



# Heavy Metals in Tire Runoff Study



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# Types of Tires Sampled



Runoff – new tires

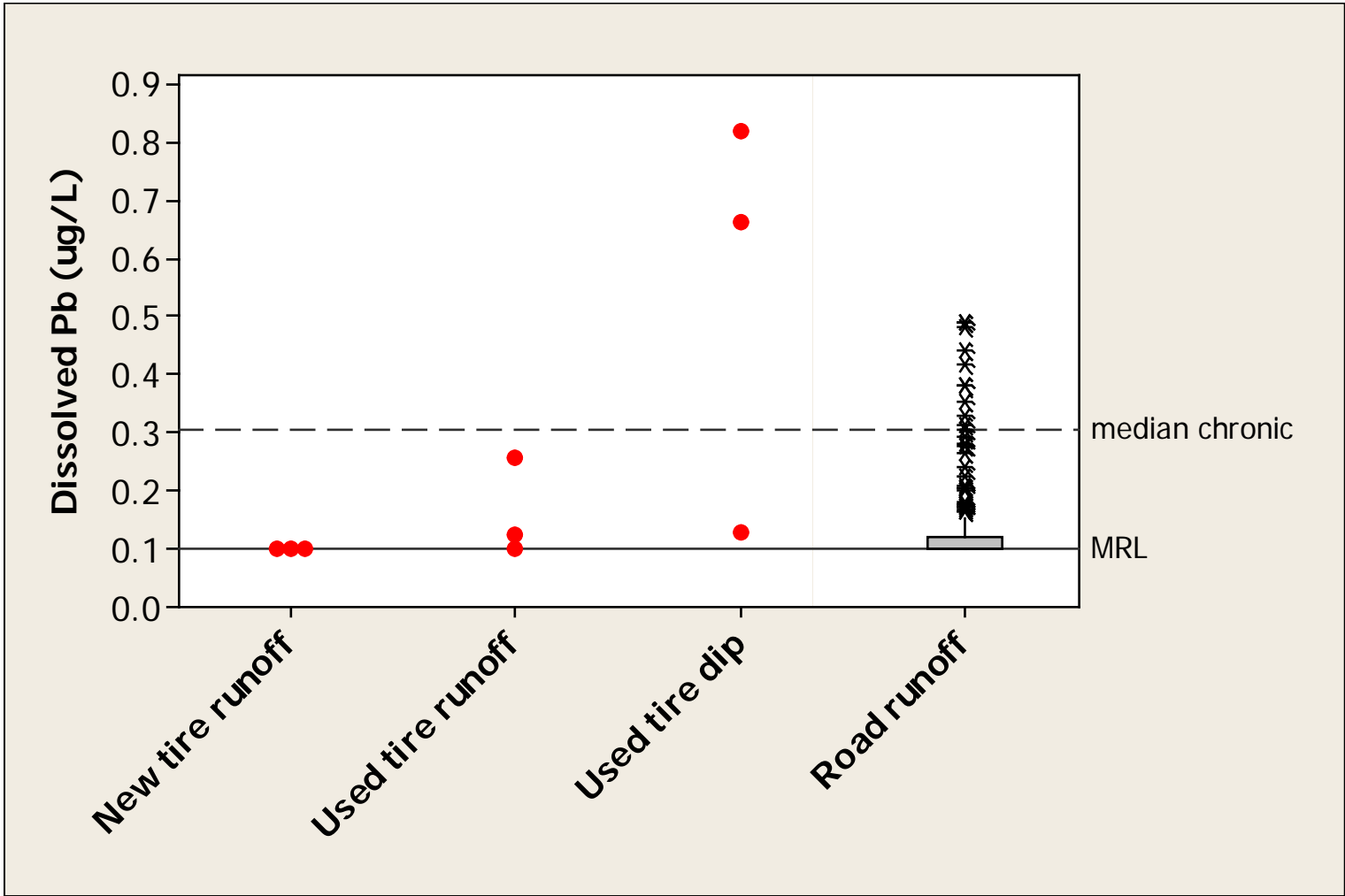


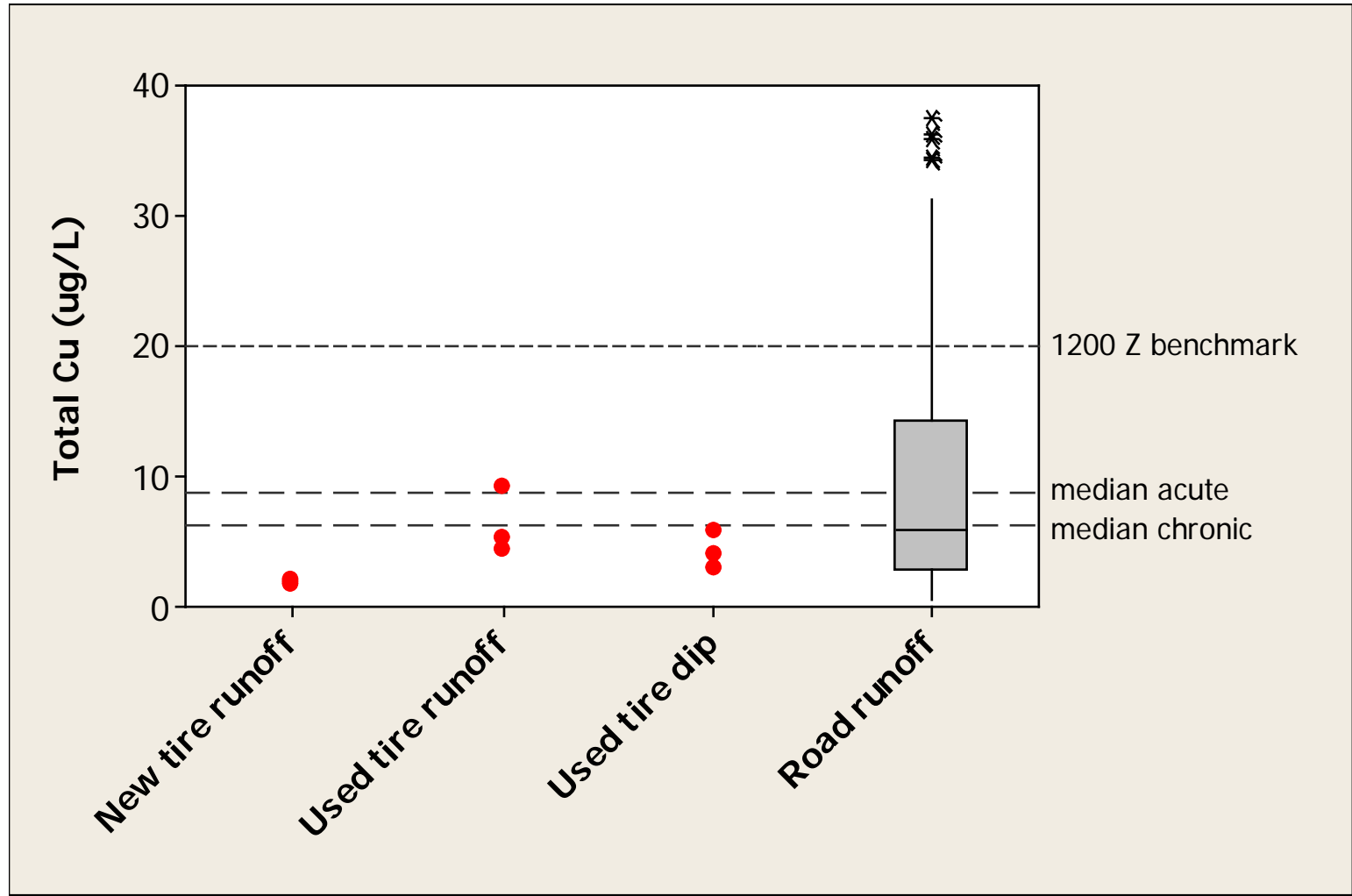
Runoff – used tires

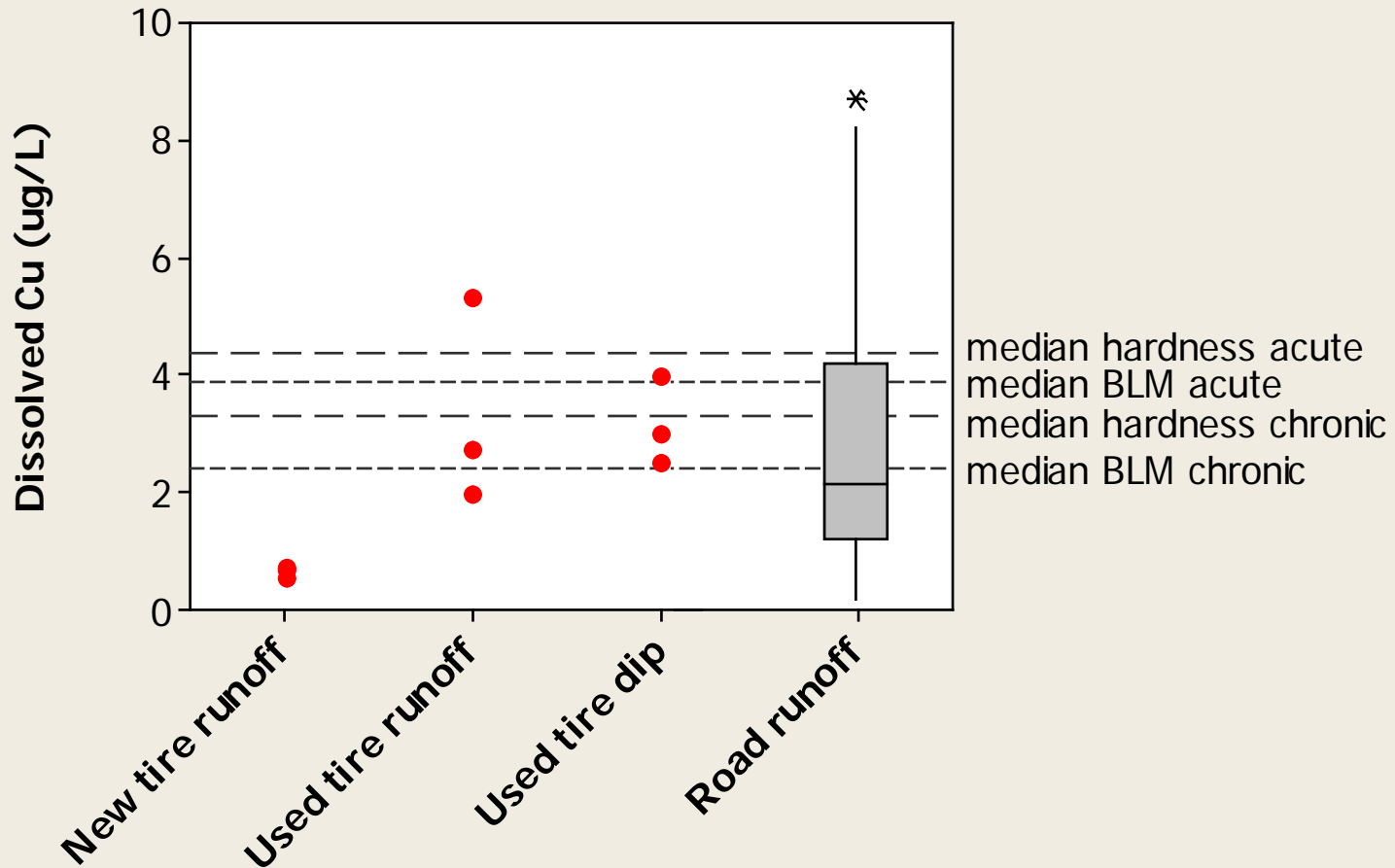


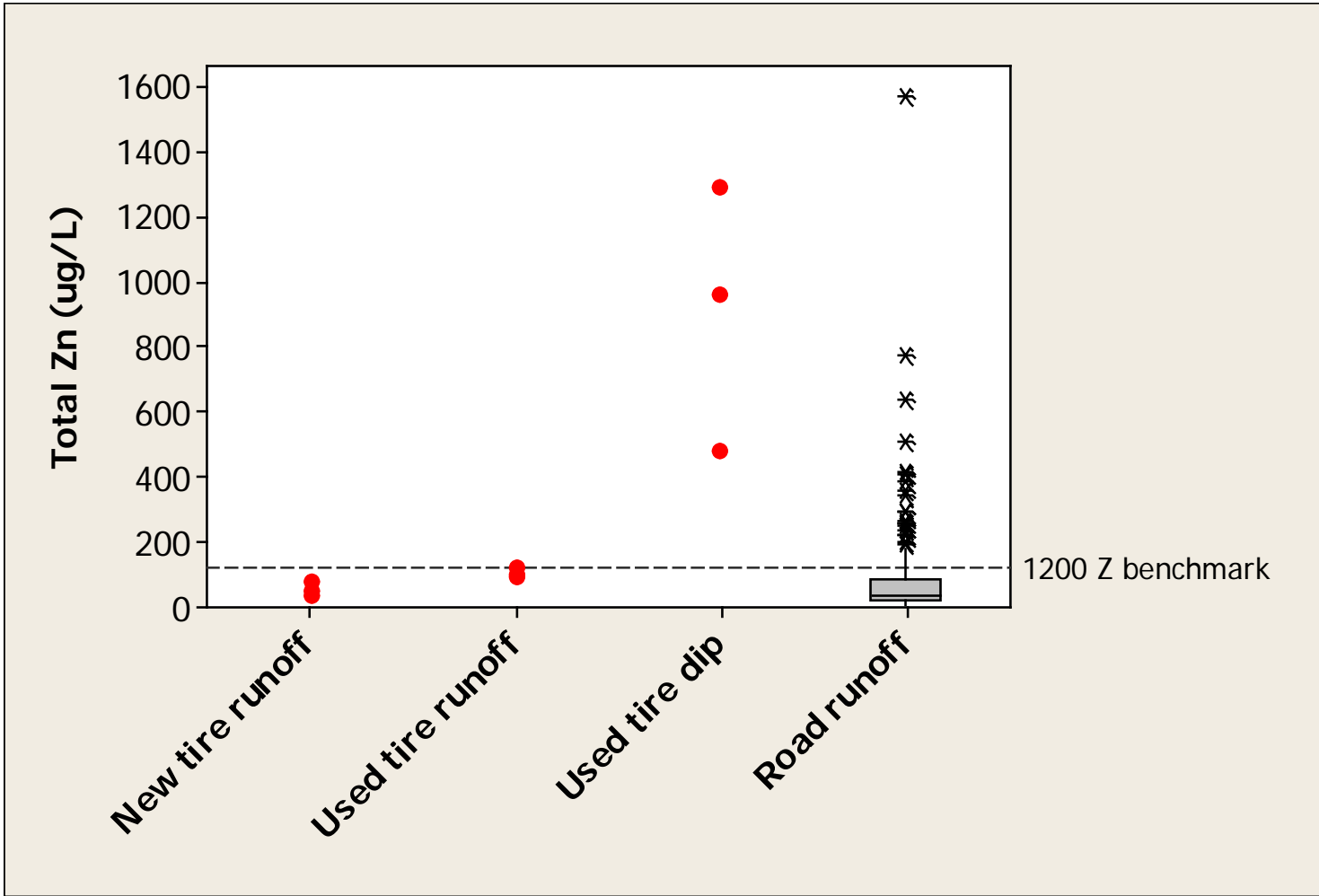
Stagnant tires

- 3 samples from each
- Compared to City's runoff data (250 samples)

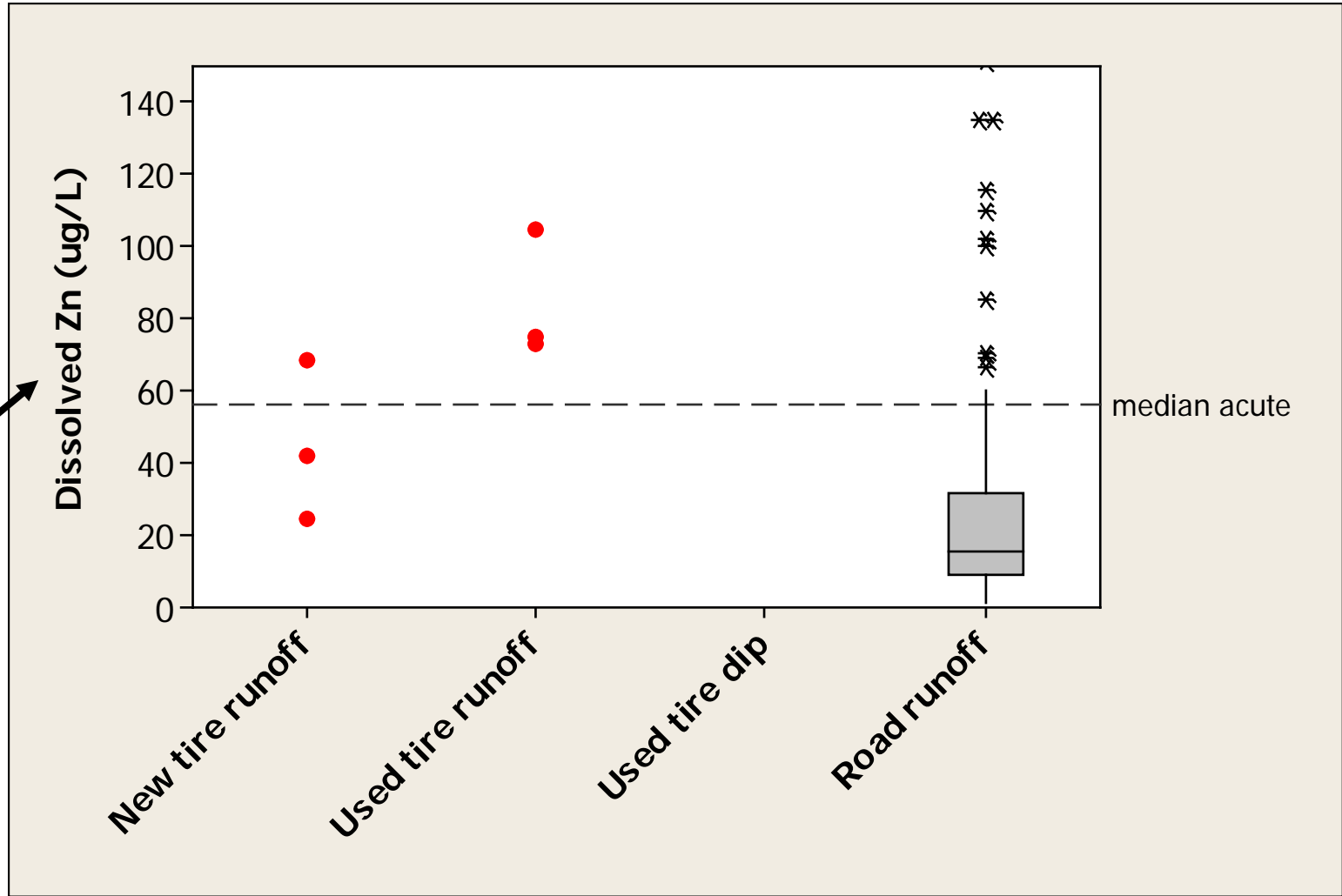


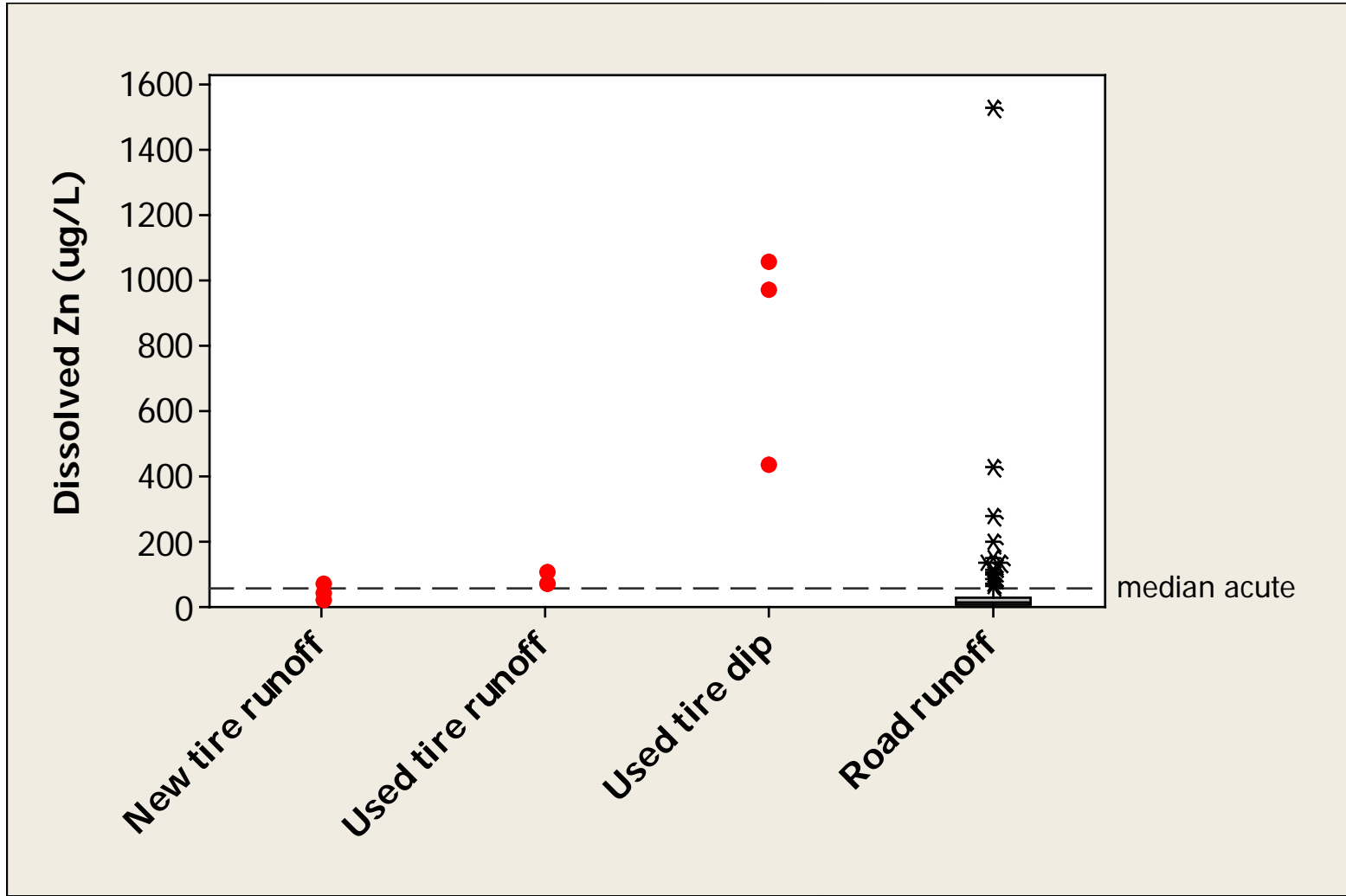






Zoomed-in y-axis







# Heavy Metals in Tire Runoff



Runoff – new tires  
Not found to be a large concern, except possibly zinc



Runoff – used tires  
Concerning for dissolved lead, total and dissolved copper, and possibly zinc



Stagnant tires  
Concerning for dissolved lead and total and dissolved copper; very concerning for zinc

# Jenifer McIntyre's study

Washington State University Puyallup Research and Extension Center



- Put juvenile coho salmon in a tank with a chunk of tire
- 90% of them died in 96 hours
- Some swam in circles on the surface

# What to do?

- Currently DEQ allows 100 used tires stored uncovered outside without a waste tire storage permit
- Gresham's approach:
  - New stormwater manual will require (temporary) covering
    - Issue: fire code
  - Attempting to organize a centralized tire hauling program
    - Issue: low market for used tires
  - Considering providing racks to limit exposure of wheel well to rain
    - Issue: still get pollutants from exterior surface

