



# 6PPD-quinone Impacts to salmon and trout

Mar 4, 2025; Joint Committee on Transportation

Becky Anthony  
*ODFW Water Quality Specialist*



6PPD-quinone  
is a compound  
added to tires  
to prevent  
degradation



6PPD-q is very toxic  
to some salmon/trout  
species

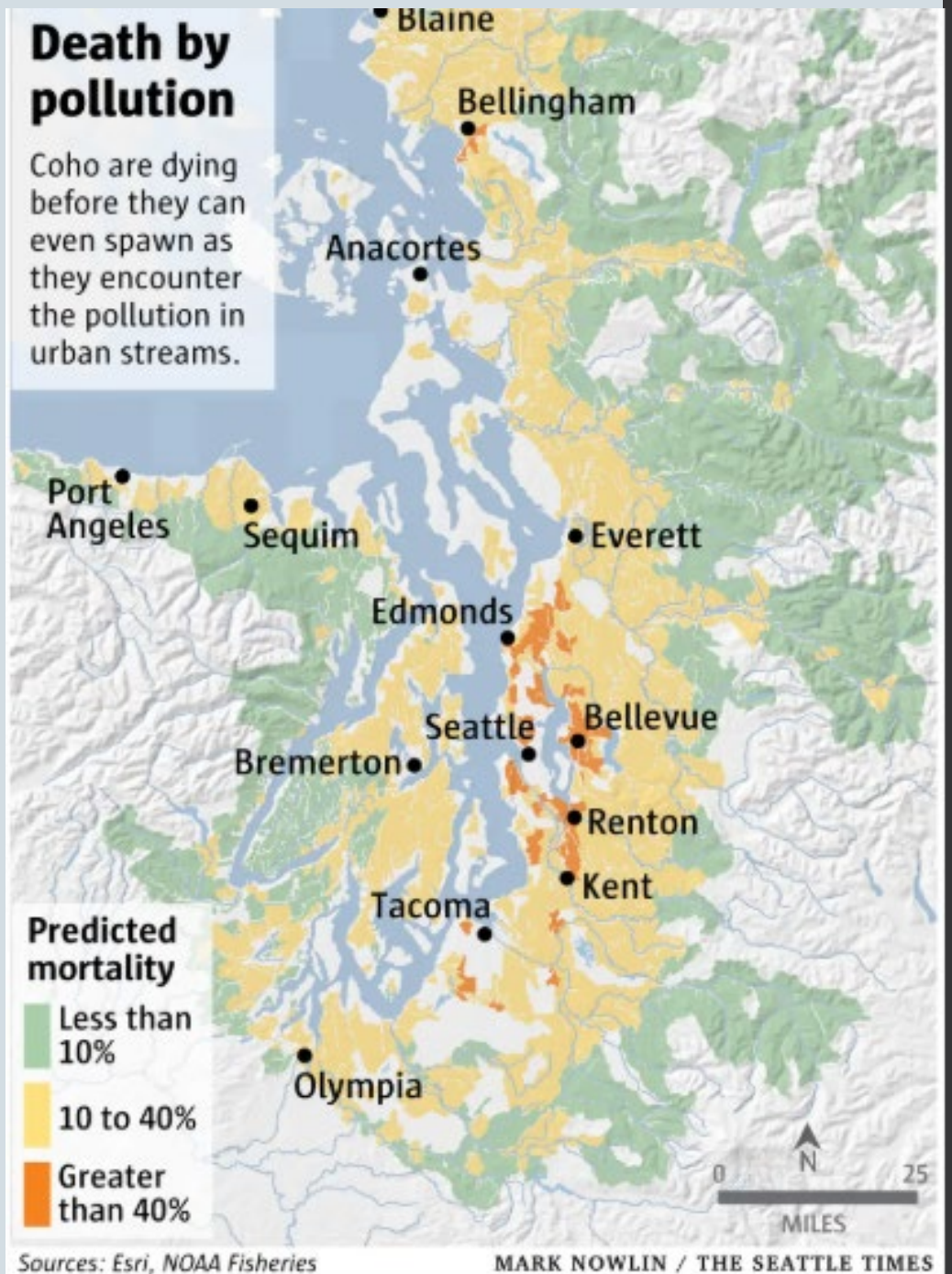
Exposure to 41 ng/L  
for 24 h kills 50% of  
coho salmon



# 20-90%

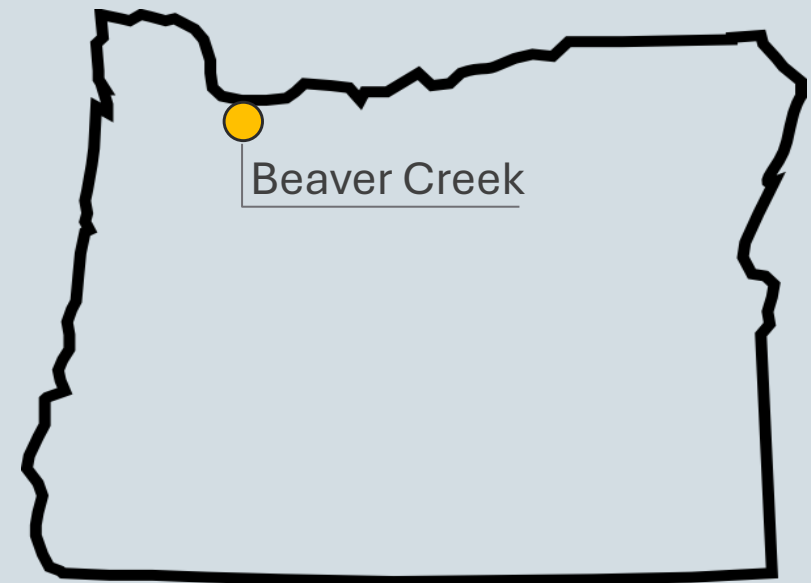
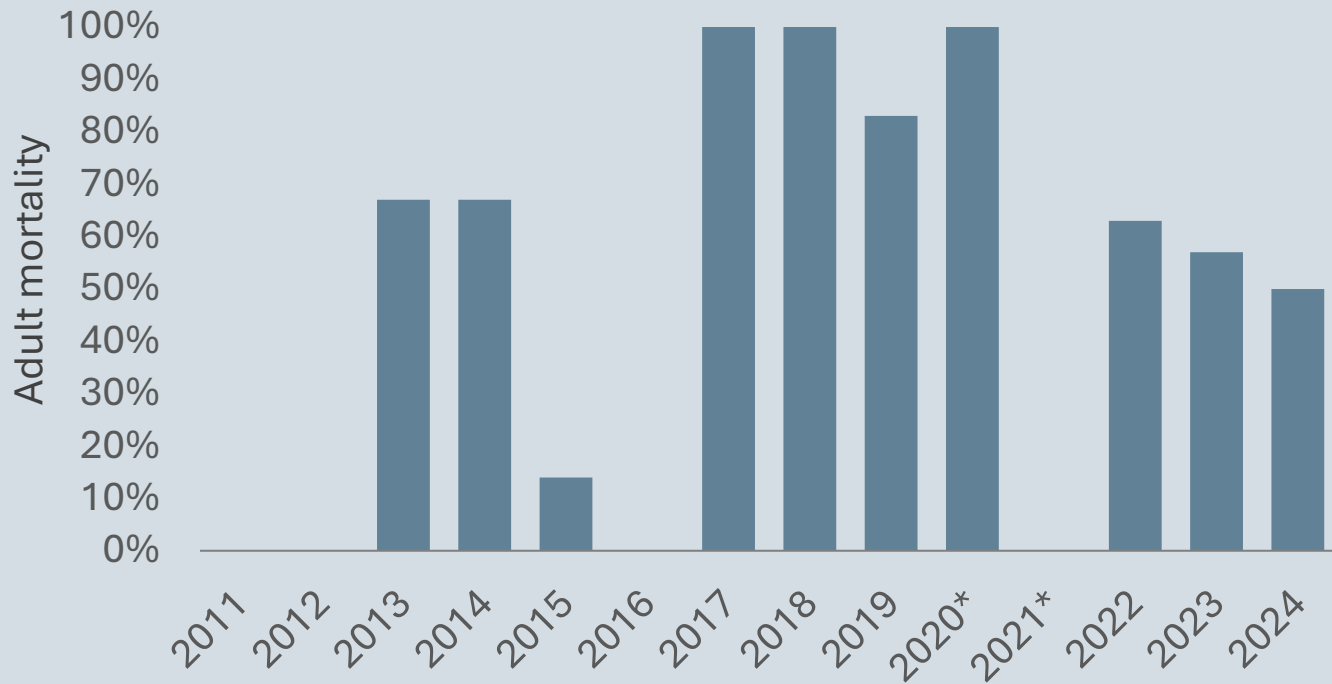
## Observed adult mortality in Puget sound streams

Spromberg and Scholz, 2011



# Beginning to document the issue in Oregon

High percentage of coho adults die before spawning in Beaver Creek  
(Gresham, OR)



\*Limited surveys due to Covid



# Solutions

- Long term: Develop an alternative chemical for tires
  - In development
  - Likely decades before all 6PPD-q off the roads

Until then: Treatment of 6PPD-q before enters streams

- Extensive ongoing research
- Promising results
- Can greatly reduce 6PPD-q and allow fish survival