

Eliciting Value Preferences of Ecosystem Goods and Services Produced by NNBFs

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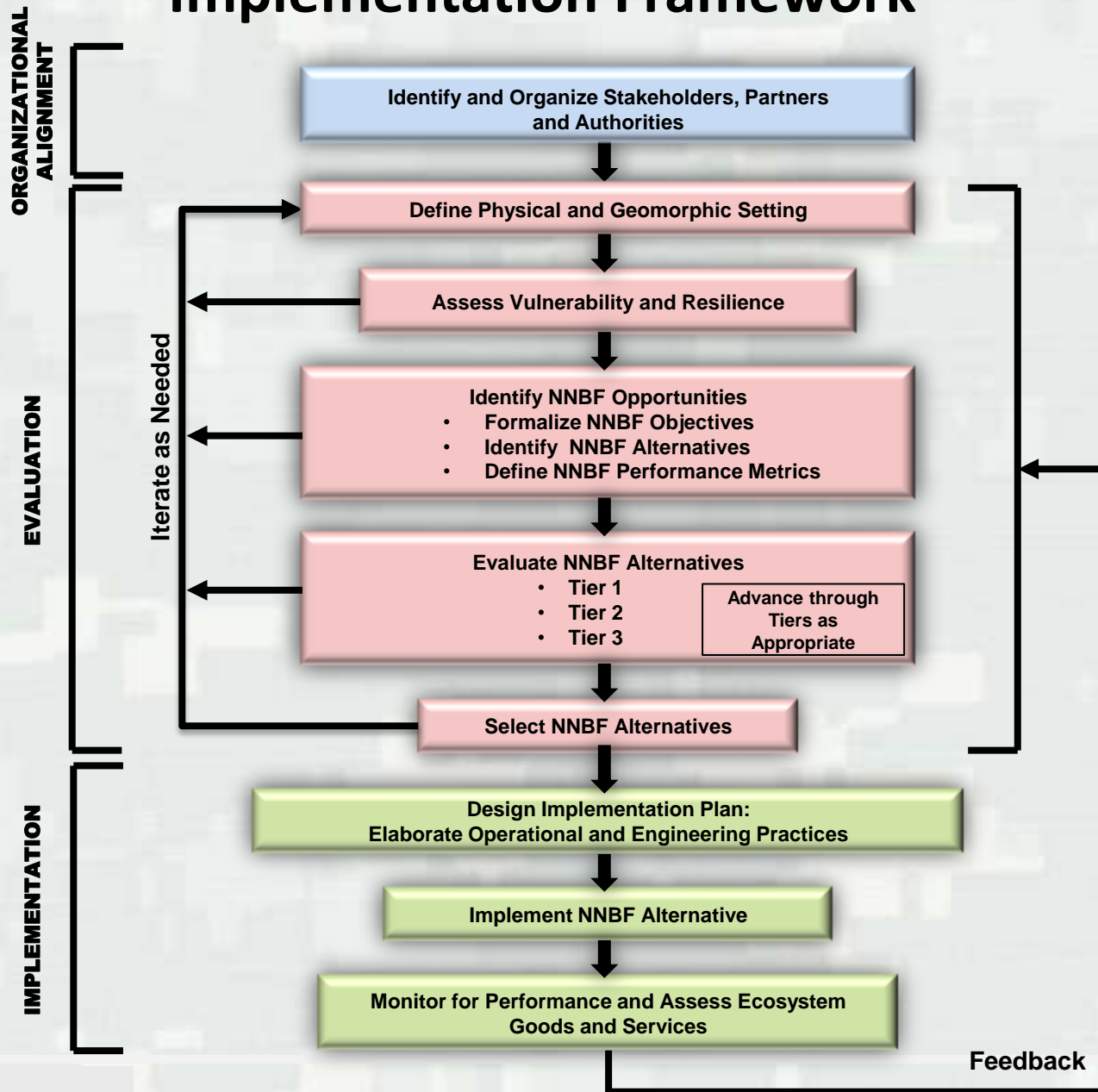
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US Army Corps of Engineers
BUILDING STRONG[®]



Natural and Nature-Based Features Evaluation and Implementation Framework



We Need Your Help!

- **21** ecosystem goods and services associated with NNBF
- How **important** are they to your organization?
- **Your organization's opinions count!**
- **Goals for Today:**
 - **Help identify** the ecosystem goods and services that matter most as we consider future investments in developing the framework and collecting associated information to support the framework
 - **Help focus** dialogue with your organization going forward
 - **Help identify** partner/collaborative opportunities on future projects



Instructions

Question:

From the perspective of the organization you are representing, on a scale of 0 to 100, indicate how important it is to consider each of the following ecosystem goods and services when determining whether and how to include natural and nature-based features into NACCS recovery efforts.

- Please fill in your personal information
- When communicating results, data will not be attributed to individuals
- Next to each metric, fill in a score in the Importance column
 - 100 = extremely important, 0 = not important
- Do not leave any cell blank
- The scores do not have to add up to any particular number
- Ties are okay

Name: Kelly Burks-Copes	Organization/Affiliation: ERDC-EL
Area(s) of Expertise: Ecologist, Planner	

Ecosystem Goods and Services (In Alphabetical Order)	Importance (0-100 scale)
Aesthetics	10
Biological diversity	0
Carbon sequestration	90
Clean water provisioning	100
Commercial harvestable fish and wildlife production	15
Cultural heritage and identity	100
Education and scientific opportunities	60
Erosion protection and control	20
Habitat for fish and wildlife provisioning	30
Increase or maintain land elevation and land-building	25
Maintain background suspended sediment in surface waters	100
Nutrient sequestration or conversion	15
Property value protection	100
Provision and storage of groundwater supply	50
Raw materials production	20
Recreation	100
Reduce hazardous or toxic materials in water or landscape	10
Reduce storm surge and related flooding	100
Reduce the peak flood height and lengthen the time to peak flood	85
Reduce wave attack	60
Threatened and Endangered species protection	100

Questions?



Preliminary Results

- 48 instruments returned (76% Response Rate)
 - 8* Academics (1 illegible)
 - 13 Consultants
 - 18 Federals
 - 9 NGOs
- Analysis so far:
 - Univariate Stats for each grouping and overall (mean, median, mode, stdeb, min, max)
 - Box & Whisker Plots
- Next Steps:
 - QA/QC
 - Correlation Analysis
 - Suggestions?



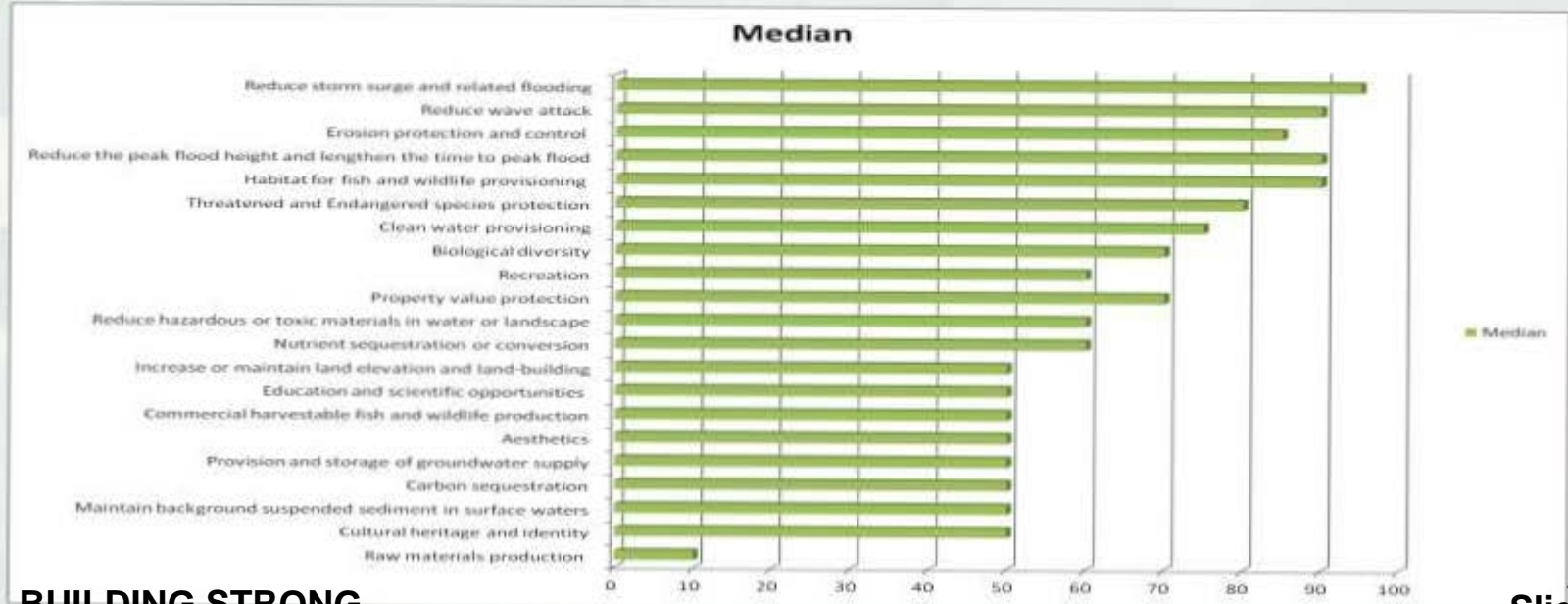
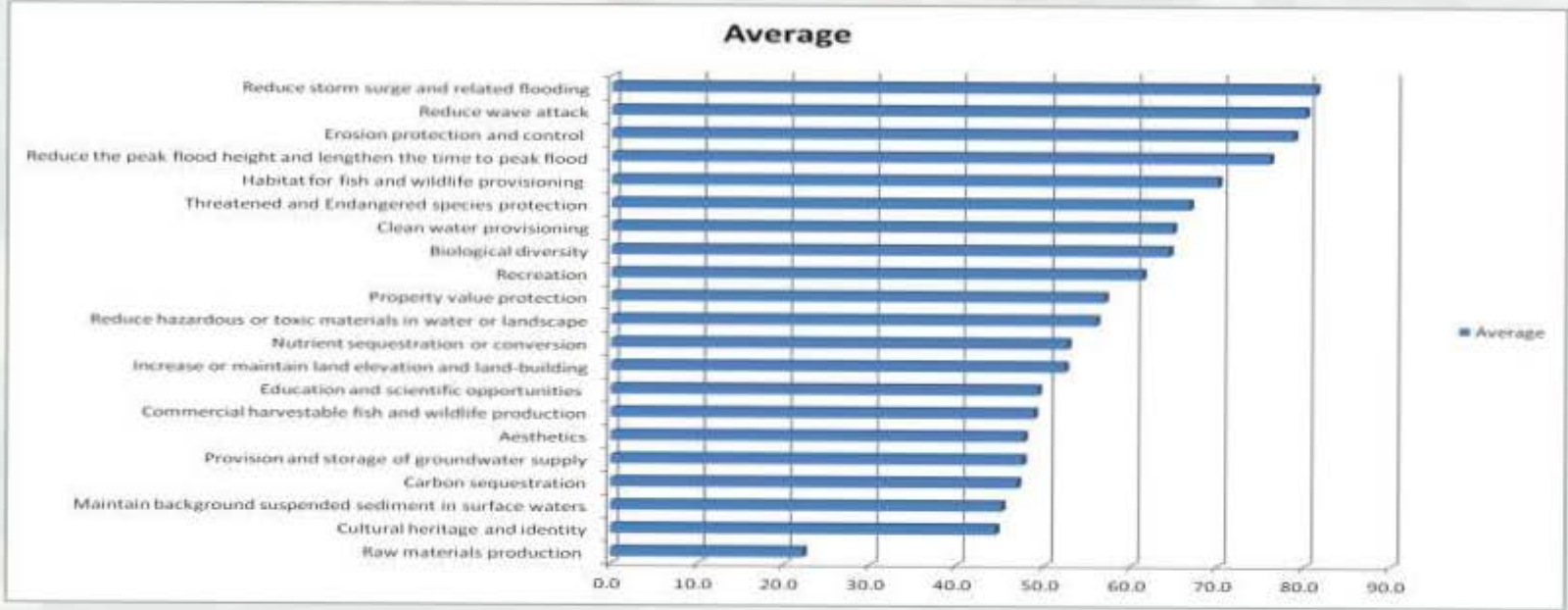
Some Numbers

Max = 81.2 (Reduce storm surge and related flooding)

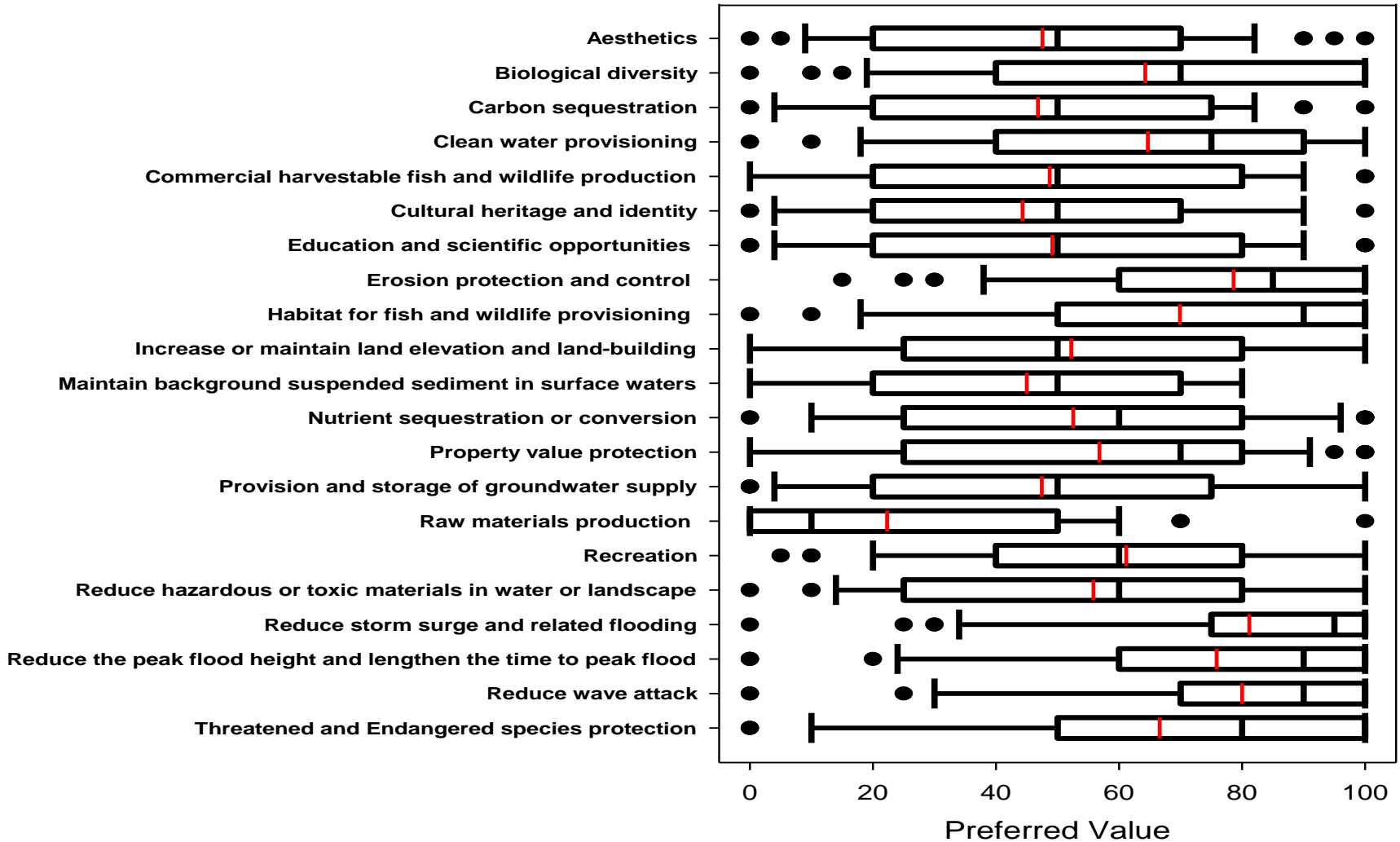
Min = 22.3 (Raw materials production)

Metric	Average	Stdev	Max	Min	Relative Mean	Median	n
Reduce storm surge and related flooding	81.2	25.9	100	0	7%	95	47
Reduce wave attack	80.0	26.8	100	0	7%	90	47
Erosion protection and control	78.6	24.7	100	15	7%	85	47
Reduce the peak flood height and lengthen the time to peak flood	75.9	29.3	100	0	7%	90	47
Habitat for fish and wildlife provisioning	69.9	32.4	100	0	6%	90	47
Threatened and Endangered species protection	66.6	32.4	100	0	6%	80	47
Clean water provisioning	64.7	31.3	100	0	6%	75	47
Biological diversity	64.3	32.0	100	0	6%	70	47
Recreation	61.2	27.4	100	5	5%	60	47
Property value protection	56.8	33.3	100	0	5%	70	47
Reduce hazardous or toxic materials in water or landscape	55.9	32.3	100	0	5%	60	47
Nutrient sequestration or conversion	52.6	31.2	100	0	5%	60	47
Increase or maintain land elevation and land-building	52.2	32.6	100	0	5%	50	47
Education and scientific opportunities	49.1	31.3	100	0	4%	50	47
Commercial harvestable fish and wildlife production	48.7	32.8	100	0	4%	50	47
Aesthetics	47.6	28.8	100	0	4%	50	47
Provision and storage of groundwater supply	47.4	31.2	100	0	4%	50	47
Carbon sequestration	46.8	30.1	100	0	4%	50	47
Maintain background suspended sediment in surface waters	45.0	26.6	80	0	4%	50	47
Cultural heritage and identity	44.3	29.1	100	0	4%	50	47
Raw materials production	22.3	25.6	100	0	2%	10	47

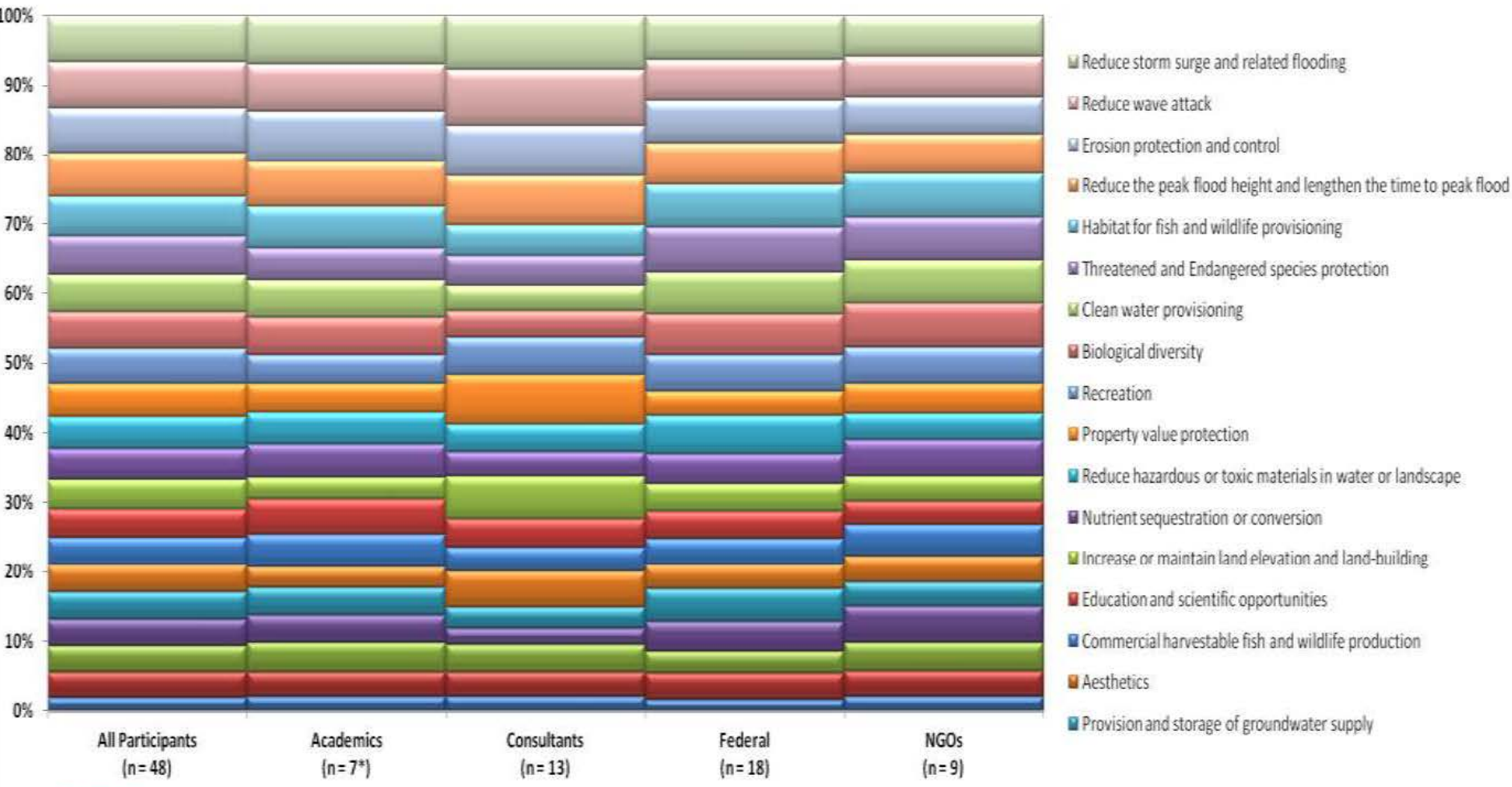
All participants combined



Box and Whiskers – All Participants



Comparisons Across Groups (Relative Importance)



Some Graphics

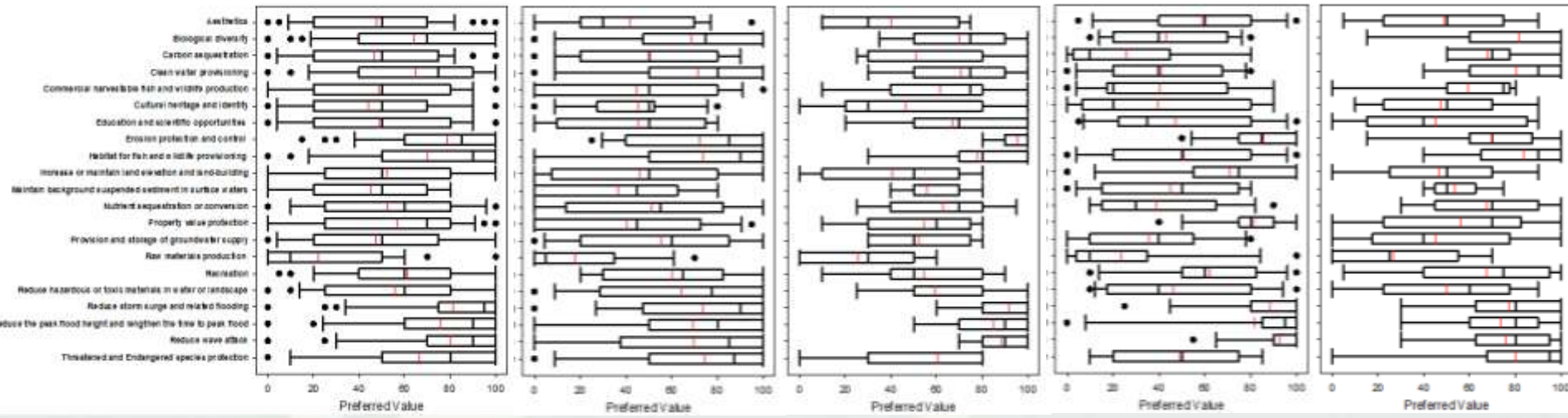
All

Academics

Consultants

Federals

NGOs



All Equal

Nutrient sequestration or conversion **Carbon sequestration**
Education and scientific opportunities
Reduce storm surge and related flooding **Aesthetics**
Provision and storage of groundwater supply **Erosion protection and control**
Reduce hazardous or toxic materials in water or landscape
Reduce the peak flood height and lengthen the time to peak flood
Recreation **Cultural heritage and identity**
Maintain background suspended sediment in surface waters
Reduce wave attack **Increase or maintain land elevation and land-building**
Commercial harvestable fish and wildlife production
Threatened and Endangered species protection
Habitat for fish and wildlife provisioning **Clean water provisioning**
Property value protection **Raw materials production**
Biological diversity



Vs. Weighted

