



MINISTERIO
PARA LA TRANSICIÓN ECOLÓGICA
Y EL RETO DEMOGRÁFICO

CONFEDERACIÓN
HIDROGRÁFICA
DEL JÚCAR, O. A.



First Expert Forum for Producers and Users of Disaster-related Statistics

“The Geospatial Dimension”

THE CASE OF TOUS DAM

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Tous Dam





1st Tous Dam (1978-1982)

H: 50 meters

Spillway:

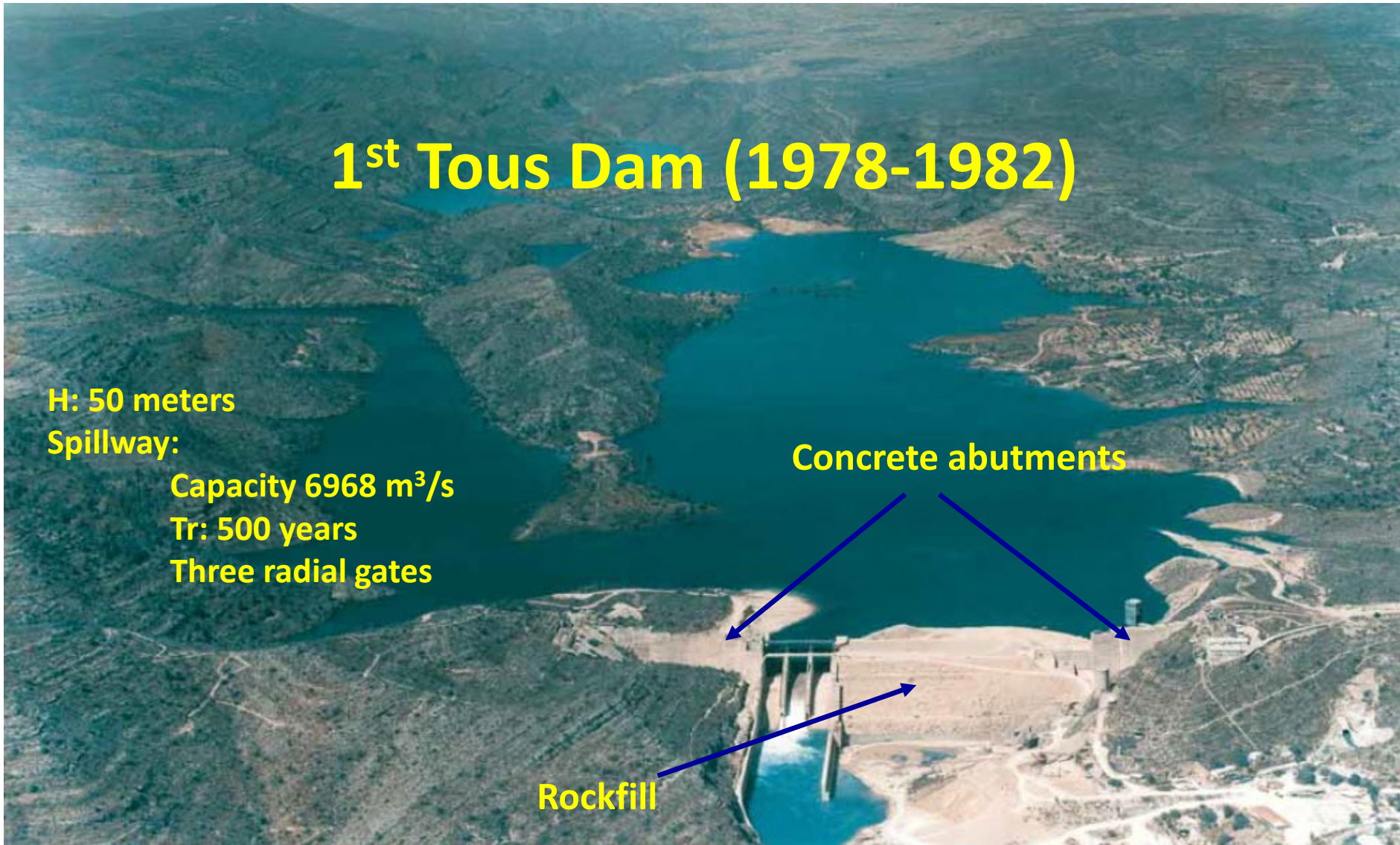
Capacity 6968 m³/s

Tr: 500 years

Three radial gates

Concrete abutments

Rockfill





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Zona inundada por la riada de octubre de 1982

Zona que tras la construcción de las nuevas presas, sería inundada por una riada similar a la del año 1982





Problems revealed

1. Lack of data led to undersizing the Spillway of the project of the Dam
2. During the storm, it was not known:
 - how much rain had fallen,
 - the flow that circulated through the rivers
 - potential damage that could be affected by the break of the dam.



Consequences

- The regulations on the construction and operation of dams in Spain were changed, affecting matters related to safety.
- Automatic Hydrological Information Systems (AHIS), were created in all the hydrographic basins in Spain, for the purpose of provide real-time rainfall data, levels in reservoirs and flows throughout the rivers.



Tous New Dam (1996)

H: 110 meters

V: 379 Hm³

Spillway:

Capacity 20.000 m³/s

Tr: 10.000 years

No gates





Final advise

The possibilities that may occur in the future are unpredictable.

It is a duty of all of us, instead of predicting bad things, to promote all those that can make a better world.

K. Popper

We need data to predict disasters, but we have an obligation to be optimistic.



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Thank you for your attention