



Assessing Conditions at a Watershed Scale: Exploring the White River Report Card

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Hendricks IN	Indiana	Census Tr	2483	380	2395	1.34	0.25	0.83	0.48	5.8	0.0923
Madison IN	Indiana	Census Tr	5140	323	3024	2.7	0.55	0.94	0.37	6.44	0.6551
Madison IN	Indiana	Census Tr	12597	202	3066	2.76	0.99	0.94	0.47	5.32	0.4
Madison IN	Indiana	Census Tr	3239	569	6944	0.91	1	1.96	0.99	5.45	0.4312
Madison IN	Indiana	Census Tr	2347	311	3285	0.38	0.3	0.71	1	8.87	0.9641
Madison IN	Indiana	Census Tr	2504	261	877	0.74	0.06	0.38	0.28	8.63	0.9441
Madison IN	Indiana	Census Tr	2035	377	1416	2.67	0.2	0.74	0.09	4.58	0.2297
Madison IN	Indiana	Census Tr	2163	244	1390	2.66	0.99	1.87	0.31	3.55	0.053
Madison IN	Indiana	Census Tr	2416	385	1355	2.7	0.99	1.86	0.98	4.03	0.12
Madison IN	Indiana	Census Tr	2710	329	2477	2.61	0.99	1.9	0.99	9.48	0.98
Madison IN	Indiana	Census Tr	3099	301	4546	2.68	0.98	1.81	0.97	7.61	0.84
Madison IN	Indiana	Census Tr	4986	274	2006	1.99	0.99	1.88	0.99	8.04	0.90
Madison IN	Indiana	Census Tr	3629	376	3411	2.21	0.82	1.59	0.99	8.04	0.90
Madison IN	Indiana	Census Tr	6289	264	2600	2.35	0.88	1.21	0.88	8.65	0.945
Madison IN	Indiana	Census Tr	3706	356	8589	2.59	0.92	1.55	0.67	8.85	0.958
Madison IN	Indiana	Census Tr	5842	223	1393	2.59	0.97	1.79	0.86	6.18	0.5953
Madison IN	Indiana	Census Tr	15587	323	1984	0.98	0.38	1.05	0.96	8.5	0.9355
Madison IN	Indiana	Census Tr	4987	522	6725	0.39	0.34	0.56	0.56	8.68	0.9468
Madison IN	Indiana	Census Tr	6982	294	4498	0.27	0.06	0.78	0.34	5.61	0.477
Madison IN	Indiana	Census Tr	6361	433	9607	0.72	0.03	0.39	0.09	4.37	0.1813
Madison IN	Indiana	Census Tr	6130	463	11317	0.86	0.2	0.27	0.05	3.85	0.099
Madison IN	Indiana	Census Tr	19903	29	4699	1.12	0.27	0.72	0.29	3.61	0.0624
Madison IN	Indiana	Census Tr	6971	774	11397	0.68	0.42	0.86	0.4	4.22	0.1561
Madison IN	Indiana	Census Tr	8901	151	3794	0.81	0.18	0.92	0.44	5.76	0.5043
Madison IN	Indiana	Census Tr	8756	570	10459	0.54	0.24	0.68	0.27	5.76	0.5043
Madison IN	Indiana	Census Tr	9979	236	2909	1.04	0.11	0.81	0.36	4	0.1215
Madison IN	Indiana	Census Tr	3980	547	7044	0.7	0.37	0.54	0.17	5.42	0.42
Madison IN	Indiana	Census Tr	4286	231	3678	0.63	0.18	0.84	0.38	4.19	0.146
Madison IN	Indiana	Census Tr	2798	307	4196	0.69	0.15	0.7	0.27	5.21	0.146
Madison IN	Indiana	Census Tr	3519	148	1404	2.09	0.18	0.63	0.23	5.2	0.146
Madison IN	Indiana	Census Tr	4863	368	2463	1.37	0.85	0.69	0.27	5.19	0.146
Madison IN	Indiana	Census Tr	5655	533	6079	2.28	0.56	1.29	0.72	5	0.146
Madison IN	Indiana	Census Tr	3657	441	4136	2.51	0.9	0.77	0.33	5	0.146
Madison IN	Indiana	Census Tr	3057	370	5160	2.53	0.96	1.48	0.83	5	0.146
Madison IN	Indiana	Census Tr	2808	131	1428	1.82	0.96	1.51	0.8	5	0.146
Madison IN	Indiana	Census Tr	3153	225	907	1.89	0.76	1.53	0.8	5	0.146
Madison IN	Indiana	Census Tr	2499	218	2244	1.21	0.78	1.09	0.8	5	0.146
Madison IN	Indiana	Census Tr	3613	196	1110	1.88	0.47	1.01	0.8	5	0.146
Madison IN	Indiana	Census Tr	16331	375	4185	2.24	0.78	1.28	0.8	5	0.146
Madison IN	Indiana	Census Tr	13677	735	7646	1.16	0.89	1.2	0.8	5	0.146
Madison IN	Indiana	Census Tr	6301	730	16667	0.68	0.45	1.1	0.8	5	0.146
Madison IN	Indiana	Census Tr	3116	421	6926	0.95	0.18	0.8	0.8	5	0.146
Madison IN	Indiana	Census Tr	2248	208	4486	1.13	0.32	0.8	0.8	5	0.146
Madison IN	Indiana	Census Tr	7524	217	255	1.81	0.43	0.8	0.8	5	0.146

D-





MEASURING SUCCESS

WHITE RIVER
REPORT CARD



INSPIRING ACTION

Measure community
progress

Align partners and
activities

Inspire change

● Existing Report Cards ● Report Cards under-development

Mississippi River
USA



Chesapeake Bay
USA



Long Island Sound
USA



Chilika Lake
India



Upolu
Samoa



Willamette River
Oregon USA



Gulf of Mexico
USA



Orinoco River
Colombia



Kura River Basin
Armenia, Georgia
Azerbaijan



Great Barrier Reef
Australia





1 WHAT IS THE
BIG PICTURE?



IDENTIFYING BASIN
VALUES AND THREATS

2 WHAT DO
WE MEASURE?



CHOOSING
INDICATORS

3 WHAT IS
HEALTHY?



DEFINING THRESHOLDS
FOR INDICATORS

4 HOW DOES
IT ADD UP?



CALCULATING SCORES AND
DETERMINING GRADES

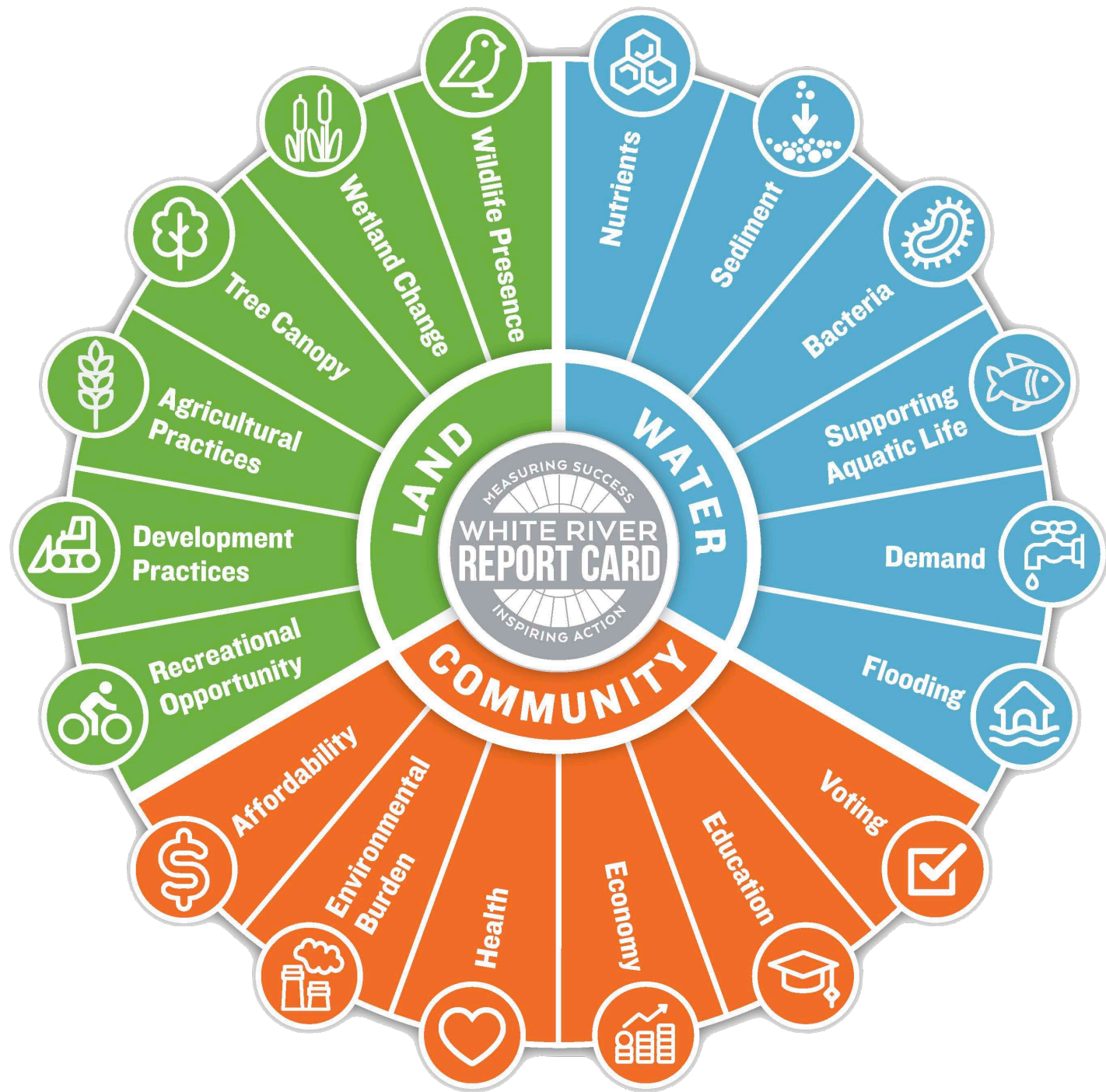
5 WHAT IS
THE STORY?

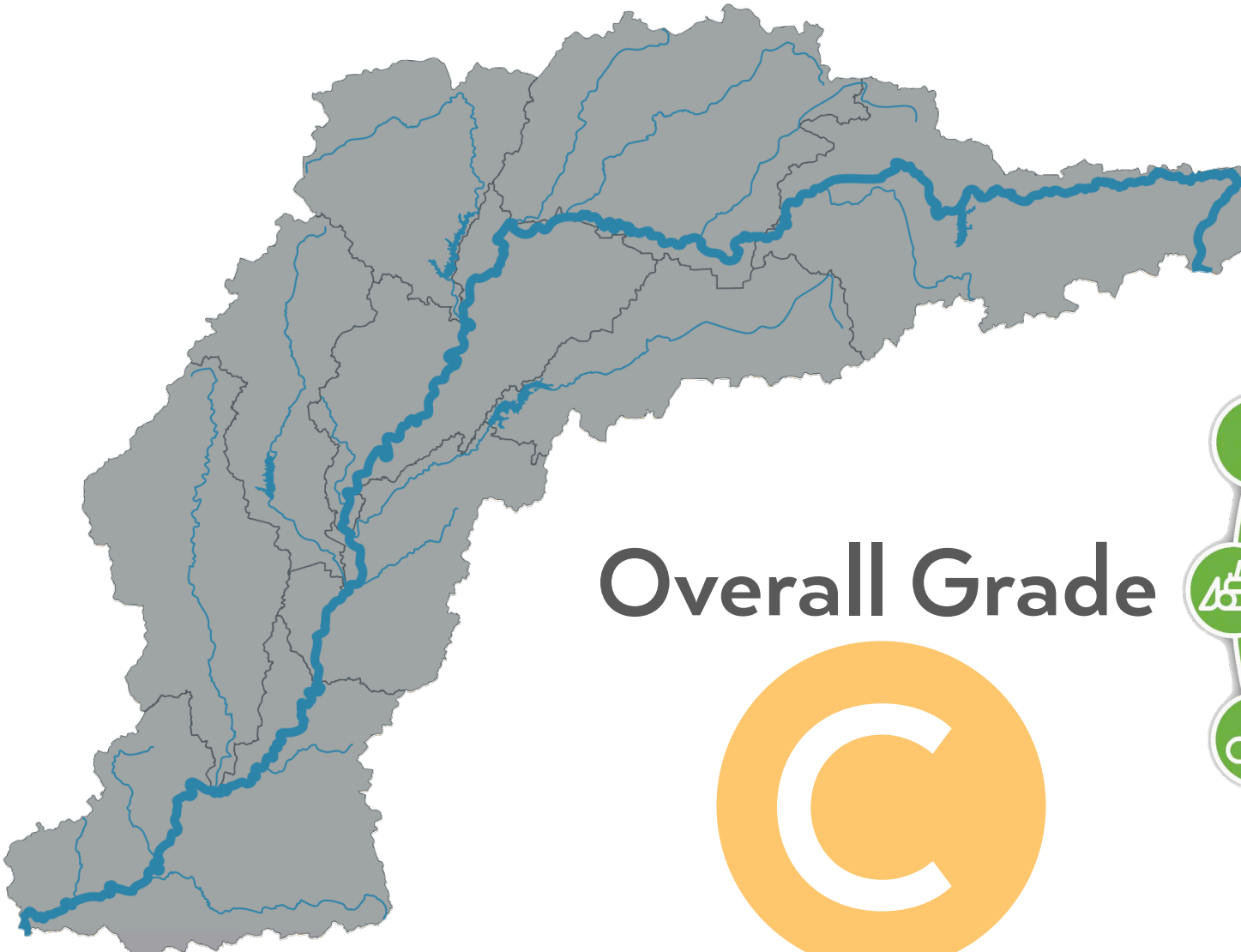


COMMUNICATING
RESULTS

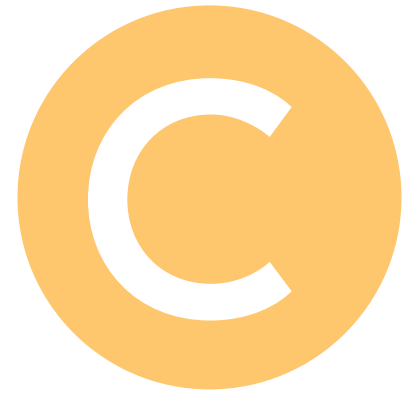
STAKEHOLDER CO-CREATED

Agricultural | Business | Community
Conservation | Industry | Political | Utility





Overall Grade



VERY GOOD

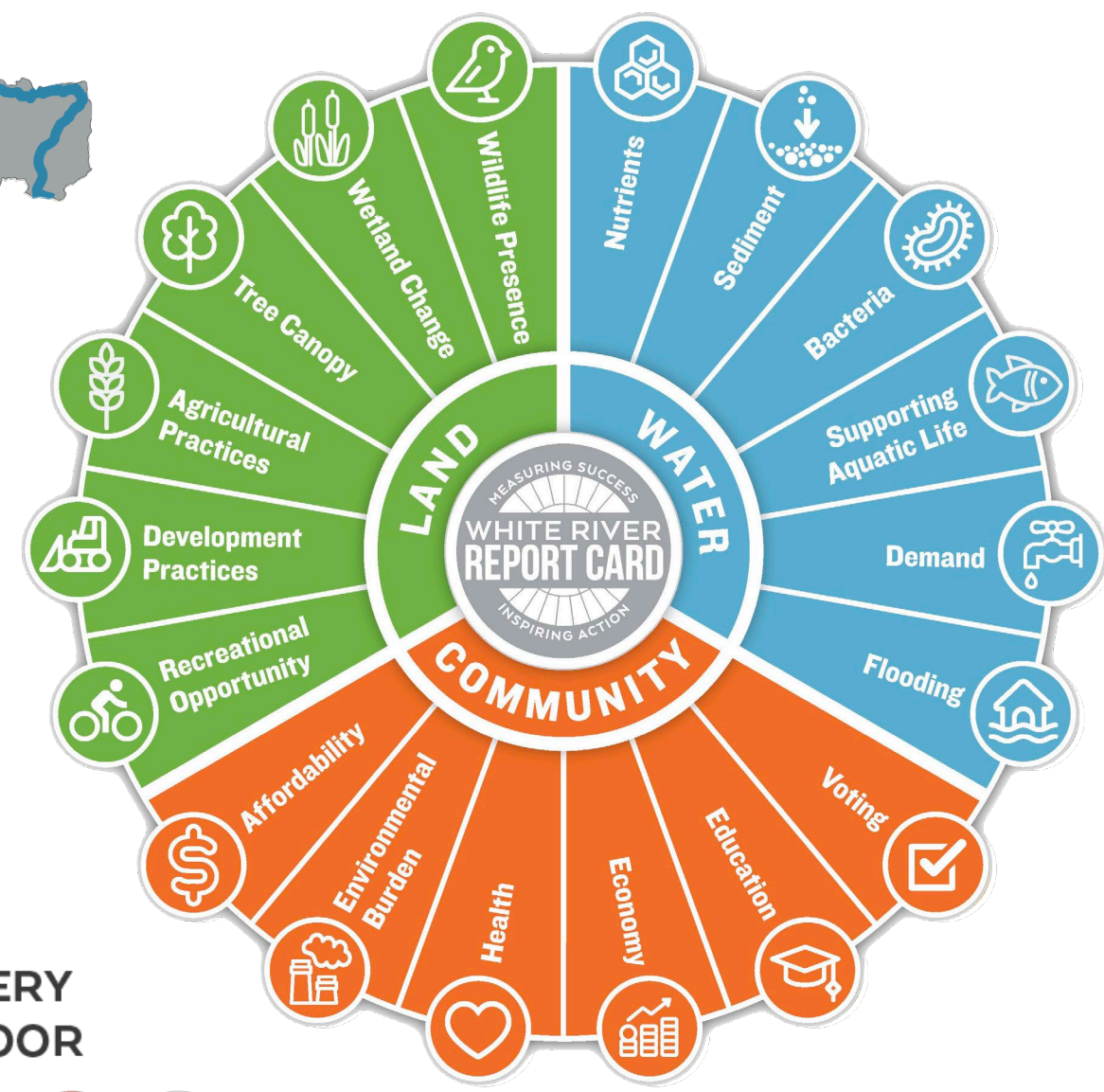
GOOD

MODERATE

POOR

VERY POOR

- A+
- A
- A-
- B+
- B
- B-
- C+
- C
- C-
- D+
- D
- D-
- F
- U



Only as good as the data

Revealed data gaps
- *Flooding & Demand*

Raise awareness of
data needs



Highest Scoring Indicators



Education: B



Aquatic Life: B-



Wildlife Diversity: B-

Lowest Scoring Indicators



Bacteria: D



Environmental Burden: D



Wetland Change: F



Bacteria

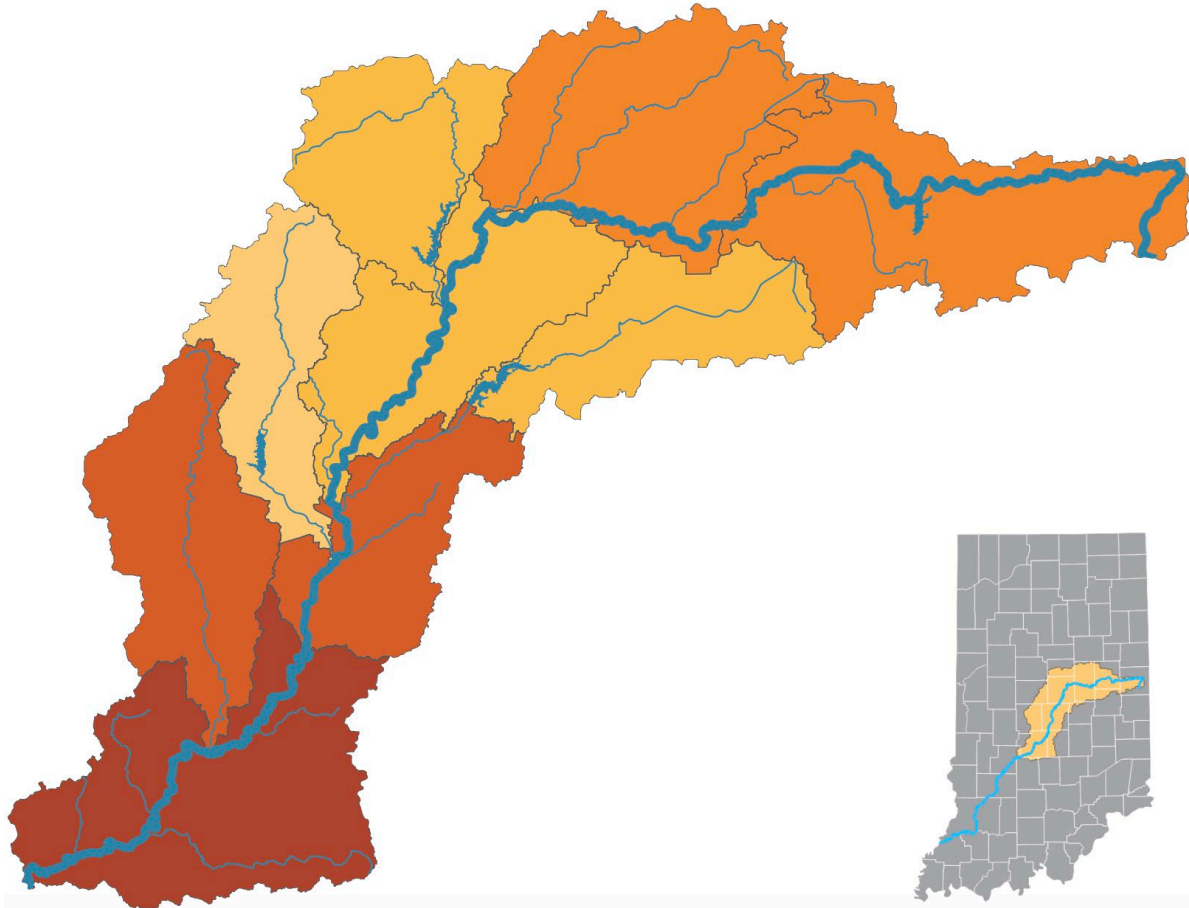
VERY GOOD

GOOD

MODERATE

POOR

VERY POOR



What does the score mean?

Find hot spots/ sources

- Analyze by tributaries
- Add new sampling location





Bacte

VERY GOOD

GOOD

MO

A+

A

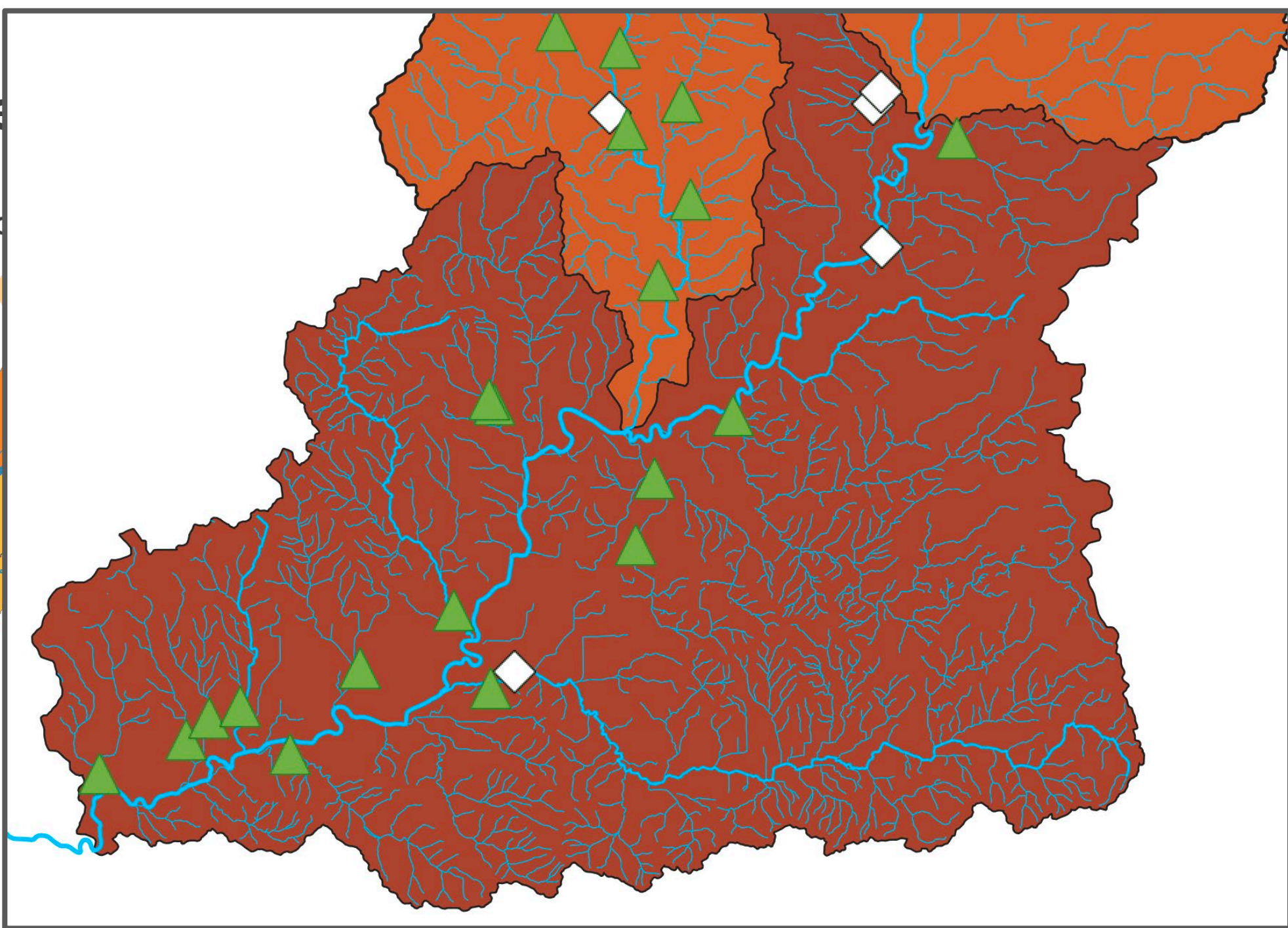
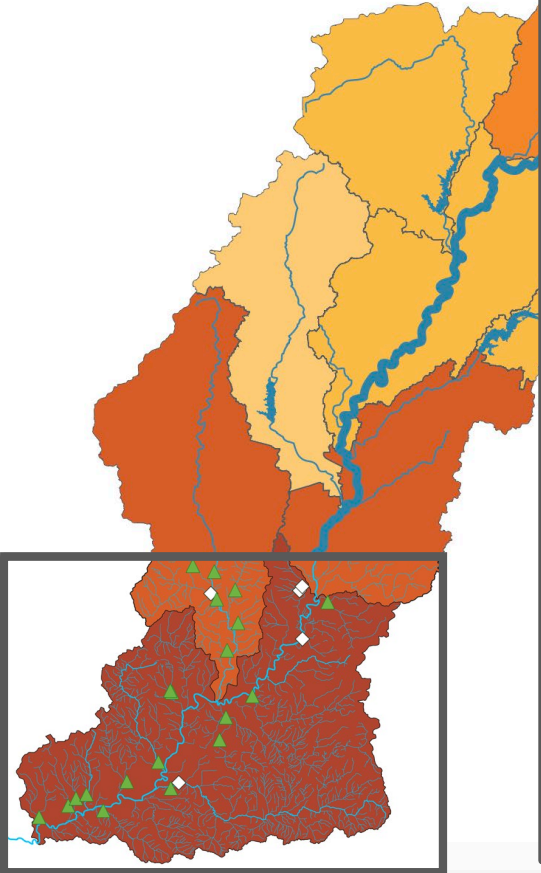
A-

B+

B

B-

C





Environmental Burden

VERY GOOD

GOOD

MODERATE

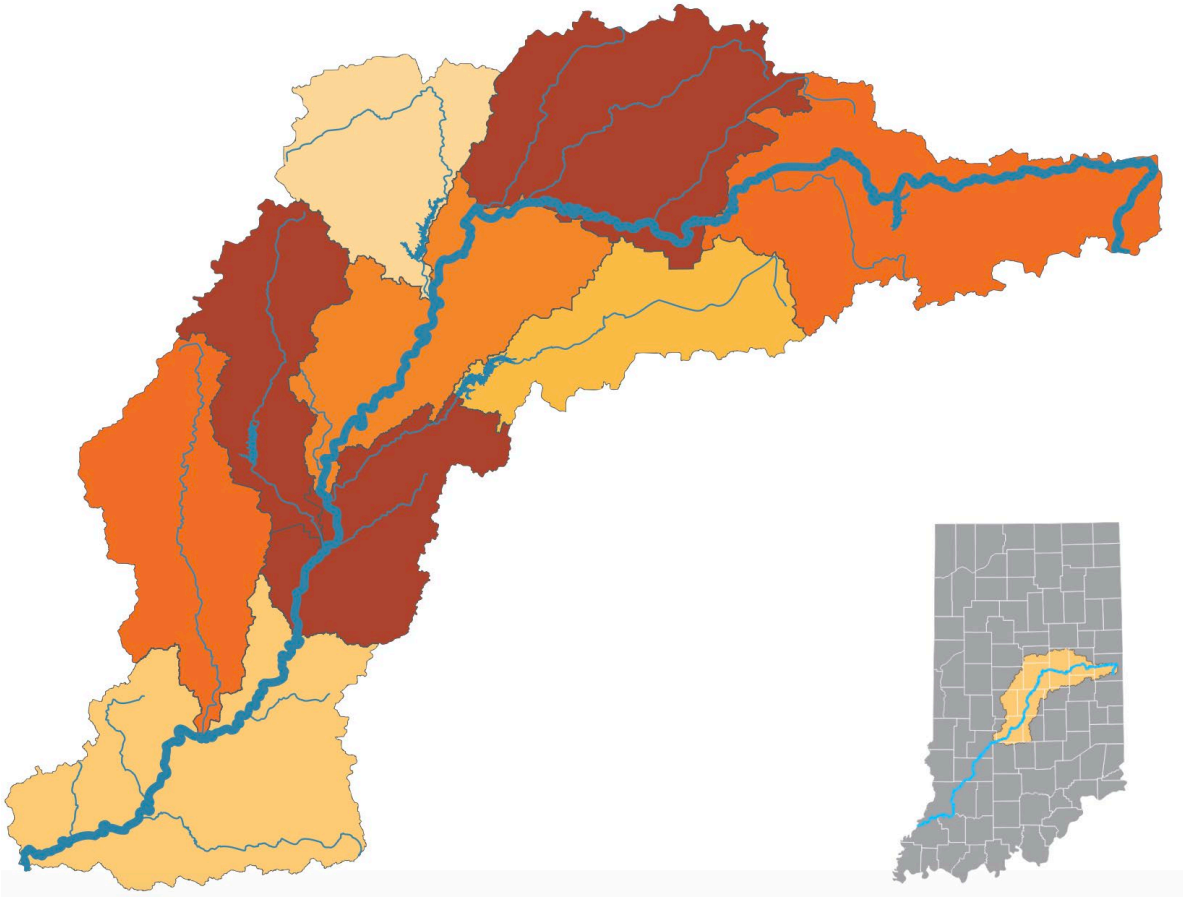
POOR

VERY POOR



Absolute vs Relative

Watershed Regionalism vs Political Regionalism





Impaired Waters

Environmental Burden

VERY GOOD

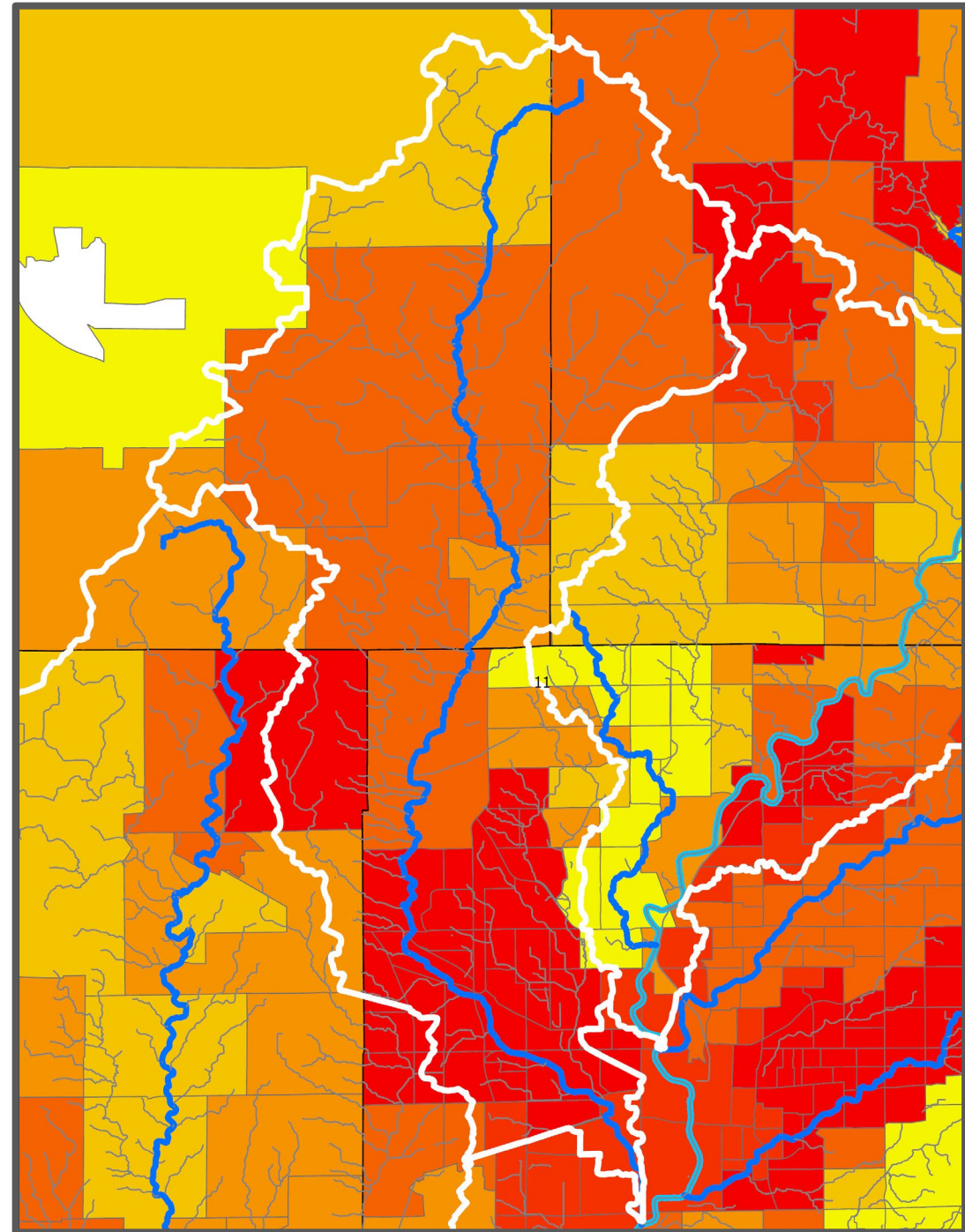
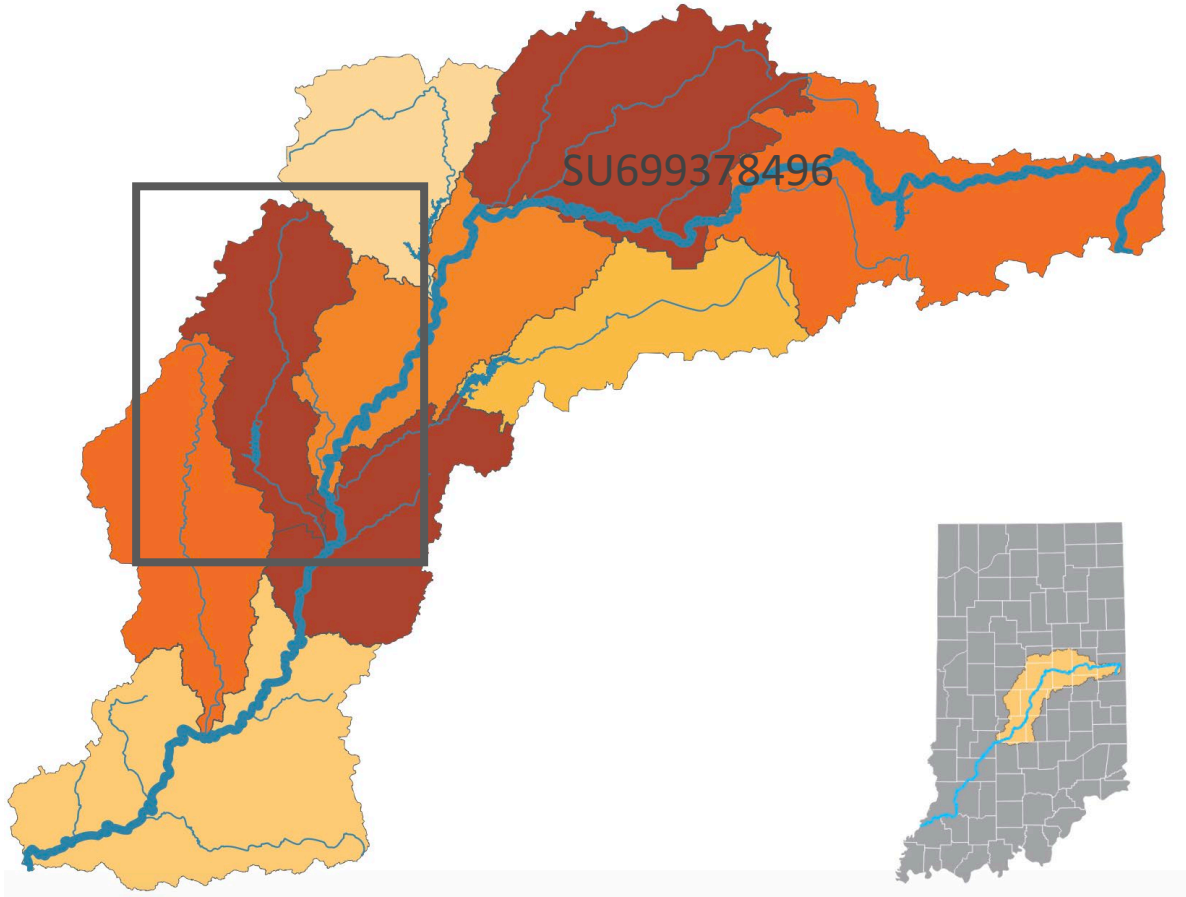
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- C-
- D+
- D
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- F
- U





Environmental Burden

Ozone

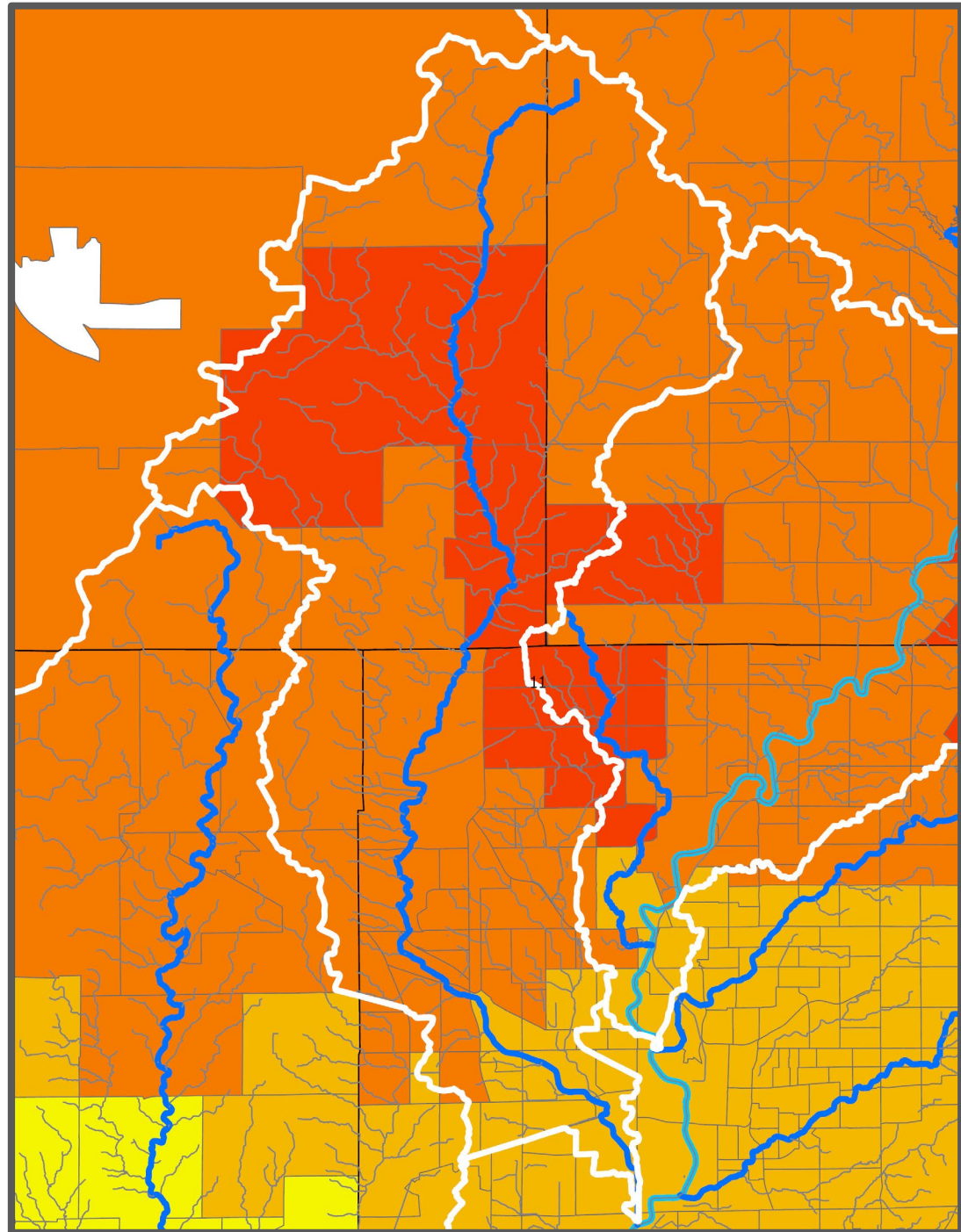
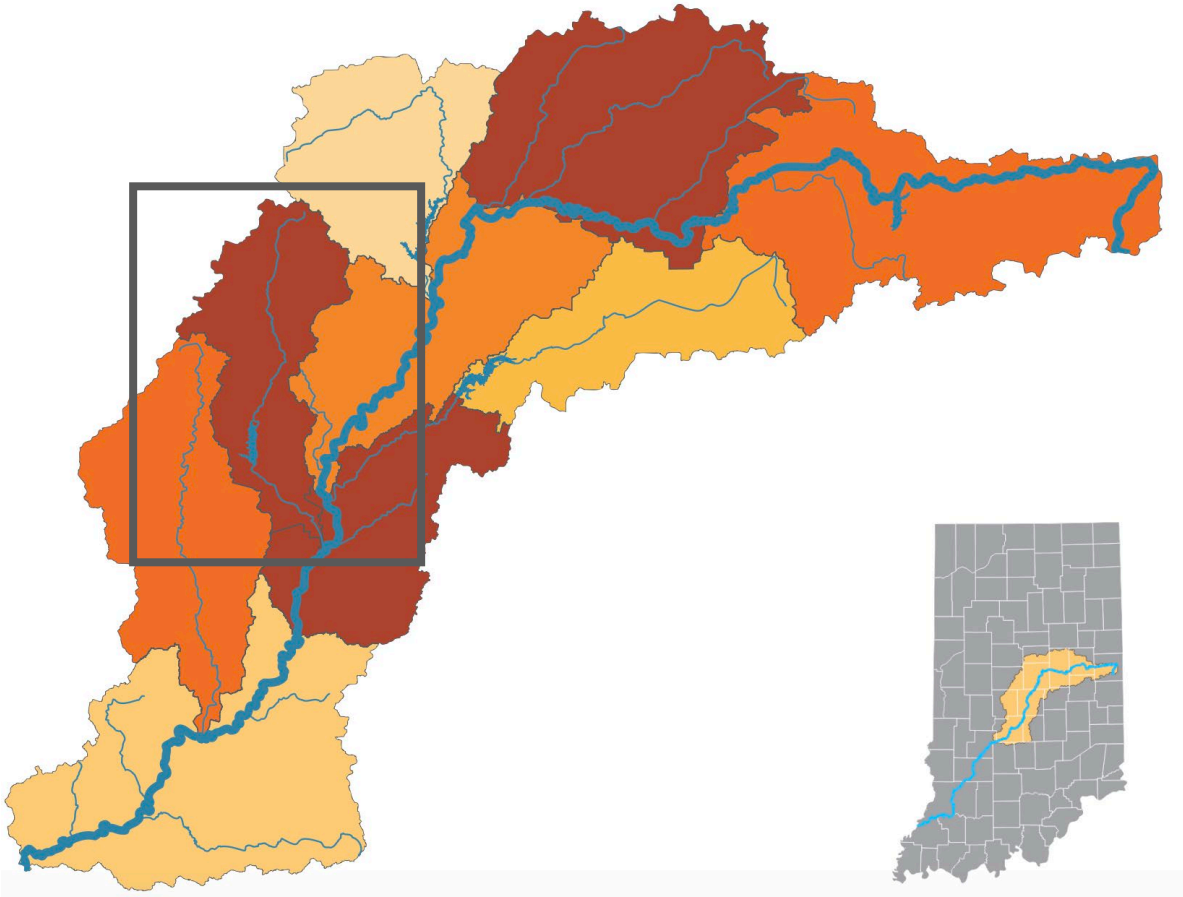
VERY GOOD

GOOD

MODERATE

POOR

VERY POOR





Particulate Matter

Environmental Burden

VERY GOOD

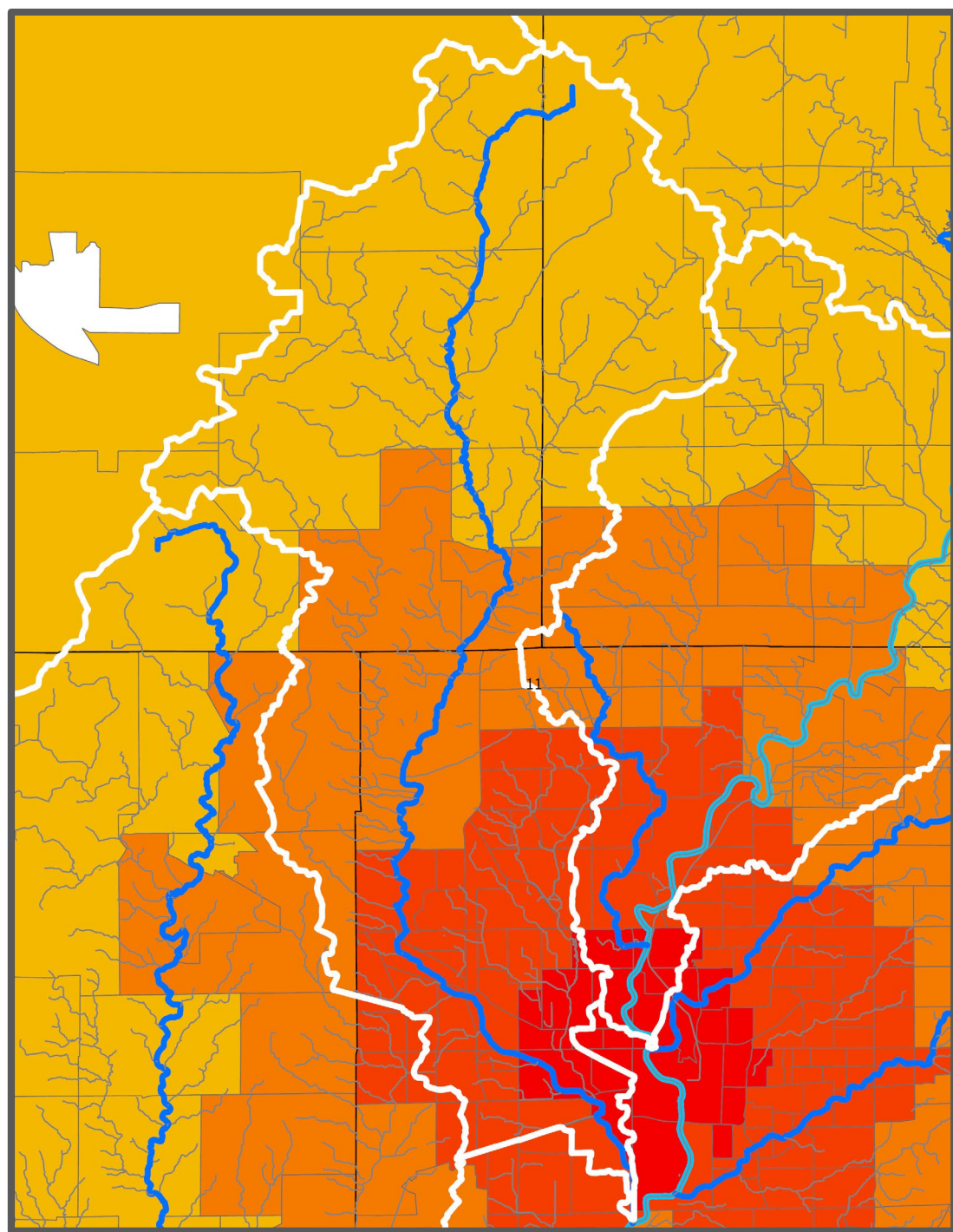
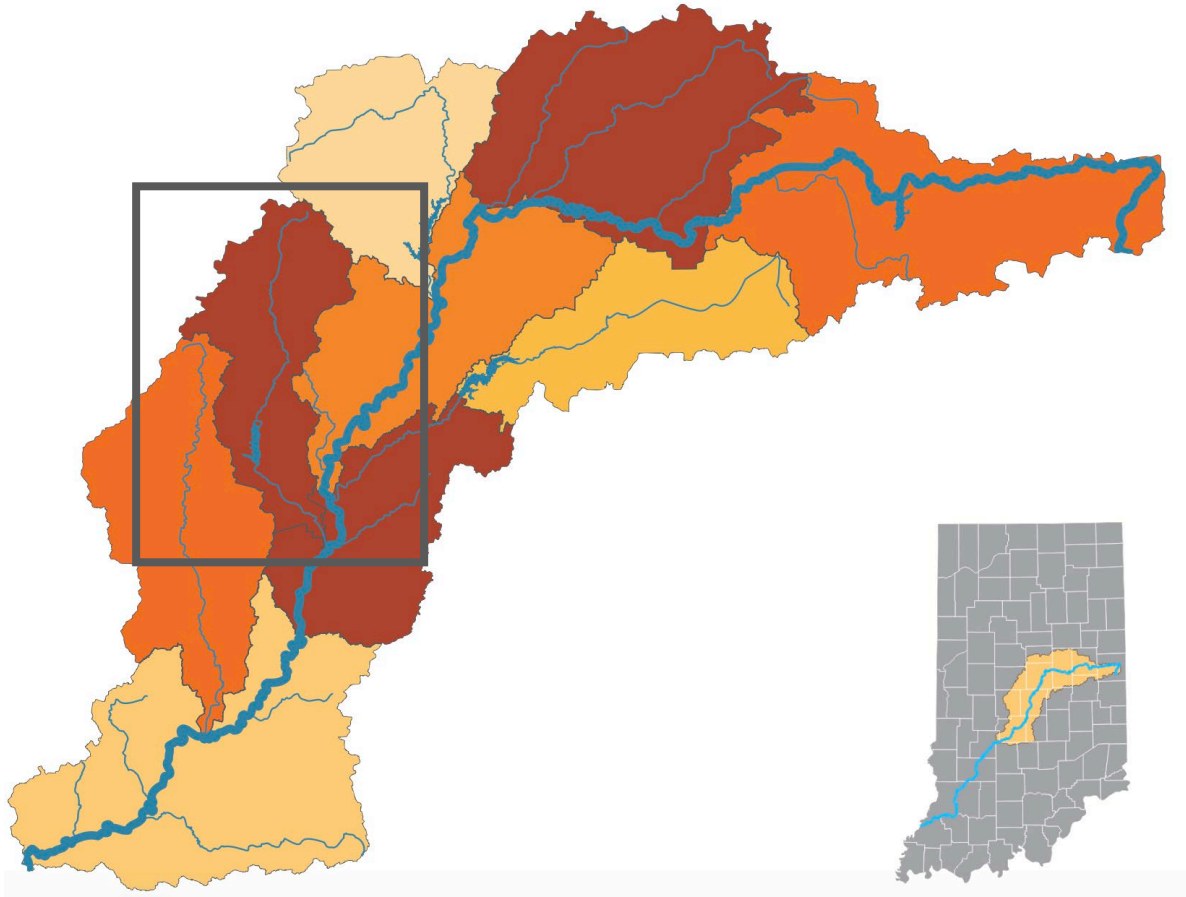
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MODERATE

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VERY POOR

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- A
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- B+
- B
- B-
- C+
- C
- C-
- D+
- D
- D-
- F
- U





Superfund

Environmental Burden

VERY GOOD

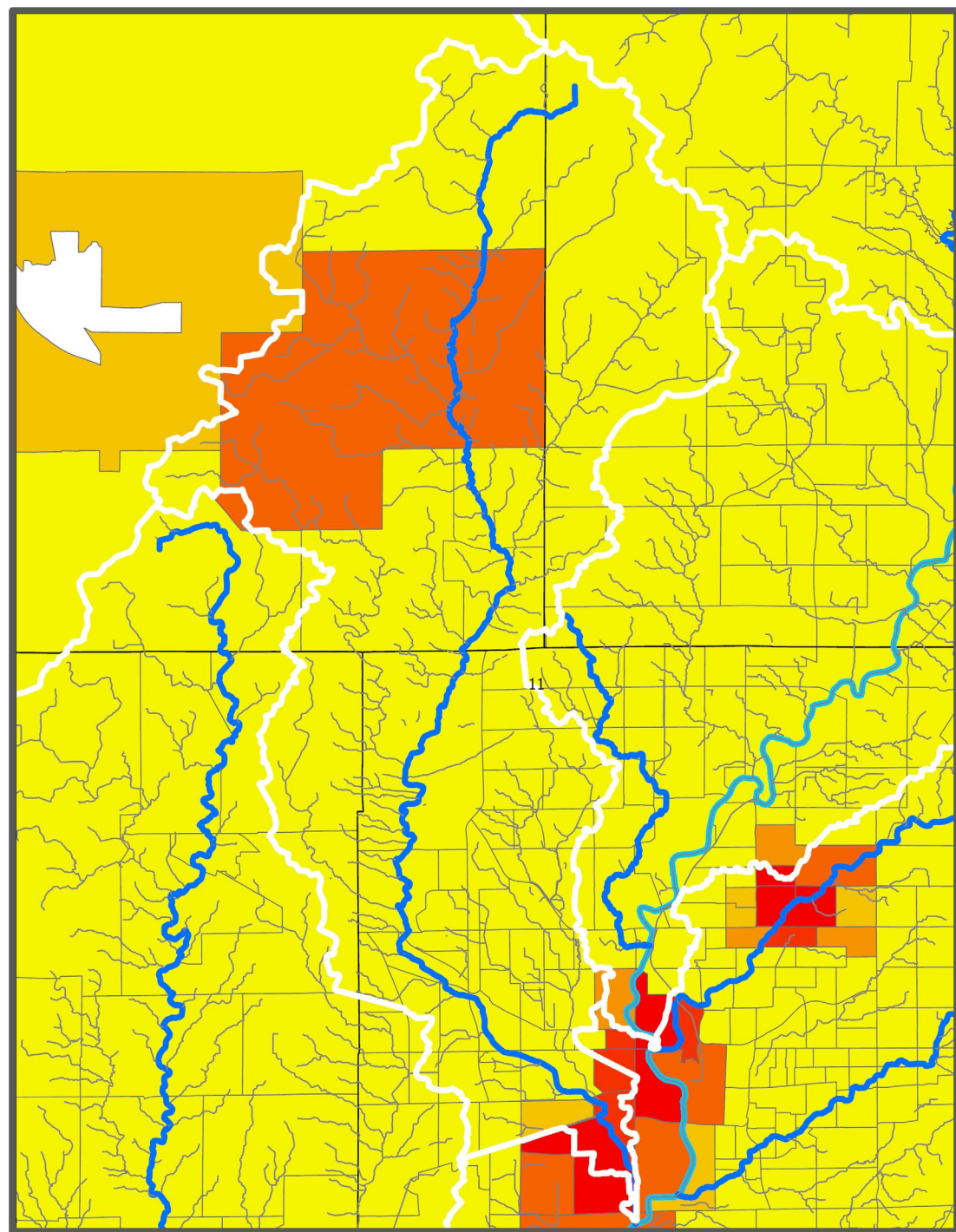
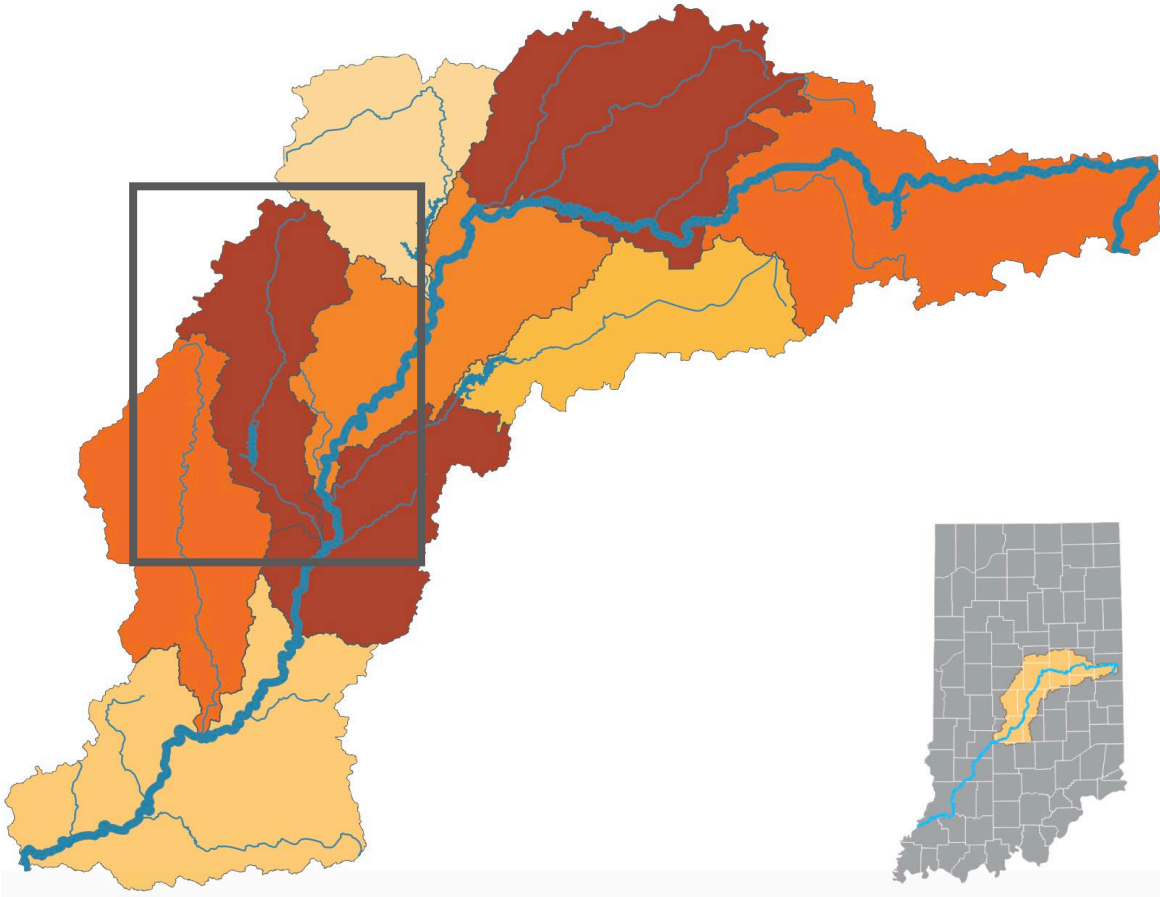
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- B
- B-
- C+
- C
- C-
- D+
- D
- D-
- F
- U





Toxic Release Inventory

Environmental Burden

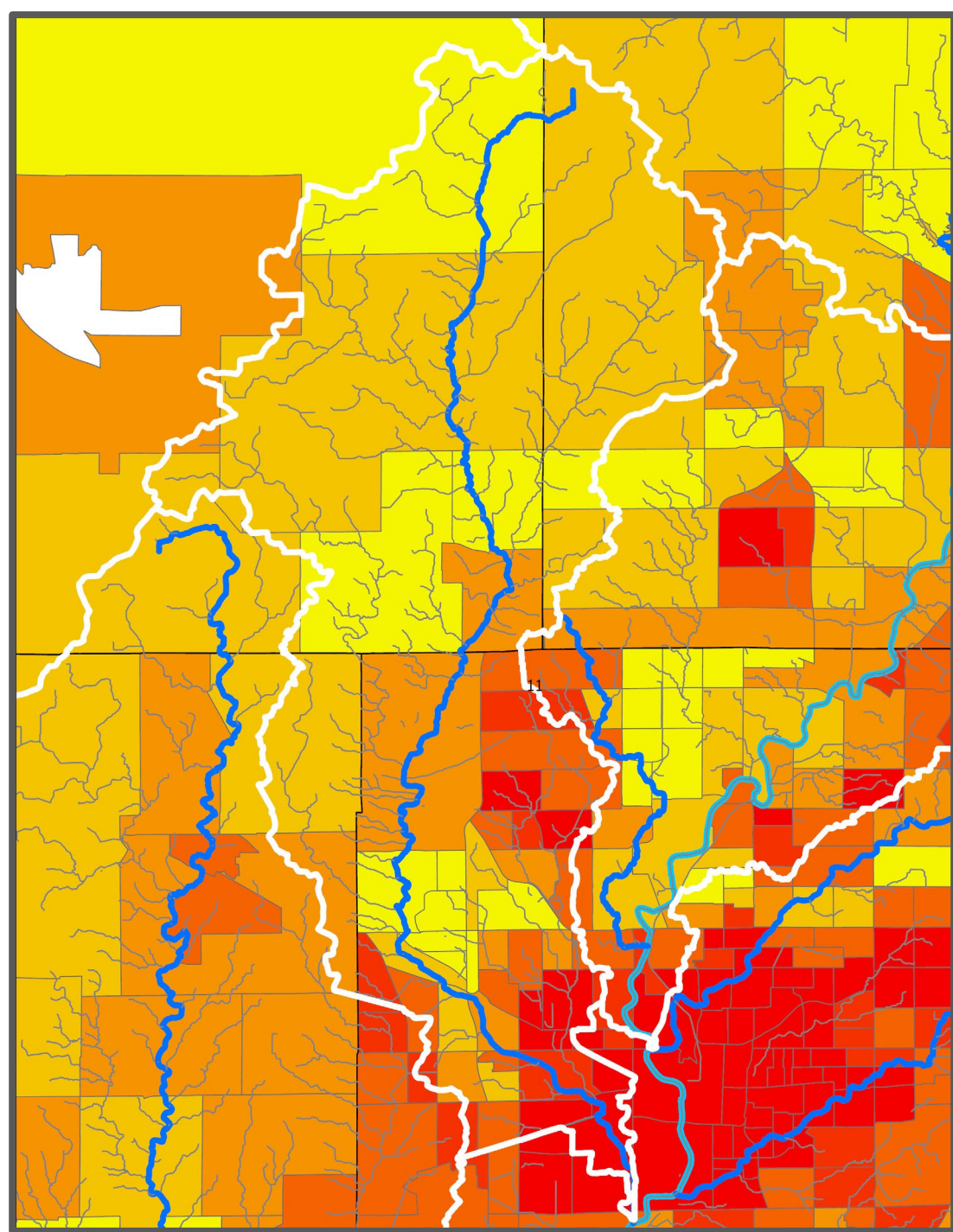
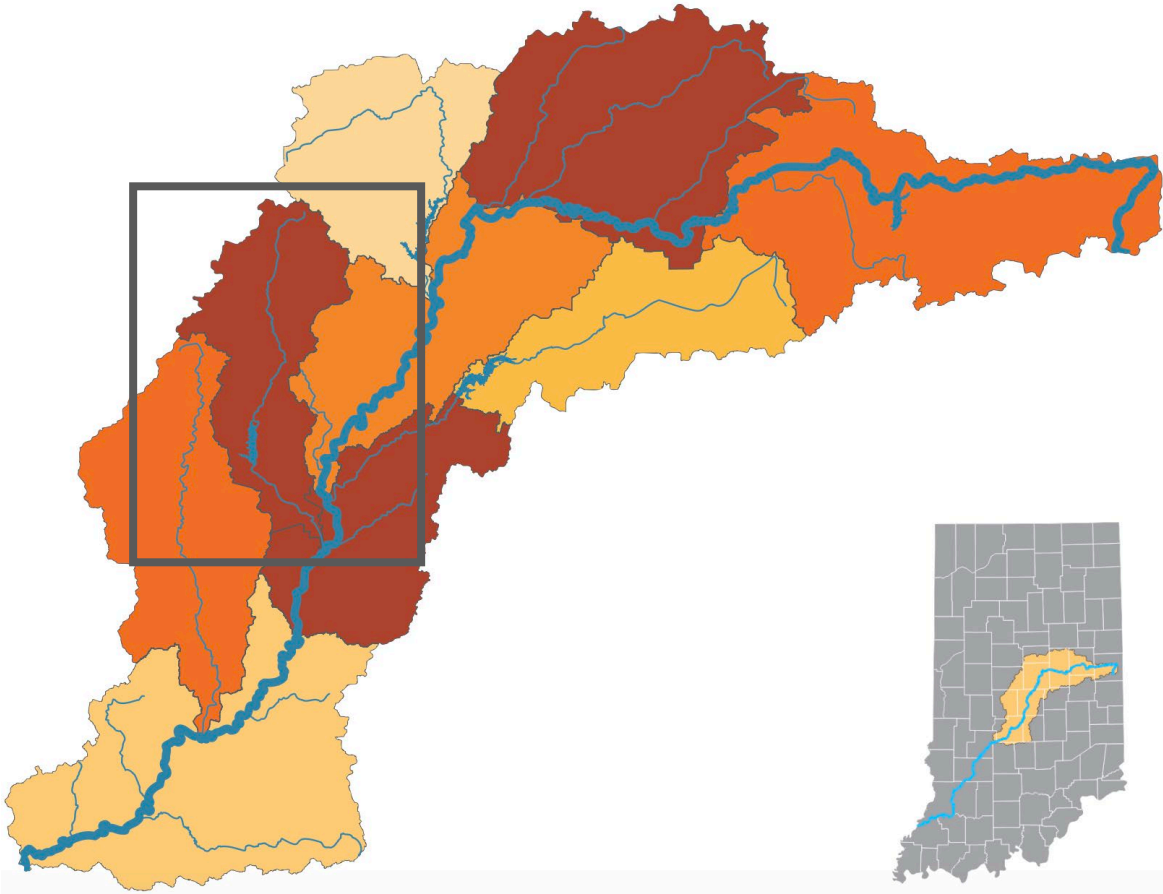
VERY GOOD

GOOD

MODERATE

POOR

VERY POOR





Wetland Change

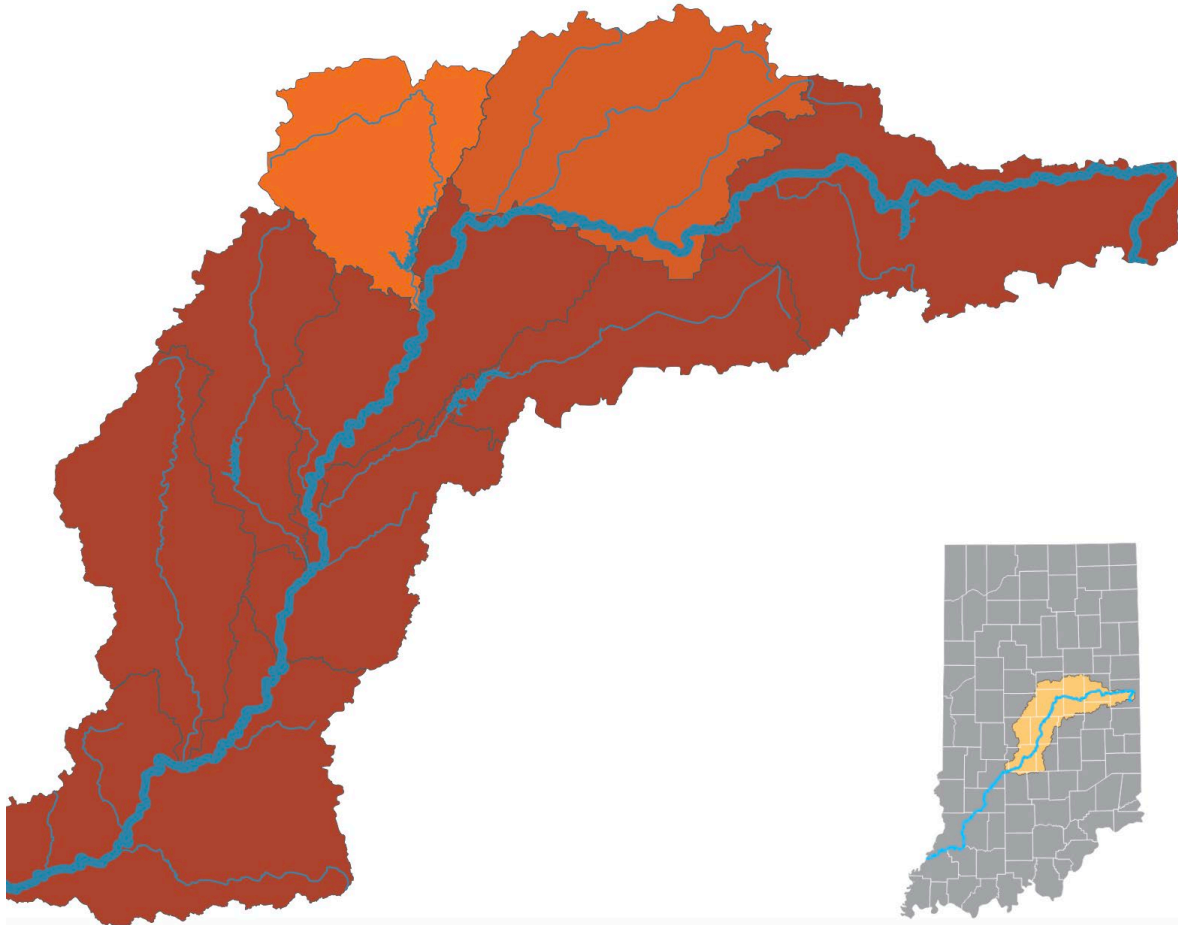
VERY GOOD

GOOD

MODERATE

POOR

VERY
POOR



What was measure?

- Change in area over time
- Not quality of wetland

Policy has an impact



Wetlands

VERY GOOD

GOOD

A+

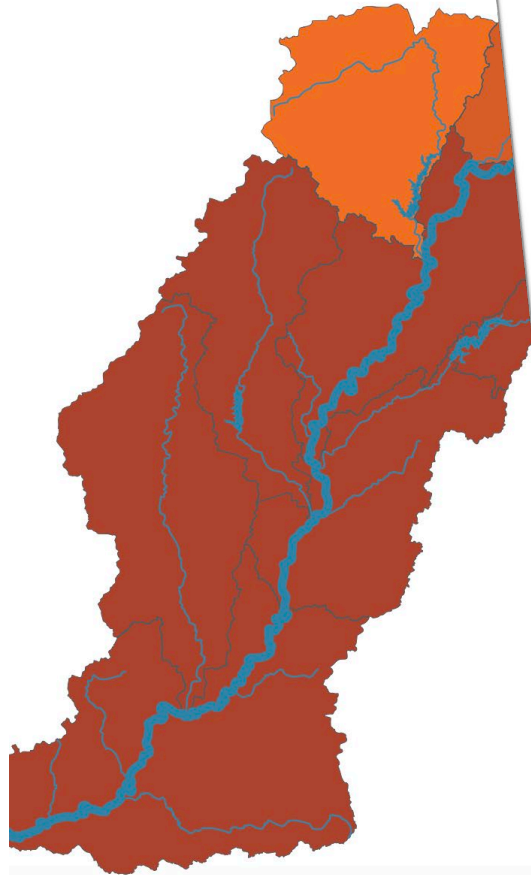
A

A-

B+

B

B-



Indiana lawmakers could further dilute state wetlands protections following SCOTUS decision



BY: CASEY SMITH - JULY 26, 2023 7:00 AM



A May ruling from the U.S. Supreme Court will allow Indiana lawmakers to further strip away regulations that currently keep developers from repurposing wetlands for commercial use. (Photo courtesy the U.S. Environmental Protection Agency)

A U.S. Supreme Court ruling from earlier this year will effectively remove federal protections for most of Indiana's wetlands – and enable Hoosier lawmakers to repeal already-weakened state protections for those areas.

The high court ruled in May that federal protections for wetlands under the Clean Water Act only apply to wetlands with a continuous surface connection to federally protected waterways that make them “indistinguishable” from those waters.

The ruling will allow states to further strip away regulations that currently keep developers from repurposing wetlands for commercial use.

It's not yet clear how Indiana lawmakers plan to respond, but the Republican-dominated legislature has in

measure?

area over time
of wetland

impact

1 COMMUNICATE
& ENGAGE



2 RECOMMEND
POLICY & ACTIONS



3 BUILD
CAPACITY



Leadership Team



Supported By



Ball Brothers Foundation



Questions?

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WhiteRiverReportCard.org