Ebey Island Restoration Feasibility Study

Revised Criteria and Initial Scoring of Restoration Project Alternatives

Presented to the Advisory Committee

10 August 2010

Washington Department of FISH and WILDLIFE

amec

How We've Listened

- ***28 draft criteria were presented*** and you were invited to comment on them.
- We ***received many helpful comments*** both at the meeting and via written correspondence afterwards.
- Rating team consisted of ***eight members*** of the client/consulting team with ***disparate expertise and backgrounds*** (biology, agriculture, planning, public outreach, engineering, management, etc).
- Discussed each to make sure each team member ***thoroughly understood what the criteria meant*** in terms of importance to each of their proponents.
- We have ***reviewed all these comments*** and ***incorporated them*** as were able; though realize that some of them contradicted others, and thus we tried to ***balance interests*** as best we could.

Outcome

- Biggest change you'll notice is the ***reduction of the number of criteria***, down to 6.
- Some were eliminated as non-determinative (i.e., didn't make a noticeable difference in the overall scores).
- ***Majority were combined into three criteria*** based on the specific topic (fish, ag, and recreation). This was done ***by creating formulas*** that incorporated measurable aspects of the major topics. (see handout for details)
- ***Three new alternatives*** were also created to incorporate ideas generated through the Advisory Committee.
- ***Metrics were then created*** for each of the criteria, normalized to a 4-point rating, and multiplied by its weighting factor as developed through the pairwise comparison.

Final Draft Criteria

- **Value to Fish** – formula accounting for
  - area of restored areas
  - tidal processes
  - connectivity to the riverine processes
  - fish access and connectivity to the mainstem
- **Ag Productivity** – formula accounting for
  - agricultural acreage
  - function
  - contiguity and
  - impacts to DD1

Final Draft Criteria (cont.)

- **Economic Effects on Diking District** – measurement of change in the ratio of length of dikes to area of land protected from flooding
- **Impacts on Road System** – comparison of the relative effects on public roads and adjacent bike trails, based on classification of the road and length affected
- **Impacts on Utilities** – review of whether utilities would be impacted and, if so, whether they are major (e.g., pipelines) or minor (e.g., standard utility poles) and the relative ease/difficulty of relocating, maintaining, or flood-proofing

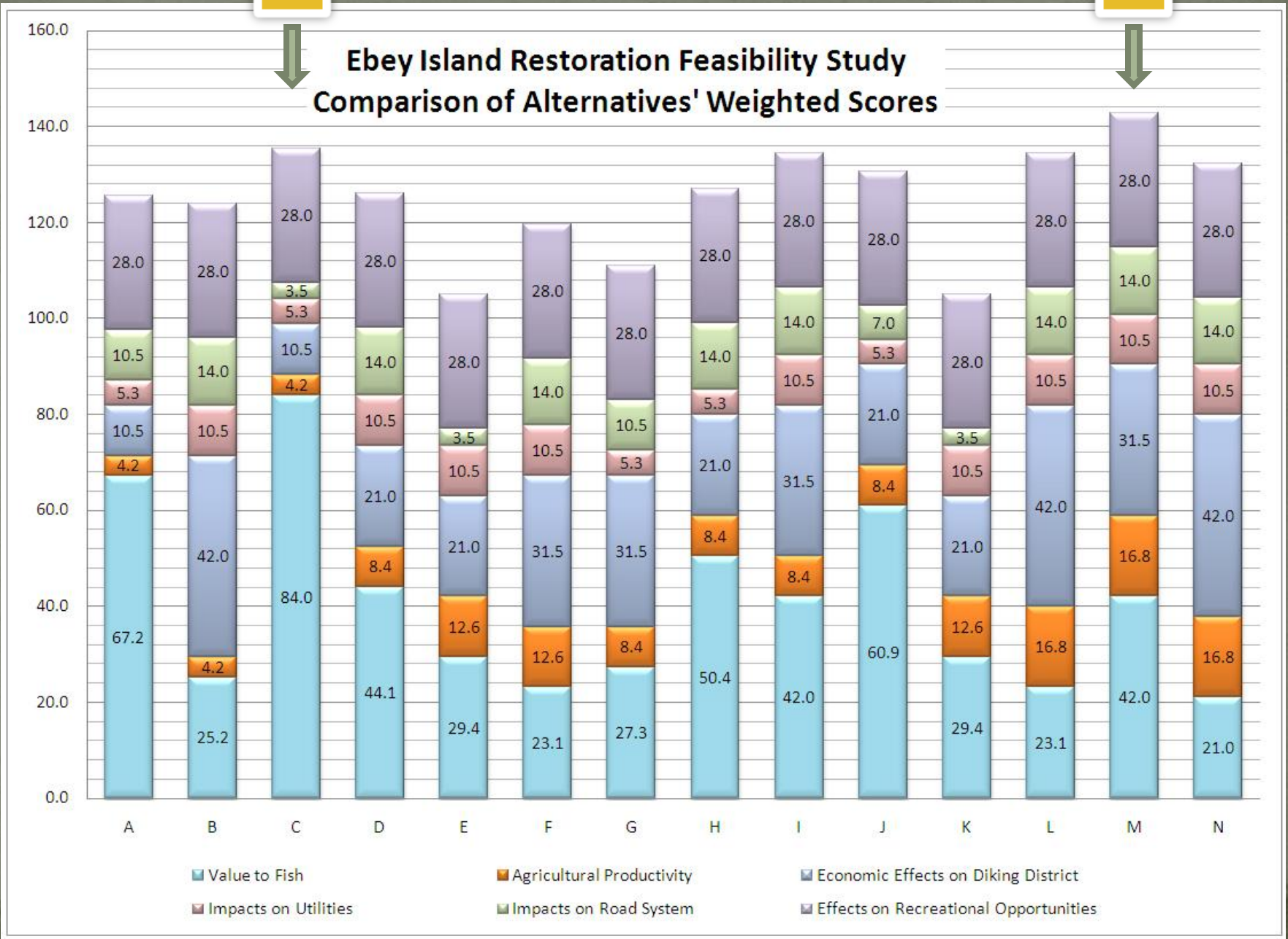
Final Draft Criteria (cont.)

- **Impacts on Recreational Opportunities** – analysis of potential effects the project will have on opportunities for:
  - fishing
  - hunting
  - boating
  - hiking/walking and
  - bird watching
- In essence, making a judgment as to whether any recreational opportunities would be lost, gained, or unaffected

Pairwise Comparison

- Each of the team members was provided a pairwise comparison chart and asked to ***independently*** judge, for each of the criterion, which was more important compared to the others.
- No one saw each others' scores, and they varied substantially.
- These were tabulated and divided by the sum of the ranking to provide relative weights of each of the criterion.

Pairwise Comparison Results

Criteria	Value to Fish	Agricultural Productivity	Economic Effects on Diking District	Impacts on Utilities	Impacts on Roads	Affects on Recreational Opportunities	Sum of Ranking
Value to Fish	0	1	2	2	1	1	
Agricultural Productivity	8	0	5	4	3	5	
Economic Effects on Diking District	6	3	0	4	1	3	
Impacts on Utilities	6	4	5	0	2	6	
Impacts on Roads	7	5	8	6	0	6	
Effects on Recreational Opportunities	7	3	6	3	4	0	
Total number of times factor checked	34	16	26	19	11	21	
Rank (highest number checked = #1 rank)	1	5	2	4	6	3	21
Weighted Decision Factor (sum of all ranks divided by the rank of the specific criterion)	**21.00**	**4.20**	**10.50**	**5.25**	**3.50**	**7.00**	

Alternatives Scores