The Arno River
Arno a Subbiano
750 km²

- CLC 1: 1,7%
- CLC 2: 22,7%
- CLC 3: 75,6%

37.000 inhabitants
50 people/km²

- 2 Discharge
- 22 Rainfall
- 11 Temperature

G. Menduni - Cambiamento climatico e pianificazione di bacino
A slight decrease of annual precipitation in the last decades.
Winter precipitation is strongly decreased in the last decades.
Rainfall events intensity has increased starting from 1970.

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Winter events intensity

Winter intensity rainfall events increases after 1970

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Precipitation intensity

Rainfall number of hours strongly decrease starting from 1970
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Average PET 1981-2007 is increased of 10% on the 1926-1980 average.

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River discharge

Daily discharge is reduced up to 40% especially in winter
The "watershed machine" is less efficient in runoff production.
Drought event intensity

# events whose daily discharge is below 0.5 cm/s For 2 consecutive days

Low discharge consecutive days frequency has increased of over 100% in 20 years
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Loss of river regime

For over two thirds of the year, water discharge is reduced by about 30%.
For over a half of the year, the active river width channel has been reduced by 15%.
Sediment transport capacity
For daily discharge classes

Sediment transport capacity is reduced of about 30%
Biodiversity loss

The low WUA number of days in the year tends to be strongly reduced.