ASSESSING DISEASE SUSCEPTIBILITY OF GREAT LAKES FISHES FOLLOWING **PERFLUOROOCTANE SULFONATE** EXPOSURE

METHODS

RATIONALE

Per- and polyfluoroalkyl substances (PFAS) are known to pose significant risks to human health. However, their potential threats to wildlife, especially in the context of disease susceptibility, progression, and survival, still require further investigation. This study focuses on investigating the effects of perfluorooctane sulfonate (PFOS), a widely prevalent PFAS globally, on the health and survival of prominent Great Lakes fish species.

MICHIGAN STATE

VERSIT

Lake whitefish vs VHSv Lake trout vs EEDV Steelhead trout vs Fp



Control

With PFOS

Viral Hemorrhagic Septicemia Virus (VHSv) Epizootic Epitheliotropic Disease Virus (EEDV) *Flavobacterium psychrophilum* (Fp)

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PFOS will impair the immune function of the fishes, leading to increased susceptibility to disease and death. If PFOS impacts the disease susceptibility and survival of these keystone fish species, regulatory actions to mitigate pollution sources and implementation of effective leasures will be critical to ensure long-term ecosystem sustainability in the Great Lakes region.

HYPOTHESIS

Great Lakes Fishery Trust

Adrian Deil **Manliclic*** manlicli@msu.edu

| Katie King | Alexandra Sexton Rachel Leads | Cheryl Murphy