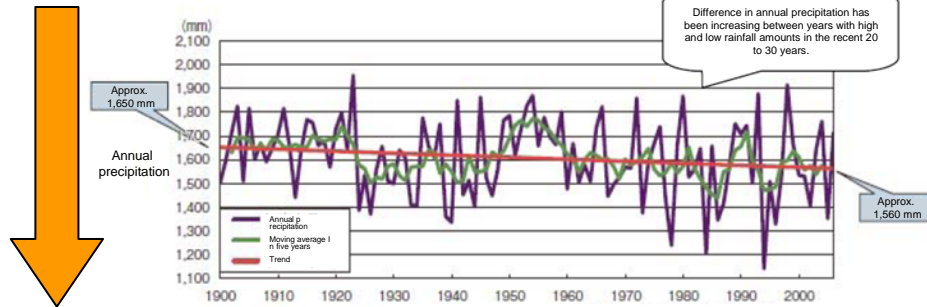


Water Environment Research Team, Climate Change Adaptation Research Group

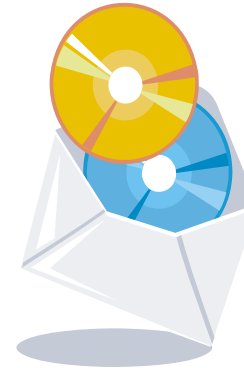
Researches on climate change effects on river environment

(Change of natural environment)

Climate change such as temperature rise and changing precipitation patterns due to global warming is expected to increase flood disaster risk, change water environment and have other effects. Developing and implementing adaptation measures are urgently required.



The past change of average pattern was as predicted from global warming or more severe.

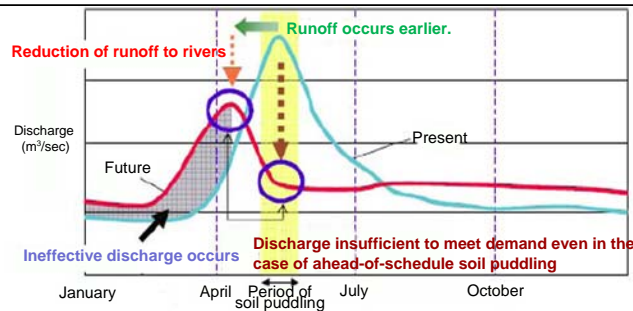


Analysis of past data

- Water temperature
- Water quantity
- Water quality
- Ecosystem, etc.

(Effects on river environment)

Water temperature, water quantity, water quality, material cycle and ecosystem are expected to change.



Investigations concerning the assessment of effects of climate change on river environment

Examples

- Reduction of area where cold-water fish is distributed
- Movement of hot-water fish toward the north
- Reduction of benthic organisms in deep lakes due to oxygen depression
- Irregular cycle of seasons such as shorter winter and earlier advent of spring

(Problem)

Neither adequate investigations nor studies have been conducted for scientific identification of the effects on the river environment, and no adaptation measures have yet been discussed.