Tool 1: Leverage points for stock and flows structure

1 Characterization of stocks

Describe the most relevant stocks of your model and describe their flows.
Remember to consider the magnitude of the flows, not just count them!
Graph their behavior (current and desired) over time within the stock.

New flow

Stock #1

.....

- ☐ .....
- ☐ .....
- ☐ .....

- ☐ .....
- ☐ .....
- ☐ .....

Stock #2

.....

- ☐ .....
- ☐ .....
- ☐ .....

- ☐ .....
- ☐ .....
- ☐ .....

Stock #3

.....

- ☐ .....
- ☐ .....
- ☐ .....

- ☐ .....
- ☐ .....
- ☐ .....

2 Magnitude of delays

Should the delays be modified? How? Why?

Delay #1

Name of delay

.....

Associated process

.....

Magnitude of delay

✕ Actual ● Desired

1 100

Time unit .....

How would this change be achieved?	Impact on change rate
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

Delay #2

Name of delay

.....

Associated process

.....

Magnitude of delay

✕ Actual ● Desired

1 100

Time unit .....

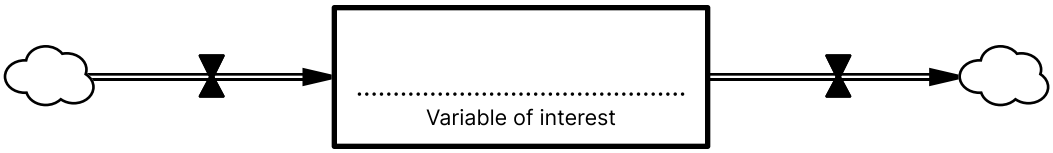
How would this change be achieved?	Impact on change rate
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

The strength of feedback loops

Identify opportunities to strengthen or weaken feedback loops
Consider the impact each loop has on current and desired behavior

1 Behavior of variable of interest

Identify the behavior (current and desired) of the net flow for each of the simulation stages



+ Positive net flow
- Negative net flow

	Stage 1	Stage 2	Stage 3	Stage 4
Current				
Desired				

Indicate the stages where current and desired behavior are different; those are stages to focus on.

2 Feedback loop intervention opportunities

Considering the desired behavior of the variable of interest, for each loop identify the stages where you would strengthen or weaken.

Remember to have your table of dominant loop functions on hand

↑ Strengthen
↓ Weaken

Loop	Polarity	Inflow	Stage 1	Stage 2	Stage 3	Stage 4	Outflow
1							
2							
3							
4							
5							
6							

3 Creating new accumulations and information links

Observe the model structure. Are there opportunities to create new accumulations (new or existing variables) that help achieve the behavior of the variable of interest?

Observe the structure of the model. Are there opportunities to add new information links that create new feedback loops? What polarity do they have? What generic function would they serve?

[Image of Stocks and flows model with feedback loops]