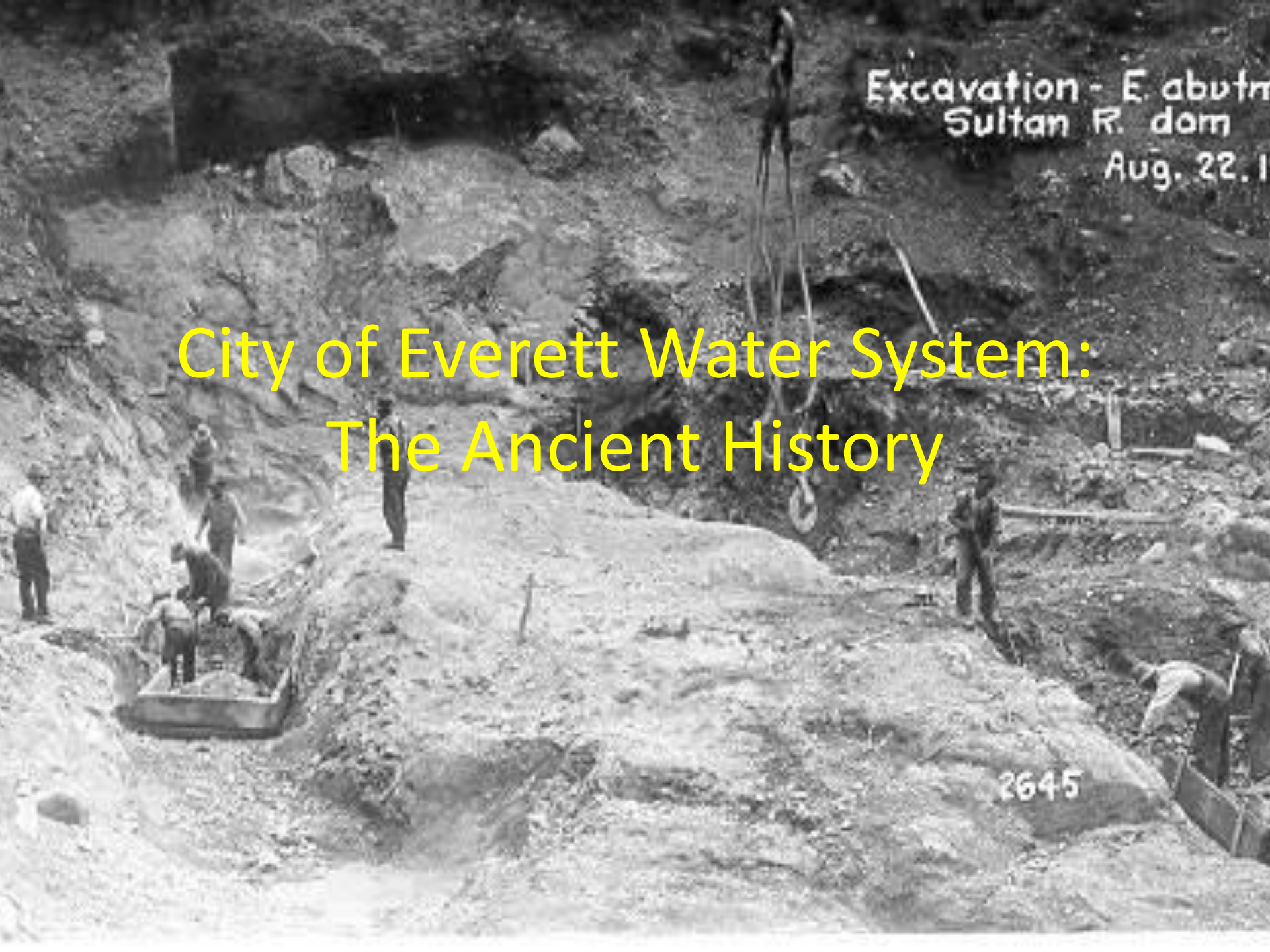


Excavation - E. abutment
Sultan R. dam
Aug. 22.

City of Everett Water System: The Ancient History

2645



Early Enthusiasm

--Everett was incorporated in 1893

--Water from private wells and springs

--A private water company developed a local supply (Woods Creek) supplying up to 5 MGD.

--Everett purchased the system in 1916.

--Between 1917-20 the City purchased land along the Sultan River and began construction of their new long-term water supply.



Original Sultan River Diversion



First Things First

A sophisticated filtration system was put on the front end of the new Sultan River diversion.

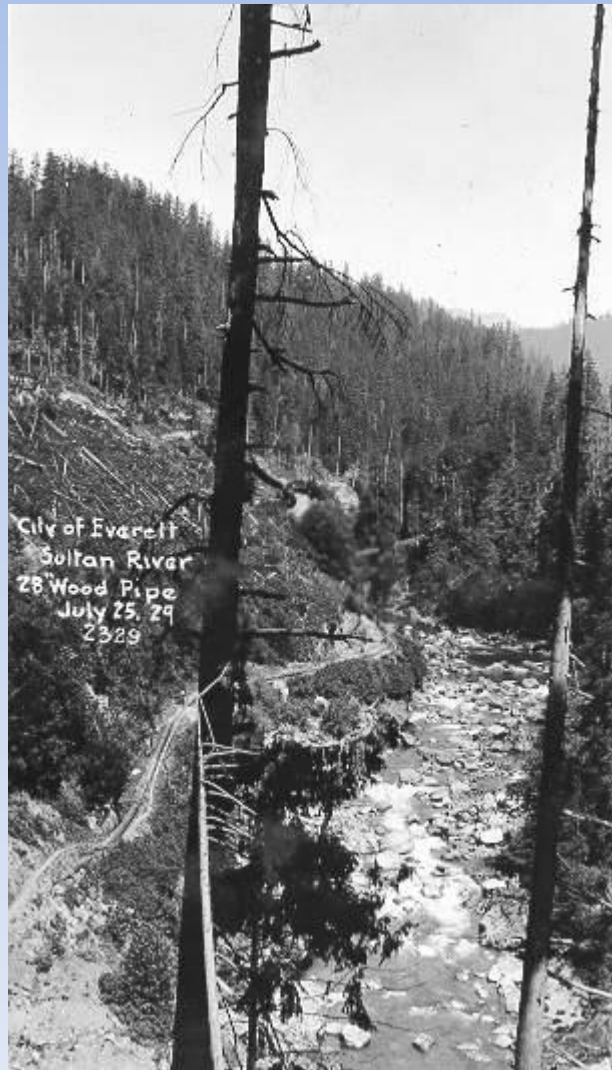


*Screens Installed
on Line #1*

It's a Kit !!



Earliest version of wood stave pipeline



The appropriately named Reservoir #1





Build another dam and a reservoir





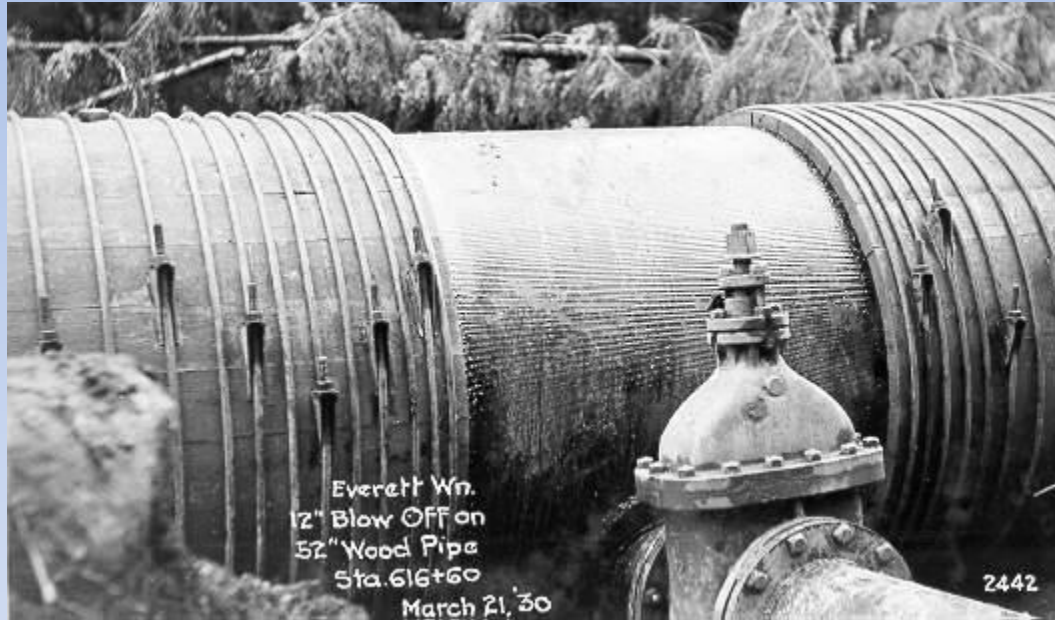
All into a state-of-the-art reservoir



Always stick with proven technology



High-Tech Blowoff



Teething Difficulties



Save the fancy stuff for high pressure and river crossings



It also happens to steel !!



Use state-of-the-art disinfection technology

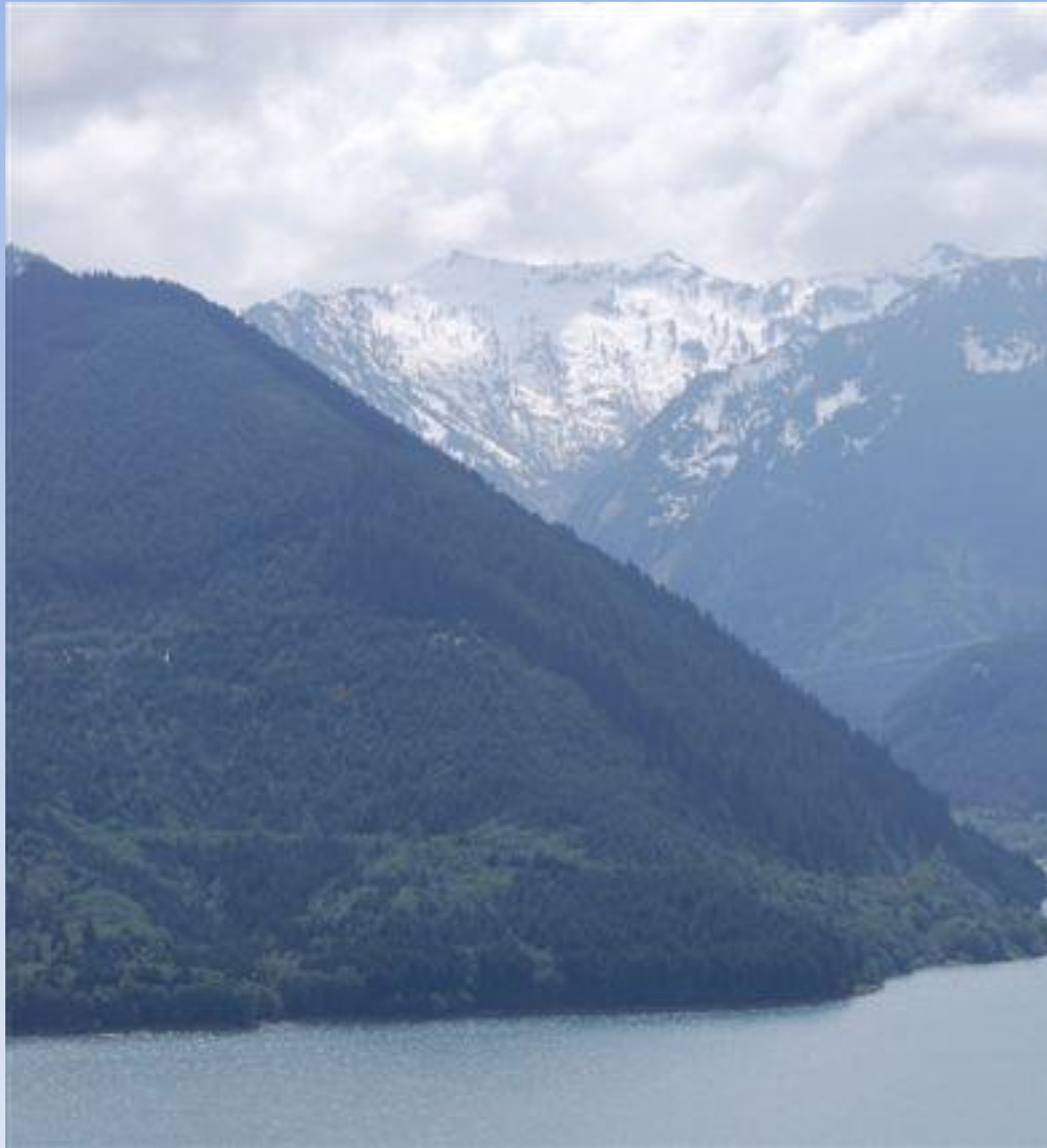


Every technology has a service life



Continuous Improvement between 1930 & 2015

- Pipelines were replaced a few sections at a time.
- Pipelines were added.
- Tunnels were lined with concrete.
- A third tunnel was dug.
- Reservoirs were added as the service population increased.
- The upper Sultan watershed was dammed in 1961 and another, larger reservoir was created.
- In 1980, work began that would increase this reservoir (Spada Lake) to 50 billion gallon capacity.
- In 1983, the City of Everett completed a 100 MGD direct filtration plant.
- Improvements large and small continue today.







Continuous Improvement

- There's a legacy of continual capital improvement since 1916.
- While difficult to initiate, continuous infrastructure improvement is the key to long-term success.
- What will the citizens of 2115 think about the stewards of 2015?



Questions ????

