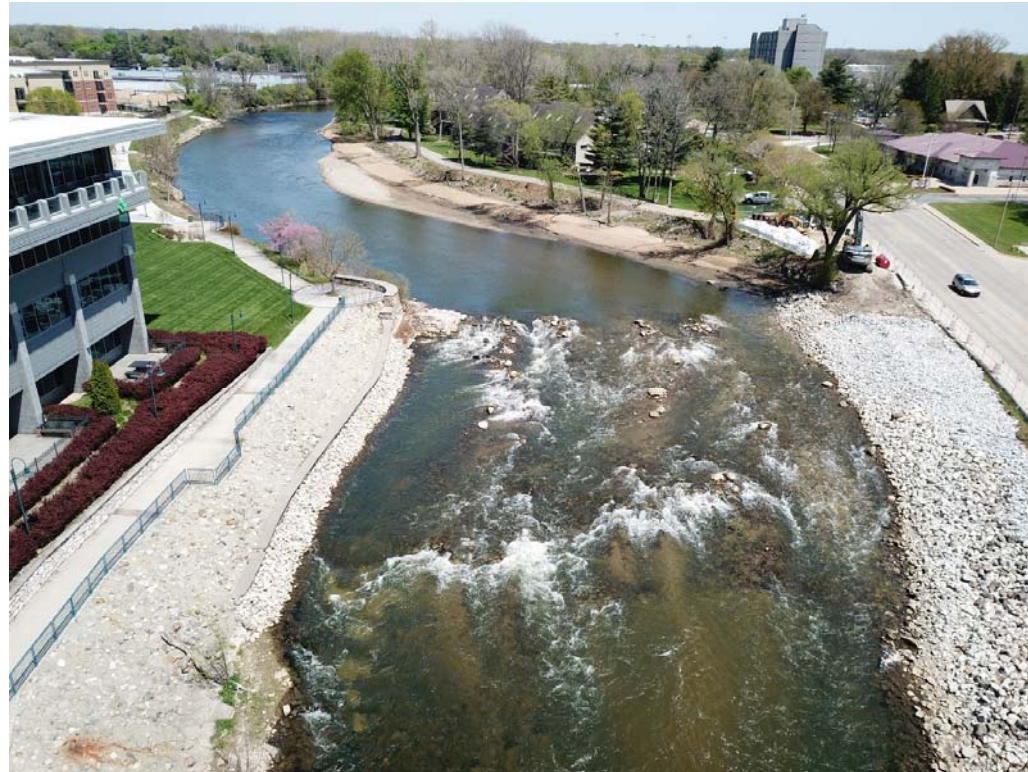


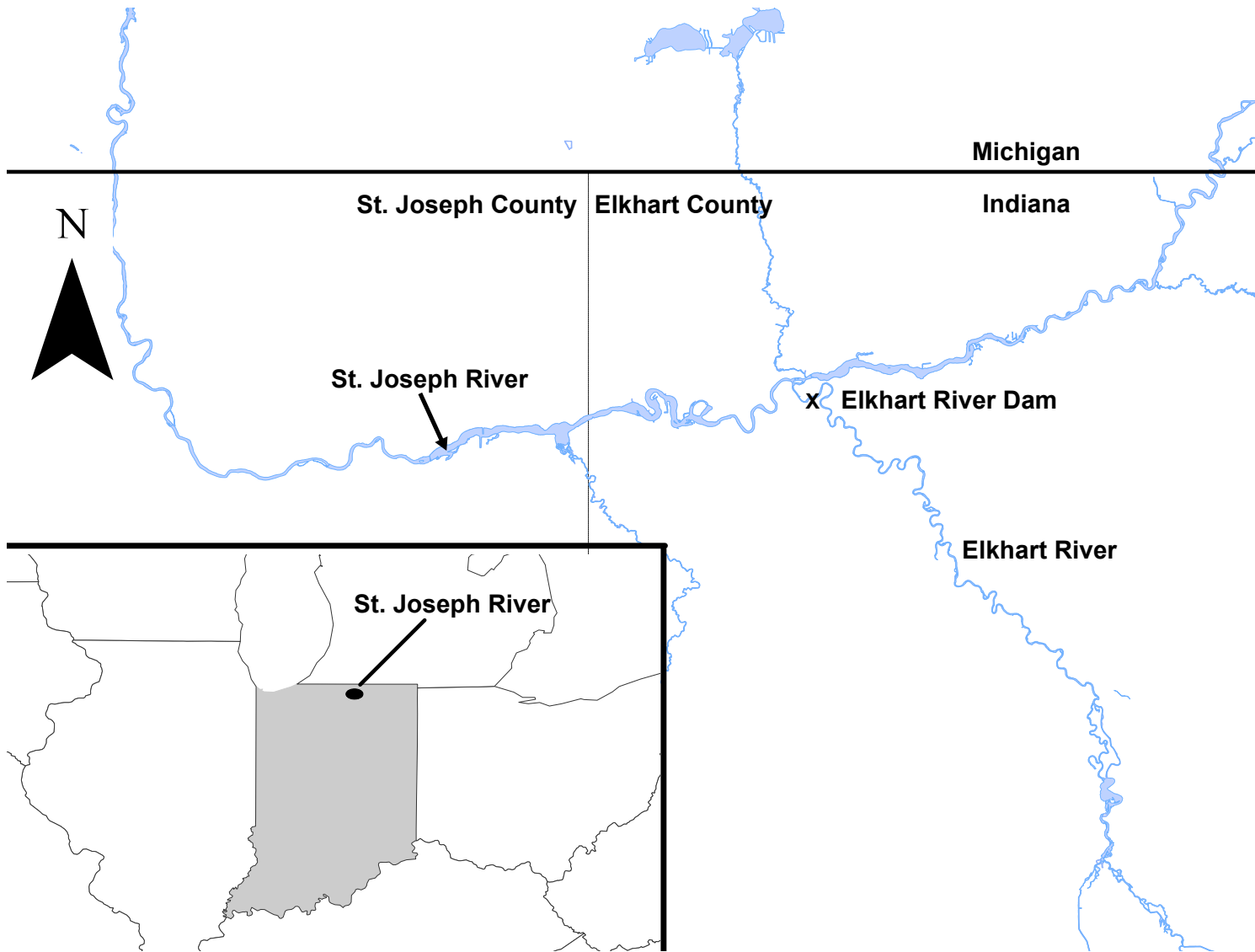
Elkhart River Dam Removal



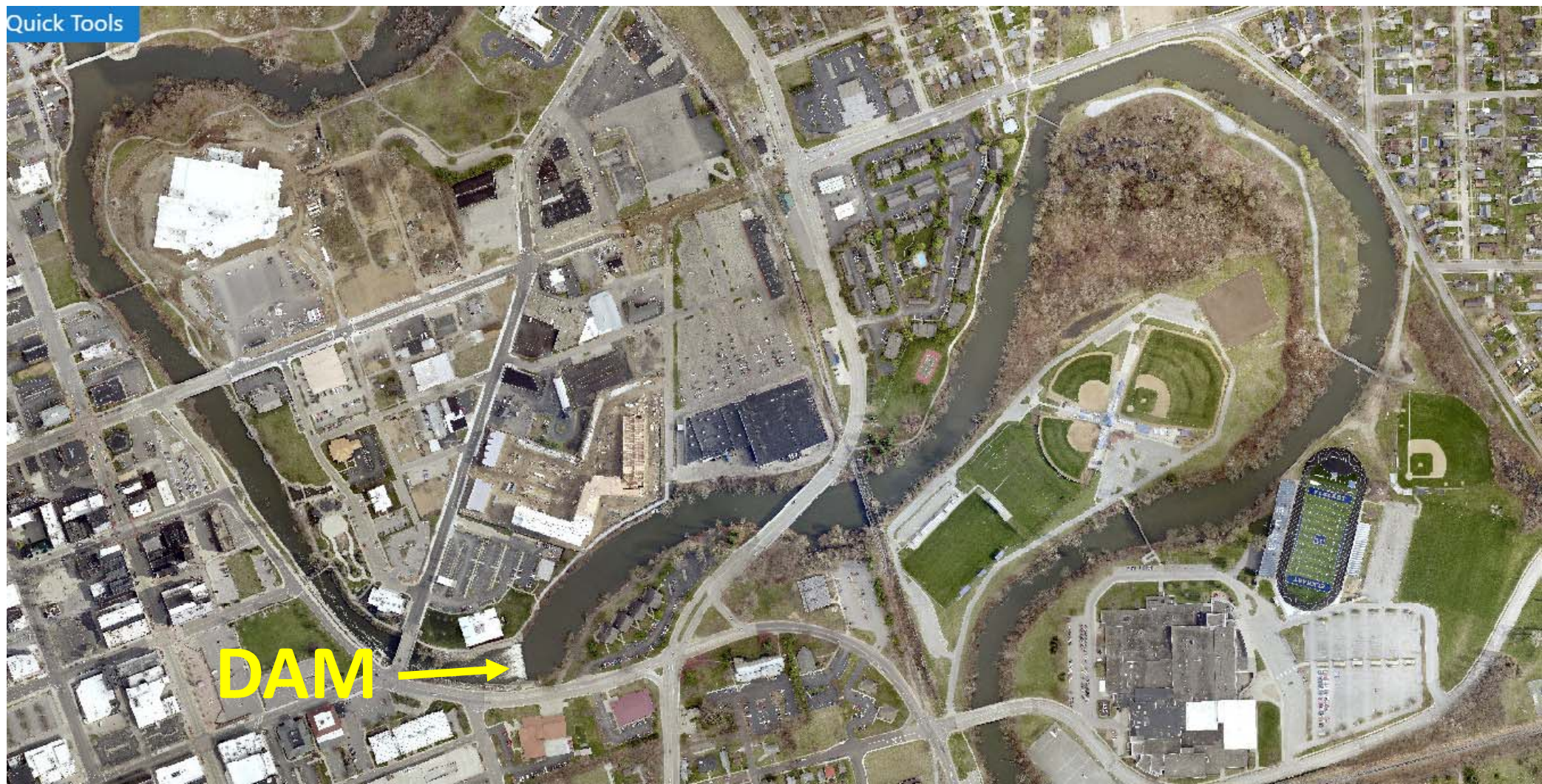
Daragh Deegan
Aquatic Biologist



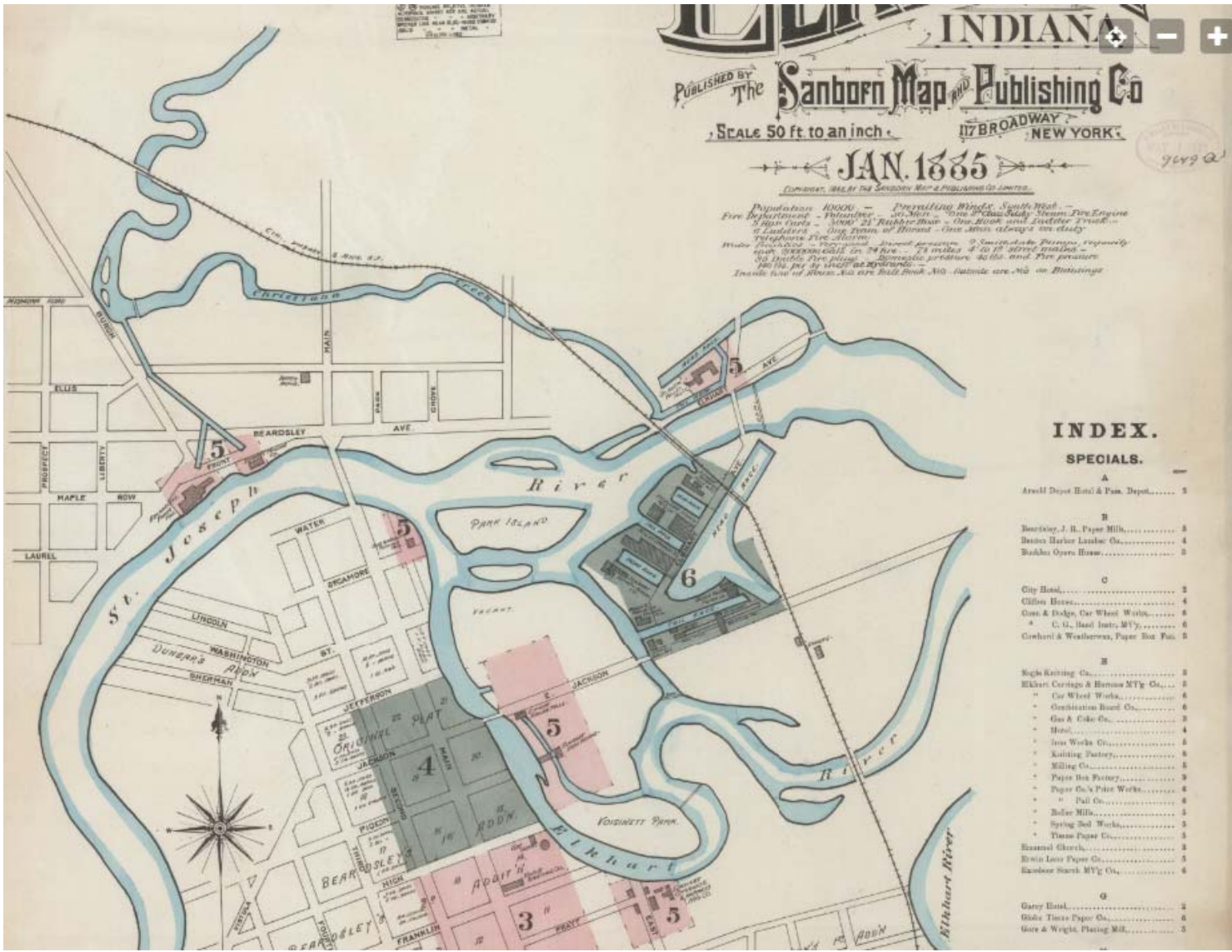




Quick Tools



DAM →



NO. 25 HUNTER STREET, NEW YORK
 PUBLISHED BY THE SANBORN MAP & PUBLISHING CO.
 117 BROADWAY, NEW YORK

INDIAN CREEK

PUBLISHED BY THE **Sanborn Map & Publishing Co.**
 SCALE 50 ft. to an inch. 117 BROADWAY, NEW YORK.

JAN. 1885

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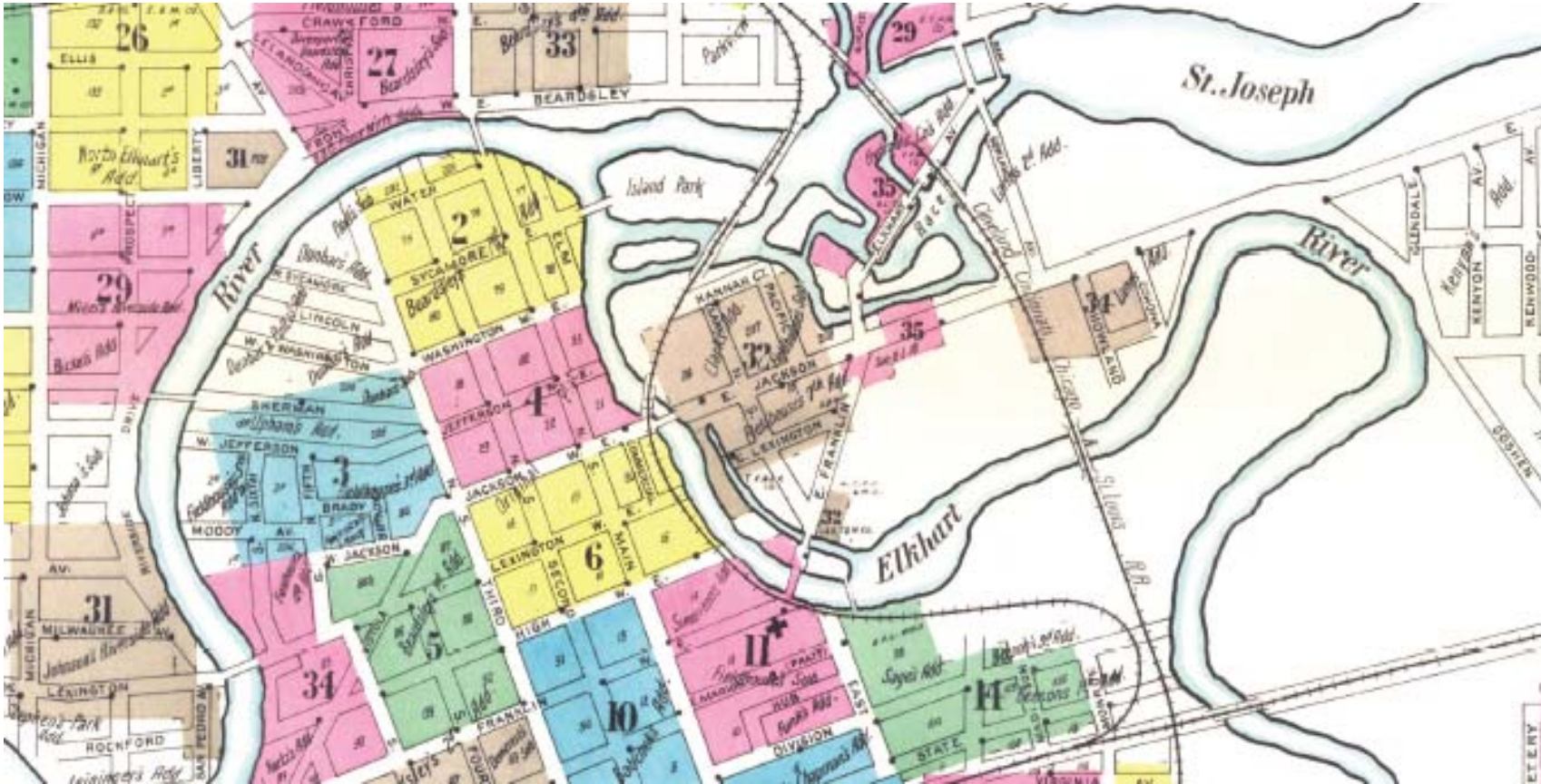
Population 40000. — Drayalling Works, Spooling Works —
 Fire Department — Firehouses — Firemen — One of Class, Daily Steam Fire Engine
 Signal Cars — 3000 2 1/2 Rubber Men — One Book and Letter Truck —
 6 Ladders — One System of Hoists — One alarm clock on duty
 Telephone Fire Alarm
 Water Pressure — Fire hydrants — 100 feet — 50 feet — 40 feet — 30 feet — 20 feet — 15 feet — 10 feet — 5 feet —
 100 feet Fire Alarm — 100 feet pressure 40 lbs. and Fire pressure
 100 lbs. per sq. inch at hydrants
 Inside line of River is on East Bank, No. Outside are No. on West Bank

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SPECIALS.

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Boston Opera House.....	5
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City Hall.....	2
Cliffon House.....	5
Cook & Dodge, Car Wheel Works.....	5
C. U. Land Inst., M.Y.....	5
Cornhill & Weatherman, Paper Box Fac. 5	5
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Daily Printing Co.....	5
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" Paper Co's Paper Works.....	5
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Essex Lumber Paper Co.....	5
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Gary Hotel.....	5
Globe Tissue Paper Co.....	5
Gore & Wright, Planing M.L.....	5

1910



Funding

- U.S. Army Corps – GLFER
 - 65% Federal / 35% Local Cost Share
- Total Project Cost - \$2.5 million
 - Elkhart City Cost ~ \$700k
 - Indiana DNR LARE - \$50k



**US Army Corps
of Engineers** ®

Timeline

- 2007 - Initial Conversation
- 2009 - Feasibility Studies
- 2020 - Dam Removal





A Larger Vision For Elkhart



- Elkhart River District
 - Public-private redevelopment partnership



Removal - February 2020







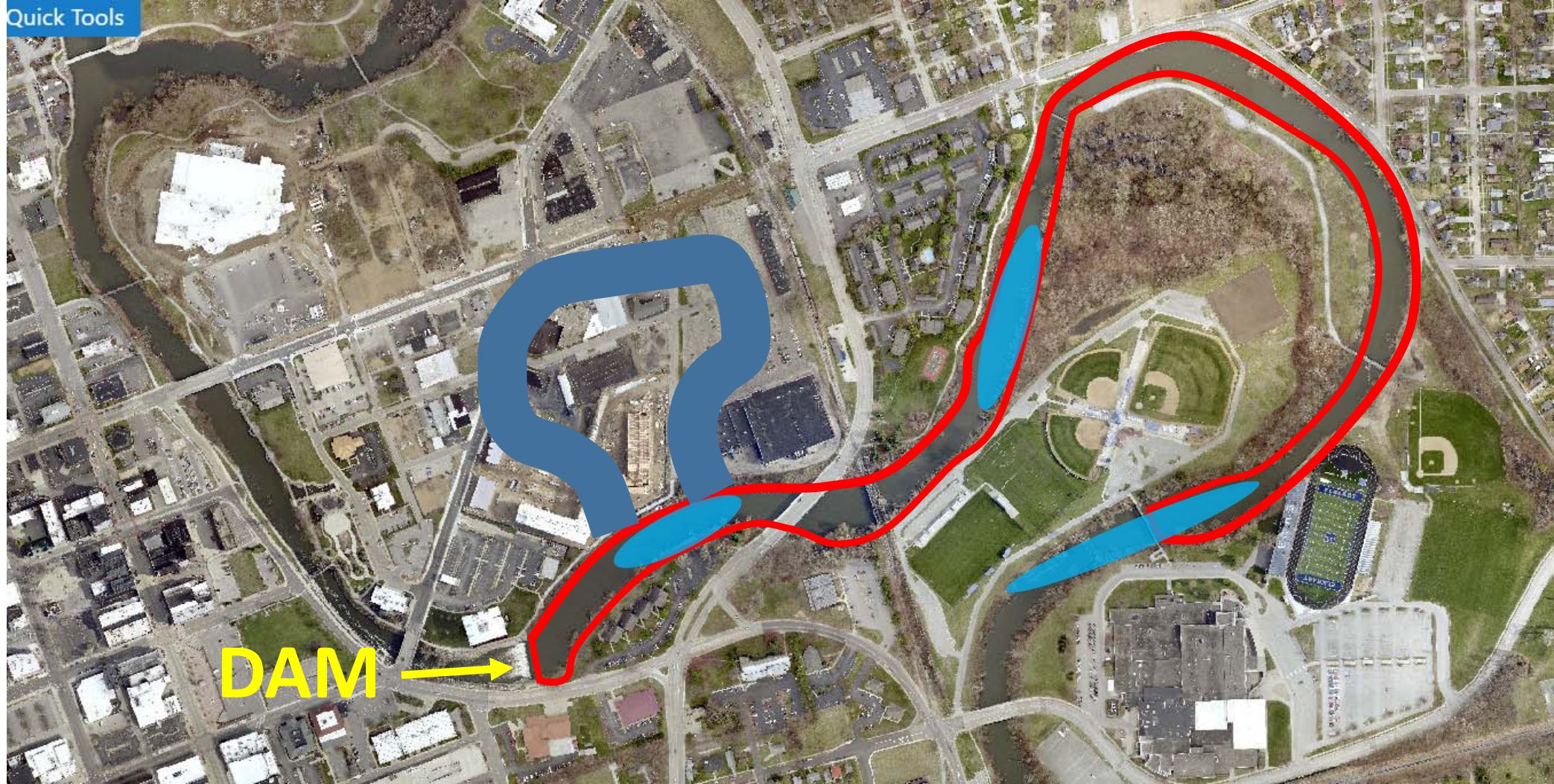






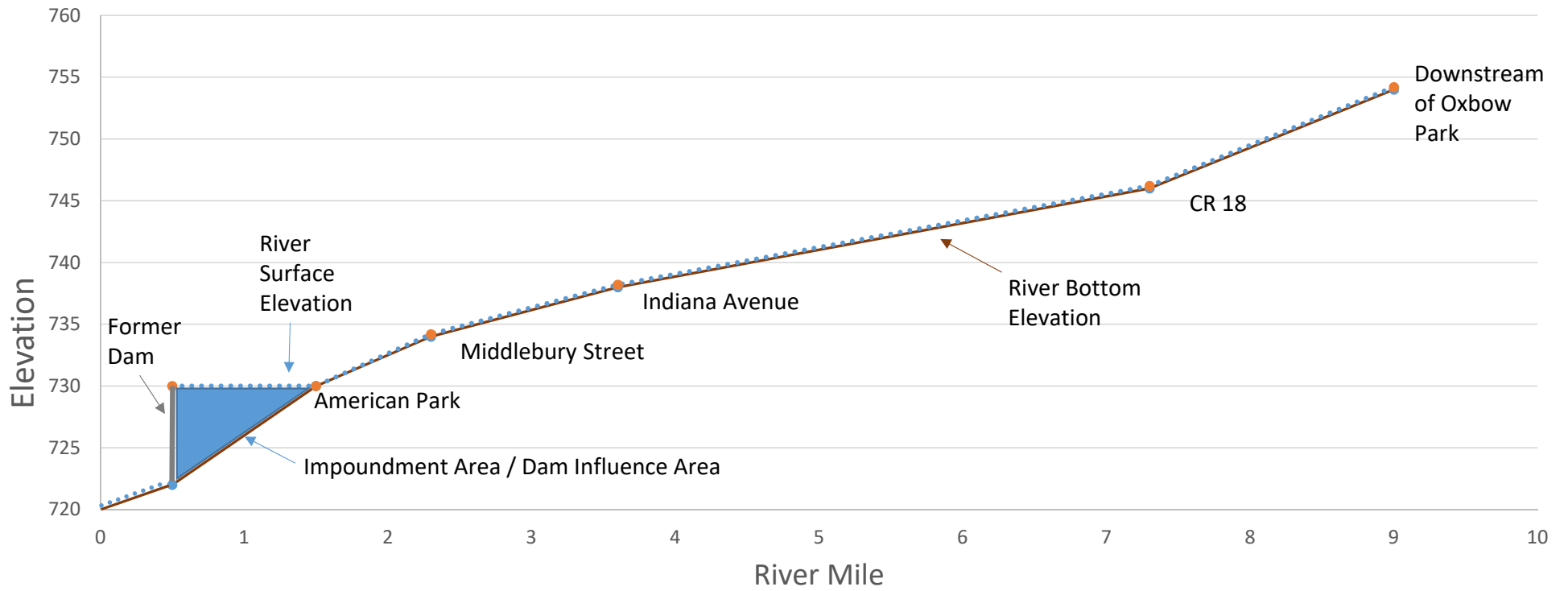


Quick Tools



DAM





Fish Studies

- Fish Community Surveys
 - Boat Electrofishing
 - Pre-Removal Surveys
 - 2009, 2018, 2019
 - Post Removal
 - Summer of 2020





Species Absent Upstream

- Channel Catfish
- Greenside Darter
- Logperch
- Longnose Gar
- Spotted Gar
- Shorthead Redhorse
- Silver Redhorse
- Black Redhorse
- Quillback Carpsucker



Sparse Records Upstream

- Muskellunge
- River Redhorse
- Brown Bullhead
- Black Bullhead
- Brook Silverside
- Bowfin
- Mimic Shiner



Other Species of Interest

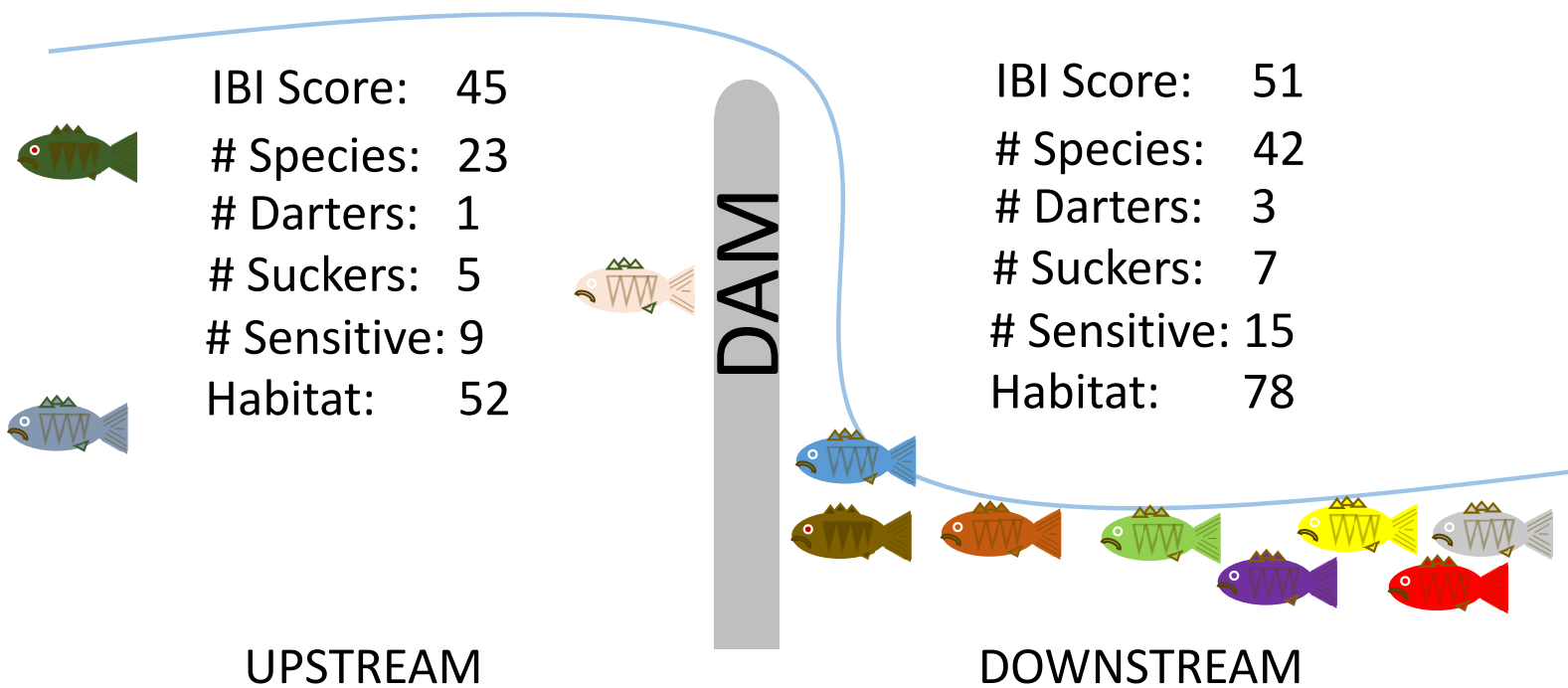
- Endangered/Threatened
 - Greater Redhorse – state endangered
 - Northern Brook Lamprey – special concern
 - Longnose Dace – special concern
- Important Game Species
 - Smallmouth Bass
 - Walleye
 - Northern Pike



Results: Initial Movement

Species	Prairie St.	American Park	Studebaker Park	CR 18	Oxbow Park	Shanklin Park
Distance Upstream (miles)	0.3	0.7	2.9	6.8	10.3	17.5
Channel Catfish	X			X		
Greenside Darter	X					
Logperch	X	X	X	X		X
Longnose Gar	X				X	
River Redhorse	X	X	X	X		
Shorthead Redhorse	X	X	X	X		X
Silver Redhorse	X	X	X	X		
Mimic Shiner	X	X	X	X		X

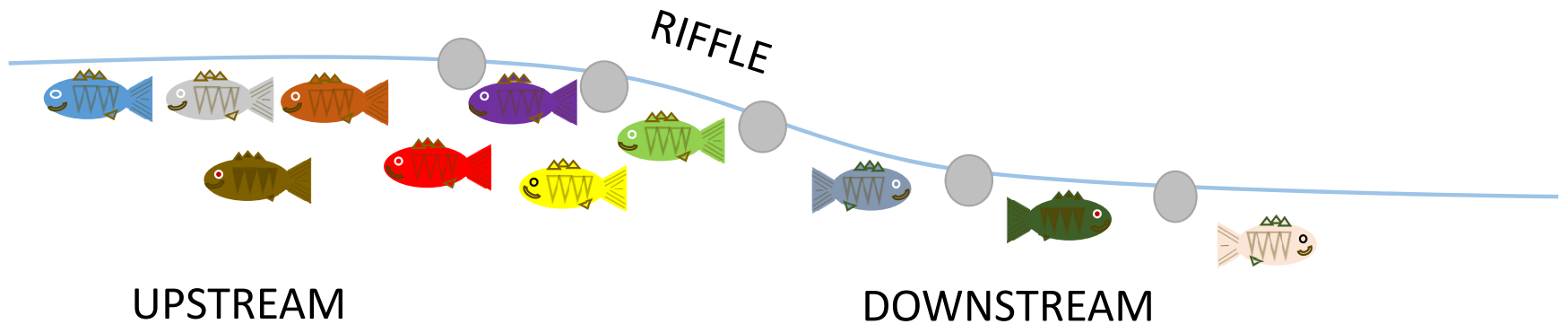
2018



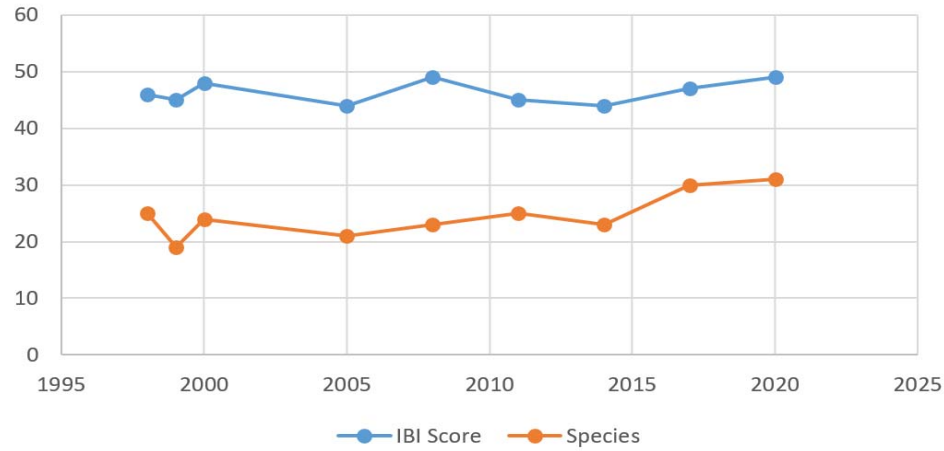
IBI Score: 54
Species: 43
Darters: 5
Suckers: 7
Sensitive: 17
Habitat: 79

2020

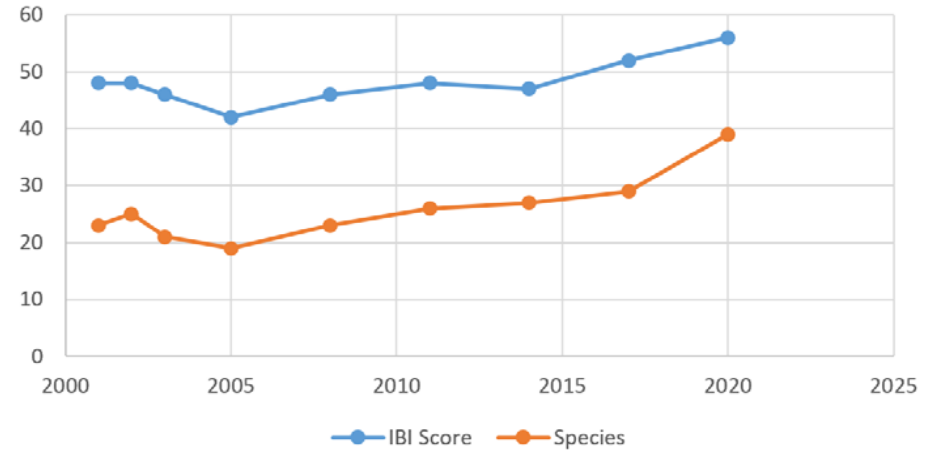
IBI Score: 51
Species: 42
Darters: 4
Suckers: 6
Sensitive: 14
Habitat: 81



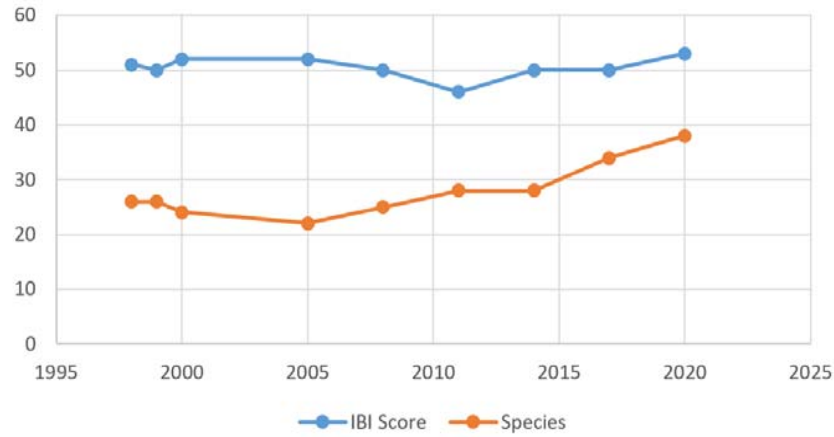
American park



Studebaker Park



CR 18



Other Notes

- Tagged SMB
- Longnose Dace using new riffle

Conclusions

- Results are promising
- River still has work to do
- Follow up surveys 2021 and 2022





City of Elkhart
Public Works and Utilities

Acknowledgements

- U.S. Army Corp of Engineers
- Indiana DNR LARE Program
- Public Works & Utilities – Mike, Lynn, Laura
- Len Kring (U.S. Forest Service)
- Matt Meersman - SJRBC
- Friends of the St. Joseph River
- Elkhart River Restoration Association
- Numerous other local partners



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