The Success of Green Sunfish Removals in McGee Wash

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Mechanical Removals

- Mechanical removals may not work

Mechanical Removals

- Various contributing factors

Mechanical Removals

- Time and effort

Target Species – Green Sunfish (*Lepomis cyanellus*)

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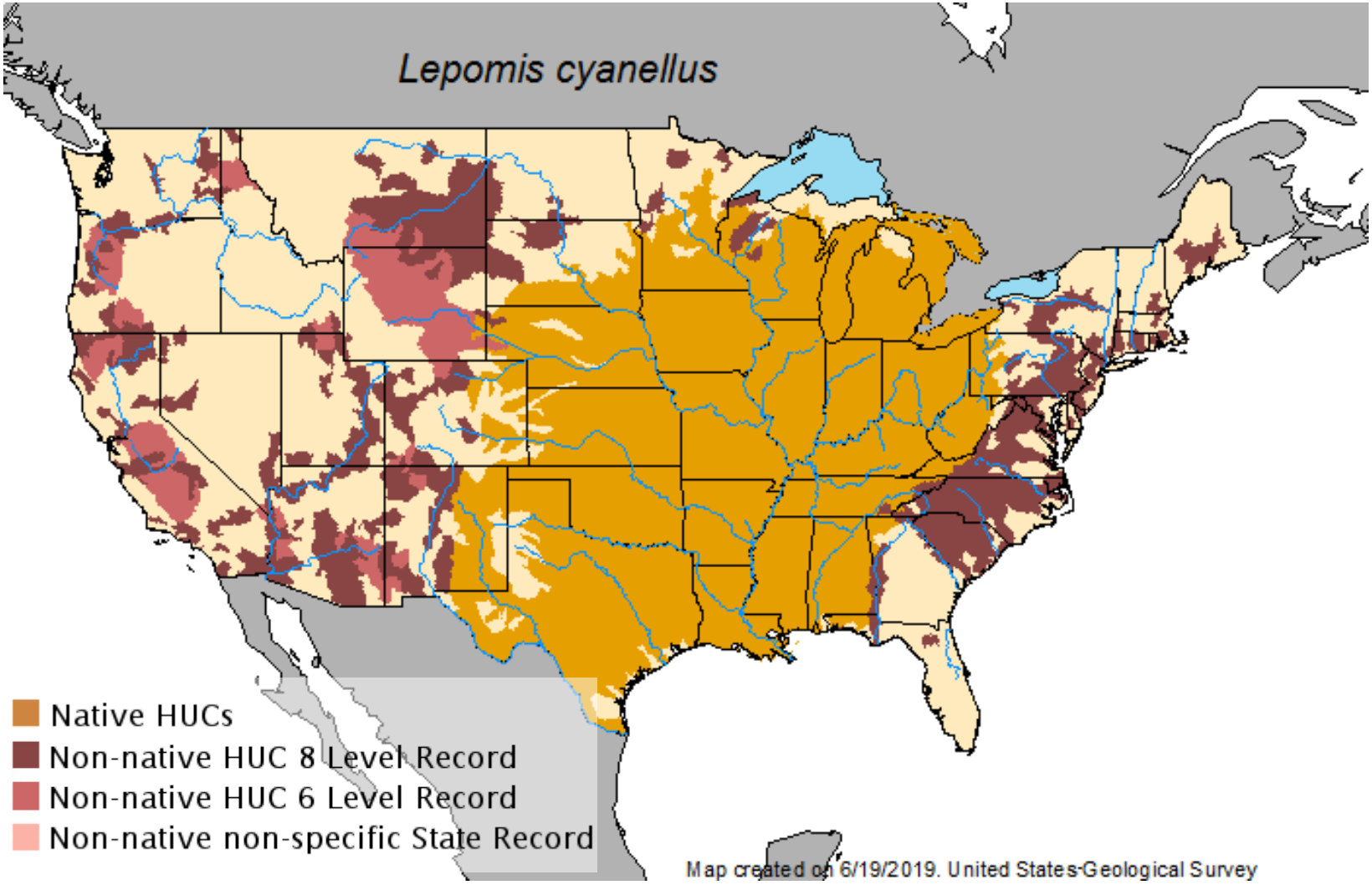
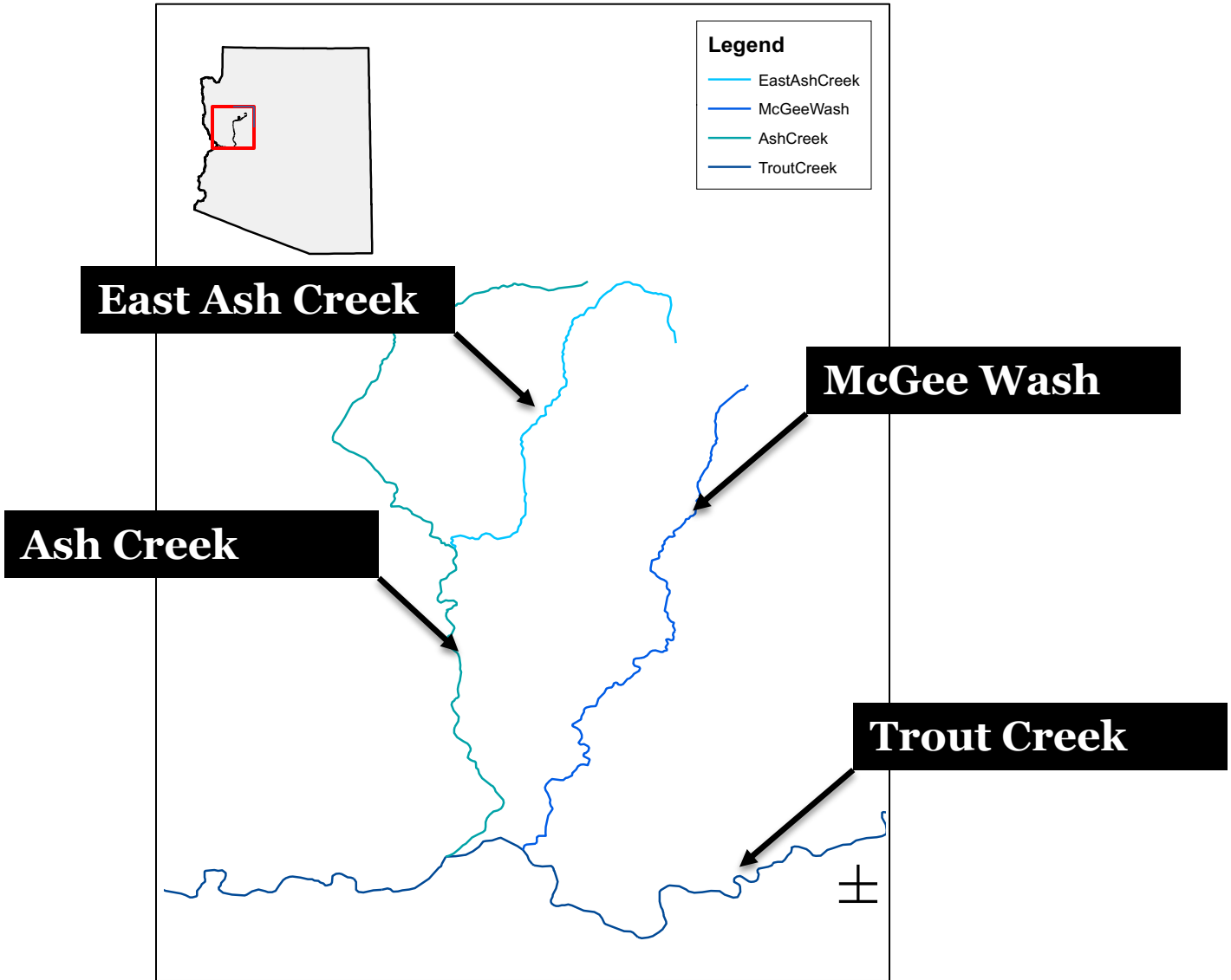


Trout Creek Watershed



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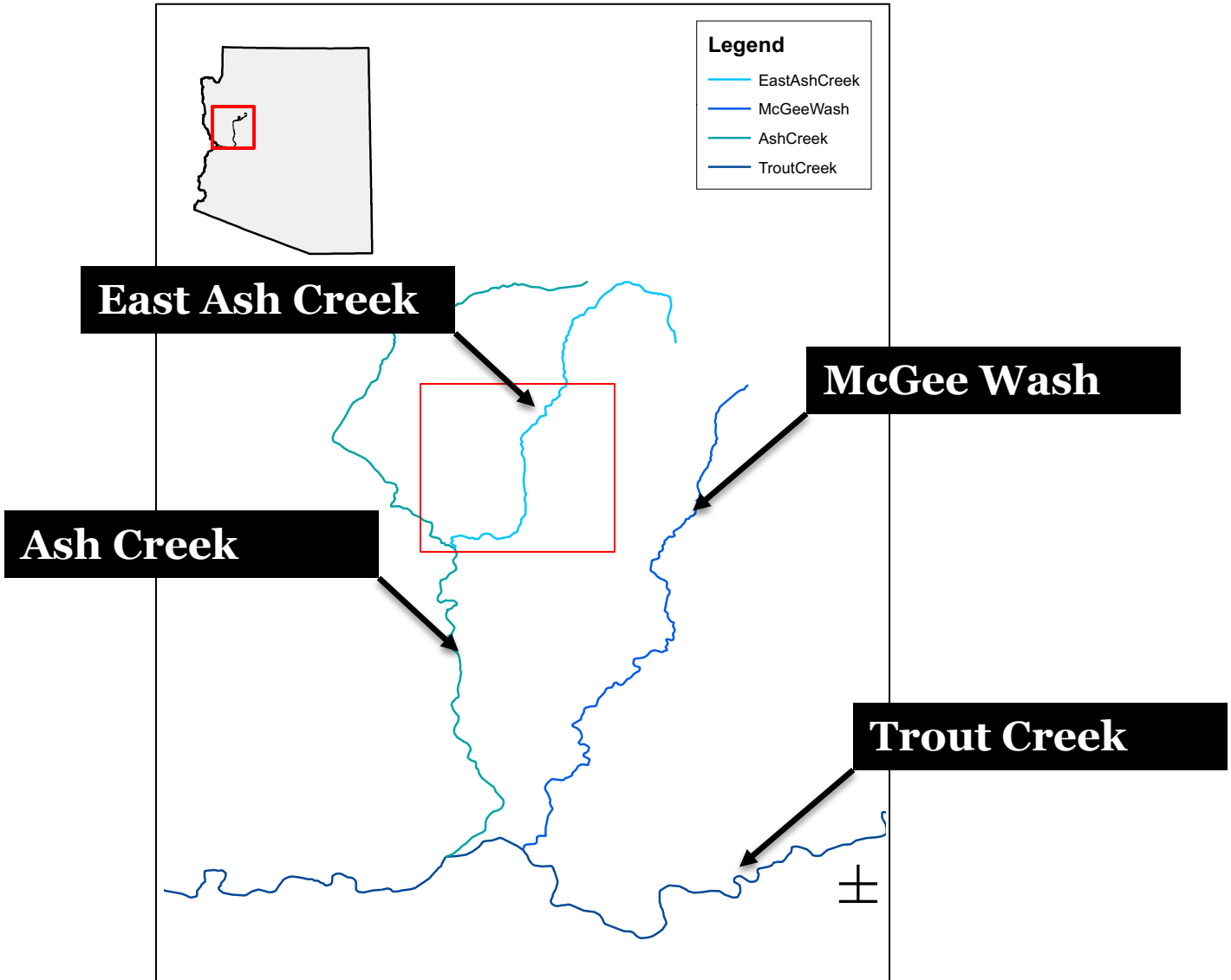

East Ash Creek Case Study

- Tributary to Ash Creek
- Dry reach impedes upstream movement
- Successful removal effort
- Potential for reinvasion

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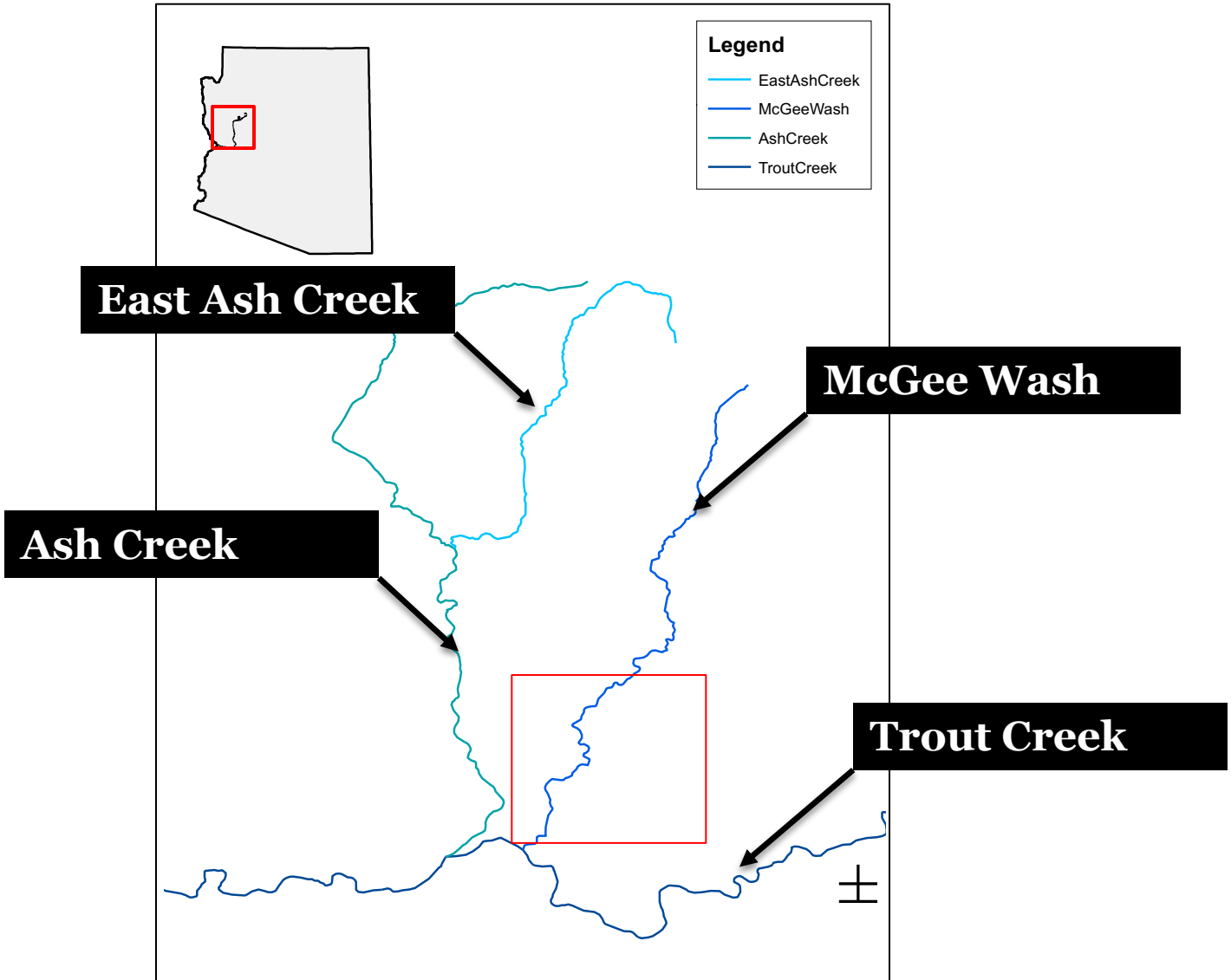
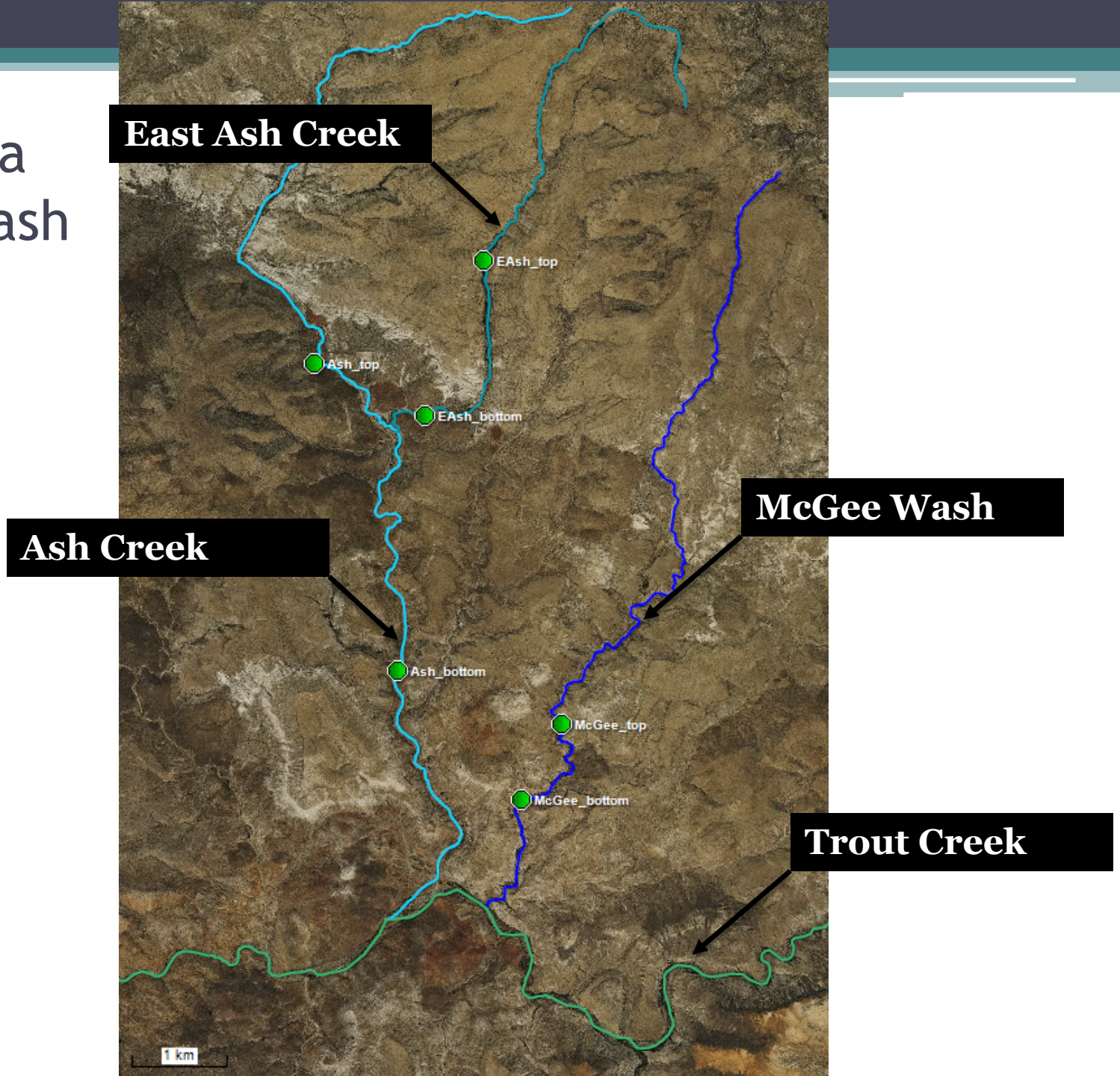
McGee Background - Locality



Study Area
McGee Wash



McGee Background – Native Species

- Roundtail Chub (*Gila robusta*)

- Desert Sucker (*Catostomus clarkii*)

- Lowland Leopard Frog (*Rana yavapaiensis*)

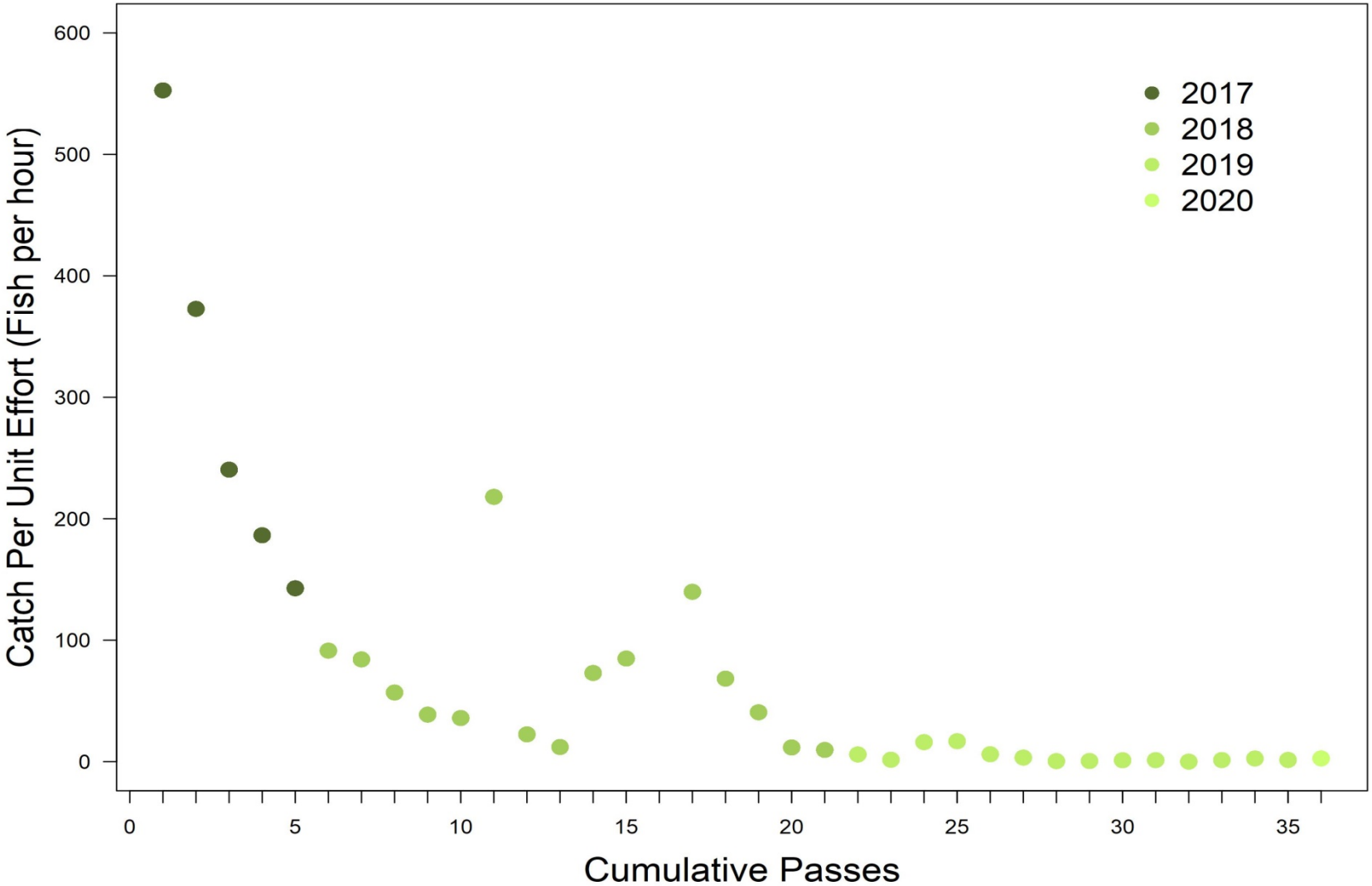
- Sonora Mud Turtle (*Kinosternon sonoriense*)

- Arizona Toad (*Anaxyrus microscaphus*)

Methods

- 36 total passes (August 2017 – January 2020)
- Backpack electrofishing
- Hoop nets
- Seining
- Angling

Data – Green Sunfish CPUE



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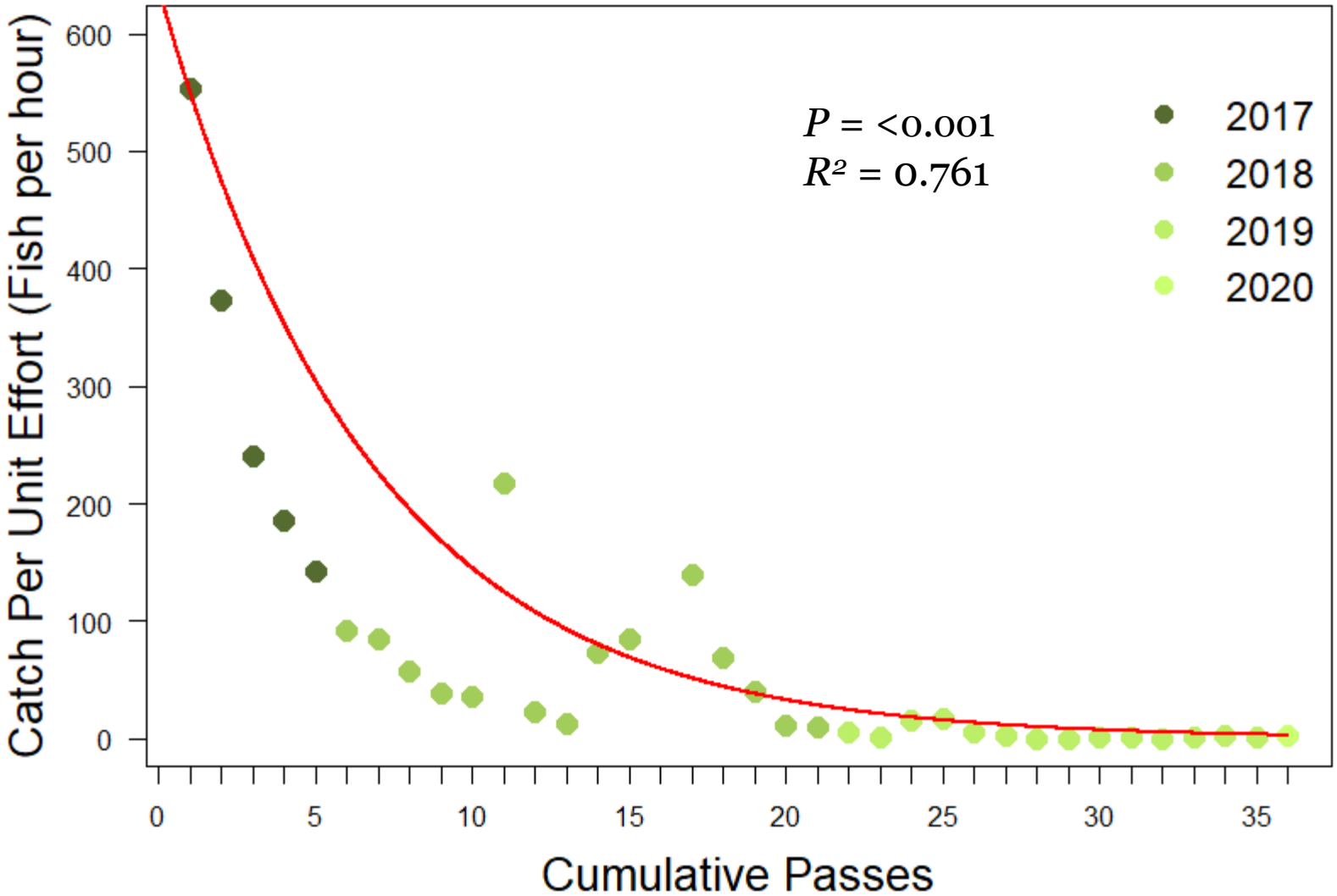
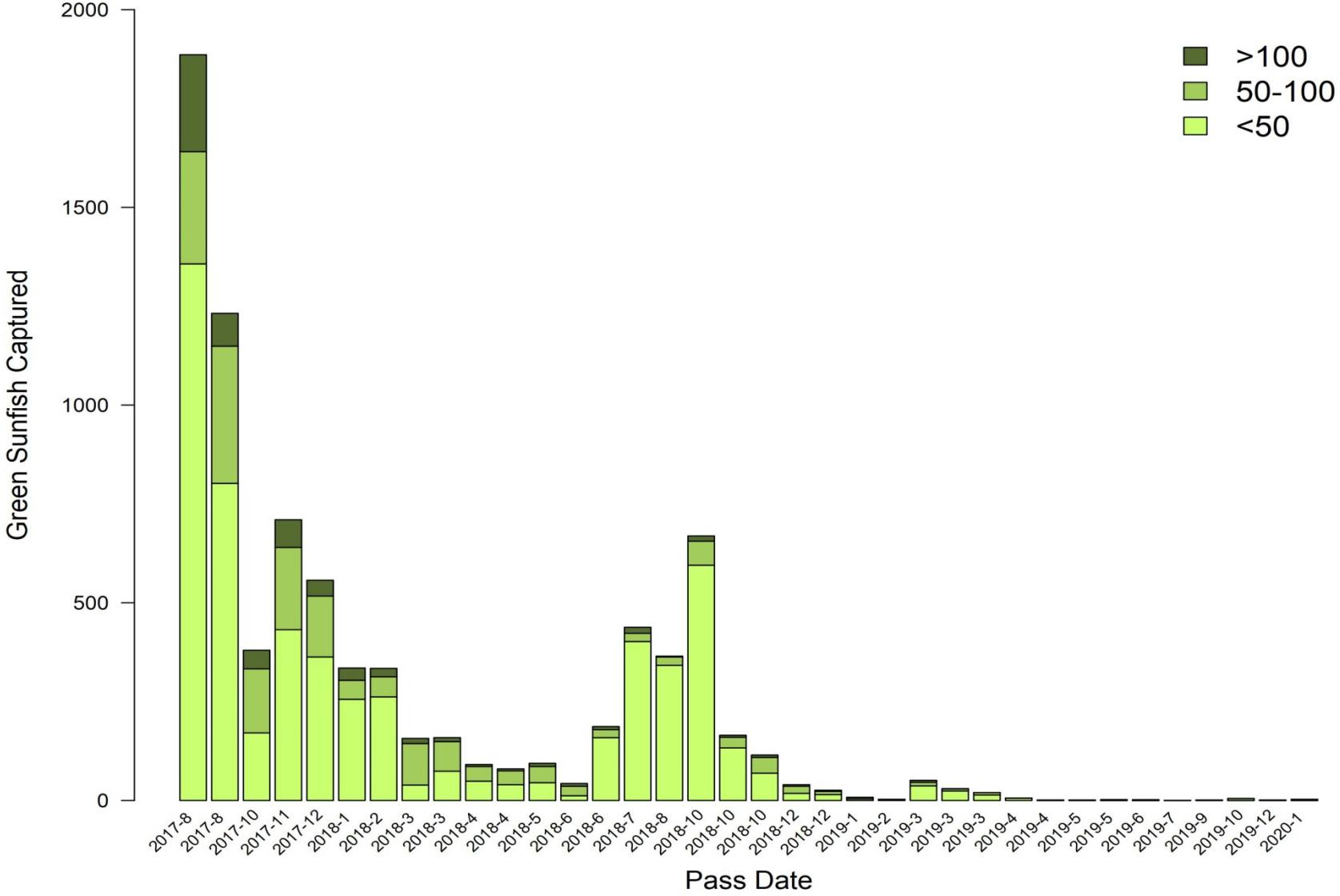
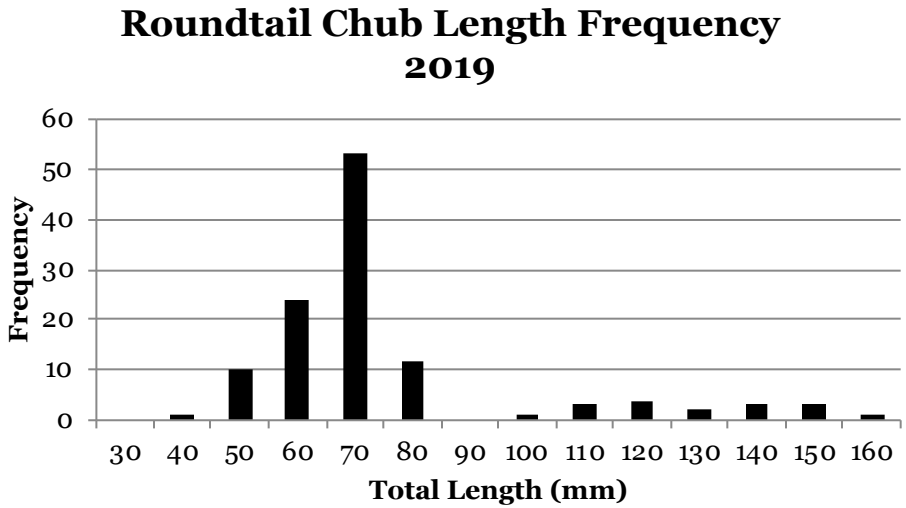
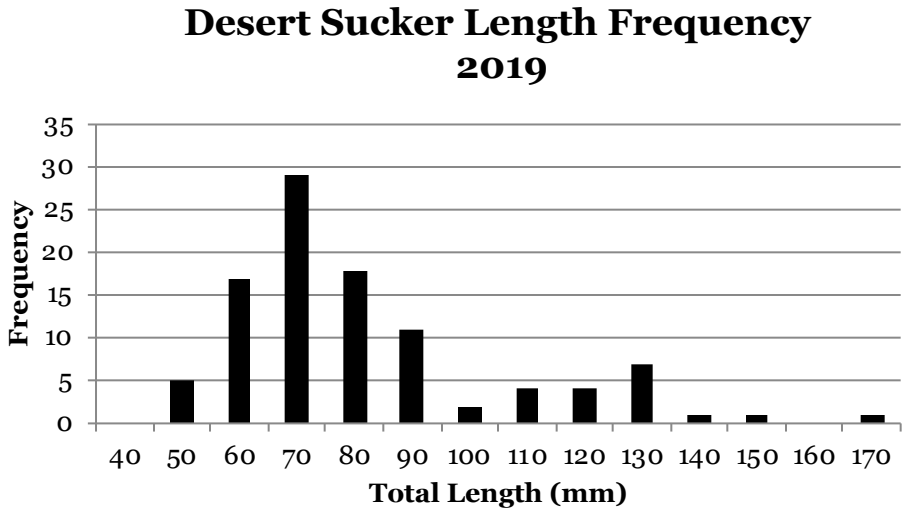

Catch Per Unit Effort (Fish per hour)
600
500
400
300
200
100
0
0
5
10
15
20
25
30
35
Cumulative Passes
P = <0.001
R² = 0.761
2017
2018
2019
2020

Data – Total Removals



Data – Native Fish Length Frequency





Data – Translocation of native fish (August 2018)

- Roundtail Chub
  (*Gila robusta*)

- Sonora Sucker
  (*Catostomus insignis*)

Discussion

- Intensive removal effort works
- Positive response from natives
- Need to collect more data
- Chance of reinvasion

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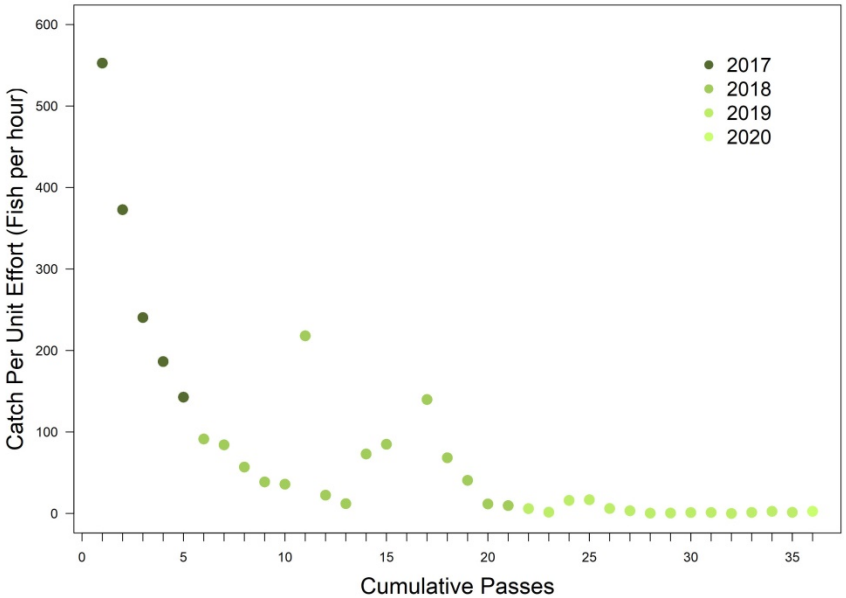

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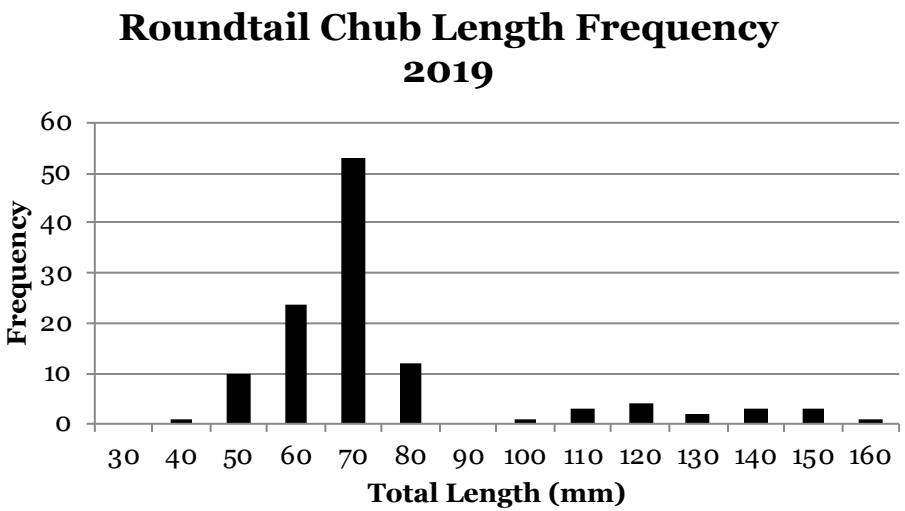

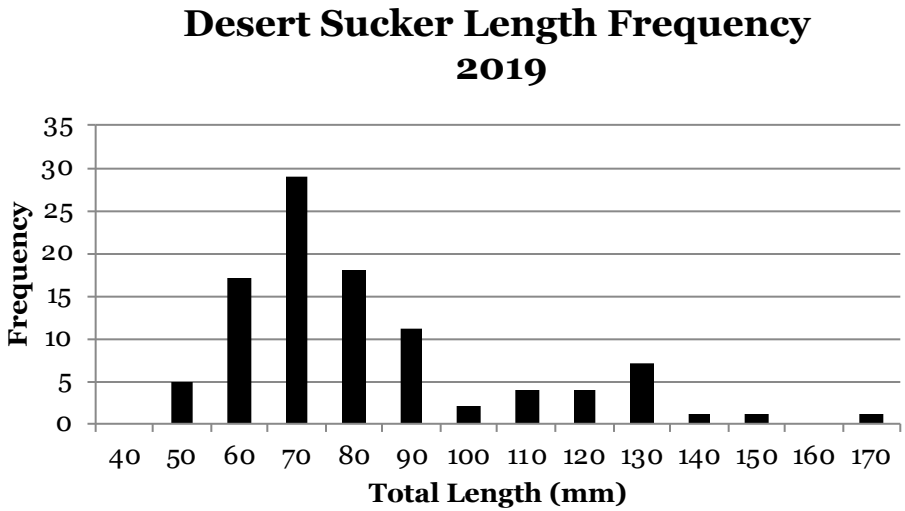

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Acknowledgments

- AZGFD
- USFWS – Parker office

Questions