AFWA Science and Research Priorities Survey

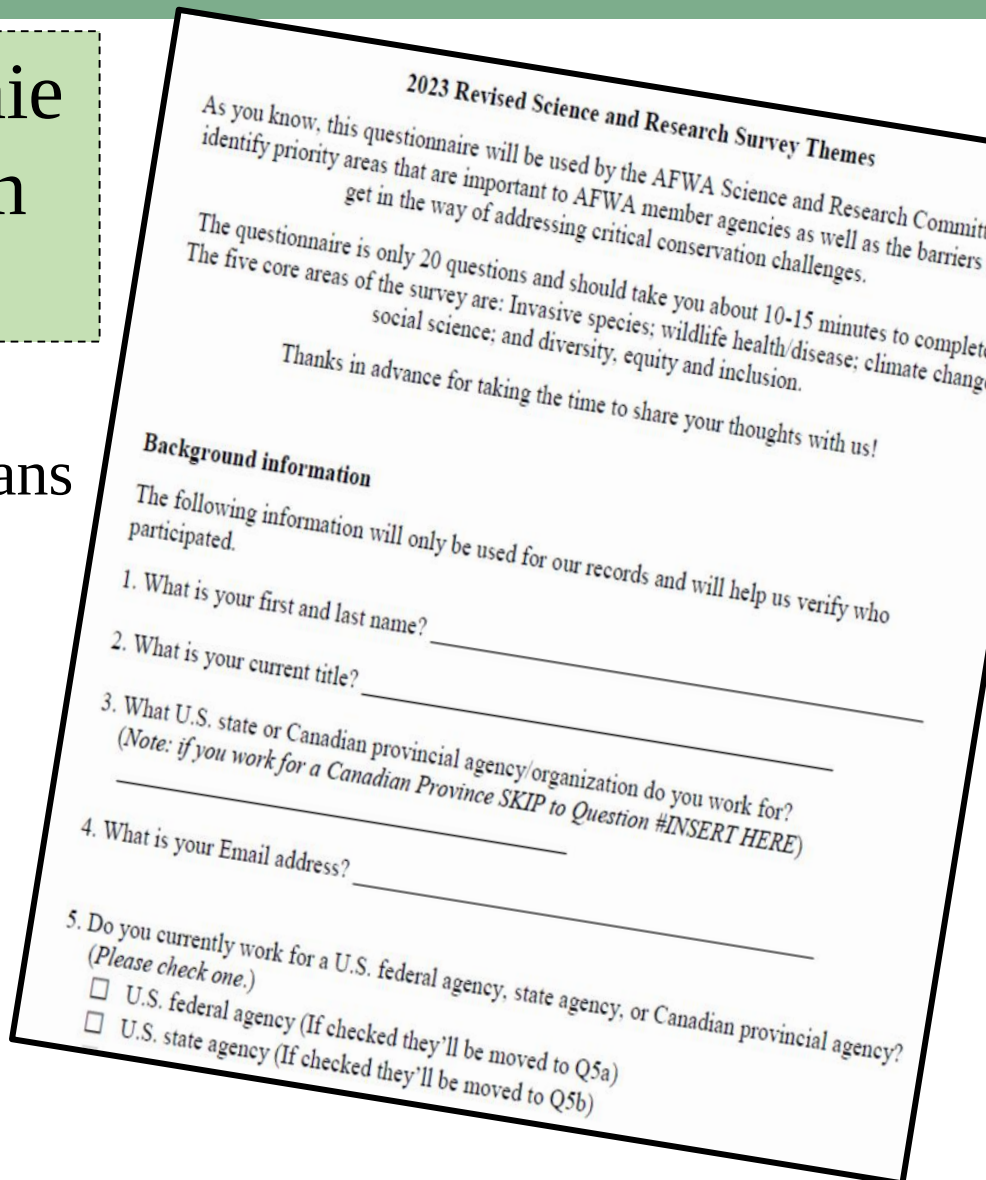
Science and Research Committee Meeting
(Results Overview)
9/25/2023

Mike Quartuch, Ph.D., Colorado Parks and Wildlife
(AFWA Social Science Subcommittee Chair)

GOAL OF INQUIRY

Identify priority areas and the barriers that stymie agencies ability to address critical conservation challenges to…

- Identify gaps: Survey & 4 regional AFWA landscape plans
- Use priorities to:
  - Shape MSCG process/priorities
  - Inform federal research partners' priorities
  - Help inform other multi-state collaboratives' discussions (SEACAS, Natures' Network)



2023 Revised Science and Research Survey Themes

As you know, this questionnaire will be used by the AFWA Science and Research Committ
identify priority areas that are important to AFWA member agencies as well as the barriers
get in the way of addressing critical conservation challenges.

The questionnaire is only 20 questions and should take you about 10-15 minutes to complet
The five core areas of the survey are: Invasive species; wildlife health/disease; climate chang
social science; and diversity, equity and inclusion.

Thanks in advance for taking the time to share your thoughts with us!

Background information

The following information will only be used for our records and will help us verify who
participated.

1. What is your first and last name? _____
2. What is your current title? _____
3. What U.S. state or Canadian provincial agency/organization do you work for?
(Note: if you work for a Canadian Province SKIP to Question #INSERT HERE)
_____
4. What is your Email address? _____
5. Do you currently work for a U.S. federal agency, state agency, or Canadian provincial agency?
(Please check one.)
☐ U.S. federal agency (If checked they'll be moved to Q5a)
☐ U.S. state agency (If checked they'll be moved to Q5b)

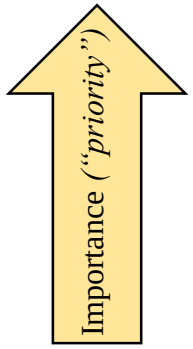
SURVEY DESIGN

20 questions, 3 core themes + social science

- Invasive species, wildlife health/disease, climate change, & social science

Climate Change	Performance (*"expectations"*)	
Importance (*"priority"*)	High importance, low performance	High importance, high performance
	Low importance, low performance	Low importance, high performance

QUESTION WORDING



1. **Agency research priorities** (Not a priority – Essential priority)

*Ex. To what extent are invasive species critical research priorities for our agency across each of the following **categories**?*

- Game mammals
- Fur-bearers
- Non-game mammals
- Birds
- Non-game fish
- Sportfish
- Reptiles/amphibians
- SGCN, threatened, endangered
- Terrestrial communities
- Aquatic communities

2. **Addressing them** (Below – Exceeding expectations)

Ex. For each category that you indicated something was a Medium, High, or Essential invasive species research priority above, please specify how well your agency is addressing them.

3. **What barriers exists** (Not at all – Major barrier)

Ex. To what extent do the following barriers reduce your ability to adequately address those invasive species priorities that you identified as Medium, High, or Essential?

SURVEY IMPLEMENTATION

Qualtrics

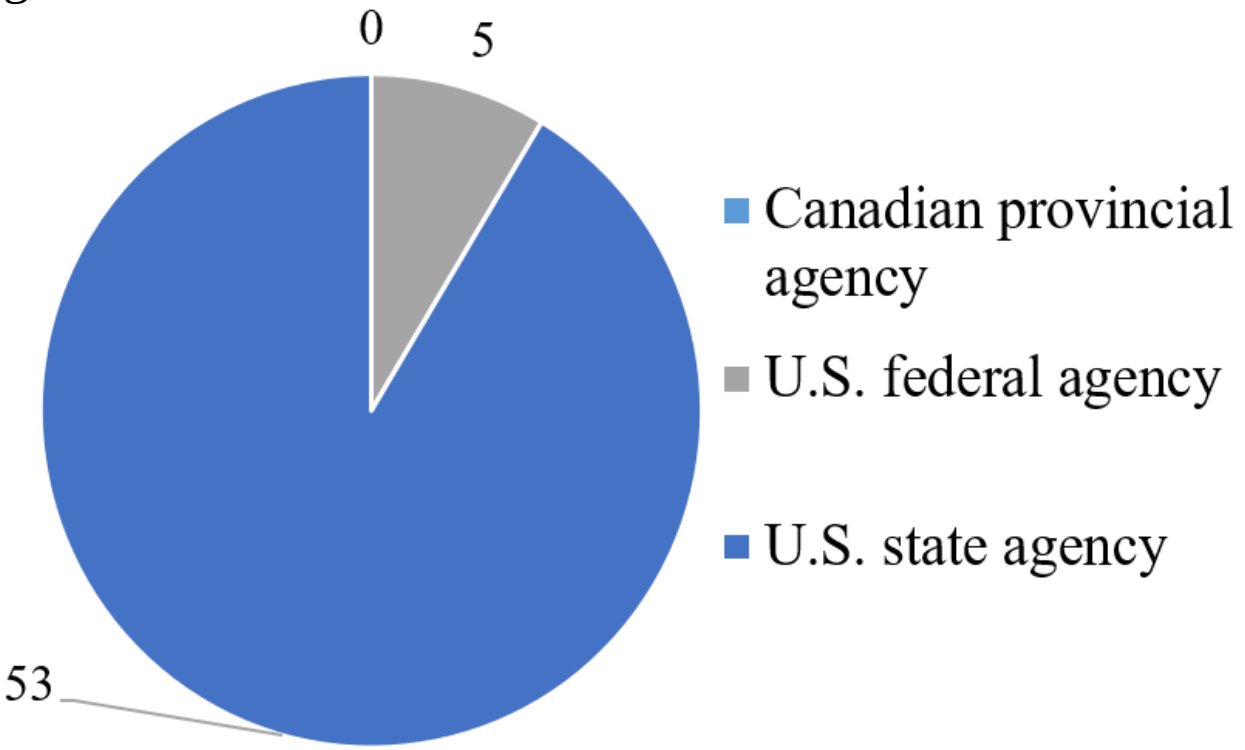
- Emailed to 88 individuals (April 24)
- Reminders emailed to non-respondents (May 1, 15, 29)
- Survey closed (June 5)

RESULTS

58 Responses *(≈ 66% response rate)*

- SEAFWA = 21 responses
- WAFWA = 18 responses
- MAFWA = 13 responses
- NEAFWA = 12 responses

} Some belong to >1 region



Invasive Species

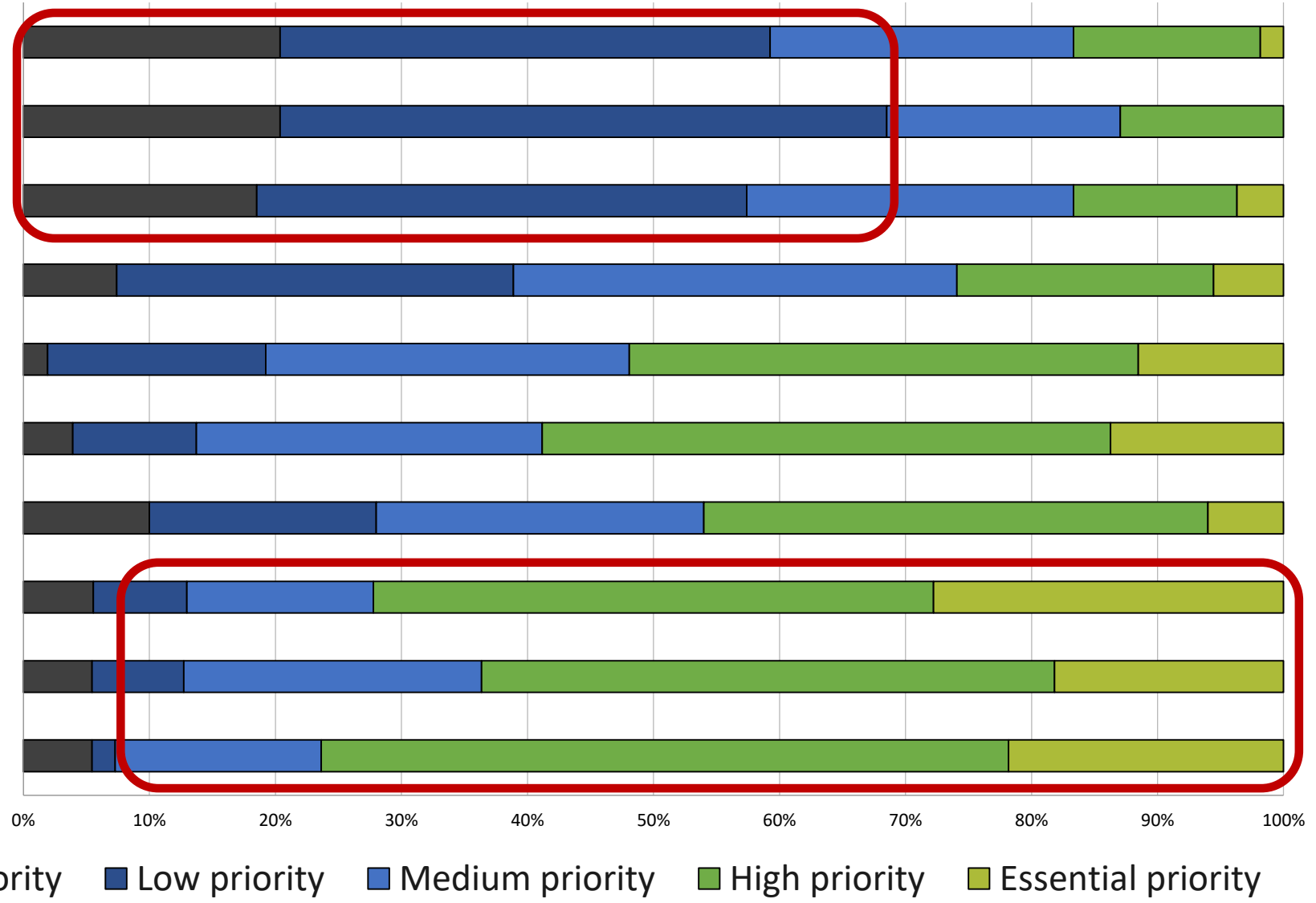
INVASIVE SPECIES PRIORITIES ("IMPORTANCE")

Lowest priorities

- *57-69% Not-Low priority*

Highest priorities

- *65-75% High+*
- *88-92% Medium+*

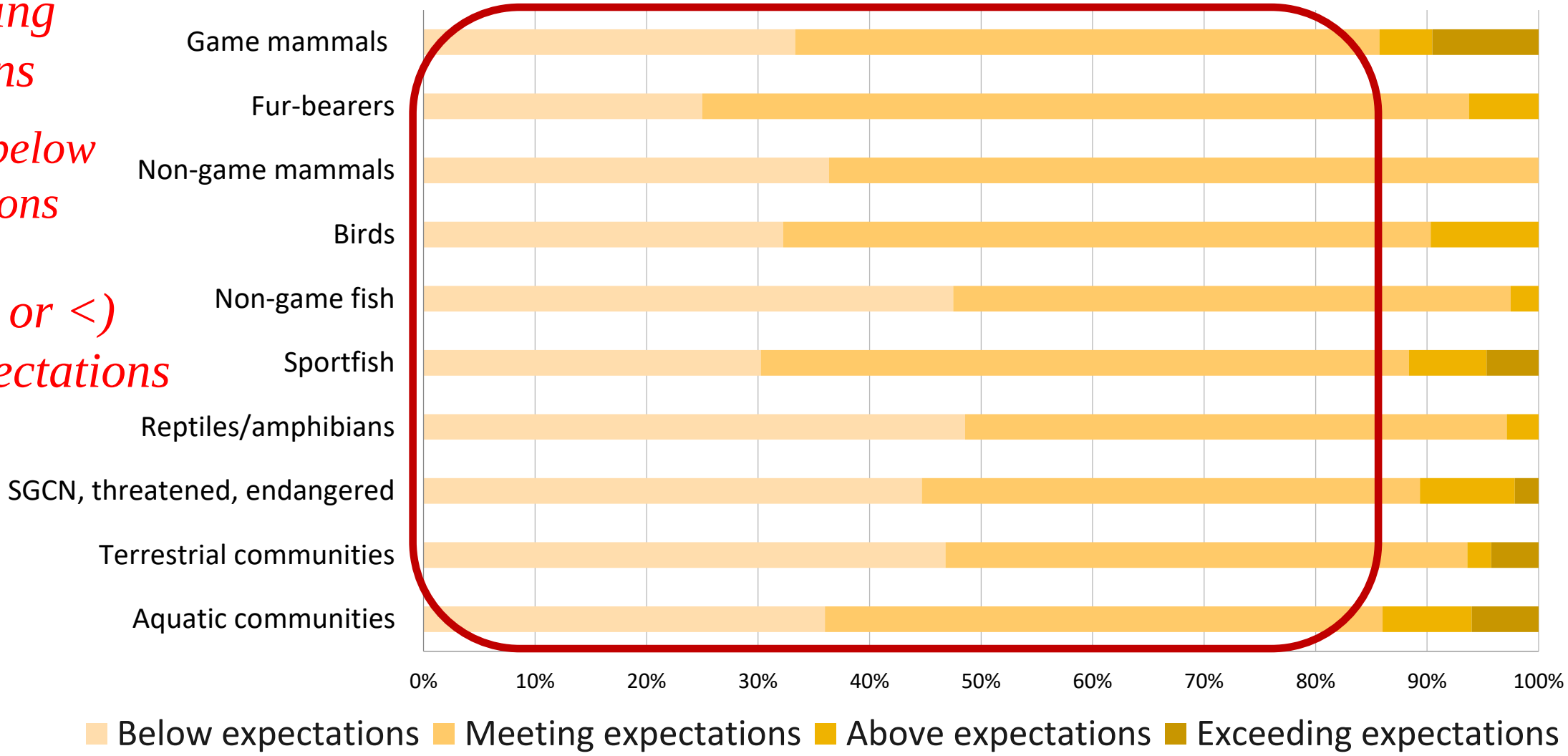


ADDRESSING INVASIVE SPECIES PRIORITIES ("PERFORMANCE")

Most meeting expectations

- *24-47% below expectations*

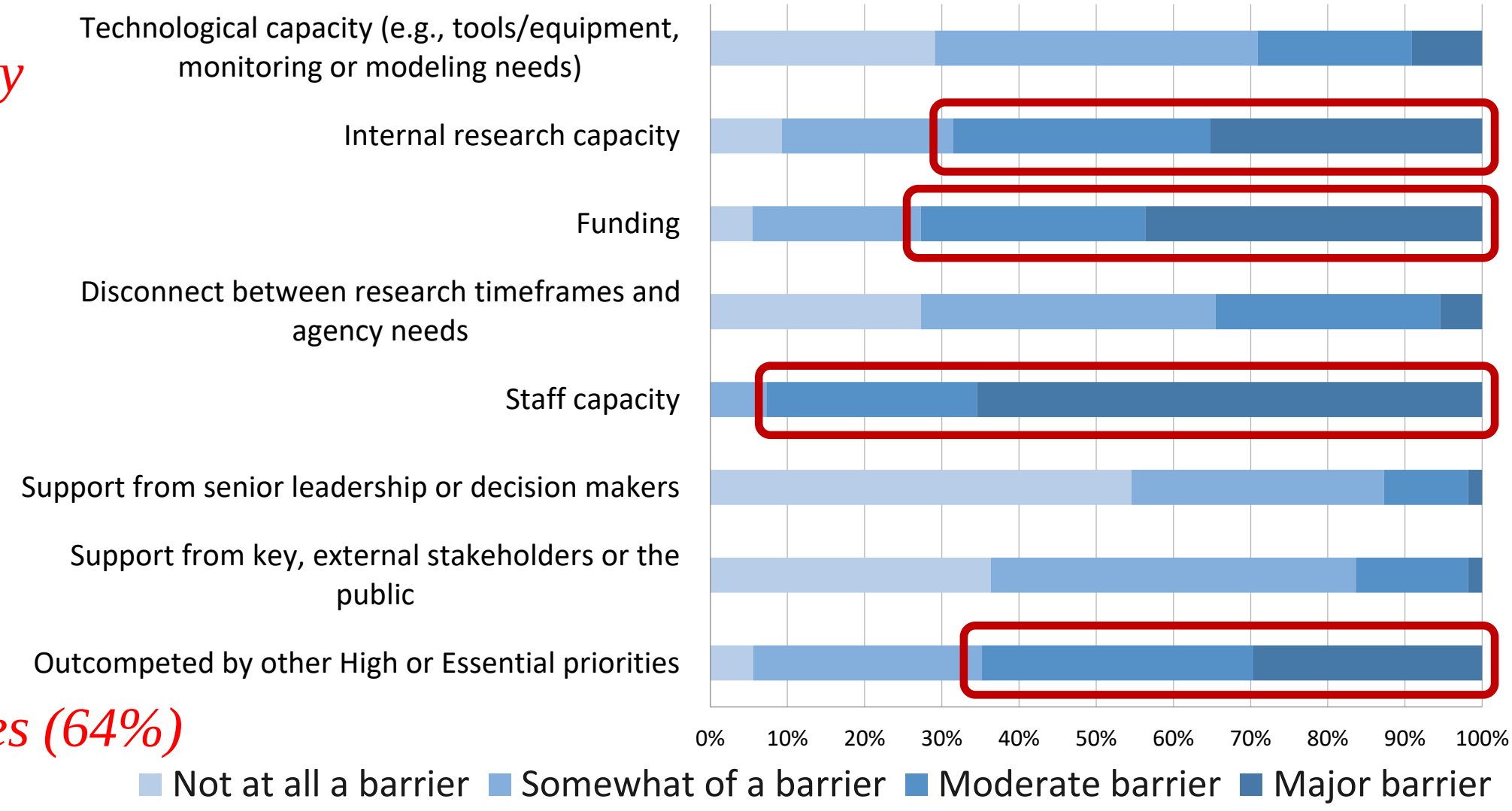
Few (15% or <) above expectations



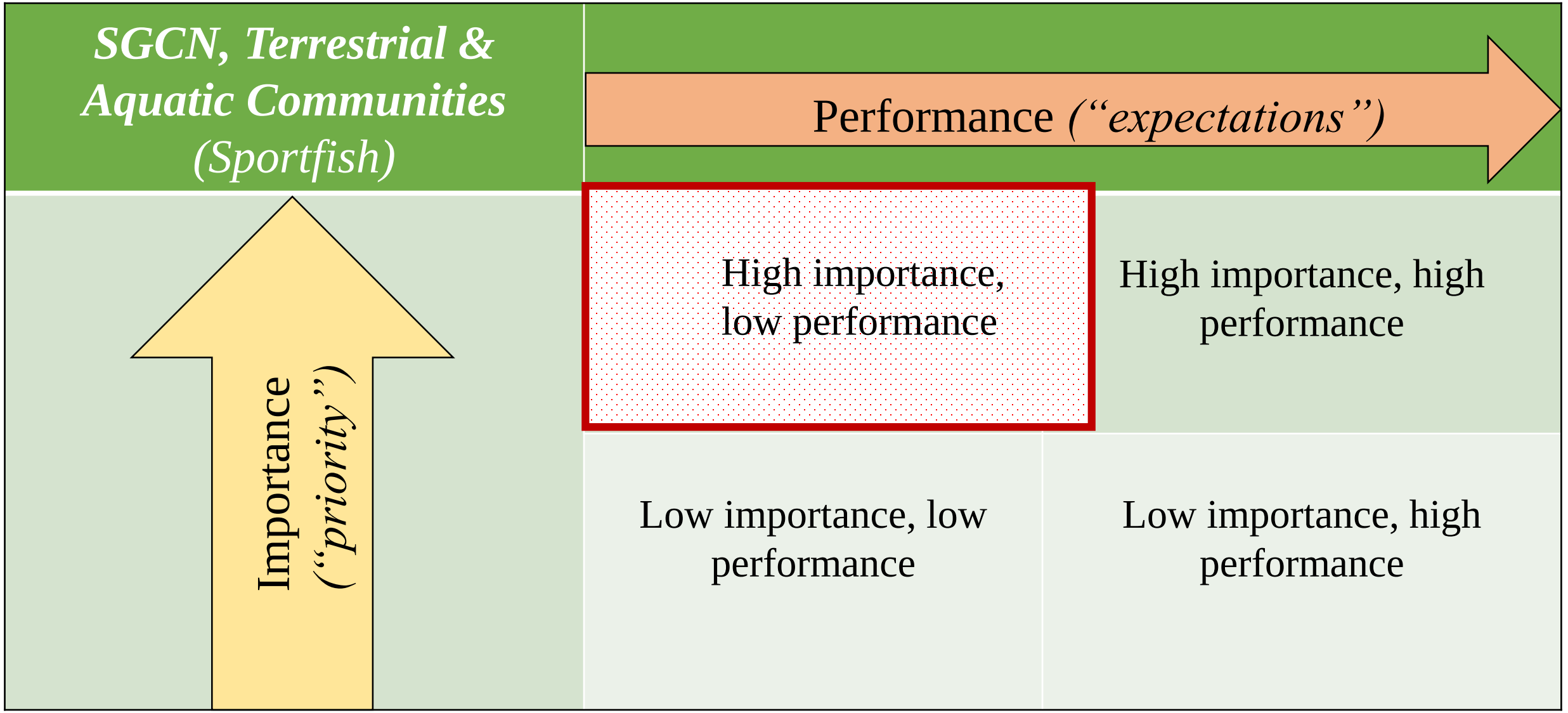
WHAT GETS IN THE WAY? (INVASIVE SPECIES "BARRIERS")

1. *Staff capacity (93%)*
2. *Funding (73%)*
3. *Internal research capacity (68%)*

**Other priorities (64%)*



OVERALL INVASIVE SPECIES SUMMARY



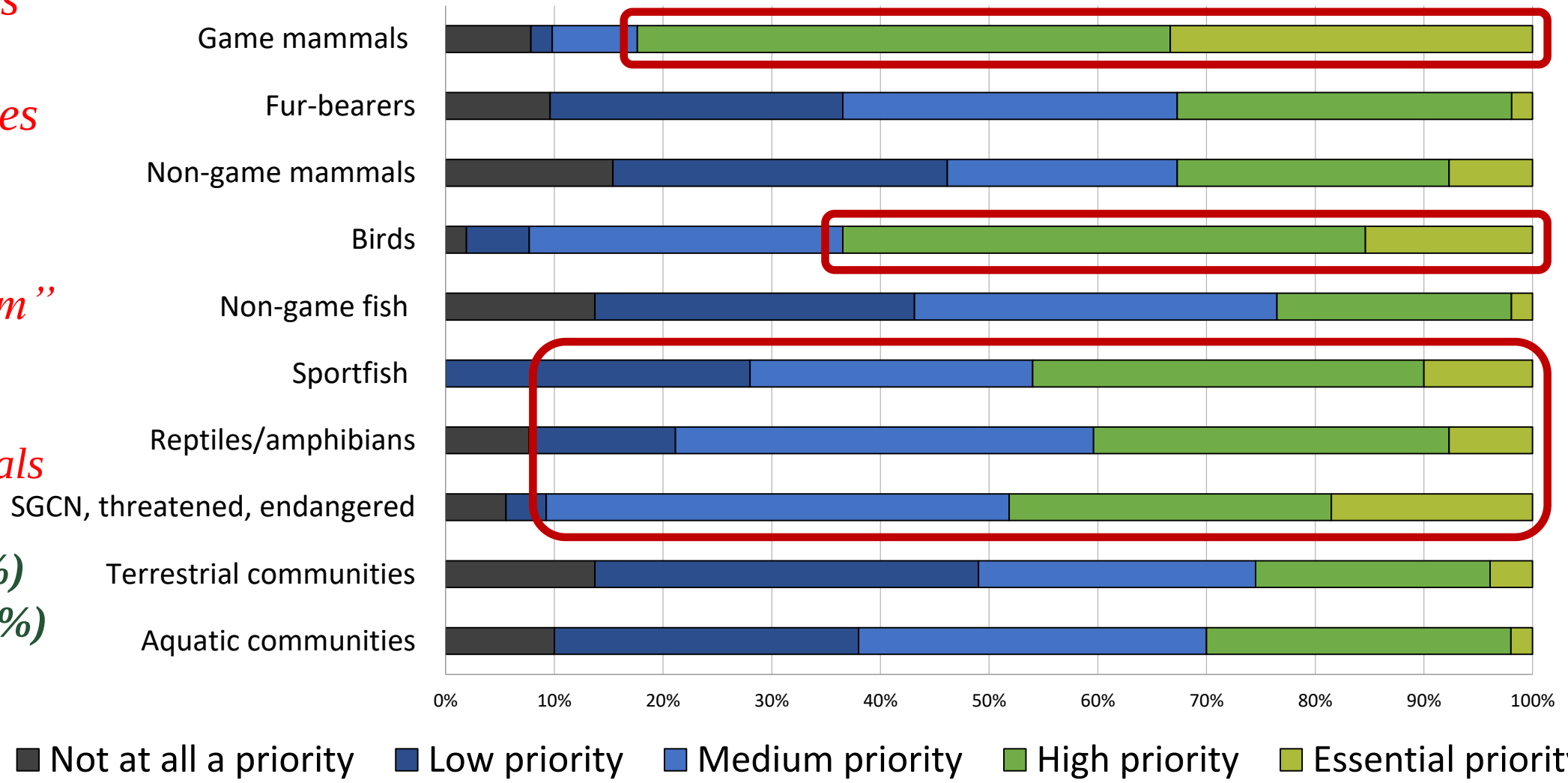
Wildlife Health & Disease

FISH & WILDLIFE HEALTH PRIORITIES ("IMPORTANCE")

Game mammals and Birds are highest priorities

Include "Medium"

- *Birds (92%)*
- ***SGCN (91%)***
- *Game mammals (90%)*
- ***Reptiles (79%)***
- ***Sportfish (72%)***



ADDRESSING FISH & WILDLIFE HEALTH PRIORITIES ("PERFORMANCE")

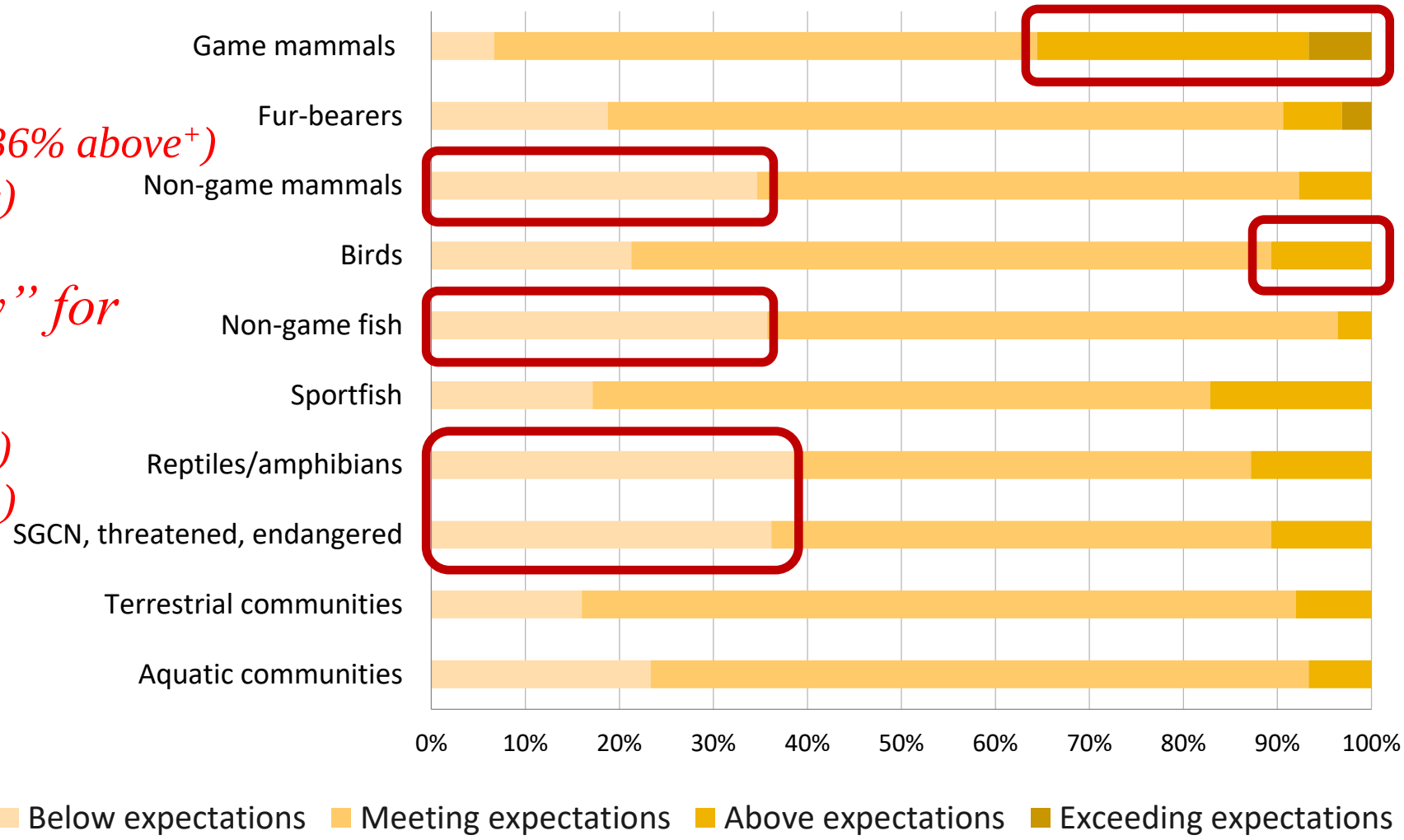
Most meeting expectations, more above, few exceeding

- *Game mammals (93% meeting^{+} 36% above^{+})*
- *Birds (78% meeting^{+}; 11% above)*

4 categories are "below" for 1/3 of respondents

- *Reptiles/amphibians (38%)*
- *Non-game mammals (38%)*
- *SGCN (36%)*
- *Non-game fish (36%)*

- *<u>Positive</u>: for any med-essential priorities (62-94% meeting, above or exceeding)*



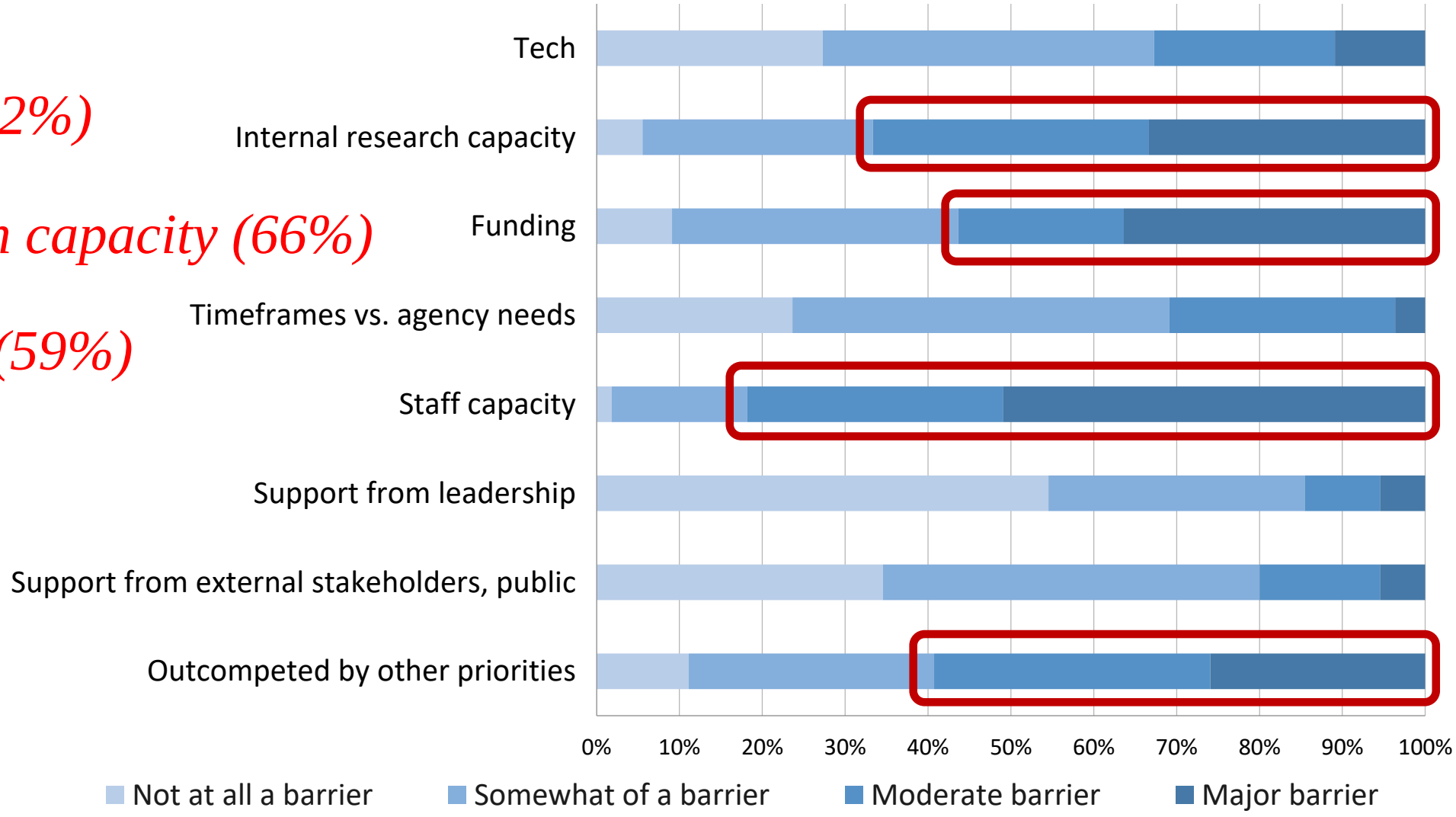
WHAT GETS IN THE WAY? (WL HEALTH "BARRIERS")

1. Staff capacity (82%)

2. Internal research capacity (66%)

3. Other priorities (59%)

**Funding (56%)*



OVERALL WILDLIFE HEALTH/DISEASE SUMMARY

Game mammals, birds *(SGCN, sportfish, reptiles)*	Performance *("expectations")* →
Importance *("priority")* ↑	High importance, low performance
	Low importance, low performance
	Low importance, high performance
	High importance, high performance

Climate Change

CLIMATE CHANGE PRIORITIES ("IMPORTANCE")

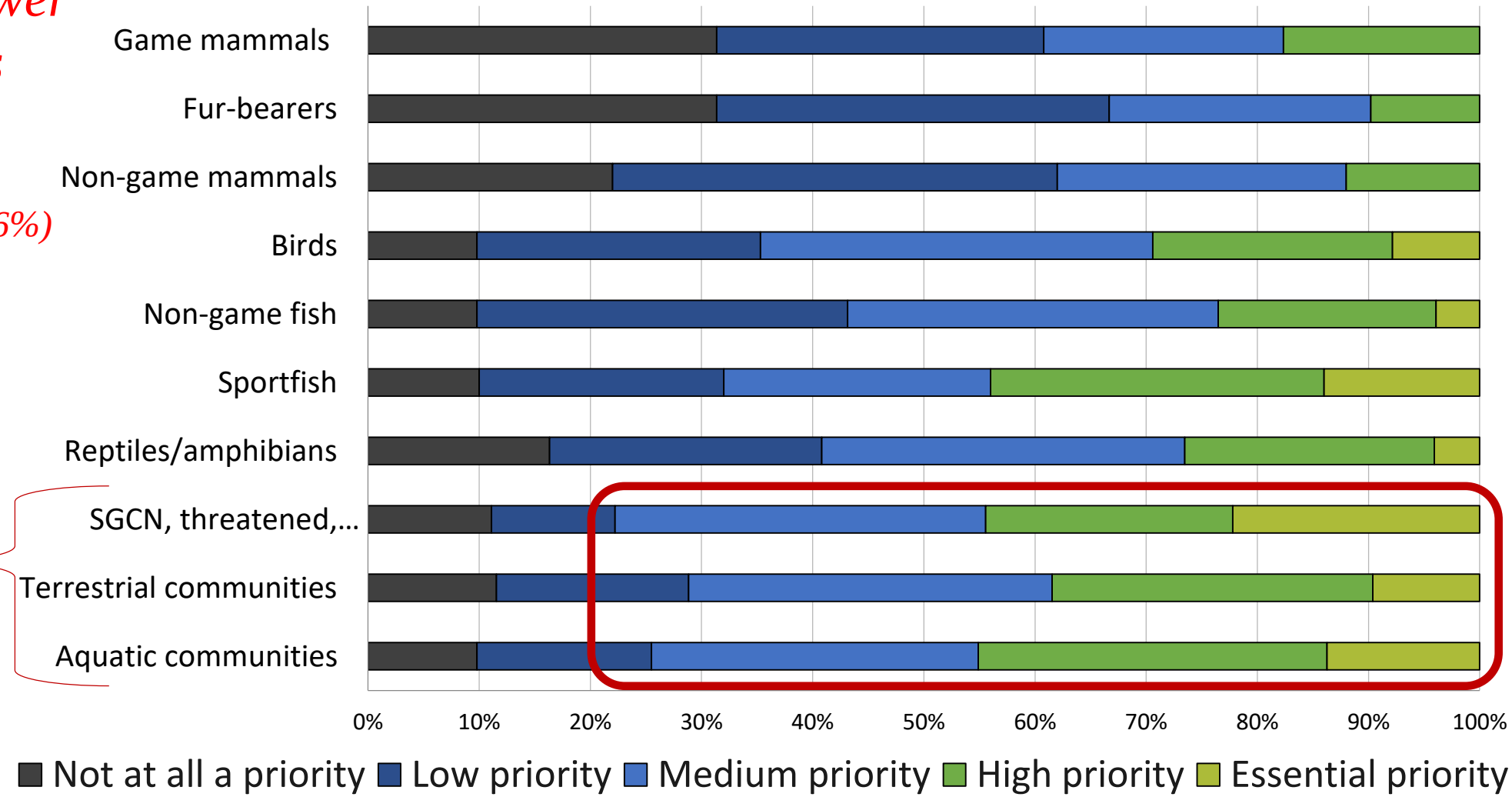
Climate Change lower priority than others

High-Essential

- *Aquatic comms (46%)*
- *SGCN (45%)*
- *Sportfish (43%)*

>70% (w/"med")

- *SGCN (78%)*
- *Aquatic (75%)*
- *Terrestrial (71%)*



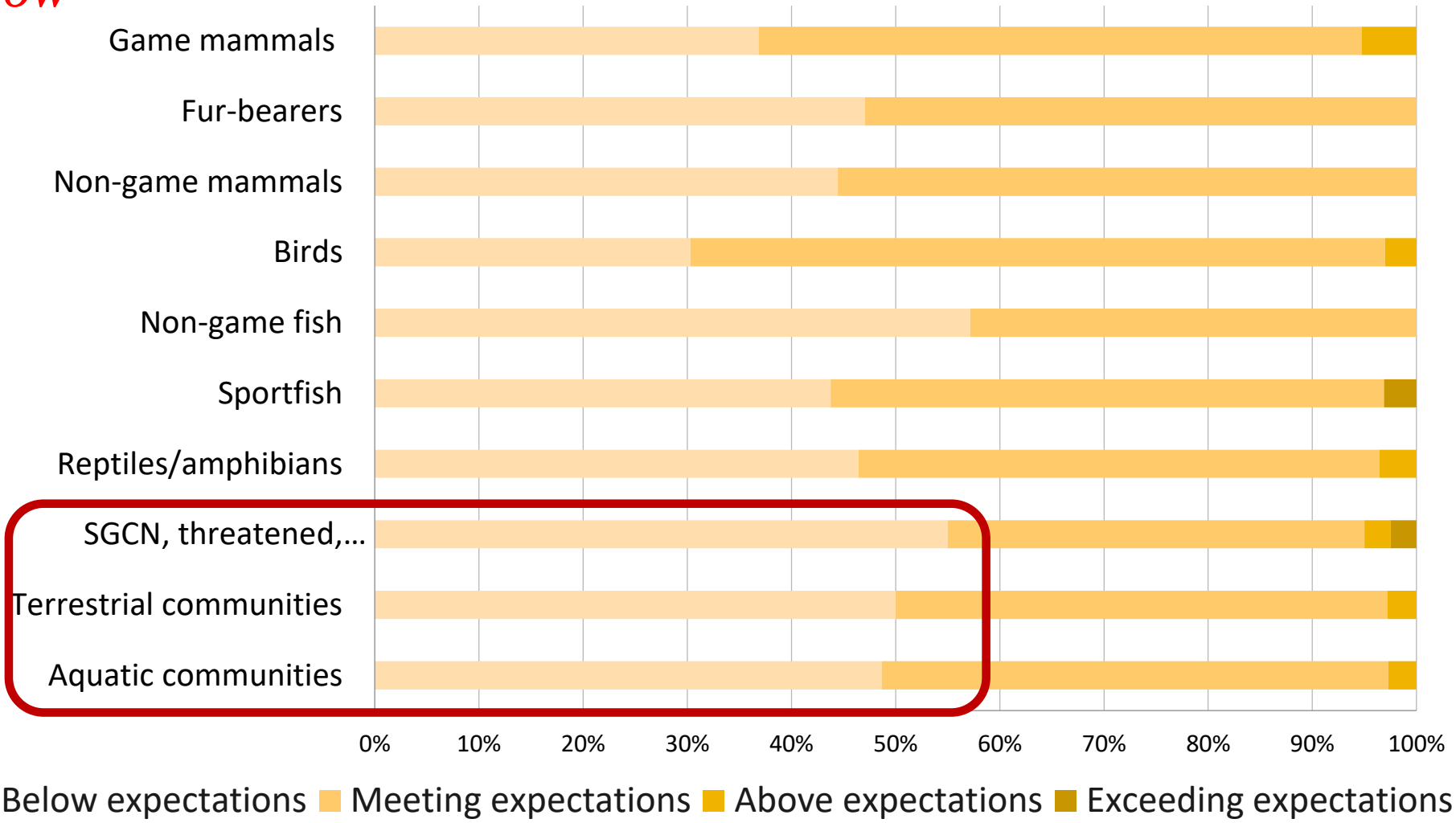
ADDRESSING CLIMATE CHANGE PRIORITIES ("SUCCESS")?

Overall, greatest % below expectations (30-57%)

- *<5% above⁺*

All 3 highest priorities are around 50% below expectations.

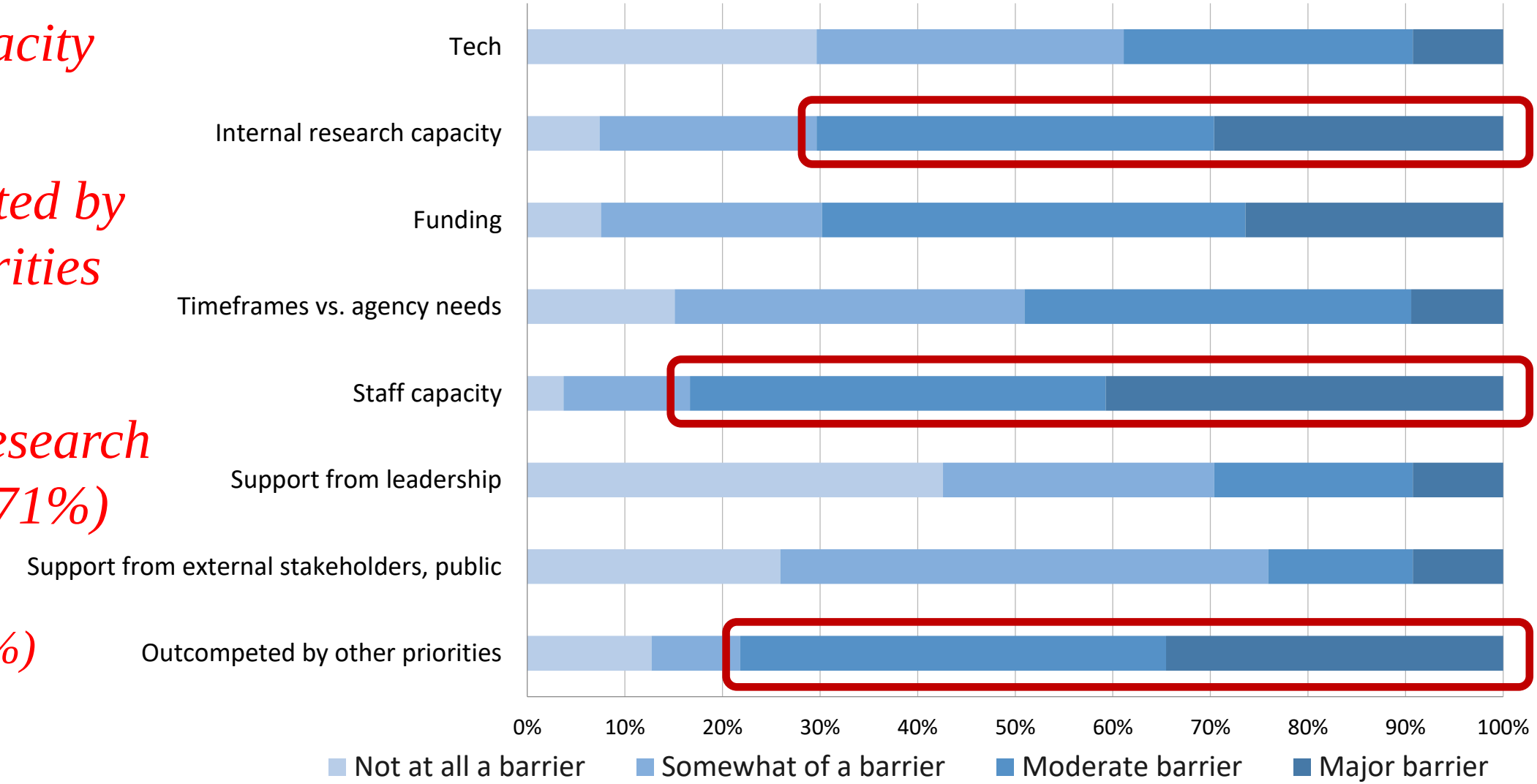
- *Sportfish around 45% below expectations (in top priority for high⁺)*



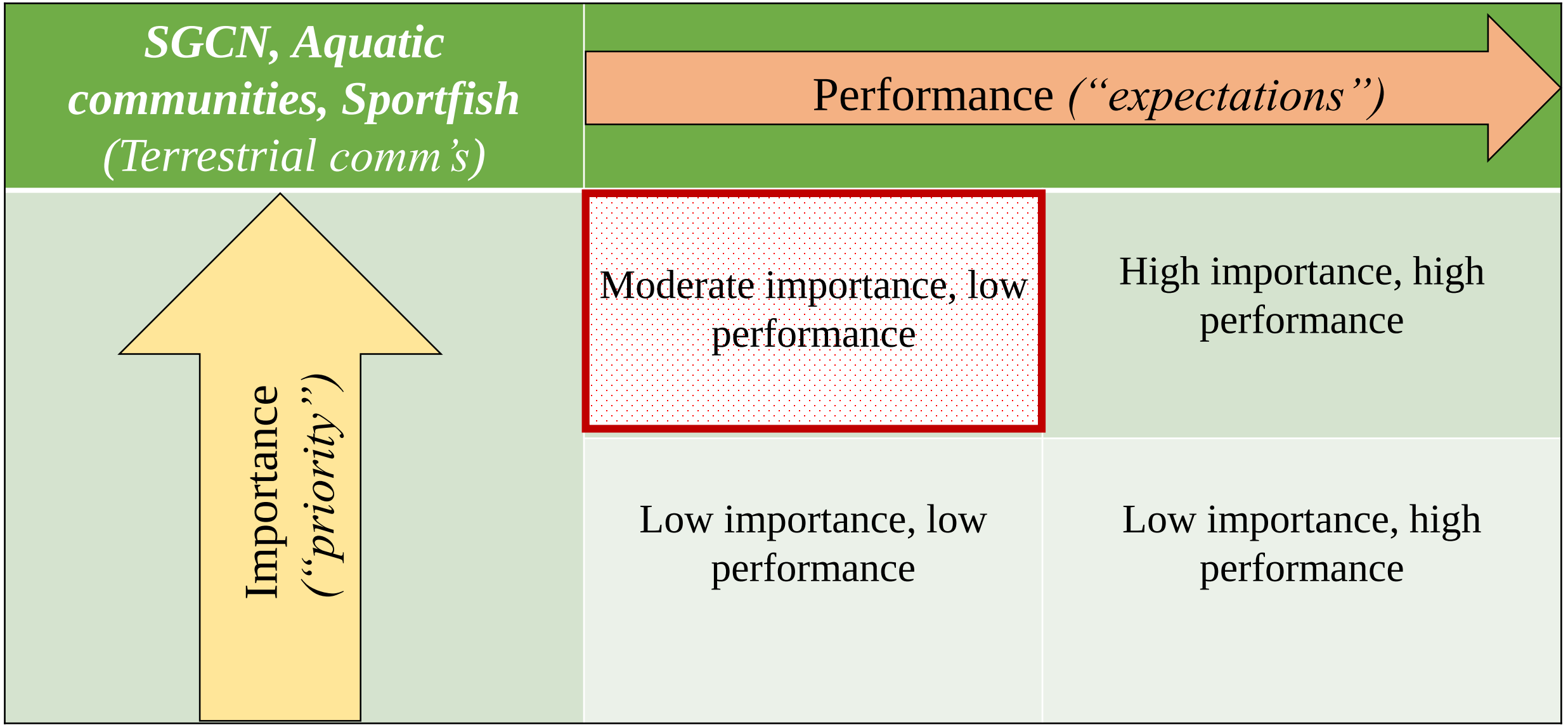
WHAT GETS IN THE WAY? ("BARRIERS")

1. *Staff capacity (84%)*
2. *Outcompeted by other priorities (79%)*
3. *Internal research capacity (71%)*

**Funding (69%)*



OVERALL CLIMATE CHANGE SUMMARY

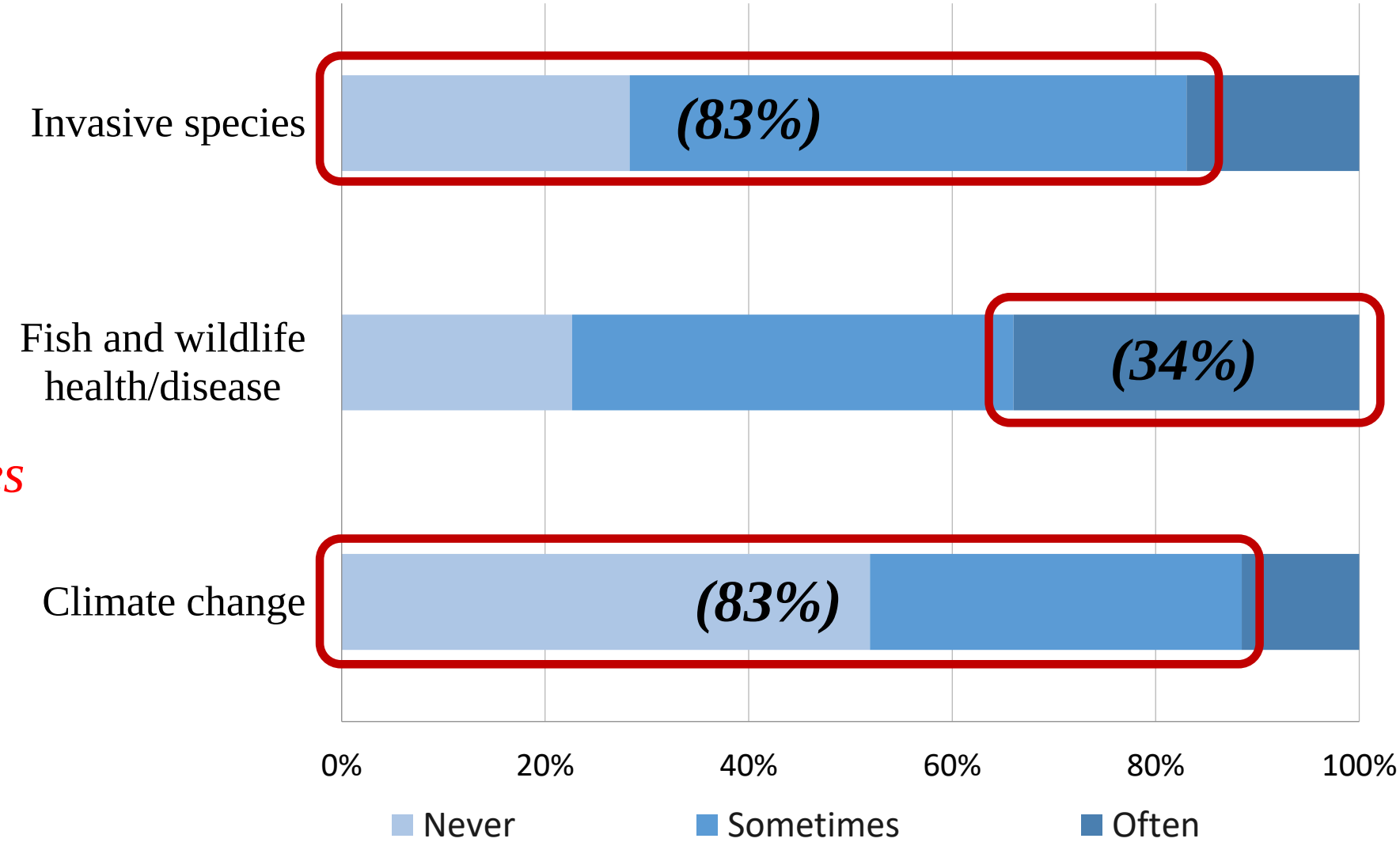


Social Science

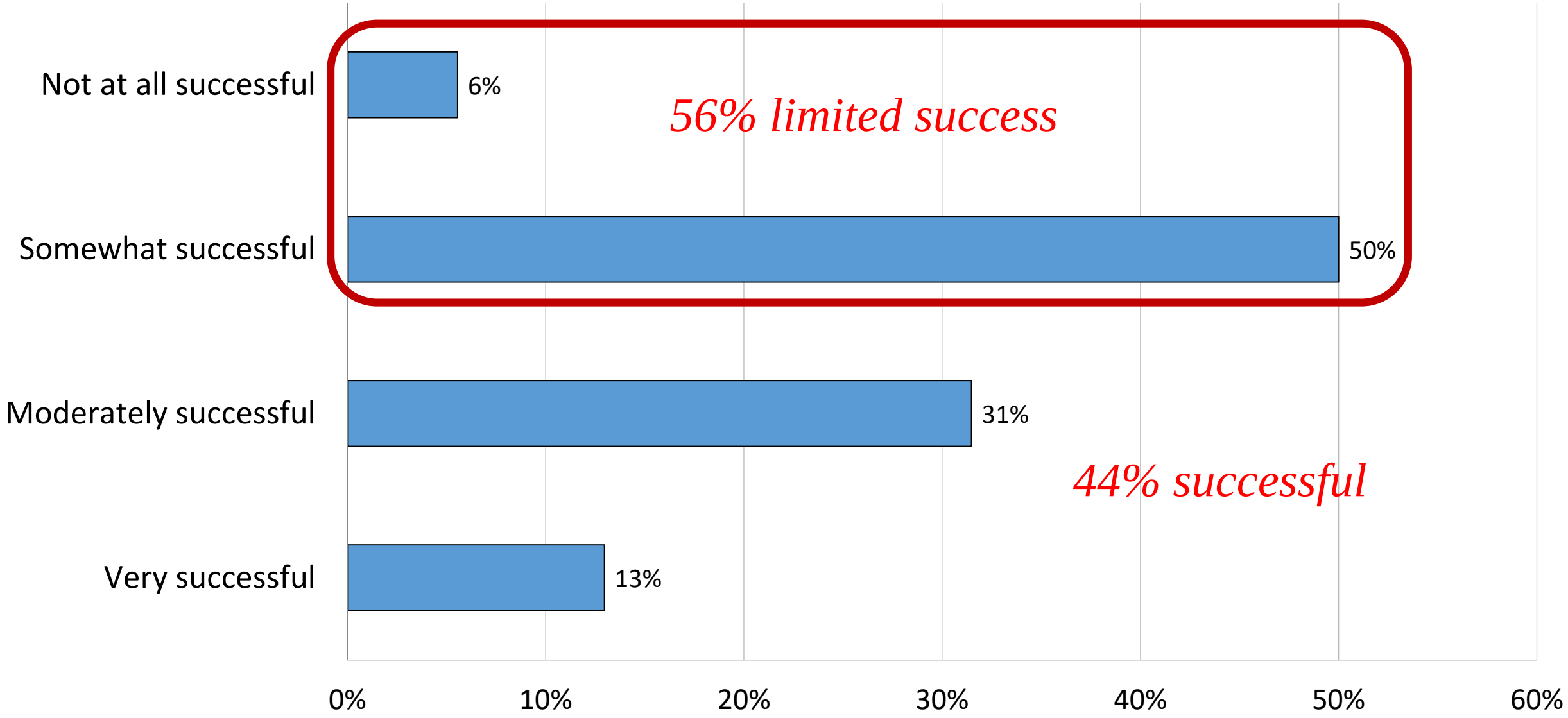
APPLYING SOCIAL SCIENCE

*Social science is used **often** in F&WL health research*

Rarely used in climate change & invasive species research (never-to-sometimes)

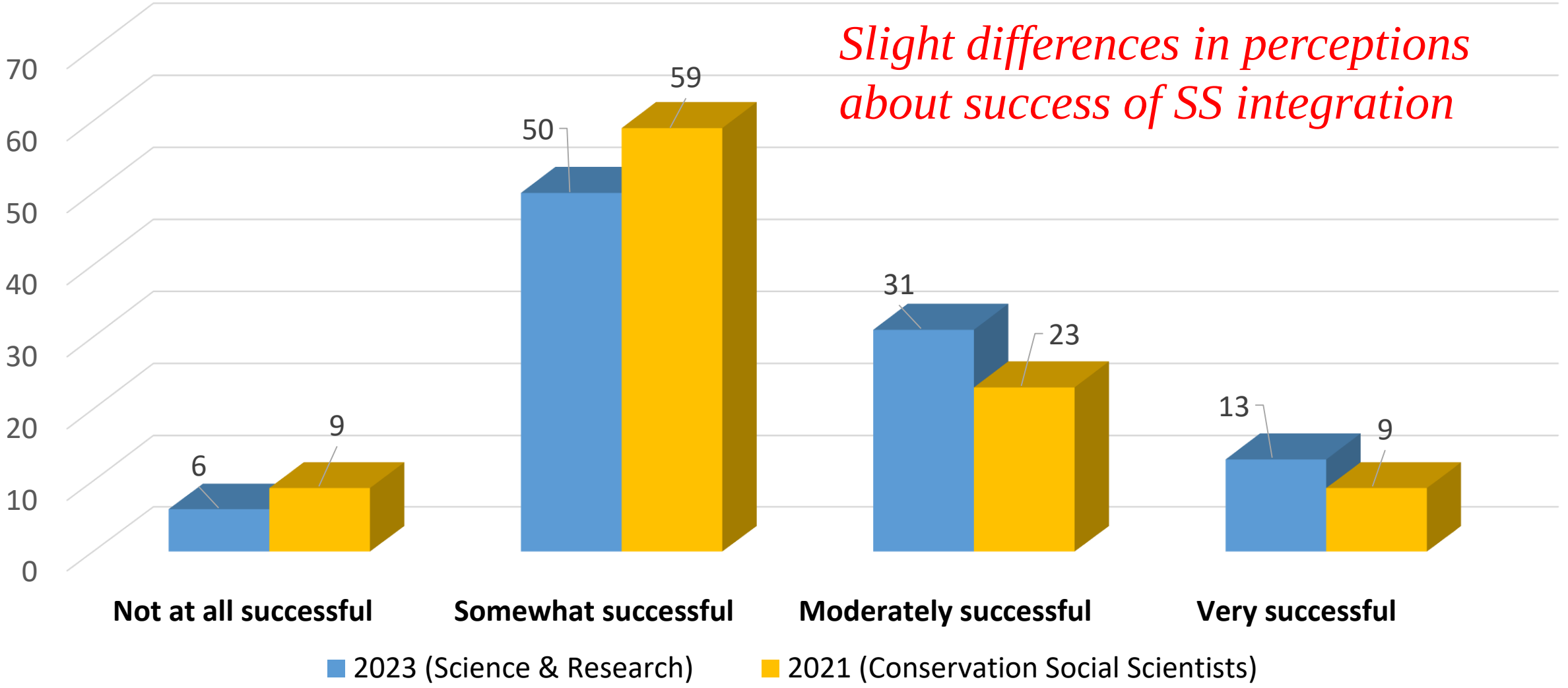


INTEGRATING SS: SUCCESS?

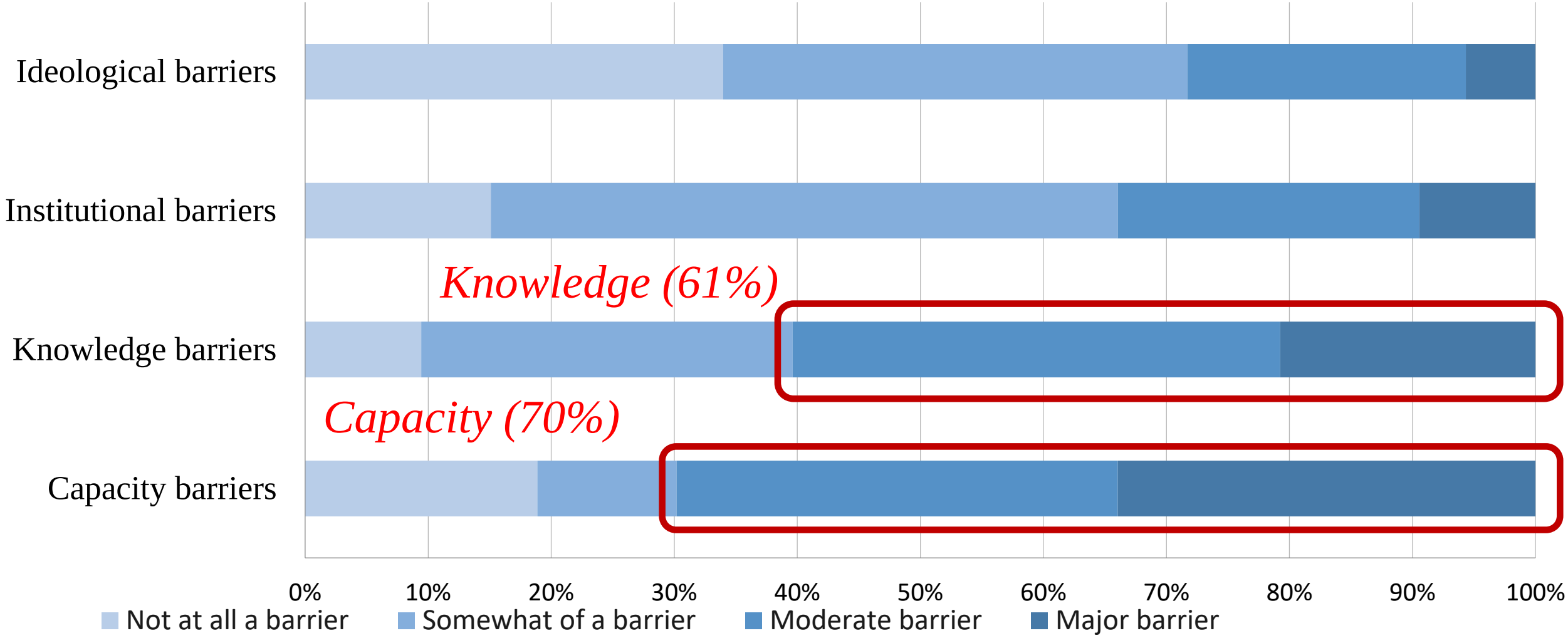


INTEGRATING SOCIAL SCIENCE: SUCCESS?

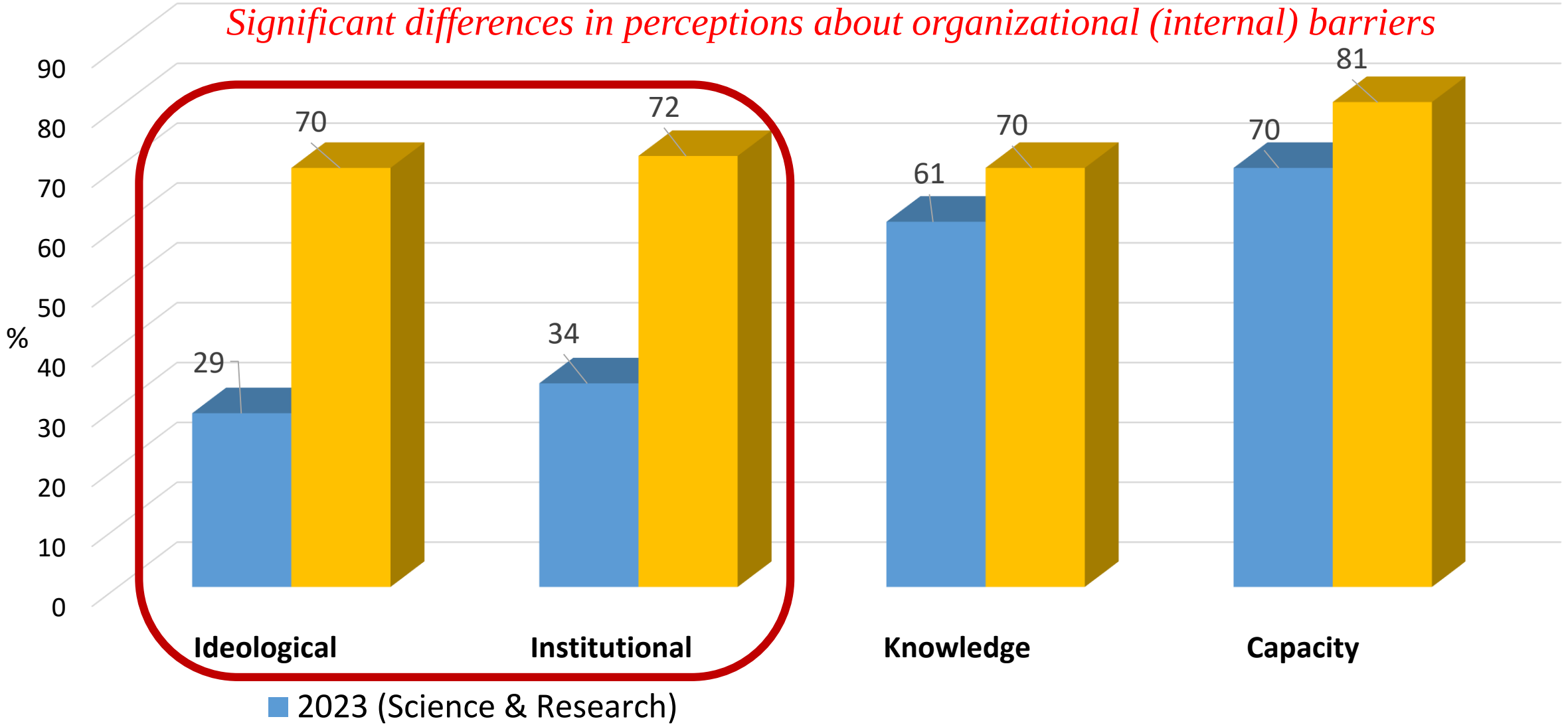
Slight differences in perceptions about success of SS integration



SOCIAL SCIENCE BARRIERS?



BARRIERS TO INTEGRATING SOCIAL SCIENCE



ASSOCIATION of FISH & WILDLIFE AGENCIES

DISCUSSION (Q&A)