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•Originally the valleys were covered in fen marshes and also in raised bogs;
•The latter were dug off and used for fuel;
•The fen marshes were drained and the vegetation converted into irrigated hay-meadows;
• maintaining those irrigated hay meadows asked a lot of work;
• so after chemical manure became available they had no longer an economic value and were abandoned, or planted with spruce, or drained to make intensive pastures

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RESTORE

So by cutting spruce and filling in drainage ditches we restore a more natural hydrology;
And the vegetation reacts: we create a new kind of fen marshes, not the ones from the Middle Ages, but those for the 21st century.

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SPONGES

These new fen-marsh vegetations act as natural sponges: when there is enough water they can stock it and when it becomes scarce it is gradually released. They are our natural water buffers.

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We think in this way our region can have an influence on floods downstream, by reversing the processus of canalisation, normalistation, drainage aiming at sending the water as quick as possible to the sea

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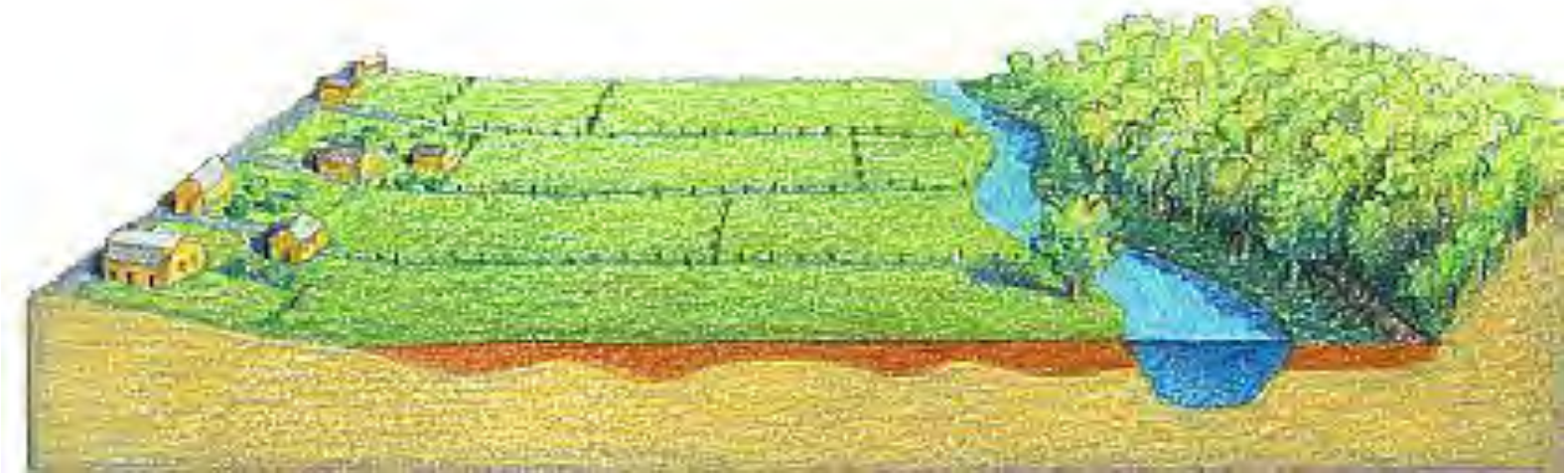
Human influence:
- fixation of the watercourse on a stable place
- cutting of the trees
- prevention of sideward erosion
- sedimentation in the valley is still occurring
- accumulation of silt in the valley



Man-made valley

- gradually the velocity of the discharge increases
- the more the river looks like a sewer, the faster the discharge goes

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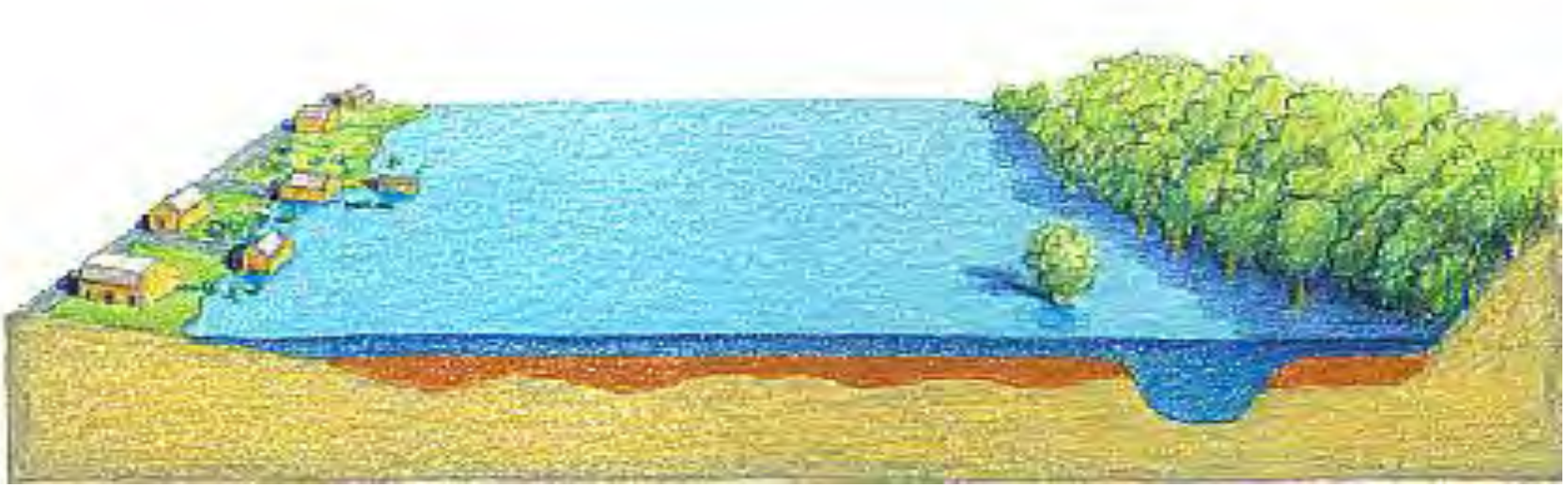

Use of the retention capacity of the valley becomes more and more rare, and of shorter duration.

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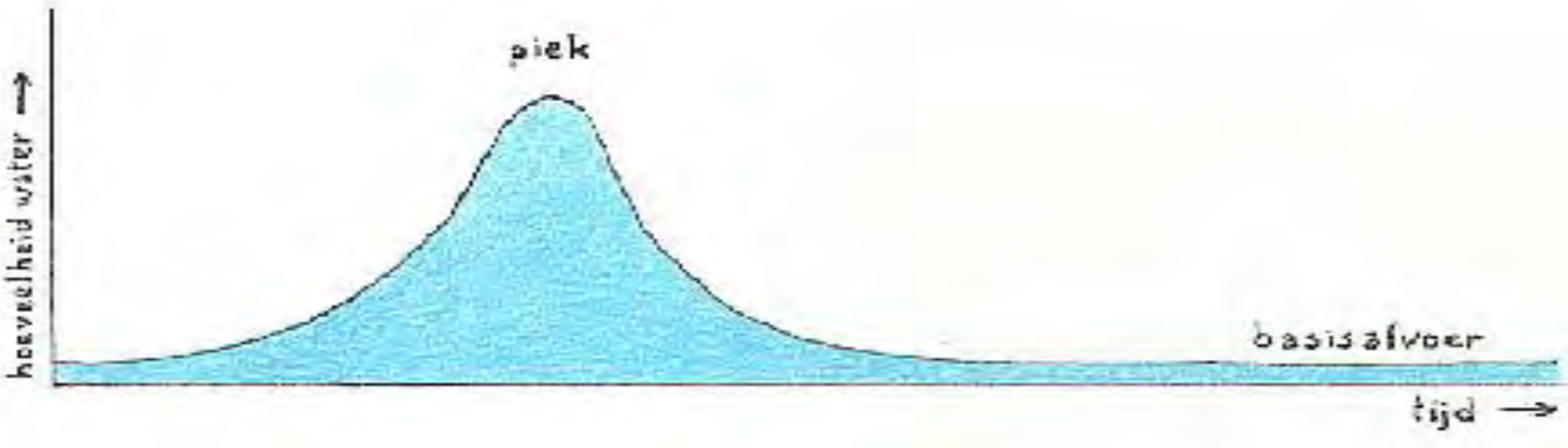

Actual situation

High and narrow peek in the waterlevel during a flood

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Natural valley

Current is slowed down by resistance of trees, islands, and cross-currents

Peeks are distracted by difference in the length of the route different courses take

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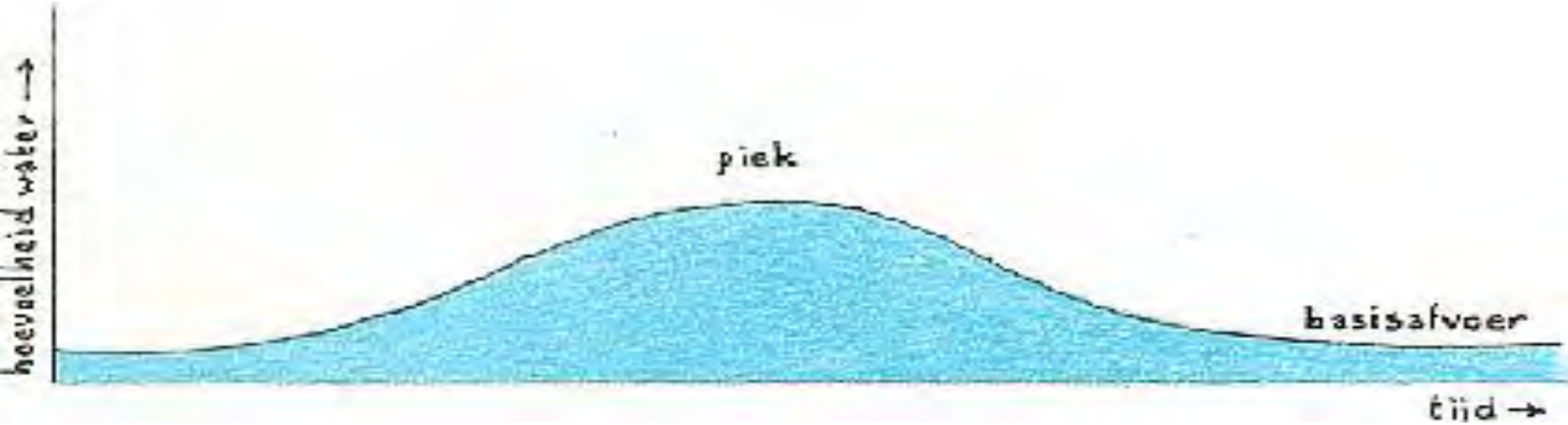

Renaturalised situation

The peek is lower, later and slower

The amount of water stored is larger

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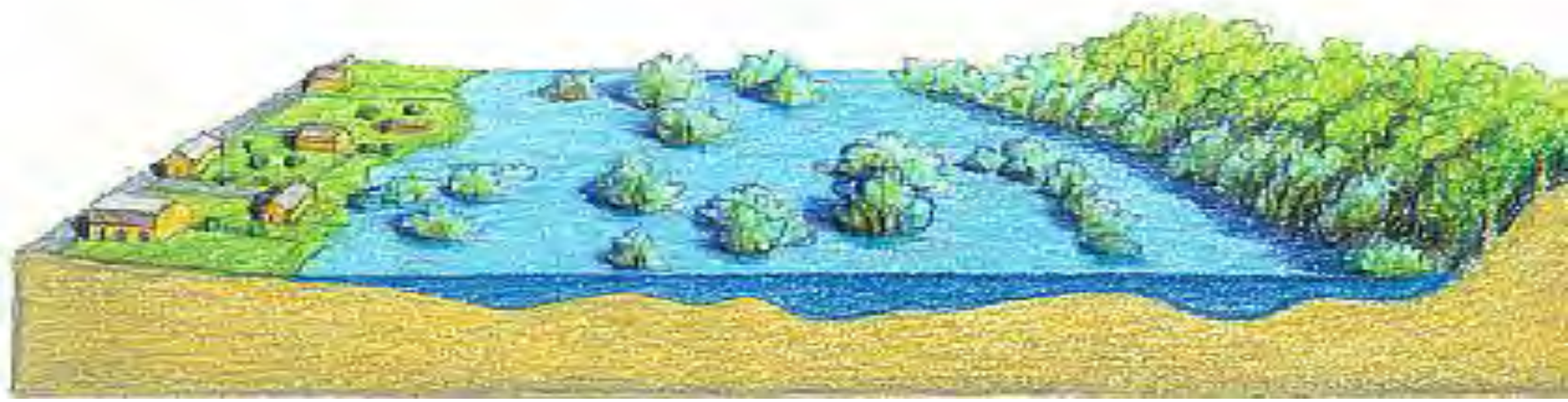

Super-flood:
in the end, even natural retention has its limits

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There is a monitoring of the vegetation

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In the Emmels and Rechterbach valleys there is also a monitoring of butterflies and dragonflies

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We want to take advantage of today's presentation of the AMICE project to very thank WWF for their financial support since 2002 and of course also for their matchfunding this project:

Thanks a lot for financial support aimed at the restoration of our beautiful nature reserves!

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Thank you for your attention

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