Visions of Sustainable Community

Sustainable Community Roundtable:

A sustainable community respects its own diversity, values the complexity of the natural world, and accepts responsibility for the social, economic, and ecological well-being of present and future generations through individual and collective actions.

A sustainable community has:

- **A healthy and diverse ecological system that continually provides life sustaining functions and other resources for humans and other species**
- **A healthy and diverse economy that adapts to change, provides long term security to residents, and recognizes social and ecological limits**
- **A social foundation that provides for the health of all community members, respects cultural diversity, is equitable in its actions, and considers the needs of future generations**

Sonoma County Footprint and Biocapacity Results

Sonoma County Footprint Summary in acres

	Energy land	Crop land	Pasture	Forest	Built area	Fishing Grou	Total	% of US average
Food	1.7	2.2	0.8	0.0	0.0	0.7	5.4	100%
Housing	2.7	0.0	0.0	1.5	0.2	0.0	4.4	84%
Transportation	3.7	0.0	0.0	0.0	0.3	0.0	4.0	92%
Goods	3.8	0.4	0.1	1.2	0.1	0.0	5.5	96%
Services	2.1	0.0	0.0	0.9	0.1	0.0	3.0	110%
Total	13.9	2.6	0.8	3.6	0.6	0.7	22.4	

Sonoma County Footprint Summary in percent

	Energy land	Crop land	Pasture	Forest	Built area	Fishing Grou	Total
Food	7%	10%	3%	0%	0%	3%	24%
Housing	12%	0%	0%	7%	1%	0%	20%
Transportation	17%	0%	0%	0%	1%	0%	18%
Goods	17%	2%	0%	5%	0%	0%	25%
Services	9%	0%	0%	4%	0%	0%	14%
Total	62%	12%	4%	16%	3%	3%	100%

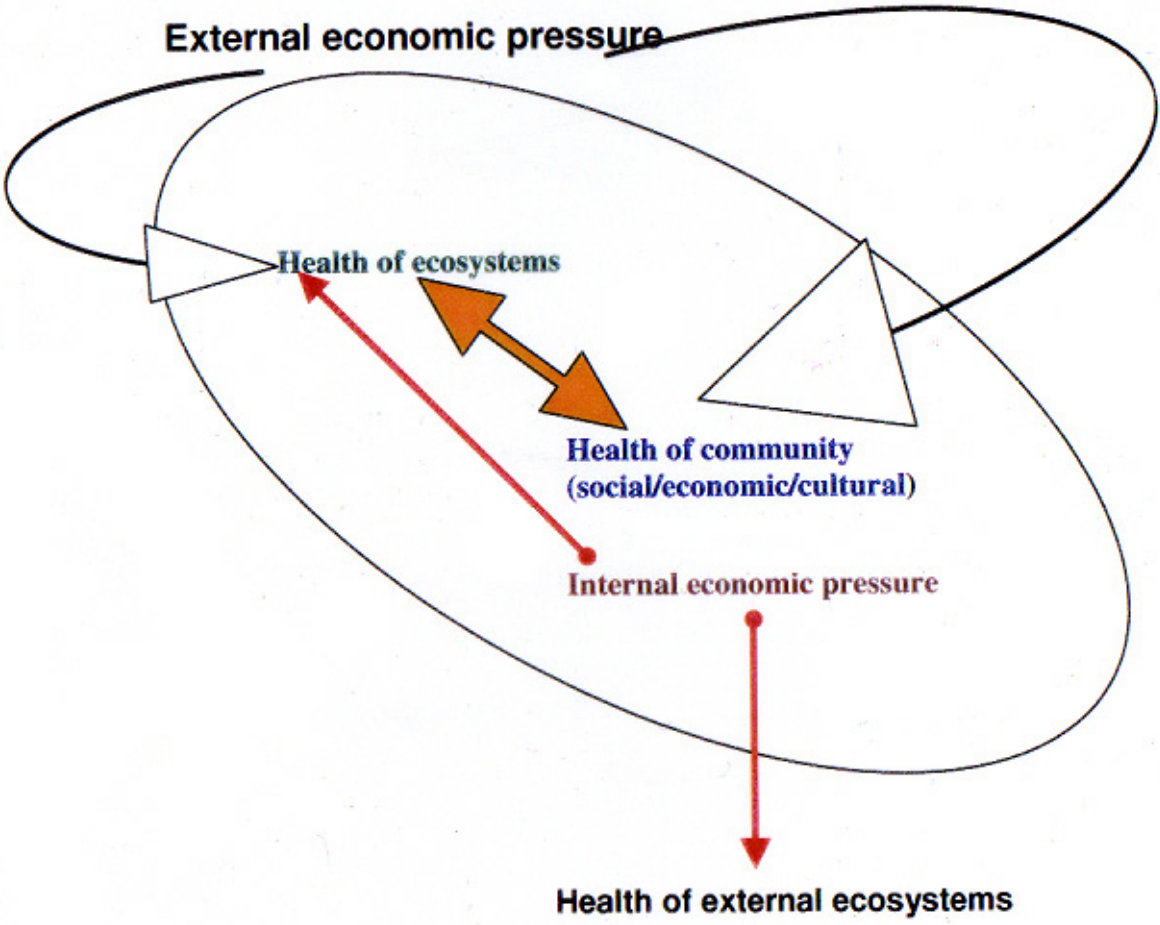
US Average Footprint Summary in acres

	Energy land	Crop land	Pasture	Forest	Built area	Fishing Grou	Total
Food	1.7	2.2	0.8	0.0	0.0	0.7	5.4
Housing	3.5	0.0	0.0	1.4	0.3	0.0	5.2
Transportation	3.9	0.0	0.0	0.0	0.5	0.0	4.3
Goods	4.0	0.4	0.1	1.2	0.1	0.0	5.8
Services	1.9	0.0	0.0	0.8	0.1	0.0	2.8
Total	15.0	2.6	0.8	3.4	1.0	0.7	23.5

SUMMARY

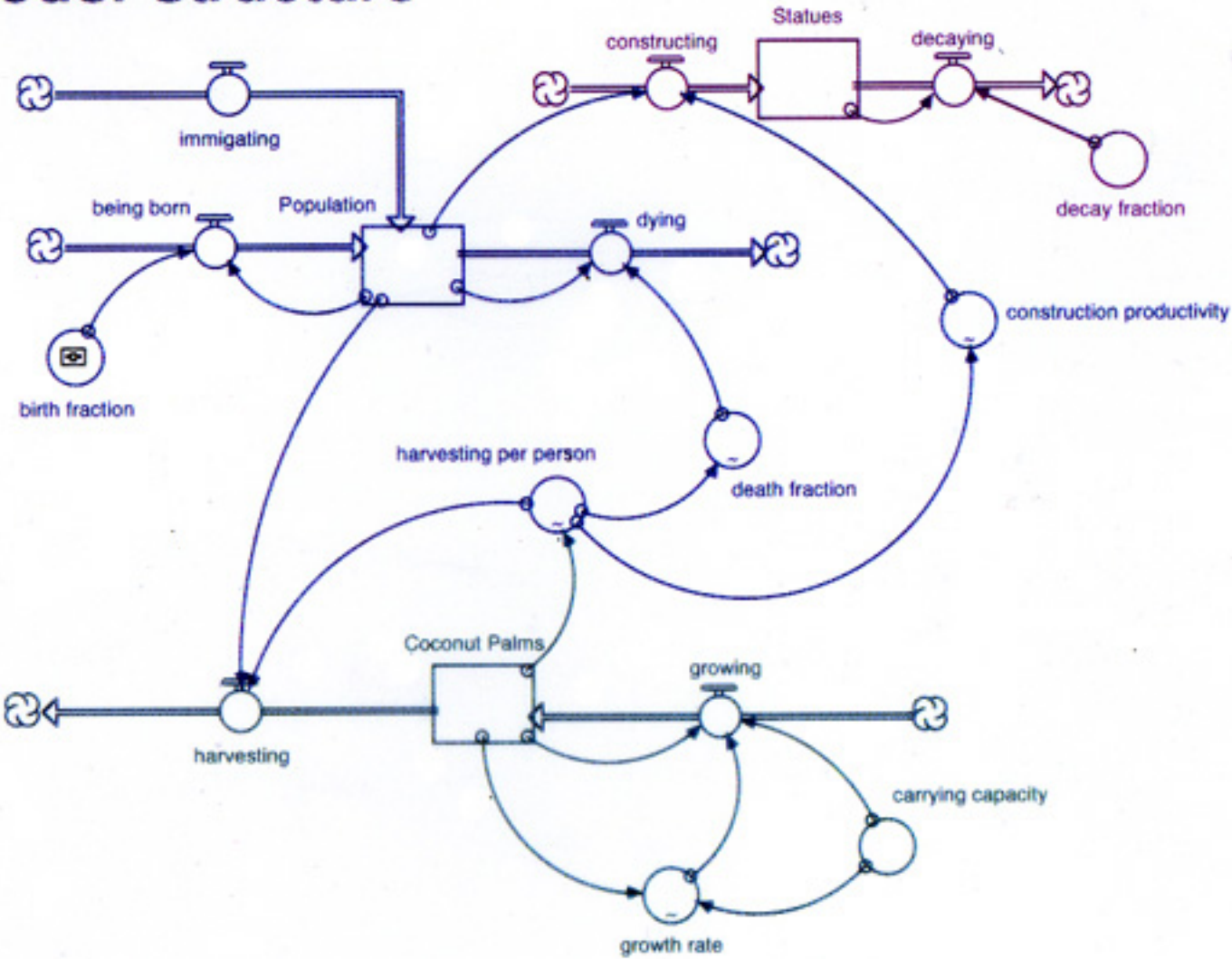
DEMAND		*SUPPLY*	
Average Sonoma County FOOTPRINT (per capita)		**BIOCAPACITY within Sonoma County (per capita)**	
Footprint areas for:	[global acres/cap]		[global acres/cap]
absorbing CO_2 from fossil fuel	13.9	land set aside for CO_2 absorption	0.0
growing crops	2.6	crop land	0.9
grazing animals	0.8	grazing land	1.0
producing wood	3.6	managed forests	2.2
accommodating roads, houses, and infrastructure	0.6	built-up area	0.6
harvesting fish and seafood	0.7	fishing grounds	0.5
		pristine ecosystems or wilderness	
TOTAL used	22.4	**TOTAL existing biocapacity**	5.2

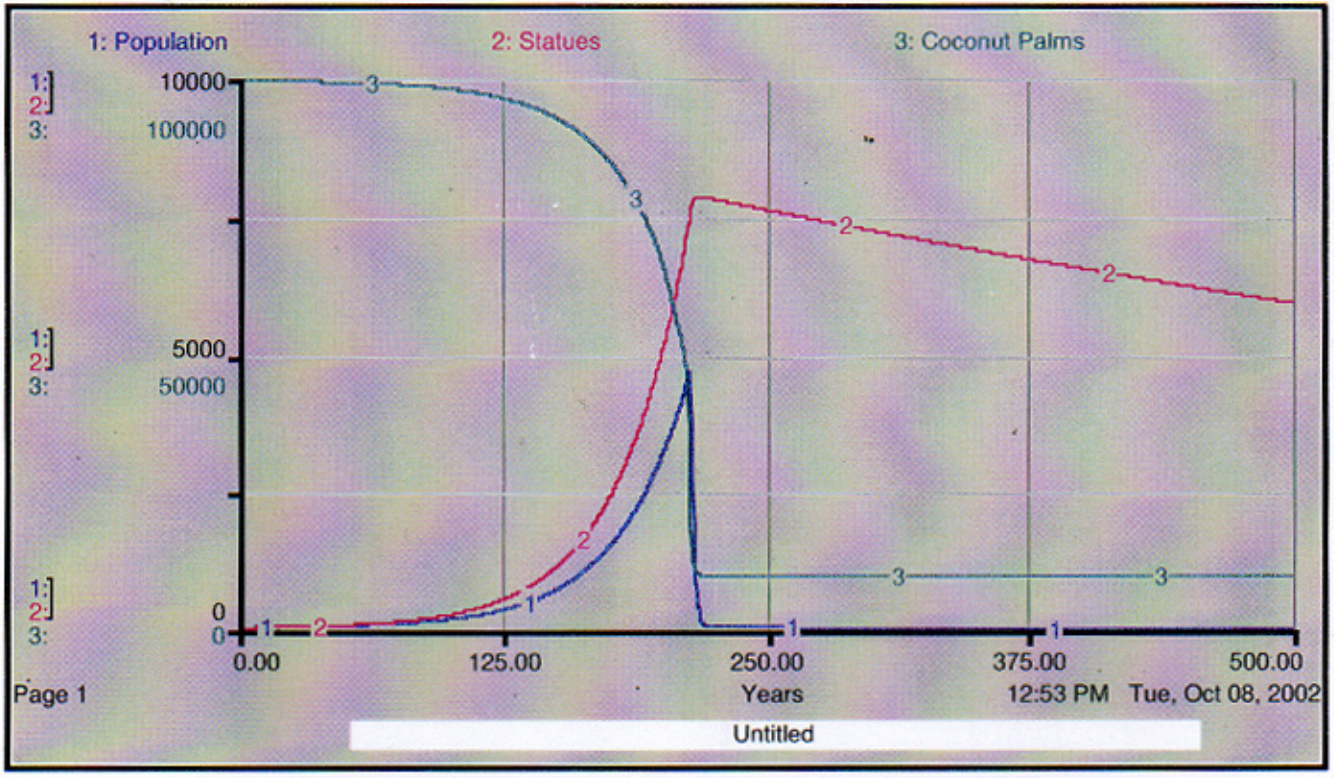
Total Sonoma County footprint	10,268,000	global acres
Total Sonoma County biocapacity	2,384,000	global acres
Sonoma County ecological deficit	-7,884,000	global acres
per capita deficit	-17.2	global ac/cap
Global biocapacity per person	4.5	global acres
US biocapacity per person	14.7	global acres
Sonoma County global deficit	-17.9	global ac/cap
Sonoma County national deficit	-7.7	global ac/cap


External economic pressure
Health of ecosystems
Health of community
(social/economic/cultural)
Internal economic pressure
Health of external ecosystems

Exploring the Mysteries of Easter Island

Core Model Structure

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2: Statues
3: Coconut Palms
1:
2:
3:
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100000
5000
50000
0
0
0.00
125.00
250.00
375.00
500.00
Years
Page 1
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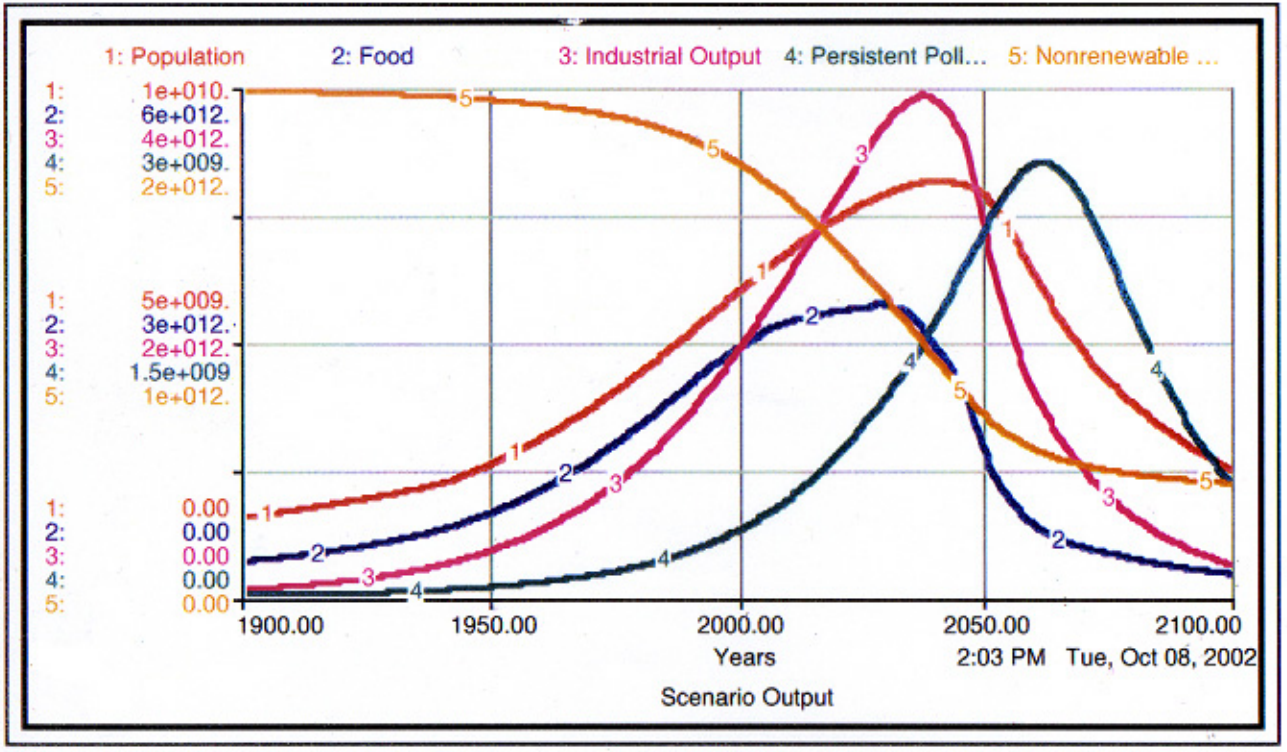
1: Population
2: Food
3: Industrial Output
4: Persistent Poll...
5: Nonrenewable ...
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2: 6e+012.
3: 4e+012.
4: 3e+009.
5: 2e+012.
1: 5e+009.
2: 3e+012.
3: 2e+012.
4: 1.5e+009
5: 1e+012.
1: 0.00
2: 0.00
3: 0.00
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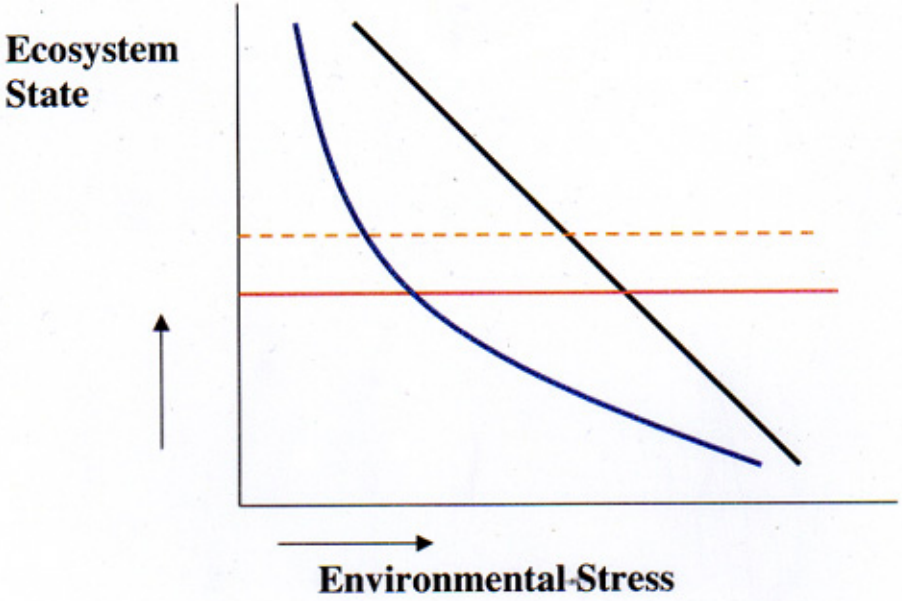
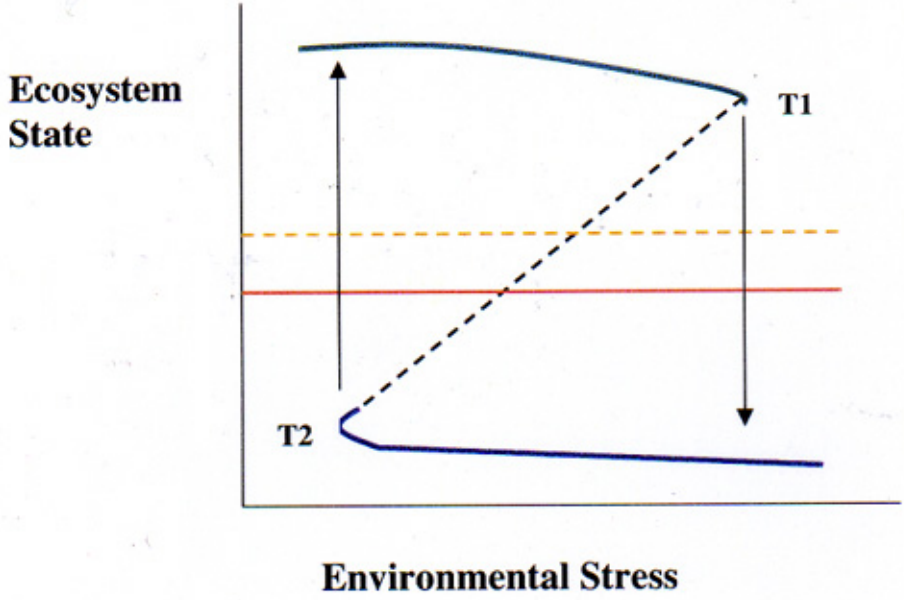
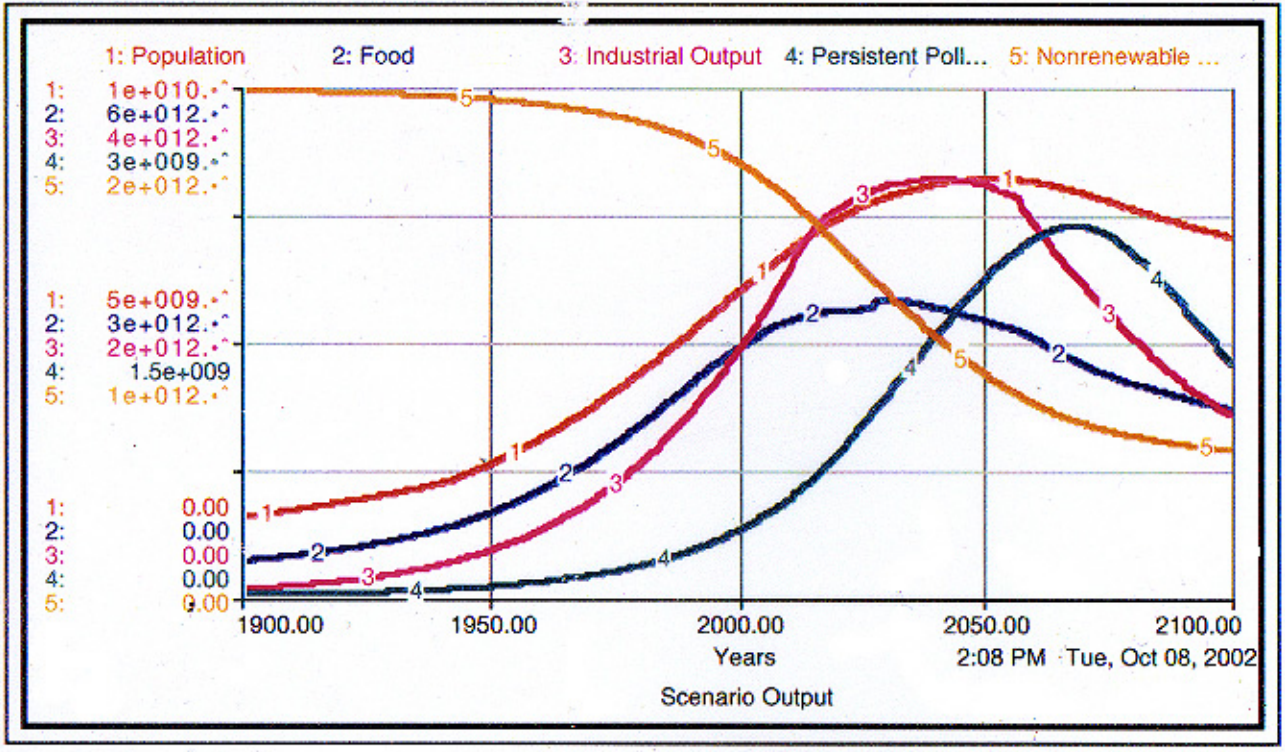
Scenario Output


Ecosystem State
Environmental Stress


Ecosystem State
T1
T2
Environmental Stress


1: Population
2: Food
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5: Nonrenewable ...
1: 1e+010
2: 6e+012
3: 4e+012
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5: 2e+012
1: 5e+009
2: 3e+012
3: 2e+012
4: 1.5e+009
5: 1e+012
1: 0.00
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Scenario Output