

Appendix E-12: Rivers and Streams Great Lakes Drainage Headwater

7. Please also rank these threats to the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

	Critical threat	Serious threat	Somewhat of a threat	Slight threat	No threat	Unknown	Response Total													
Habitat loss (breeding range)	0% (0)	0% (0)	67% (2)	33% (1)	0% (0)	0% (0)	3													
Habitat loss (feeding/foraging areas)	0% (0)	0% (0)	67% (2)	33% (1)	0% (0)	0% (0)	3													
Small native range (high endemism)	0% (0)	0% (0)	0% (0)	67% (2)	0% (0)	33% (1)	3													
Near limits of natural geographic range	0% (0)	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3													
Large home range requirements	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3													
Viable reproductive population size or availability	0% (0)	0% (0)	0% (0)	33% (1)	33% (1)	33% (1)	3													
Specialized reproductive behavior or low reproductive rates	0% (0)	0% (0)	0% (0)	33% (1)	33% (1)	33% (1)	3													
Degradation of movement/migration routes (overwintering habitats, nesting and staging sites)	0% (0)	0% (0)	0% (0)	33% (1)	33% (1)	33% (1)	3													
Genetic pollution (hybridization)	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3													
Unknown	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1													
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1													
Total Respondents							29													

8. Other threats to the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

No responses were entered for this question.

Total Respondents 0

9. Please briefly describe the top two threats to the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana identified above.

Exotic species competition, specifically the round goby.

Habitat degradation, non-point sources runoff resulting from loss of riparian buffers due to development.

High sediment loads during spring rains

Total Respondents 3

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10. Please rank the following threats to the HABITAT of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

	Critical threat	Serious threat	Somewhat of a threat	Slight threat	No threat	Unknown	Response Total													
Commercial or residential development (sprawl)	33% (1)	0% (0)	33% (1)	33% (1)	0% (0)	0% (0)	3													
Counterproductive financial incentives or regulations	0% (0)	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3													
Invasive/non-native species	33% (1)	33% (1)	0% (0)	0% (0)	33% (1)	0% (0)	3													
Nonpoint source pollution (sedimentation and nutrients)	0% (0)	33% (1)	67% (2)	0% (0)	0% (0)	0% (0)	3													
Habitat fragmentation	0% (0)	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	3													
Successional change	0% (0)	0% (0)	0% (0)	67% (2)	0% (0)	33% (1)	3													
Diseases (of plants that create habitat)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (3)	3													
Habitat degradation	0% (0)	33% (1)	67% (2)	0% (0)	0% (0)	0% (0)	3													
Climate change	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (3)	3													
Stream channelization	33% (1)	33% (1)	0% (0)	33% (1)	0% (0)	0% (0)	3													
Impoundment of water/flow regulation	0% (0)	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	3													
Agricultural/forestry practices	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	0% (0)	3													
Residual contamination (persistent toxins)	0% (0)	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	3													
Point source pollution (continuing)	0% (0)	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	3													
Mining/acidification	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3													
Drainage practices (stormwater runoff)	0% (0)	0% (0)	0% (0)	67% (2)	0% (0)	33% (1)	3													
Unknown	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1													
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1													
Total Respondents							50													

11. Other HABITAT threats to the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

No responses were entered for this question.

Total Respondents 0

12. Please briefly describe the top two HABITAT threats to the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana identified above.

Invasive species competition, specifically round goby interactions. Stream channelization resulting in loss of habitat.

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Invasive species, non-point source pollution

Sedimentation

Loss of habitat due to development in headwater areas

Total Respondents 3

13. What current monitoring efforts by state agencies are you aware of for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Yes, these efforts occur	Not aware of these efforts occurring	Response Total
Statewide year-round monitoring conducted by state agencies	0% (0)	100% (3)	3
Statewide once a year monitoring conducted by state agencies	0% (0)	100% (3)	3
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (3)	3
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (3)	3
Regional or local year-round monitoring conducted by state agencies	0% (0)	100% (3)	3
Regional or local once a year monitoring conducted by state agencies	0% (0)	100% (3)	3
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by state agencies	100% (3)	0% (0)	3
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by state agencies	67% (2)	33% (1)	3
		Total Respondents	24

14. What current monitoring efforts by other organizations are you aware of for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Yes, these efforts occur	Not aware of these efforts occurring	Response Total
Statewide year-round monitoring conducted by other organizations	0% (0)	100% (3)	3
Statewide once a year monitoring conducted by other organizations	0% (0)	100% (3)	3
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by other organizations	0% (0)	100% (3)	3
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by other organizations	0% (0)	100% (3)	3
Regional or local year-round monitoring conducted by other organizations	0% (0)	100% (3)	3
Regional or local once a year monitoring conducted by other	0% (0)	100% (3)	3

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organizations			
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by other organizations	33% (1)	67% (2)	3
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by other organizations	0% (0)	100% (3)	3
		Total Respondents	24

15. How crucial are these monitoring efforts by state agencies for the conservation of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?		Very crucial	Somewhat crucial	Slightly crucial	Not crucial	Unknown	Response Total
Statewide year-round monitoring conducted by state agencies	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3	
Statewide once a year monitoring conducted by state agencies	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3	
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3	
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by state agencies	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3	
Regional or local year-round monitoring conducted by state agencies	0% (0)	0% (0)	33% (1)	33% (1)	33% (1)	3	
Regional or local once a year monitoring conducted by state agencies	0% (0)	33% (1)	33% (1)	0% (0)	33% (1)	3	
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by state agencies	33% (1)	0% (0)	67% (2)	0% (0)	0% (0)	3	
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by state agencies	33% (1)	0% (0)	33% (1)	0% (0)	33% (1)	3	
				Total Respondents		24	

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19. Please list organizations that are monitoring the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

IDNR-Fish and Wildlife.

Total Respondents 1

20. What are the current monitoring techniques for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Frequently used	Occasionally used	Not used but possible with existing technology and data	Not used and not possible with existing technology and data	Not economically feasible	Unknown	Response Total
Radio telemetry and tracking	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	0% (0)	3
Modeling	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	0% (0)	3
Coverboard routes	0% (0)	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Spot mapping	0% (0)	0% (0)	33% (1)	0% (0)	33% (1)	33% (1)	3
Driving a survey route	0% (0)	0% (0)	0% (0)	0% (0)	50% (1)	50% (1)	2
Reporting from harvest, depredation, or unintentional take (road kill, bycatch)	0% (0)	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Mark and recapture	0% (0)	0% (0)	33% (1)	0% (0)	33% (1)	33% (1)	3
Professional survey/census	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	0% (0)	3
Volunteer survey/census	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Trapping (by any technique)	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	0% (0)	3
Representative sites	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	0% (0)	3
Probabilistic sites	0% (0)	0% (0)	33% (1)	0% (0)	0% (0)	67% (2)	3
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
							Total Respondents 36

21. Other monitoring techniques for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

No responses were entered for this question.

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Total Respondents	0
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22. What one or two monitoring techniques would you recommend for effective conservation of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

Stream sampling using electrofishing techniques and seining. This should be done every 5 years to get a clear picture of changes that occur to habitat, water quality and invasive species introductions and distribution.

Rotational sampling at reference sites along the headwaters. Historical comparisons from the early 80's will be compared with the sampling that was completed 2001-2004.

Total Respondents 2

23. What current HABITAT inventory and assessment efforts or activities by state agencies are you aware of for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Yes, these efforts occur	No effort that I'm aware of	Response Total
Statewide annual inventory and assessment conducted by state agencies	0% (0)	100% (3)	3
Statewide once a year inventory and assessment conducted by state agencies	0% (0)	100% (3)	3
Periodic statewide (less than once a year but still regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (3)	3
Occasional statewide (less than once a year and not regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (3)	3
Regional or local year-round inventory and assessment conducted by state agencies	0% (0)	100% (3)	3
Regional or local once a year inventory and assessment conducted by state agencies	33% (1)	67% (2)	3
Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by state agencies	100% (3)	0% (0)	3
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by state agencies	67% (2)	33% (1)	3
		Total Respondents	24

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24. What current HABITAT inventory and assessment efforts or activities by other organizations are you aware of for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Yes, these efforts occur	No effort that I'm aware of	Response Total
Statewide year-round inventory and assessment conducted by other organizations	0% (0)	100% (3)	3
Statewide once a year inventory and assessment conducted by other organizations	0% (0)	100% (3)	3
Periodic statewide (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (3)	3
Occasional statewide (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (3)	3
Regional or local year-round inventory and assessment conducted by other organizations	0% (0)	100% (3)	3
Regional or local once a year inventory and assessment conducted by other organizations	0% (0)	100% (3)	3
Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	33% (1)	67% (2)	3
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (3)	3
		Total Respondents	24

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26. How crucial are these HABITAT efforts by other organizations for the conservation of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	These efforts are very crucial for this HABITAT	These efforts are somewhat crucial for this HABITAT	These efforts are slightly crucial for this HABITAT	These efforts are not crucial for this HABITAT	Unknown	Response Total
Statewide year-round inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Statewide once a year inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Periodic statewide (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Occasional statewide (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Regional or local year-round inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Regional or local once a year inventory and assessment conducted by other organizations	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	3
Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	33% (1)	33% (1)	0% (0)	33% (1)	3
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	33% (1)	0% (0)	0% (0)	67% (2)	3
				Total Respondents		24

27. Regional or local state agency HABITAT inventory and assessment for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

Trail Creek, East Branch of Little Calumet river, Reynolds Creek, Salt Creek, West Branch of Little Calumet River, Deep River.

IDEM ecoregion surveys

Total Respondents 2

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28. Regional or local HABITAT inventory and assessment by other organizations for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

City of Elkhart

Total Respondents 1

29. Please list organizations that are monitoring this HABITAT for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

IDNR-Fish and Wildlife, USFWS

IDNR-Fish and Wildlife, Lake Michigan Fisheries Office

Total Respondents 2

30. What are the current HABITAT inventory and/or assessment techniques for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

If a technique is not applicable to the Wildlife in Headwaters of the Great Lakes Drainage Habitat do not select a response in that row.

	Frequently used	Occasionally used	Not used but possible with existing technology and data	Not used and not possible with existing technology and data	Not economically feasible	Unknown	Response Total
GIS mapping	0% (0)	67% (2)	33% (1)	0% (0)	0% (0)	0% (0)	3
Aerial photography and analysis	0% (0)	33% (1)	0% (0)	33% (1)	0% (0)	33% (1)	3
Systematic sampling	0% (0)	67% (2)	33% (1)	0% (0)	0% (0)	0% (0)	3
Property tax estimates	0% (0)	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	3
State revenue data	0% (0)	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	3
Regulatory information	0% (0)	0% (0)	0% (0)	33% (1)	0% (0)	67% (2)	3
Participation in landuse programs	0% (0)	0% (0)	33% (1)	0% (0)	0% (0)	67% (2)	3
Modeling	0% (0)	0% (0)	33% (1)	0% (0)	33% (1)	33% (1)	3
Voluntary landowner reporting	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
							Total Respondents 28

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31. Other HABITAT inventory and assessment techniques for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

IBI, and QHEI for representative sites.

Total Respondents 1

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32. What one or two HABITAT inventory and assessment techniques would you recommend for effective conservation of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

Sampling.

Sampling using electrofishing and seining in headwater areas. Completing IBI and QHEI and water quality analysis for these sites.

Total Respondents 2

33. What is the current body of science for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

		Response Total	Response Percent
Complete, up to date and extensive		0	0%
Adequate		0	0%
Inadequate		0	0%
Nonexistent		1	33%
Other (please explain below)	 Unknown in the larger scale	2	67%
		Total Respondents	3

34. Please provide a citation (title, author, date, publisher) that would give the best overview of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana, if available. This resource may be used if further detail is needed.

Title = Fisheries Survey of the East Branch of the Little Calumet River Watershed
 Author = Neil Ledet
 Date = 1978
 Publisher = IDNR Fisheries Section

**Response
Total Response
Percent**

35. If possible, please provide a second citation (title, author, date, publisher) that would give another good overview of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana. This resource may also be used if further detail is needed.

Title = Stream Survey of the East Arm of the Little Calumet River
 Author = Edward Braun
 Date = 1974
 Publisher = IDNR Division of Fish and Wildlife

**Response
Total Response
Percent**

36. What is the current HABITAT body of science for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

		Response Total	Response Percent
Complete, up to date and extensive		0	0%
Adequate		0	0%

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Inadequate		1	33%
Nonexistent		1	33%
Other (please explain below)	 Unknown on the larger scale	1	33%
Total Respondents			3

37. Please provide a citation (title, author, date, publisher) that would give the best HABITAT overview of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana, if available. This resource may be used if further detail is needed.

Title = Fisheries Survey of the East Branch of the Little Calumet River Watershed

Author = Neil Ledet

Date = 1978

Publisher = IDNR Fisheries Section

**Response
Total Response
Percent**

38. If possible, please provide a second citation (title, author, date, publisher) that would give another good HABITAT overview of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana. This resource may also be used if further detail is needed.

Title = Stream Survey of the East Arm of the Little Calumet River

Author = Edward Braun

Date = 1974

Publisher = IDNR Division of Fish and Wildlife

**Response
Total Response
Percent**

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39. What are the research needs for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Urgently needed	Greatly needed	Needed	Slightly needed	Not needed	Unknown	Response Total
Life cycle	0% (0)	0% (0)	67% (2)	33% (1)	0% (0)	0% (0)	3
Distribution and abundance	0% (0)	0% (0)	100% (3)	0% (0)	0% (0)	0% (0)	3
Limiting factors (food, shelter, water, breeding sites)	0% (0)	0% (0)	100% (3)	0% (0)	0% (0)	0% (0)	3
Threats (predators/competition, contamination)	0% (0)	33% (1)	67% (2)	0% (0)	0% (0)	0% (0)	3
Relationship/dependence on specific habitats	0% (0)	0% (0)	100% (3)	0% (0)	0% (0)	0% (0)	3
Population health (genetic and physical)	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	0% (0)	3
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
						Total Respondents	19

40. Other research needs for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

No responses were entered for this question.

Total Respondents 0

41. What are the HABITAT research needs for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Urgently needed	Greatly needed	Needed	Slightly needed	Not needed	Unknown	Response Total
Successional changes	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Distribution and abundance (fragmentation)	0% (0)	0% (0)	33% (1)	33% (1)	0% (0)	33% (1)	3
Threats (land use change/competition, contamination/global warming)	0% (0)	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	3
Relationship/dependence on specific site conditions	0% (0)	0% (0)	67% (2)	0% (0)	0% (0)	33% (1)	3
Growth and development of individual components of the habitat	0% (0)	0% (0)	67% (2)	0% (0)	0% (0)	33% (1)	3
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
						Total Respondents	16

42. Other HABITAT research needs for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

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No responses were entered for this question.

Total Respondents 0

(skipped this question) 1

43. How well do the following conservation efforts address the threats to the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Very well	Somewhat	Not at all	Not used	Unknown	Response Total
Habitat protection (use below for details)	0% (0)	67% (2)	0% (0)	0% (0)	33% (1)	3
Population management (hunting, trapping)	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Population enhancement (captive breeding and release)	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Reintroduction (restoration)	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Food plots	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Threats reduction	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Native predator control	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Exotic/invasive species control	0% (0)	33% (1)	0% (0)	0% (0)	67% (2)	3
Regulation of collecting	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Disease/parasite management	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Translocation to new geographic range	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Protection of migration routes	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Limiting contact with pollutants/contaminants	0% (0)	67% (2)	0% (0)	33% (1)	0% (0)	3
Public education to reduce human disturbance	0% (0)	0% (0)	0% (0)	33% (1)	67% (2)	3
Culling/selective removal	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Stocking	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
				Total Respondents		49

44. Other current conservation practices for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

No responses were entered for this question.

Total Respondents 0

45. What one or two specific practices would you recommend for more effective conservation of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

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Land use planning and education.

Habitat protection through landuse regulation. Agricultural runoff protection through education and landuse planning.

Total Respondents **2**

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46. How well do the following conservation efforts address the HABITAT threats to the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

	Very well	Somewhat	Not at all	Not used	Unknown	Response Total
Habitat protection through regulation	0% (0)	67% (2)	0% (0)	0% (0)	33% (1)	3
Habitat protection on public lands	0% (0)	33% (1)	0% (0)	67% (2)	0% (0)	3
Habitat protection incentives (financial)	0% (0)	0% (0)	33% (1)	33% (1)	33% (1)	3
Habitat restoration through regulation	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Habitat restoration on public lands	0% (0)	33% (1)	0% (0)	67% (2)	0% (0)	3
Habitat restoration incentives (financial)	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Artificial habitat creation (artificial reefs, nesting platforms)	0% (0)	0% (0)	0% (0)	0% (0)	100% (3)	3
Selective use of functionally equivalent exotic species in place of extirpated natives	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	3
Succession control (fire, mowing)	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Corridor development/protection	0% (0)	67% (2)	0% (0)	33% (1)	0% (0)	3
Managing water regimes	0% (0)	33% (1)	0% (0)	0% (0)	67% (2)	3
Pollution reduction	0% (0)	67% (2)	0% (0)	0% (0)	33% (1)	3
Protection of adjacent buffer zone	0% (0)	67% (2)	0% (0)	0% (0)	33% (1)	3
Restrict public access and disturbance	0% (0)	33% (1)	0% (0)	33% (1)	33% (1)	3
Land use planning	0% (0)	67% (2)	33% (1)	0% (0)	0% (0)	3
Technical assistance	0% (0)	0% (0)	0% (0)	67% (2)	33% (1)	3
Cooperative land management agreements (conservation easements)	0% (0)	33% (1)	0% (0)	33% (1)	33% (1)	3
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
				Total Respondents		52

47. Other current HABITAT conservation practices for the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana.

No responses were entered for this question.

Total Respondents 0

48. What one or two specific HABITAT practices would you recommend for more effective conservation of the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana?

Protection of habitat through land use planning. Currently most of the headwaters areas run through agricultural areas and need to maintain riparian buffer strips.

Total Respondents 1

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- 49.** Do you have any additional comments or information on the Wildlife in Headwaters of the Great Lakes Drainage Habitat in Indiana that you feel would be useful in the development of the Indiana Comprehensive Wildlife Strategy?

It has been over 20 years since the surveys were conducted, prior to the 2001-2004 surveys. It is important that surveys be conducted every 5 years or so to document changes to water quality, habitat and riparian zone protection.

Total Respondents 1