

Observation Data and Effective Groundwater Preservation Efforts Using Scientific Techniques



APPEAL AND UNIQUE CHARACTERISTICS OF KUMAMOTO CITY



Water Cycle in Kumamoto

Geological strata formed by volcanic activity is easy for water to penetrate and creates abundant groundwater



APPEAL AND UNIQUE CHARACTERISTICS OF KUMAMOTO CITY



Water Fosters Nature and Culture

Groundwater is the basis of our economic activities and life in Kumamoto, and it continues to shape Kumamoto Culture

Suizenji Jojuen Garden
(Kumamoto City)



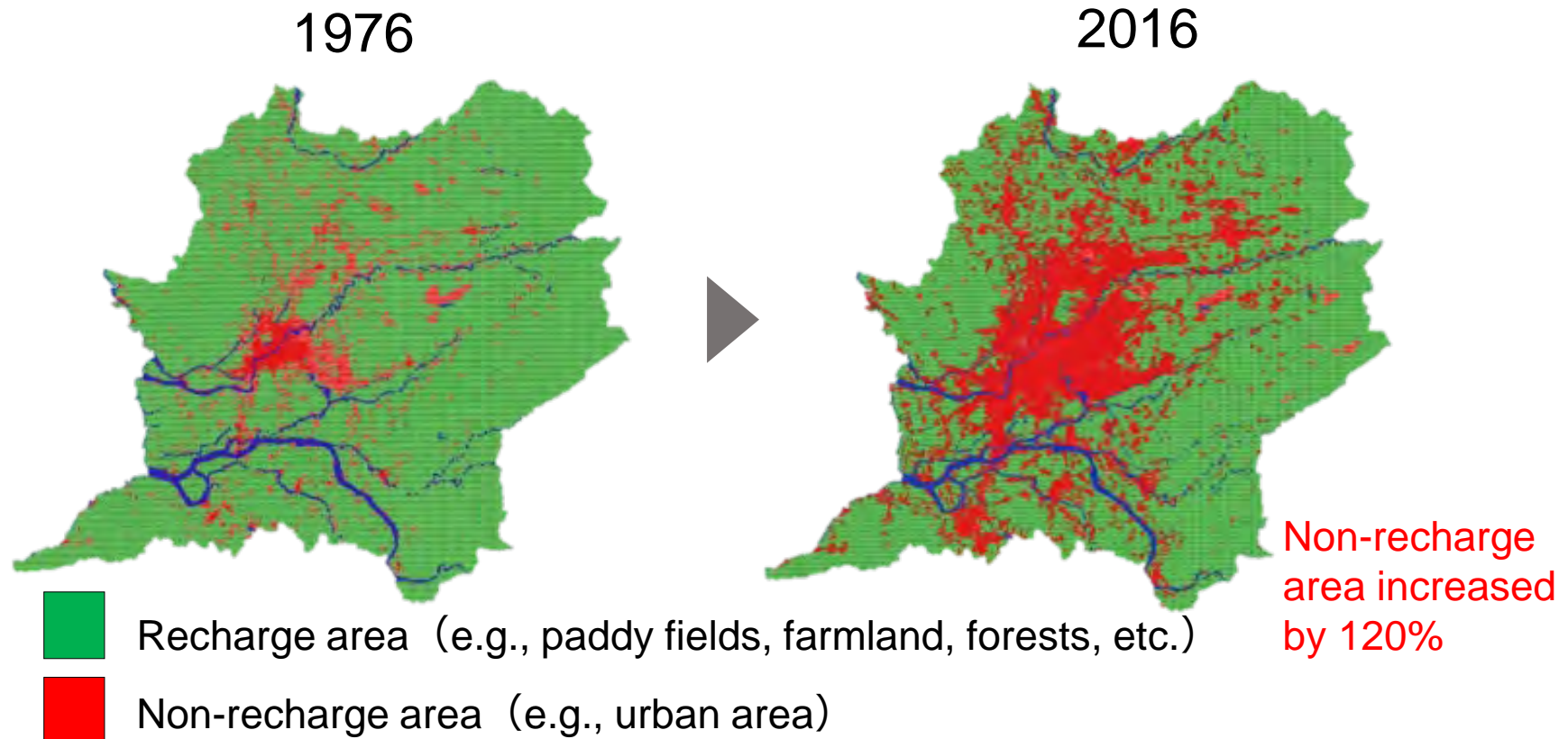
Lake Ezu
(Kumamoto City)



ISSUES

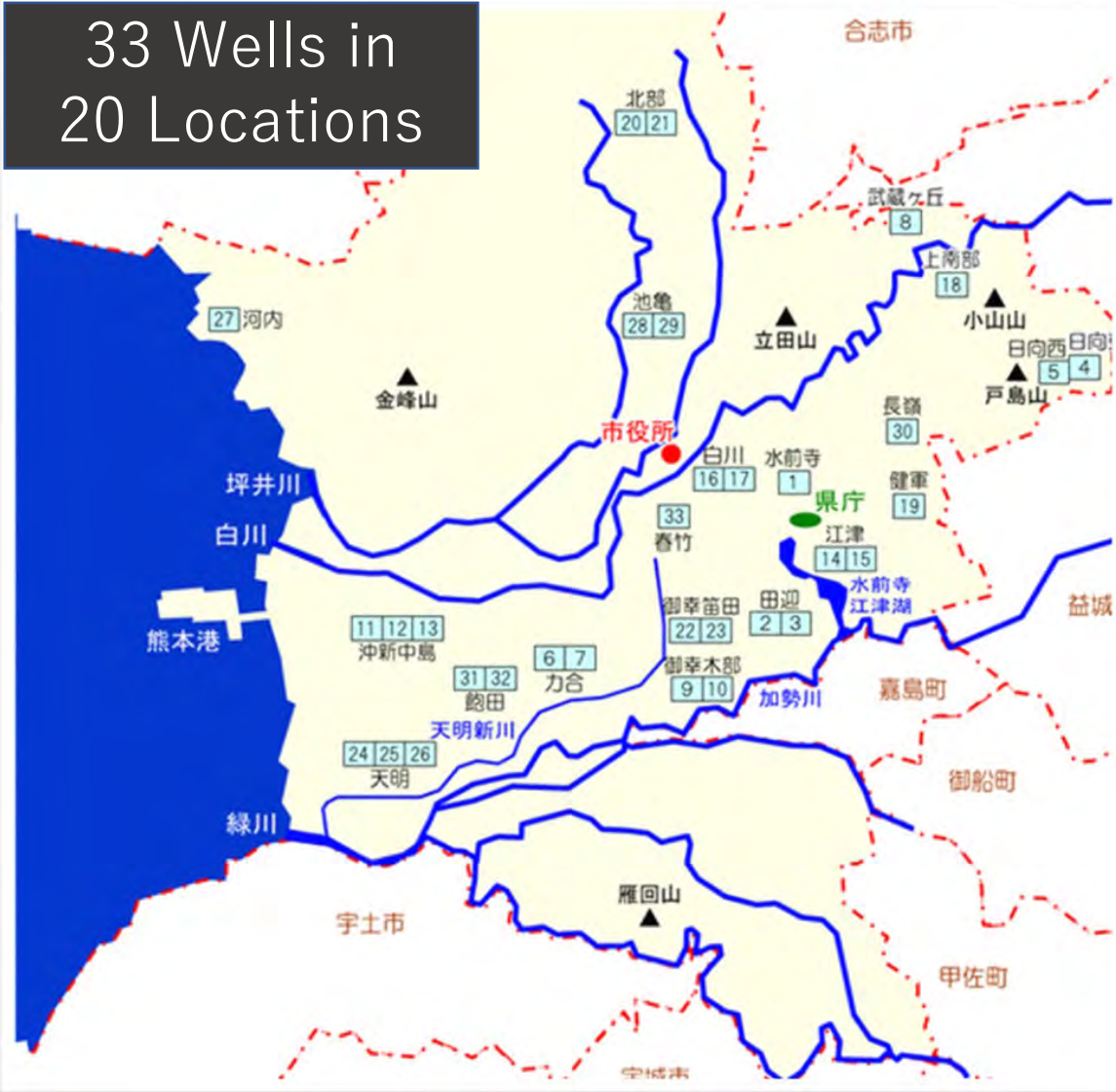
Groundwater Depletion

The decrease in paddy fields due to urbanization has led to a decrease in groundwater recharge

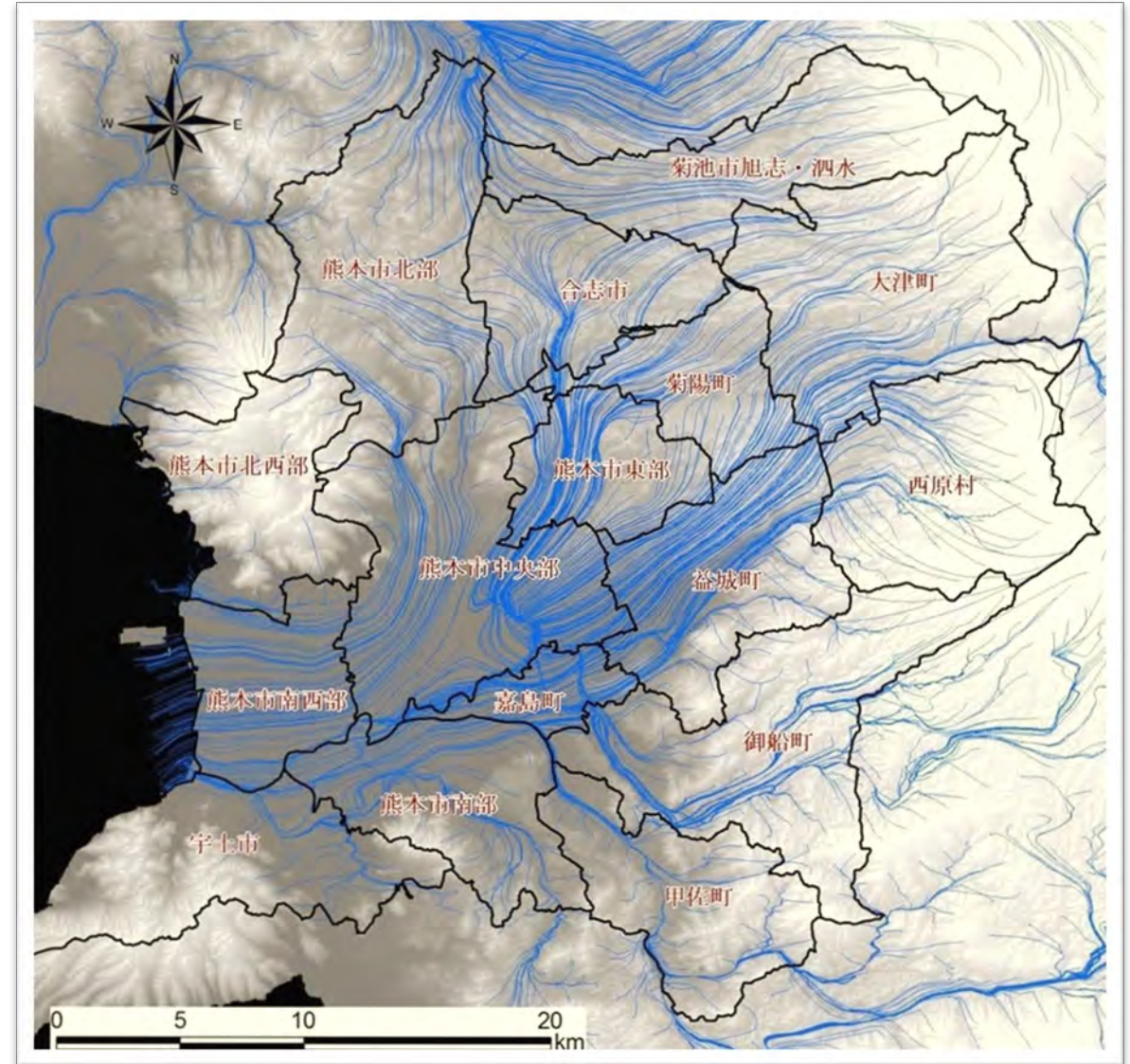


Kumamoto Groundwater Observation Wells

33 Wells in
20 Locations



Visualizing Our Groundwater



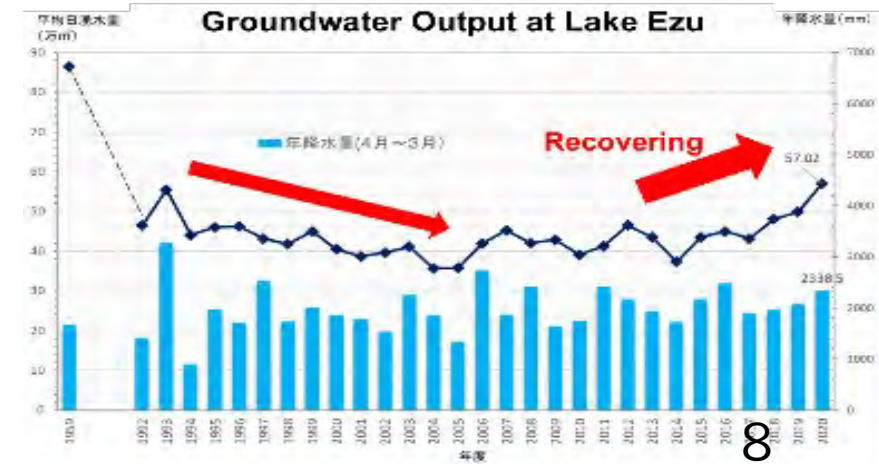
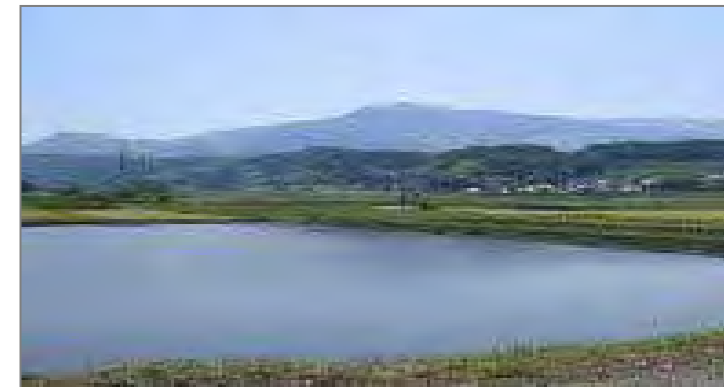
INITIATIVES

Regional Groundwater Conservation

Promotion of cross-sectoral and trans-municipal groundwater conservation activities in the middle reaches of the Shirakawa River



Flooded paddy field



Water-Related Disaster Risk Reduction

River Basin Disaster Resilience and Sustainability by All
Comprehensive and multi-level water-related disaster prevention

Prevent Floods & Reduce Hazards

e.g. Channel modification, stormwater storage facilities, forest conservation, paddy field water storage

Reduce Exposure to Disaster

e.g. Promotion of redevelopment of decrepit buildings in the city center

Increase Disaster Resilience

e.g. Create hazard maps and raise citizen awareness of water-related disasters



▲ Modified Section of the
Shirakawa River

Strengthen Flood Evacuation Plan

Never underestimate future disasters and
conduct training courses to protect lives

■ Training city workers for disaster response during the pandemic

Training on how to respond to various unexpected situations during disaster response while being cautious of the spread of COVID-19.

■ Training citizens for flood evacuation using VR (Virtual Reality)



Hosting the 4th Asia-Pacific Water Summit



4th Asia-Pacific Water Summit
Kumamoto Japan 2022

