

Draft Consequence Table

ENREP.....

September 2024

About Consequence Tables

- A consequence table is a summary matrix illustrating the performance of each alternative (actions or strategies under consideration) on each objective (the things we care about). It is like an executive summary of the relative performance of the alternatives – it presents the key messages about the trade-offs and uncertainties relevant for decision making.
- Importantly, there will normally be supporting information about every cell in the table. This information will help participants put that number or summary statement in context, including understanding what's included and not, the significance of differences across the alternatives, and whether and how uncertainty affects the interpretation of results. The back-up information should provide participants with confidence that the performance expressed in the consequence table is in fact a good summary of how that alternative performs relative to others.

Example Consequence Table

Recall our first meeting with TFW policy we discussed Consequence Tables using the Frank's Tract project as an example. This is an example where multiple technical studies and parameters were rolled up into an index/scale to support policy decisions. In the CT below, the values in each cell are representative of a much larger body of technical work

Objectives	No Action	Concept A	Concept B	Concept C
Navigation	7.4	6.1	7.2	7.3
Recreation	2.3	5.3	6.1	5.6
Local Economy & Community	4.5	5.2	6.2	6.4
Ecology	2.5	6.0	6.2	6.0
Water Quality & Supply Reliability	3.3	7.3	7.0	6.7
Flood Protection	4.0	7.5	7.5	7.5
Construction Impacts	6.0	4.0	4.0	4.0
Total Cost: Construction and O&M	\$	\$\$\$	\$\$\$	\$\$\$

No Action

Concept A

Concept B

Concept C



Open water berm and channel

Central landmass

Eastern landmass

Objectives	Worst	Best	No Action	Concept A	Concept B	Concept C
Ecology			2.5	6	6.2	6
Special Status Species			2.5	6.8	6.2	6.2
Chinook: Tidal Marsh Channel Length			0	122746	131058	132348
Chinook: Tidal Channels Connected to Migratory Path			0	3	2	2
Chinook: Habitat Connectivity			0	1003	759	771
Delta Smelt: LFT Open Water Adjacent to Tidal Marsh			0	113	113	113
Delta Smelt: LFT Tidal Marsh			0	233	233	233
Entrainment Risk: Smelt			5	8	8	8
Entrainment Risk: Salmonids			5	5	5	5
Sportfish Habitat			5.4	6.2	6.5	5.8
Largemouth Bass: Edge length			37178	142569	141434	137490
Largemouth Bass: Shallow water			4562	2250	2453	2384
Striped Bass: Open Water Area			4562	3334	3251	3238
Striped Bass: # Velocity Gradients			2	4	5	3
Conditions for Native Species			1	4	5	5
Tidal Marsh Area			0	1227	1311	1323
Conditions for AIS Spread			1	7	7	7
AIS Colonization Risk			4562	3022	3178	3112
Intertidal Marshplain			0	1227	1311	1323
Intertidal Channels			0	98	105	106
Shallow Open Water			4562	2250	2453	2384
Medium Open Water			0	193	185	155
Deep Open Water			0	891	613	699

ENREP Decision

- Compass is providing support to the AMP/TFW policy committee in preparation for an upcoming decision based on the results from the ongoing ENREP study.
- The final product we are aiming to deliver will be a consequence table specific to the ENREP context, and a plan for how to fill it out (analysis etc..)
- On the next slide, there is a skeleton of a CT that includes the draft objectives and Performance measures that we have developed so far. The work going forward will be to develop a plan for filling out the table....

Empty Consequence Table

Objective	Performance Measure	Unit	Preferred Direction	Untreated	Treatment 1 (Current WAC Rules)	Treatment 2 (more protective)	Treatment 3 (less protective)
Riparian Ecosystem Function							
Instream							
Water Temperature	Change in mean daily maximum	Degrees C	Lower				
Suspended Sediment	Change in mean monthly sediment concentration	mg/L	Lower				
Streamflow	Deviation from baseline	%	Lower				
Primary Productivity	Change in mean monthly primary productivity		Higher				
Aquatic and Riparian Dependent Species							
Benthic Invertebrate Communities	Change in density of benthic communities	mg / m2	Higher				
Amphibian Populations	Change in suitable habitat (proxy)	m2	Higher				
Economically viable Timber Industry							
Operational Costs	Change in cost	%	Lower				
Industry Revenue	Change in revenue	%	Higher				
Long term Asset value	Harvestable Acres	# ac.	Higher				