ACHIEVING FLOOD REDUCTION WITH NATURAL WATER RETENTION MEASURES IN AGRICULTURAL CATCHMENTS

Postgrad Symposium 2021

Pia Laue



ENHANCE THE WATER STORAGE POTENTIAL OF LANDSCAPE, SOIL, AND AQUIFERS, BY RESTORING ECOSYSTEMS, NATURAL FEATURES AND CHARACTERISTICS OF WATER COURSES AND USING NATURAL **PROCESSES.**

European Union



FLATTEN THE CURVE_



FIELD WORK_





SWALE

NWRM IN BALLYGOW_

NEW BUND





"OLD" BUND FIXED



SWALE

OLD BUND FIXED

NEW BUND





MONITORING_

4 water level sensors installed (see map)

- 1.5m before swale
- 2.10m after swale
- 3. In bund
- 4. Behind bund ca. 5m
- 1 Barometer
- 1 Rain gauge (Event Logger)

ADDITIONAL PARAMETER AT THOSE POINTS

- Cross-section (Trimble GNSS + Manual)
- Velocity (EM Flow Meter)
- Water samples

DATA COLLECTED

• Drone (DEM)

THE EQUIPMENT_



In-Situ Rugged Troll 100



EML Event Logger

THANK YOU