44	672.95
96.84	673.59	101.61	673.57	105.6	673.56	109.32	673.27	116.62	672.95
124.18	673	126.72	672.85	129.49	672.46	132	672.33	132.95	672.5
134.85	672.59	135.19	672.64	136.2	672.72	139.29	672.54	143.99	673.28
144.79	673.52	145.7	673.77	146.88	673.9	147.63	673.95	153.45	674.06
154.28	674.08	157.3	674.17	158.99	674.13	163.31	674.16	164.19	674.14
167.85	674.05	170.46	674.06	171.21	674.06	176.28	674.06	178.96	676.36
179.68	676.4	181.76	676.41	182.04	676.41	184.15	676.37	184.52	676.37
185.31	676.39	185.41	676.4	186.31	676.75	186.31	676.76	186.32	677.24

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	54.48	.045	163.31	.055

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
54.48 178.96 5.773 6.56 7.817 .1 .3
Left Levee Station= 54.48 Elevation= 674.51

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	674.86	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.045	
W.S. Elev (m)	674.37	Reach Len. (m)	5.77	6.56	7.82
Crit W.S. (m)	674.27	Flow Area (m2)		154.08	
E.G. Slope (m/m)	0.013427	Area (m2)		154.08	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	122.06	Top Width (m)		122.06	
Vel Total (m/s)	3.12	Avg. Vel. (m/s)		3.12	
Max Chl Dpth (m)	2.90	Hydr. Depth (m)		1.26	
Conv. Total (m3/s)	4142.4	Conv. (m3/s)		4142.4	
Length Wtd. (m)	6.56	Wetted Per. (m)		123.37	
Min Ch El (m)	671.47	Shear (N/m2)		164.45	
Alpha	1.00	Stream Power (N/m s)		512.30	
Frctn Loss (m)	0.09	Cum Volume (1000 m3)		22.60	
C & E Loss (m)	0.01	Cum SA (1000 m2)		16.77	

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, energy was used.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 10

INPUT
Description: sezione 10
Station Elevation Data num= 44

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.28	1.43	676.33	4.73	676.3	12.22	676.2	17.66	674.64
28.63	674.98	31.7	674.19	40.71	674.11	48.58	674.34	56.76	674.48
61.43	672.59	66.19	672.25	73.01	672.74	75.23	672	79.42	671.58
80.87	671.27	84.84	671.26	86.39	671.57	89.39	671.79	93.37	672.4
94.53	672.71	96.03	673.44	101.48	673.61	106.2	673.29	115.46	673.04
124.1	672.89	130.17	672.27	132.66	672.06	135.27	672.43	138.62	672.47

```
  143.51  673.15  145.28  673.74  147.29  673.94  154.21  674.05  159.11  674.11
  164.52  674.09  171.04  673.98  177.09  673.89  179.93  676.31  182.69  676.31
  185.41  676.26  186.29  676.28  187.17  676.62  187.18  677.08

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   56.76    .045  147.29    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          56.76  179.93           7.103    7.12   6.773            .1       .3
Left Levee      Station=   56.76      Elevation=  674.48

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           674.76    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.58    Wt. n-Val.                        0.045
  W.S. Elev (m)           674.18    Reach Len. (m)            7.10       7.12       6.77
  Crit W.S. (m)           674.18    Flow Area (m2)                     141.88
  E.G. Slope (m/m)      0.014115    Area (m2)                          141.88
  Q Total (m3/s)          480.00    Flow (m3/s)                        480.00
  Top Width (m)           119.92    Top Width (m)                      119.92
  Vel Total (m/s)           3.38    Avg. Vel. (m/s)                      3.38
  Max Chl Dpth (m)          2.92    Hydr. Depth (m)                      1.18
  Conv. Total (m3/s)      4040.2    Conv. (m3/s)                       4040.2
  Length Wtd. (m)           7.12    Wetted Per. (m)                    121.08
  Min Ch El (m)           671.26    Shear (N/m2)                       162.20
  Alpha                     1.00    Stream Power (N/m s)               548.76
  Frctn Loss (m)            0.11    Cum Volume (1000 m3)                21.63
  C & E Loss (m)            0.01    Cum SA (1000 m2)                    15.97


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 9.6667*

INPUT
Description:
Station Elevation Data    num=      92
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  676.36     1.4  676.12    3.07  675.79    4.62  675.78   11.31  675.75
   11.94  675.74   14.17  675.31   17.26  674.72   25.14   674.9    25.5  674.86
   27.48  674.49   27.97   674.5   30.97  673.97   38.05  673.92   39.78  673.93
   47.47  674.21   47.76  674.22   55.46  674.37    56.5  674.06   60.12  672.84
   60.35  672.81   64.88  672.63   66.58  672.73   69.03   672.2   71.68   672.4
   73.58  672.03    73.9  671.94   78.09  671.49   79.26  671.28   79.53  671.24
   82.31  671.25    83.5  671.16   85.07  671.38   85.15  671.39   85.67  671.43
    87.7  671.59   88.11   671.6   88.57  671.63   91.74  672.16   92.14  672.29
   93.01  672.64   93.32  672.69   94.84  673.17   98.83  673.23  100.36  673.25
  103.96  673.07  105.15  673.02  109.72  672.97  114.53  672.92  114.95  672.92
  121.39  672.78  123.29  672.76  128.53  672.42  129.44  672.31  131.69  672.05
  131.97  672.04  134.61   672.3  136.18  672.32  138.01  672.35  140.62  672.61
  142.97  672.89  144.76  673.33  144.96  673.35   146.8  673.53   149.2  673.62
  150.18  673.77   150.6  673.82  153.81  673.83  154.09  673.89  158.78  673.98
  159.32     674  159.87  674.05  163.88     674  164.26  673.98  169.61  673.91
  170.19  673.89  170.87  673.88  174.55  673.82     177  673.82  177.84  674.29
  179.88  676.14  180.56  676.22  181.19  676.23  182.66  676.22  182.84  676.21
  185.31  676.17   185.4  676.16   185.6  676.15   186.2  676.19  186.28   676.2
  187.17  676.52  187.18  676.99

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   55.46    .045   149.2    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          55.46  179.88           7.103    7.12   6.773            .01      .03
Left Levee      Station=   55.46      Elevation=674.3733
Right Levee     Station=  159.87      Elevation=  674.05

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           674.64    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.66    Wt. n-Val.                        0.045
  W.S. Elev (m)           673.98    Reach Len. (m)            7.10       7.12       6.77
  Crit W.S. (m)           674.00    Flow Area (m2)                     133.21
  E.G. Slope (m/m)      0.016725    Area (m2)                          133.21
  Q Total (m3/s)          480.00    Flow (m3/s)                        480.00
  Top Width (m)           102.11    Top Width (m)                      102.11
  Vel Total (m/s)           3.60    Avg. Vel. (m/s)                      3.60
  Max Chl Dpth (m)          2.82    Hydr. Depth (m)                      1.30
```

Conv. Total (m3/s)	3711.6	Conv. (m3/s)	3711.6
Length Wtd. (m)	7.12	Wetted Per. (m)	102.87
Min Ch El (m)	671.16	Shear (N/m2)	212.39
Alpha	1.00	Stream Power (N/m s)	765.30
Frctn Loss (m)	0.13	Cum Volume (1000 m3)	20.65
C & E Loss (m)	0.00	Cum SA (1000 m2)	15.18

Note: Program found supercritical flow starting at this cross section.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 9.3333*

INPUT
Description:
Station Elevation Data num= 92

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.43	1.36	675.91	3	675.26	4.51	675.27	11.05	675.28
11.66	675.28	13.84	675.07	16.85	674.79	24.55	674.92	24.9	674.82
26.83	674.02	27.32	674.03	30.25	673.75	37.16	673.71	38.85	673.76
46.35	674.08	46.64	674.1	54.16	674.27	55.2	674.07	58.82	673.08
59.04	673.04	63.56	673.01	65.27	673.03	67.71	671.85	70.36	672.05
72.25	671.94	72.57	671.88	76.75	671.4	77.93	671.22	78.2	671.21
80.97	671.23	82.15	671.07	83.75	671.2	83.83	671.2	84.35	671.24
86.42	671.41	86.83	671.4	87.3	671.41	90.5	671.98	90.92	672.19
91.8	672.66	92.11	672.68	93.65	672.9	97.7	672.89	99.25	672.89
102.89	672.76	104.1	672.75	108.73	672.73	113.61	672.79	114.03	672.8
120.55	672.64	122.48	672.64	127.79	672.43	128.72	672.34	130.99	672.01
131.28	672.01	133.96	672.17	135.54	672.2	137.4	672.23	140.04	672.38
142.42	672.63	144.24	672.93	144.45	672.95	146.31	673.11	148.74	673.27
149.74	673.55	150.16	673.65	153.42	673.71	153.69	673.72	158.45	673.85
158.99	673.86	159.56	673.9	163.62	673.95	164.01	673.87	169.42	673.82
170.02	673.79	170.7	673.78	174.43	673.72	176.92	673.74	177.76	673.99
179.84	675.96	180.51	676.13	181.15	676.16	182.63	676.13	182.81	676.12
185.29	676.08	185.38	676.07	185.58	676.04	186.19	676.11	186.27	676.12
187.16	676.42	187.17	676.89						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	54.16	.045	150.16	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
54.16	179.84	7.103	7.12	6.773	.01	.03

Left Levee Station= 54.16 Elevation=674.2667
Right Levee Station= 163.62 Elevation= 673.95

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	674.51	Element	Left OB	Channel	Right OB
Vel Head (m)	0.75	Wt. n-Val.		0.045	
W.S. Elev (m)	673.76	Reach Len. (m)	7.10	7.12	6.77
Crit W.S. (m)	673.86	Flow Area (m2)		125.15	
E.G. Slope (m/m)	0.020694	Area (m2)		125.15	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	98.83	Top Width (m)		98.83	
Vel Total (m/s)	3.84	Avg. Vel. (m/s)		3.84	
Max Chl Dpth (m)	2.69	Hydr. Depth (m)		1.27	
Conv. Total (m3/s)	3336.7	Conv. (m3/s)		3336.7	
Length Wtd. (m)	7.12	Wetted Per. (m)		99.68	
Min Ch El (m)	671.07	Shear (N/m2)		254.77	
Alpha	1.00	Stream Power (N/m s)		977.16	
Frctn Loss (m)	0.14	Cum Volume (1000 m3)		19.73	
C & E Loss (m)	0.00	Cum SA (1000 m2)		14.47	

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, energy was used.

CROSS SECTION

RIVER: fiume Fella
REACH: fiume Fella RS: 9

INPUT
Description: sezione 9
Station Elevation Data num= 54

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.51	2.93	674.74	10.78	674.82	13.51	674.84	23.96	674.93

24.3	674.78	26.19	673.55	36.27	673.5	45.52	673.97	52.86	674.16
53.9	674.07	57.73	673.28	63.95	673.44	66.39	671.5	70.92	671.86
76.59	671.17	79.63	671.21	80.81	670.97	82.51	671.01	83.04	671.05
85.13	671.24	86.02	671.18	89.27	671.3	90.58	672.67	96.56	672.56
101.82	672.46	107.74	672.58	113.11	672.63	119.72	672.5	127.05	672.54
130.3	671.98	134.91	672.07	139.47	672.16	143.93	672.54	148.28	672.91
149.29	673.33	149.72	673.47	153.3	673.55	158.67	673.74	159.24	673.64
163.36	673.76	169.24	673.73	169.84	673.69	174.31	673.62	177.69	673.69
179.79	675.79	180.47	676.04	181.11	676.03	182.78	676.03	185.28	675.99
185.57	675.93	186.18	676.02	187.16	676.32	187.17	676.8		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	63.95	.045	149.72	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
52.86	179.79	8.7	8.485	12.375	.01 .03

Left Levee Station= 52.86 Elevation= 674.16

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	674.37	Element			
Vel Head (m)	0.75	Wt. n-Val.		0.045	
W.S. Elev (m)	673.61	Reach Len. (m)	8.70	8.49	12.37
Crit W.S. (m)	673.78	Flow Area (m2)		124.87	
E.G. Slope (m/m)	0.019503	Area (m2)		124.87	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	98.98	Top Width (m)		98.98	
Vel Total (m/s)	3.84	Avg. Vel. (m/s)		3.84	
Max Chl Dpth (m)	2.64	Hydr. Depth (m)		1.26	
Conv. Total (m3/s)	3437.1	Conv. (m3/s)		3437.1	
Length Wtd. (m)	8.49	Wetted Per. (m)		100.31	
Min Ch El (m)	670.97	Shear (N/m2)		238.09	
Alpha	1.00	Stream Power (N/m s)		915.21	
Frctn Loss (m)	0.16	Cum Volume (1000 m3)		18.84	
C & E Loss (m)	0.00	Cum SA (1000 m2)		13.76	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 8.5000*

INPUT
Description:
Station Elevation Data num= 93

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.72	2.78	675.1	3.55	674.89	10.22	674.83	12.81	674.81
13.35	674.8	20.36	674.78	22.72	674.77	23.05	674.69	24.84	674.06
26.56	674.05	29.36	673.39	34.4	673.37	35.3	673.39	40.29	673.62
43.17	673.77	50.13	674.02	51.33	673.63	52.18	673.39	55.75	673.13
57.99	673.19	59.38	672.9	61.01	673.03	62.93	673.1	65.74	672.19
65.84	672.2	67.47	672.25	69.5	672.31	70.11	671.65	70.97	671.67
73.5	671.52	77.09	671.18	77.52	671.15	79.43	671.09	81.02	671.09
82.38	670.96	84.07	671.03	84.59	671.06	85.5	671.13	86.66	671.24
87.54	671.25	88.72	671.43	90.76	671.97	91.23	672.2	92.05	672.48
96.88	672.45	97.97	672.44	101.33	672.42	103.17	672.39	107.47	672.41
109.03	672.42	112.22	672.43	114.34	672.47	118.91	672.45	120.88	672.44
126.06	672.5	128.13	672.37	131.25	671.89	131.35	671.88	135.91	671.99
136	672	140.42	672.06	141.99	672.14	144.84	672.35	148.32	672.62
149.14	672.66	150.14	672.88	150.56	672.95	153.77	673	153.99	673.04
154.11	673.06	159.37	673.64	159.42	673.67	159.98	673.63	164.06	673.57
164.83	673.56	169.88	673.59	170.47	673.57	171.78	673.57	174.89	673.52
177.82	673.52	178.24	673.7	180.32	675.64	180.99	675.79	181.62	675.83
183.04	675.85	183.27	675.85	185.75	675.83	186.04	675.8	186.64	675.84
186.8	675.87	187.61	676.18	187.62	676.66				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	50.13	.045	153.77	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
50.13	180.32	8.7	8.485	12.375	.01 .03

Left Levee Station= 50.13 Elevation= 674.02
Right Levee Station= 159.42 Elevation= 673.67

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	674.20	Element			
Vel Head (m)	0.67	Wt. n-Val.		0.045	

W.S. Elev (m)	673.53	Reach Len. (m)	8.70	8.49	12.37
Crit W.S. (m)	673.56	Flow Area (m2)		132.89	
E.G. Slope (m/m)	0.019246	Area (m2)		132.89	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	106.66	Top Width (m)		106.66	
Vel Total (m/s)	3.61	Avg. Vel. (m/s)		3.61	
Max Chl Dpth (m)	2.57	Hydr. Depth (m)		1.25	
Conv. Total (m3/s)	3459.9	Conv. (m3/s)		3459.9	
Length Wtd. (m)	8.49	Wetted Per. (m)		107.52	
Min Ch El (m)	670.96	Shear (N/m2)		233.28	
Alpha	1.00	Stream Power (N/m s)		842.62	
Frctn Loss (m)	0.15	Cum Volume (1000 m3)		17.75	
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.89	

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, energy was used.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 8

INPUT
Description: sezione 8
Station Elevation Data num= 45

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.93	3.36	675.04	12.62	674.76	19.25	674.65	25.11	674.55
27.76	673.26	33.38	673.23	38.1	673.43	47.4	673.88	49.72	672.86
56.31	673.05	57.89	672.44	59.73	672.66	65.21	672.89	67.06	672.88
69.35	672.86	70.05	671.49	73.89	671.45	77.96	671.15	80.61	670.99
83.96	670.95	87.04	671.12	90.23	671.45	92.71	672.29	98.3	672.32
102.7	672.34	108.78	672.27	113.48	672.21	120.09	672.34	127.17	672.47
132.3	671.78	137	671.92	142.93	671.93	149.19	672.4	154.58	672.46
154.8	672.54	160.12	673.55	165.52	673.36	172.4	673.48	178.37	673.36
180.84	675.49	183.54	675.67	187.26	675.67	188.06	676.04	188.07	676.52

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	56.31	.045	160.12	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
47.4	180.84	6.86	8.24	12.665	.1	.3

Left Levee Station= 47.4 Elevation= 673.88
Right Levee Station= 160.12 Elevation= 673.55

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	674.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.		0.045	
W.S. Elev (m)	673.46	Reach Len. (m)	6.86	8.24	12.67
Crit W.S. (m)	673.43	Flow Area (m2)		141.62	
E.G. Slope (m/m)	0.016613	Area (m2)		141.62	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	111.27	Top Width (m)		111.27	
Vel Total (m/s)	3.39	Avg. Vel. (m/s)		3.39	
Max Chl Dpth (m)	2.51	Hydr. Depth (m)		1.27	
Conv. Total (m3/s)	3724.0	Conv. (m3/s)		3724.0	
Length Wtd. (m)	8.24	Wetted Per. (m)		112.72	
Min Ch El (m)	670.95	Shear (N/m2)		204.70	
Alpha	1.00	Stream Power (N/m s)		693.78	
Frctn Loss (m)	0.14	Cum Volume (1000 m3)		16.58	
C & E Loss (m)	0.02	Cum SA (1000 m2)		11.97	

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 7.5000*

INPUT
Description:
Station Elevation Data num= 83

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.12	3.01	675.12	6.53	675	11.31	674.83	12.92	674.79
17.25	674.66	18.57	674.62	20.01	674.53	21.63	674.05	22.5	673.97
24.23	673.34	24.88	673.16	27.71	673.11	29.91	673.12	34.14	673.26
35.87	673.32	42.47	673.59	44.89	672.93	49.84	672.84	51.75	672.88
53.39	672.58	55.3	672.7	57.13	672.75	61.01	672.84	62.51	672.84

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   62.93  672.83   65.31  672.79   66.04  672.09   68.18  672.05   68.84  671.39
   70.04  671.19   70.19  671.16   72.29  671.09   74.27  671.05   75.61  671.03
   76.62  670.96   77.03  670.94   80.51  670.86   83.52  671.03   85.13  671.16
   86.64  671.31   86.66  671.32   89.06  671.94   91.57  672.16   94.52  672.19
   98.81  672.23   99.23  672.23  102.48  672.23  104.75  672.22   108.9  672.18
  109.34  672.18  115.79  672.23   116.5  672.23   122.7  672.26  124.03  672.16
  127.71   671.9  129.02  671.91   132.3  671.67  132.72  671.63  138.09  671.75
  139.38  671.82   144.2  672.04  149.47  672.13  149.68  672.18  150.74  672.29
  152.54  672.71  154.87  672.97  158.12  672.95  160.15  672.77  160.86  672.73
  163.71  672.97  166.86  673.04  168.73  673.05   172.2  673.32  172.69  673.48
   175.1  675.39  178.61  675.49  180.06  675.49  183.44  675.49  183.61  675.52
  184.48  675.87  184.49  675.96  184.49  676.23

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   42.47    .045  172.69    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          42.47   175.1             6.86    8.24  12.665            .1       .3
Left Levee       Station=  42.475      Elevation=  673.59

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           673.88    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.51    Wt. n-Val.                        0.045
  W.S. Elev (m)           673.38    Reach Len. (m)            6.86      8.24      12.67
  Crit W.S. (m)           673.33    Flow Area (m2)                    151.96
  E.G. Slope (m/m)      0.016404    Area (m2)                         151.96
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           129.05    Top Width (m)                     129.05
  Vel Total (m/s)           3.16    Avg. Vel. (m/s)                     3.16
  Max Chl Dpth (m)          2.52    Hydr. Depth (m)                     1.18
  Conv. Total (m3/s)      3747.7    Conv. (m3/s)                      3747.7
  Length Wtd. (m)           8.24    Wetted Per. (m)                   129.97
  Min Ch El (m)           670.86    Shear (N/m2)                      188.08
  Alpha                     1.00    Stream Power (N/m s)              594.11
  Frctn Loss (m)            0.15    Cum Volume (1000 m3)               15.37
  C & E Loss (m)            0.01    Cum SA (1000 m2)                   10.98


Note:    Multiple critical depths were found at this location.  The critical depth with the lowest, valid,
energy was used.


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 7

INPUT
Description: sezione 7
Station Elevation Data     num=      43
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  675.32    5.77  675.08   11.42  674.84   16.42  674.62   17.69  674.57
   19.12  673.54   21.42  673.07    24.5  672.97   31.71  673.11   37.55   673.3
    45.2  672.69   52.77  672.76   58.36  672.79   64.25  672.63   64.94  671.31
   66.34  670.88   68.53  670.89   71.97  670.93   73.02   670.9   77.07  670.78
   81.57  671.02   83.07  671.18   87.86  672.02   95.33  672.13    98.5  672.17
  104.77  672.15  112.18  672.11  119.53  672.04   124.4     672  128.01  671.34
  134.51  671.57  145.59  671.84  147.35  672.33   152.8  672.47  155.47  672.09
  158.25  672.51  163.15  672.66  166.54  673.26  169.37  675.28  175.47  675.31
  179.83  675.32  180.91   675.7  180.92  676.04

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
       0    .055   64.25    .045  166.54    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          37.55  169.37            1.295    3.06    7.39            .1       .3
Left Levee       Station=   37.55      Elevation=   673.3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           673.73    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.57    Wt. n-Val.                        0.047
  W.S. Elev (m)           673.16    Reach Len. (m)            1.30      3.06       7.39
  Crit W.S. (m)           673.16    Flow Area (m2)                    144.15
  E.G. Slope (m/m)      0.020921    Area (m2)                         144.15
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           126.70    Top Width (m)                     126.70
  Vel Total (m/s)           3.33    Avg. Vel. (m/s)                     3.33
```

Max Chl Dpth (m)	2.38	Hydr. Depth (m)	1.14
Conv. Total (m3/s)	3318.5	Conv. (m3/s)	3318.5
Length Wtd. (m)	3.06	Wetted Per. (m)	127.92
Min Ch El (m)	670.78	Shear (N/m2)	231.18
Alpha	1.00	Stream Power (N/m s)	769.82
Frctn Loss (m)	0.07	Cum Volume (1000 m3)	14.15
C & E Loss (m)	0.01	Cum SA (1000 m2)	9.92

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 6.5000*

INPUT
Description:
Station Elevation Data num= 80

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	675.32	4.88	675.12	5.82	675.03	10.31	674.9	11.52	674.85
14.73	674.7	16.57	674.62	17.85	674.57	18.06	674.49	19.29	673.57
19.38	673.53	21.61	673.08	21.74	673.07	24.55	672.97	24.72	672.97
31.99	673.1	37.89	673.24	40.22	672.93	45.43	672.67	45.55	672.67
53.14	672.58	53.94	672.57	58.74	672.73	59.07	672.74	64.65	672.59
65.23	672.02	65.34	671.91	66.74	671.43	68.94	671.15	70.37	670.94
72.38	670.9	73.44	670.82	73.75	670.81	77.49	670.67	81.88	670.99
82.35	671.04	83.34	671.13	88.01	671.75	88.36	671.76	92.29	672.06
95.29	672.08	98.38	672.1	98.56	672.09	103.57	672.08	104.5	672.08
108.43	672.04	111.72	672.02	113.23	672.01	118.88	672.01	118.97	672.01
123.63	672.02	125.17	671.88	127.15	671.5	130.8	671.21	133.48	671.27
136.23	671.31	138.24	671.59	141.27	671.46	144.29	671.71	144.96	671.86
146	671.99	149.67	671.99	150.41	672.17	151.31	672.2	153.92	672.06
156.63	672.31	157.63	672.35	159.54	672.04	161.4	672.16	163.77	672.49
164.71	672.99	167.46	675.2	171.1	675.22	174.87	675.2	175.55	675.19
180.17	675.22	180.71	675.3	181.48	675.53	181.49	675.63	181.49	676.04

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.055	37.89	.045	164.71	.055

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
37.89 167.46 1.295 3.06 7.39 .01 .03
Left Levee Station= 37.89 Elevation= 673.24

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	673.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.045	
W.S. Elev (m)	672.98	Reach Len. (m)	1.30	3.06	7.39
Crit W.S. (m)	673.07	Flow Area (m2)		132.66	
E.G. Slope (m/m)	0.024563	Area (m2)		132.66	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	124.47	Top Width (m)		124.47	
Vel Total (m/s)	3.62	Avg. Vel. (m/s)		3.62	
Max Chl Dpth (m)	2.31	Hydr. Depth (m)		1.07	
Conv. Total (m3/s)	3062.7	Conv. (m3/s)		3062.7	
Length Wtd. (m)	3.06	Wetted Per. (m)		125.27	
Min Ch El (m)	670.67	Shear (N/m2)		255.08	
Alpha	1.00	Stream Power (N/m s)		922.96	
Frctn Loss (m)	0.07	Cum Volume (1000 m3)		13.73	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.54	

Note: Program found supercritical flow starting at this cross section.

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 6

INPUT
Description: sezione 6
Station Elevation Data num= 42

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	675.32	4.92	675.12	10.4	674.91	14.86	674.7	18.22	674.57
19.55	673.54	21.93	673.07	24.77	672.97	38.22	673.18	40.56	672.84
45.78	672.65	54.31	672.38	59.45	672.69	65.63	672.54	70.78	670.96
74.17	670.72	77.92	670.56	82.65	671	88.5	671.5	92.33	672.04
98.44	672.02	103.32	672.01	108.05	671.96	112.73	671.92	118.32	671.98
124.36	672.05	129.84	670.95	135.13	670.99	137.09	671.5	140.04	671.15
143.64	671.68	148.23	671.56	148.95	671.9	155.98	672.15	157.84	671.47
161.96	671.9	165.56	675.12	169.84	675.14	175.08	675.07	181.15	675.13
182.06	675.46	182.07	676.03						

```
Manning's n Values        num=       2
     Sta   n Val     Sta   n Val
       0    .055   65.63    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         38.22  165.56              .84    4.58   13.45           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           673.57    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.73    Wt. n-Val.                        0.045
  W.S. Elev (m)           672.84    Reach Len. (m)            0.84      4.58      13.45
  Crit W.S. (m)           672.97    Flow Area (m2)                    126.94
  E.G. Slope (m/m)      0.023775    Area (m2)                         126.94
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           122.48    Top Width (m)                     122.48
  Vel Total (m/s)           3.78    Avg. Vel. (m/s)                     3.78
  Max Chl Dpth (m)          2.28    Hydr. Depth (m)                     1.04
  Conv. Total (m3/s)      3113.0    Conv. (m3/s)                      3113.0
  Length Wtd. (m)           4.58    Wetted Per. (m)                   123.65
  Min Ch El (m)           670.56    Shear (N/m2)                      239.35
  Alpha                     1.00    Stream Power (N/m s)              905.07
  Frctn Loss (m)            0.11    Cum Volume (1000 m3)               13.33
  C & E Loss (m)            0.00    Cum SA (1000 m2)                    9.16


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 5

INPUT
Description:
Station Elevation Data    num=      44
     Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev
       0   675.17     5.39   674.99    10.71   674.81    15.79   674.63    17.48   674.57
    18.9   673.54    21.53   673.07    23.67   672.97    32.46   673.19    37.62   673.25
   40.29   672.77    44.32   672.67    53.62   672.34    61.23   672.63    65.45   672.49
   66.14   670.82    69.32   670.95    72.14   670.91    73.28   670.83    76.66   670.34
    82.2   670.85    89.47   671.23     93.3   671.83    97.91   671.88   103.73   671.89
  109.68   671.84   114.66   671.79   120.85   671.69   124.79   671.96   129.06   671.49
  131.88   670.72   134.34   670.92   138.44   671.01   142.23   671.01   147.11   671.48
  150.11   671.28   156.31   671.62   160.19   674.83   163.63   674.92   170.58   675.05
  177.36   674.89   182.28   674.88   183.24   675.16   183.25   675.78

Manning's n Values        num=       2
     Sta   n Val     Sta   n Val
       0    .055   65.45    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         37.62  160.19            19.95   20.9   23.77           .01      .03

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           673.46    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.82    Wt. n-Val.                        0.045
  W.S. Elev (m)           672.64    Reach Len. (m)           19.95     20.90      23.77
  Crit W.S. (m)           672.83    Flow Area (m2)                    119.71
  E.G. Slope (m/m)      0.025244    Area (m2)                         119.71
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)           112.38    Top Width (m)                     112.38
  Vel Total (m/s)           4.01    Avg. Vel. (m/s)                     4.01
  Max Chl Dpth (m)          2.30    Hydr. Depth (m)                     1.07
  Conv. Total (m3/s)      3021.1    Conv. (m3/s)                      3021.1
  Length Wtd. (m)           20.90   Wetted Per. (m)                   114.19
  Min Ch El (m)           670.34    Shear (N/m2)                      259.53
  Alpha                     1.00    Stream Power (N/m s)             1040.59
  Frctn Loss (m)            0.30    Cum Volume (1000 m3)               12.77
  C & E Loss (m)            0.00    Cum SA (1000 m2)                    8.62


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 4

INPUT
Description:
Station Elevation Data    num=      48
     Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev
       0   675.25     4.26   675.02     9.49   674.71    14.99    674.4    17.78   673.09
```

22.26	673.07	27.33	673.04	31.05	673.02	33.59	673.15	36.08	672.28
40.26	672.17	43.75	672.29	46.97	672.39	51.29	672.38	55.93	672.31
58.82	672.27	61.67	672.22	62.06	671.23	64.5	670.8	65.94	670.79
70.58	670.6	72.71	670.07	76.46	670.61	80.1	670.69	83.39	671.29
87.92	670.88	89.9	670.45	94.14	670.35	96.83	671.56	100.98	671.55
103.79	671.54	107.32	671.53	111.09	670.81	116.58	670.96	118.29	671.28
124.59	671.49	126.91	670.08	130.41	670.09	133.87	670.42	137.21	670.39
141.4	670.35	146	674.45	154.04	674.54	161.79	674.76	173.85	674.62
180.54	674.42	181.5	674.7	181.52	675.3				

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	61.67	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
33.59	146	3.647	4.567	8.667	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	673.11	Element			
Vel Head (m)	0.58	Wt. n-Val.		0.045	
W.S. Elev (m)	672.52	Reach Len. (m)	3.65	4.57	8.67
Crit W.S. (m)	672.48	Flow Area (m2)		142.08	
E.G. Slope (m/m)	0.013094	Area (m2)		142.08	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	108.46	Top Width (m)		108.46	
Vel Total (m/s)	3.38	Avg. Vel. (m/s)		3.38	
Max Chl Dpth (m)	2.45	Hydr. Depth (m)		1.31	
Conv. Total (m3/s)	4194.7	Conv. (m3/s)		4194.7	
Length Wtd. (m)	4.57	Wetted Per. (m)		111.01	
Min Ch El (m)	670.07	Shear (N/m2)		164.34	
Alpha	1.00	Stream Power (N/m s)		555.21	
Frctn Loss (m)	0.06	Cum Volume (1000 m3)		10.03	
C & E Loss (m)	0.01	Cum SA (1000 m2)		6.32	

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: fiume Fella
REACH: fiume Fella RS: 3.6667*

INPUT
Description:
Station Elevation Data num= 84

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	675.26	4.61	675	5.47	674.95	10.27	674.69	10.38	674.69
14.32	674.48	16.23	674.09	17.16	673.67	19.22	673.06	19.25	673.05
23.5	673.02	24.1	673.01	29	672.97	29.59	672.96	33.4	672.93
33.61	672.94	36.36	673.14	38.03	672.43	38.73	672.27	42.69	672.26
43.69	672.3	46	672.28	47.59	672.26	49.06	672.3	51.47	672.3
53.16	672.31	54.48	672.31	56.71	672.23	57.56	672.26	60.3	672.2
62.45	672.15	63.01	671.9	63.38	671.11	63.58	671	65.69	670.72
67.06	670.73	68.72	670.7	71.46	670.45	73.48	669.97	76.52	670.45
77.16	670.52	80.73	670.63	81.01	670.67	83.96	671.1	86.75	670.99
88.4	670.9	90.35	670.64	91.65	670.64	94.5	670.53	97.14	671.28
101.21	671.19	102.5	671.16	103.97	671.12	106.11	671.06	107.43	671.07
111.13	670.62	113.55	670.69	116.52	670.81	118.19	671.06	121.2	671.19
124.37	671.24	126.65	670.29	127.04	670.23	130.08	670.13	131.9	670.16
133.48	670.27	133.84	670.27	135.25	670.2	136.75	670.19	139.86	670.18
140.06	670.2	140.86	670.38	145.38	674.13	153.41	674.32	154.53	674.34
161.53	674.52	163.35	674.56	170.29	674.54	177.08	674.48	179.96	674.43
184.69	674.41	185.78	674.62	185.79	674.73	185.81	675.22		

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	36.36	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
36.36	145.38	3.647	4.567	8.667	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	673.04	Element			
Vel Head (m)	0.56	Wt. n-Val.		0.045	
W.S. Elev (m)	672.48	Reach Len. (m)	3.65	4.57	8.67
Crit W.S. (m)	672.39	Flow Area (m2)		144.96	
E.G. Slope (m/m)	0.014881	Area (m2)		144.96	

Q Total (m3/s)	480.00	Flow (m3/s)	480.00
Top Width (m)	105.44	Top Width (m)	105.44
Vel Total (m/s)	3.31	Avg. Vel. (m/s)	3.31
Max Chl Dpth (m)	2.51	Hydr. Depth (m)	1.37
Conv. Total (m3/s)	3934.8	Conv. (m3/s)	3934.8
Length Wtd. (m)	4.57	Wetted Per. (m)	107.38
Min Ch El (m)	669.97	Shear (N/m2)	197.00
Alpha	1.00	Stream Power (N/m s)	652.31
Frctn Loss (m)	0.07	Cum Volume (1000 m3)	9.38
C & E Loss (m)	0.00	Cum SA (1000 m2)	5.83

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 3.3333*

INPUT
Description:
Station Elevation Data num= 84

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	675.26	4.96	674.98	5.89	674.93	11.06	674.67	11.17	674.67
15.41	674.45	17.47	673.78	18.47	673.34	20.68	673.02	20.72	673.02
25.29	672.96	25.94	672.95	31.21	672.89	31.84	672.89	35.95	672.84
36.18	672.86	39.14	673.12	40.72	672.33	41.37	672.26	45.12	672.3
46.07	672.3	48.26	672.27	49.76	672.25	51.15	672.26	53.43	672.26
55.03	672.29	56.27	672.33	58.38	672.23	59.19	672.21	61.79	672.14
63.82	672.08	64.35	671.58	64.7	670.94	64.88	670.75	66.89	670.65
68.18	670.67	69.75	670.68	72.34	670.3	74.26	669.88	77.24	670.39
77.86	670.44	81.37	670.57	81.63	670.59	84.53	670.9	87.26	670.94
88.89	670.93	90.79	670.84	92.07	670.86	94.87	670.72	97.46	671.01
101.45	670.83	102.71	670.78	104.15	670.7	106.25	670.59	107.55	670.61
111.17	670.44	113.55	670.51	116.45	670.66	118.1	670.84	121.04	671.01
124.16	671	126.39	670.49	126.78	670.49	129.76	670.18	131.54	670.05
133.09	670.13	133.44	670.13	134.83	669.99	136.3	670	139.35	670.01
139.54	670.03	140.33	670.41	144.75	673.9	153.77	674.12	155.02	674.14
162.87	674.32	164.91	674.36	172.7	674.39	180.3	674.35	183.53	674.31
188.84	674.41	190.07	674.53	190.08	674.59	190.09	675.13		

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	39.14	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
39.14	144.75	3.647	4.567	8.667	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel	Right OB
E.G. Elev (m)	672.97	Element			
Vel Head (m)	0.56	Wt. n-Val.		0.045	
W.S. Elev (m)	672.41	Reach Len. (m)	3.65	4.57	8.67
Crit W.S. (m)	672.20	Flow Area (m2)		145.44	
E.G. Slope (m/m)	0.014115	Area (m2)		145.44	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	102.31	Top Width (m)		102.31	
Vel Total (m/s)	3.30	Avg. Vel. (m/s)		3.30	
Max Chl Dpth (m)	2.53	Hydr. Depth (m)		1.42	
Conv. Total (m3/s)	4040.1	Conv. (m3/s)		4040.1	
Length Wtd. (m)	4.57	Wetted Per. (m)		104.07	
Min Ch El (m)	669.88	Shear (N/m2)		193.45	
Alpha	1.00	Stream Power (N/m s)		638.43	
Frctn Loss (m)	0.06	Cum Volume (1000 m3)		8.71	
C & E Loss (m)	0.01	Cum SA (1000 m2)		5.35	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 3

INPUT
Description:
Station Elevation Data num= 41

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	675.27	6.31	674.91	11.96	674.65	16.5	674.43	19.78	673.01
22.15	672.98	27.08	672.9	33.42	672.82	38.5	672.75	41.91	673.11
43.4	672.39	48.45	672.49	51.93	672.1	55.39	672.13	58.07	672.31
60.06	672.19	65.19	672	66.19	670.51	70.78	670.66	75.03	669.78
77.95	670.32	82.26	670.52	87.78	670.89	92.49	671.08	102.92	670.39
106.39	670.12	113.54	670.32	120.89	670.82	126.51	670.69	131.18	669.94
133.04	669.99	134.4	669.79	138.83	669.83	139.02	669.87	144.13	673.63
154.12	673.91	164.21	674.13	175.1	674.24	187.11	674.2	194.36	674.45

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  194.38  675.05

Manning's n Values          num=       2
     Sta   n Val     Sta   n Val
       0    .055   58.07    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         41.91  144.13             8.484   8.734   8.092            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           672.91    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.53    Wt. n-Val.                        0.045
  W.S. Elev (m)           672.37    Reach Len. (m)            8.48      8.73      8.09
  Crit W.S. (m)           672.09    Flow Area (m2)                    148.36
  E.G. Slope (m/m)       0.010628   Area (m2)                         148.36
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            92.92    Top Width (m)                      92.92
  Vel Total (m/s)           3.24    Avg. Vel. (m/s)                     3.24
  Max Chl Dpth (m)          2.59    Hydr. Depth (m)                     1.60
  Conv. Total (m3/s)      4656.0    Conv. (m3/s)                      4656.0
  Length Wtd. (m)           8.73    Wetted Per. (m)                    94.86
  Min Ch El (m)           669.78    Shear (N/m2)                      163.01
  Alpha                     1.00    Stream Power (N/m s)              527.39
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)                8.04
  C & E Loss (m)            0.00    Cum SA (1000 m2)                    4.91


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella          RS: 2.8000*

INPUT
Description:
Station Elevation Data      num=       69
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  675.47     3.9  675.18    7.05  674.95    7.73   674.9   11.24  674.65
   13.37  674.51   15.33  674.38   18.45  674.16   18.94  673.99   22.11   672.9
   24.36  672.88   28.87  672.82   29.03  672.82   35.03  672.75   35.63  672.74
   39.84  672.68   43.07  672.97   44.45  672.54   49.14   672.4   50.29  672.28
   52.36  672.07   53.77  672.07   55.05  672.07   55.57  672.07   58.06  672.19
    59.9  672.08   64.66  671.88   65.44  671.05   65.88   670.6    65.9  670.58
   69.12  670.65   69.82   670.6    71.6  670.57   72.18  670.48   73.45  670.29
   75.21  670.04   76.87  669.66   78.77  670.06   79.72  670.21   83.68  670.39
   83.93  670.41   89.08  670.73   89.32  670.75   93.92  670.97   97.05  670.74
  101.14  670.54  106.66  670.31   110.5  669.94  116.48  670.15  122.64   670.6
   127.4  670.49  130.78  669.92  131.72  669.79  132.54  669.81  133.44  669.83
  134.69  669.67  136.37  669.69  138.79  669.94  138.96  669.99  143.68  673.47
  153.25  673.74  159.94   673.9   162.9  673.97  173.33  674.11  173.73  674.11
  184.83  674.16  185.75  674.19  191.77  674.81  191.79  675.29

Manning's n Values          num=       2
     Sta   n Val     Sta   n Val
       0    .055   43.07    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         43.07  143.68             8.484   8.734   8.092            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           672.81    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.52    Wt. n-Val.                        0.045
  W.S. Elev (m)           672.29    Reach Len. (m)            8.48      8.73      8.09
  Crit W.S. (m)           671.98    Flow Area (m2)                    150.38
  E.G. Slope (m/m)       0.010948   Area (m2)                         150.38
  Q Total (m3/s)          480.00    Flow (m3/s)                       480.00
  Top Width (m)            91.86    Top Width (m)                      91.86
  Vel Total (m/s)           3.19    Avg. Vel. (m/s)                     3.19
  Max Chl Dpth (m)          2.63    Hydr. Depth (m)                     1.64
  Conv. Total (m3/s)      4587.4    Conv. (m3/s)                      4587.4
  Length Wtd. (m)           8.73    Wetted Per. (m)                    93.50
  Min Ch El (m)           669.66    Shear (N/m2)                      172.68
  Alpha                     1.00    Stream Power (N/m s)              551.18
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)                6.74
  C & E Loss (m)            0.00    Cum SA (1000 m2)                    4.10


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella          RS: 2.6000*
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INPUT
Description:
Station Elevation Data    num=      69
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  675.67    4.31  675.29     7.8  674.93    8.54  674.92   12.42  674.56
   14.78  674.37   16.95   674.2   20.39  673.83   20.93  673.73   24.45  672.79
   26.57  672.77   30.82  672.74   30.97  672.74   36.64  672.67   37.21  672.66
   41.18  672.61   44.23  672.82    45.5  672.26   49.82  672.31   50.89   672.2
    52.8  672.03   54.09  672.03   55.27  672.01   55.75     672   58.04  672.07
   59.74  671.96   64.13  671.76   65.06  671.04   65.59  670.67   65.61  670.65
   69.45   670.7   70.29  670.58   72.41  670.49    73.1  670.39   74.63  670.24
   76.73  670.03   78.71  669.54   80.57  669.97   81.49   670.1   85.36  670.28
    85.6  670.29   90.63  670.58   90.87   670.6   95.36  670.85   99.05  670.57
  103.88  670.39   110.4  670.22  114.61  669.75  119.43  669.98  124.39  670.38
   128.3  670.29  131.39  669.74  132.26  669.64  133.01  669.66  133.83  669.67
  134.99  669.55  136.53  669.56  138.74  670.06   138.9  670.12  143.23  673.31
  152.37  673.58  158.77  673.74   161.6  673.81  171.56  673.98  171.95  673.98
  182.54  674.12  183.42  674.15  189.17  675.17  189.19  675.53

Manning's n Values        num=       2
     Sta   n Val     Sta   n Val
       0    .055   44.23    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         44.23  143.23           8.484   8.734   8.092            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           672.71    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.51    Wt. n-Val.                         0.045
  W.S. Elev (m)           672.20    Reach Len. (m)            8.48      8.73      8.09
  Crit W.S. (m)           671.87    Flow Area (m2)                     151.51
  E.G. Slope (m/m)      0.010490    Area (m2)                          151.51
  Q Total (m3/s)          480.00    Flow (m3/s)                        480.00
  Top Width (m)            90.83    Top Width (m)                       90.83
  Vel Total (m/s)           3.17    Avg. Vel. (m/s)                     3.17
  Max Chl Dpth (m)          2.66    Hydr. Depth (m)                     1.67
  Conv. Total (m3/s)      4686.5    Conv. (m3/s)                       4686.5
  Length Wtd. (m)           8.73    Wetted Per. (m)                     92.26
  Min Ch El (m)           669.54    Shear (N/m2)                       168.94
  Alpha                     1.00    Stream Power (N/m s)               535.20
  Frctn Loss (m)            0.09    Cum Volume (1000 m3)                5.42
  C & E Loss (m)            0.00    Cum SA (1000 m2)                    3.30


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella        RS: 2.4000*

INPUT
Description:
Station Elevation Data    num=      69
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0  675.87    4.72  675.41    8.54  675.02    9.36  674.93   13.61  674.48
   16.19  674.23   18.56  674.01   22.34  673.61   22.93  673.48   26.78  672.67
   28.77  672.67   32.78  672.66   32.92  672.66   38.25   672.6   38.79  672.59
   42.52  672.55   45.39  672.68   46.56  672.27   50.51  672.22   51.48  672.13
   53.23     672   54.42  671.99    55.5  671.95   55.93  671.94   58.03  671.95
   59.59  671.85    63.6  671.64   64.68  671.03    65.3  670.74   65.32  670.73
   69.79  670.75   70.77  670.56   73.23   670.4   74.03   670.3   75.81  670.18
   78.24  670.02   80.55  669.43   82.36  669.89   83.27  669.99   87.03  670.17
   87.28  670.18   92.18  670.44   92.41  670.46   96.79  670.74  101.05  670.41
  106.62  670.24  114.13  670.14  118.71  669.57  122.37   669.8  126.13  670.17
  129.19   670.1  132.01  669.56  132.79   669.5  133.48  669.51  134.23  669.52
  135.28  669.44  136.68  669.44   138.7  670.17  138.84  670.24  142.79  673.16
   151.5  673.41   157.6  673.58  160.29  673.65  169.79  673.85  170.16  673.86
  180.26  674.07   181.1  674.11  186.58  675.53   186.6  675.77

Manning's n Values        num=       2
     Sta   n Val     Sta   n Val
       0    .055   45.39    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         45.39  142.79           8.484   8.734   8.092            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           672.62    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.52    Wt. n-Val.                         0.045
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W.S. Elev (m)	672.10	Reach Len. (m)	8.48	8.73	8.09
Crit W.S. (m)	671.77	Flow Area (m2)		150.38	
E.G. Slope (m/m)	0.010527	Area (m2)		150.38	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	89.46	Top Width (m)		89.46	
Vel Total (m/s)	3.19	Avg. Vel. (m/s)		3.19	
Max Chl Dpth (m)	2.67	Hydr. Depth (m)		1.68	
Conv. Total (m3/s)	4678.3	Conv. (m3/s)		4678.3	
Length Wtd. (m)	8.73	Wetted Per. (m)		90.79	
Min Ch El (m)	669.43	Shear (N/m2)		170.99	
Alpha	1.00	Stream Power (N/m s)		545.77	
Frctn Loss (m)	0.09	Cum Volume (1000 m3)		4.10	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.52	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 2.2000*

INPUT
Description:
Station Elevation Data num= 69

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.07	5.13	675.52	9.29	675.05	10.17	674.95	14.79	674.39
17.61	674.09	20.18	673.83	24.29	673.33	24.93	673.22	29.12	672.56
30.98	672.57	34.73	672.58	34.87	672.55	39.86	672.52	40.36	672.51
43.86	672.48	46.55	672.53	47.61	672.29	51.19	672.13	52.08	672.05
53.66	671.97	54.74	671.94	55.72	671.9	56.12	671.88	58.02	671.82
59.43	671.73	63.07	671.52	64.3	671.01	65	670.8	65.03	670.8
70.12	670.8	71.24	670.55	74.05	670.31	74.96	670.22	76.98	670.13
79.76	670	82.39	669.31	84.16	669.3	85.04	669.87	88.71	670.05
88.95	670.06	93.73	670.29	93.95	670.31	98.23	670.62	103.05	670.24
109.36	670.09	117.87	670.05	122.82	669.38	125.32	669.63	127.88	669.95
130.09	669.9	132.62	669.38	133.33	669.35	133.95	669.35	134.63	669.36
135.57	669.32	136.84	669.32	138.65	670.29	138.78	670.37	142.34	673
150.62	673.25	156.42	673.41	158.99	673.49	168.02	673.72	168.37	673.73
177.98	674.03	178.77	674.06	183.99	675.83	184	676.01		

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.055	46.55	.045

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
46.55	142.34	8.484	8.734	8.092	.1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (m)	672.52	Element	Left OB	Channel	Right OB
Vel Head (m)	0.54	Wt. n-Val.		0.045	
W.S. Elev (m)	671.99	Reach Len. (m)	8.48	8.73	8.09
Crit W.S. (m)	671.70	Flow Area (m2)		147.81	
E.G. Slope (m/m)	0.010848	Area (m2)		147.81	
Q Total (m3/s)	480.00	Flow (m3/s)		480.00	
Top Width (m)	87.62	Top Width (m)		87.62	
Vel Total (m/s)	3.25	Avg. Vel. (m/s)		3.25	
Max Chl Dpth (m)	2.68	Hydr. Depth (m)		1.69	
Conv. Total (m3/s)	4608.5	Conv. (m3/s)		4608.5	
Length Wtd. (m)	8.73	Wetted Per. (m)		88.94	
Min Ch El (m)	669.31	Shear (N/m2)		176.80	
Alpha	1.00	Stream Power (N/m s)		574.14	
Frctn Loss (m)	0.10	Cum Volume (1000 m3)		2.80	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.74	

CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella RS: 2

INPUT
Description:
Station Elevation Data num= 40

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	676.27	5.54	675.63	10.99	674.97	15.98	674.3	21.8	673.64
26.93	672.97	31.45	672.45	36.69	672.5	41.94	672.44	47.71	672.39
52.67	671.98	55.06	671.9	55.94	671.84	62.54	671.4	63.92	671
64.71	670.87	70.46	670.85	71.71	670.53	75.89	670.13	78.16	670.07
81.28	669.99	84.23	669.19	85.95	669.72	90.39	669.94	95.28	670.15
99.66	670.51	105.05	670.07	112.1	669.94	121.61	669.97	126.93	669.2
129.63	669.73	130.98	669.7	133.24	669.2	134.42	669.2	136.99	669.2
141.89	672.84	155.25	673.25	166.58	673.6	176.45	674.02	181.41	676.25

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Manning's n Values         num=       2
     Sta   n Val      Sta   n Val
       0    .055    47.71    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         47.71  141.89            10.14   11.67    10.2            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           672.41    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.64    Wt. n-Val.                        0.045
  W.S. Elev (m)           671.77    Reach Len. (m)          10.14     11.67      10.20
  Crit W.S. (m)           671.61    Flow Area (m2)                   136.01
  E.G. Slope (m/m)      0.013457    Area (m2)                        136.01
  Q Total (m3/s)          480.00    Flow (m3/s)                      480.00
  Top Width (m)            83.52    Top Width (m)                     83.52
  Vel Total (m/s)           3.53    Avg. Vel. (m/s)                    3.53
  Max Chl Dpth (m)          2.58    Hydr. Depth (m)                    1.63
  Conv. Total (m3/s)      4137.8    Conv. (m3/s)                     4137.8
  Length Wtd. (m)          11.67    Wetted Per. (m)                   84.91
  Min Ch El (m)           669.19    Shear (N/m2)                     211.39
  Alpha                     1.00    Stream Power (N/m s)             746.03
  Frctn Loss (m)            0.17    Cum Volume (1000 m3)               1.56
  C & E Loss (m)            0.00    Cum SA (1000 m2)                   0.99


CROSS SECTION
RIVER: fiume Fella
REACH: fiume Fella         RS: 1

INPUT
Description: sezione 1
Station Elevation Data     num=      38
     Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev      Sta     Elev
       0   675.91     5.68   675.41    11.24   674.92    15.74   674.43   21.729   673.93
   21.73   673.94    26.95   672.96    31.27   672.85    36.19   672.67    40.56    672.3
    43.1   672.39    45.35   671.51       49   671.33    56.39   671.02    56.86   670.94
   60.66   670.37    64.63   670.34    66.98   670.34    68.96   670.69    69.46   670.04
   71.68    669.8    76.17   669.71    80.39      669    82.43   669.65     89.3   670.12
    95.3   670.23   103.88   669.88   108.71   669.45   113.48   669.66   118.92   669.62
  123.32   669.05   124.32   669.02   126.27   669.01   128.38   669.16   134.04   672.72
  141.32   673.04   151.01      674   161.49   676.02

Manning's n Values         num=       2
     Sta   n Val      Sta   n Val
       0    .055     43.1    .045

Bank Sta: Left   Right    Coeff Contr.   Expan.
         36.19  134.04            .1       .3

CROSS SECTION OUTPUT  Profile #PF 1

  E.G. Elev (m)           672.23    Element                Left OB    Channel   Right OB
  Vel Head (m)              0.68    Wt. n-Val.                        0.045
  W.S. Elev (m)           671.55    Reach Len. (m)
  Crit W.S. (m)           671.50    Flow Area (m2)                   131.16
  E.G. Slope (m/m)      0.016004    Area (m2)                        131.16
  Q Total (m3/s)          480.00    Flow (m3/s)                      480.00
  Top Width (m)            86.94    Top Width (m)                     86.94
  Vel Total (m/s)           3.66    Avg. Vel. (m/s)                    3.66
  Max Chl Dpth (m)          2.55    Hydr. Depth (m)                    1.51
  Conv. Total (m3/s)      3794.3    Conv. (m3/s)                     3794.3
  Length Wtd. (m)                   Wetted Per. (m)                   88.31
  Min Ch El (m)           669.00    Shear (N/m2)                     233.10
  Alpha                     1.00    Stream Power (N/m s)             853.07
  Frctn Loss (m)                    Cum Volume (1000 m3)
  C & E Loss (m)                    Cum SA (1000 m2)


SUMMARY OF MANNING'S N VALUES
River:fiume Fella
      Reach          River Sta.       n1        n2        n3
 fiume Fella          23               .055      .045
 fiume Fella          22.800*          .055      .045
 fiume Fella          22.600*          .055      .045
 fiume Fella          22.400*          .055      .045
 fiume Fella          22.200*          .055      .045
 fiume Fella          22               .055      .045
 fiume Fella          21.750*          .055      .045
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fiume Fella	21.500*	.055	.045	
fiume Fella	21.250*	.055	.045	
fiume Fella	21	.055	.045	
fiume Fella	20.750*	.055	.045	
fiume Fella	20.500*	.055	.045	.045
fiume Fella	20.250*	.055	.045	
fiume Fella	20	.055	.045	
fiume Fella	19	.055	.045	
fiume Fella	18.750*	.055	.045	
fiume Fella	18.500*	.055	.045	
fiume Fella	18.250*	.055	.045	
fiume Fella	18	.055	.045	
fiume Fella	17.667*	.055	.045	.055
fiume Fella	17.333*	.055	.045	.055
fiume Fella	17	.055	.045	.055
fiume Fella	16.667*	.055	.045	.055
fiume Fella	16.333*	.055	.045	.055
fiume Fella	16	.055	.045	.055
fiume Fella	15.750*	.055	.045	.055
fiume Fella	15.500*	.055	.045	.055
fiume Fella	15.250*	.055	.045	.055
fiume Fella	15	.055	.045	.055
fiume Fella	14	.055	.045	.055
fiume Fella	13.667*	.055	.045	.055
fiume Fella	13.333*	.055	.045	.055
fiume Fella	13	.055	.045	.055
fiume Fella	12.667*	.055	.045	.055
fiume Fella	12.333*	.055	.045	.055
fiume Fella	12	.055	.045	.055
fiume Fella	11.667*	.055	.045	.055
fiume Fella	11.333*	.055	.045	.055
fiume Fella	11	.055	.045	.055
fiume Fella	10.667*	.055	.045	.055
fiume Fella	10.333*	.055	.045	.055
fiume Fella	10	.055	.045	.055
fiume Fella	9.6667*	.055	.045	.055
fiume Fella	9.3333*	.055	.045	.055
fiume Fella	9	.055	.045	.055
fiume Fella	8.5000*	.055	.045	.055
fiume Fella	8	.055	.045	.055
fiume Fella	7.5000*	.055	.045	.055
fiume Fella	7	.055	.045	.055
fiume Fella	6.5000*	.055	.045	.055
fiume Fella	6	.055	.045	
fiume Fella	5	.055	.045	
fiume Fella	4	.055	.045	
fiume Fella	3.6667*	.055	.045	
fiume Fella	3.3333*	.055	.045	
fiume Fella	3	.055	.045	
fiume Fella	2.8000*	.055	.045	
fiume Fella	2.6000*	.055	.045	
fiume Fella	2.4000*	.055	.045	
fiume Fella	2.2000*	.055	.045	
fiume Fella	2	.055	.045	
fiume Fella	1	.055	.045	

SUMMARY OF REACH LENGTHS
River: fiume Fella

Reach	River Sta.	Left	Channel	Right
fiume Fella	23	9.074	8.544	8.762
fiume Fella	22.800*	9.074	8.544	8.762
fiume Fella	22.600*	9.074	8.544	8.762
fiume Fella	22.400*	9.074	8.544	8.762
fiume Fella	22.200*	9.074	8.544	8.762
fiume Fella	22	7.35	6.94	6.918
fiume Fella	21.750*	7.35	6.94	6.918
fiume Fella	21.500*	7.35	6.94	6.918
fiume Fella	21.250*	7.35	6.94	6.917
fiume Fella	21	4.718	4.537	4.847
fiume Fella	20.750*	4.718	4.537	4.847
fiume Fella	20.500*	4.718	4.537	4.847
fiume Fella	20.250*	4.718	4.538	4.847
fiume Fella	20	28.31	18.8	10.67
fiume Fella	19	5.957	5.95	6.24
fiume Fella	18.750*	5.957	5.95	6.24
fiume Fella	18.500*	5.957	5.95	6.24
fiume Fella	18.250*	5.958	5.95	6.24
fiume Fella	18	10.463	8	5.307
fiume Fella	17.667*	10.463	8	5.307

fiume Fella	17.333*	10.463	8	5.307
fiume Fella	17	10.063	7.133	3.093
fiume Fella	16.667*	10.063	7.133	3.093
fiume Fella	16.333*	10.063	7.133	3.093
fiume Fella	16	3.493	3.435	3.24
fiume Fella	15.750*	3.493	3.435	3.24
fiume Fella	15.500*	3.493	3.435	3.24
fiume Fella	15.250*	3.493	3.435	3.24
fiume Fella	15	7.67	7.26	12.96
fiume Fella	14	9.01	7.377	4.267
fiume Fella	13.667*	9.01	7.377	4.267
fiume Fella	13.333*	9.01	7.377	4.267
fiume Fella	13	6.95	6.703	6.78
fiume Fella	12.667*	6.95	6.703	6.78
fiume Fella	12.333*	6.95	6.703	6.78
fiume Fella	12	7.24	6.883	6.783
fiume Fella	11.667*	7.24	6.883	6.783
fiume Fella	11.333*	7.24	6.883	6.783
fiume Fella	11	5.773	6.56	7.817
fiume Fella	10.667*	5.773	6.56	7.817
fiume Fella	10.333*	5.773	6.56	7.817
fiume Fella	10	7.103	7.12	6.773
fiume Fella	9.6667*	7.103	7.12	6.773
fiume Fella	9.3333*	7.103	7.12	6.773
fiume Fella	9	8.7	8.485	12.375
fiume Fella	8.5000*	8.7	8.485	12.375
fiume Fella	8	6.86	8.24	12.665
fiume Fella	7.5000*	6.86	8.24	12.665
fiume Fella	7	1.295	3.06	7.39
fiume Fella	6.5000*	1.295	3.06	7.39
fiume Fella	6	.84	4.58	13.45
fiume Fella	5	19.95	20.9	23.77
fiume Fella	4	3.647	4.567	8.667
fiume Fella	3.6667*	3.647	4.567	8.667
fiume Fella	3.3333*	3.647	4.567	8.667
fiume Fella	3	8.484	8.734	8.092
fiume Fella	2.8000*	8.484	8.734	8.092
fiume Fella	2.6000*	8.484	8.734	8.092
fiume Fella	2.4000*	8.484	8.734	8.092
fiume Fella	2.2000*	8.484	8.734	8.092
fiume Fella	2	10.14	11.67	10.2
fiume Fella	1			

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS
River: fiume Fella

Reach	River Sta.	Contr.	Expan.
fiume Fella	23	.1	.3
fiume Fella	22.800*	.1	.3
fiume Fella	22.600*	.1	.3
fiume Fella	22.400*	.1	.3
fiume Fella	22.200*	.1	.3
fiume Fella	22	.1	.3
fiume Fella	21.750*	.1	.3
fiume Fella	21.500*	.1	.3
fiume Fella	21.250*	.1	.3
fiume Fella	21	.1	.3
fiume Fella	20.750*	.01	.3
fiume Fella	20.500*	.01	.03
fiume Fella	20.250*	.01	.03
fiume Fella	20	.01	.03
fiume Fella	19	.01	.03
fiume Fella	18.750*	.01	.03
fiume Fella	18.500*	.01	.03
fiume Fella	18.250*	.01	.03
fiume Fella	18	.01	.03
fiume Fella	17.667*	.1	.3
fiume Fella	17.333*	.1	.3
fiume Fella	17	.1	.3
fiume Fella	16.667*	.1	.3
fiume Fella	16.333*	.1	.3
fiume Fella	16	.1	.3
fiume Fella	15.750*	.01	.03
fiume Fella	15.500*	.01	.03
fiume Fella	15.250*	.01	.03
fiume Fella	15	.01	.03
fiume Fella	14	.01	.03

fiume Fella	13.667*	.01	.03
fiume Fella	13.333*	.01	.03
fiume Fella	13	.1	.3
fiume Fella	12.667*	.01	.03
fiume Fella	12.333*	.01	.03
fiume Fella	12	.01	.03
fiume Fella	11.667*	.01	.03
fiume Fella	11.333*	.01	.03
fiume Fella	11	.1	.3
fiume Fella	10.667*	.1	.3
fiume Fella	10.333*	.1	.3
fiume Fella	10	.1	.3
fiume Fella	9.6667*	.01	.03
fiume Fella	9.3333*	.01	.03
fiume Fella	9	.01	.03
fiume Fella	8.5000*	.01	.03
fiume Fella	8	.1	.3
fiume Fella	7.5000*	.1	.3
fiume Fella	7	.1	.3
fiume Fella	6.5000*	.01	.03
fiume Fella	6	.01	.03
fiume Fella	5	.01	.03
fiume Fella	4	.1	.3
fiume Fella	3.6667*	.1	.3
fiume Fella	3.3333*	.1	.3
fiume Fella	3	.1	.3
fiume Fella	2.8000*	.1	.3
fiume Fella	2.6000*	.1	.3
fiume Fella	2.4000*	.1	.3
fiume Fella	2.2000*	.1	.3
fiume Fella	2	.1	.3
fiume Fella	1	.1	.3