



How to Water a Desert

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Problem

The Colorado River damming in 1964 decreased the fresh water supply entering the Mexicali Valley, reducing agricultural productivity in the area.

Methods/Process

Combination of Solar Pond and Multiple-Effect Distillation (MED) desalinization plant

- Low energy consumption
- Low maintenance cost
- Low environmental impact
- Optimized for sunny climates



Fig. 2: Location of the Mexicali Municipality

Colorado River Water Flow

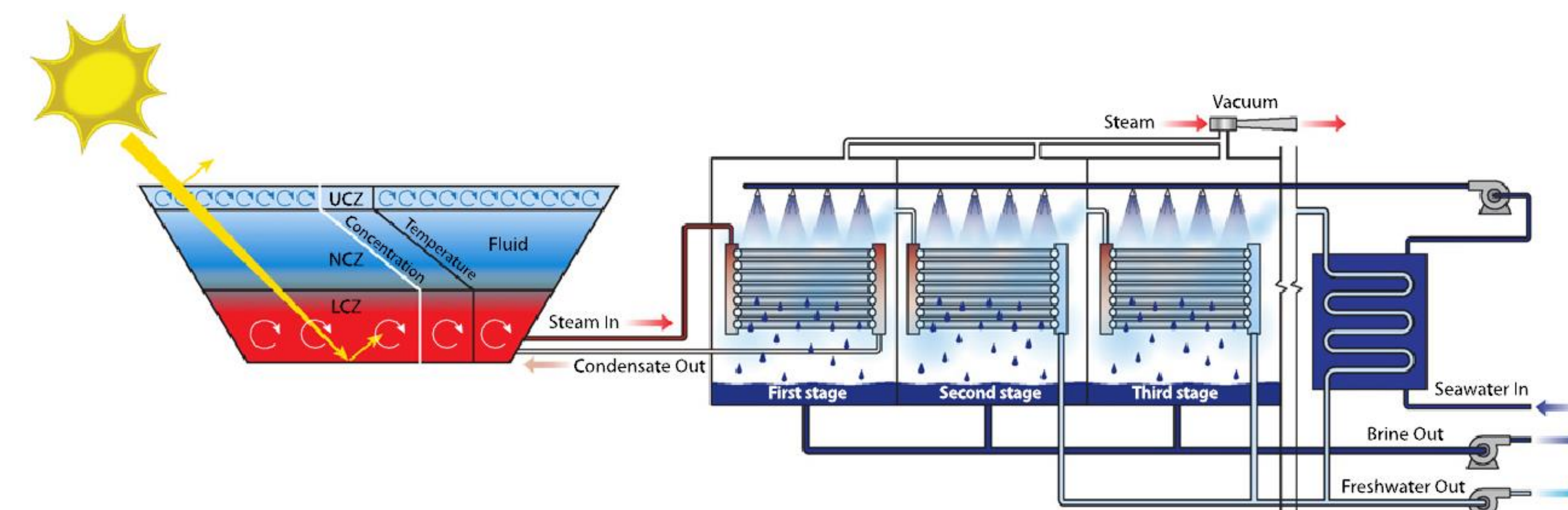
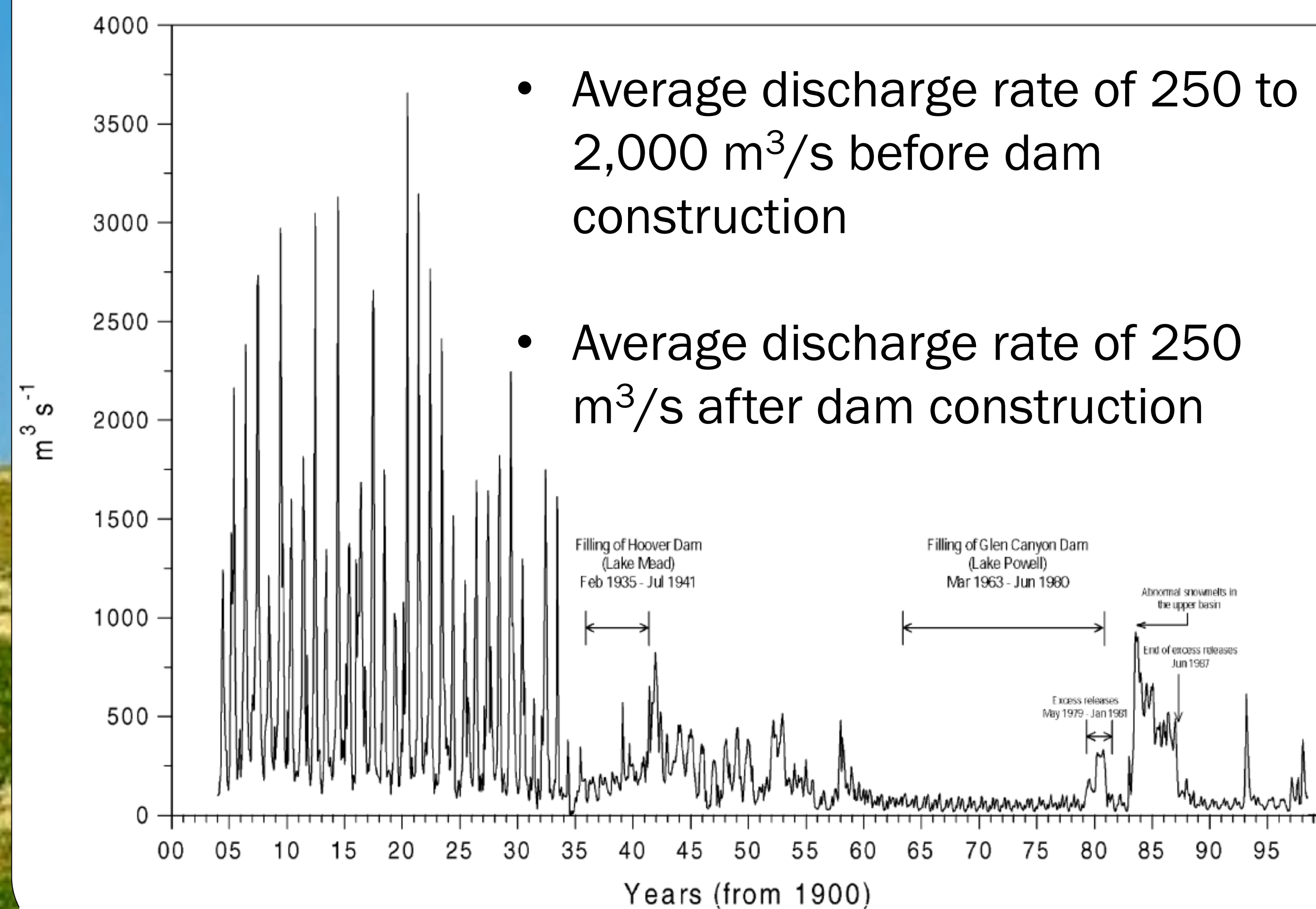


Fig. 1: Solar Pond/MED process

Conclusions

- Desalinization plant will offset the water loss from the Colorado River damming
- High initial cost is offset by long term agricultural and economic benefits

Project Goals/Objectives

- 10% increase in agricultural productivity
- Increase access to fresh water in the Mexicali Municipality
- Promote job growth and a strong economy

Results/Outcomes

- Increase in local crop production
- More fresh water for agricultural and domestic use
- Short and long term job creation in the area

References

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