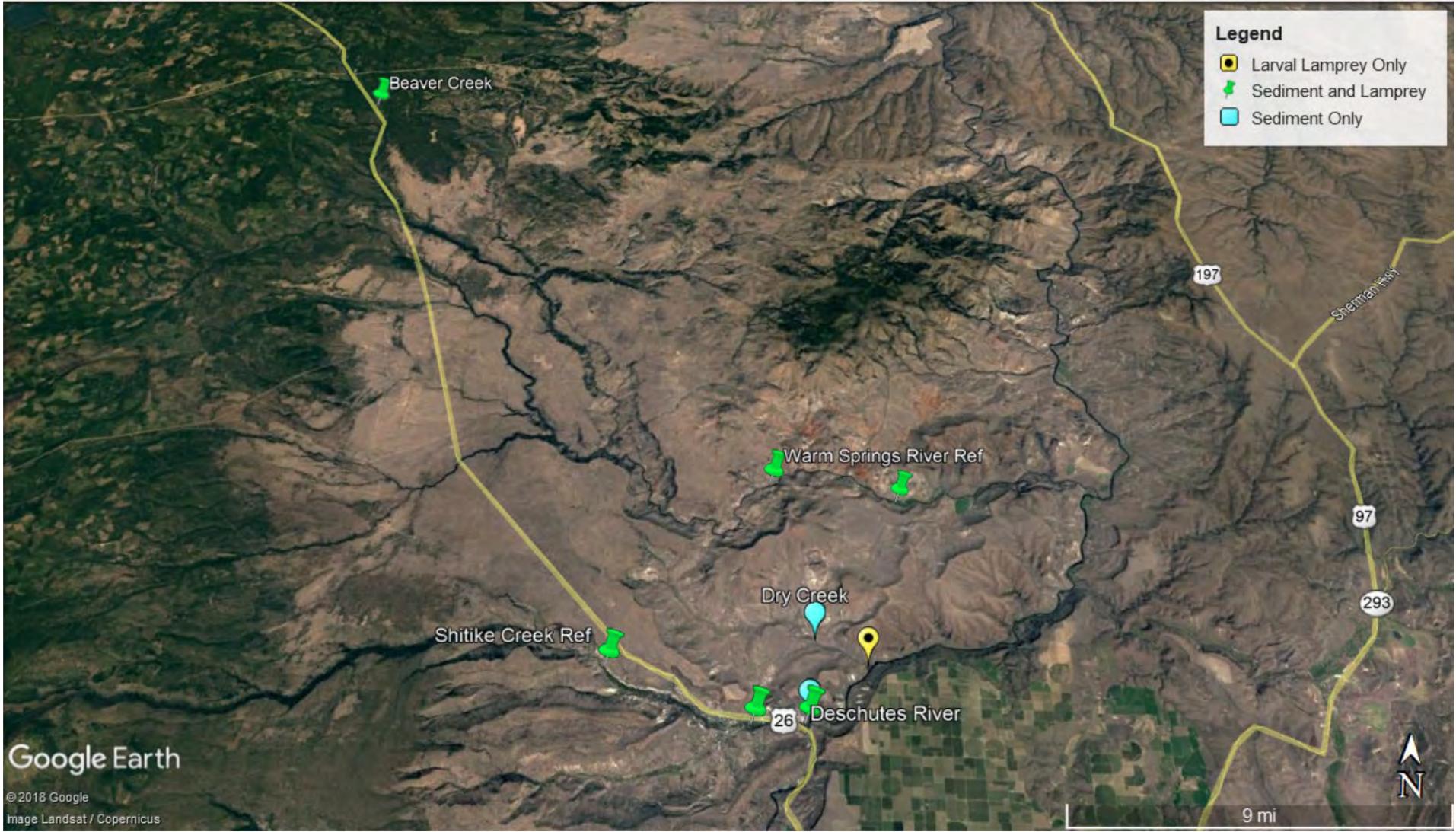


# Contaminants in Sediments and Larval Lampreys from Tributaries of the Deschutes River located on the Warm Springs Reservation, OR

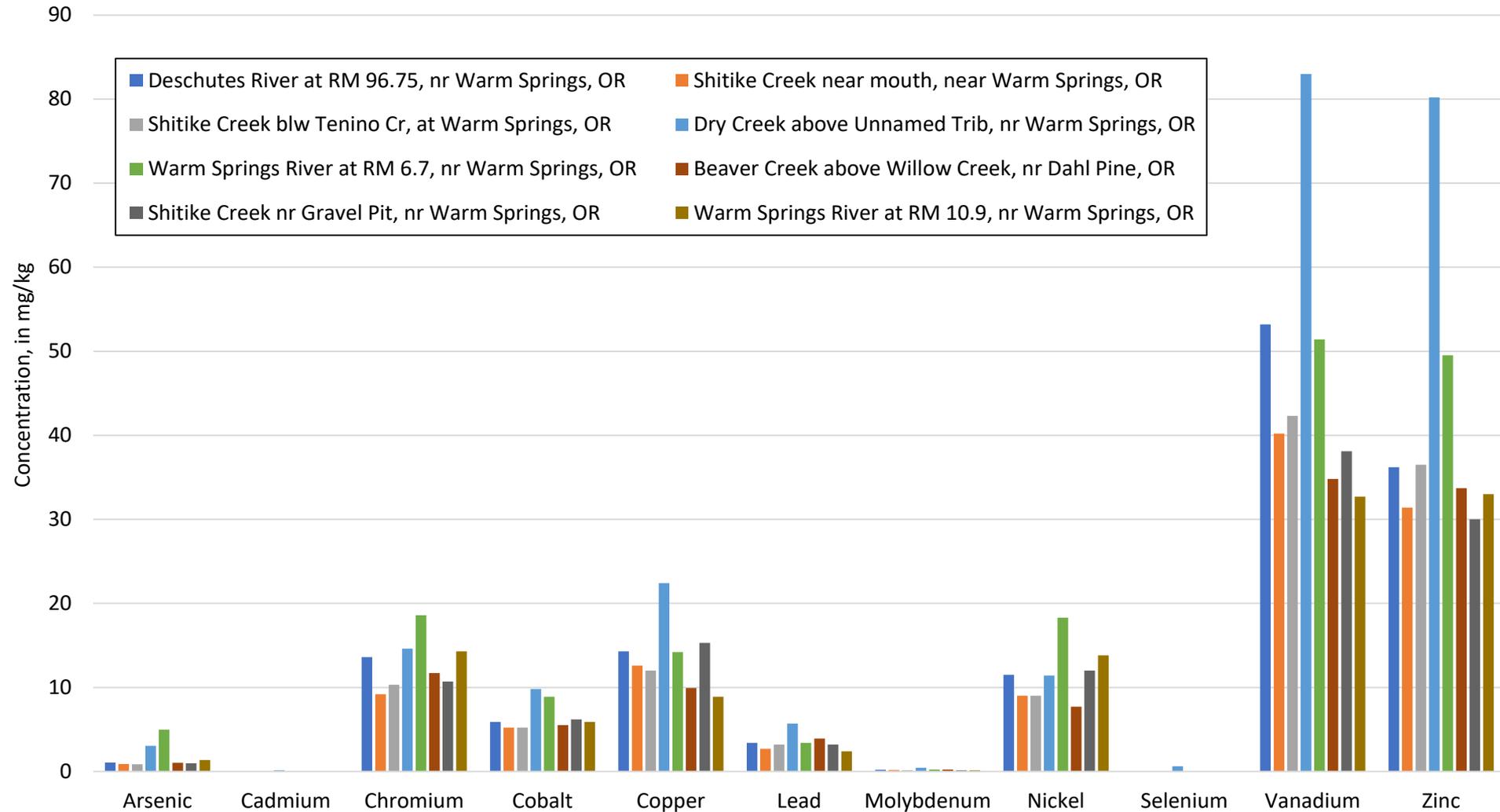
Casie Smith<sup>1</sup>, Elena Nilsen<sup>1</sup>, and Cyndi Baker<sup>2</sup>

<sup>1</sup> U.S. Geological Survey

<sup>2</sup> Confederated Tribes of Warm Springs



# Metals in Bottom Sediments



# Metals in Bottom Sediments

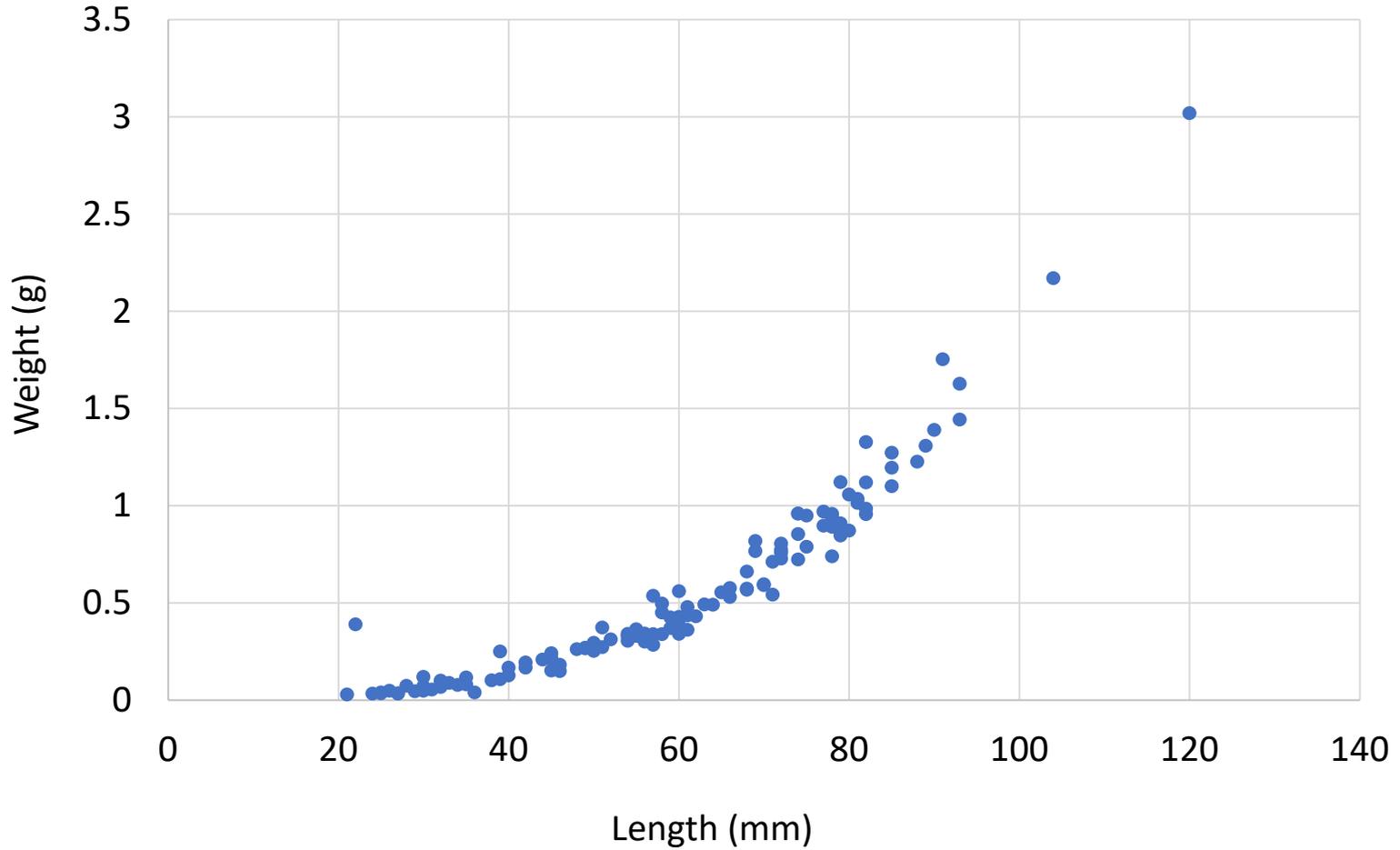
Compared to screening-level benchmark concentrations for metals in sediments:

- 1) Cu in Dry Creek and Ni in Warm Springs River may warrant further testing (Persaud and others, 1993).
- 2) Se and V in Dry Creek were greater than mean background values (Shacklette and Boerngen, 1984).
- 3) All metals analyzed in this study and covered by the WDOE Sediment Management Standards were below the Sediment Cleanup Objectives.



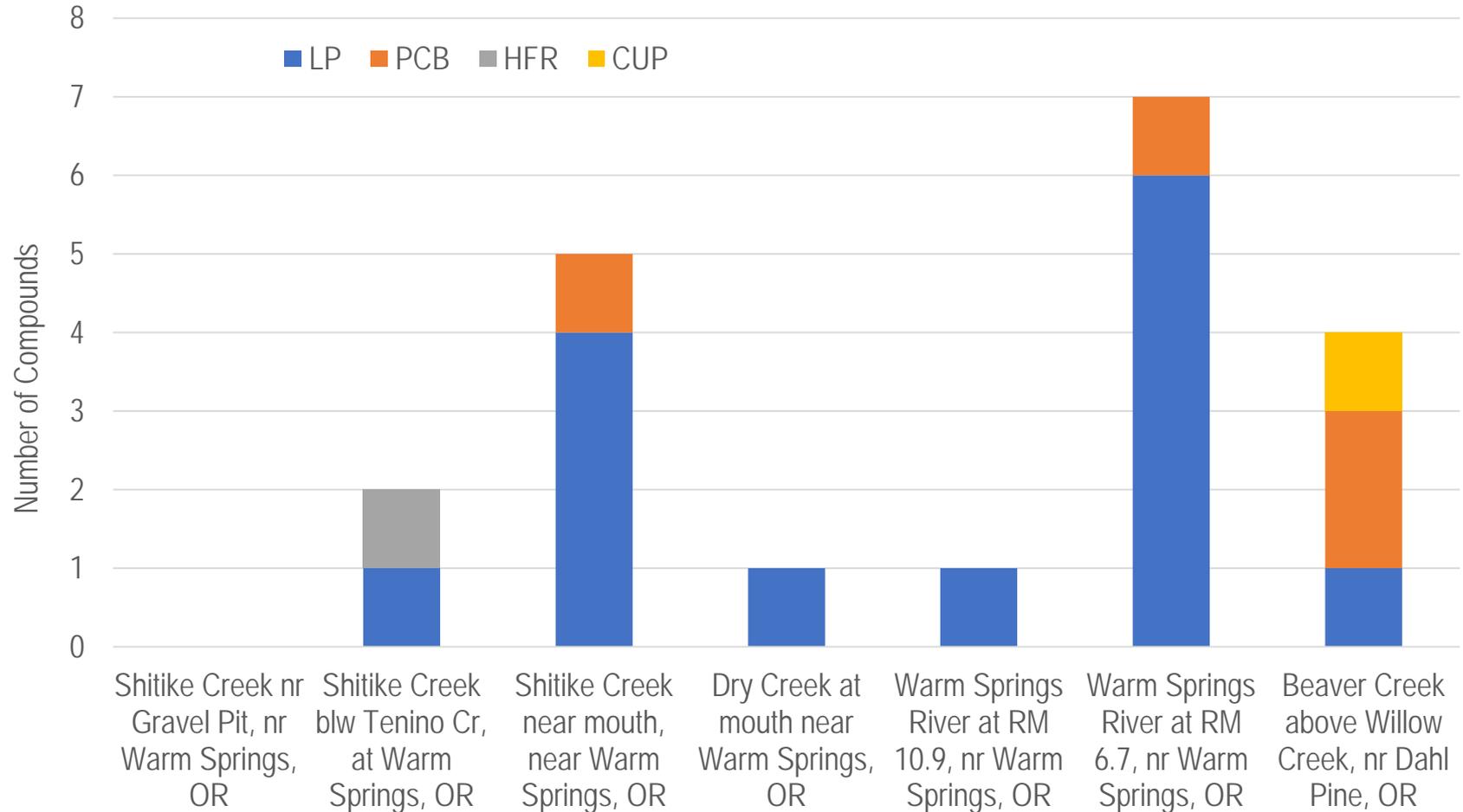
Photo by USGS

# Larvae Data



# Halogenated Compounds in Tissues

Can be grouped into the following classes: halogenated flame retardants (HFRs), polychlorinated biphenyls (PCBs), currently used pesticides (CUPs), legacy pesticides (LPs), and industrial/personal care products (I/PCPs).



# Next Steps

Awaiting results for:

- 1) Halogenated compounds in sediment
- 2) Waste-water indicators in sediment
- 3) Compare contaminants and concentrations to Nilsen et al. 2015
- 4) Identify locations and life stages for further study



Photo by USGS

# Acknowledgements

- Field assistance for this study was provided by Confederated Tribes of Warm Springs (CTWS) personnel Dillon, Tiger, Chuck, and Andy (formerly with CTWS). We appreciate the assistance and insights of Cyndi Baker (CTWS), Lyman Jim (CTWS), David Piatt (USGS), and Jennifer Morace (USGS).



Photo by USGS