Conservation Bridge - Cornell University
APPENDIX VIII-B (Sean Callahan, Sara Cullen, Anna Kusler, and Simone Passarelli, Cornell University, Spring Semester, 2012
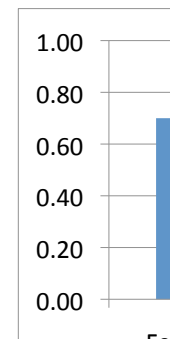Fill in Yellow Cells with Consequences and Weights
Fill in Green Cells with Equations

SIMPLIFIED MATRIX		Treatment (Alternatives)			
Objectives	Goal	Fencing	Insurance	Park Guards	Units
Cost	Min	30,000	8,000	6,000	$dollars
Effects on Crops	Min	8	2	2	Yield per year, 1-10 scale
Effects on Understory	Max	8	2	2	Stem density (m^2)
Effects on Tigers	Min	4	10	2	Number of tigers killed per year
Effects on Livestock	Min	2	5	15	Number of livestock killed per year

NORMALIZED SCORES		Treatment (Alternatives)			Convert performance measures to normalized
Objectives	Goal	Fencing	Insurance	Park Guards	
Cost	Min	0.000	0.917	1.000	To normalize (max): $[(value - min)/($
Effects on Crops	Min	0.000	1.000	1.000	To normalize (min): $1-[(value - min)$
Effects on Understory	Max	1.000	0.000	0.000	by row (objective)
Effects on Tigers	Min	0.750	0.000	1.000	
Effects on Livestock	Min	1.000	0.769	0.000	

WEIGHTED SCORES			Treatment (Alternatives)			Add objective wei
Objectives	Goal	Weight	Fencing	Insurance	Park Guards	
Cost	Min	0.1	0	0.091666667	0.1	
Effects on Crops	Min	0.1	0	0.1	0.1	
Effects on Understory	Max	0.1	0.1	0	0	
Effects on Tigers	Min	0.4	0.3	0	0.4	
Effects on Livestock	Min	0.3	0.3	0.230769231	0	
Sum of Weights (for all objectives)		1				
Sum of weighted scores (for each alternative)			0.70	0.42	0.60	
Final Score (sum of weighted scores/sum of weights)			**0.70**	**0.42**	**0.60**	

Start with reduced matrix

(0-1) ranks

max-min)]
)/(max-min)]
)

ights; sum wt'd scores; avg