

Giving Room to Nature's Engineers



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Following on my talk of yesterday:

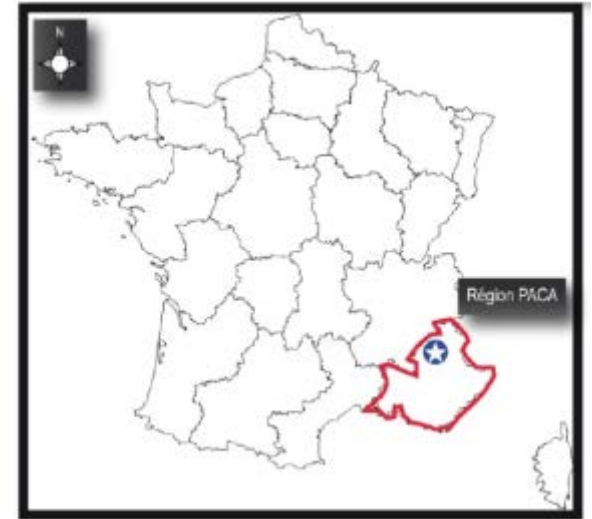
River Restoration Priorities

First: preserve river reaches that are functioning well
Establish erodible corridor within which nature's engineers (flow, erosion, deposition, biota) can function

Second: restore processes within river corridor

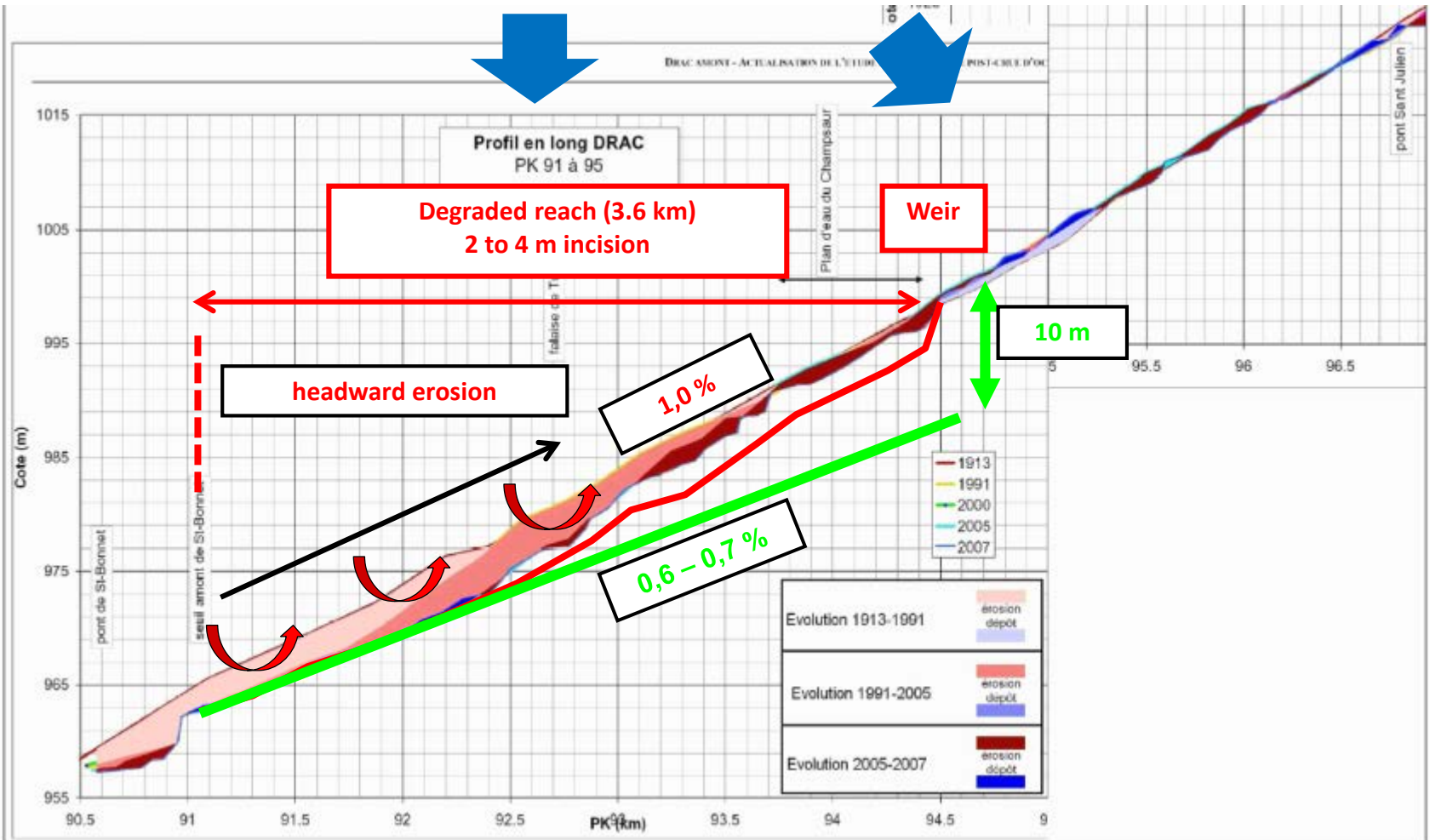
Today: an example of
restoration of process

Drac River, SE France (Alps)

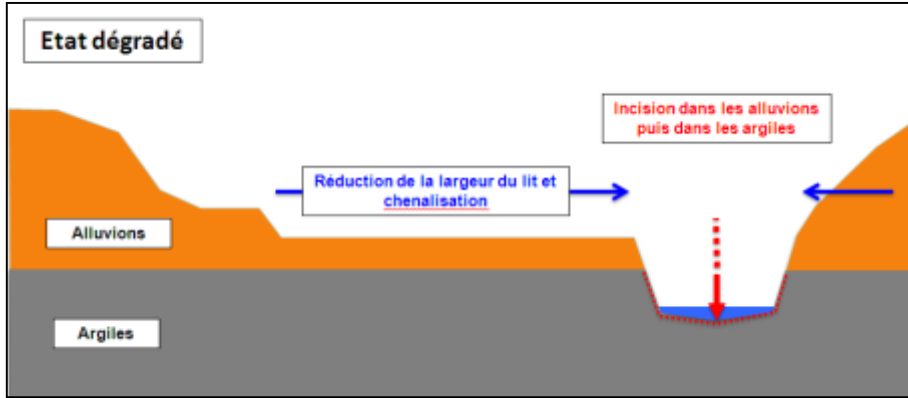
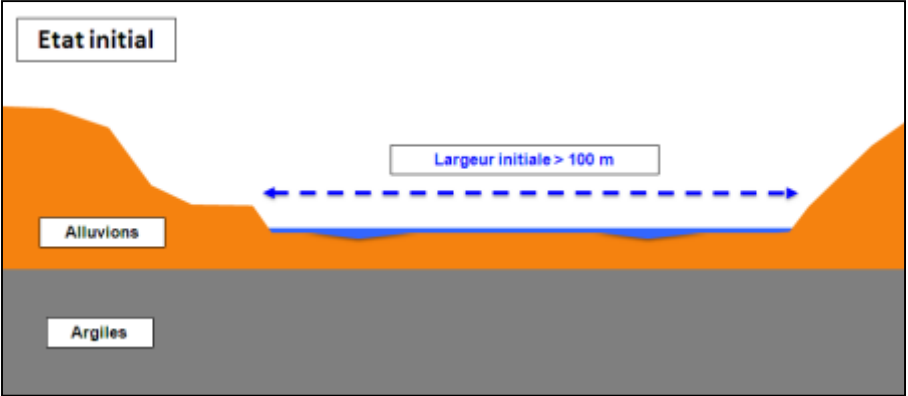


Thanks to Olivier Vento, Burgeap Consultants, Avignon



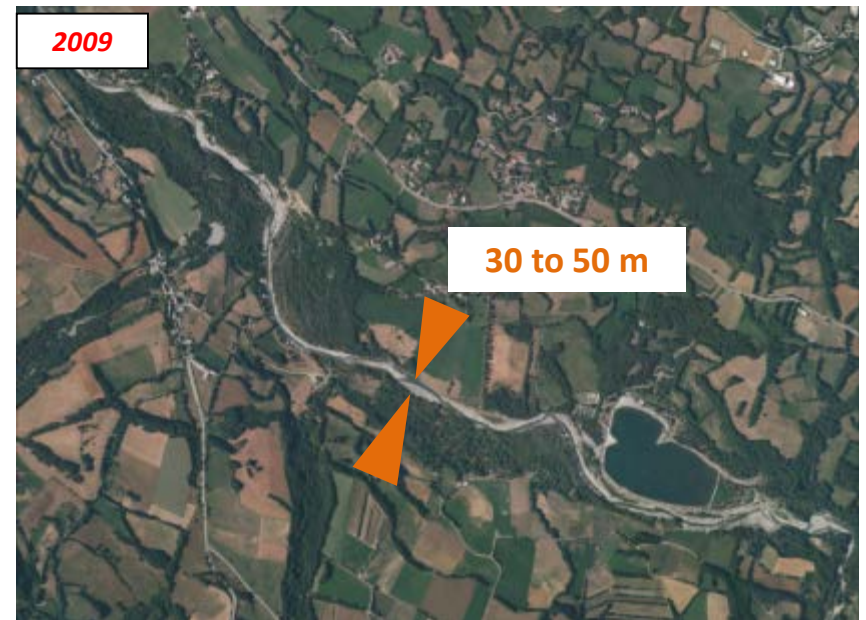
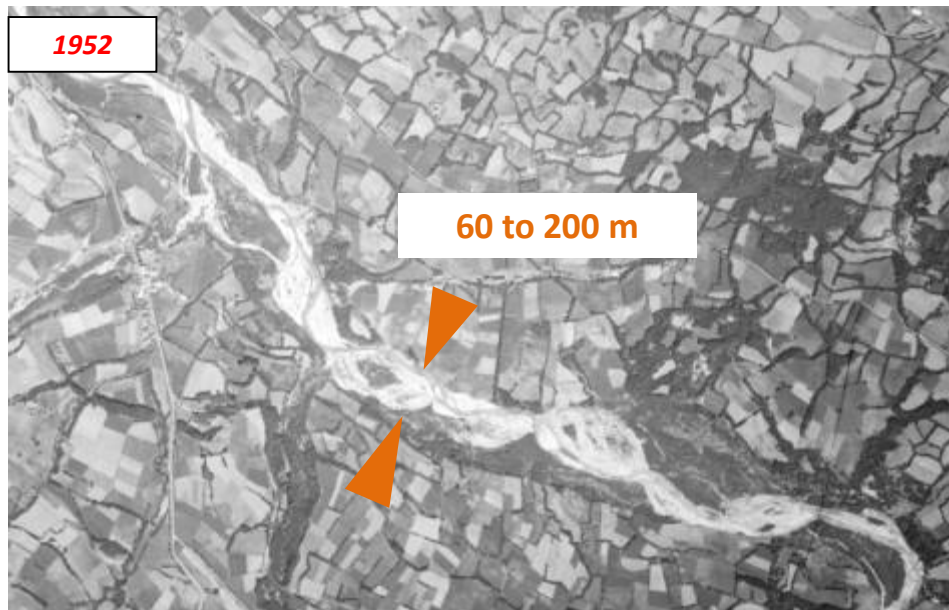


- A major factor : soft clay substratum under bed materials
 - Alluvial material thickness : 1 to 3 m
 - Incision between 2005 and 2012 : 2 to 4 m in clayey substratum



Bed incision in clay bedrock and chenalization

- Fluvial style consequence :
 - Fluvial pattern tended from braided to recti-linear
 - Active bed width reduced from 60-200 m to 30-50 m



Restoration involved filling degraded 'slot' channel with gravel from adjacent floodplain

- Examples of cross-sections

