

# Suffolk Holistic Water Management Project

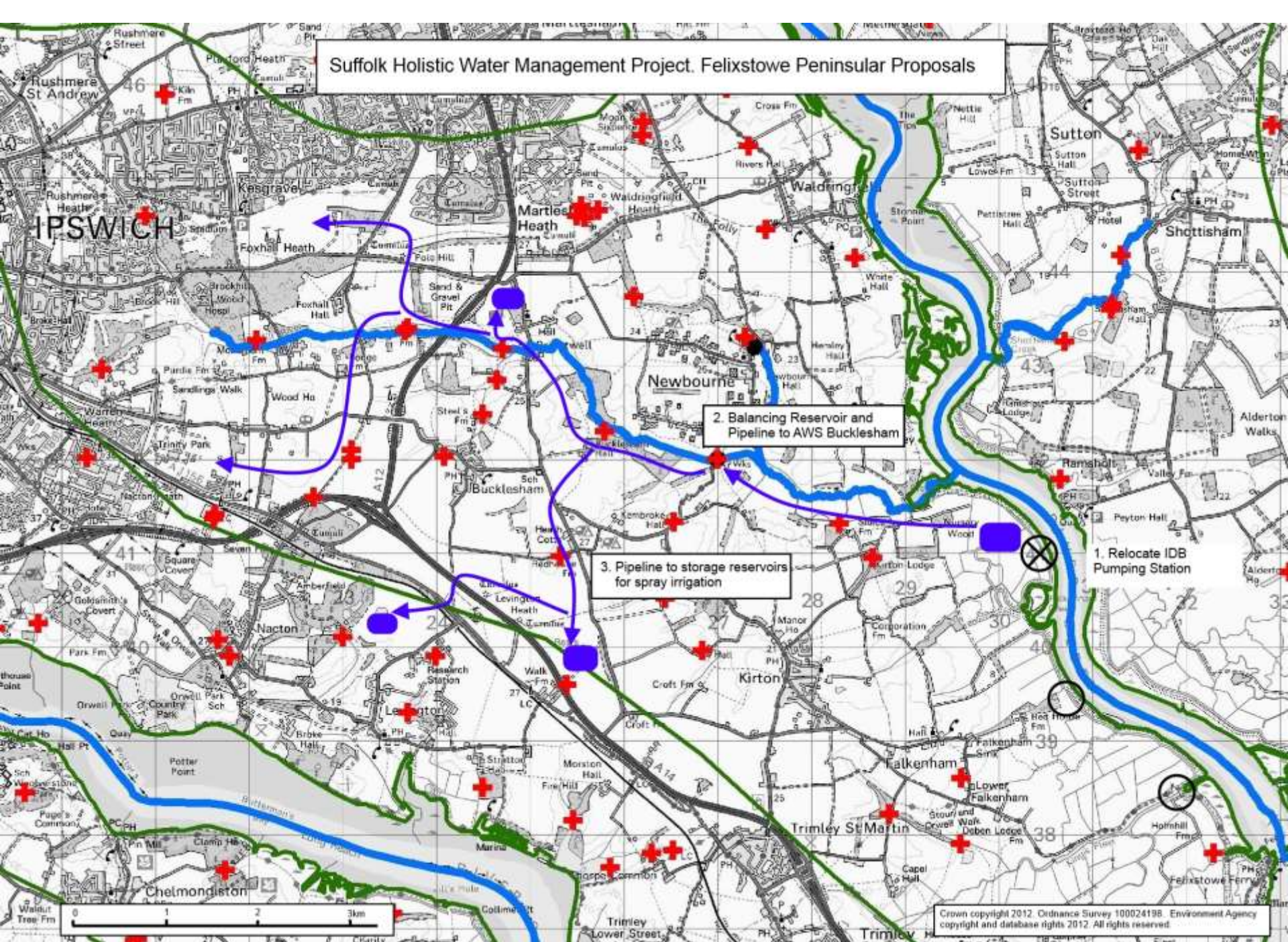
Felixstowe Peninsula Proposal

# Proposal Summary

**Re-use water currently discharged to tide to benefit flood management, water resources and the environment**

1. Relocate and reconfigure IDB Kings Fleet Pumping Station (1,500 Ml/a)
2. Construct balancing reservoir to capture water and pipe to AWS Bucklesham works (for possible treatment and ASR)
3. Extend raw water pipeline from Bucklesham to new and existing farm reservoirs for spray irrigation

# Suffolk Holistic Water Management Project. Felixstowe Peninsular Proposals



2. Balancing Reservoir and Pipeline to AWS Bucklesham

3. Pipeline to storage reservoirs for spray irrigation

1. Relocate IDB Pumping Station



# Environmental Benefits

- Mudflats (SAC priority habitat). Relocation of IDB Kings Fleet pump will prevent further sediment loss.



# Environmental Benefits

- Mill River.
  - Pristine but currently over-licensed. New supply can replace existing licences
- Habitat enhancement/creation
  - DEP priority habitats; mudflats, reedbeds etc

# Flood Management Benefits

- Internal Drainage Board.
  - Current operations in breach of Habitats Regulations- replacement essential.
  - Potential revenue stream.
- River Walls.
  - Enhanced saltmarsh provides additional protection, reducing maintenance.

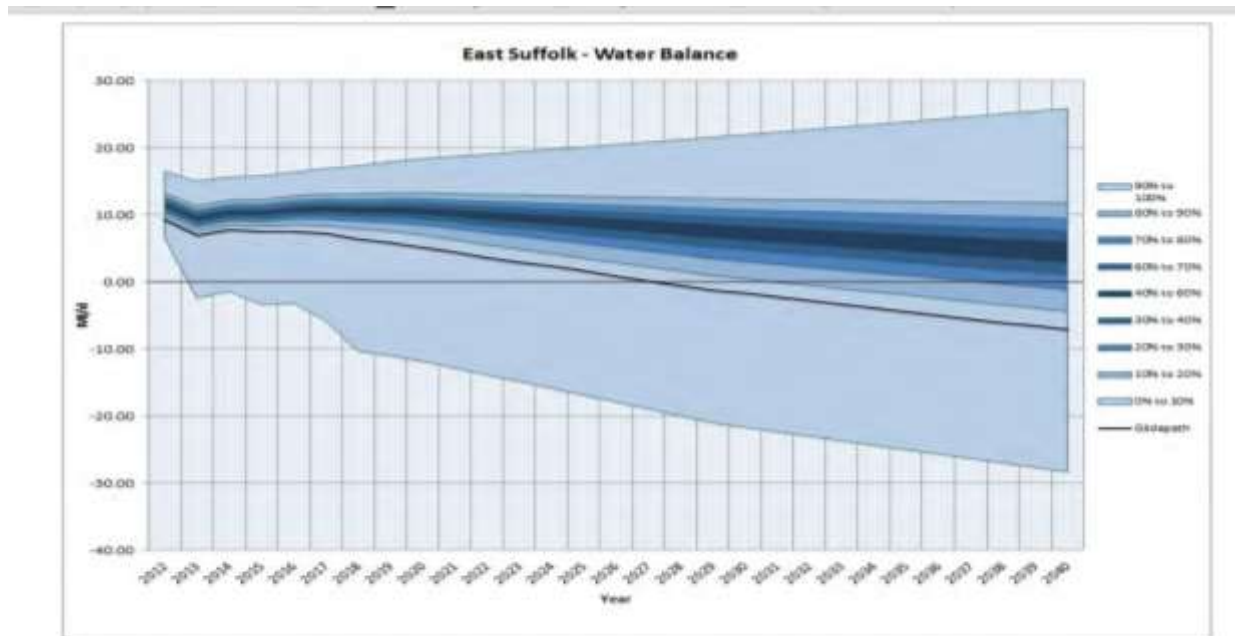
# Water Resource (Economic) Benefits

- Spray Irrigation demand = 562 Ml/a
  - Estimated value, £1.6M/a

*This figure includes 5 landowners who have expressed their requirements. There are 3 more in the area who have yet to state their needs.*

# Water Resources (Economic) Benefits

- Public Water Supply. E Suffolk zone demand deficit = 5.62 MI/d by 2039 (AWS Draft WRMP 2014).



- Options
  - Ipswich Water Re-use (£65 M)
  - S. Essex transfer (£8.3M)
  - Bucklesham ASR –Some infrastructure already in place and R&D undertaken.



# Risks and Issues (further work required)

- Water Demand.
  - Volumes, Quality, Seasonality.
- Water Supply
  - Catchment hydrology (determines infrastructure capacity).
  - Pipeline routing and reservoir construction.
- Conservation
  - SAC requires flushing (5%ile) and base flow
  - Habitat enhancement potential – Mill River and new habitats
- Management/finance
  - Capex programme, maintenance, resource allocation