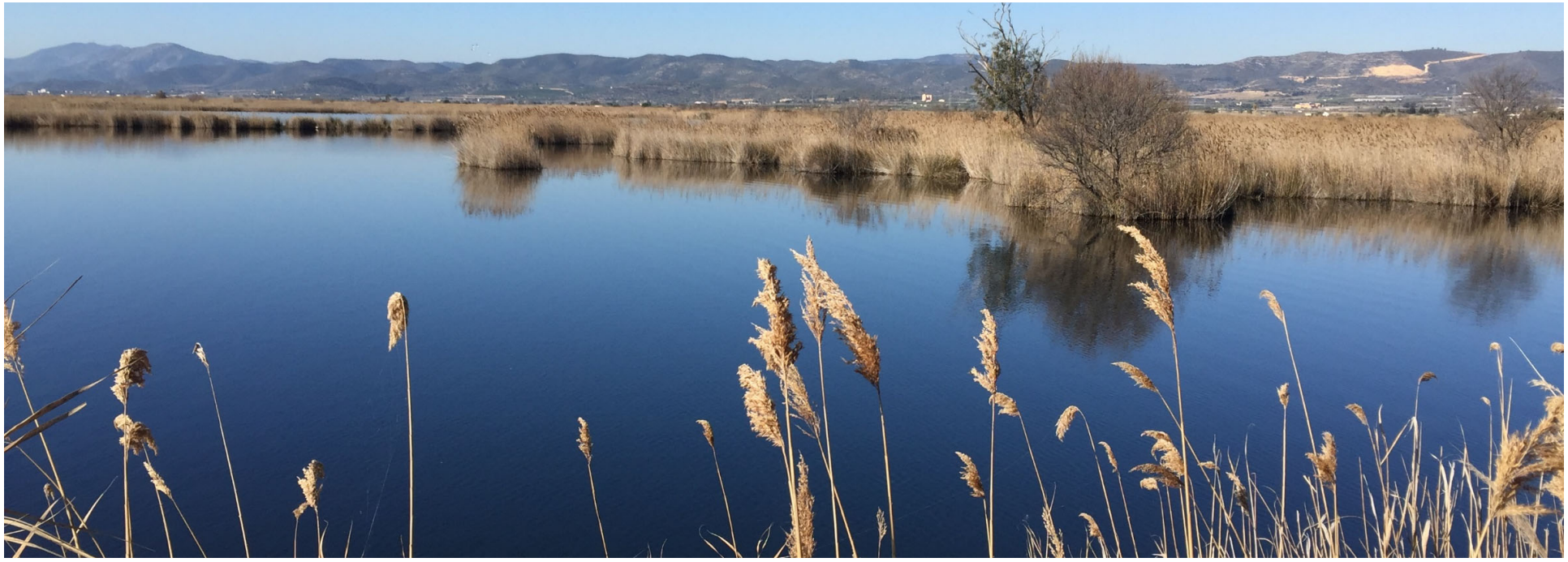
NETWORKING EVENT: GENERAL DISCUSSION

20/12/2021



www.wetlands4climate.eu · info@wetlands4climate.eu

FUNDACIÓN GLOBAL NATURE

EFE VERDE efeverde.com

VNIVERSITAT DE VALÈNCIA ICBiBE Institut Universitari Cavanilles de Biodiversitat i Biologia Evolutiva

València Clima i Energia

CON LA CONTRIBUCIÓN DEL INSTRUMENTO FINANCIERO LIFE DE LA UNIÓN EUROPEA

Carbon credits form peatland rewetting: MoorFutures Standard

Succow Foundation

TOPIC OF INTEREST

- Incluison of carbon credits in peatland rewetting to reduce CH_4 emissions of peatlands

METHODOLOGY

- Simplified standard principles for joining the voluntary markets of carbon credits
- Use of water level and vegetation as indicators [species groups (presence/absence)]

MAIN CONCLUSIONS

- Rewetting peatlands have some costs, especially economic, but not rewetting have higher costs focused on increasing GHG emissions, fires, and other damages
- Main benefits → safeguarding carbon stocks, enabling sequestration on long-run, water control, biodiversity… An opportunity to finance by carbon credits frompeatland rewetting, as well as to stablish a voluntary market

The role of Mediterranean wetlands in C & GHG-exchanges: LIFE Wetlands4Climate and related projects

Fundación Global Nature
Institut Cavanilles de Biodiversitat i Biologia Evolutiva, Universitat de València

TOPIC OF INTEREST

- Nature-based solutions, like carbon sinks, included in the conservation and management

METHODOLOGY

- Metabolic approach and GHG emissions to define a carbon balace
- GHG vs microbiota (structure and function)

MAIN CONCLUSIONS

- Ecology determines the trends of metabolic rates and carbon balance
- Ecological status can alter the carbon balance and retention capacity

Carbon cycling in temporary and shrinking waters: doing limnology when water vanishes

Universitat de Barcelona

TOPIC OF INTEREST

- Alteration of carbon sink and source dynamics in temporary and shrinking waters
- Both lotic and lentic ecosystems and studying the main processes of shrinking

METHODOLOGY

- Carbon and GHG fluxes

MAIN CONCLUSIONS

- Drying and rewetting phases are biogeochemical hot-moments (e.g. in CO_2 emissions)
- Dry phase in riverbeds is a hotspot of CO_2 emissions. The highest the water content, the lowest the CO_2 flux
- CO_2 from dry systems emissions share a pattern globally
- Reservoirs emit GHG emissions, especially during the dry phase

FLAMMINGGOS: The roles of waterbirds, invertebrates, and carbon and nutrient subsidies in modulating wetland greenhouse gas emissions

University of Louisville, USA
EBD-CSIC

TOPIC OF INTEREST

- Including the action of waterbirds and invertebrates with carbon and nutrients in GHG emissions

METHODOLOGY

- Lab study (effects of invertebrates and sinking algae on GHG emissions) and manipulative study (top-down effect of waterbirds on GHG emissions)

MAIN CONCLUSIONS

- More birds, fewer invertebrates → reduction of the microbial activity
- Significant higher fluxes of CO_2 in areas of flamingo exclusion

CiRcadian, seasOnal and climatic variability in greeNhouse gas emissiOns in Mediterranean reservoirS: physical and biogeochemical drivers (CRONOS)

University of Granada

TOPIC OF INTEREST

- CO_2, CH_4 and N_2O fluxes measurements simultaneously in reservoirs.
- Studies including the relationship of fluxes with morphometry, land uses and watershed lithology

METHODOLOGY

- GHG fluxes in field, including ebullition

MAIN CONCLUSIONS

- GHG fluxes from reservoirs are determined by watershed, lithology and anthropogenic pressure
- Shallow reservoirs show higher GHG emissions
- Dissolved CH_4 is related with Chl-*a* concentration

Pond ecosystems for resilient future landscapes in a changing climate: PONDERFUL Project

Universitat de Vic-UCC & ICREA
Aarhus University

TOPIC OF INTEREST

- Interactions between biodiversity and ecosystem functions and services like GHG production and C trapping in ponds across the climate gradient, ecosystem state and land use
- CO_2, CH_4 and N_2O
- Best way to manage ponds to optimize their carbon capturing capacity and minimize GHG emissions

METHODOLOGY

- Mesocosm experiments including both diffusive and ebullitive fluxes, and sampling ponds across Europe

MAIN CONCLUSIONS

WetLands 4CLIMATE

www.wetlands4climate.eu
info@wetlands4climate.eu

CON LA CONTRIBUCIÓN DEL INSTRUMENTO FINANCIERO LIFE DE LA UNIÓN EUROPEA

FUNDACIÓN GLOBAL NATURE

EFE VERDE
efeverde.com

VNIVERSITAT DE VALÈNCIA
ICBiBE
Institut Universitari Cavanilles de Biodiversitat i Biologia Evolutiva

València Clima i Energia

Con el apoyo de:

GOBIERNO DE ESPAÑA
VICEPRESIDENCIA TERCERA DEL GOBIERNO
MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA Y EL RETO DEMOGRÁFICO

Fundación Biodiversidad

GENERALITAT VALENCIANA
Conselleria d'Agricultura, Desenvolupament Rural, Emergència Climàtica i Transició Ecològica

AJUNTAMENT DE VALÈNCIA
CONSERVACIÓ D'ÀREES NATURALS I DEVESA-ALBUFERA

AJUNTAMENT DE TORREBLANCA