

Slowing the Flow at Pickering: Have we Made a Difference?

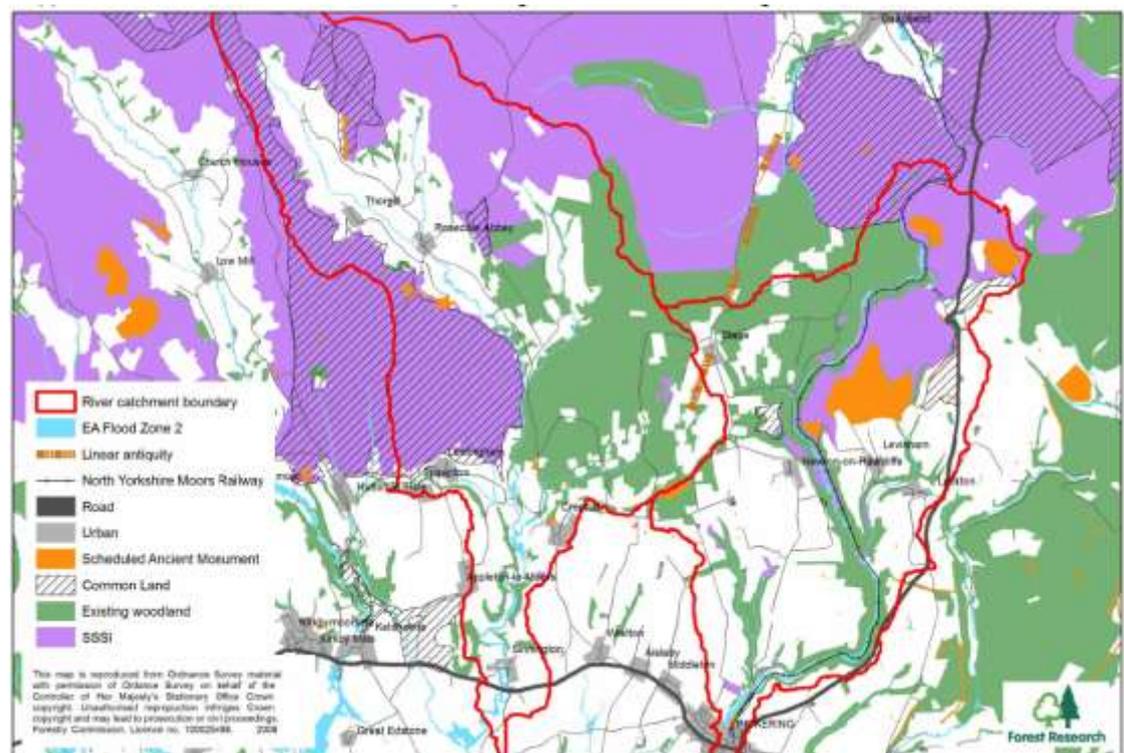
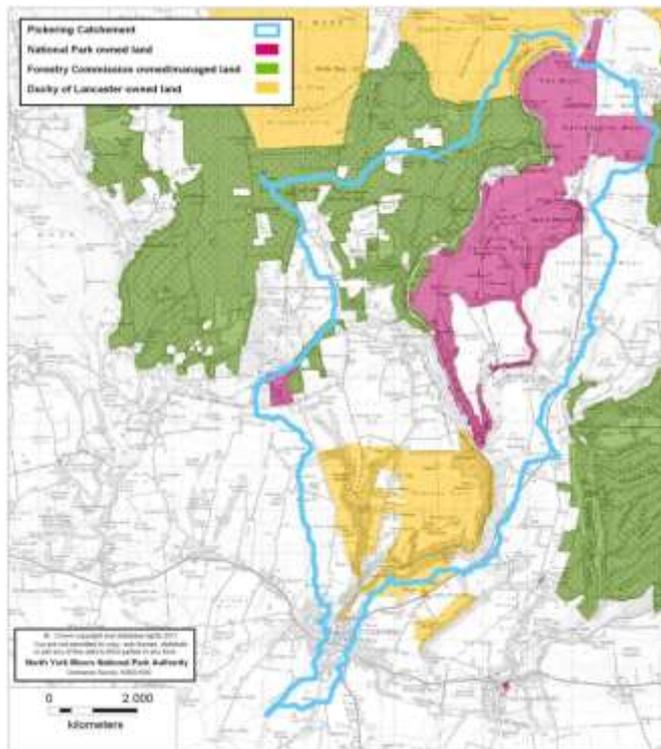
'The Project Partnership'

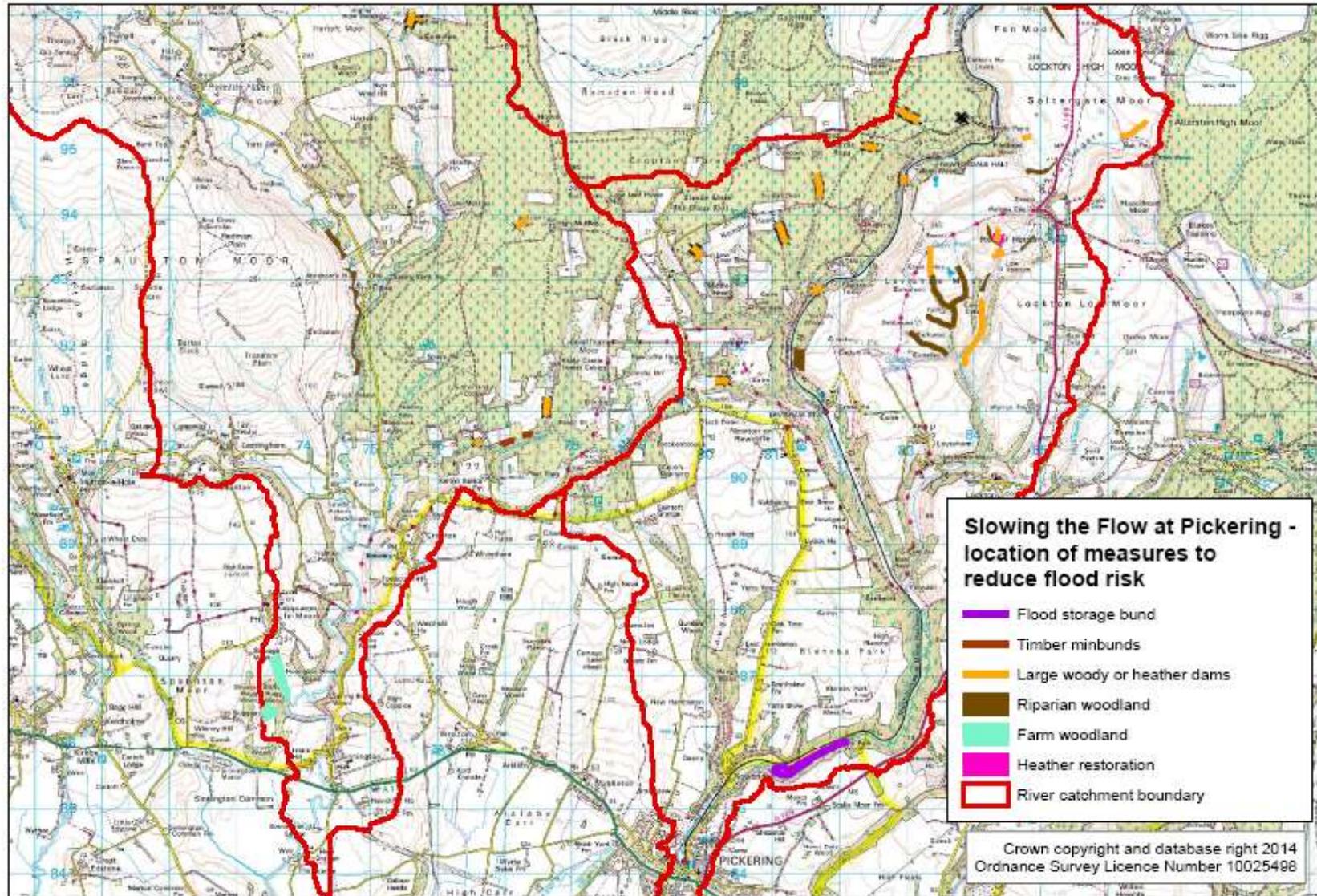


Sinnington Parish Council

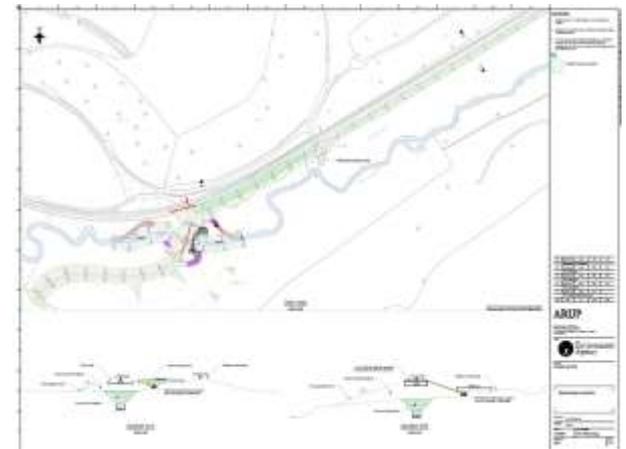


Aim: To demonstrate how the integrated application of a range of land management practices can help reduce flood risk at Pickering (from 25% to 4%), as well as deliver wider multiple benefits for local communities.





Construction underway of low-level, flood storage bund, designed to store 120,000 m³: Jan-Sept 2014



19 ha of riparian woodland planted/naturally regenerated between 2011-13, plus 23 ha of farm woodland in 2012/13 (in River Seven catchment): benefits for soil infiltration but otherwise, too early.



Yes, 175 LWD dams installed within wooded and open channels – performing as expected during flood events by increasing flood water storage.

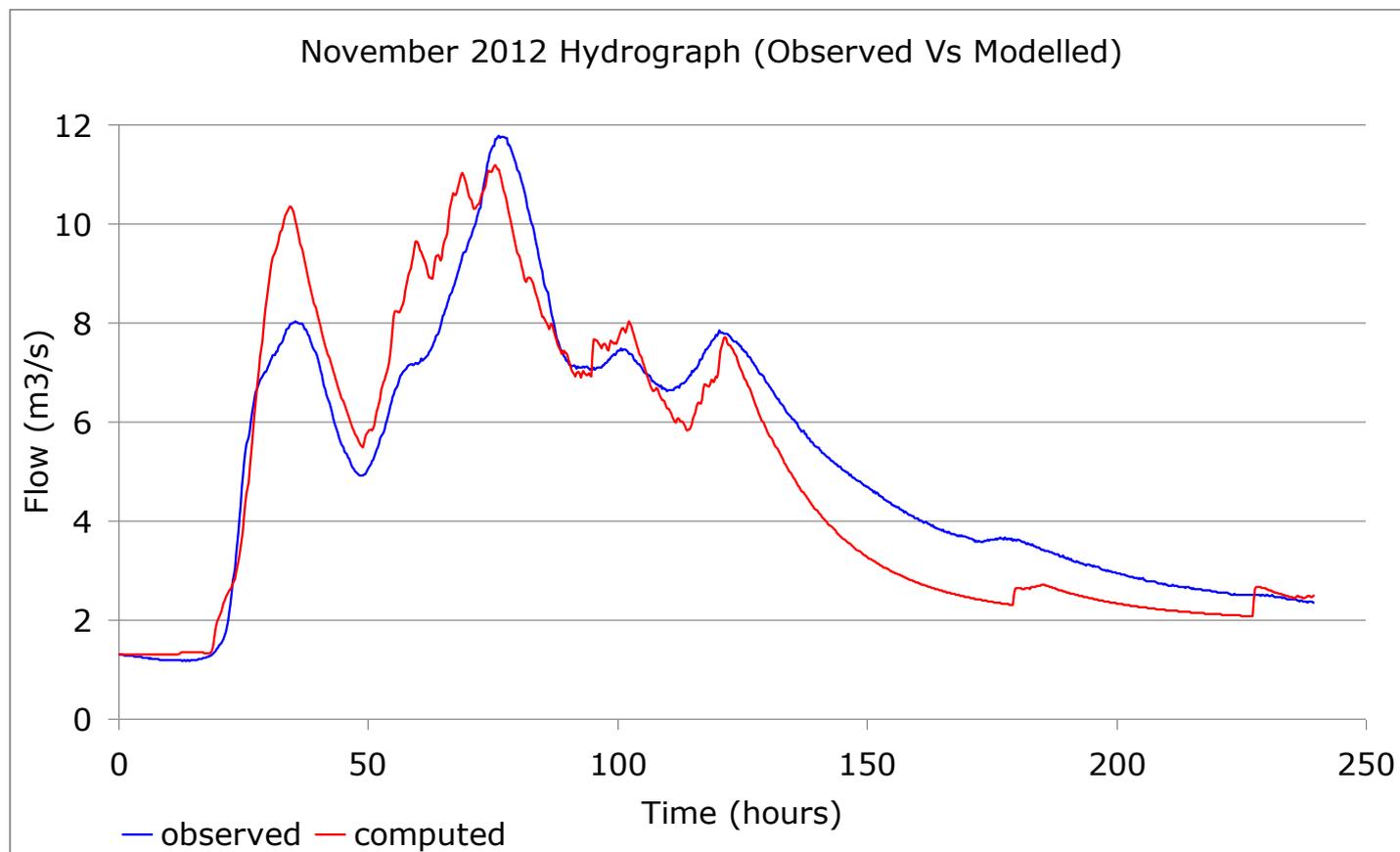


Timber minibunds observed to be working but still to be tested under extreme events (potential to store several thousand m³ of flood water).



Blocking of moorland drains, controlling heather burning, establishing no-burn buffer zones along watercourses, re-seeding, re-designing footpaths, and farm yard works, observed to be reducing soil erosion and rapid runoff.





Rainfall-runoff modelling over-predicted 1st peak by 30%; reduced time to peak but also height of second (single vs multiple peak); and enhanced rate of recession limb.

Conclusions:

- On track to deliver or exceed targets for all measures except woodland planting.
- Most of the land management measures observed to be working at the local scale but can't be definitive about their contribution to the November 2012 near-flood in Pickering.
- Main flood storage bund designed to reduce chance of Pickering flooding in any given year from 25% to 4% or less.
- Local community have largely embraced the concept of a whole-catchment approach to flood risk management.
- Project gained national profile and helping to shape government policy on flood risk and land use management.