



CE 3372 WATER SYSTEMS DESIGN

INTRODUCTION PART 3 (FALL 2020)

BRIEF HISTORY OF WATER SYSTEMS

- This brief history is adapted from
 - “Historical Urban Water Systems” by Dr. Robert Pitt, Department of Civil and Environmental Engineering, University of Alabama, Tuscaloosa, AL 35487
- As we proceed through the history, consider whether the picture is a water control, water use, or environmental restoration system.

BRIEF HISTORY OF WATER SYSTEMS



**Ancient springs at Delphi, Greece (site of Oracle)
(bronze age center of the universe)**

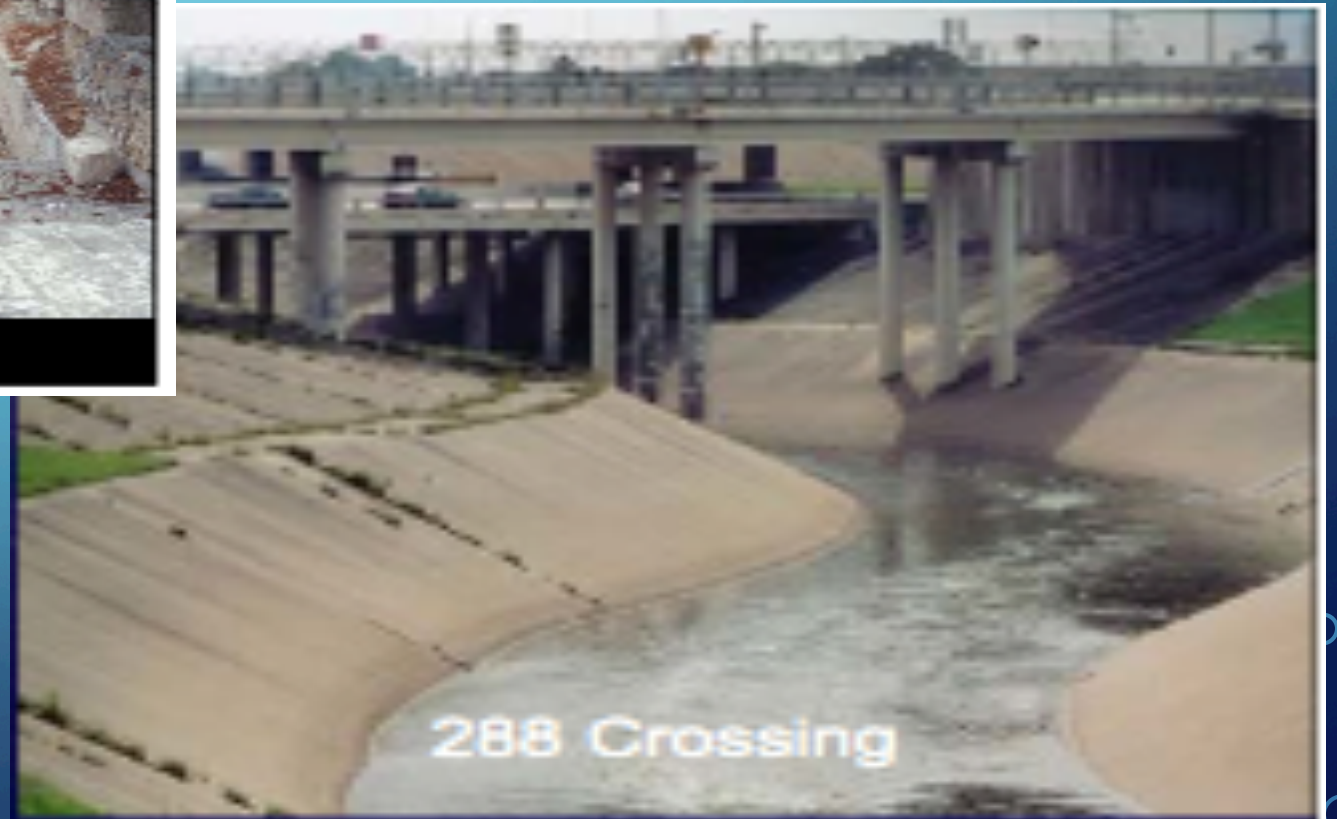


Modern springs at Delphi, Greece

BRIEF HISTORY OF WATER SYSTEMS

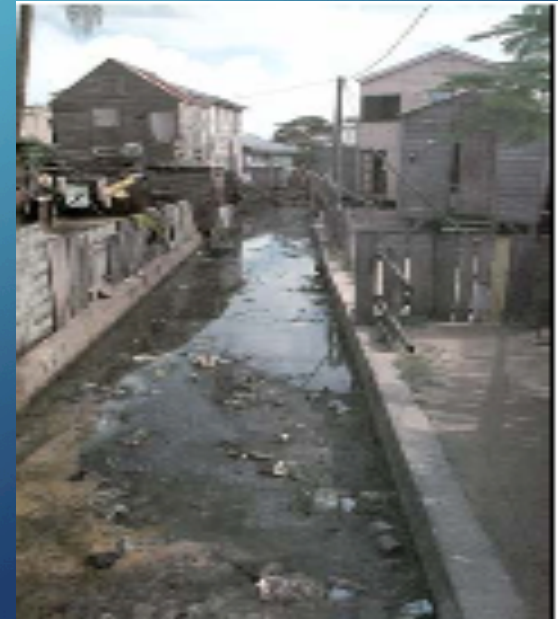


Storm drainage channels at the Agora, Athens, Greece



288 Crossing

BRIEF HISTORY OF WATER SYSTEMS



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Ancient stone pipe from reservoir at Knossos, Crete (Minoan 2600 to 1000 BC)



Excavation of ancient Roman pipes, Rome (about 100 AD)

J. Harper photo



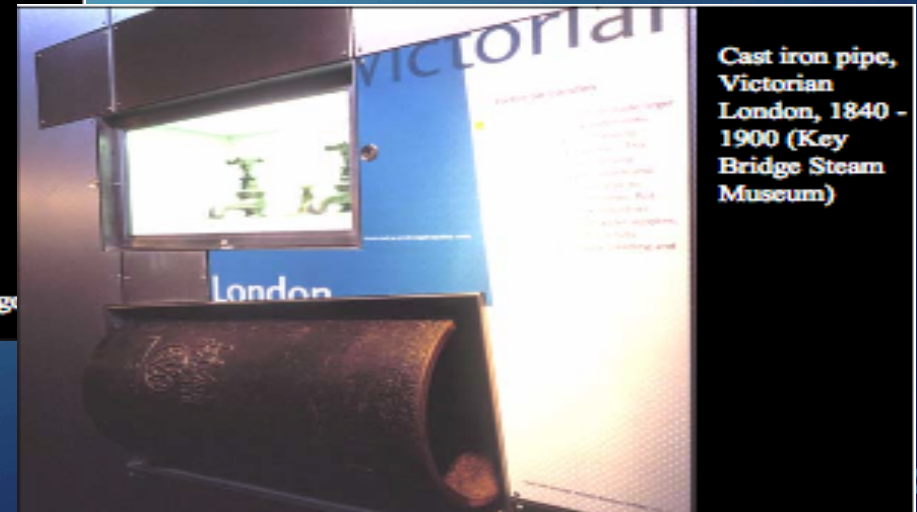
Wooden water pipe, Seattle, WA (Underground Seattle Museum)



Lead pipe, Medieval London, 1000 to 1400 (Key Bridge Steam Museum)



Ancient clay pipe at Kamiros, Rhodes (ancient Greece, 7th century BC)

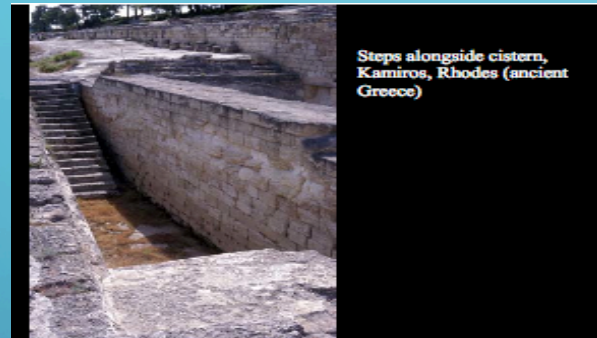
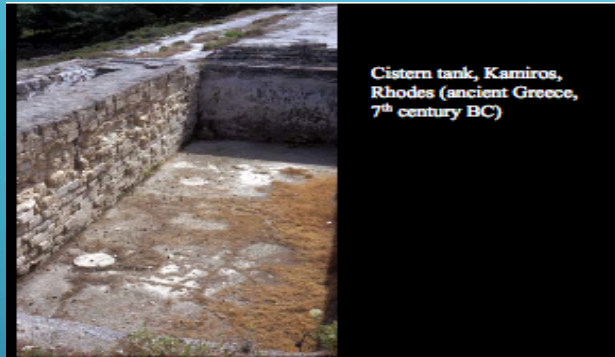


Cast iron pipe, Victorian London, 1840 - 1900 (Key Bridge Steam Museum)

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NOTABLE “BIG” SYSTEMS

- Los Angeles Aqueduct <http://www.history.com/topics/los-angeles-aqueduct>
- Central Valley Project https://en.wikipedia.org/wiki/Central_Valley_Project
- Salt River Project https://en.wikipedia.org/wiki/Salt_River_Project
- Tennessee Valley Authority (https://en.wikipedia.org/wiki/Tennessee_Valley_Authority)
- Three Gorges Project (https://en.wikipedia.org/wiki/Three_Gorges_Dam)

OTHER INTERESTING SYSTEMS

- Las Vegas Water Authority (
<https://www.reviewjournal.com/local/local-las-vegas/follow-a-gallon-of-water-from-lake-mead-to-a-las-vegas-tap/>)
- New York https://en.wikipedia.org/wiki/New_York_City_water_supply_system
- Paris (FRANCE) <https://parisianfields.com/2012/03/11/a-most-unusual-water-system/>
- Berlin (GERMANY) <http://www.bwb.de/content/en/html/index.php>

NEXT TIME

- Design criteria
 - Codes
 - Manuals
 - Literature