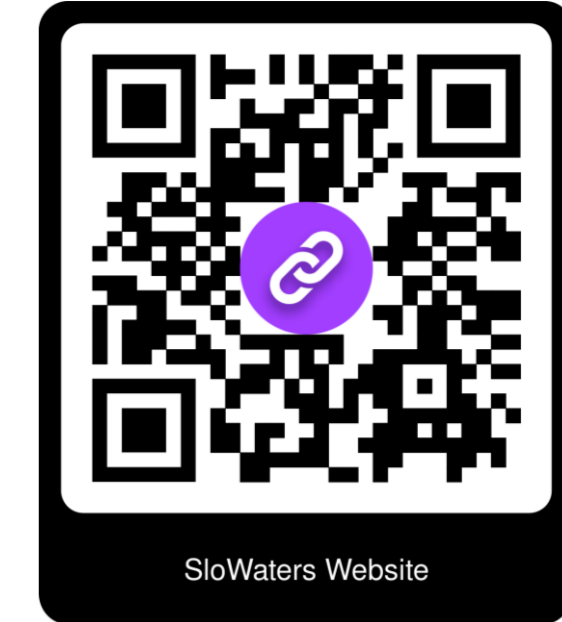
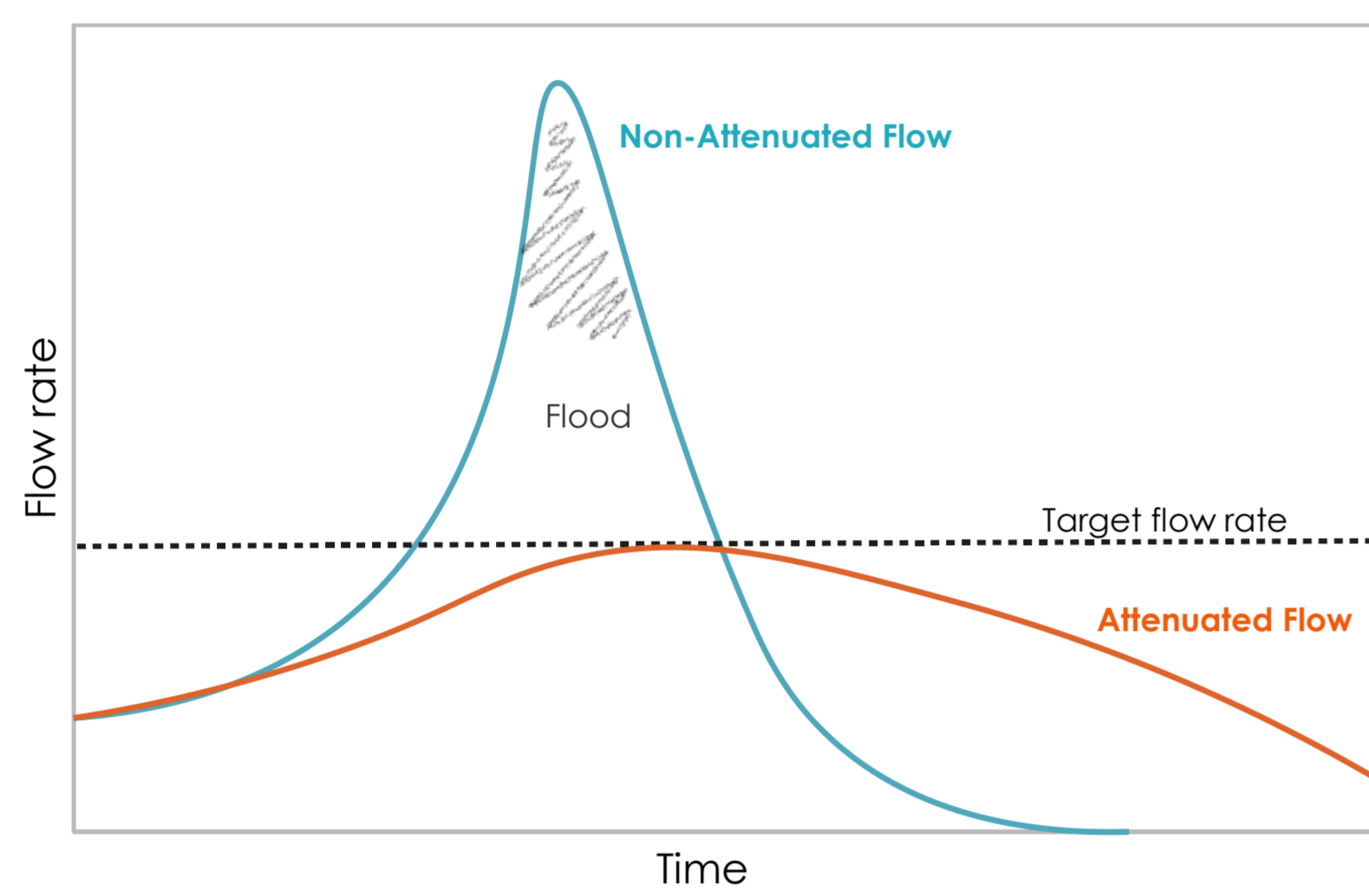
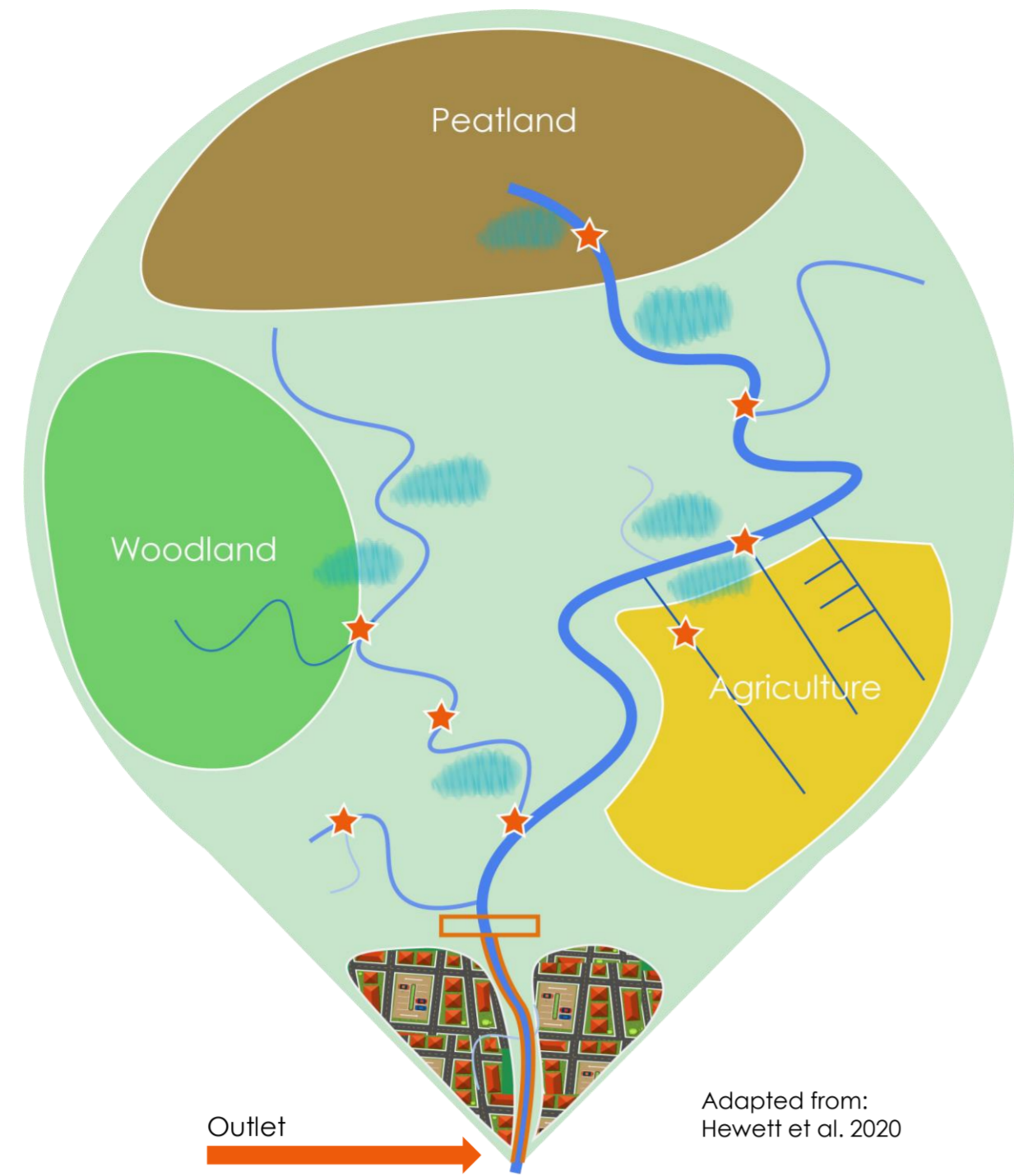


M. Bourke (TCD)
 D. Murphy (UCC)
 P. Quinn (NU)
 S. Harrison (UCC)
 M. Wilkinson (JHI)



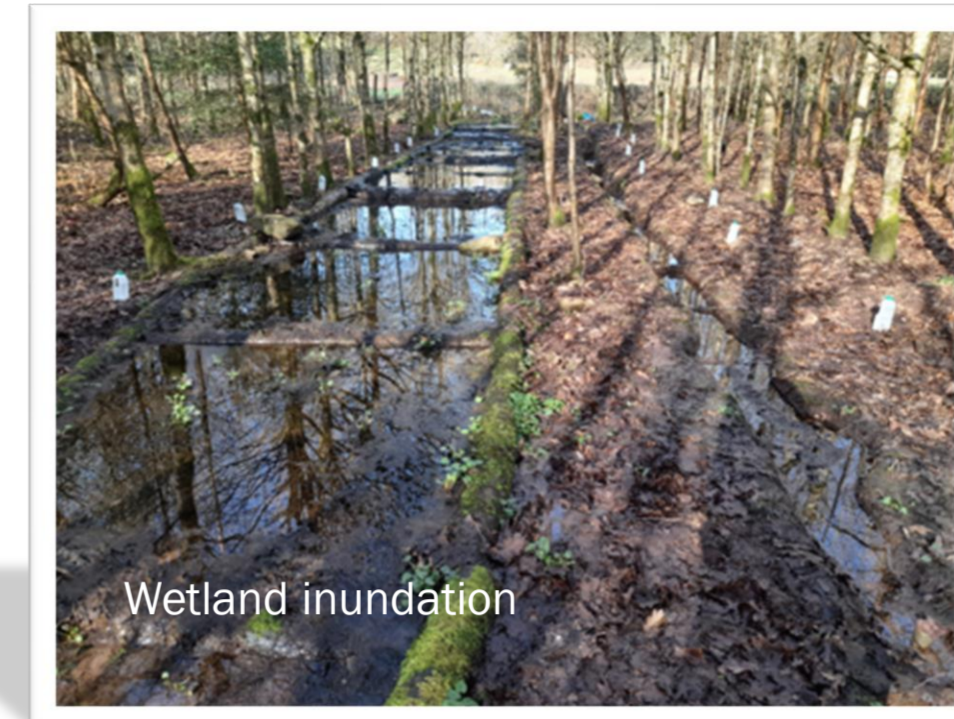
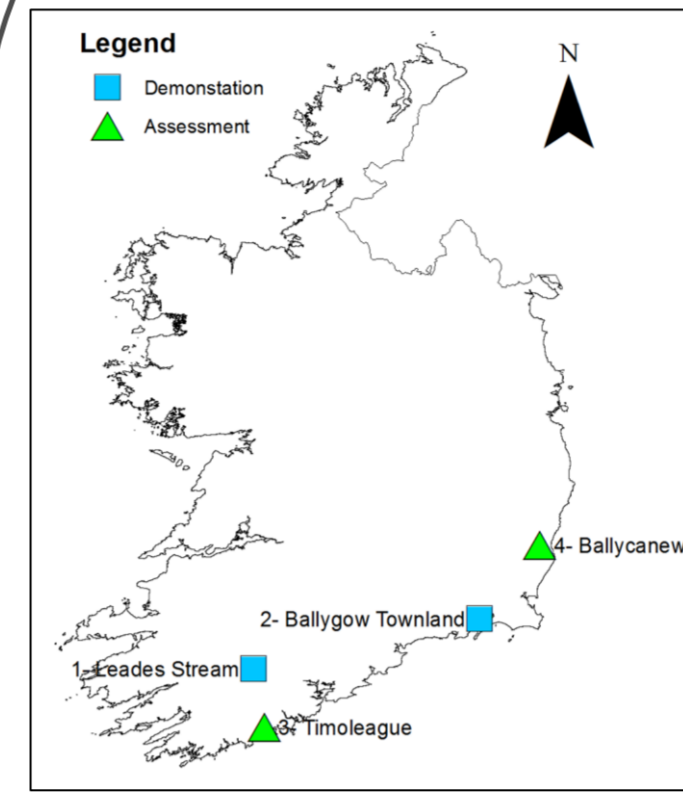
Concept

1. Increase Temporary Storage
2. Increase Roughness
3. Increase Infiltration Loss
4. De-synchronise tributary flows

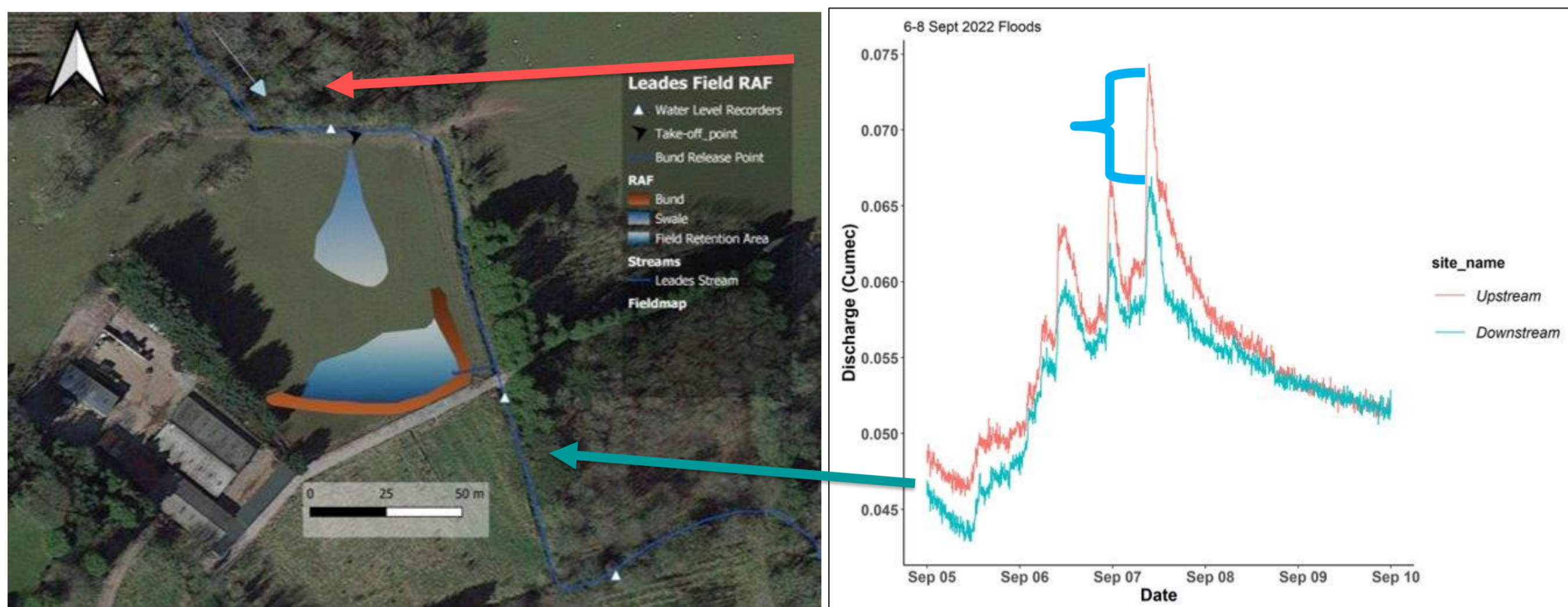


Demonstration

Runoff attenuation features



FLOODS: Peak discharge reduced by 25%



Note: Data are from D. Murphy's Ph.D

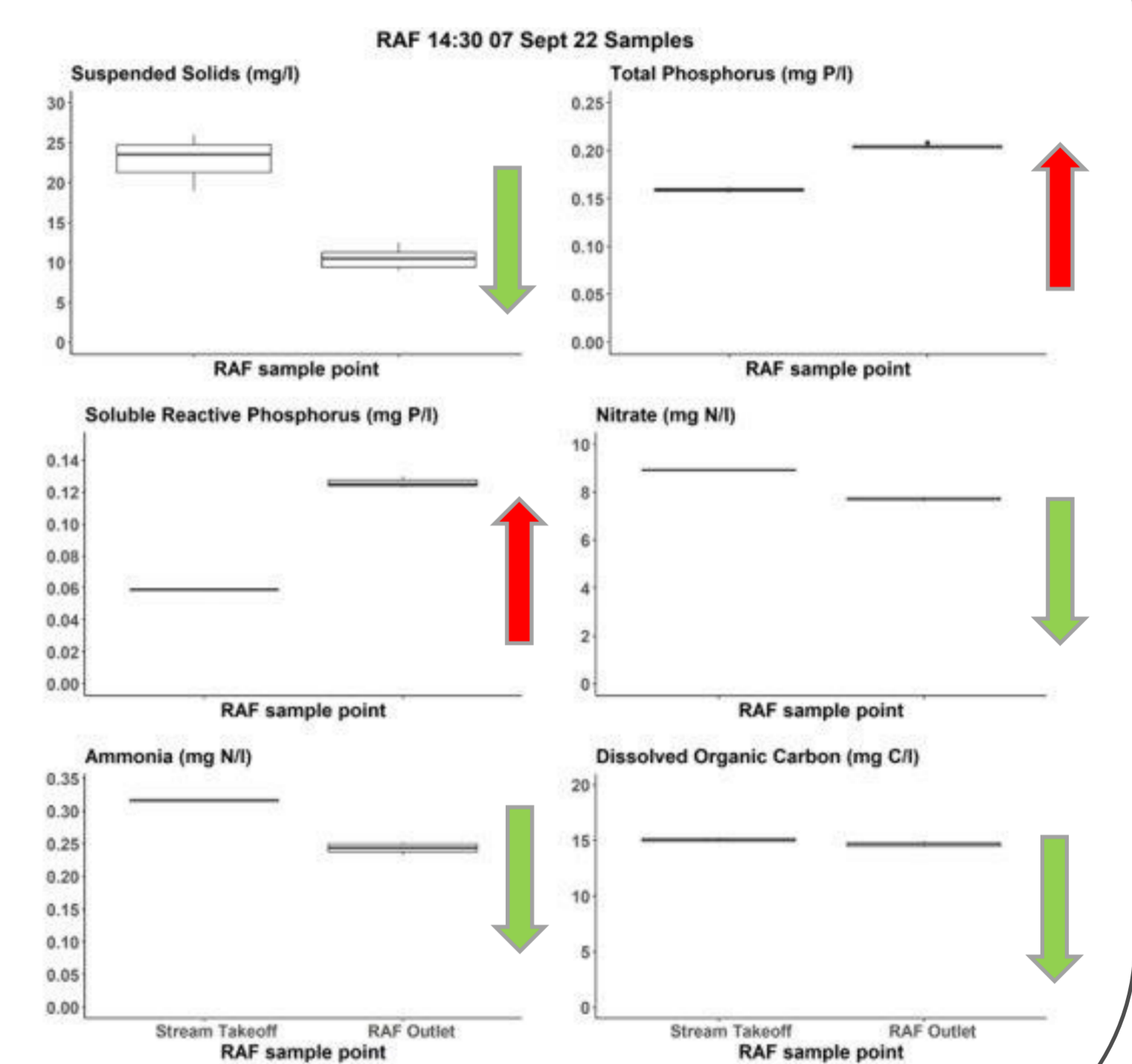
WATER QUALITY: improves

Retention of:

- ✓ Suspended Solids
- ✓ Nitrate
- ✓ Ammonia
- ✓ Dissolved Organic Carbon

Increase in:

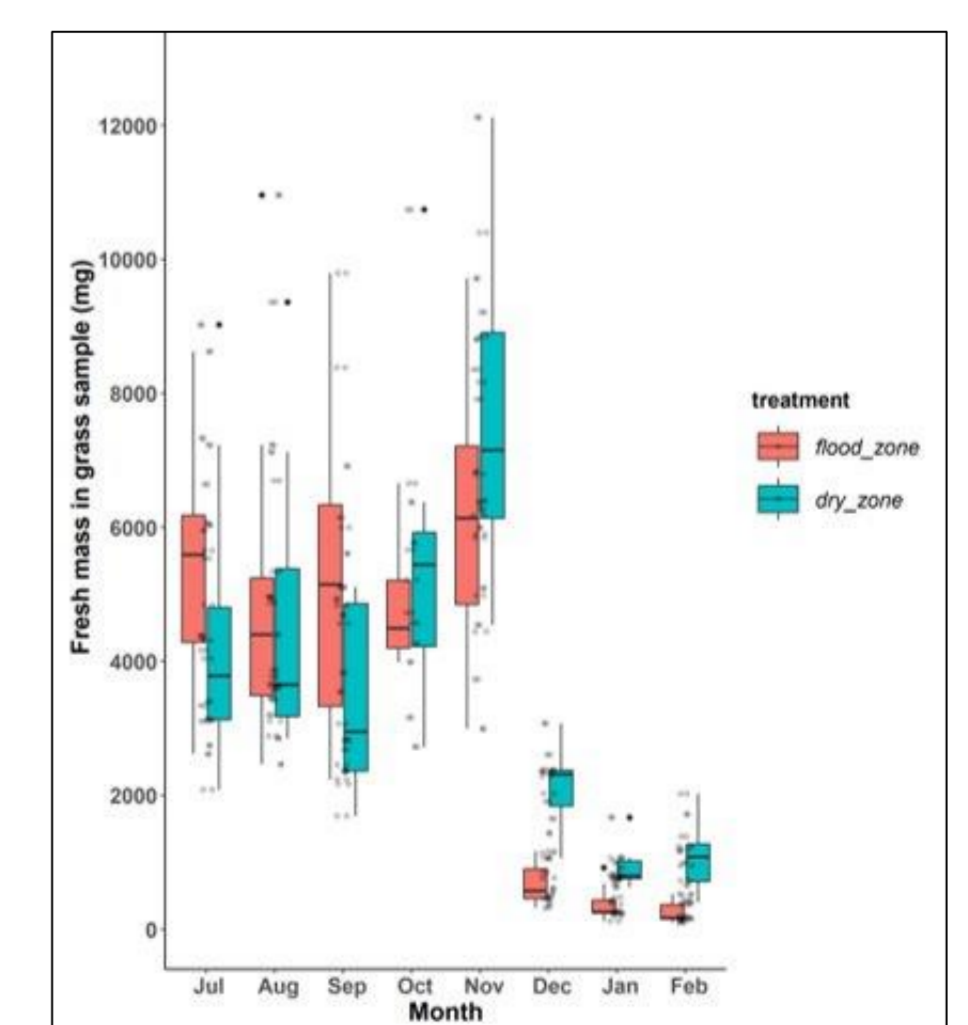
- Total Phosphorous
- Soluble reactive Phosphorous



Note: Data are from D. Murphy's Ph.D

Do they work?
YES

Better Grass growth:
 more grass in inundation areas compared to non-inundated areas



Note: Data are from D. Murphy's Ph.D

