World Water Week, Stockholm 2008

The Protocol on Water and Health: where health, environment, and development policies meet

The Protocol as a change management tool: using the provisions of the Protocol to adapt to climate change

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UNECE

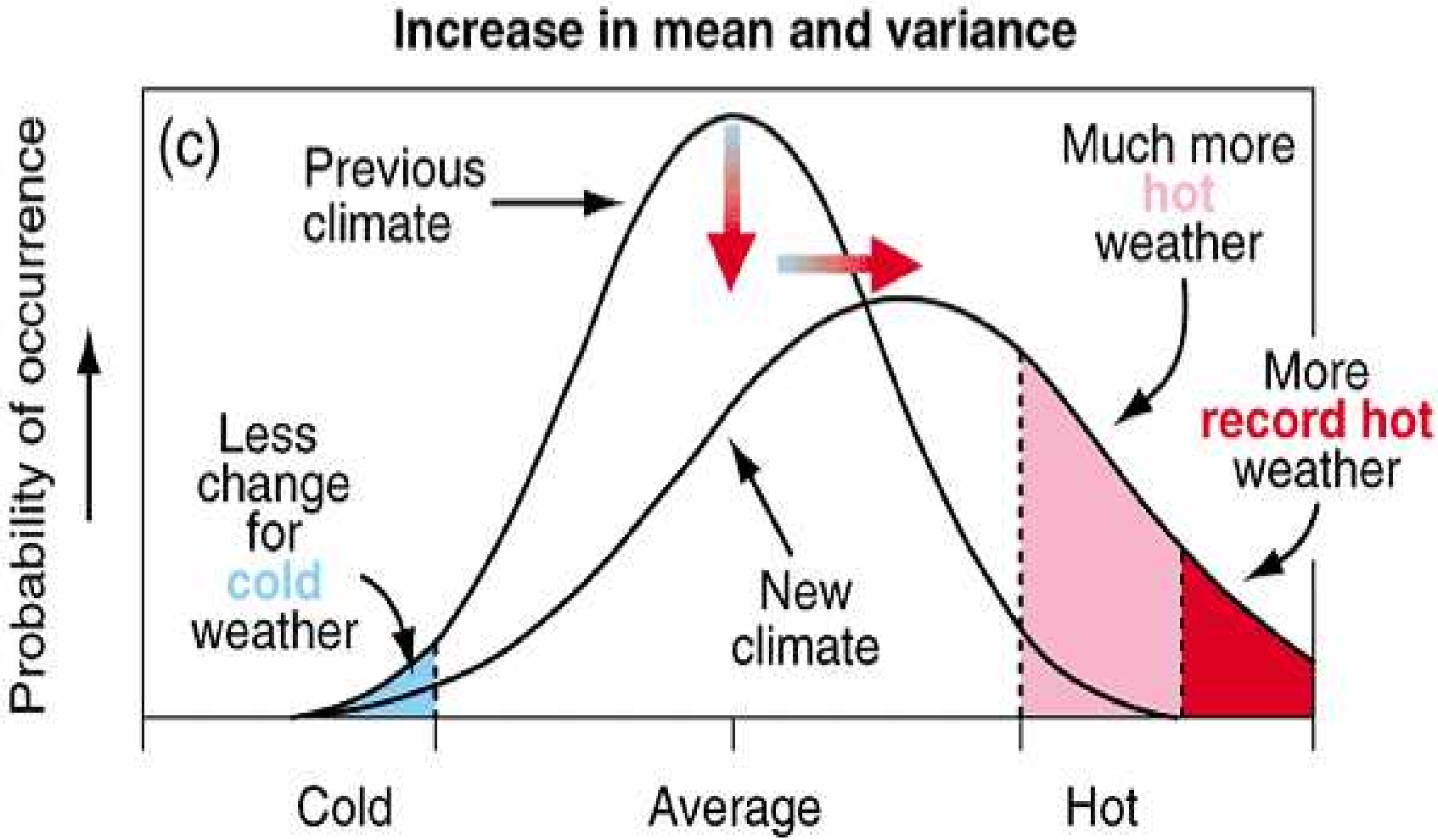
World Health Organization

EUROPE

Stockholm International Water Week

Protocol on Water and Health as a Change Management Tool

The bottom line…



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Protocol on Water and Health as a Change Management Tool

Shallow well repair UKR…

WHO emergency team well assessment

Tajik cold wave March 2008

ADVENTURE

The result of bad planning!

Water utilities need to adapt NOW!

Water is a magnifier for climate related problems

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FLOODS	Hydraulic	Discharges of untreated storm water overflows (6.2.g)
DROUGHT	Quality	Quality conform WHO (6.2.a)
RESOURCE	Surface Aquifer	Protection of water used as source of drinking-water (4.2.a. & c; 6.2.f) Quality of waters used for dw, bathing, aquaculture (6.2.j.)
SERVICE	Quality Continuity	Performance levels (62e)
HEALTH		Outbreaks and incidents (6.2.b) Food safety (4.2.d) Response systems (8)

Human health

- Increase in diarrhoeal diseases
- Vector-borne diseases
  - (Chikungunya in Italy)
- Increase in water for cooling: legionella added
- Food safety
  - Salmonella
  - Aquaculture impact of algal pollution
- Recreational water quality

Conclusion

- A forward looking planning instrument
- To protect human health
- Against present and future risks
- In an integrated manner
- Throughout the entire warer cycle

River flow

- Water-stressed regions in S Europe are projected to be particularly exposed to reductions in water resources due to climate change. This will lead to increased competition for available water resources.
- Flood frequency will increase in large parts in Europe

Freshwater and biodiversity

- Physical change
  - Higher temperature, lower oxygen content
  - Stable vertical stratification
  - Eutrophication, change in timing of algal blooms and increase of harmful algal bloom
  - Alteration to habitats and distribution of aquatic organisms
- Chemical change
- Biological change