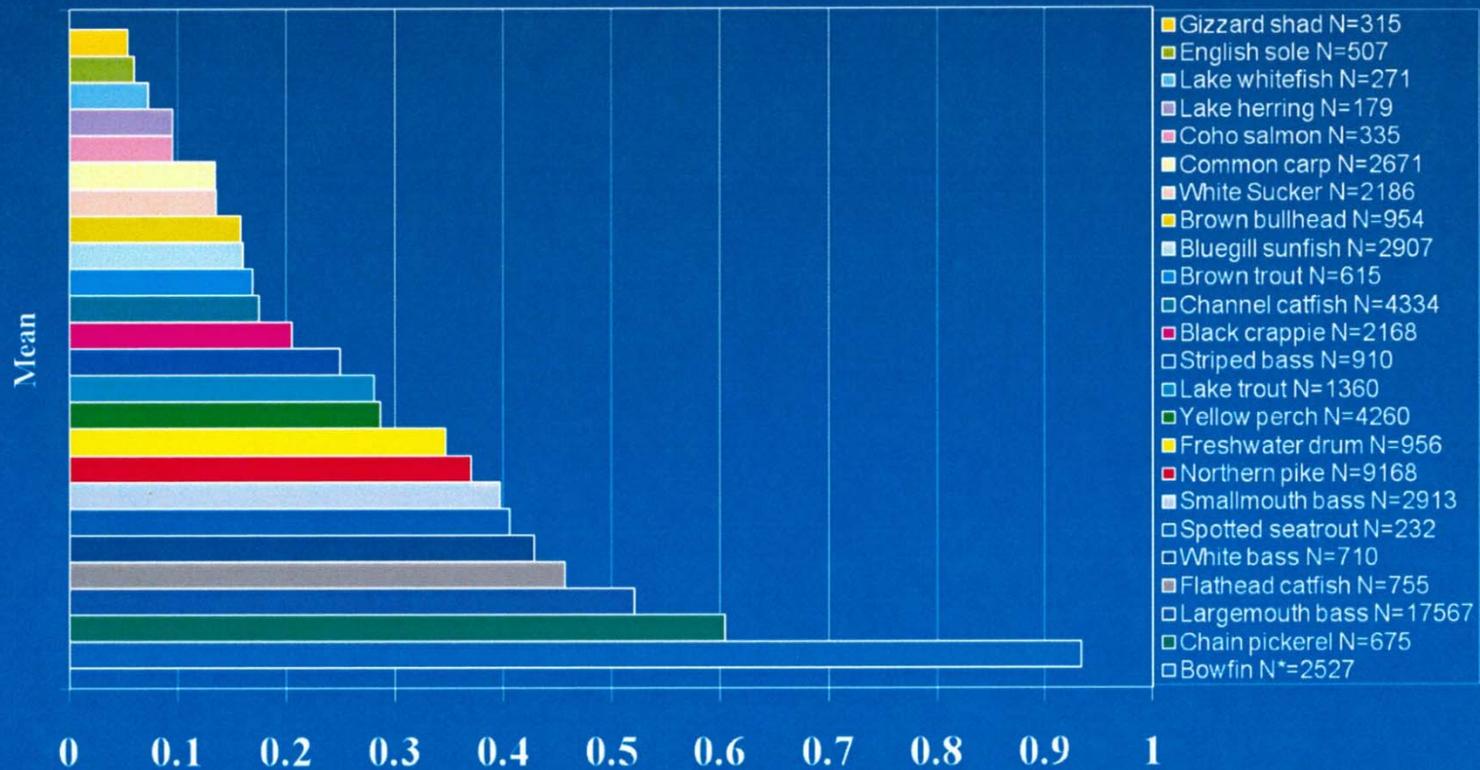


# Mercury in Grand Canyon Trout

- Human Consumption/Beneficial Use of Nonnative Trout
    - Consistent with Tribal Consultation
    - MOA with the State Historic Preservation Office
  - States issue fish consumption advisories
  - No fish consumption advisories have been issued for Grand Canyon
  - Rainbow (RBT) and Brown Trout (BNT) are generally low in mercury, relative to other fish:
    - EPA: RBT mean Hg = 0.11 ppm, BNT mean Hg = 0.16 ppm
    - Canned albacore tuna = 0.35 ppm
- (<http://www.fda.gov/food/foodborneillnesscontaminants/metals/ucm115644.htm>)

## National Mean Mercury Concentration in Tissues of Selected Fish Species (all sample types)



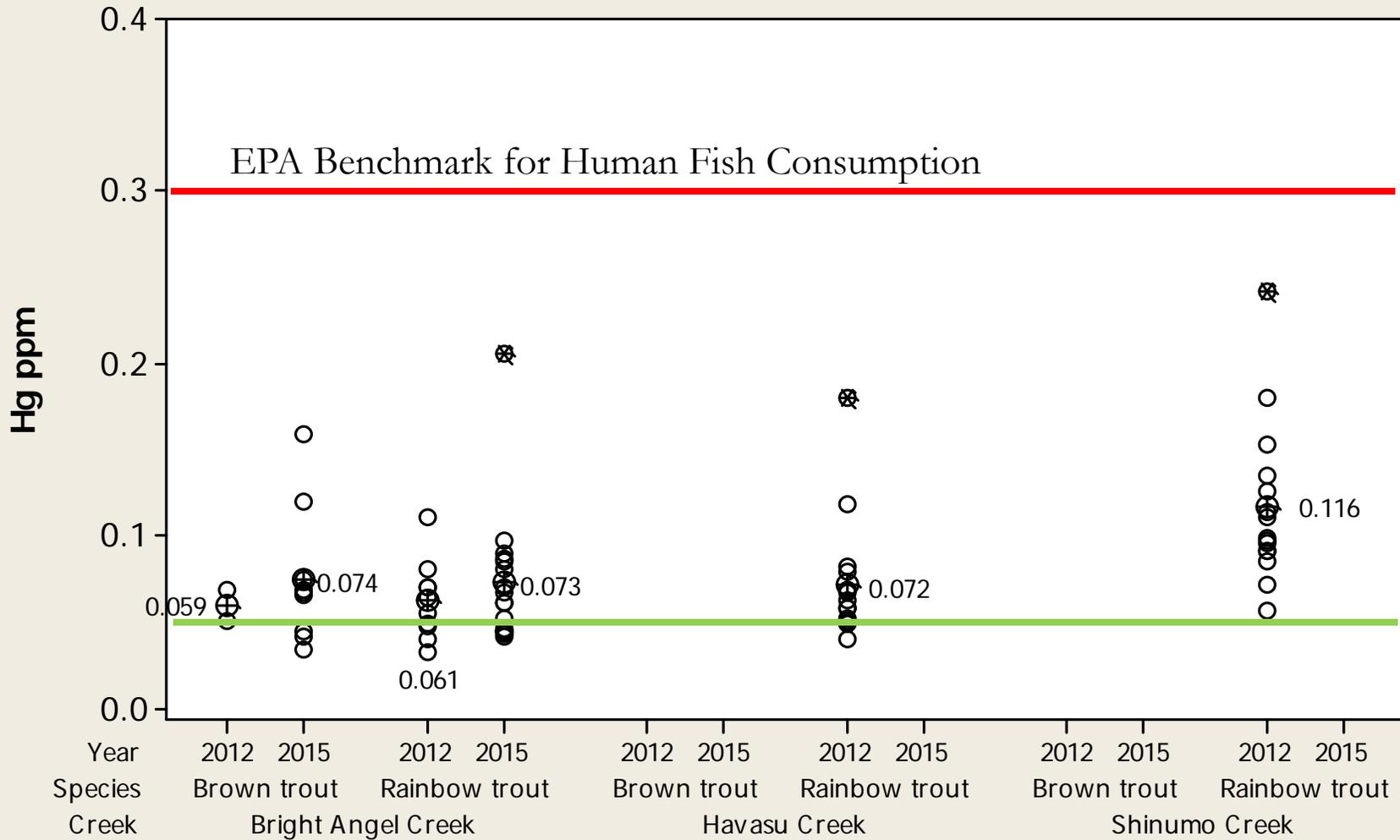
\*N= number of samples

EPA: RBT mean Hg = 0.11 ppm, BNT mean Hg = 0.16 ppm

# Mercury in Grand Canyon Trout

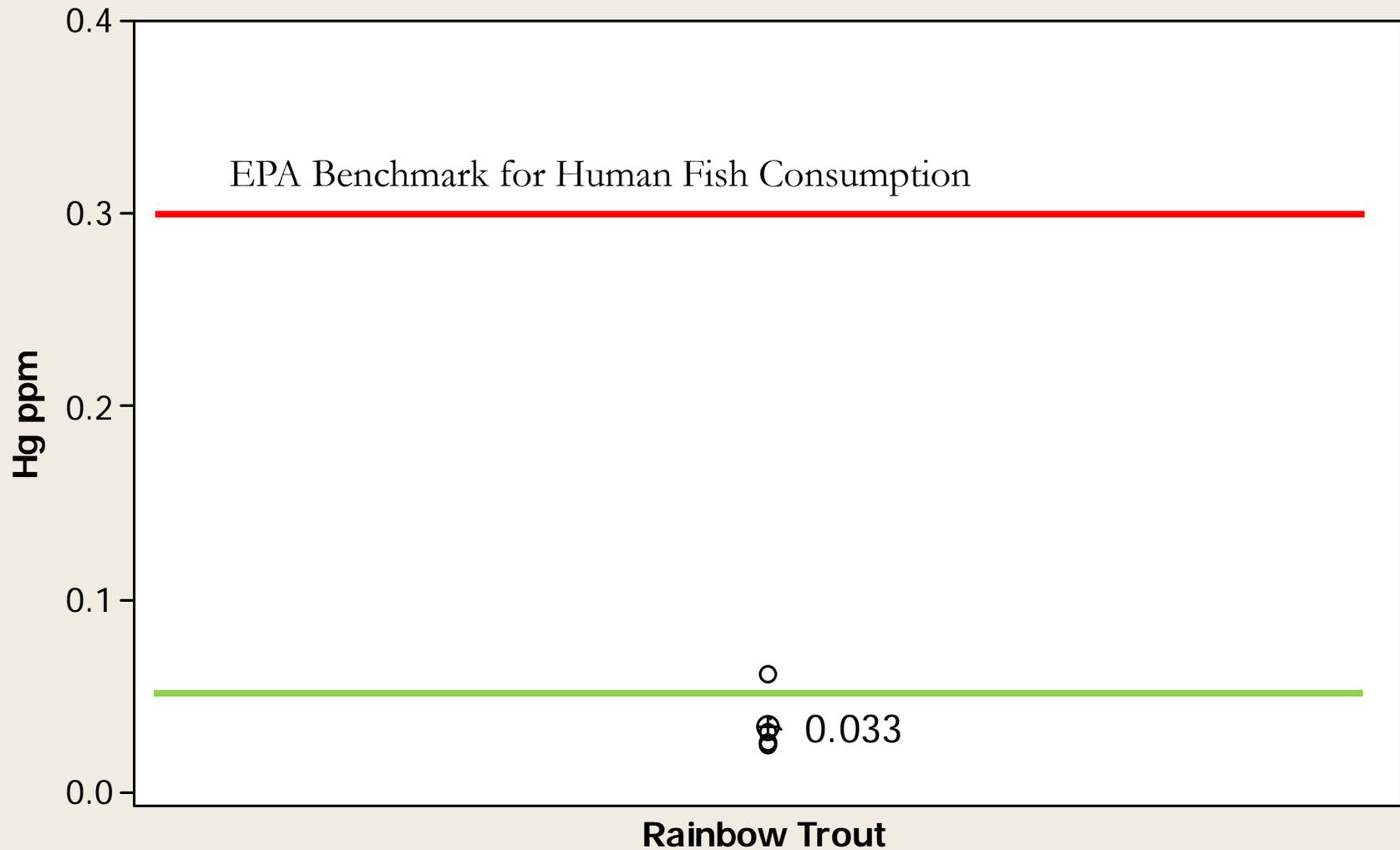
- Studies:
  - Environmental Protection Agency- 2009
    - Colorado River – 17 RBT collected
  - NPS/USGS 2014:
    - 2012 – NPS – GRCA collected trout from Havasu, Shinumo, Bright Angel Creek (n = 40 RBT, 2 BNT)
    - 21 National Parks in the Western U.S.
  - NPS/USGS 2015 – Bright Angel Creek
    - 16 RBT, 9 BNT

## Mercury Concentration - Grand Canyon tributaries



Provisional USGS Data – DO NOT CITE

## Mercury Concentration - Colorado River in Grand Canyon (EPA 2009)



<http://www2.epa.gov/fish-tech/fish-tissue-data-collected-epa>

# Mercury in Grand Canyon Trout

- Summary:
  - Preliminary data indicate relatively low mercury levels from trout in Bright Angel Creek
    - Lower than national average
- Data shared with Arizona Game and Fish Department
- Next Steps:
  - Collect additional BNT and RBT from Colorado River/Bright Angel Inflow