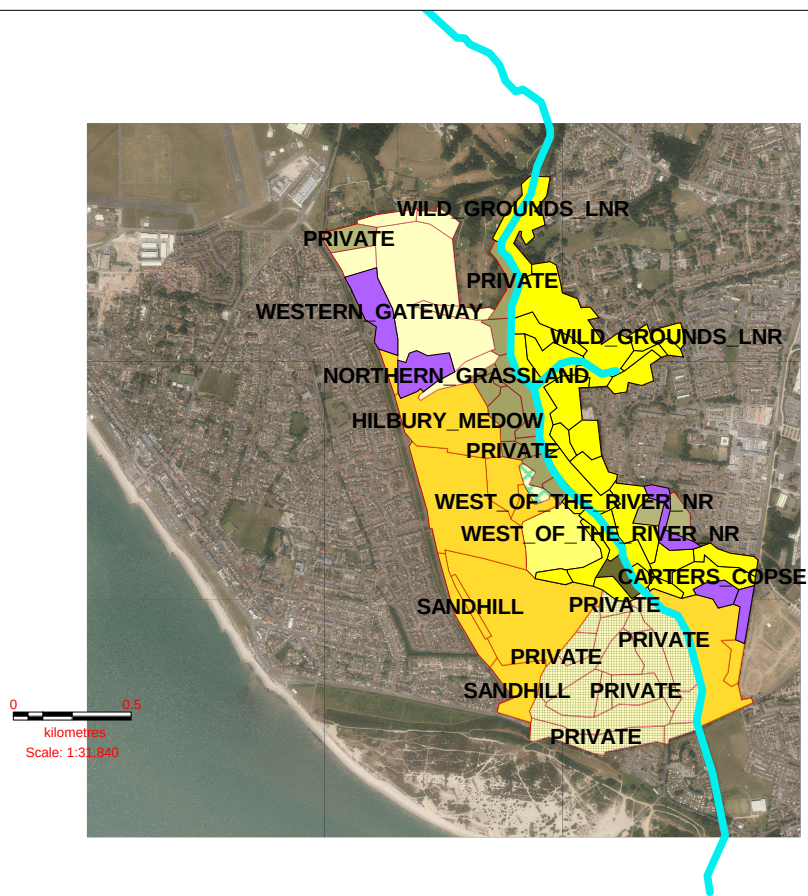






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University of
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ALVER VALLEY COUNTRY PARK

10 Year Management Plan Improvements

GIS & Habitat Management (ACBA7005)

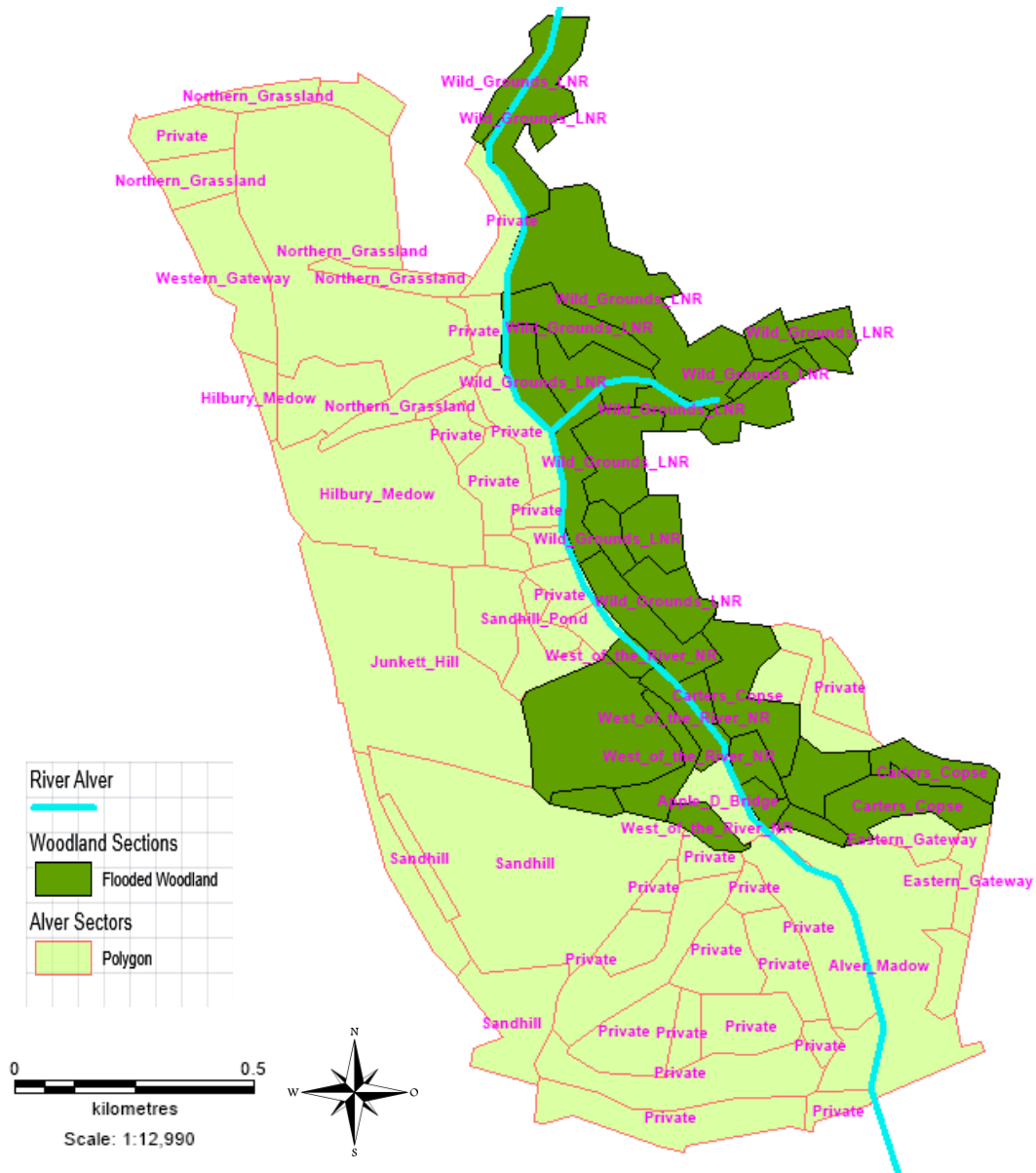
Matt Morga (1705592)



Alver Valley Country Park : Location

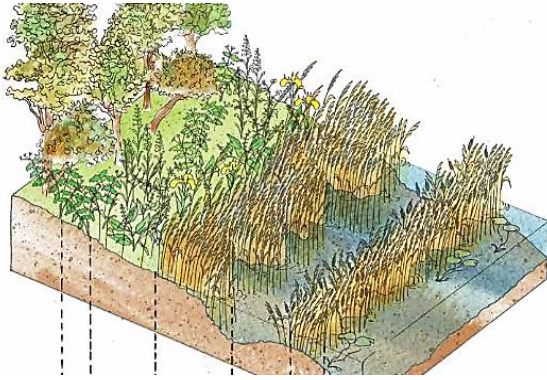
- Hampshire (the south coast of England).
- Large territory (200 ha).
- Silty clays and peat deposits on river banks.
- Post-industrial land (ex-quarry and landfill).
- Higher-Level Stewardship (HLS) Grant received in 2018
- Recreational use and habitat enhancement
- Frequent flooding

(Gosport Borough Council, 2015; Mapinfo, 2021).



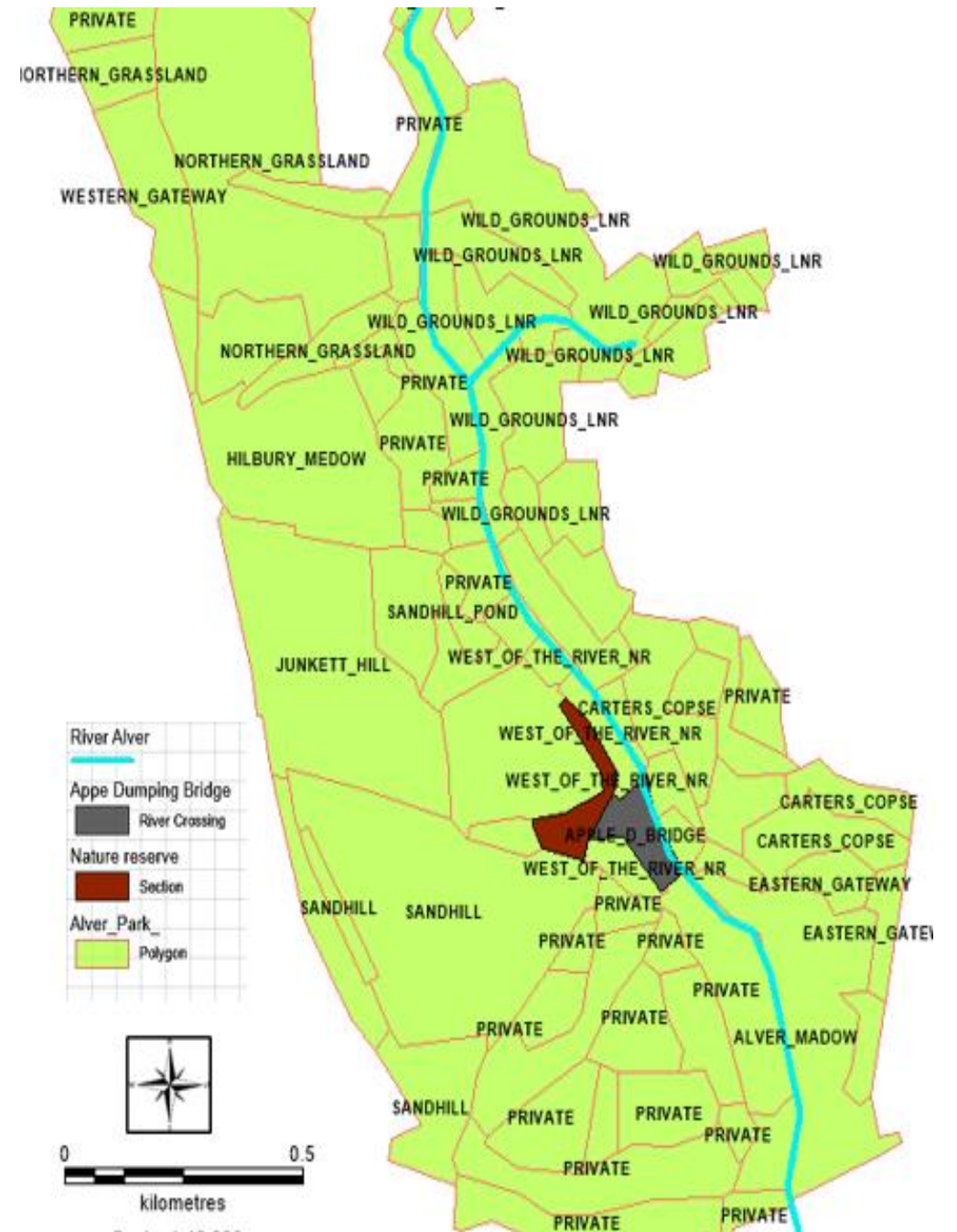
Flood control: 'Leaky Dams' (Tudeley Woods Example)

- Cheap technique.
- Gosport Borough Strategic Flood Risk Assessment.
- Can reduce runoff, flash floods.
- Can trap sediment.
- Habitat enhancement.
- Climate change resilience.



Flood Control & Pollution Control: Reedbeds Introduction (River Cain example)

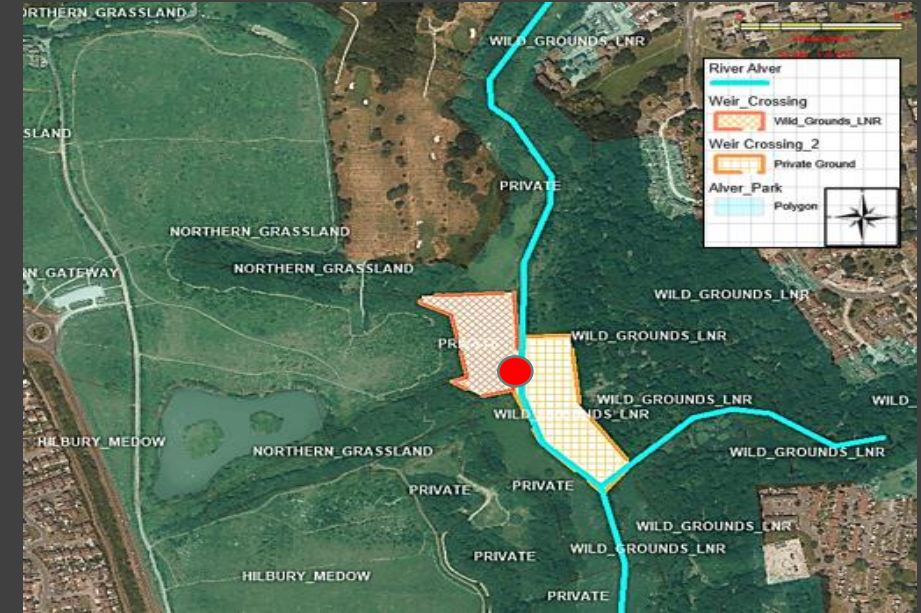
- Apple Dumpling bridge and West of the River NR area.
- Multi-species habitats (perfect for water voles' conservation) (UK BAP).
- Ditches to maintain 1m depths (important).
- Absorbing pollutants.
- River flow control and reduced flooding.



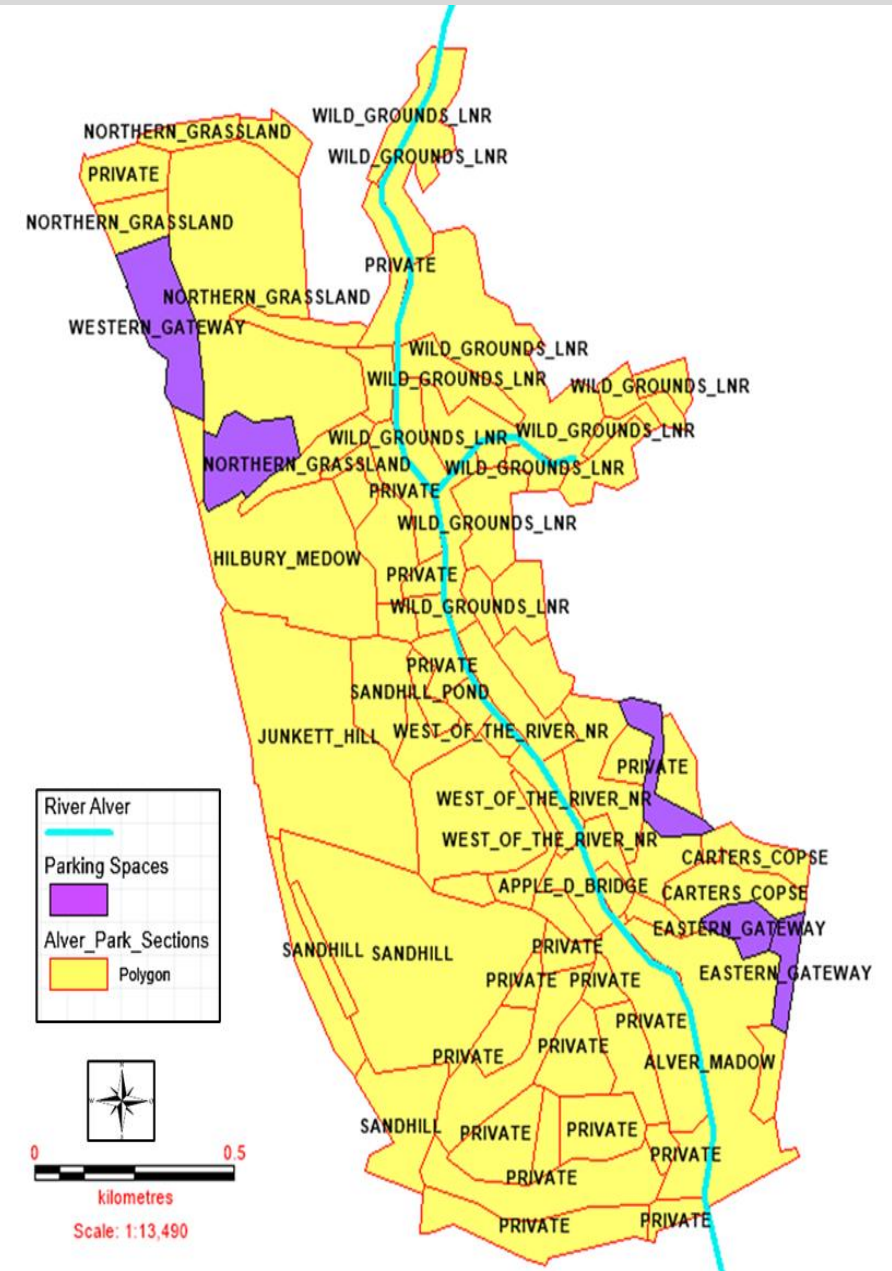
RIVERFLOW CONTROL: THORNEY WEIR CROSSING (GOOD PRACTICE GUIDE)

- Plans to install second river crossing (access issues) (in line with AVCP Strategic Plan).
- Sediment accumulation in the river channel.
- Access issues (strategic location)
- Thorney Weir (perfect solution).
- Multiple benefits of weir/crossing design.

(Rickard, Day and Purseglove, 2003; MapInfo, 2021).



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- A 3D cutaway diagram of a green roof assembly. From top to bottom, the layers are: a layer of green vegetation (grass), a layer of dark topsoil, a drainage layer (light-colored gravel), a filter layer (white mesh), an insulation layer (white foam), and a structural concrete deck. A grey drainage channel is shown on the right side, collecting water from the drainage layer.



References

- ABG Creative Geosynthetic Engineering (2021) Permeable Car Parking for Schools, Universities & Hospitals. Available at: <https://www.abg-geosynthetics.com/schools-university-hospital-parking.html> (Accessed: 14 May 2021).
- BBC News (2021) Reeds used to cut pollution in Llanfyllin's River Cain. Available at: <https://www.bbc.co.uk/news/uk-wales-13376913> (Accessed: 14 May 2021).
- Environment Times (2020) Naturally designed 'leaky dams' prevent flooding. Available at: <https://www.environmenttimes.co.uk/news/item/845-naturally-designed-leaky-dams-prevent-flooding> (Accessed: 12 May 2021).
- Gosport Borough Council (2014a) Alver Valley Country Park: Strategy.
- Gosport Borough Council (2014b) Strategic Flood Risk Assessment (Level 1). Gosport.
- Gosport Borough Council (2015) Alver Valley Gosport's Wildlife Haven. Available at: [https://www.discovergosport.co.uk/AVCP Leaflet 2016 web.pdf](https://www.discovergosport.co.uk/AVCP%20Leaflet%202016%20web.pdf) (Accessed: 10 May 2021).
- Morganti, M. et al. (2019) 'Multi-species habitat models highlight the key importance of flooded reedbeds for inland wetland birds: implications for management and conservation', Avian Research. doi: 10.1186/s40657-019-0154-9.
- Rickard, C., Day, R. and Purseglove, J. (2003) River Weirs-Good Practice Guide Guide-Section A. Available at: www.environment-agency.gov.uk (Accessed: 12 May 2021).
- White, G. and Blyth, S. (2013) Section heading Bringing Reedbeds to Life: creating and managing reedbeds for wildlife.

THANK YOU

ANY
QUESTIONS?

