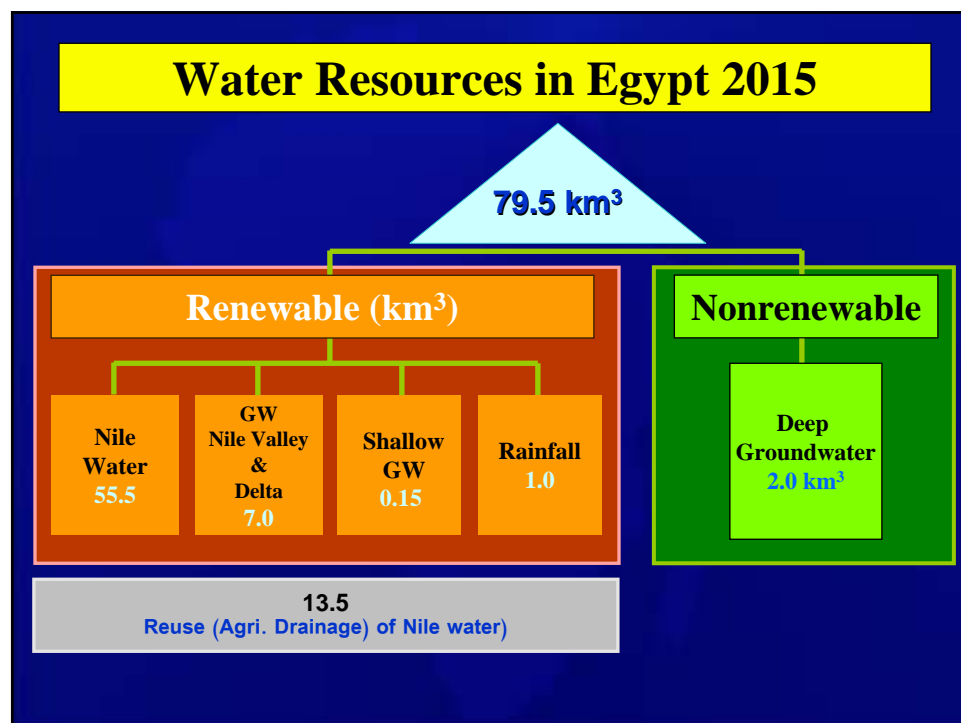
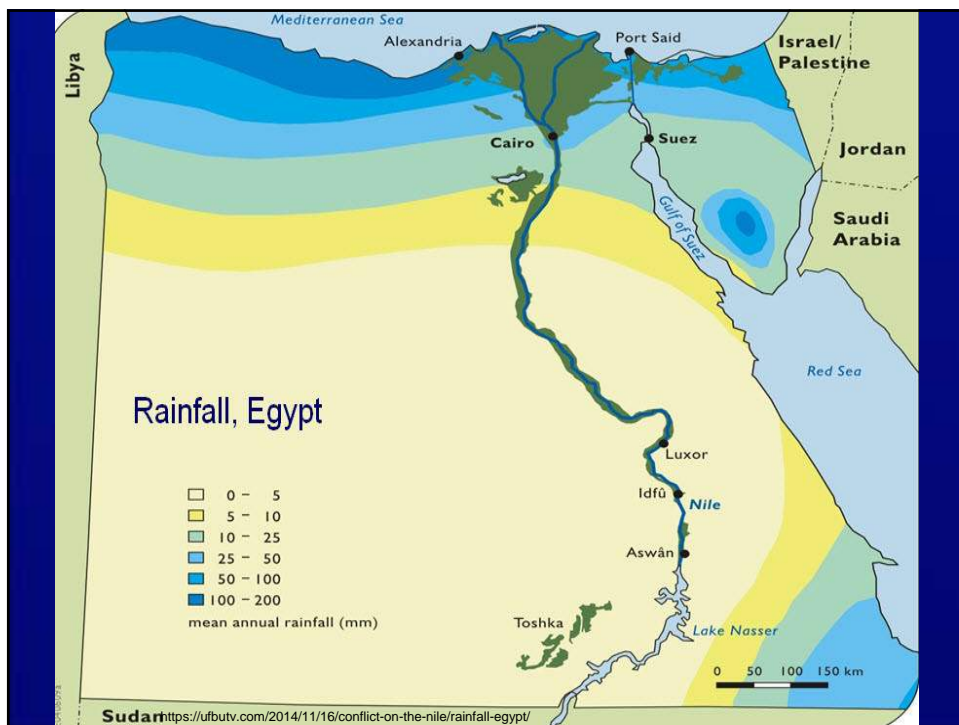
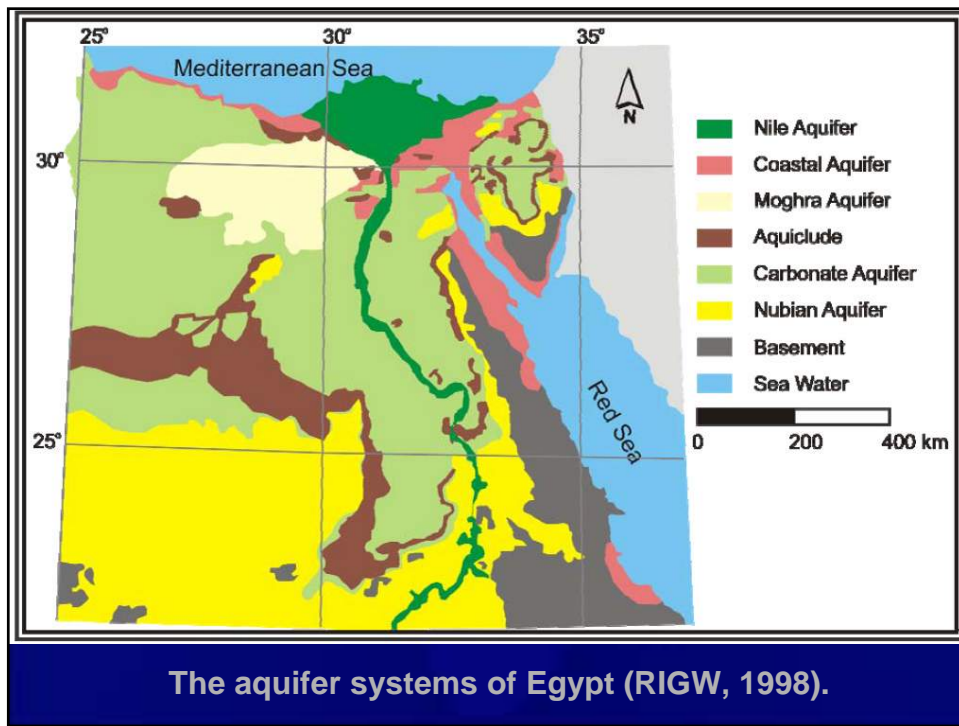


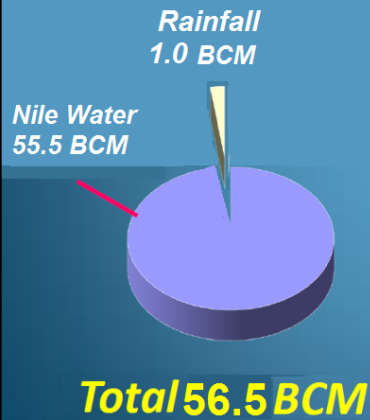
Water Resources in Egypt



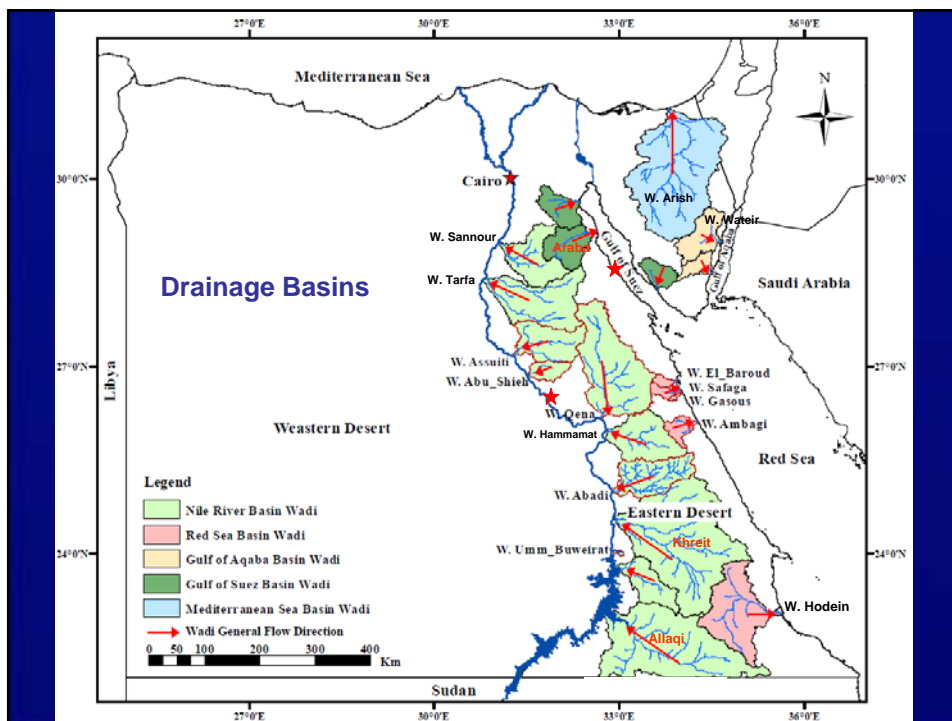
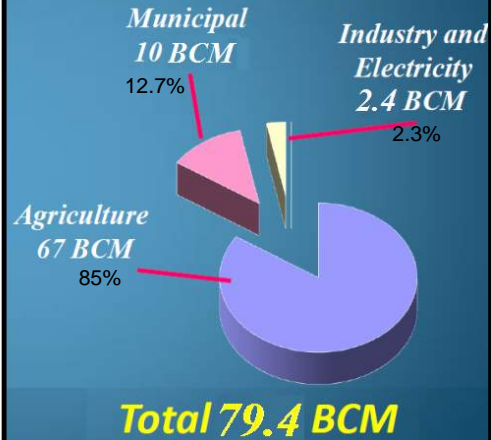


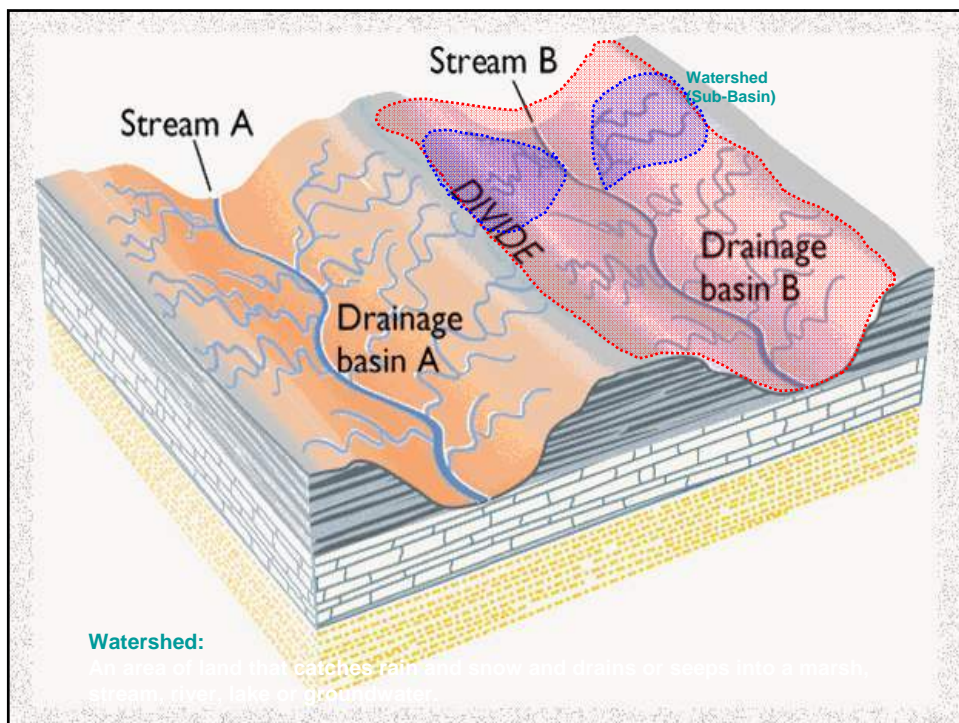
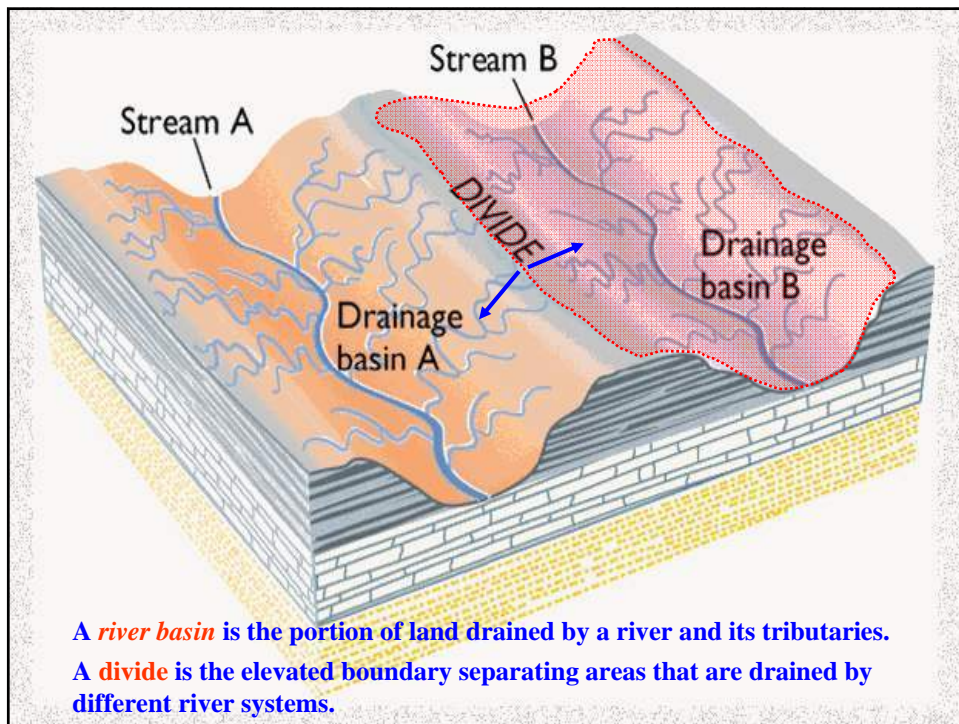
Water balance in Egypt 2015

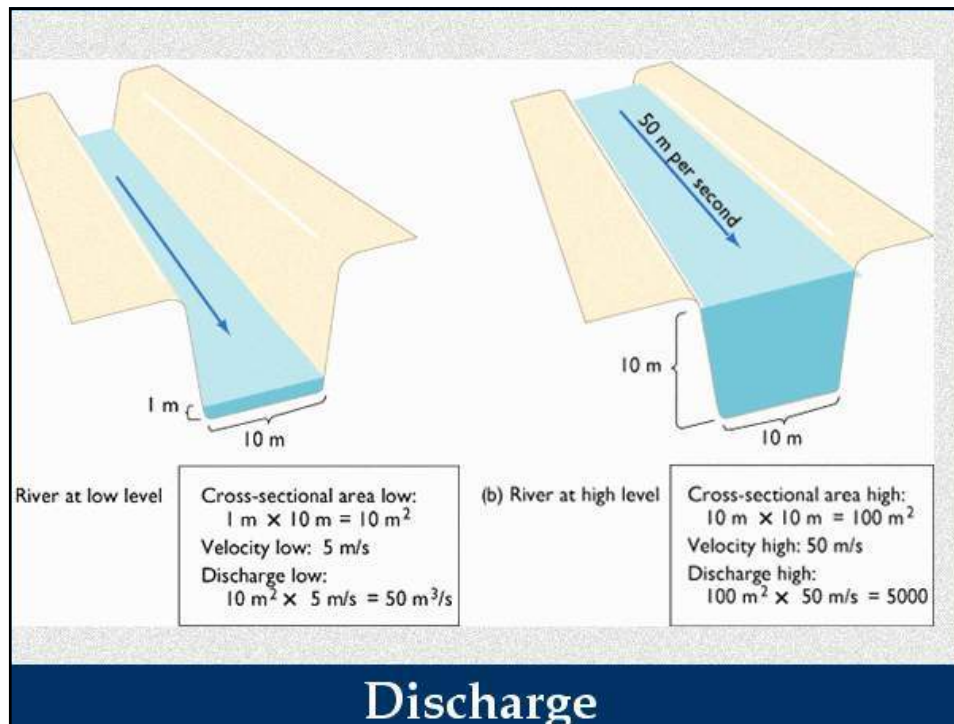
Available water resources



Consumptions







Stream Discharge

River discharge (Q):

It is the volume of water moving down a stream or river per unit of time, commonly expressed in m^3/s .

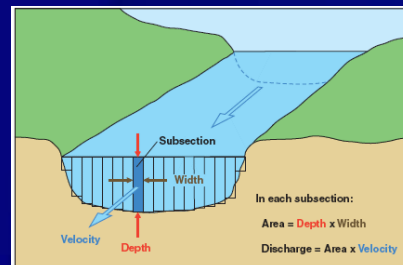
$$Q = W \times D \times V$$

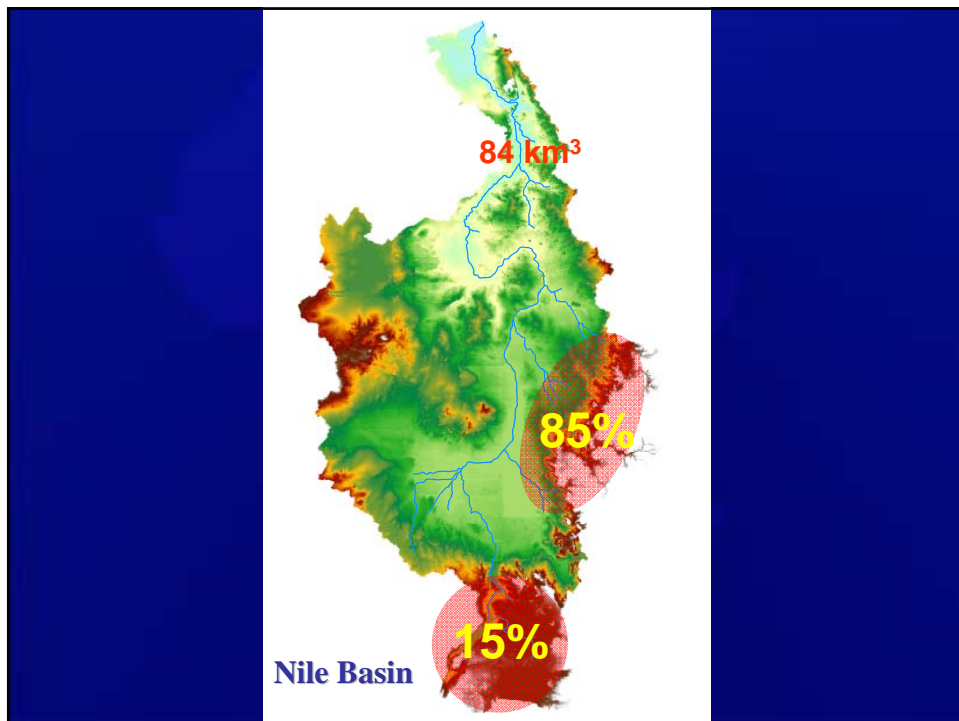
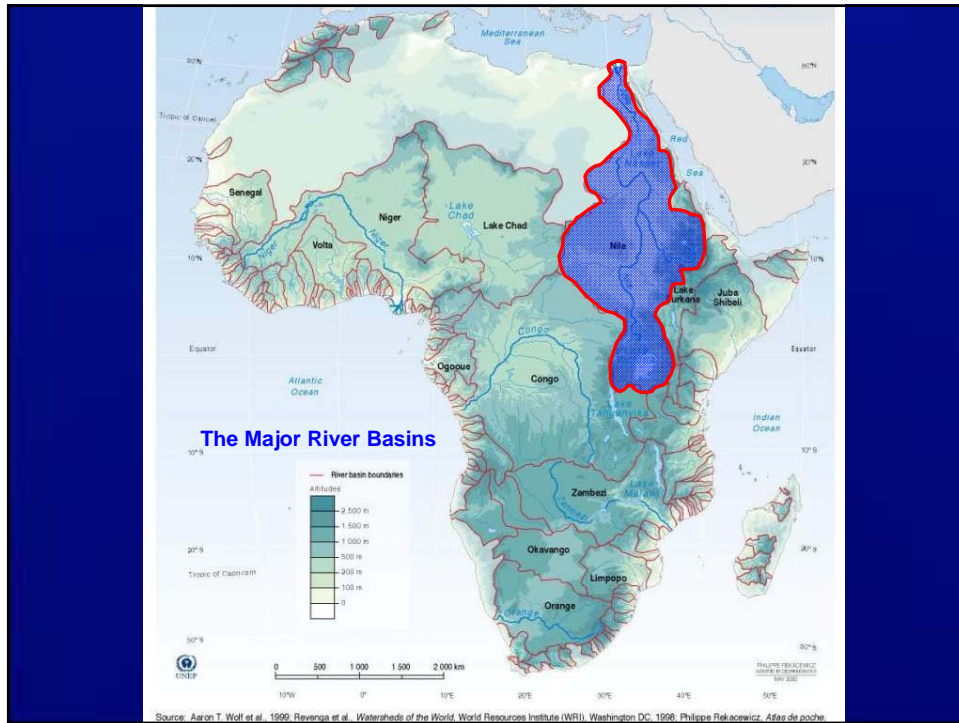
Q = stream discharge (m^3/sec)

W = average width (m)

D = average depth (m)

V = velocity of water (m/sec)



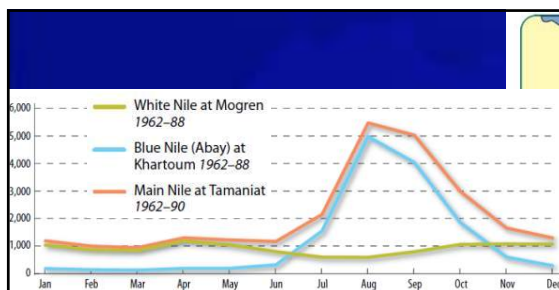


Nile Basin Countries

1. Egypt
2. Sudan
3. South Sudan
4. Eritrea
5. Ethiopia
6. Uganda
7. Kenya
8. Rwanda
9. Burundi
10. Tanzania,
11. DR Congo

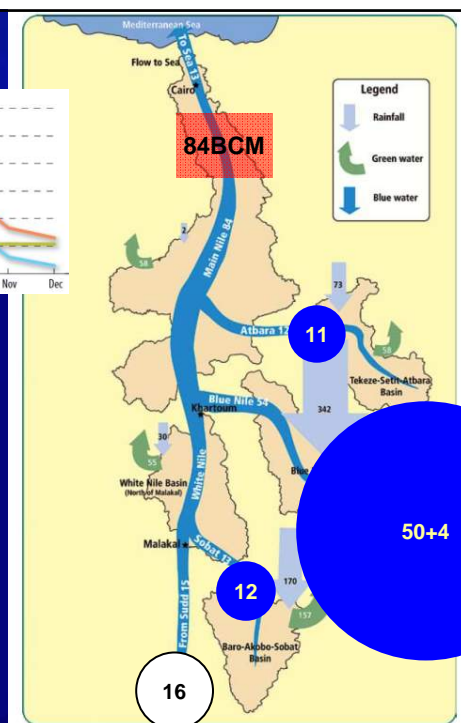
POLITICAL MAP OF THE NILE REGION

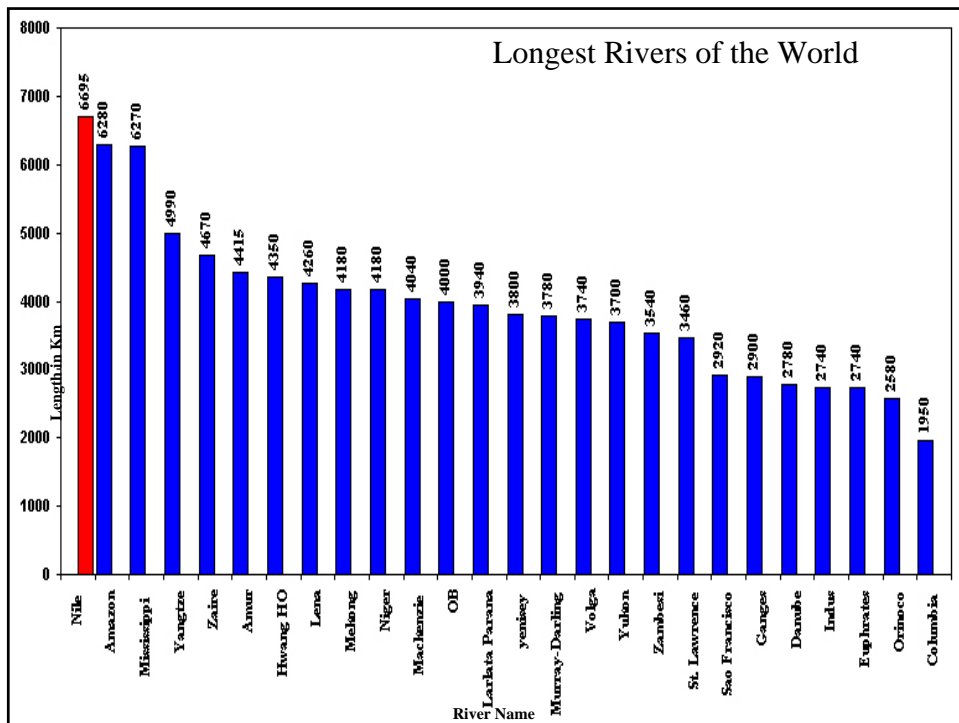
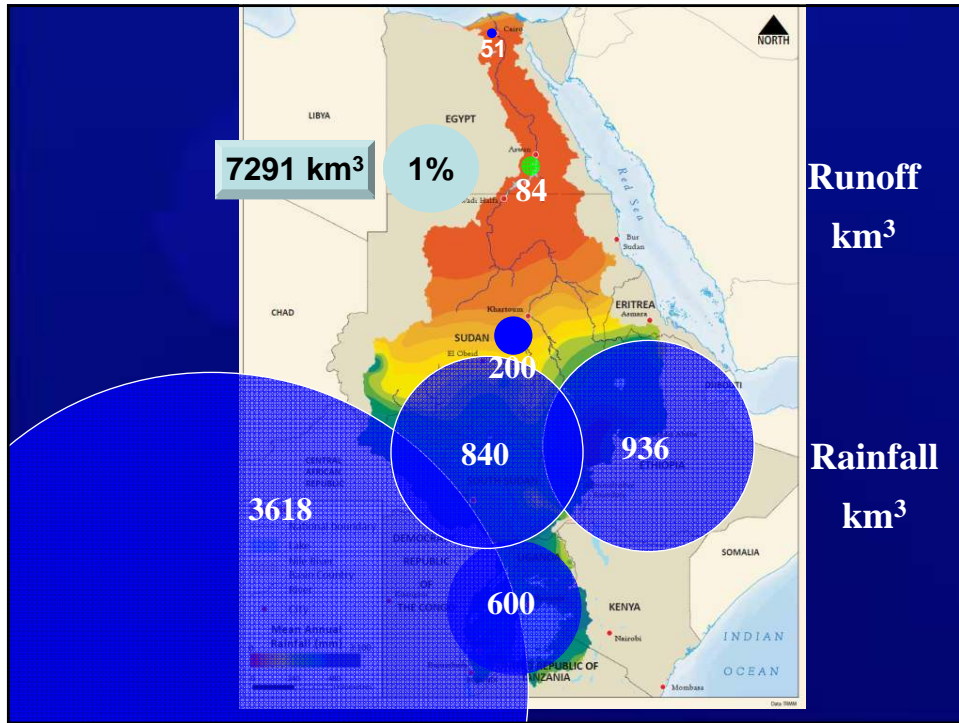
- Nile Basin boundary
- international boundaries
- rivers
- lakes
- capital city
- other town/city

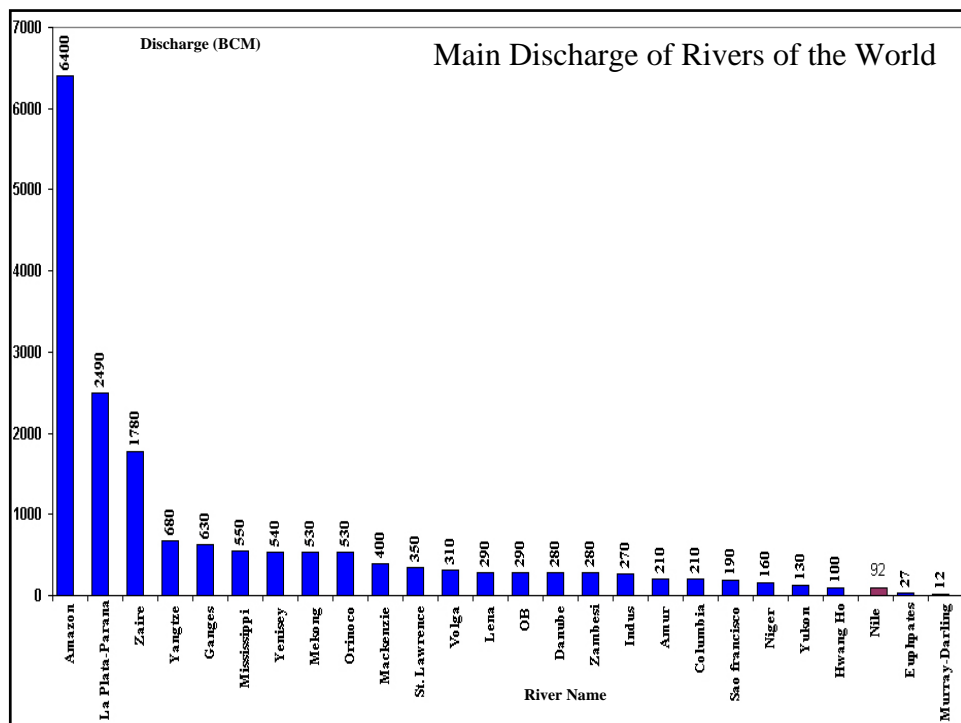
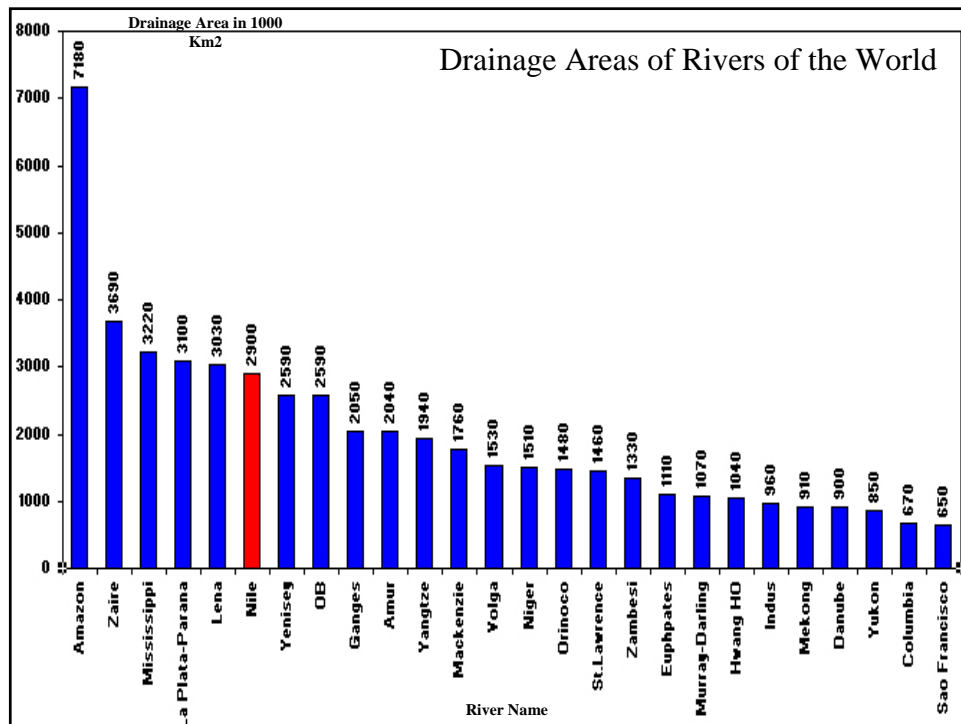


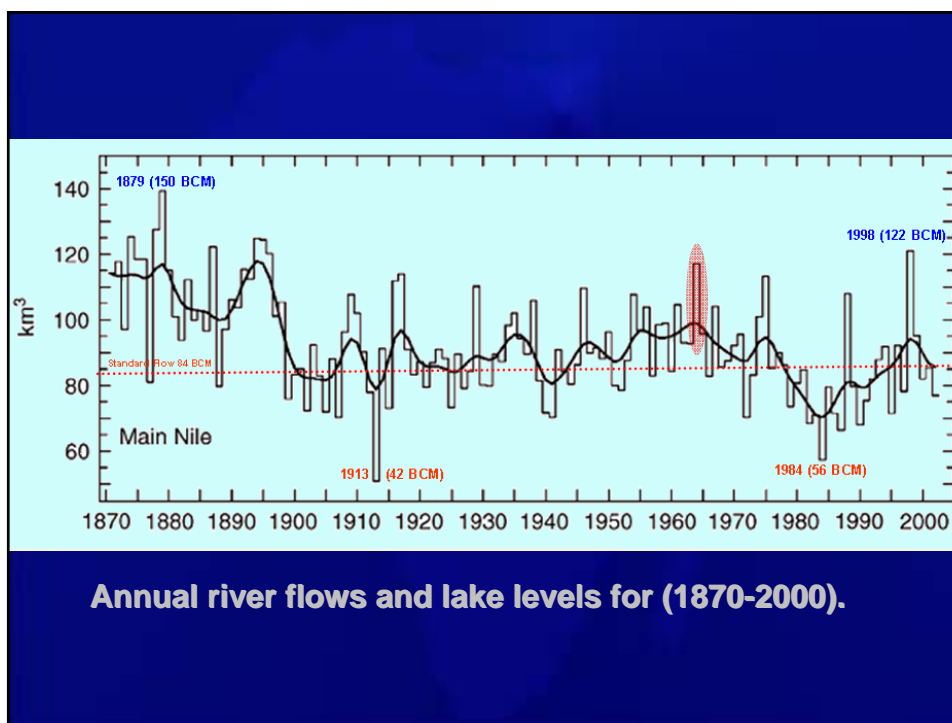
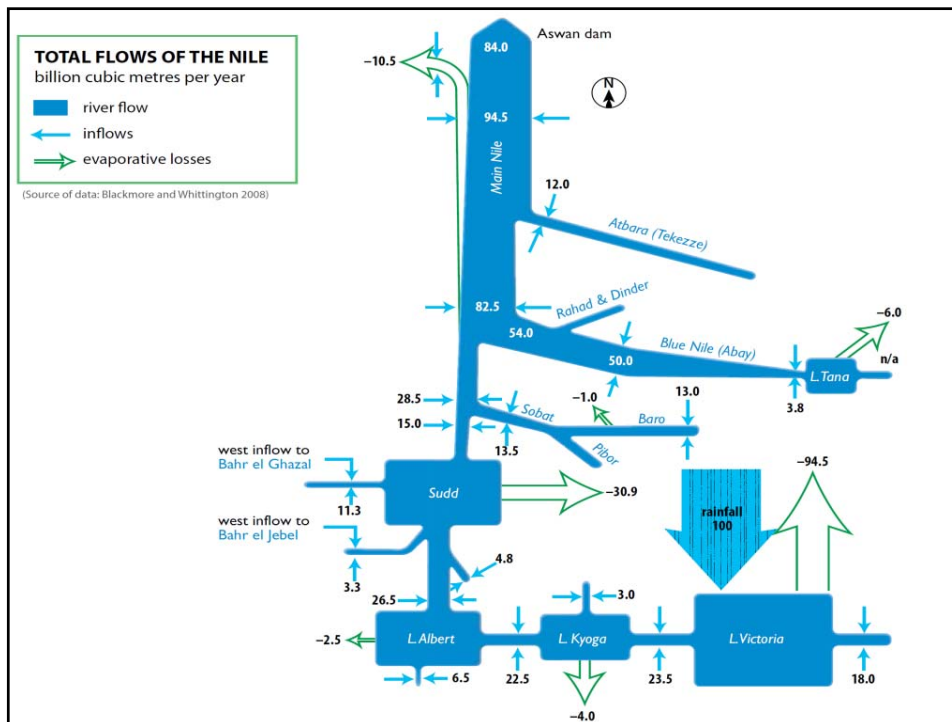
Average monthly flow (m³/sec).

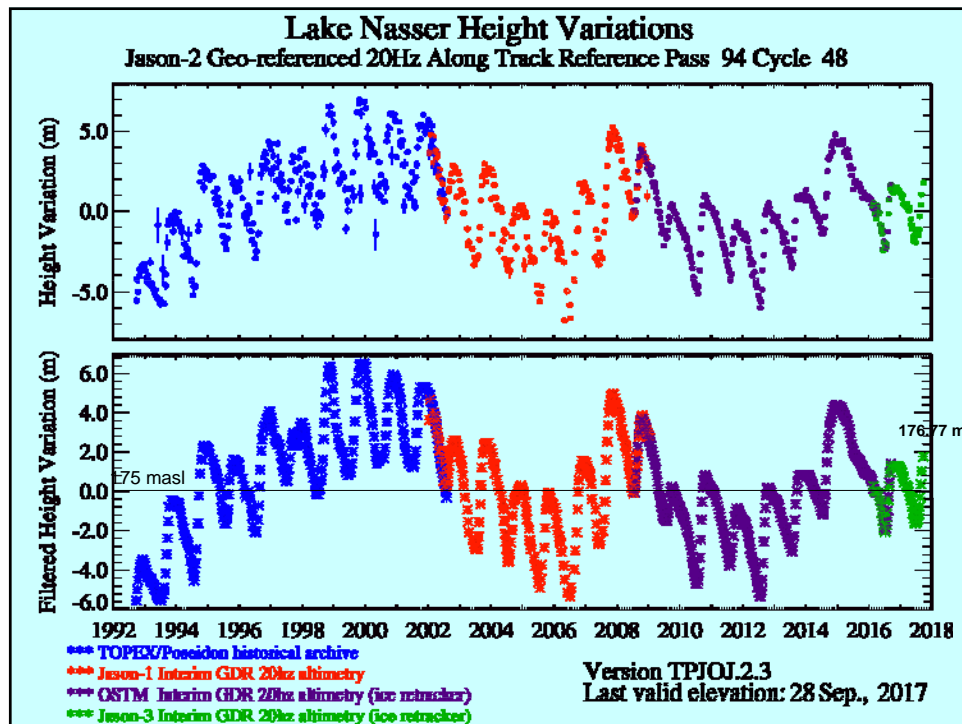
Annual flow (km³)











Characteristics	Lake Nasser (Egypt)
Max length (km)	500
Max width (km)	12
Maximum depth (m)	110
Mean depth (m)	70
Reservoir area (km ²)	6000
Water volume (km ³)	162
Average annual inflow (km ³ /y)	70
Average residence time (y)	2.30
Major water uses	Irrigation, hydropower

Characteristics of the Lake Nasser.

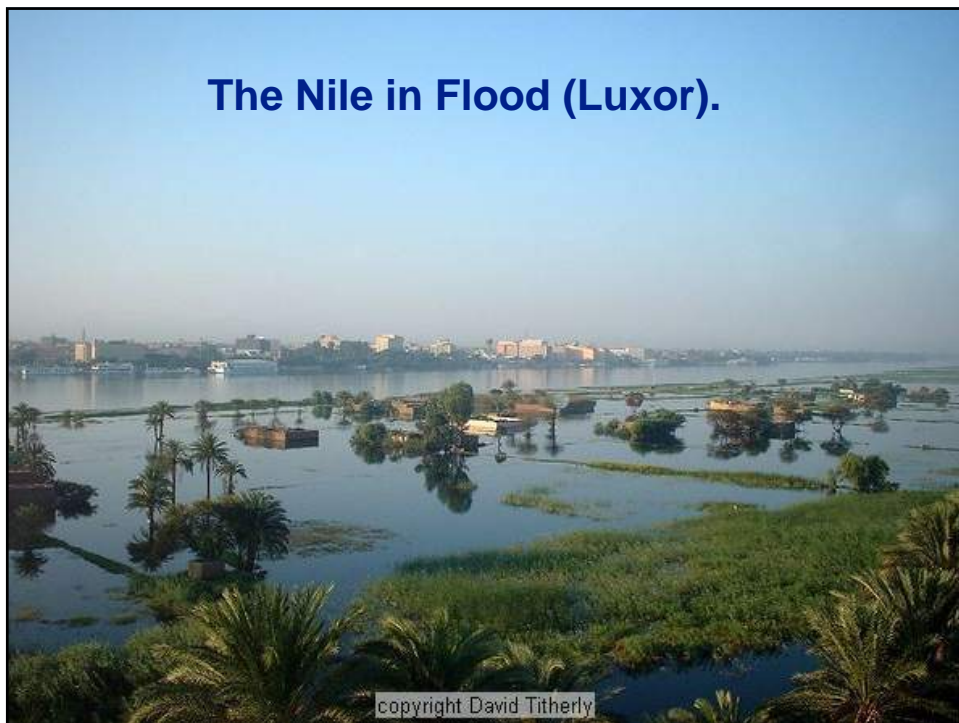
October 31, 1927



Nile flood, Delta, 1963

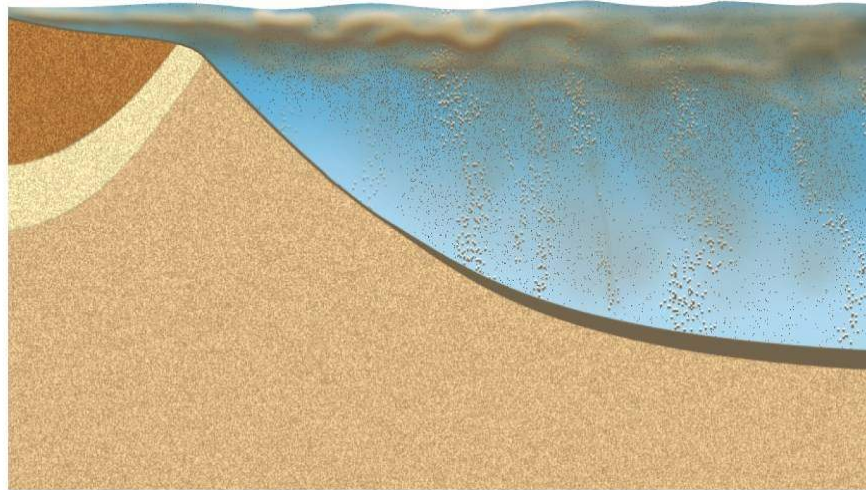


The Nile in Flood (Luxor).

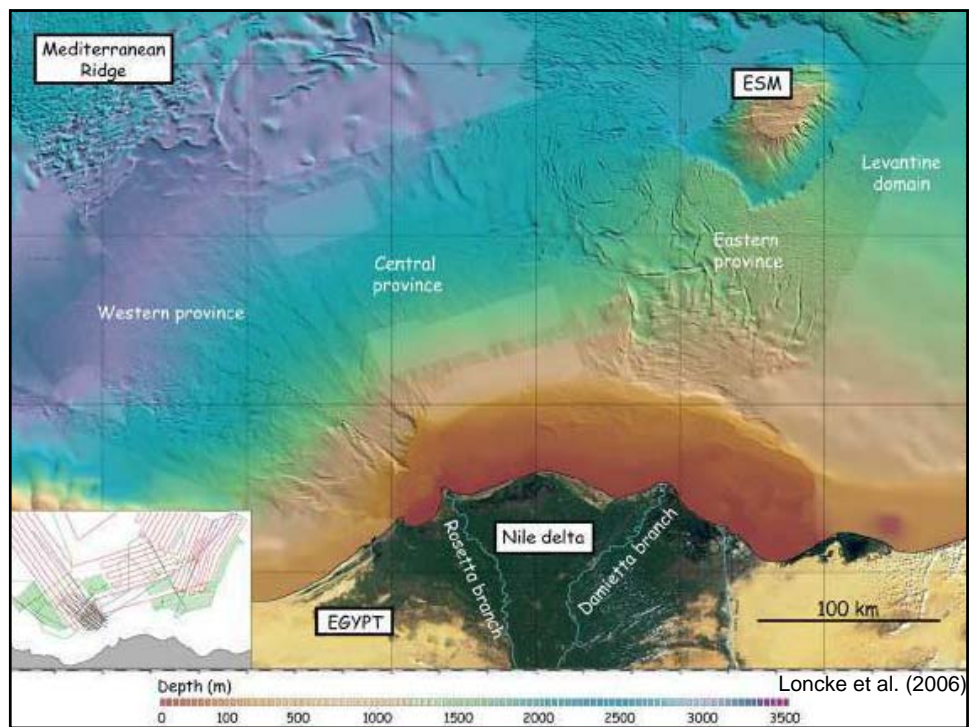




The last Nile flood, September 1964



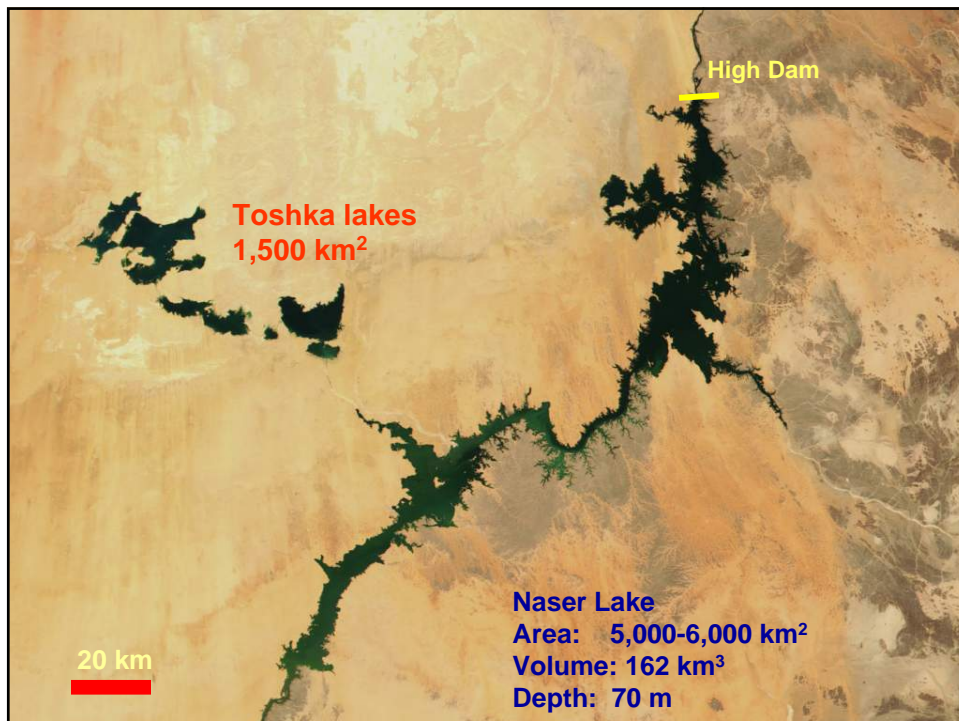
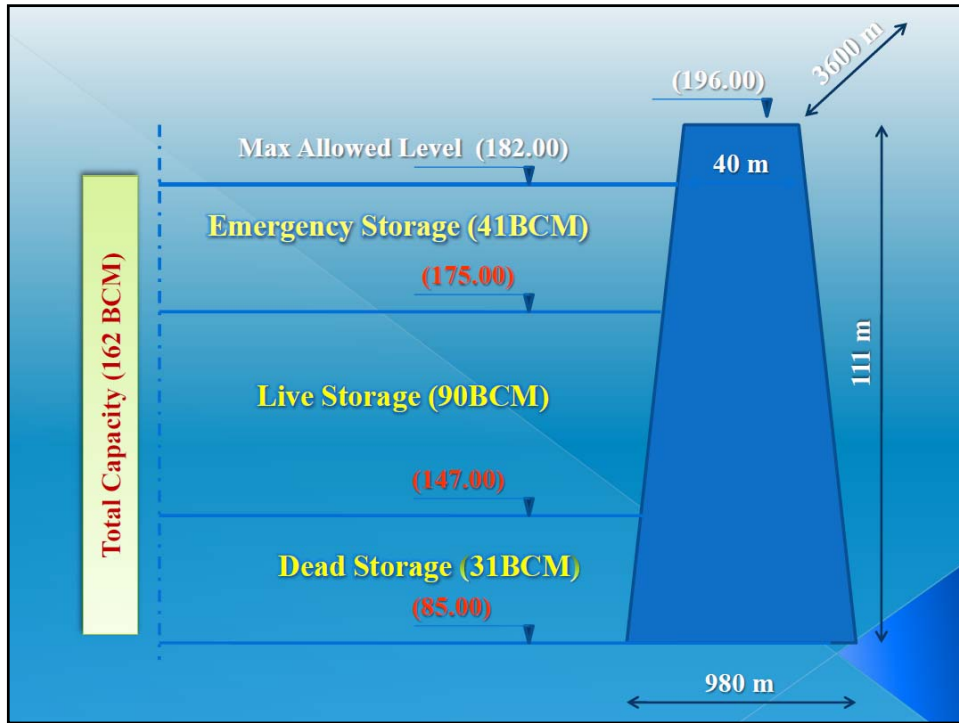
Meeting of the Waters

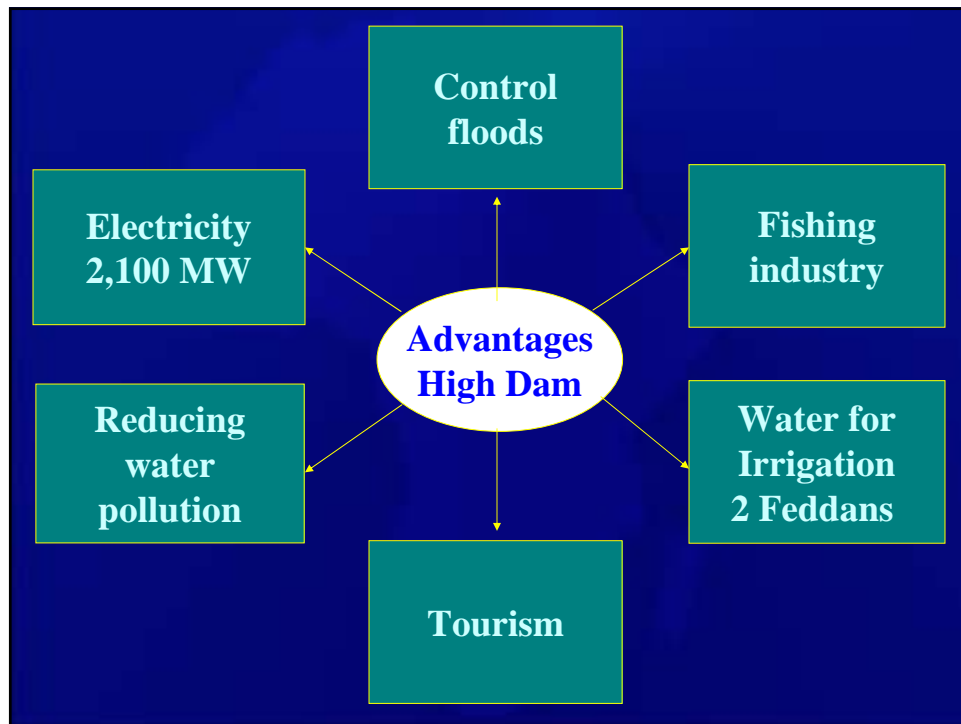




According to CONEXPO-CON/AGG '99,
the top 10 construction achievements of the 20th century are:

1. Chunnel Tunnel.
2. Golden Gate Bridge
3. Dwight D. Eisenhower System of Interstate and Defense Highway.
4. Empire State Building.
5. Hoover/Boulder Dam.
6. Panama Canal.
7. Sydney Opera House.
8. Aswan High Dam.
9. World Trade Center.
10. Chek Lap Kok Airport in Hong Kong.





Disadvantages of the Dam

- The land of Nubia had to be flooded to create the reservoir, which is 310 miles in length
- 10,000 people displaced to other places in Egypt
- Sometimes the Aswan High Dam gets blocked by silt and mud
- Erosion of the coastal area
- Salinization of GW and soil N. Delta
- Urbanization along the Nile banks

