

The Impact of Armed Conflict on Urban Water Services

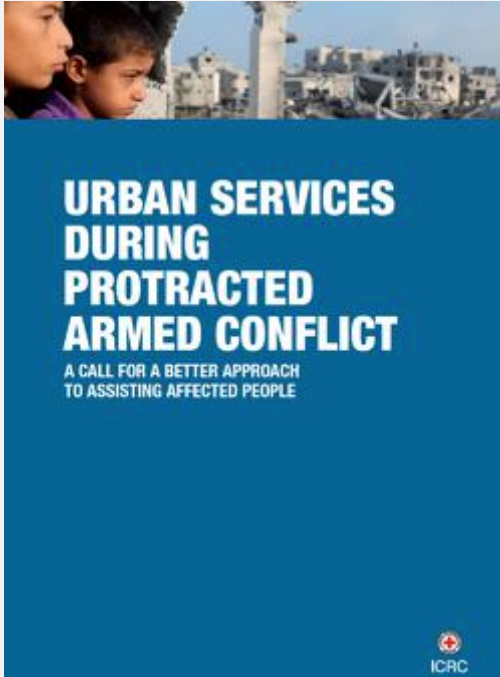
(*protracted* armed conflict and explosive weapons)

Experts' Workshop - Water in Post-Conflict Situations
and the Role of the Security Council

Lund University , 15 February 2018



Summary



<https://www.icrc.org/en/document/urban-services-protracted-conflict-report>



Explosive Weapons

- Impact can be direct and / or reverberating
- Extent in space depends on the component of the service that is damaged
- Duration depends on the pre-attack condition of the service

Protracted armed conflict

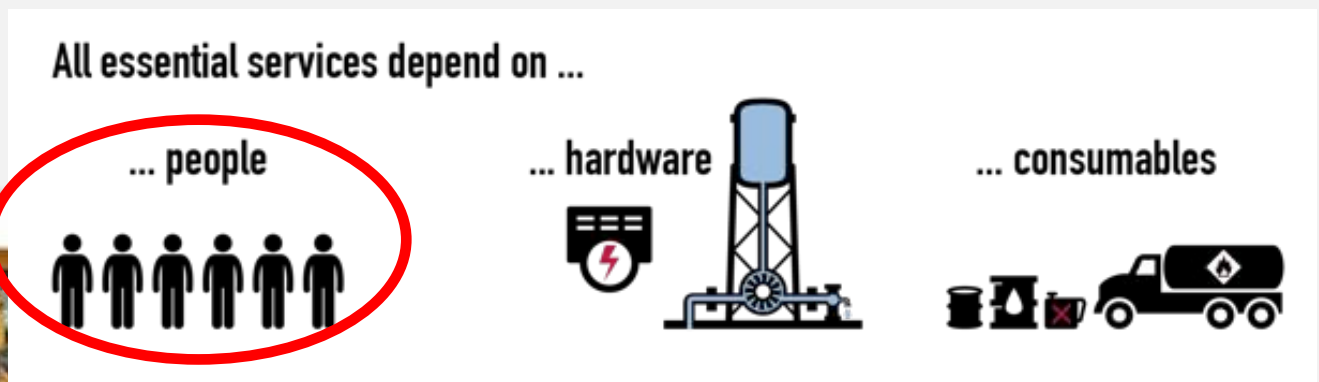
- Impact can be direct, indirect, or cumulative
- Indirect impact are more difficult to deal with than direct
- Cumulative impact are the most difficult to deal with

Implications

- Strengthen IHL
- Make funding mechanisms more adaptable
- Increase technical capacity
- Re-work the *relief-rehabilitation-development* continuum

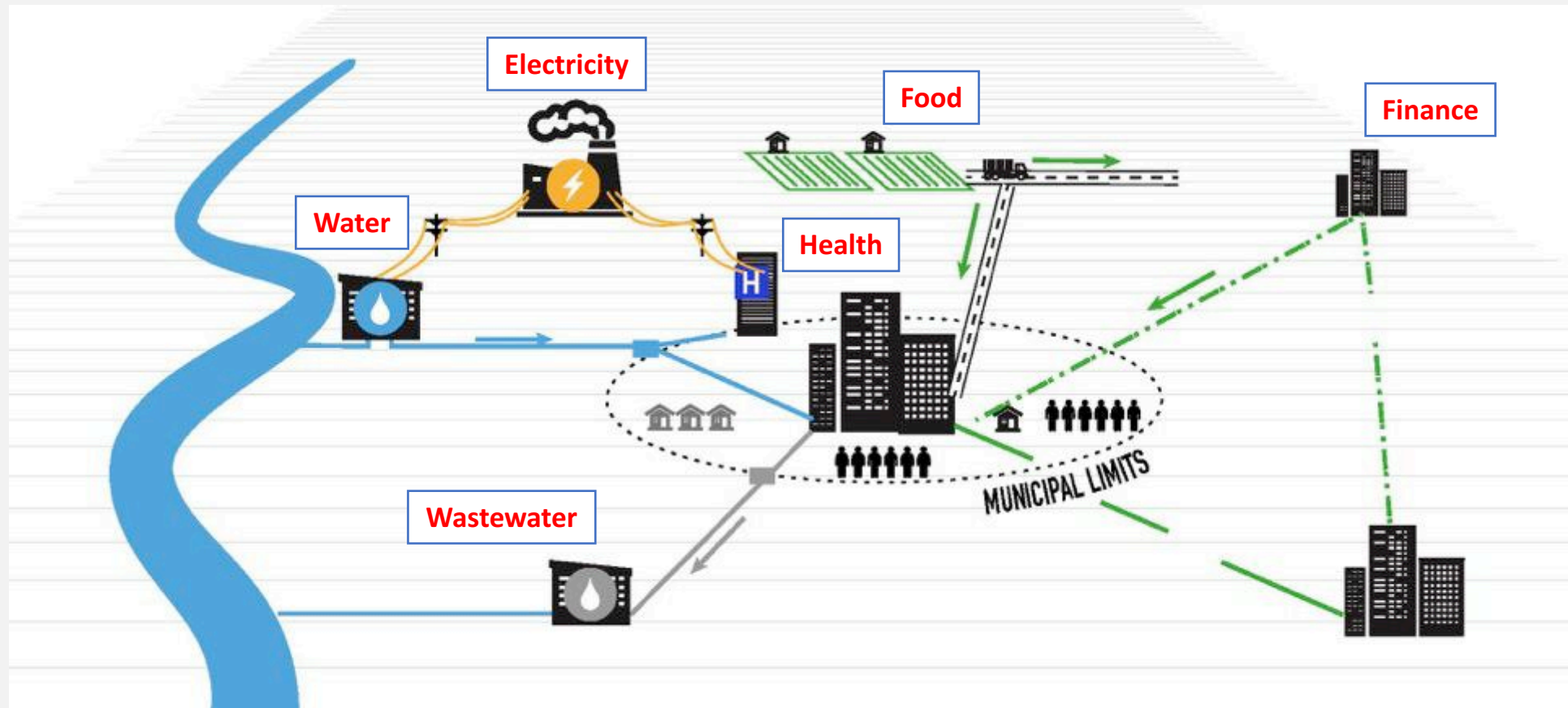
1. Water Service basics
2. Impact of Explosive Weapons
3. Impact of Protracted Armed Conflict
4. Implications

Urban services are more than just infrastructure



Urban services are inter-dependent

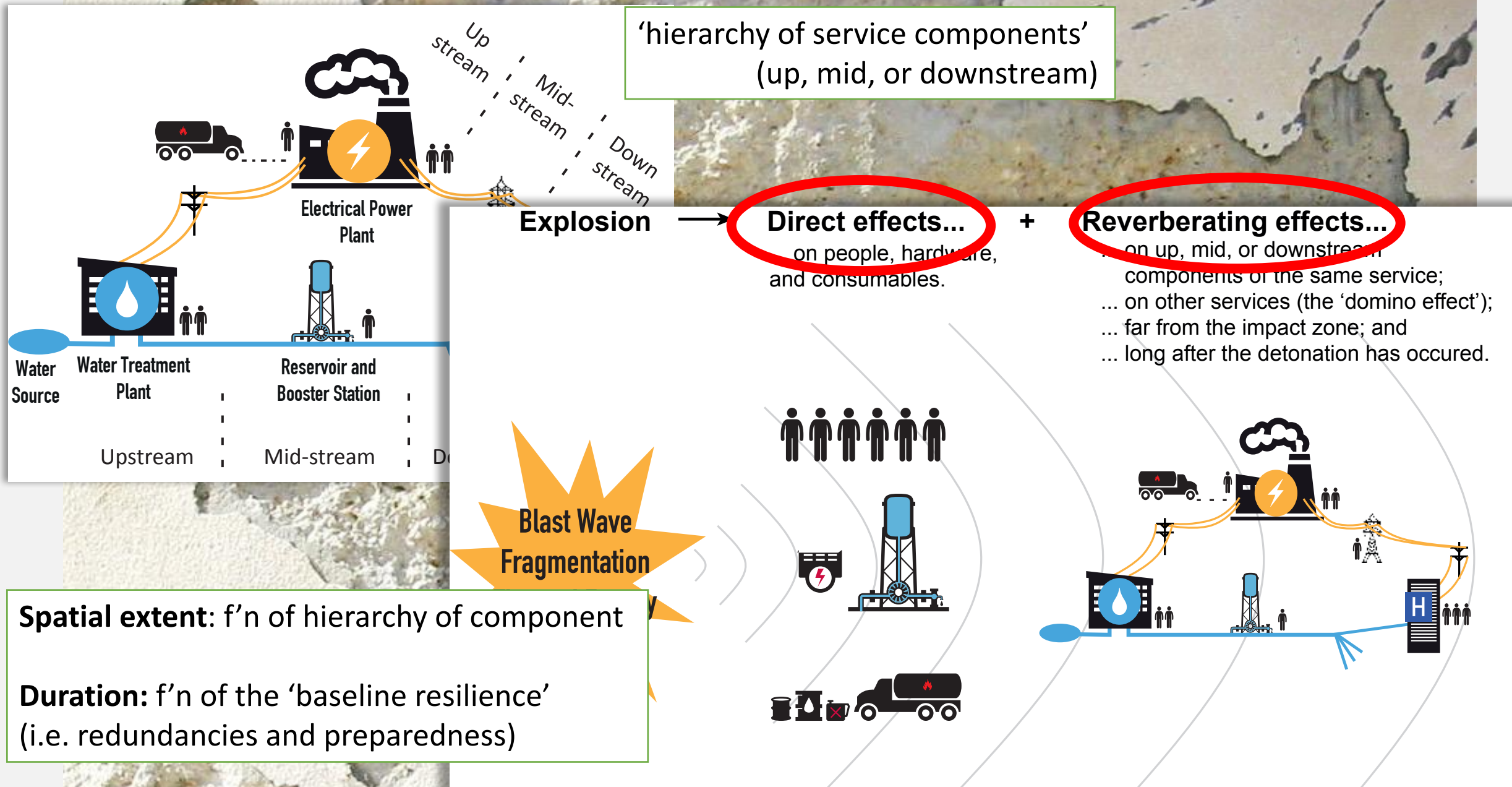
Interdependent services



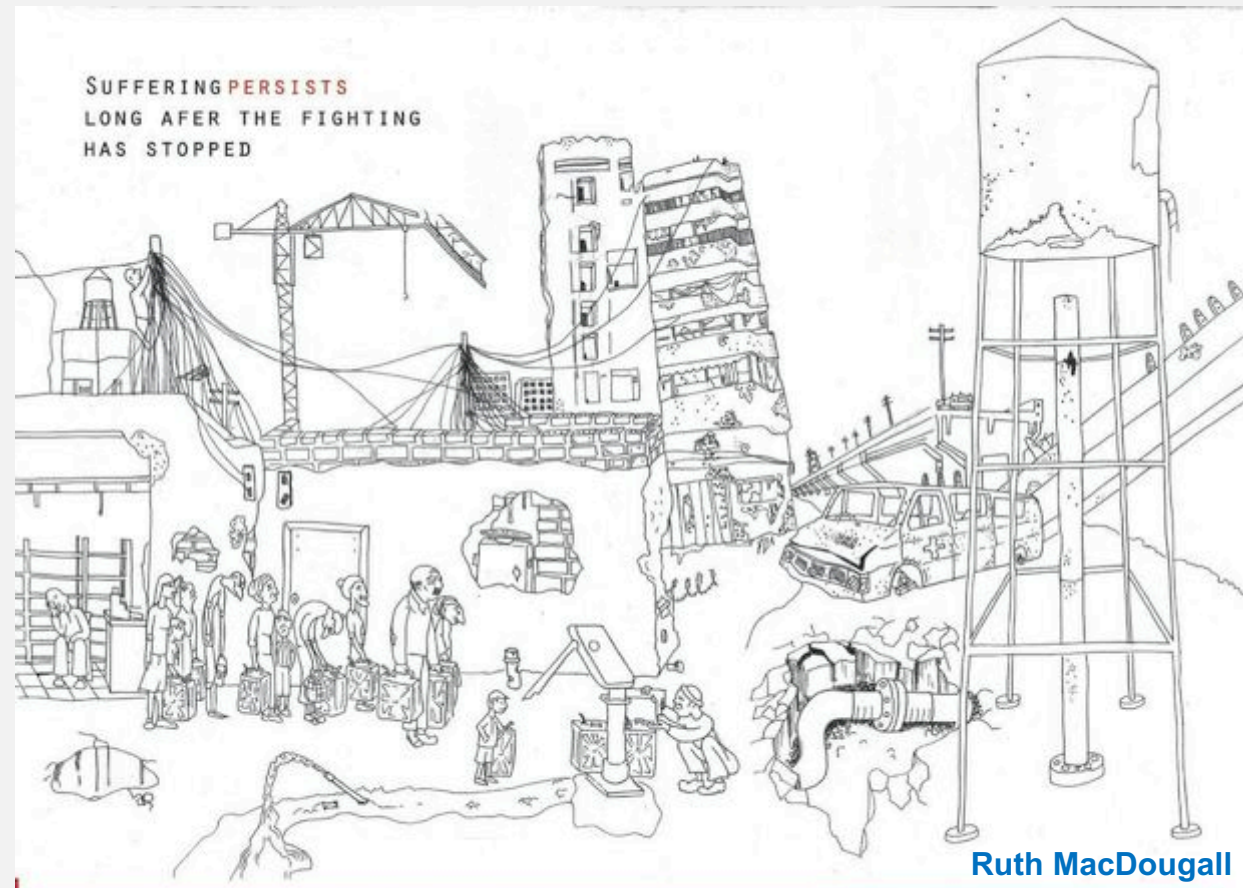
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Explosive weapons - direct and reverberating effects



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Hardware

pressure drops in water networks

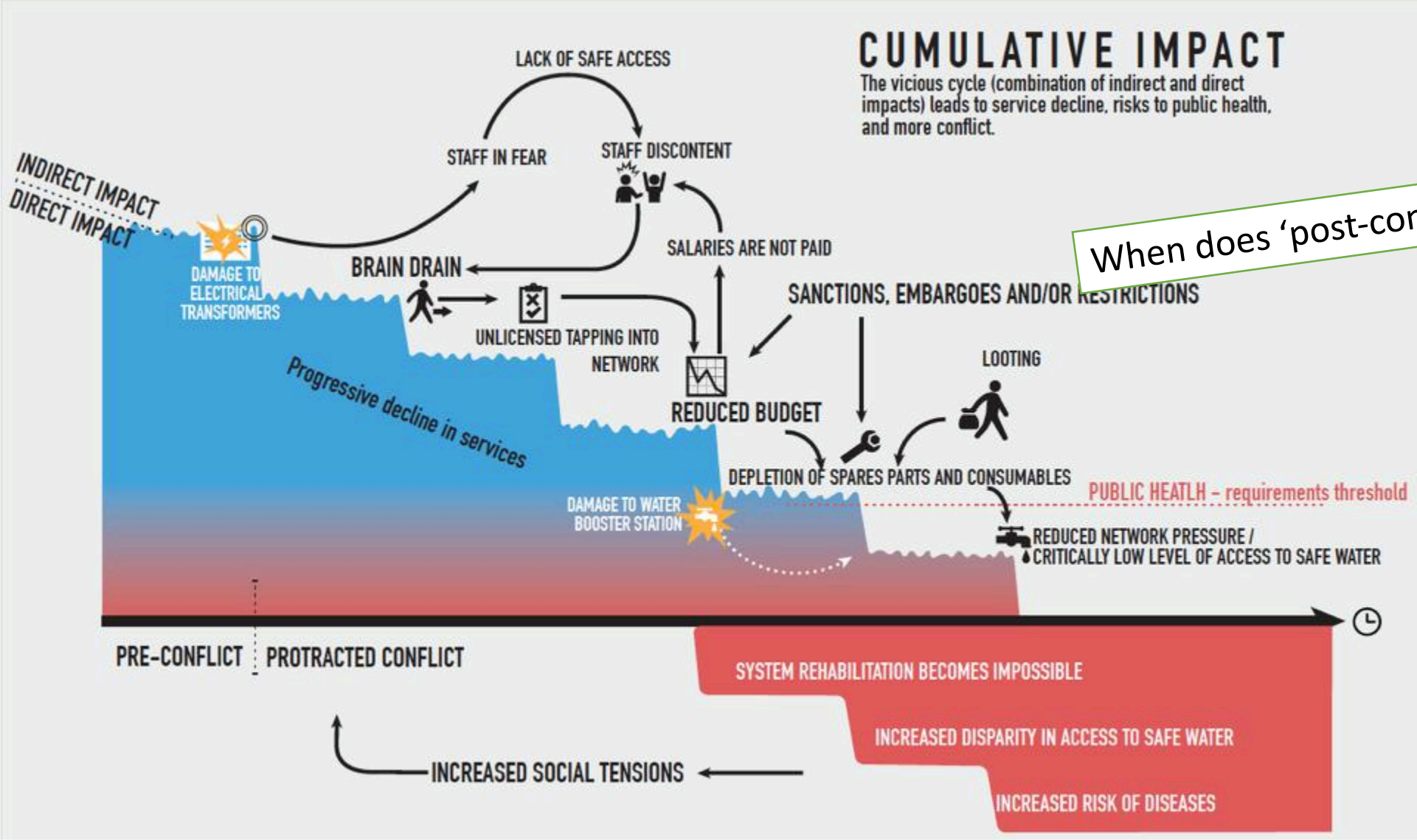
Consumables

looting of warehouses
price spikes → rationing

People

brain-drain
trauma





1. Water Service basics
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IHL

- *Direct* impact of explosive weapons are ‘reasonably foreseeable’, both in space and in time
 - Proportionality assessments should include engineers within the targeting cell
 - Reverberating, indirect, and cumulative impact should be better documented and communicated – so that they become ‘reasonably foreseeable’

Programming (for protracted conflicts):

- Donors to make funding mechanisms more adaptable
- Agencies to increase technical capacity

Conceptual

- Re-work the *relief-rehabilitation-development* continuum

