

# **Rio Grande Silvery Minnow capacity for movement in a highly dynamic system**

**Ben Stout – Utah State University**

**Phaedra Budy – US Geological Survey, Utah Cooperative Fish and Wildlife Research  
Unit, Utah State University**

**Mark McKinstry – U.S. Bureau of Reclamation**

**Peter MacKinnon – Utah State University**

**Gary Thiede – Utah State University**



# Species Conservation



# Movement and space use





Rio Grande

Rio Grande

Rio Grande

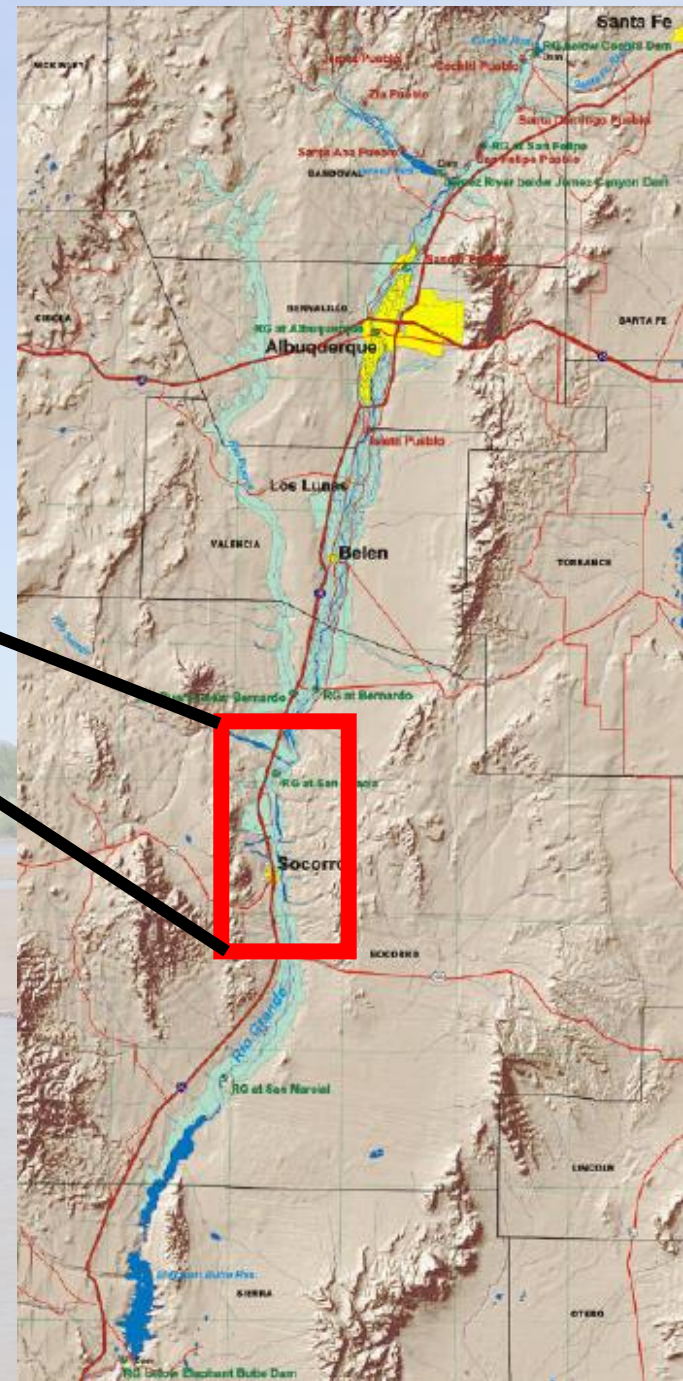


**How do these fish move in a contemporary fragmented river?**



# Study Site

- San Acacia

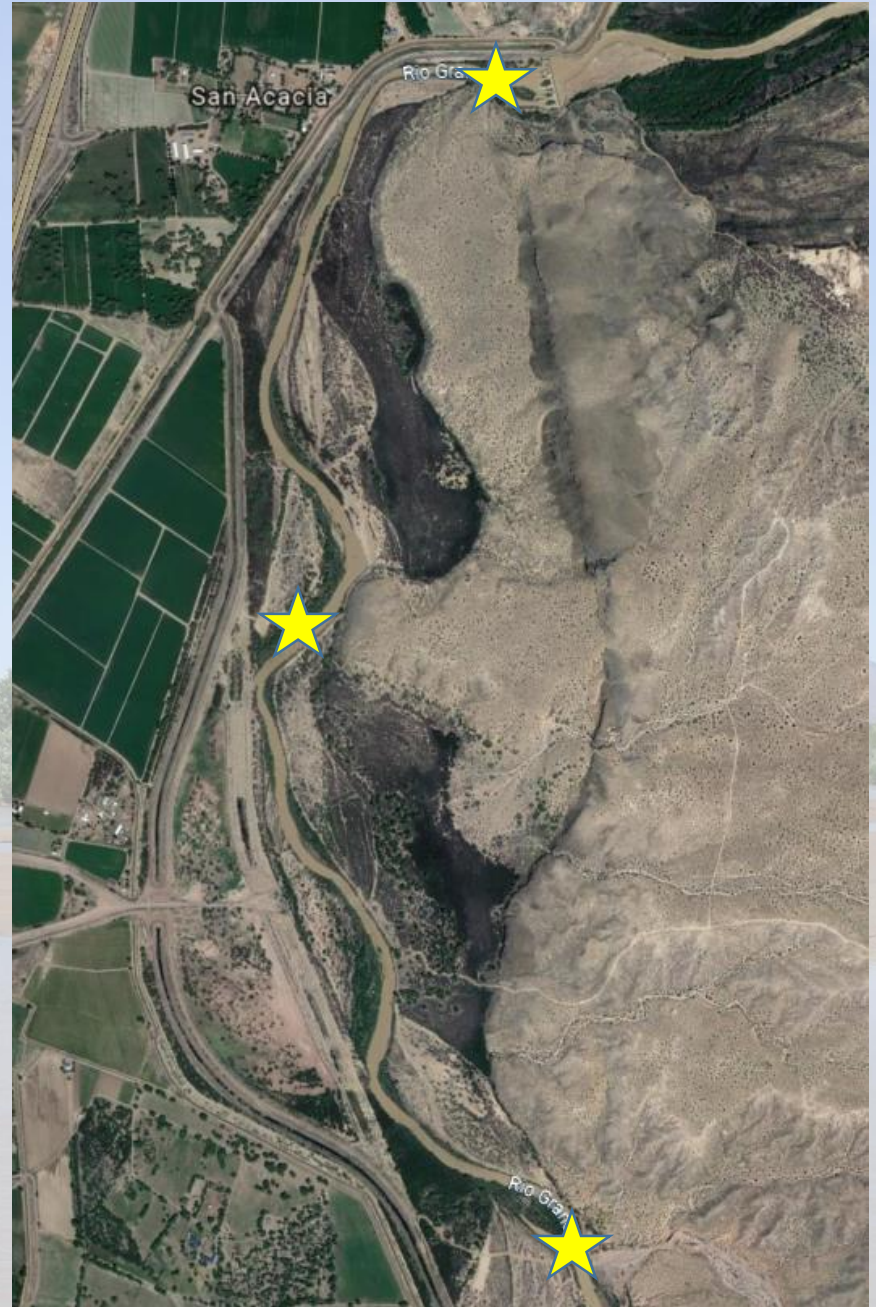


# Rio Grande Silvery Minnow





# Methods



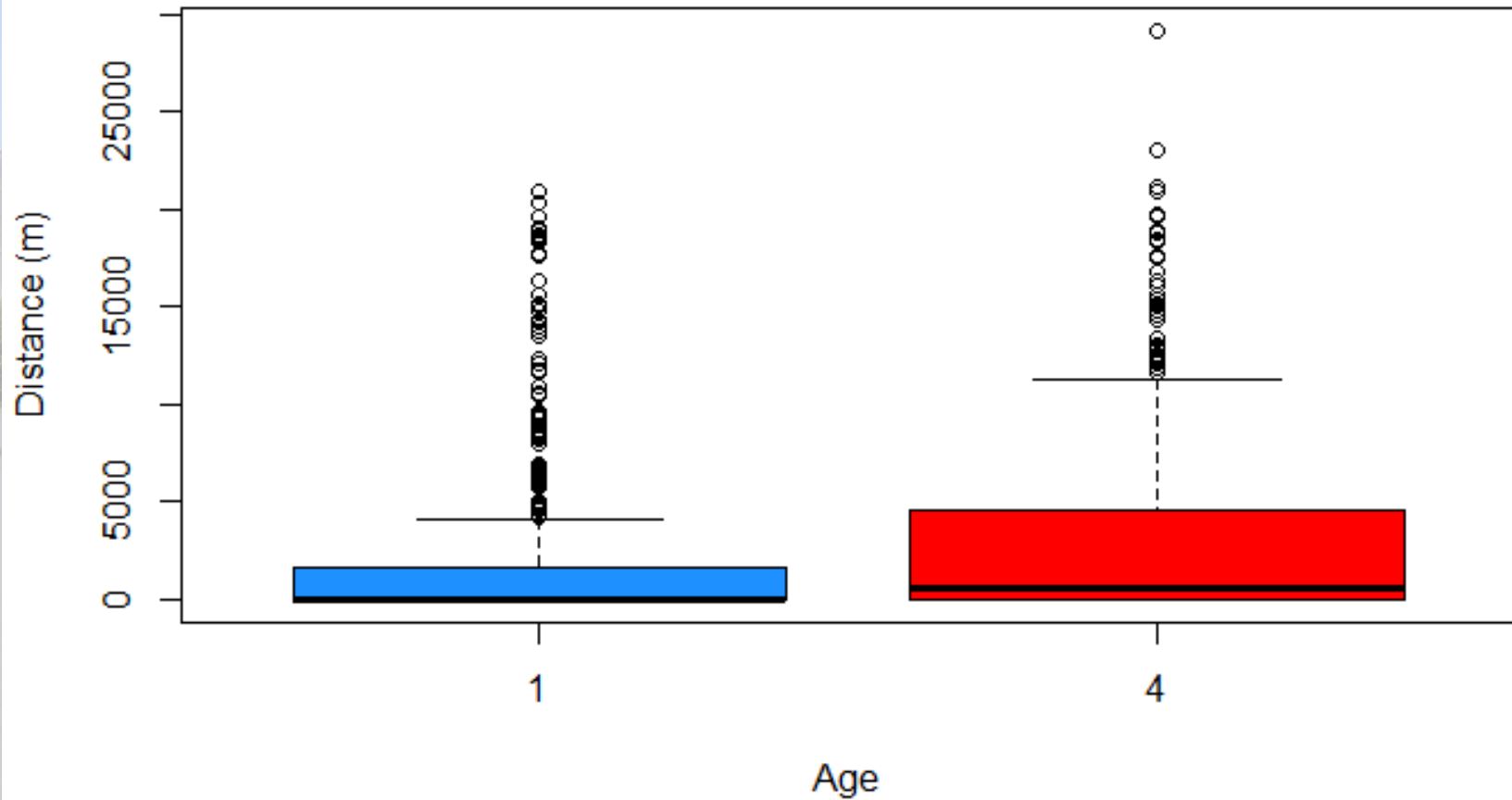
# Methods



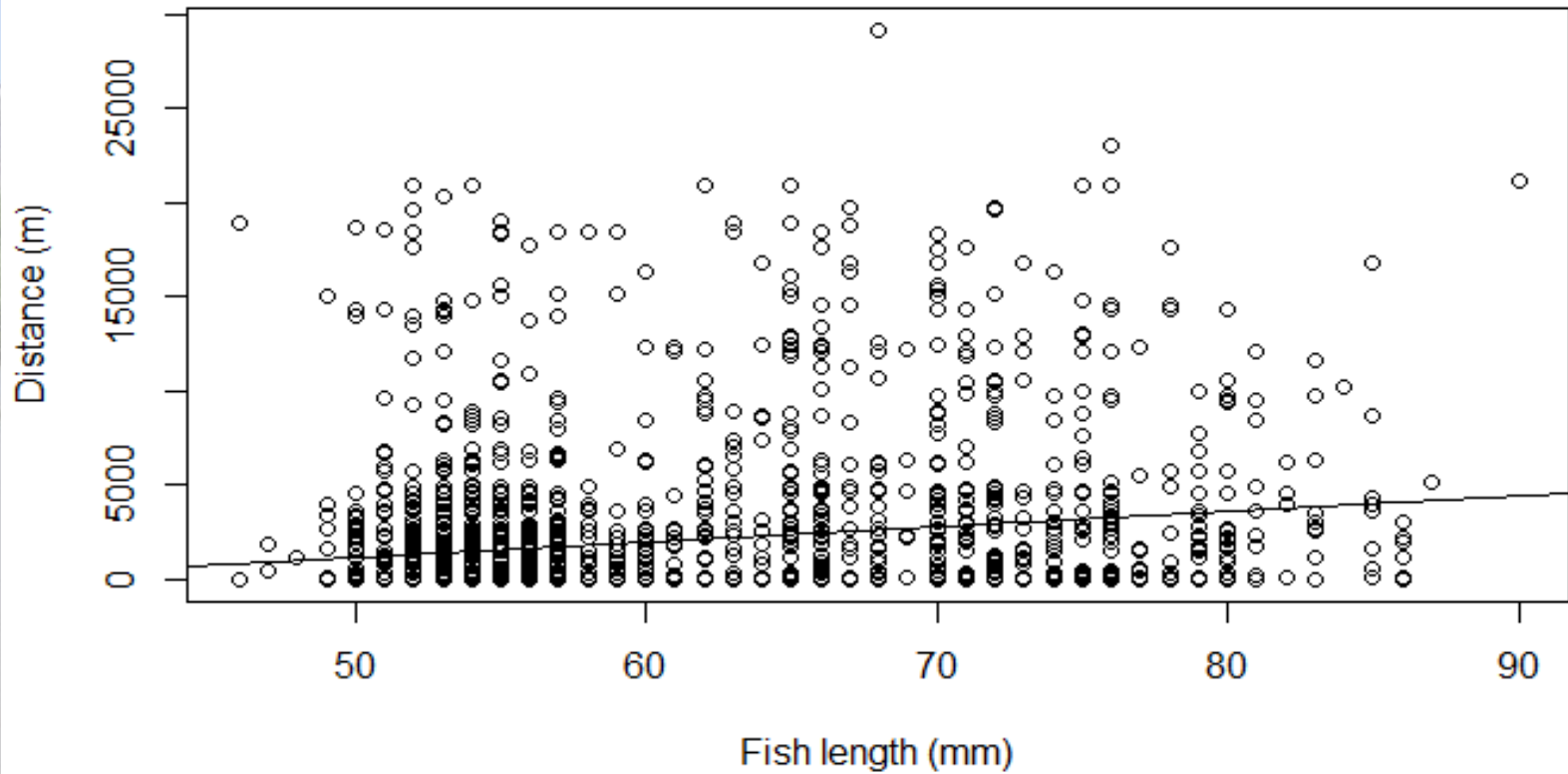
# Results: Pilot study

Total released	Unique detections	Total detections
1701	979	3097

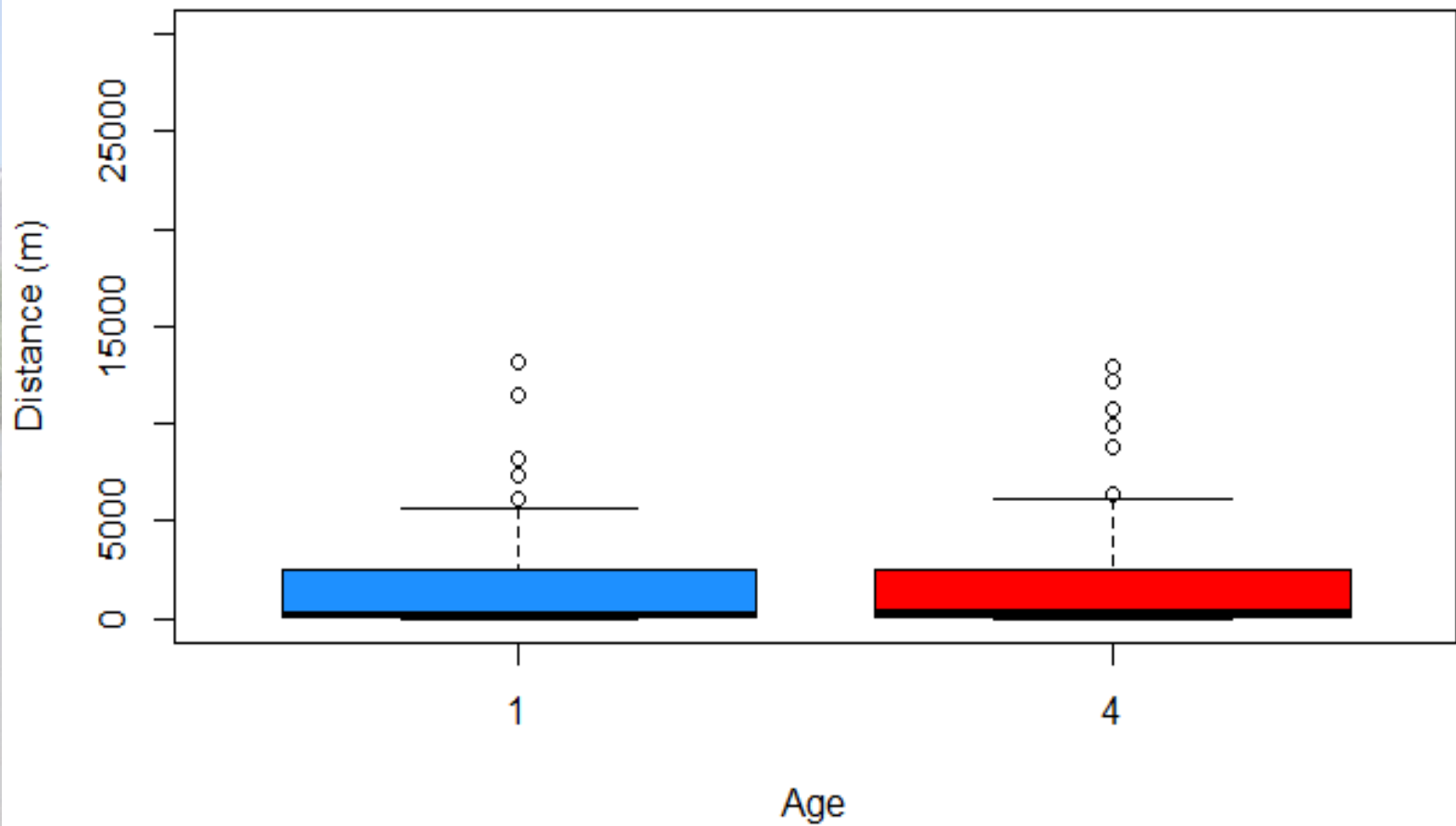
# Downstream movement



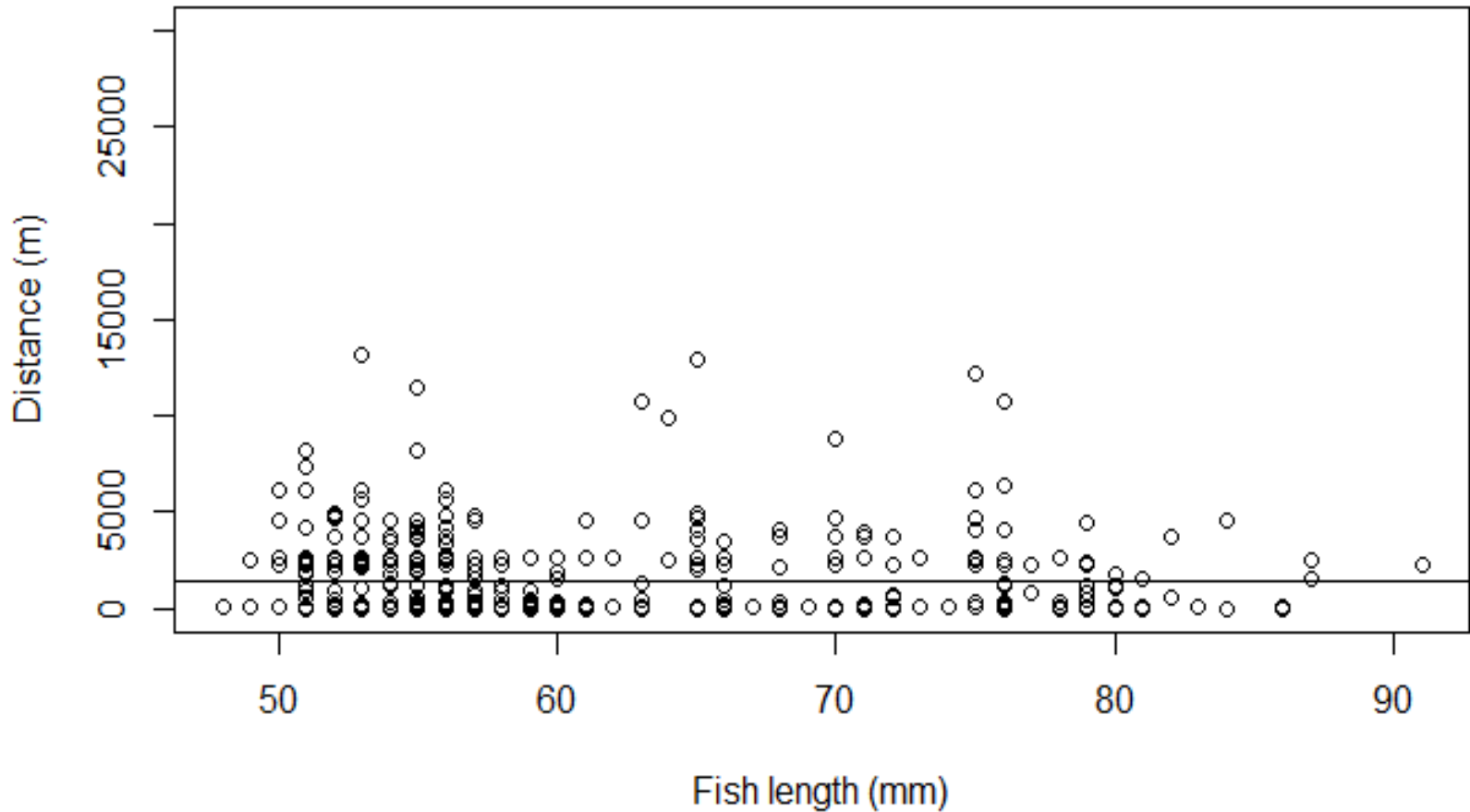
# Downstream movement



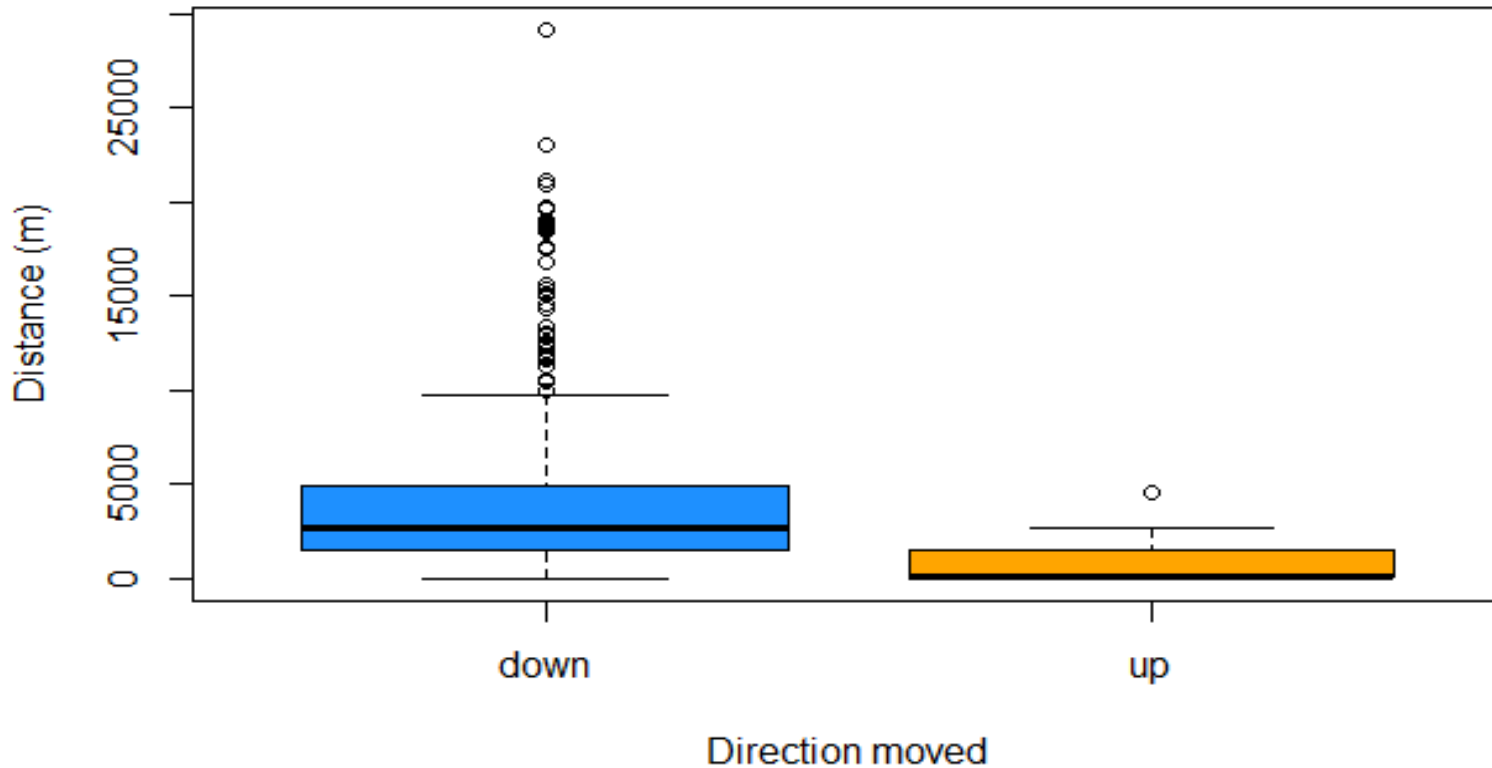
# Upstream movement



# Upstream movement

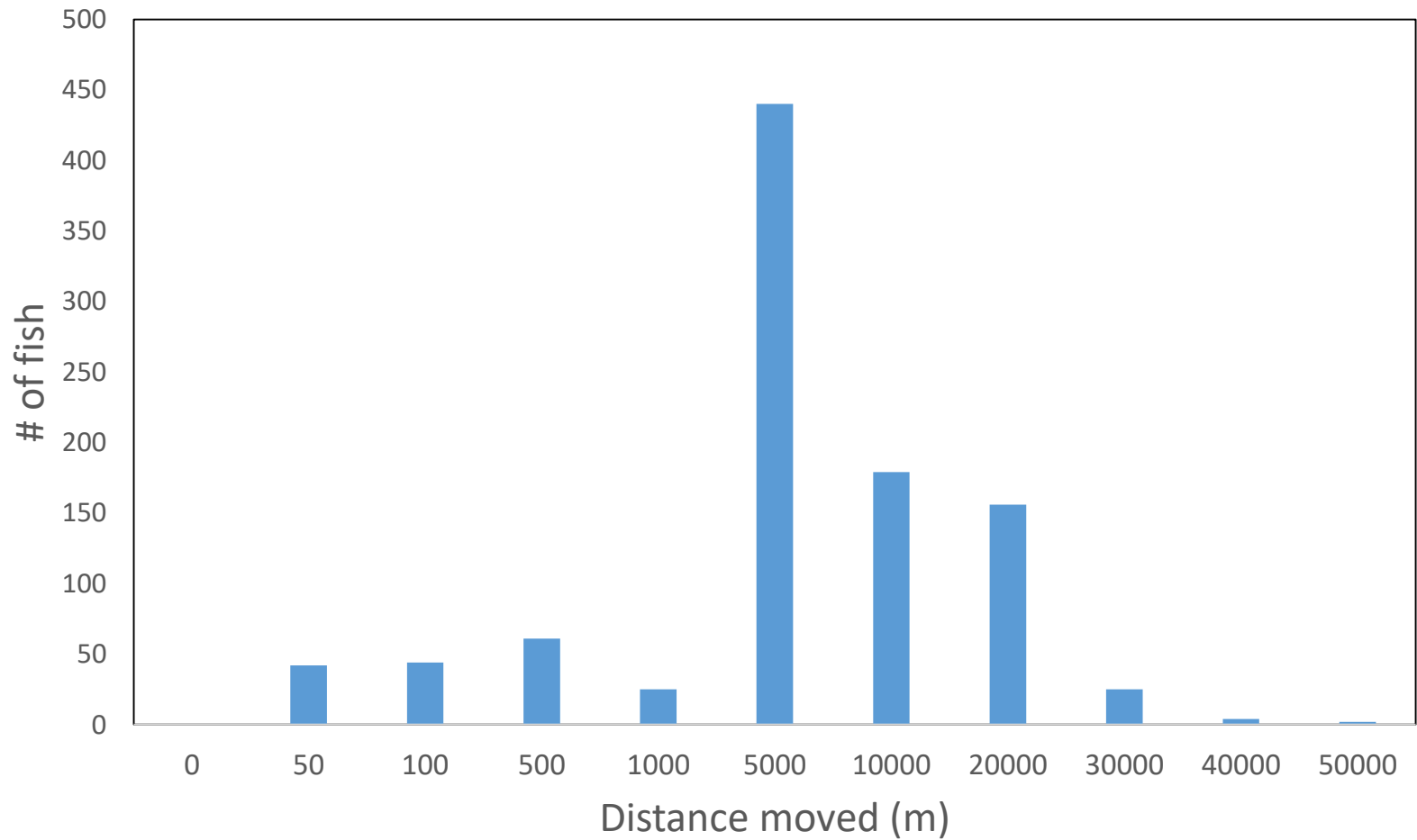


# Initial movement after release



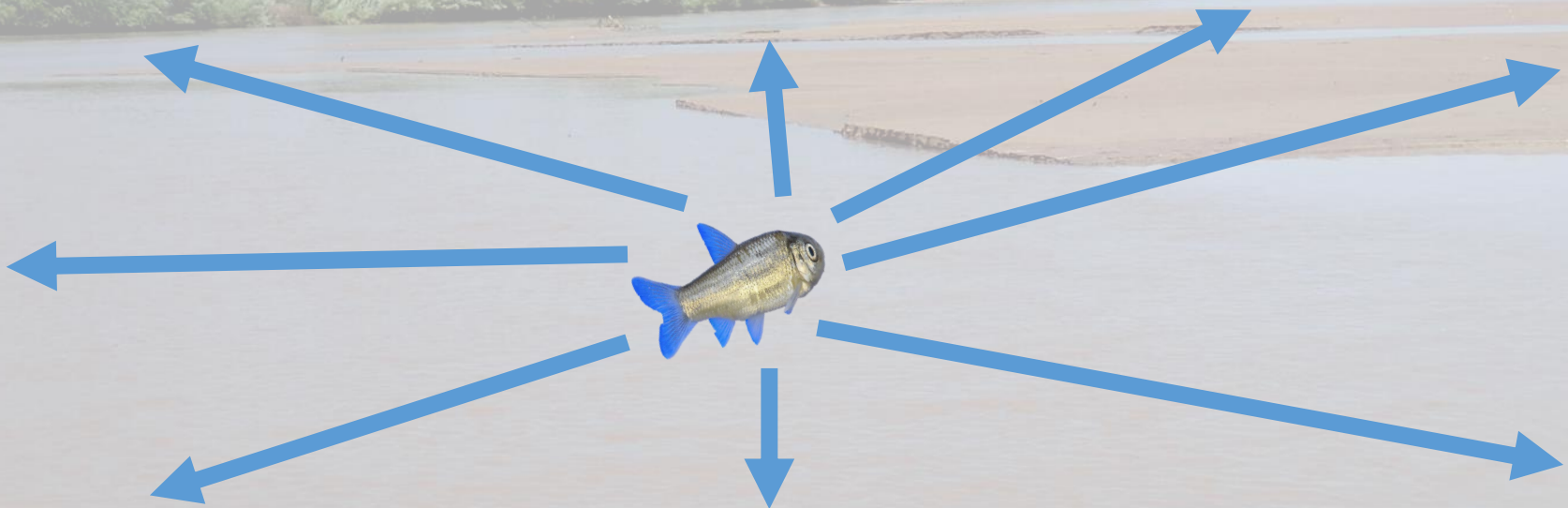


# Cumulative distance moved



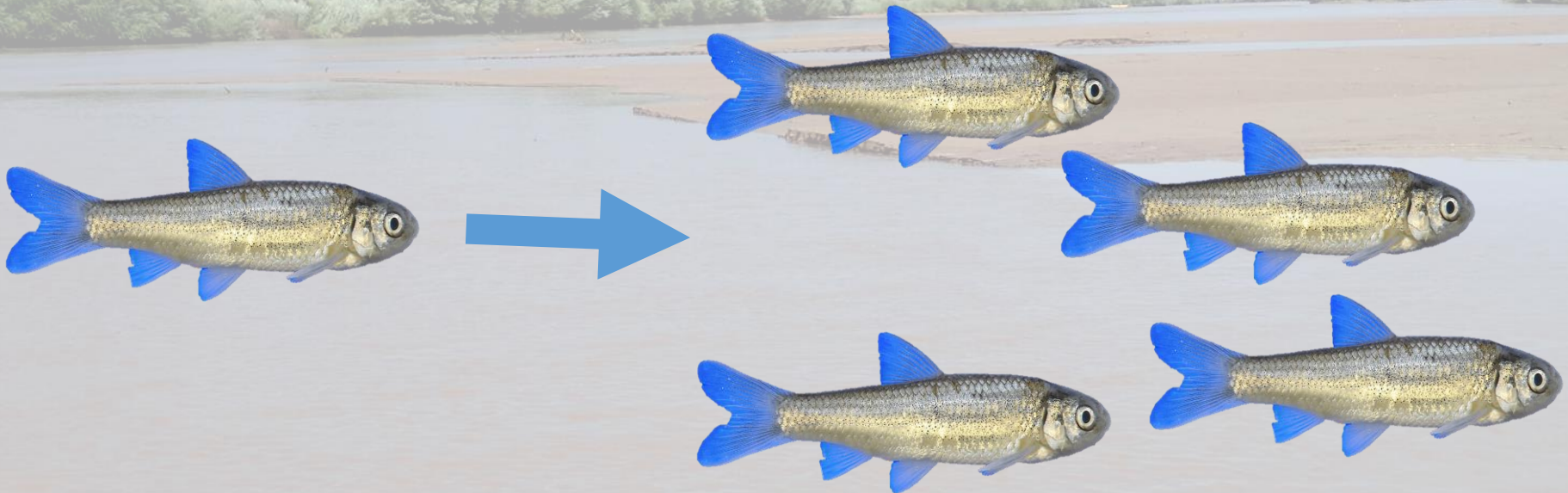
# Preliminary conclusions

- Approach = highly effective
- Highly mobile fish (up to 42 km)
- Have the ability to disperse widely when given the opportunity:
  - Upstream (*to the extent possible*)
  - Downstream



# Next Steps

- In midst of second release event
  - Released fish on 11/20
- Expanding spatial/temporal scale:
  - Isleta
  - Across all seasons
- Working on data visualization techniques



# Acknowledgements

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Questions?

