



MINISTRY OF ENVIRONMENT
AND CLIMATE CHANGE



University of
Southampton



REGIONAL FLYWAY INITIATIVE TRAINING SERIES:

Workshop on Wetland Ecosystem Services and Nature-based Solutions

MONGOLIA 28–29 November 2024

Water-Related (Flood Mitigation) Services of RFI Sites in Mongolia – Preliminary Results

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The two-pronged approach of the Regional Flyway Initiative



Source: East Asian-Australasian Flyway Partnership & Asian Development Bank

regulating ES

High-level, modelling-based assessment

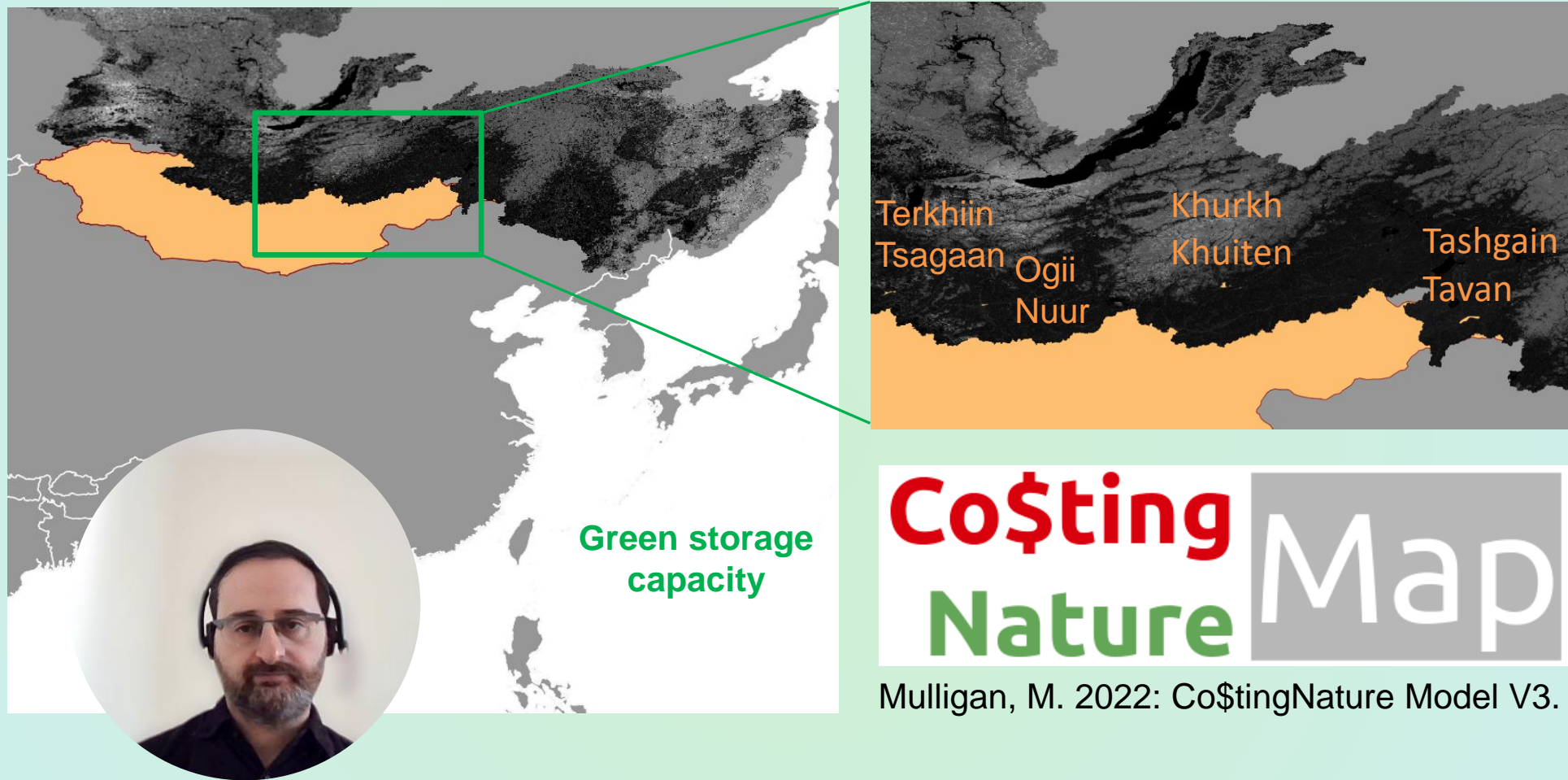


provisioning ES

Site-level, participatory assessment



Modelling-based assessment: Flood Mitigation (biophysical)



Flood mitigation service (biophysical values)

ID 110 (Mongolia)

Tashgain Tavan Lakes (IBA)

Magnitude of natural storage:

203 ± 4 GigaLitres (avg. 175)

Downstream population benefitting:

1.49 ± 0.03 people (avg. 1.11)

Downstr. infrastructure benefitting:

0.30 ± 0.01 ha (avg. 0.28)



Flood mitigation service (biophysical values)

ID 107 (Mongolia)

Khurkh Khuiten Rivers (IBA)

Magnitude of natural storage:

189 ± 4 GigaLitres (avg. 175)

Downstream population benefitting:

1.70 ± 0.04 people (avg. 1.11)

Downstr. infrastructure benefitting:

0.27 ± 0.01 ha (avg. 0.28)



Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Image BCO-DO

Flood mitigation service (biophysical values)

ID 109 (Mongolia)

Ogii Nuur (IBA)

Magnitude of natural storage:

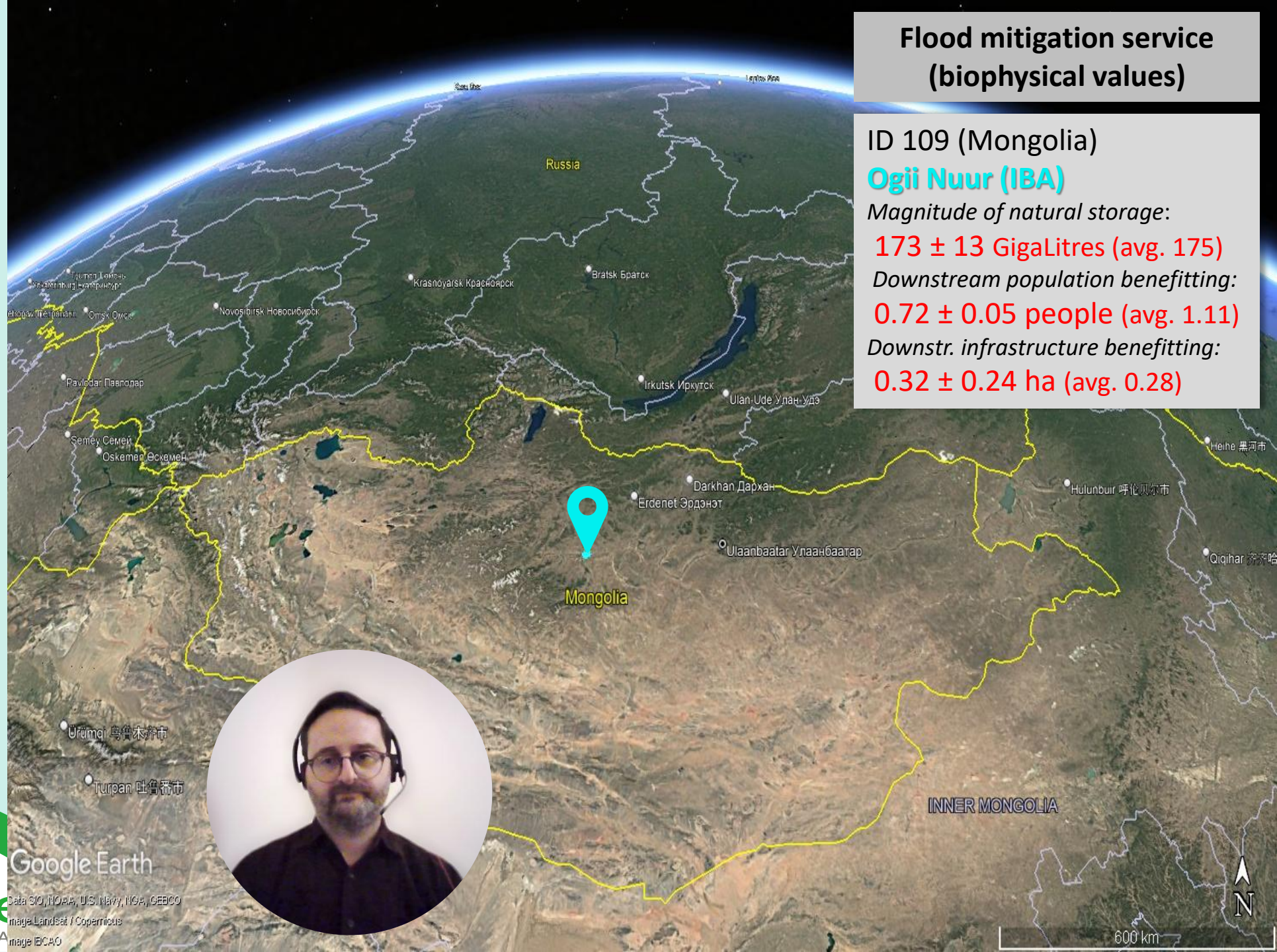
173 ± 13 GigaLitres (avg. 175)

Downstream population benefitting:

0.72 ± 0.05 people (avg. 1.11)

Downstr. infrastructure benefitting:

0.32 ± 0.24 ha (avg. 0.28)



Flood mitigation service (biophysical values)

ID 111 (Mongolia)

Terkhiin Tsagaan Lake (IBA)

Magnitude of natural storage:

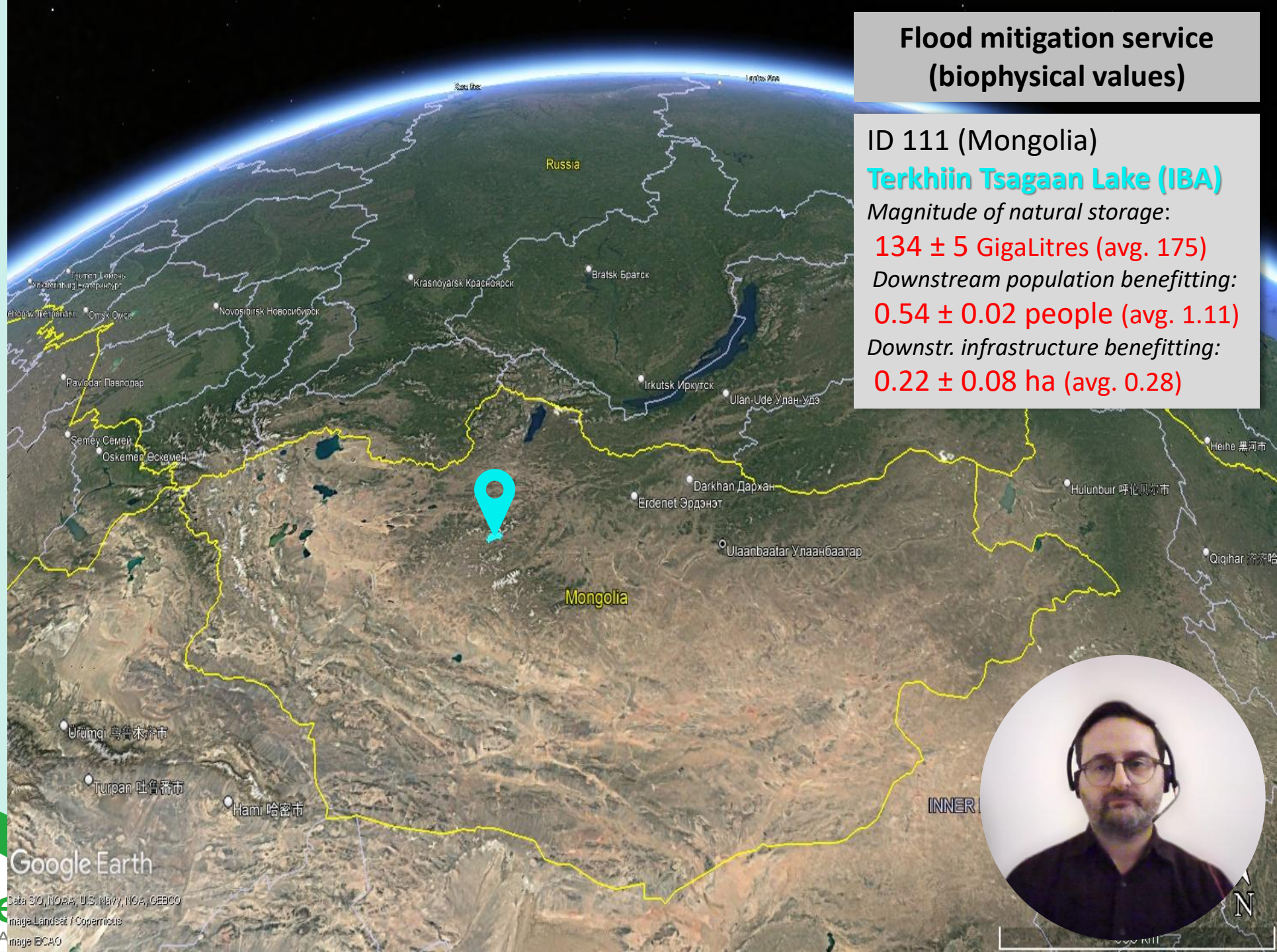
134 ± 5 GigaLitres (avg. 175)

Downstream population benefitting:

0.54 ± 0.02 people (avg. 1.11)

Downstr. infrastructure benefitting:

0.22 ± 0.08 ha (avg. 0.28)





ANY QUESTIONS?

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