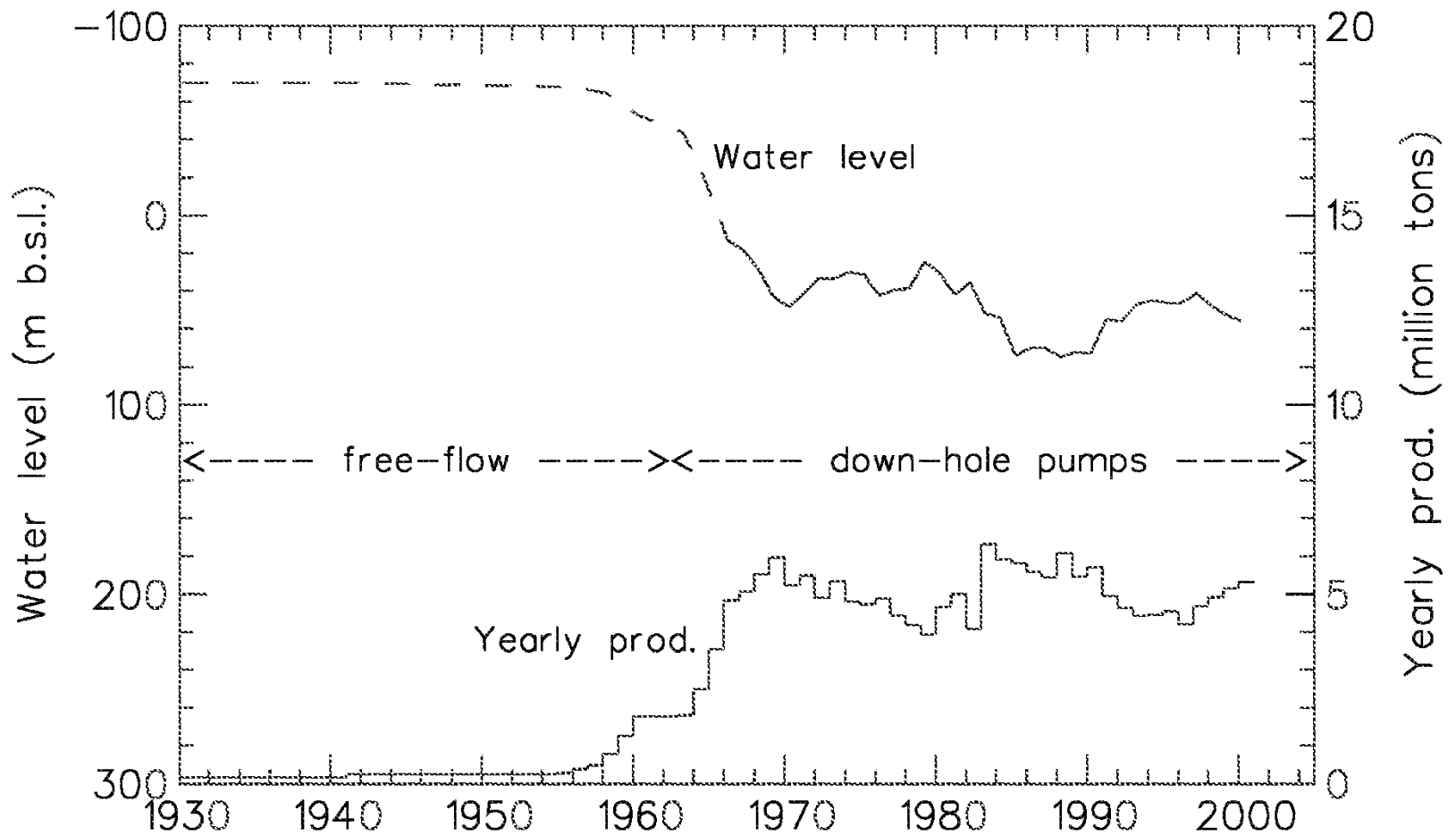


# Reservoir management

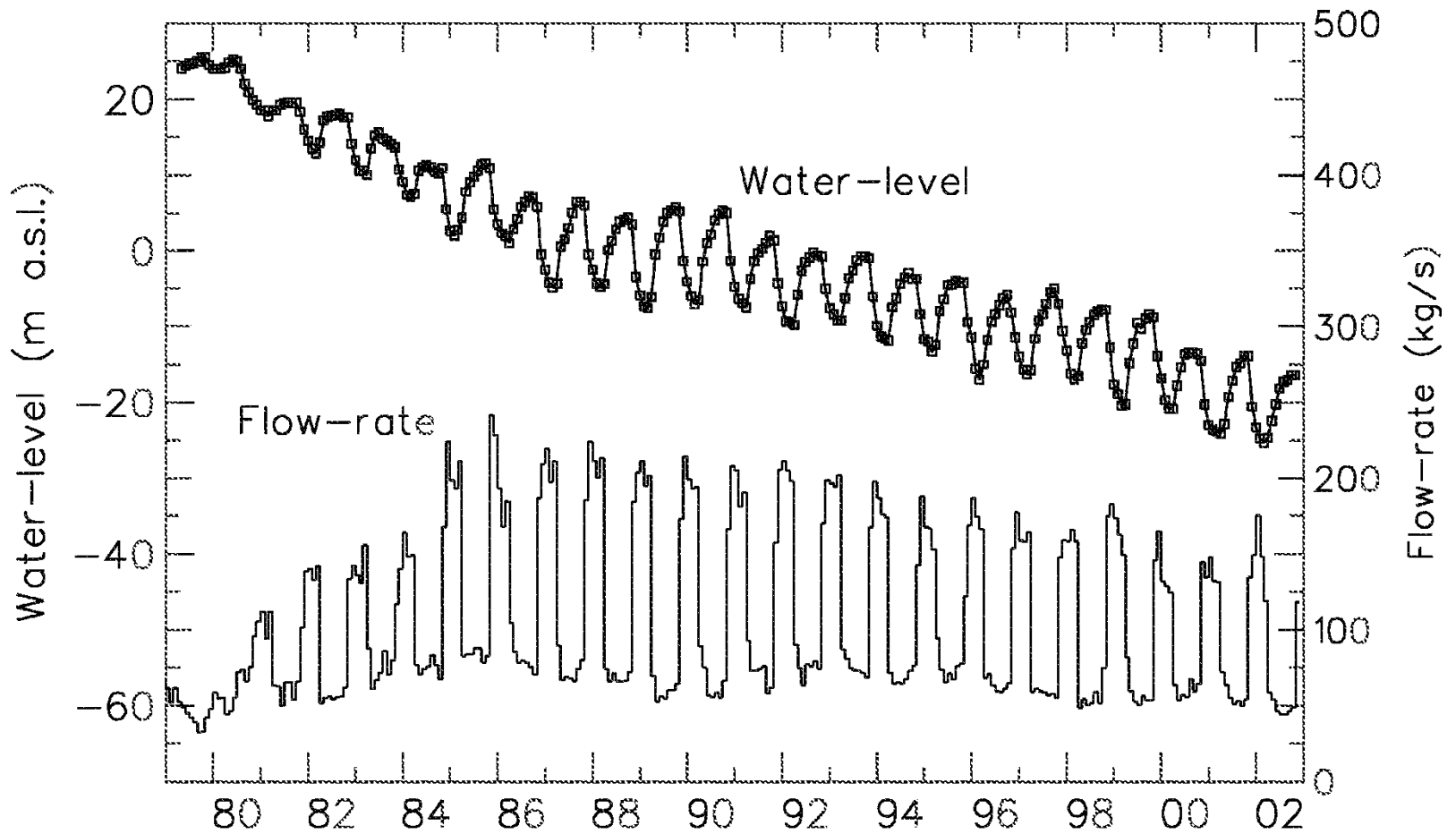
Presented by Dr. Ólafur G. Flóvenz,  
general director of ISOR – Iceland  
GeoSurvey

# Sustainable geothermal production

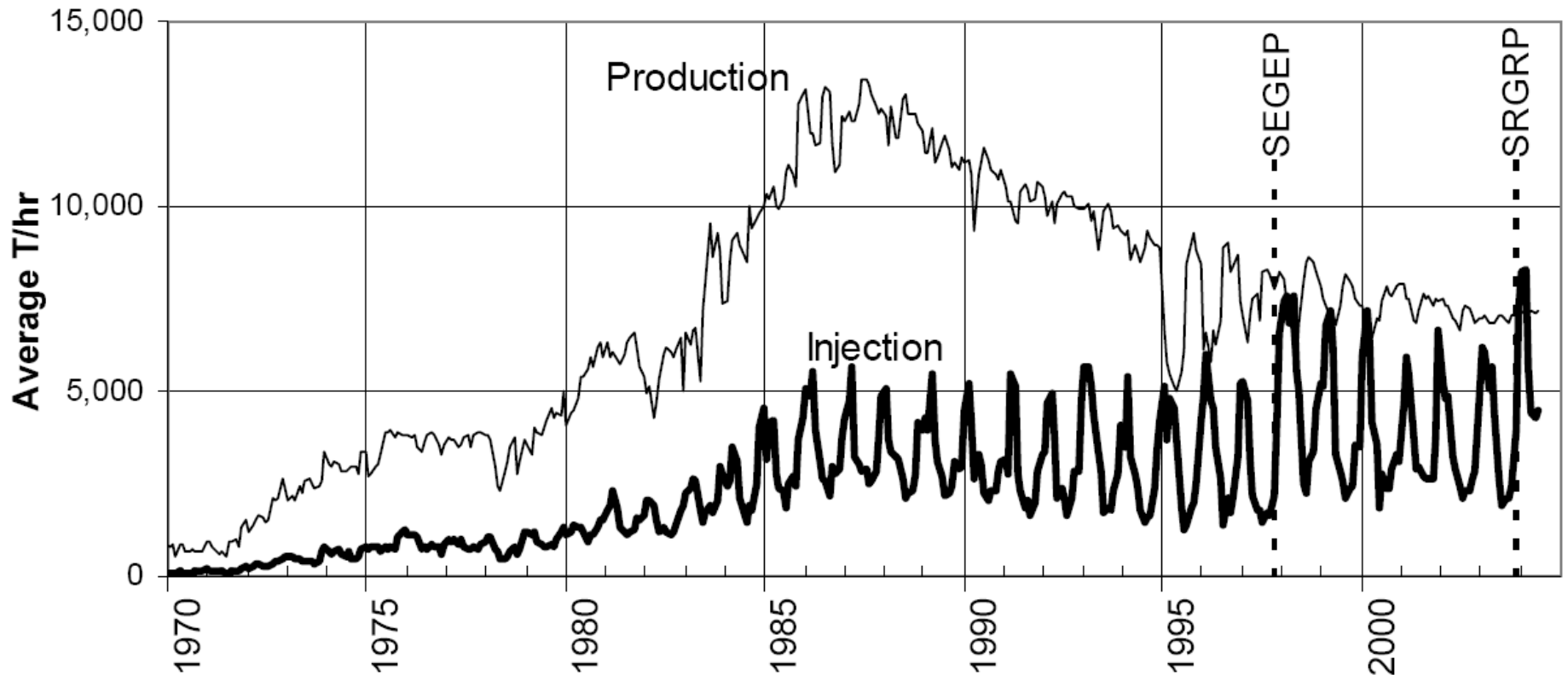
- Sustainable production is energy production can be maintained at constant level through a few centuries (100-300 years).
- It is site and technology dependent.
- For each field and for each mode of production there exist a certain value of the production that is defined as sustainable production.
- Exceeding sustainable production is overproduction
- Re-injection increases the sustainable production capacity



Production- and response history of the Laugarnes system  
(Iceland) 1930 – 2002



Production- and response history of the Urban Area system in Beijing (China) 1979 – 2003



Production and water injection history of the Geysers geothermal field in California [USA]; production has been reduced greatly due to **overexploitation** but **re injection** has helped maintaining it at ~50%

# Geothermal resource management

- Relies on proper **knowledge** of the geothermal system involved and its production response, which depends on extensive data and information.
- Most important data obtained through careful **monitoring** of its response to long-term production.
- Modelling is an important management tool.
- Reinjection often essential for sustainable management.

