

Meadows

## Intro Comments

- ▶ I like the organization and description.
- ▶ I disagree with almost every example. There is a lot economist strawman in there.
- ▶ The last few are a little “big think”
- ▶ Implicit in all but the first is dynamics

## The list Part 1

12. Constants, parameters, numbers (such as subsidies, taxes, standards).
13. The sizes of buffers and other stabilizing stocks, relative to their flows.
14. The structure of material stocks and flows (such as transport networks, population age structures).
15. The lengths of delays, relative to the rate of system change.
16. The strength of negative feedback loops, relative to the impacts they are trying to correct against.
17. The gain around driving positive feedback loops.

## The list Part 2

6. The structure of information flows (who does and does not have access to information).
7. The rules of the system (such as incentives, punishments, constraints).
8. The power to add, change, evolve, or self-organize system structure.
9. The goals of the system.
10. The mindset or paradigm out of which the system — its goals, structure, rules, delays, parameters — arises.
11. The power to transcend paradigms.