# Chesapeake Governance Study: Report of 2021 Decision Maker Interview Results

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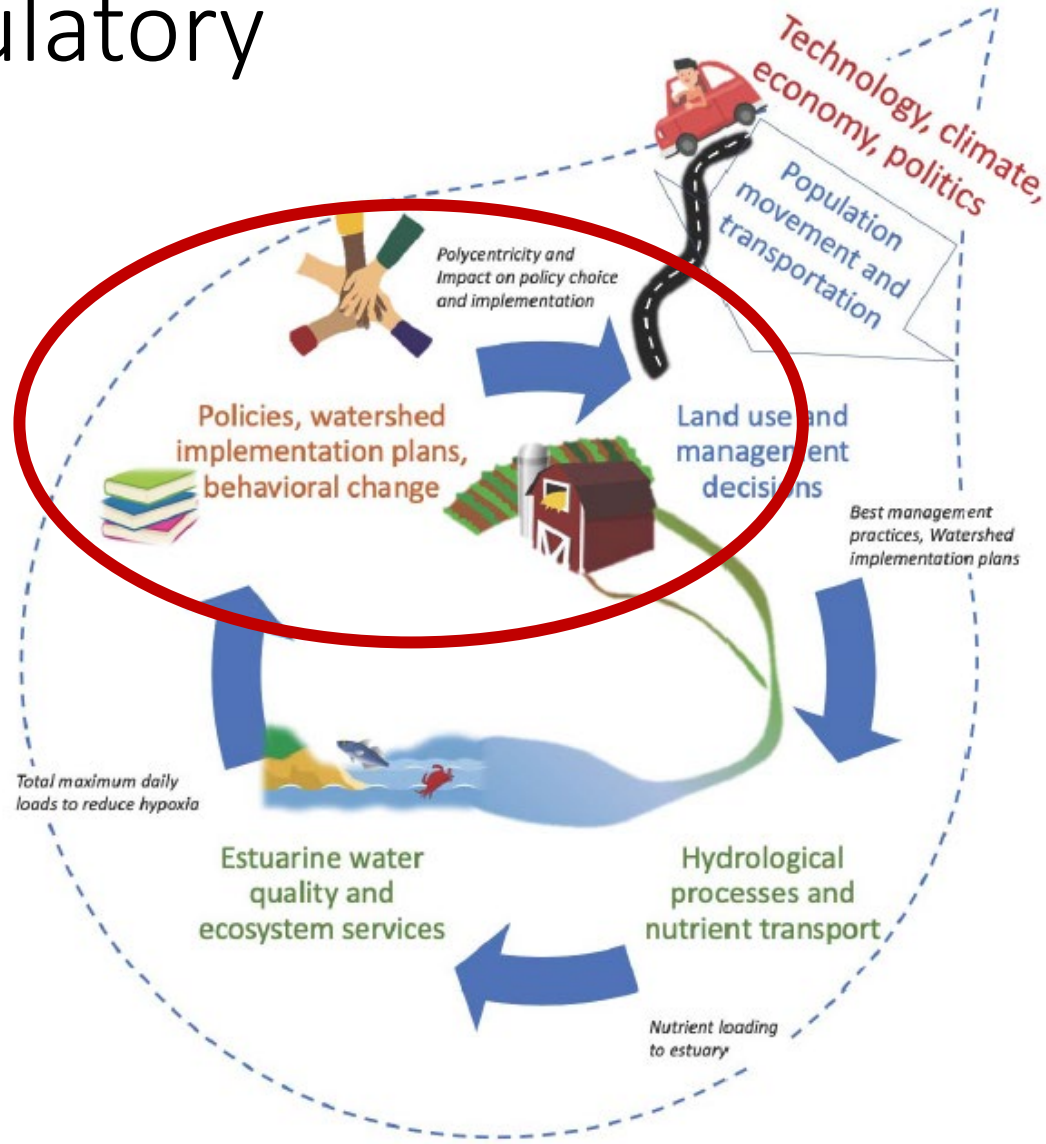
# Modeling the dynamics of human and estuarine systems with regulatory feedbacks (NSF #2009248)

Understanding Connections/Feedbacks

Projecting Future Scenarios

Leverage Points to Improve Governance



# Big Picture

- Methods/Data
- Effectiveness
- Challenges & Opportunities
- Equity & Legitimacy
- Compare w/ CESR

CESR = GREEN

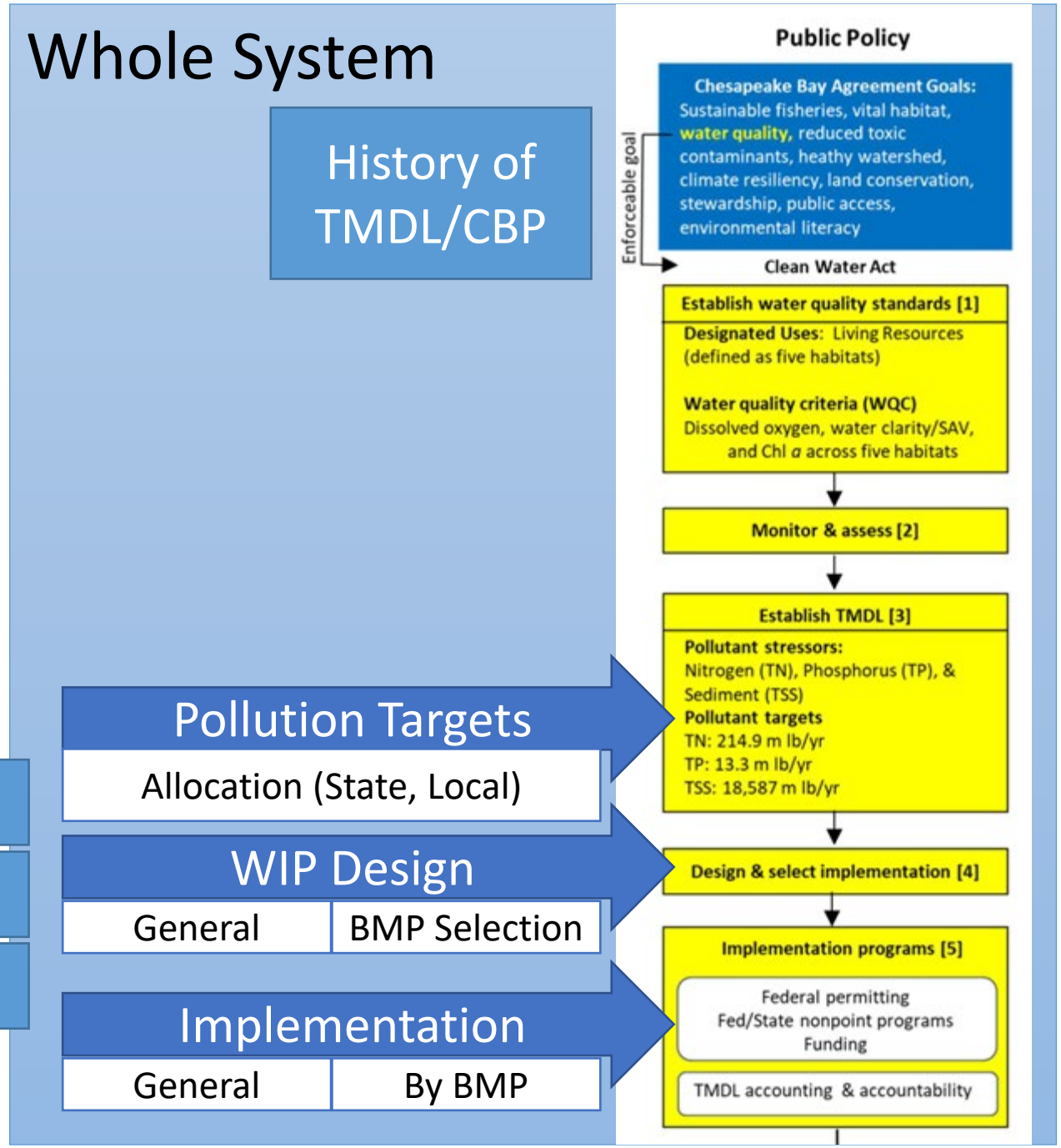
Funding

Modeling

Lawsuits

## Whole System

History of TMDL/CBP



# Methods/Data

- 59 Open-ended interviews
  - Decision makers in CWS governance
  - Stratified snowball sampling
  - June-December 2021
- Analysis (Atlas.ti)
  - Blocks → Codes
  - Number of Mentions (M)
  - Co-occurrences (CC)

M = 118 for “Effectiveness”

7 Jurisdictions + Federal + Independent (> 5 per group)

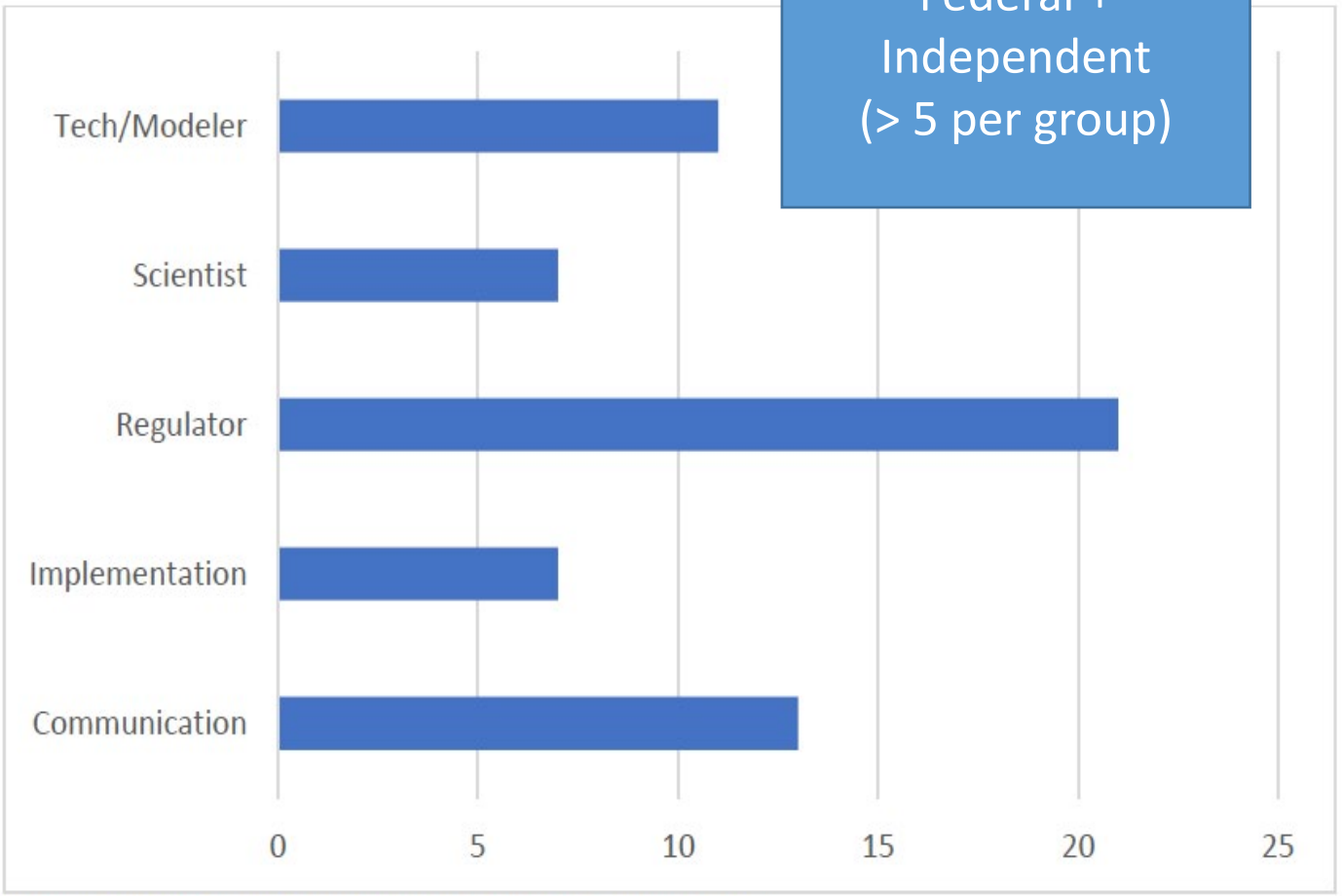
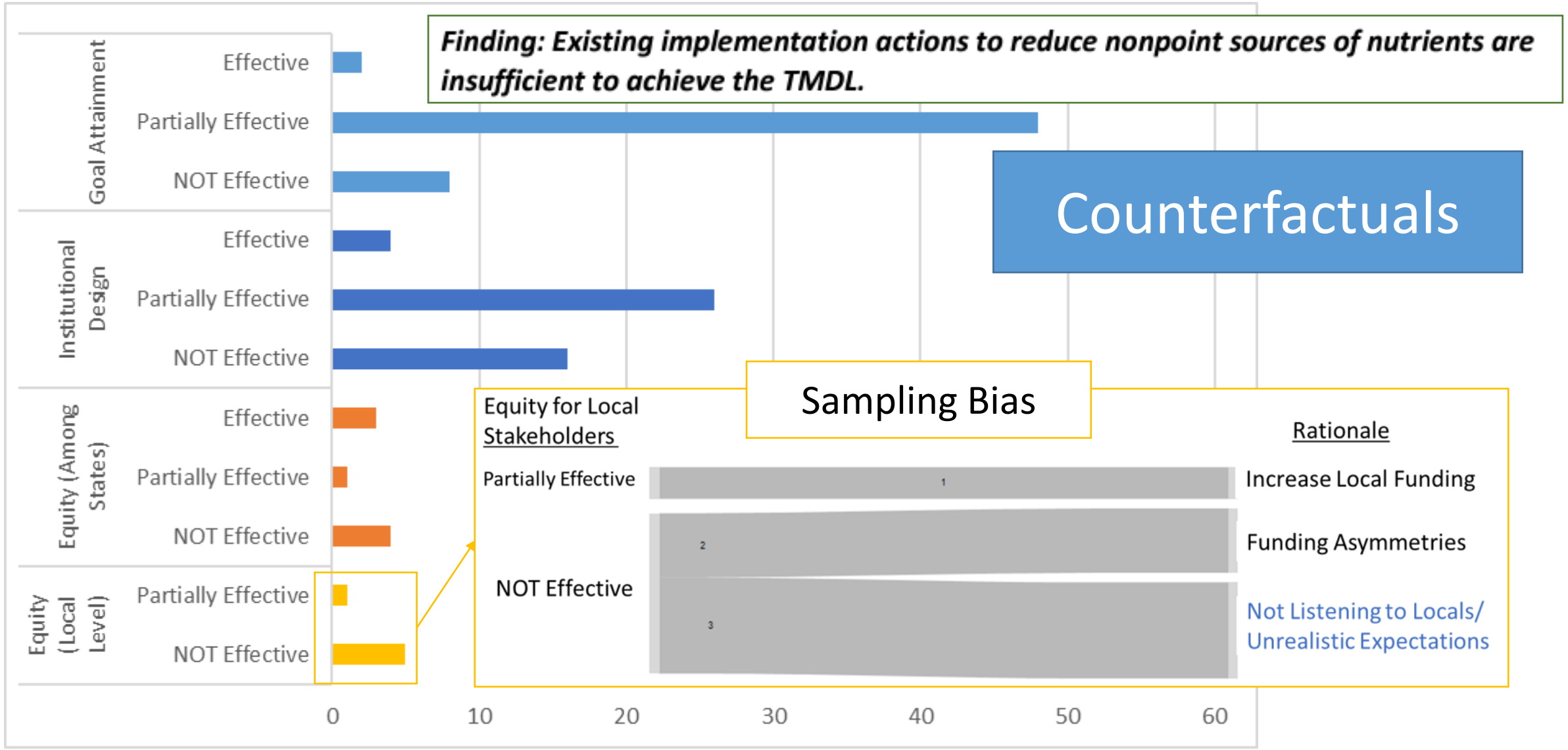
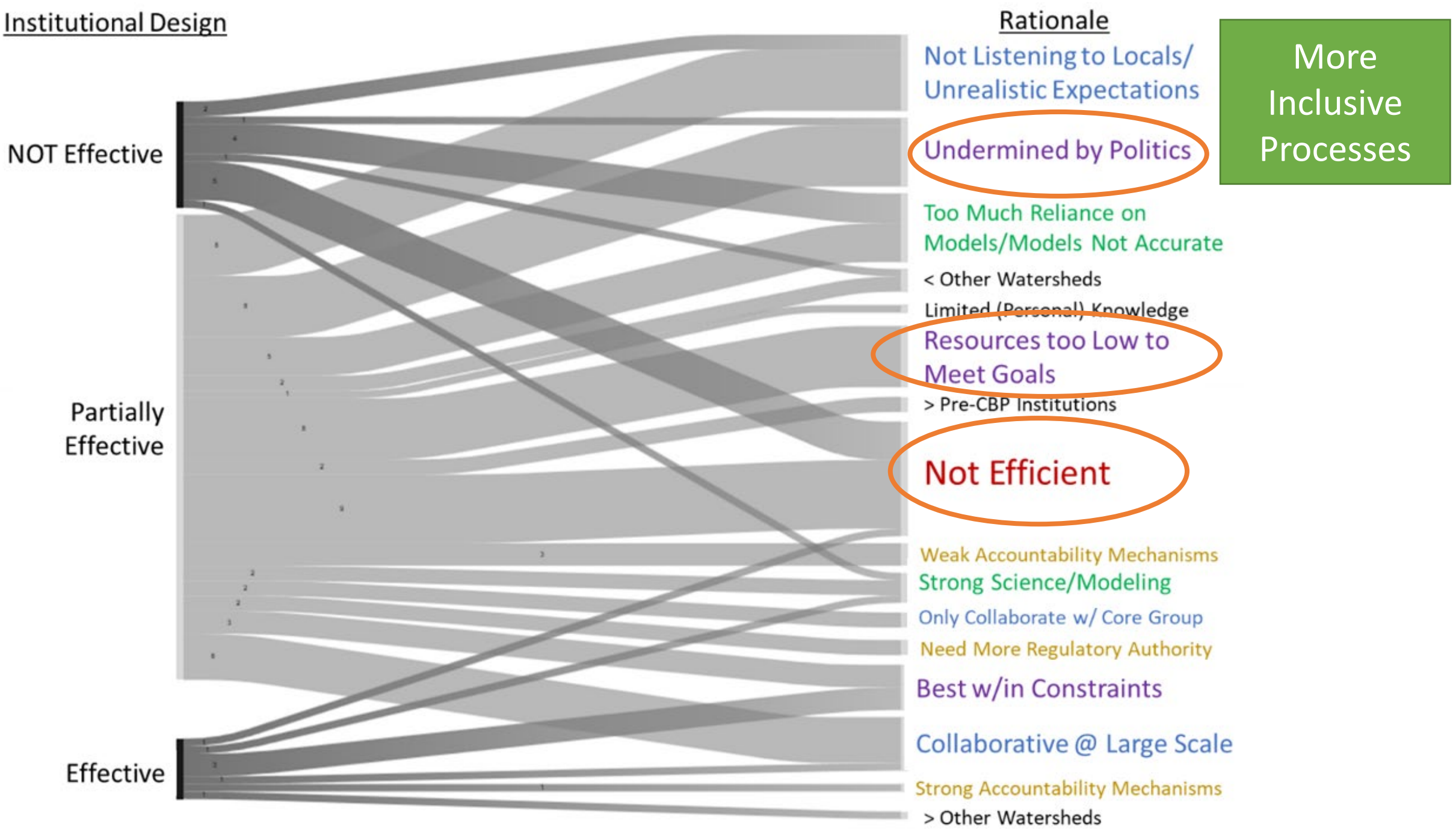



*Figure 90: Number of Respondents by their General Roles*

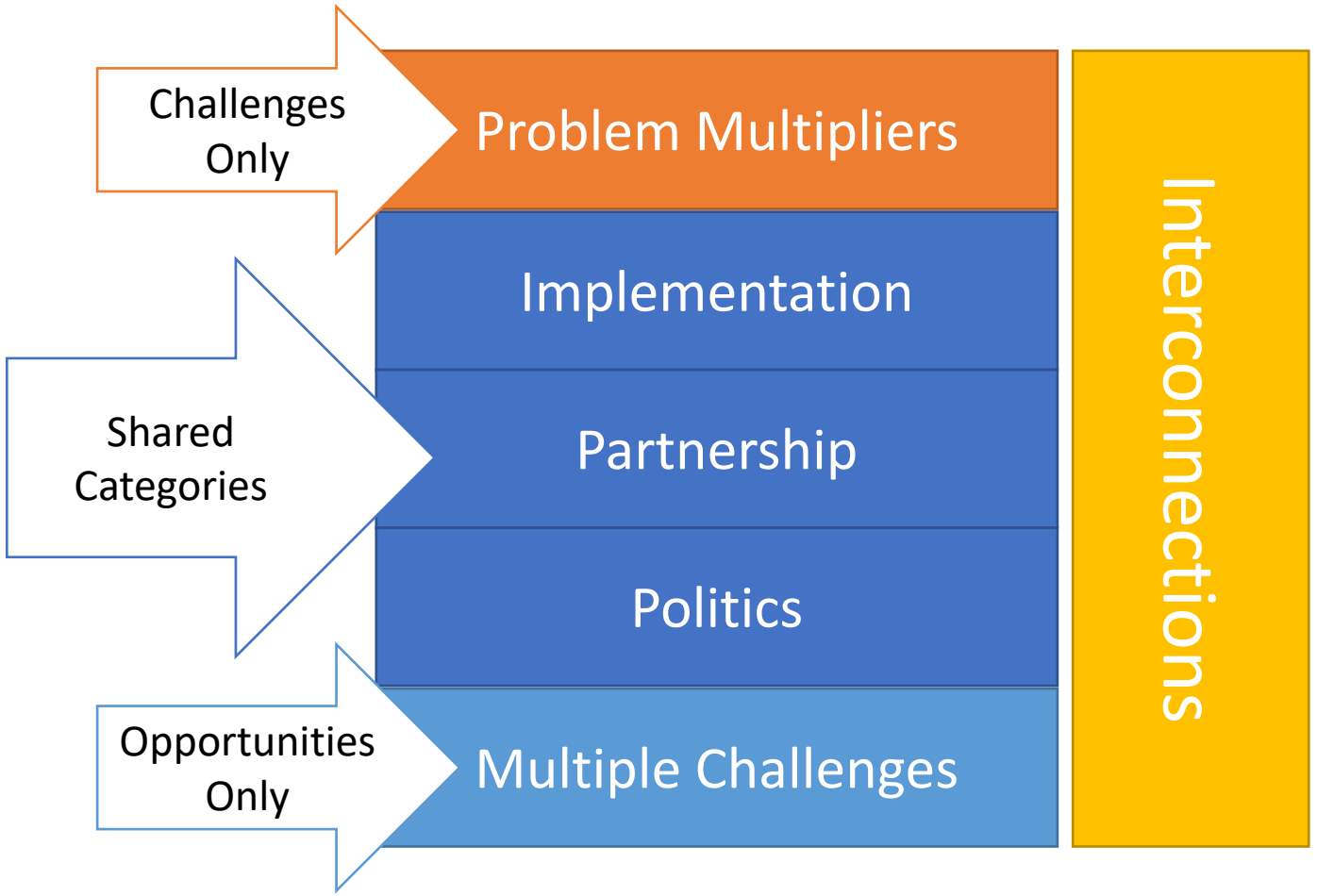
# Effectiveness

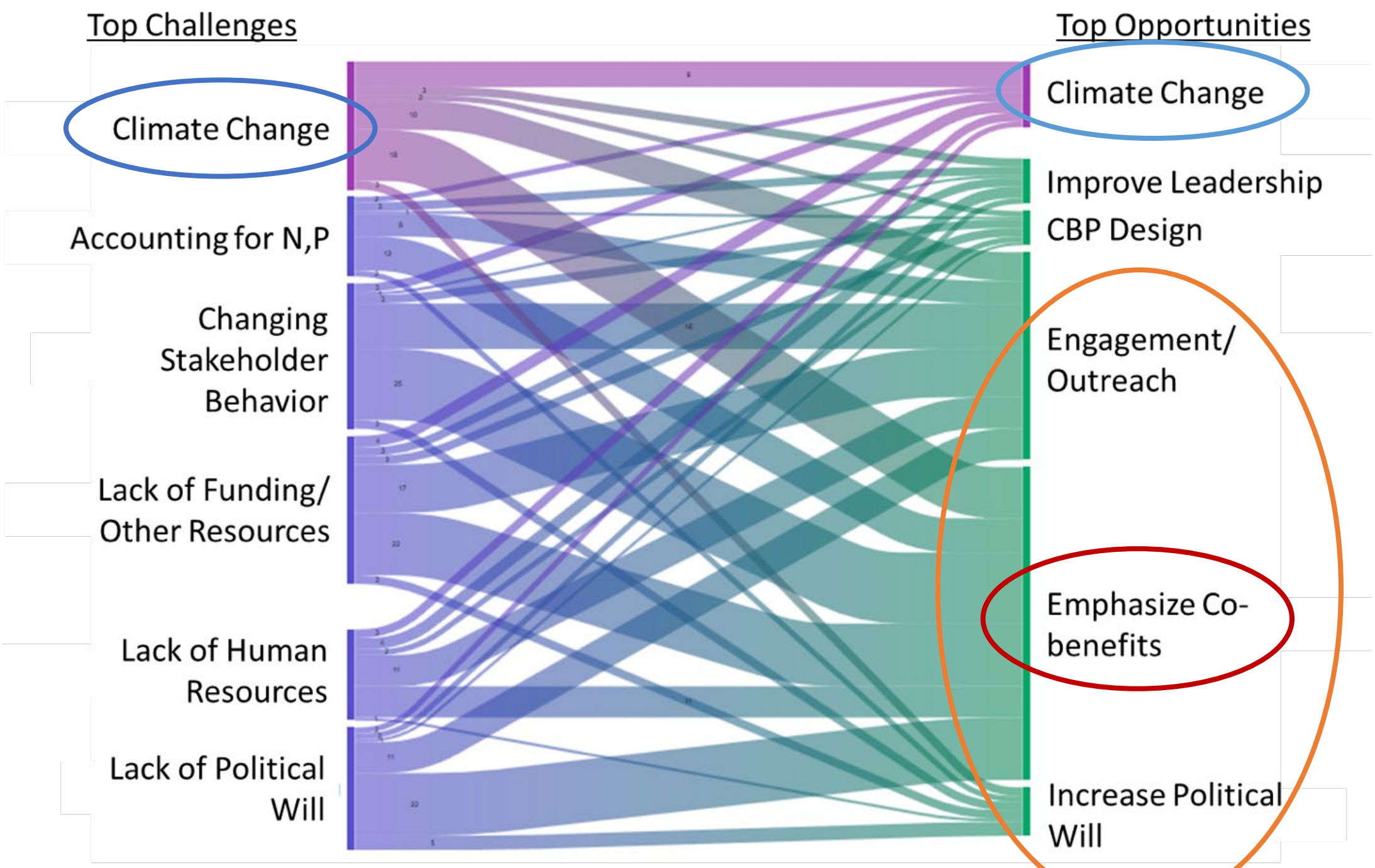



Institutional Design
Rationale
More Inclusive Processes
NOT Effective
Partially Effective
Effective
Not Listening to Locals/ Unrealistic Expectations
Undermined by Politics
Too Much Reliance on Models/Models Not Accurate
< Other Watersheds
Limited (Personal) Knowledge
Resources too Low to Meet Goals
> Pre-CBP Institutions
Not Efficient
Weak Accountability Mechanisms
Strong Science/Modeling
Only Collaborate w/ Core Group
Need More Regulatory Authority
Best w/in Constraints
Collaborative @ Large Scale
Strong Accountability Mechanisms
> Other Watersheds

# Challenges and Opportunities

- Challenges
  - 114 detailed →
  - 42 types →
  - 4 categories
- Opportunities
  - 77 detailed →
  - 26 types →
  - 4 categories




Top Challenges
Top Opportunities
Climate Change
Accounting for N,P
Changing Stakeholder Behavior
Lack of Funding/ Other Resources
Lack of Human Resources
Lack of Political Will
Climate Change
Improve Leadership
CBP Design
Engagement/ Outreach
Emphasize Co-benefits
Increase Political Will

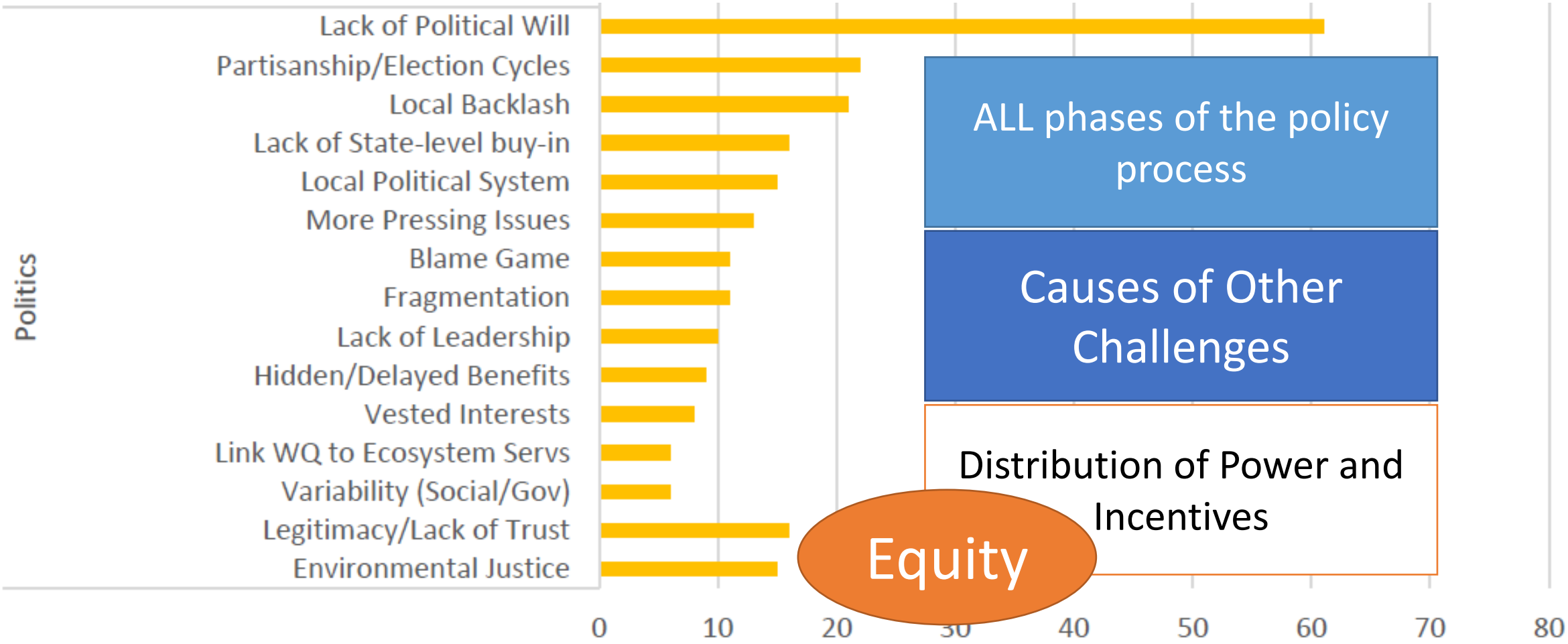
# Top 3 Co-Benefits

From 15 Types of Co-beneifts

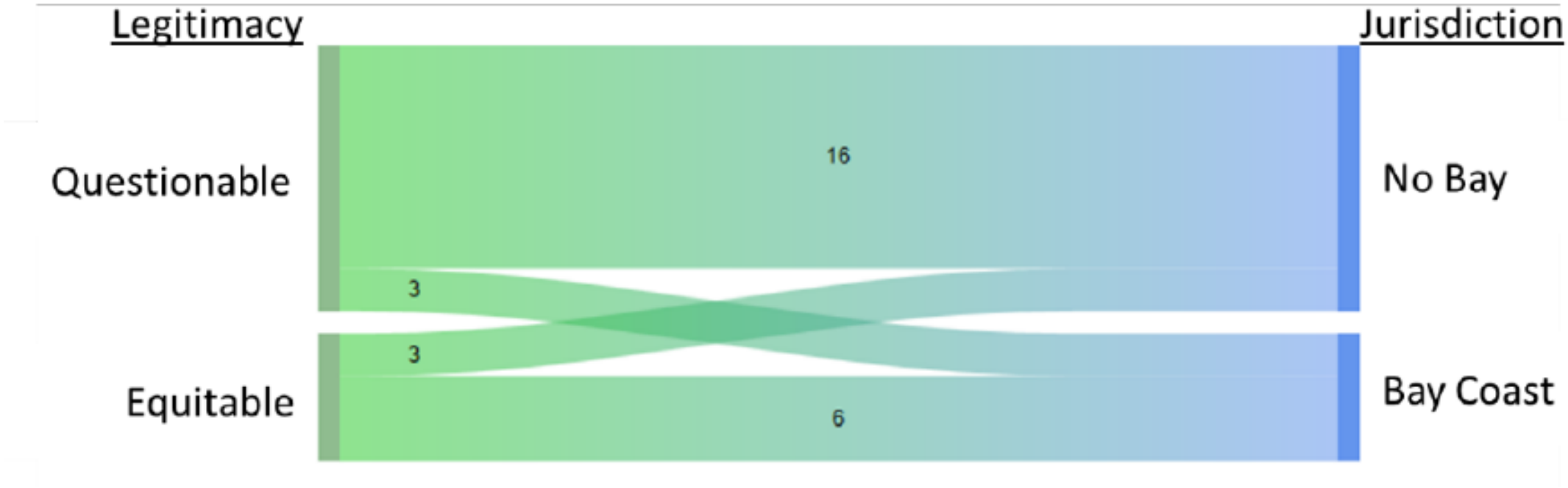
- Reduce flooding
- Improve local water quality
- Increase profits for agriculture

Species/Ecosystems are on the list, but not at the top

# Political Challenges

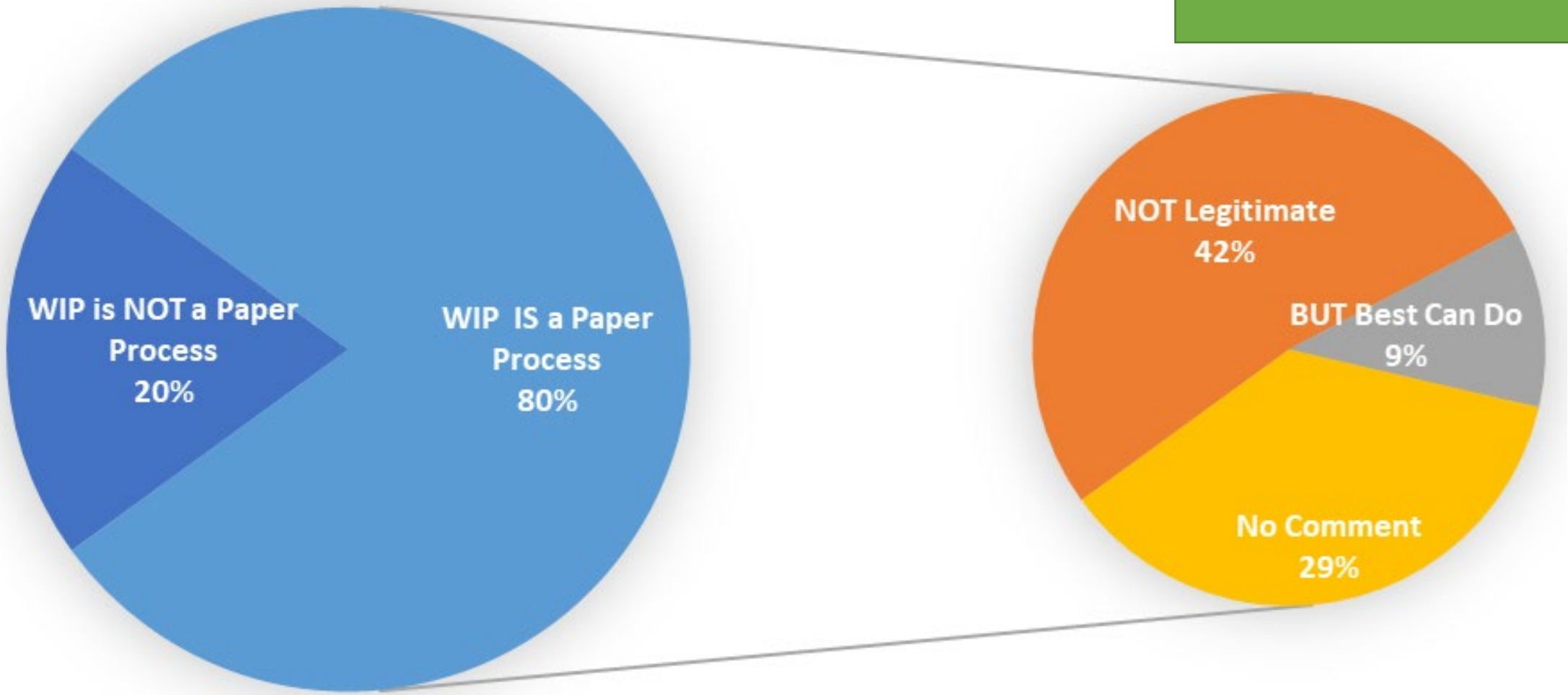


# Legitimacy: State-Level Equity

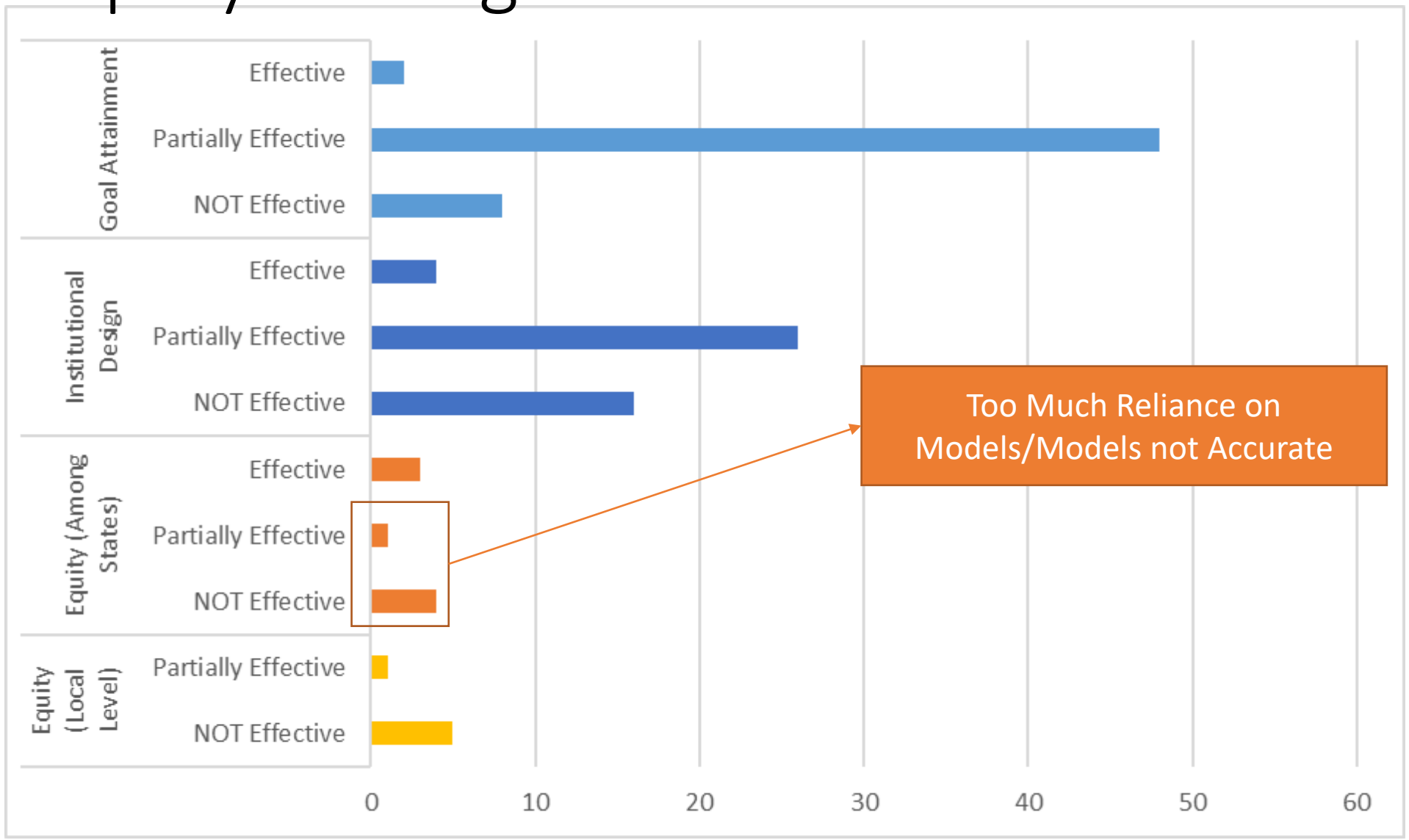


# Legitimacy: WIP Design (M = 44)

Change Accounting Process



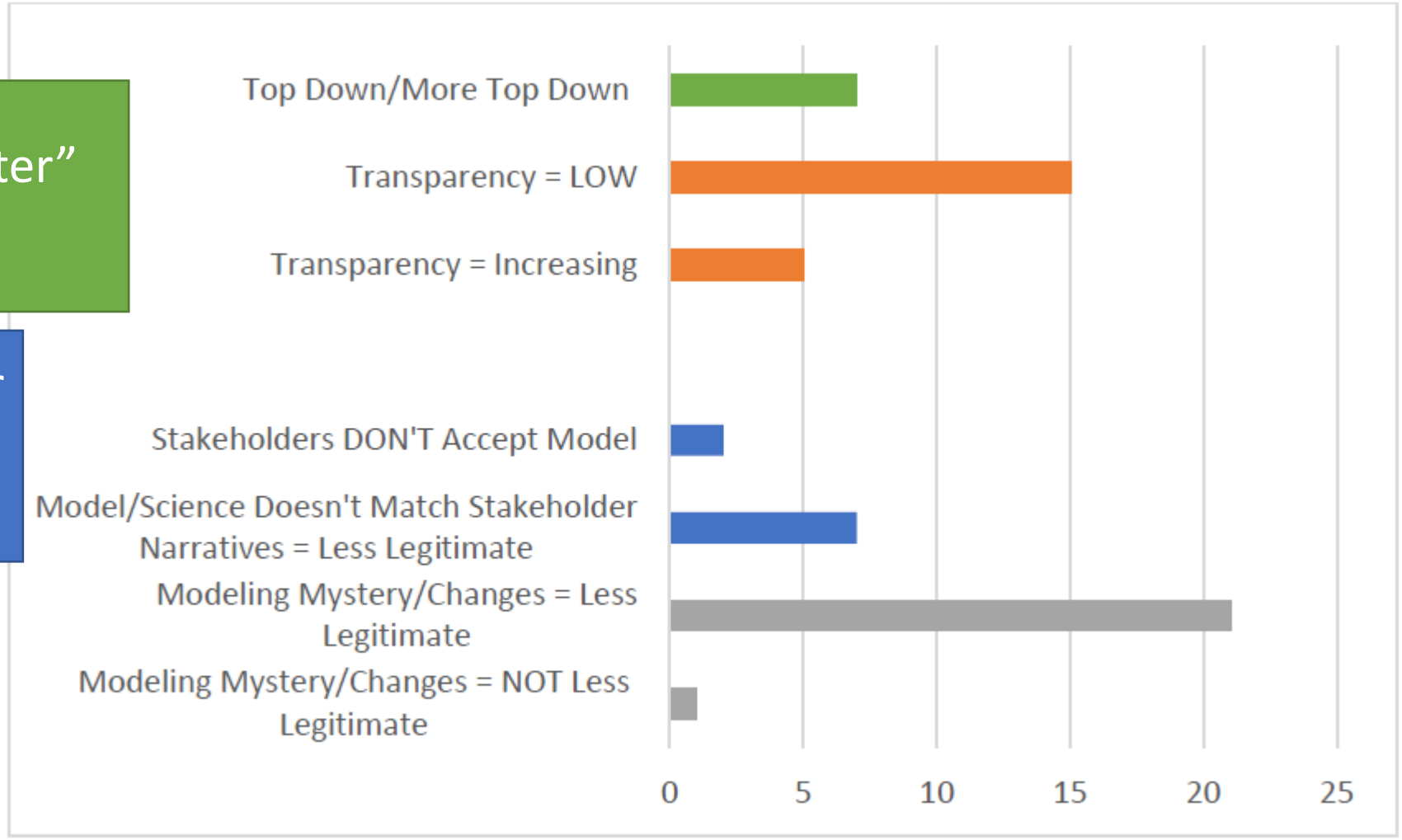
# Equity Among States and Models



# Legitimacy: Models

More AND “Better” Models

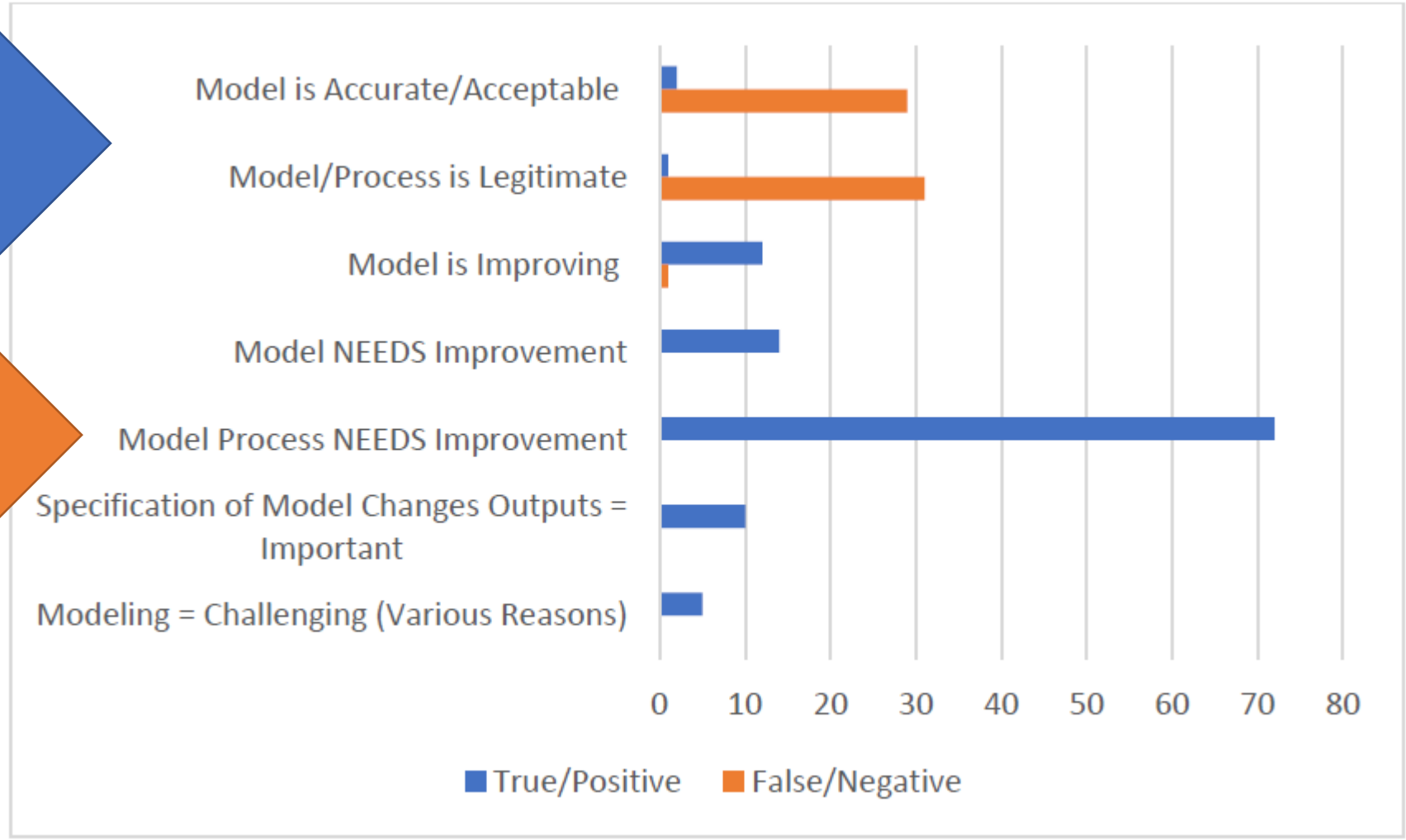
Technically better
vs.
Politically better



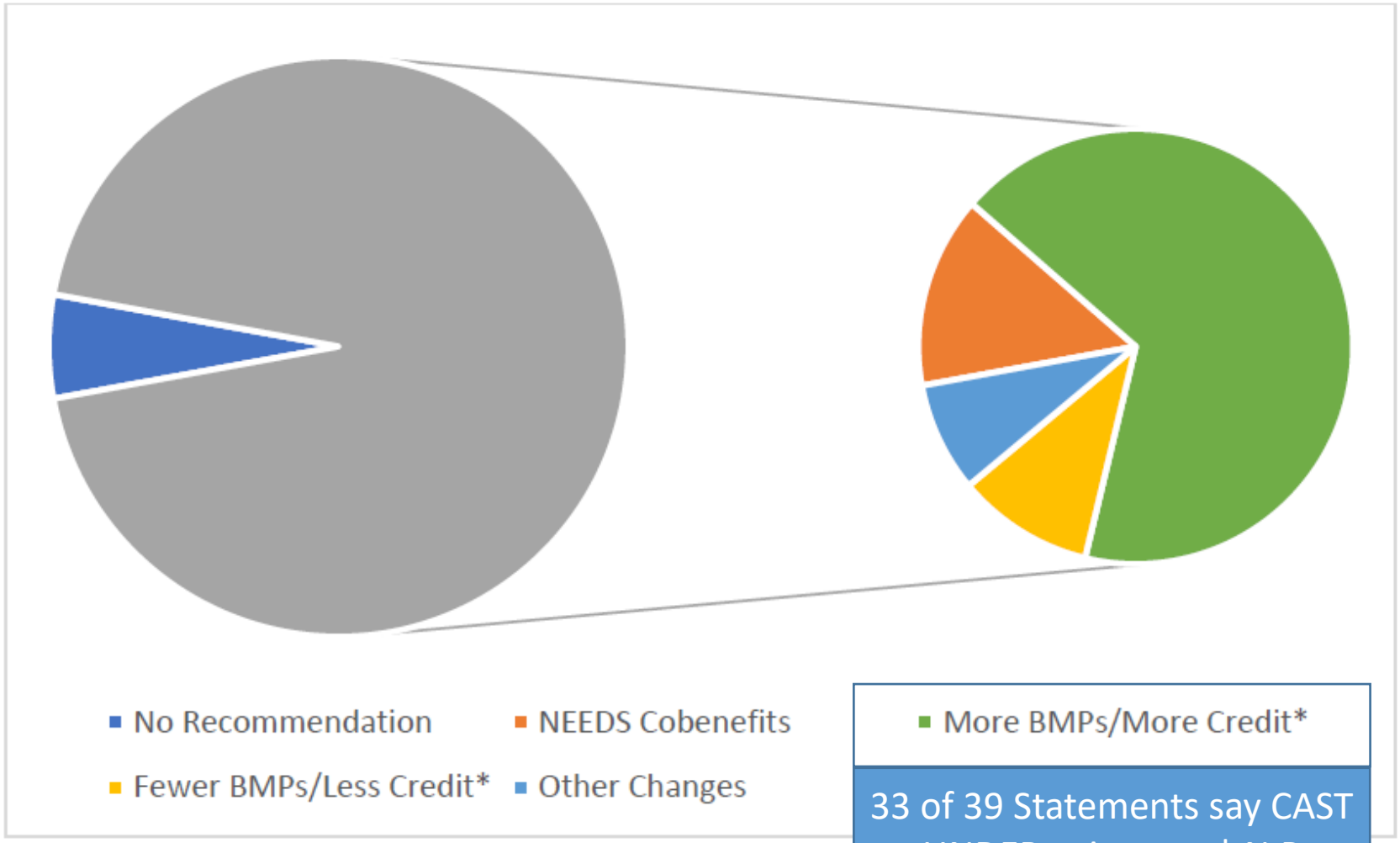
# Models vs. Modeling Process

More negative than positive for both

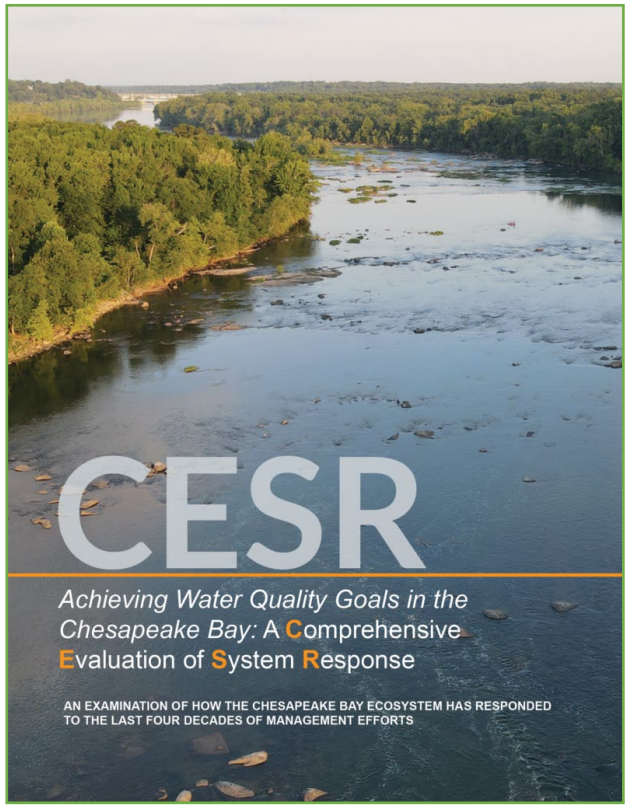
PROCESS improvements mentioned more than MODEL improvements



# Proposed Changes to Model(s)



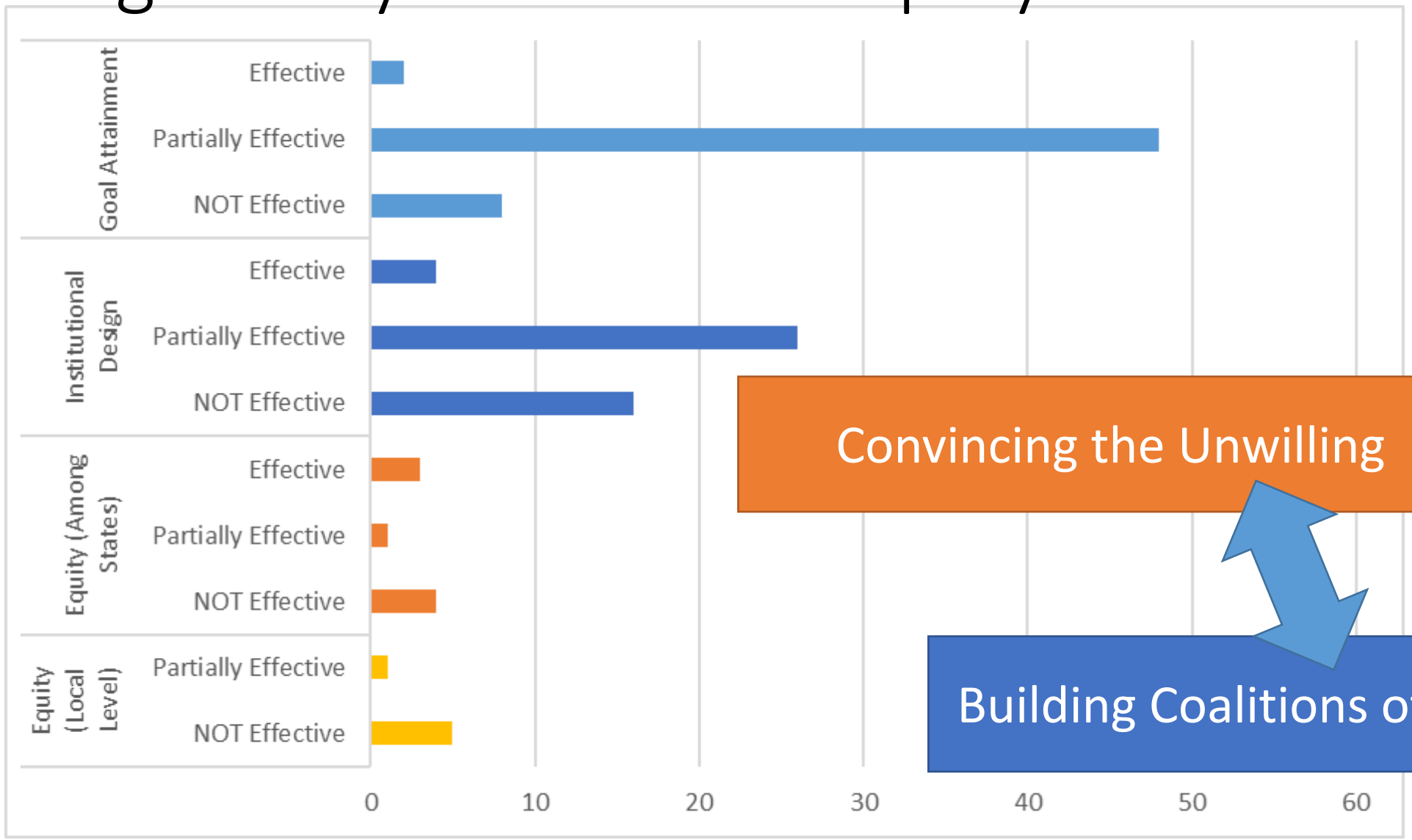

33 of 39 Statements say CAST UNDERestimates ↓N,P




Response Gap

Implementation Gap

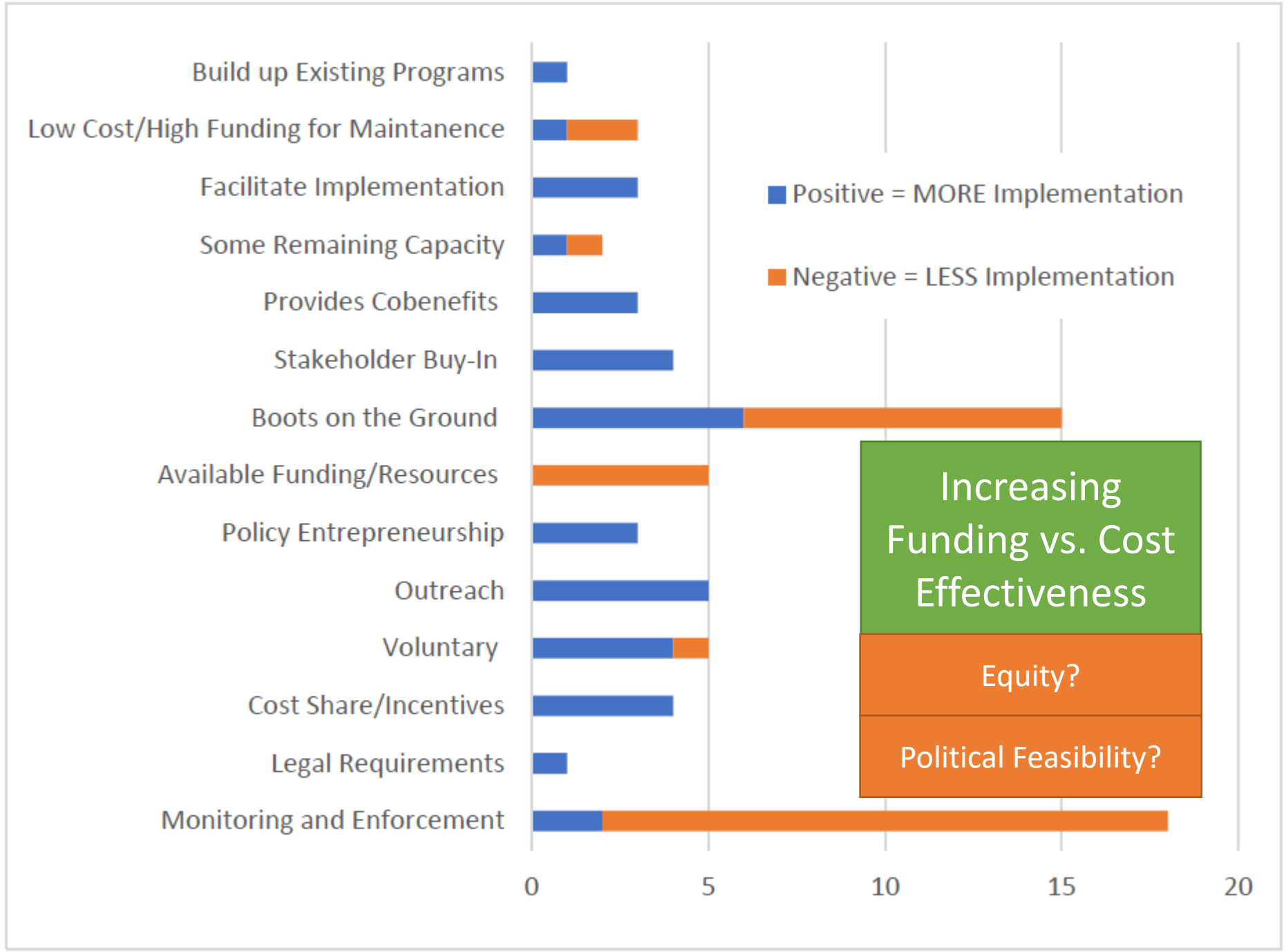
# Legitimacy: Local-level Equity




Convincing the Unwilling

Building Coalitions of the Willing

# Factors Affecting Implementation (General)



# Acknowledgements



**CNH2-L # 2009248**

Colleagues who started the snowball sample

59 People who answered my questions!