



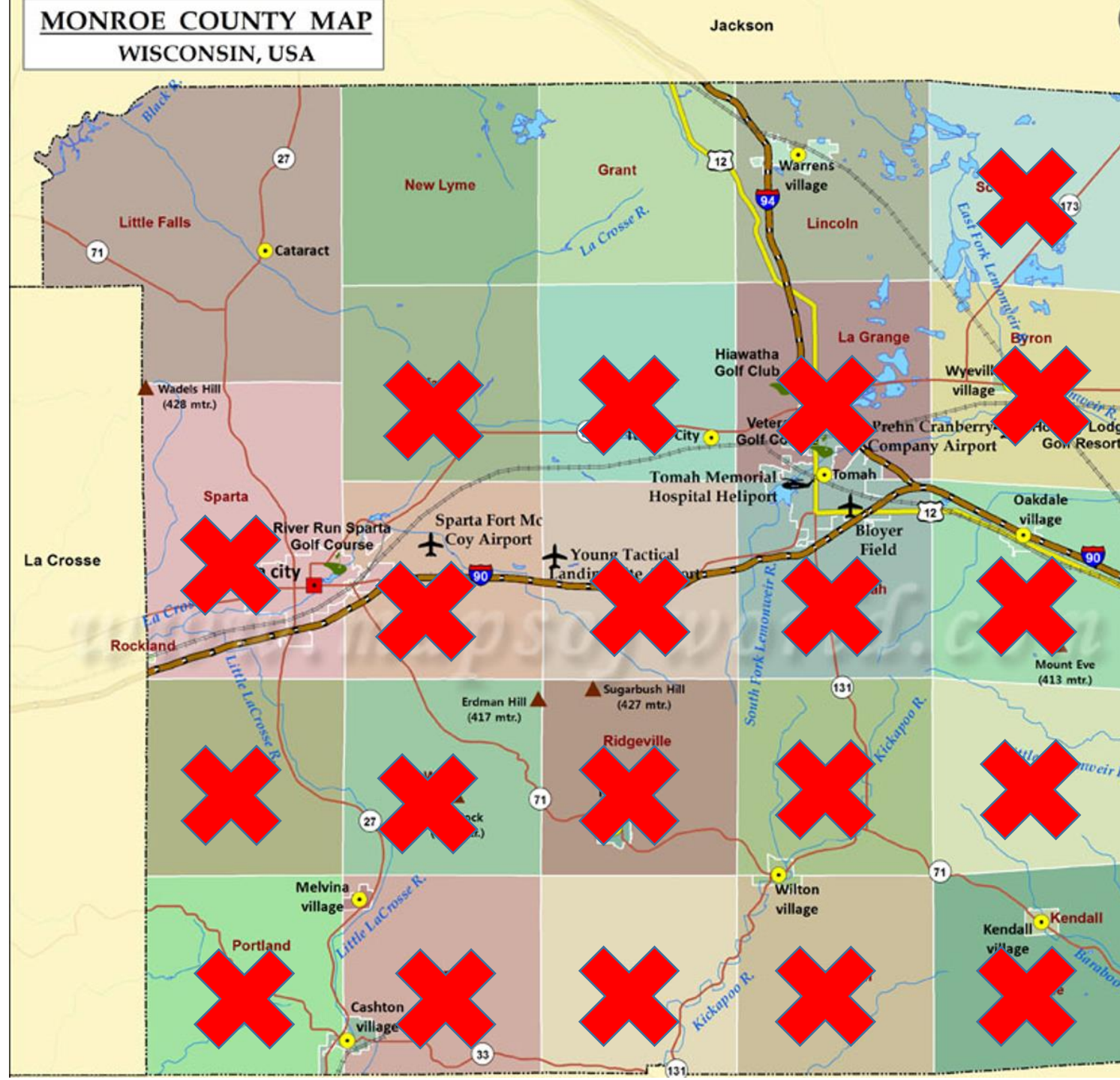
MoCo LCD 2022 Stream Crossing Assessments

Helena Wehrs and Brandon Thill

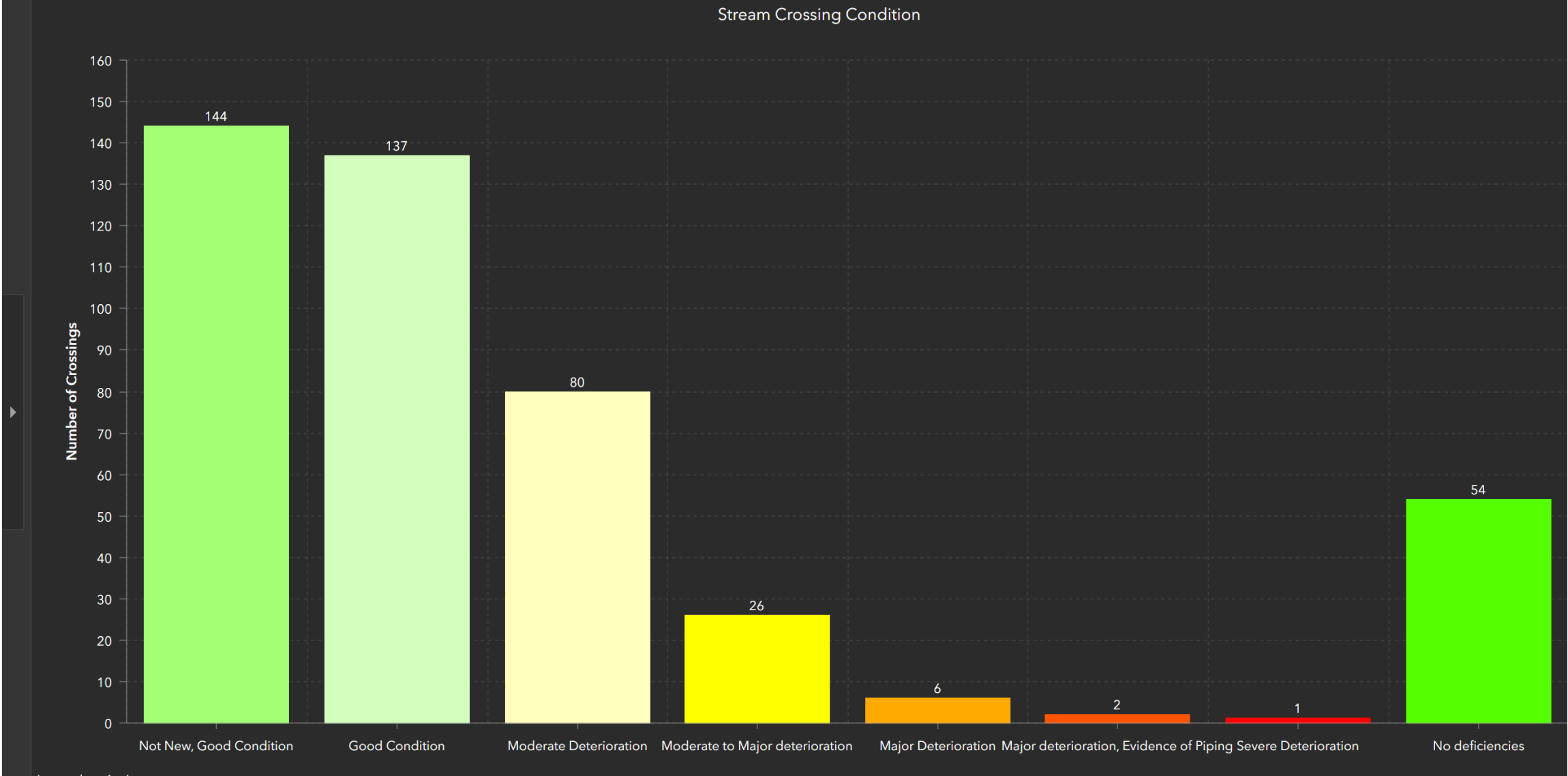
Objective

Evaluate stream crossings for fish passage and flood resiliency in Monroe County with criteria from the Great Lakes Stream Crossing Inventory.

- This data provides information necessary to determining priority for maintenance and replacement of structures.



Structure Condition



Severe Deterioration



Inlet



Outlet

New Structure



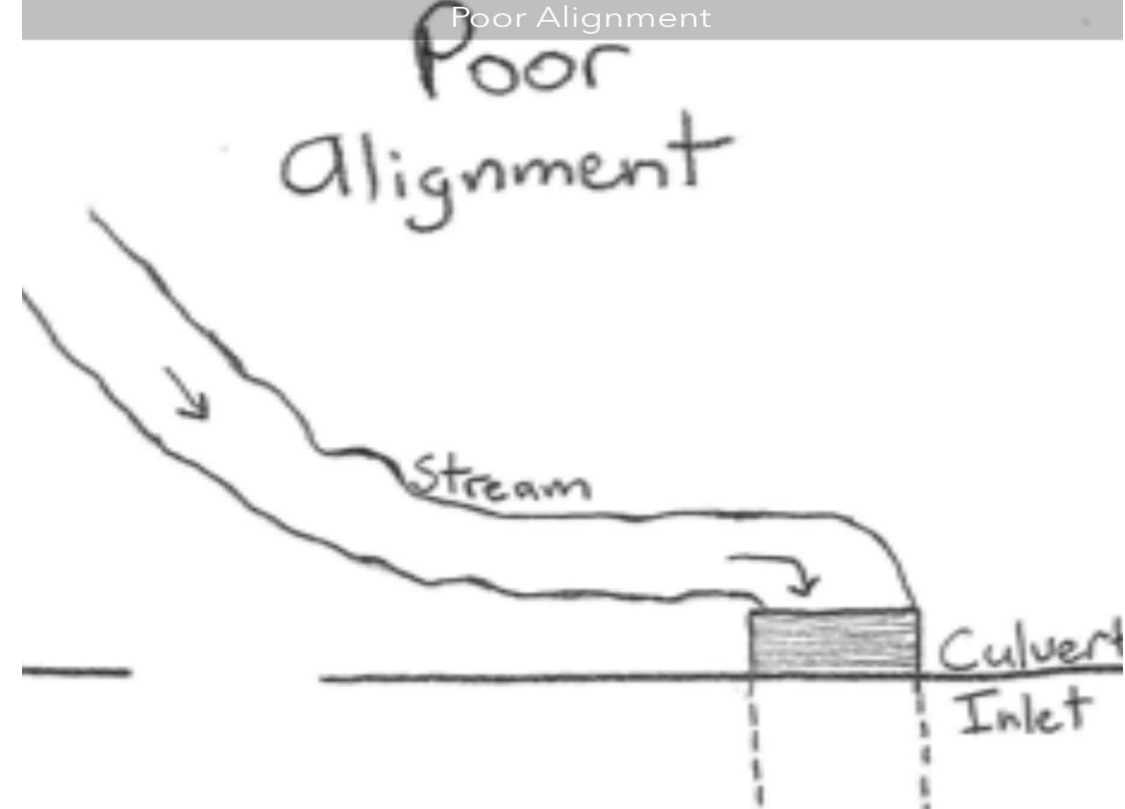
Inlet



Outlet

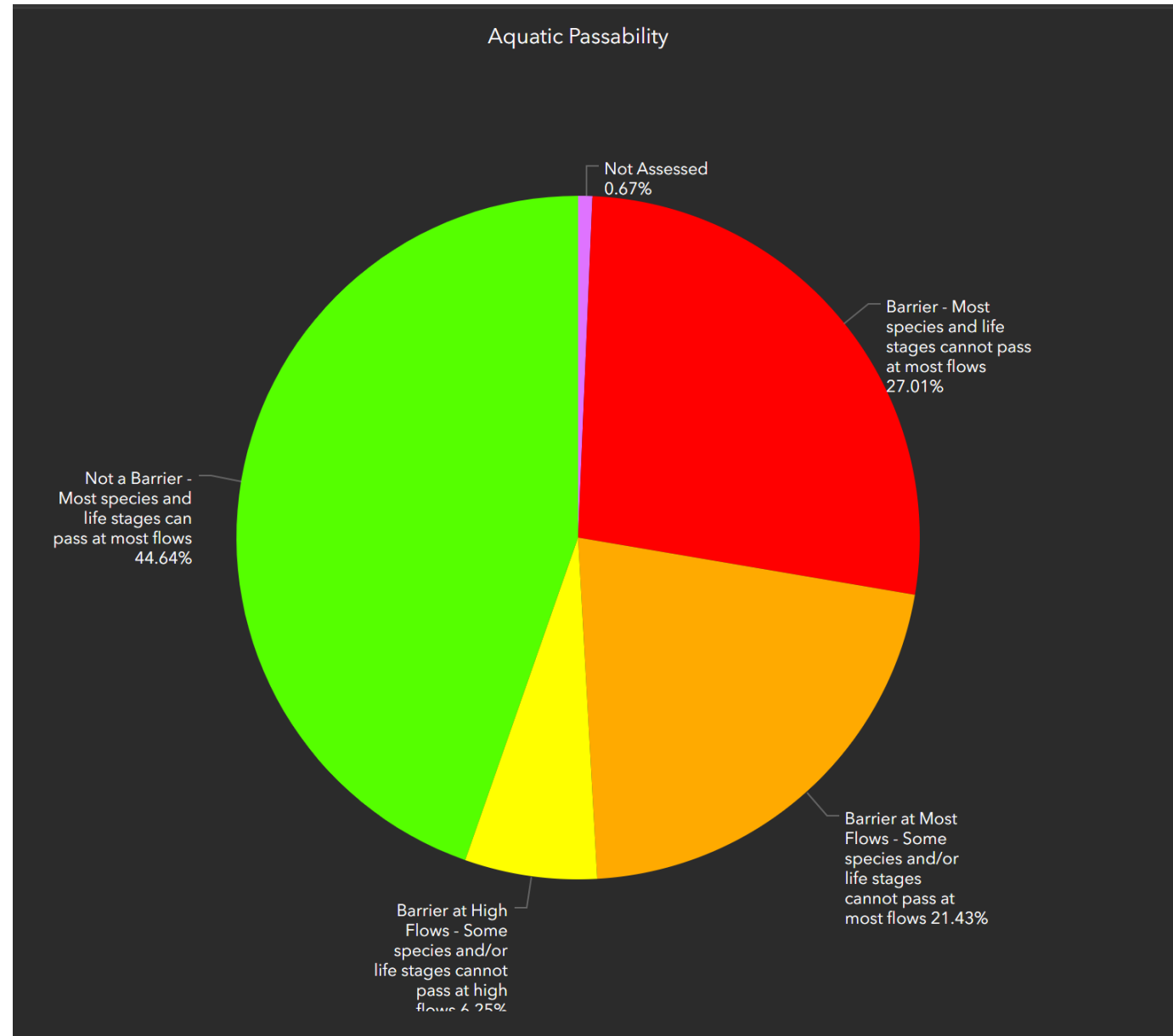
Structure Condition

- There are several factors that can play a role in the condition of a structure, especially overtime
 - Alignment with stream
 - Site erosion totals
 - Armoring/RipRap/Wingwalls



Fish Passability

- 54.69% of crossings completed in Monroe County are barriers to fish at some or all flows
- Culverts are more likely to be a barrier than bridges
- Not all barriers found here are located in trout streams

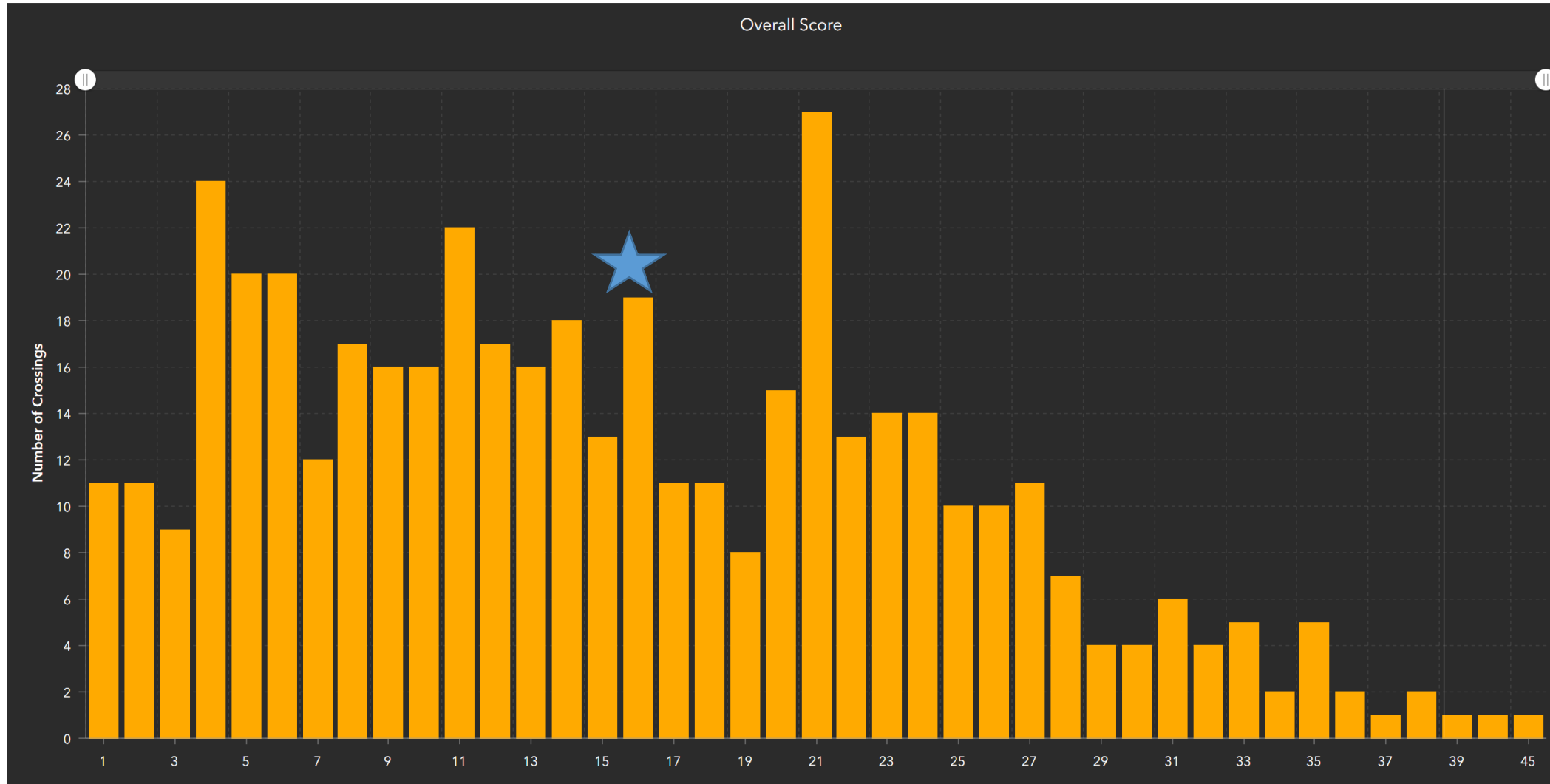


Barriers

- Perch height
- Velocity
- Water level
- Structure shape



Overall Flood Resiliency Score



Flood Resiliency

- Sizing standards
- Plugging or crushing
- Inlet armoring and riprap
- Structure alignment
- Diversion potential



Sizing Standards

- 57% of crossings undersized
- water capacity
- premature deterioration
- 1.2 times bankfull width
- Seen more often in culverts than bridges

