

# Lake Dorothy Project

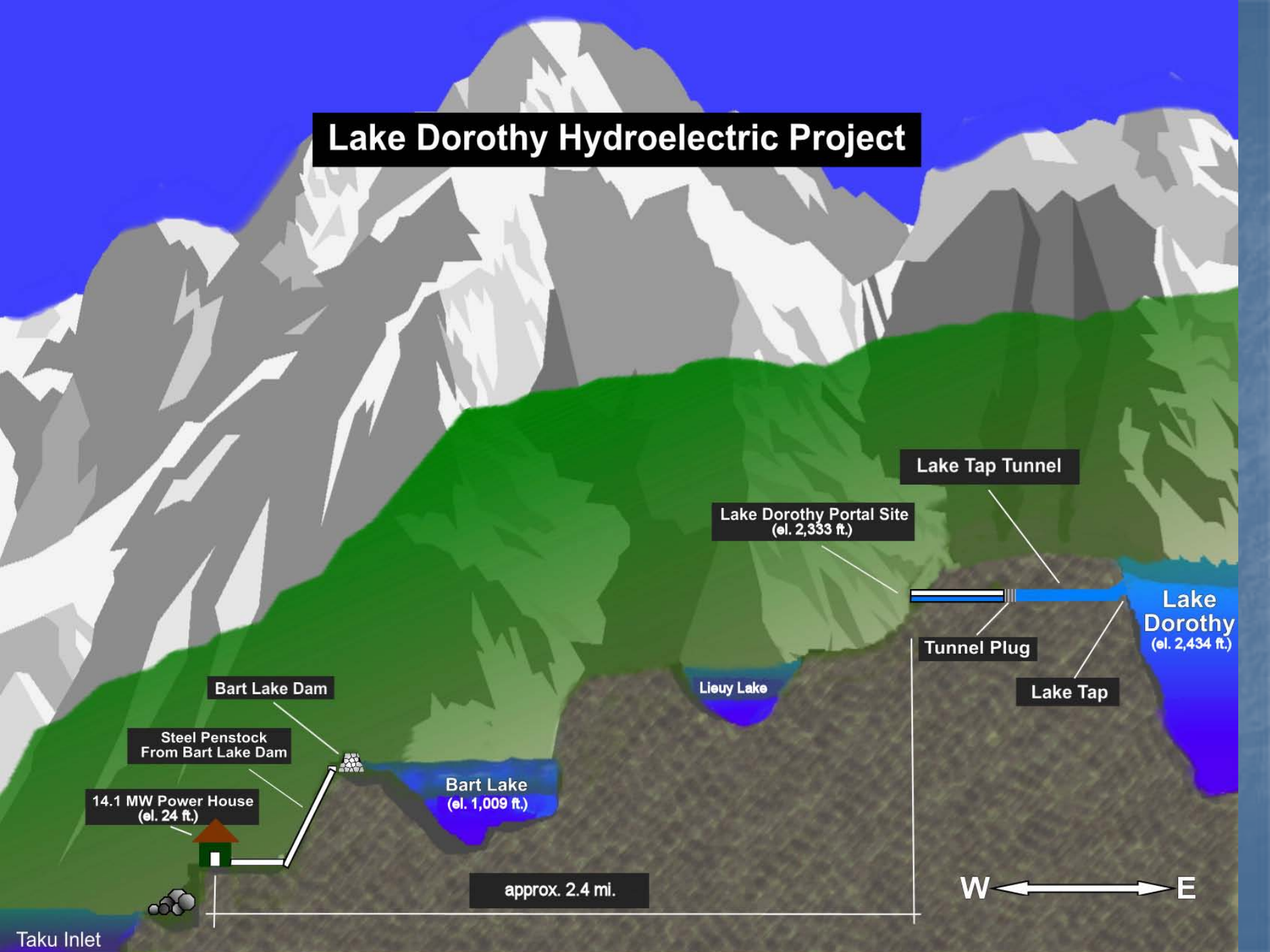
National Hydropower Association

Juneau, Alaska

March 2010



# Lake Dorothy Hydroelectric Project



Lake Tap Tunnel

Lake Dorothy Portal Site  
(el. 2,333 ft.)

Lake Dorothy  
(el. 2,434 ft.)

Tunnel Plug

Lake Tap

Bart Lake Dam

Steel Penstock  
From Bart Lake Dam

14.1 MW Power House  
(el. 24 ft.)

Bart Lake  
(el. 1,009 ft.)

Lieuy Lake

approx. 2.4 mi.

W ← → E

Taku Inlet









# Blessing of Hydro

- Renewable (I don't care what some say, it really is)
- Zero Carbon, Green
- Can be stored
- DISPATCHABLE!

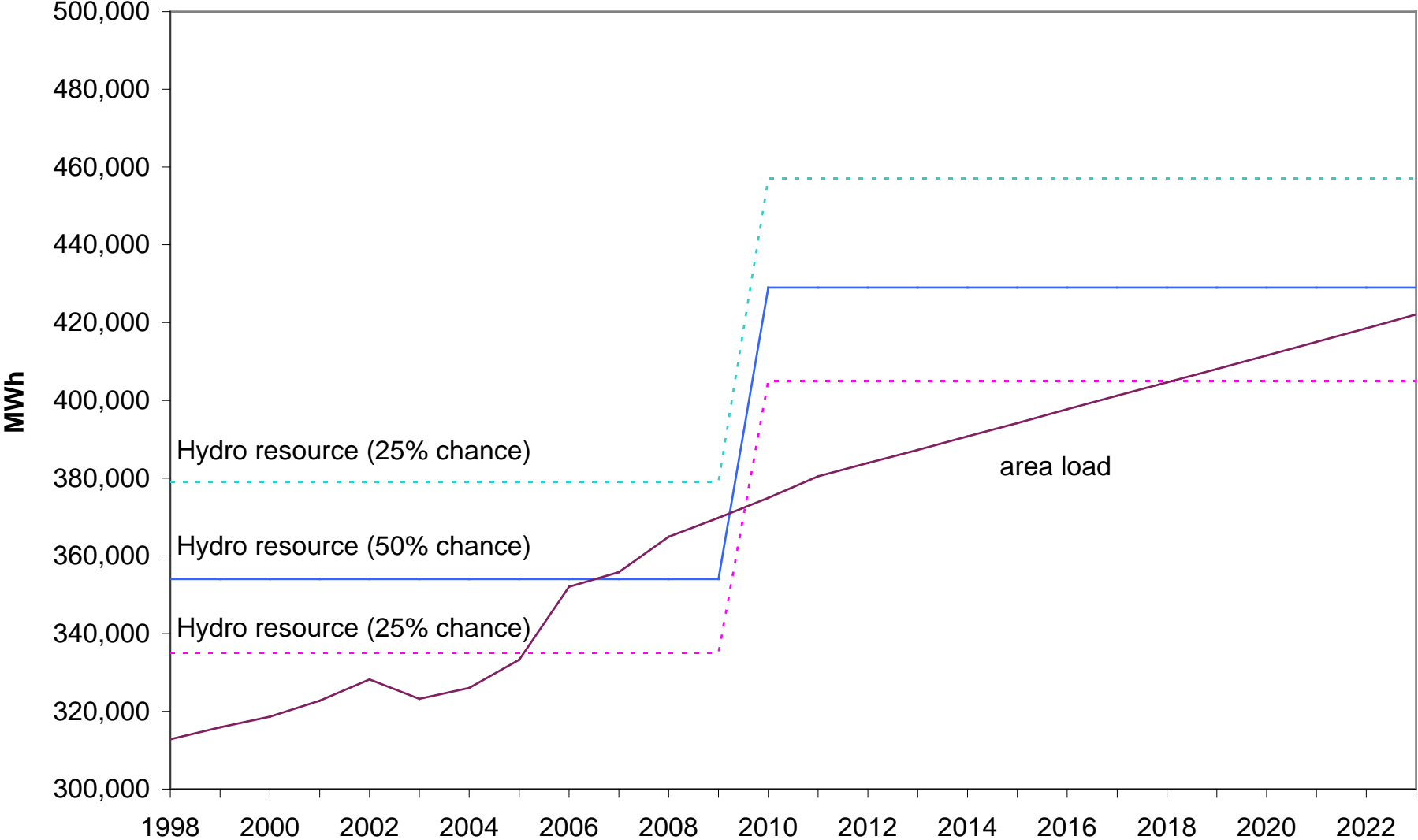
# Curse of Hydro

(in isolated systems)

- Quantized
- Have to pay for whole thing whether you are using it or not
- Results in rate shock

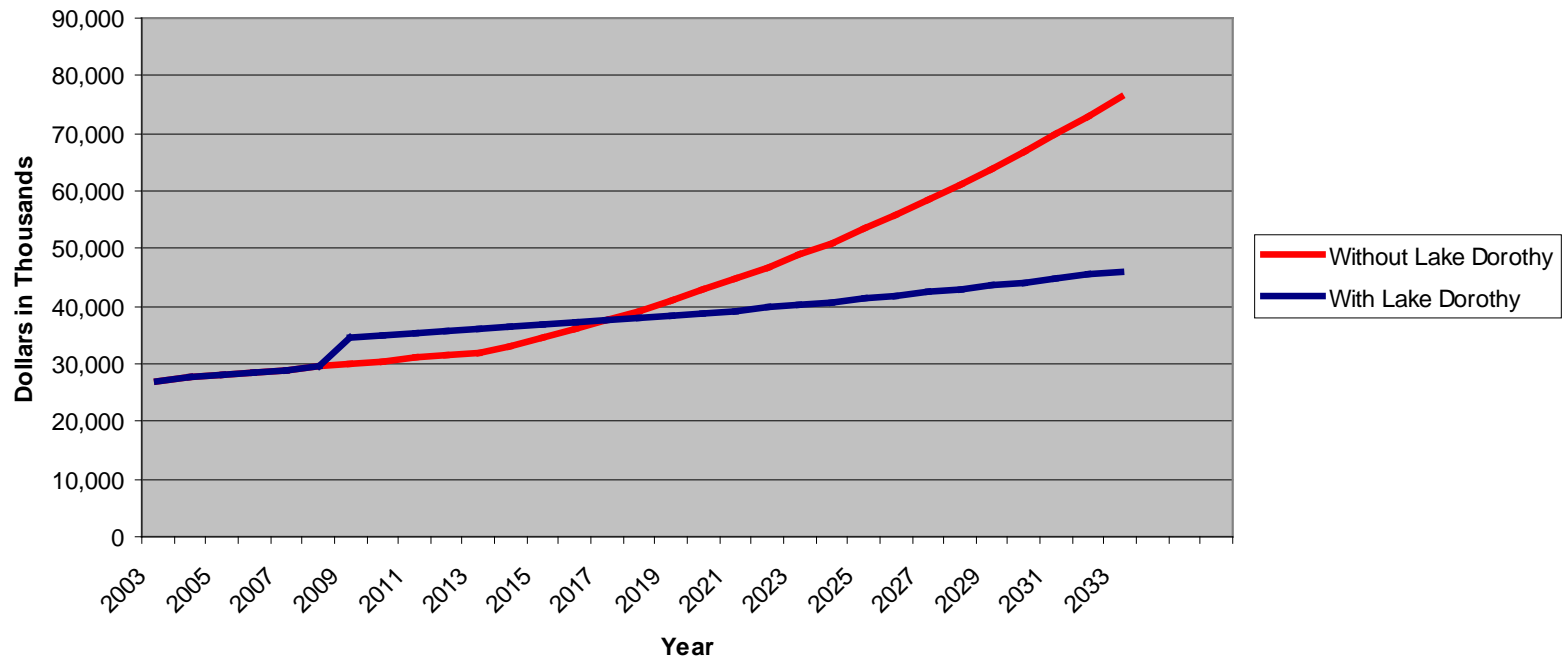


# Juneau Load Forecast



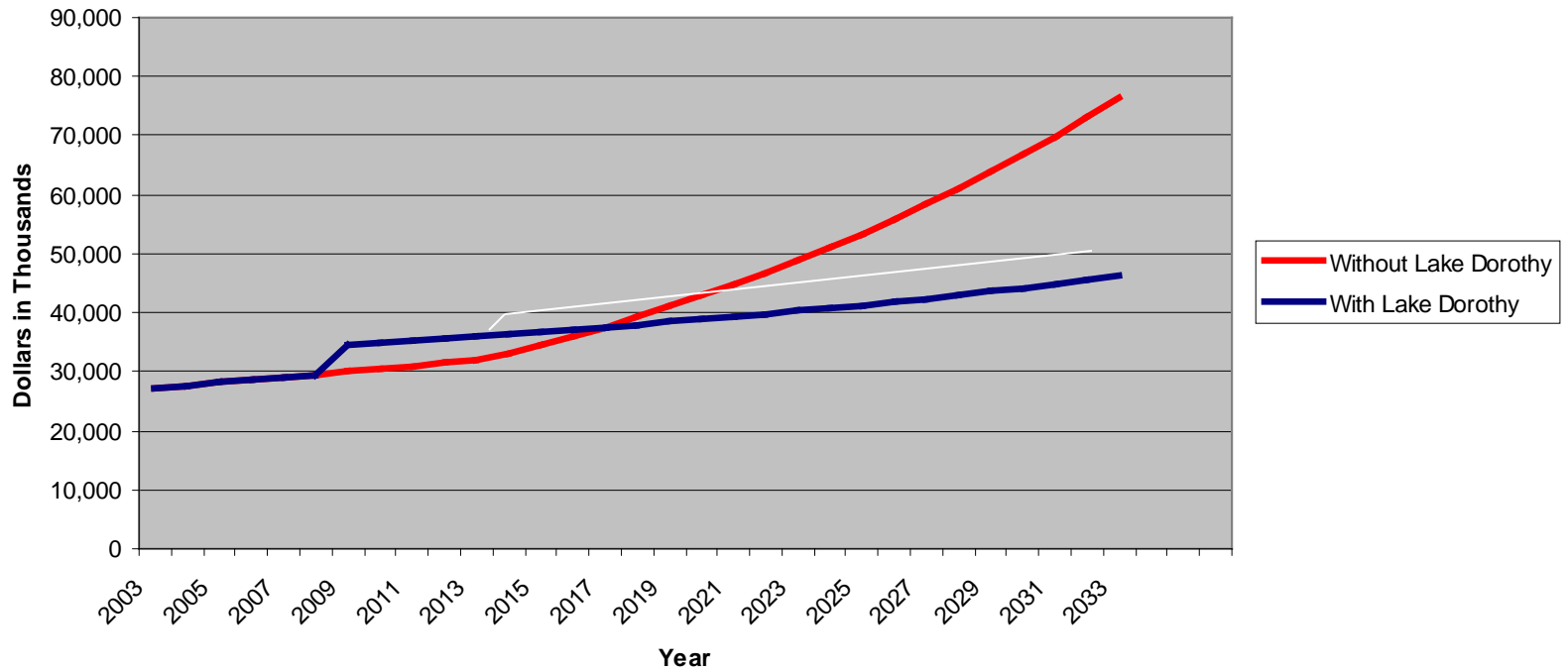
# Projected Rev Req

Total Cost to Ratepayers



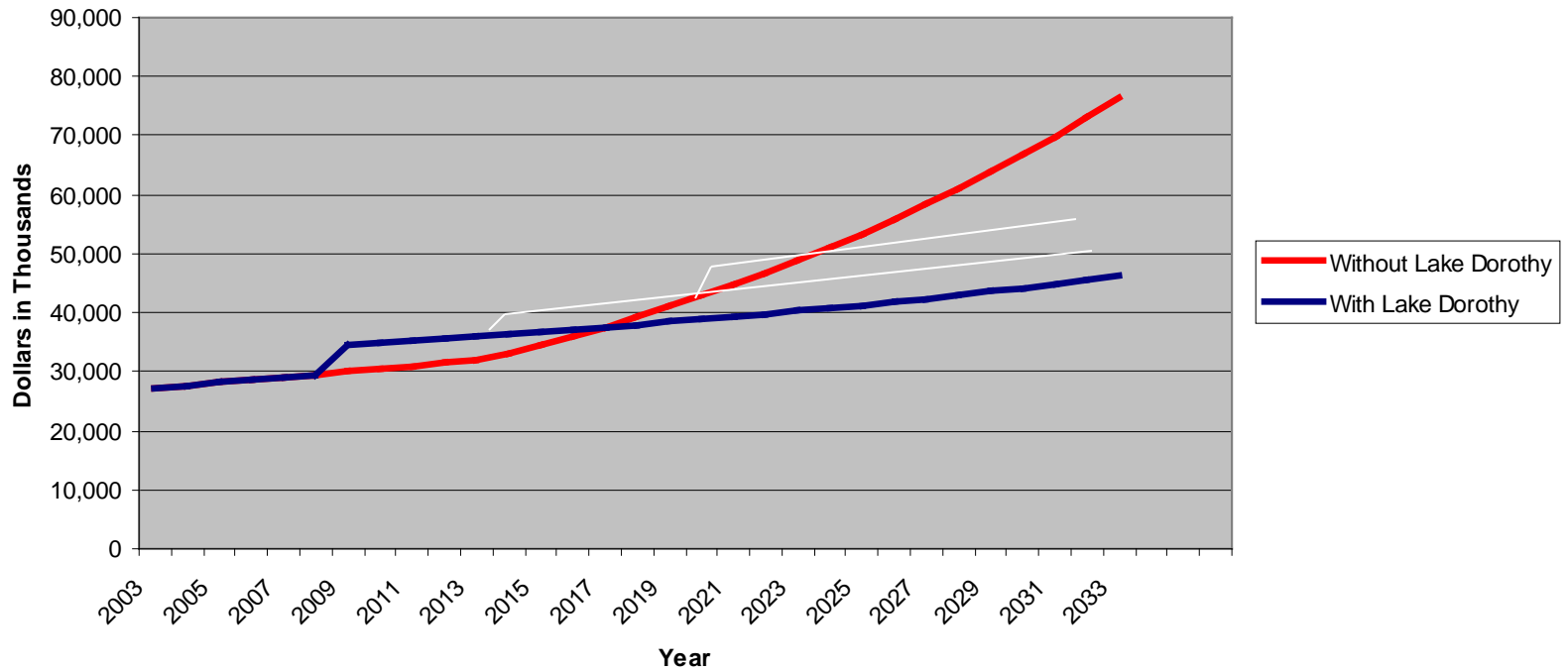
# Projected Rev Req

Total Cost to Ratepayers

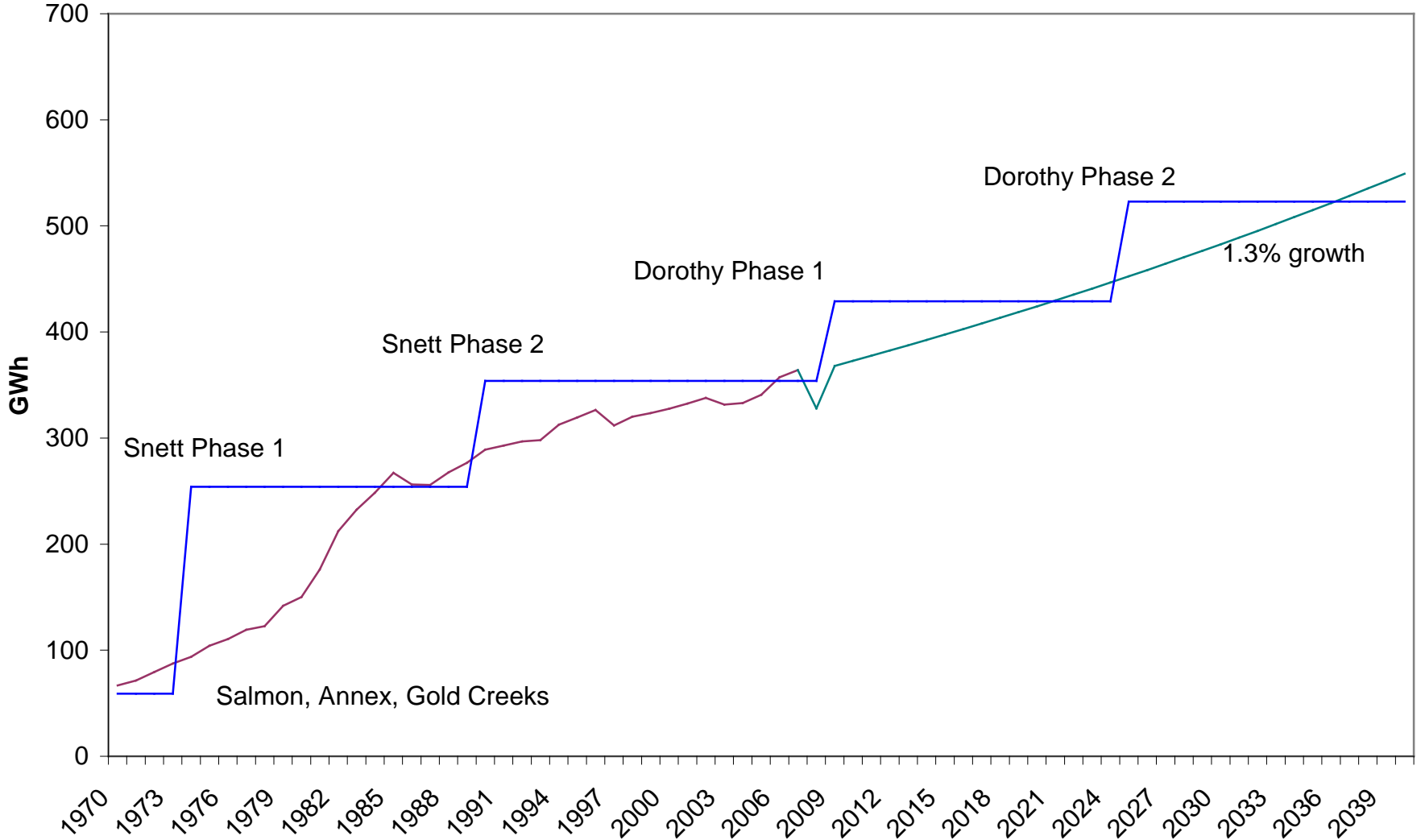


# Projected Rev Req

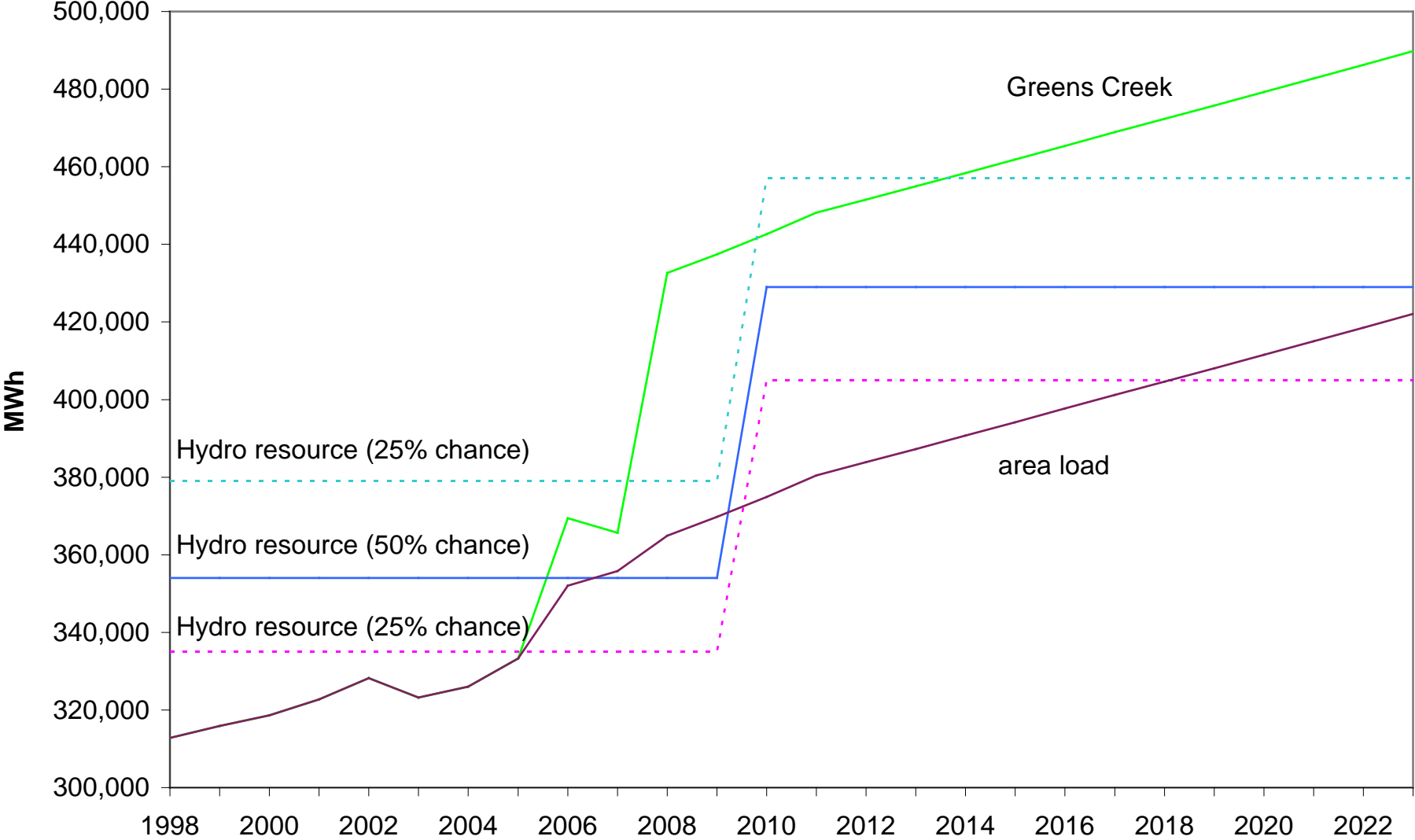
Total Cost to Ratepayers



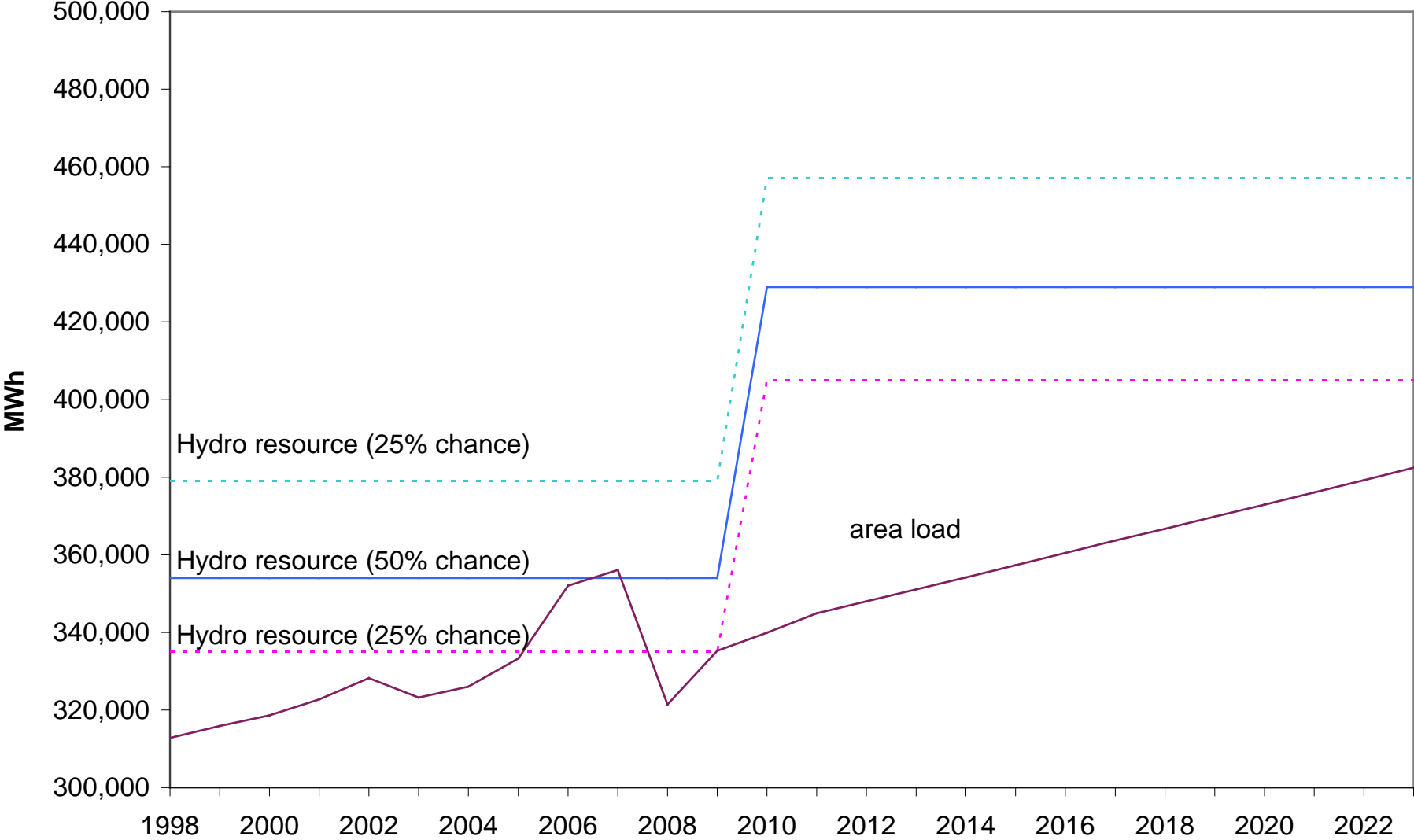
# Juneau Area Energy



# Juneau Load Forecast with Greens Creek



# Juneau Load Forecast



# Juneau Load Forecast with Greens Creek

