

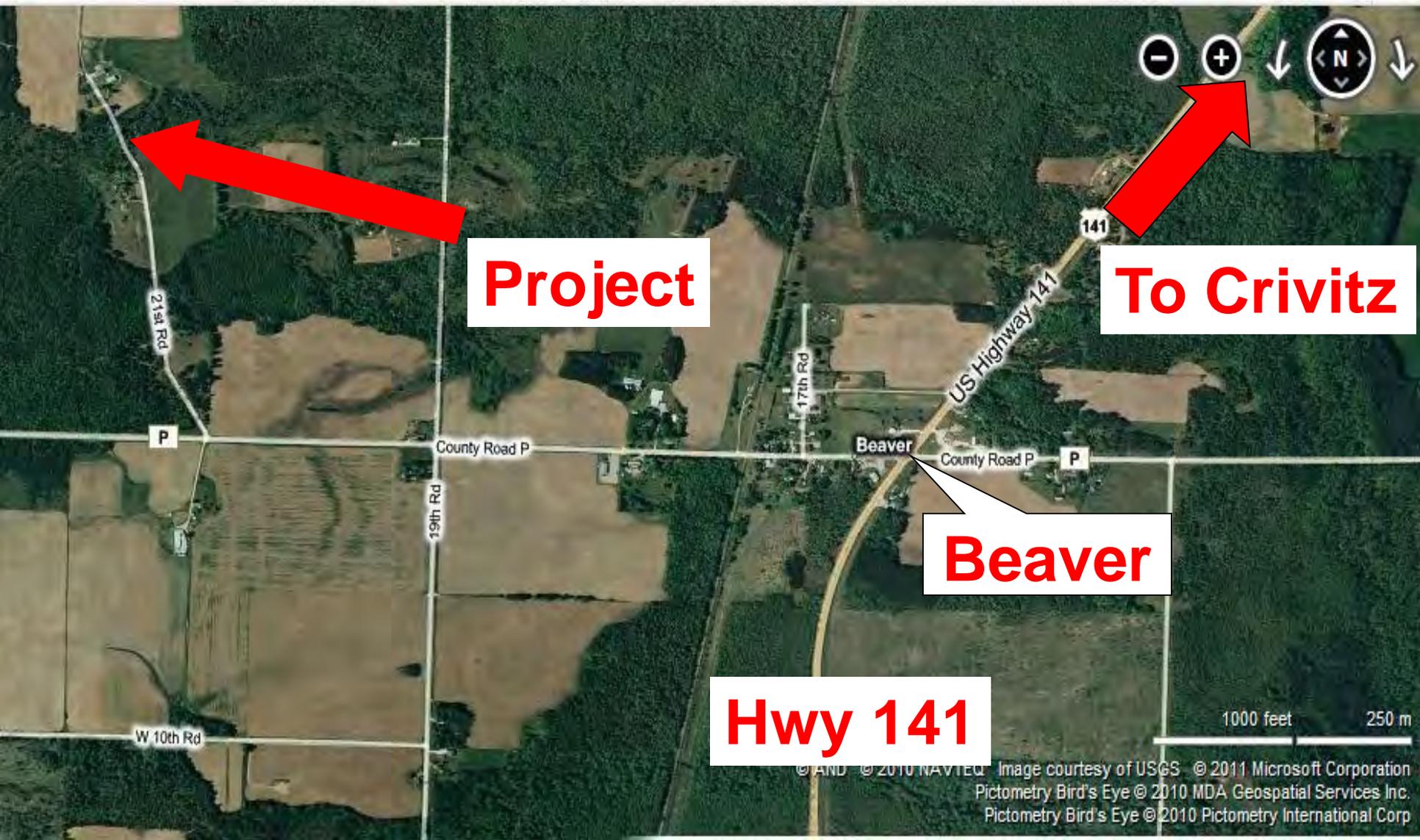
# 21<sup>st</sup> Road at North Branch Beaver Creek



Al Stranz—CORRE, Inc.

WDNR Environmental Analysis & Review Supervisor—*Emeritus*

# 21<sup>st</sup> Road at North Branch of Beaver Creek



**Project**

**To Crivitz**

**Beaver**

**Hwy 141**

# Site Description

- Over a century ago this was the location of a log drive dam
- Currently a road-stream crossing on a local town road—old structure in place for 60 years+
- A Trout Unlimited fishing platform is present in the northeast quadrant of the road and river
- Class I trout stream
- Riparian corridor is primarily wooded wetland

# Upstream—Before



# Downstream—Before



# Downstream—Before



# Downstream—Plunge Pool



# Design Considerations

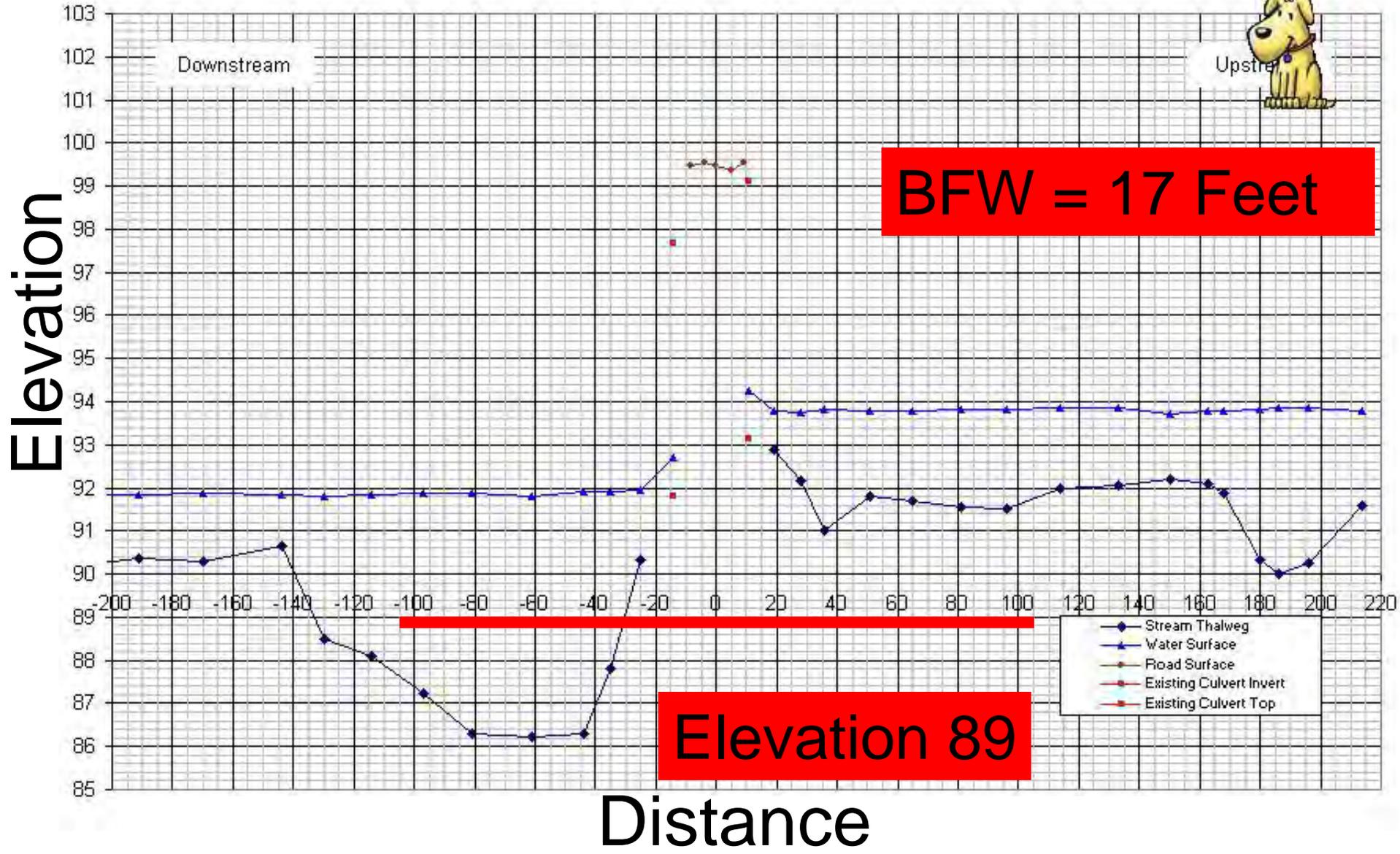
- The existing structure is perched and is an aquatic organism passage barrier—what replacement structure size and type is appropriate?
- Habitat Impacts—Removal of the structure will result in headcutting the stream upstream and sediment will fill in the plunge pool below. How will that impact the fish habitat?
- Constructability—How will the water be handled? How will the worksite be isolated? Where will the bypass channel be located? How/where will the dewatering basin be constructed/located?



**Stream Profile Survey**

# Choosing a Structure

Beaver Creek @ 21st Road



# Partnership Money

Township	\$20,000
DNR Trout Stamp	up to \$20,000
US Fish and Wildlife Service	up to \$10,000
Marinette Trout Unlimited	up to \$5,000
Green Bay Trout Unlimited	up to \$5,000
<b>Total</b>	<b>\$60,000</b>

# Actual Cost

Cost of the structure— delivered and unassembled	\$41,688
Assembly, miscellaneous fill, bedding, and installation	\$22,400
<b>Total</b>	<b>\$64,088</b>

# Temporary Bypass Channel



# Temporary Bypass Channel



# Installing the Structure



# Installing the Structure



# Dewatering



# Rip Rap



# Installed 2010



# Streambed Mobilization

Downstream Deposition into Plunge Pool



# Flooding Event after Construction

Mobilizing MORE Material into Plunge Pool



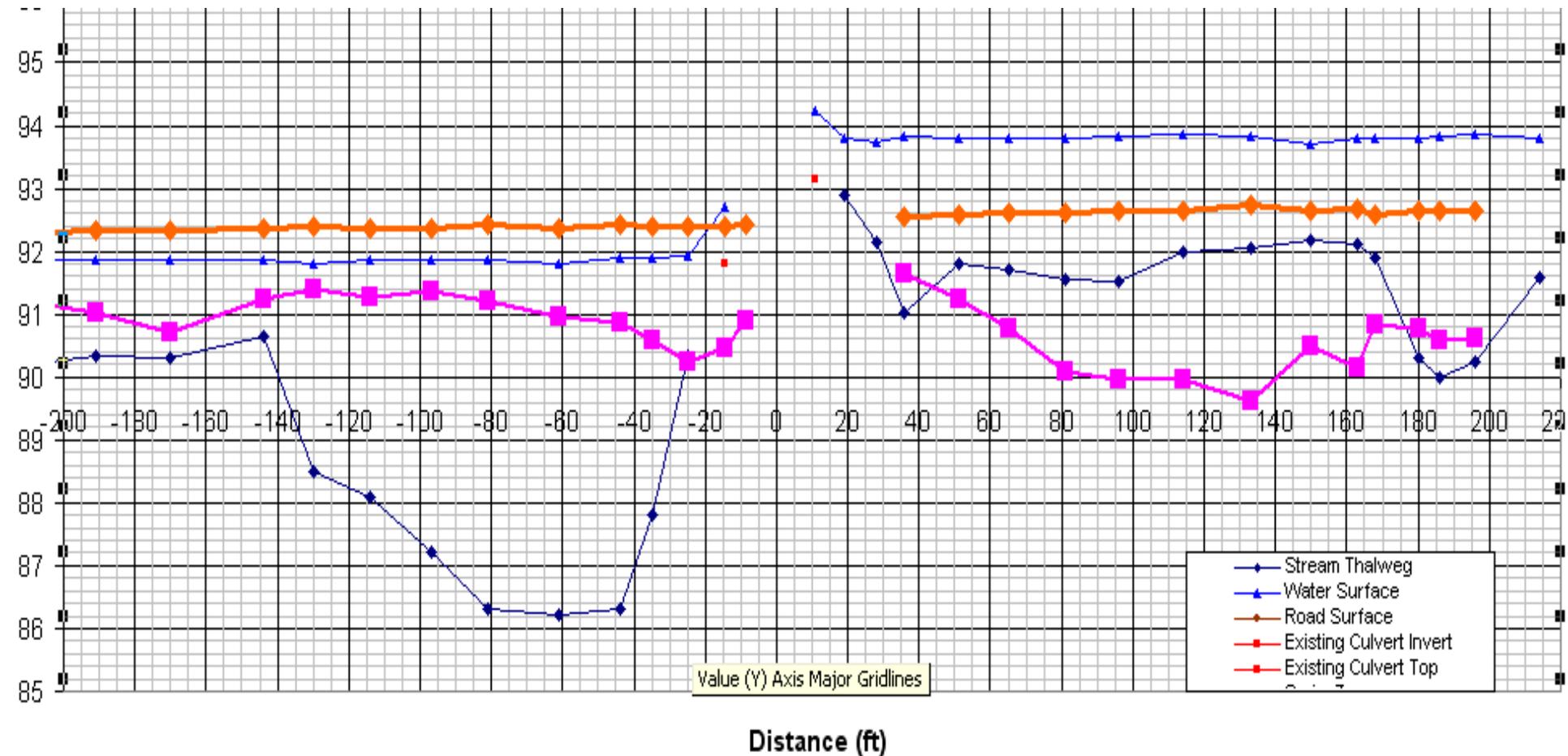
# Flooding Event after Construction

Mobilizing MORE Material into Plunge Pool



# Resurvey 2011

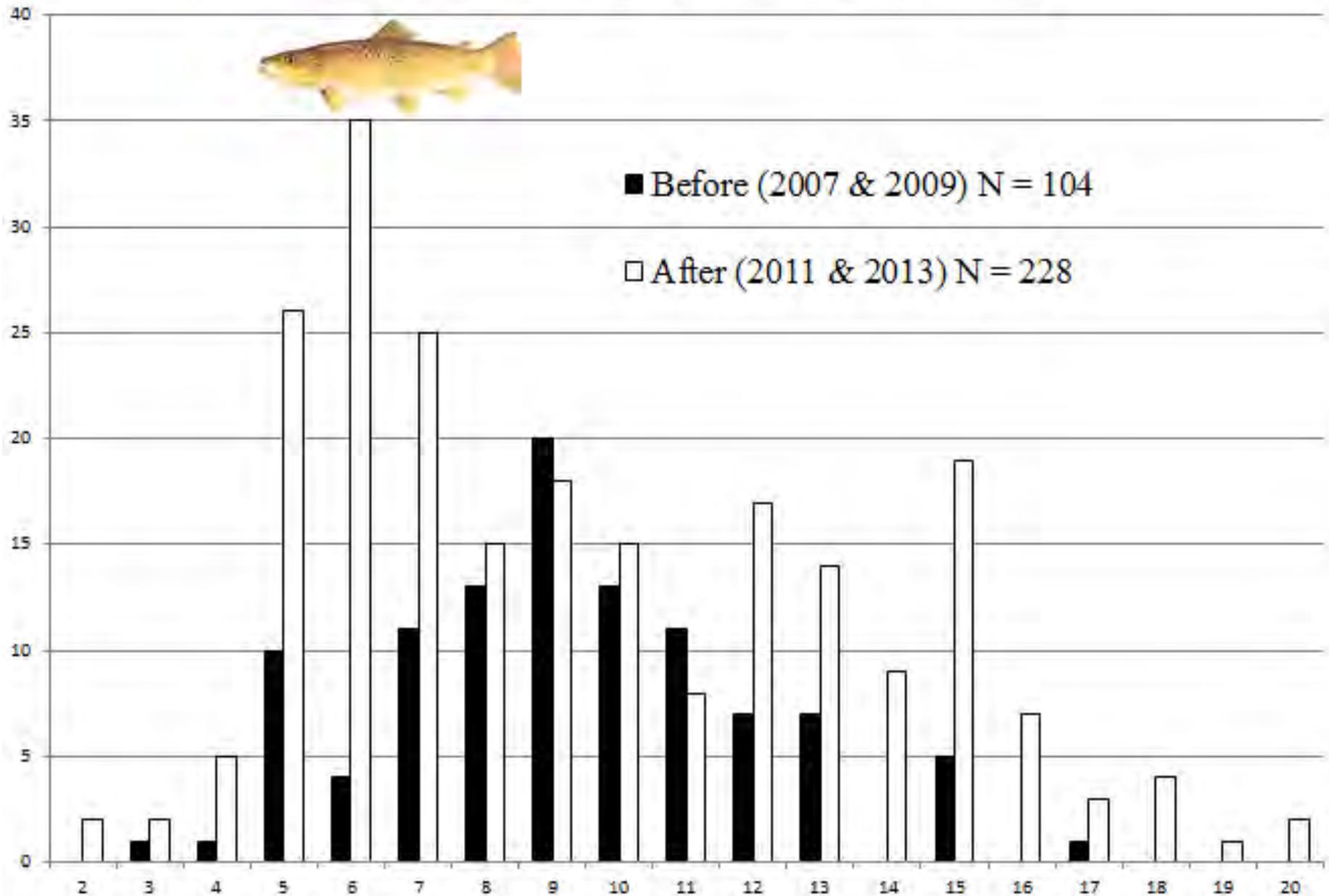
## 1 year after Construction



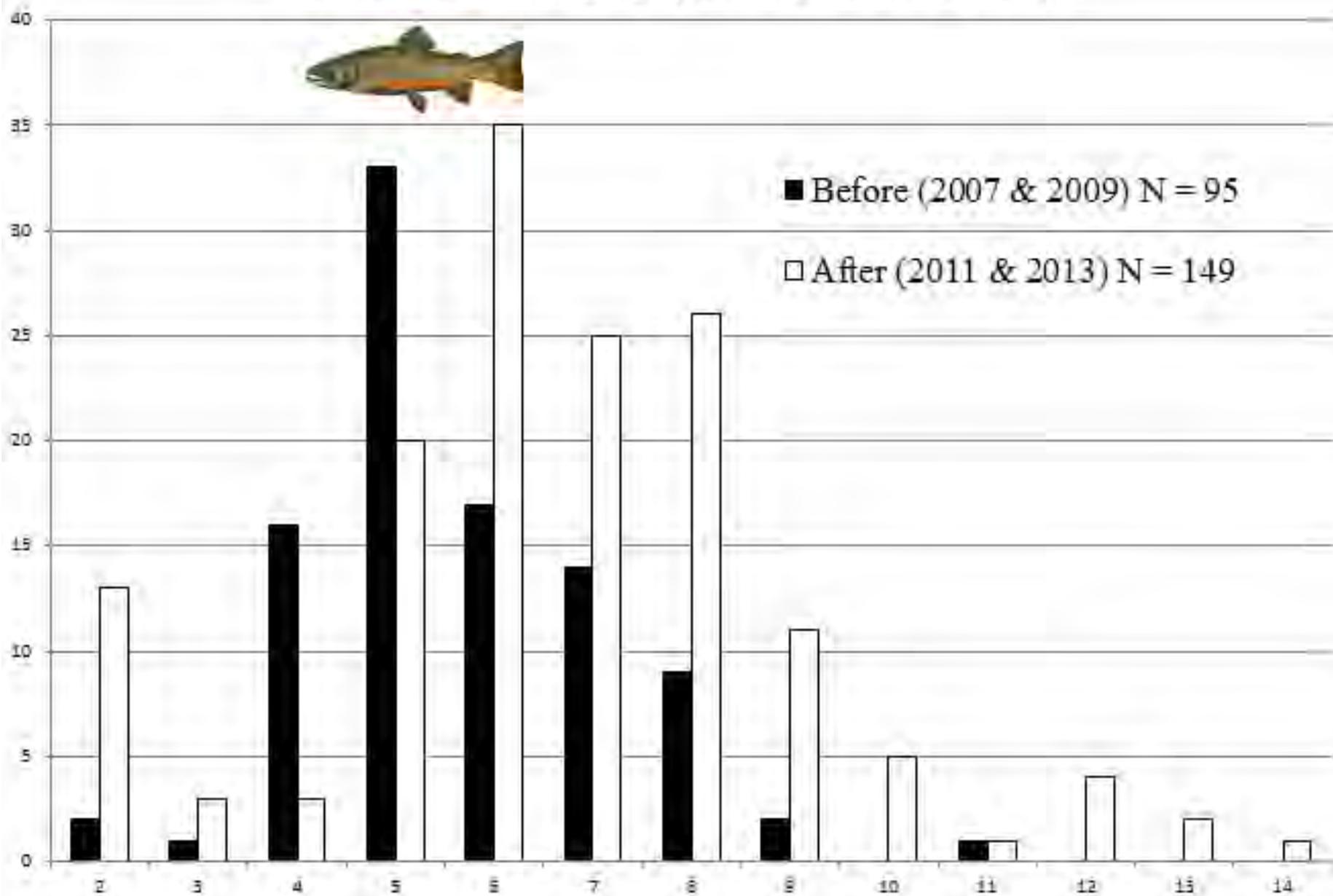
# Fall 2013



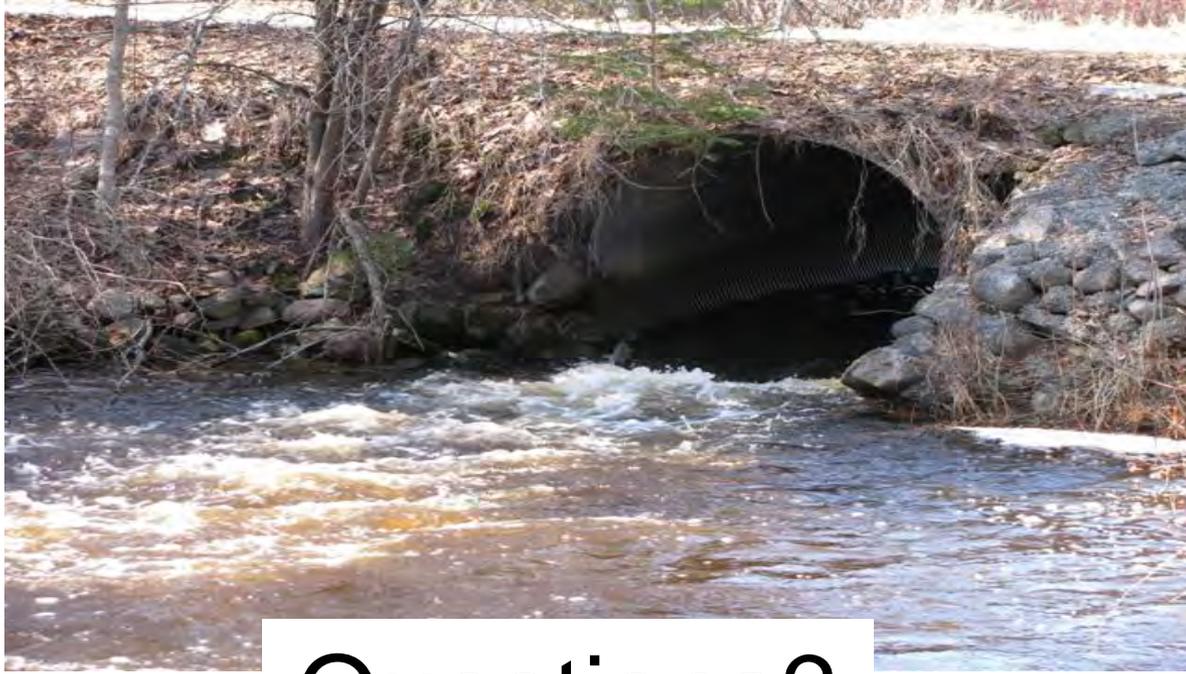
## Brown Trout - 21<sup>st</sup> Road (North Br Beaver Creek)



## Brook Trout - 21<sup>st</sup> Road (North Br Beaver Creek)



Before



Questions?



After