Ignoring Main River Maintenance At Our Peril

Short-Term Win or Long-Term Loss?

APPG for Sustainable Flood & Drought Management

Wednesday 10th December 2025

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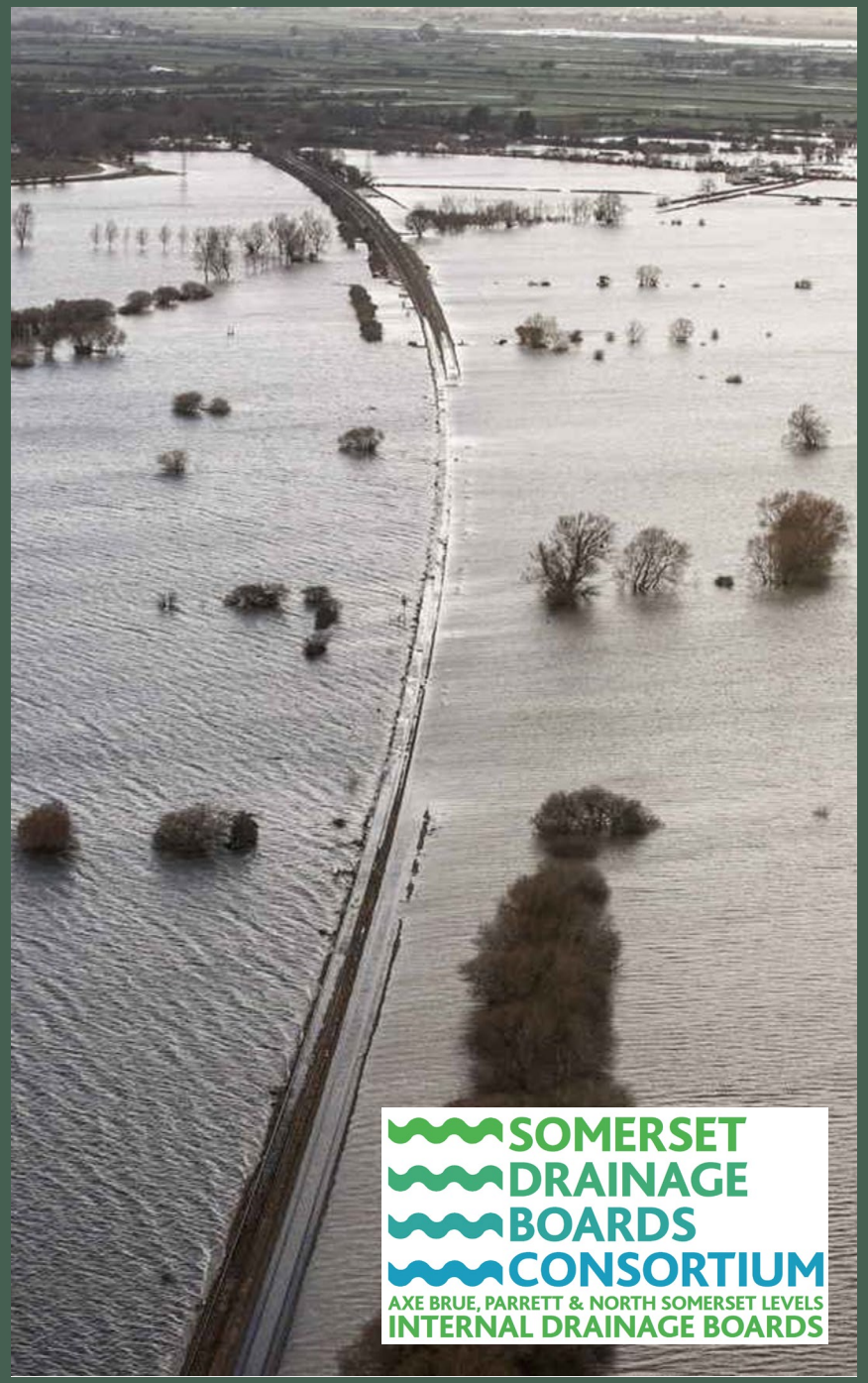
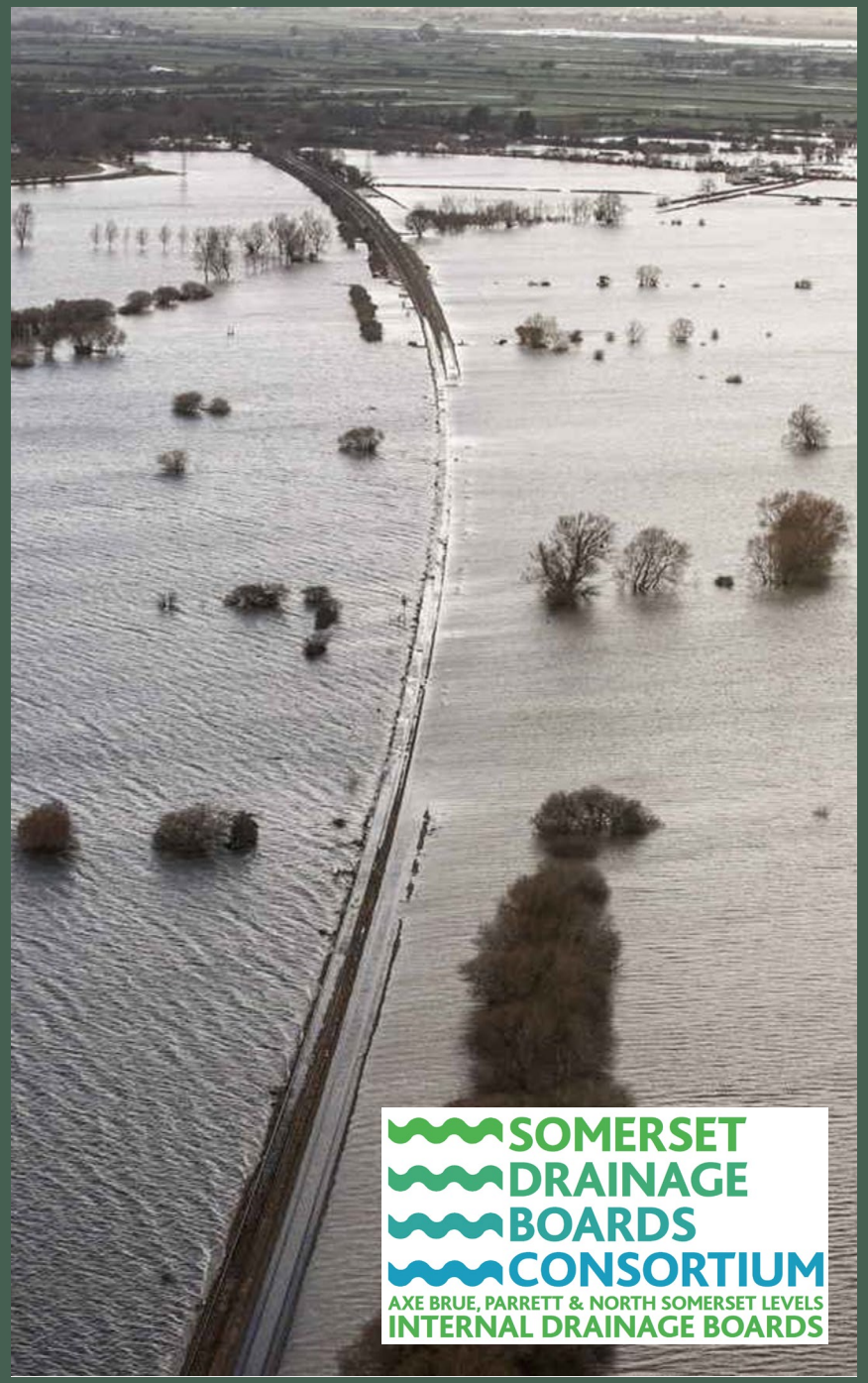
Chief Engineer and Clerk/CEO
Somerset Drainage Boards Consortium



Why is Maintenance, River and Asset Condition, Safe Conveyance and Storage of floodwater important?

Water which exceeds the **conveyance** capacity of Main Rivers spills over the banks into the adjacent lowland system where it causes flooding.

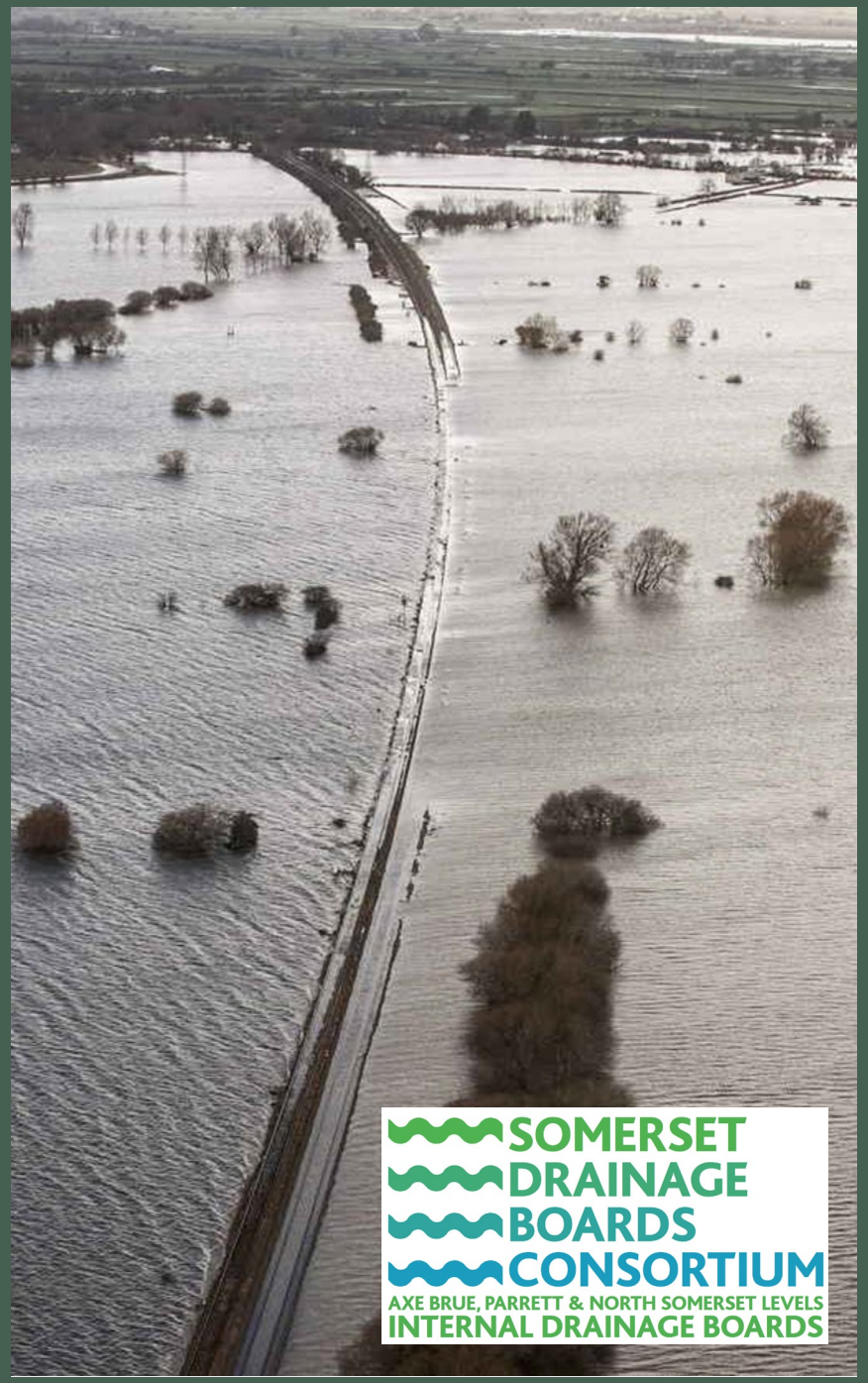
Here it stays until river levels subside and it can drain or be pumped back into the Main Rivers.



Why does this matter?

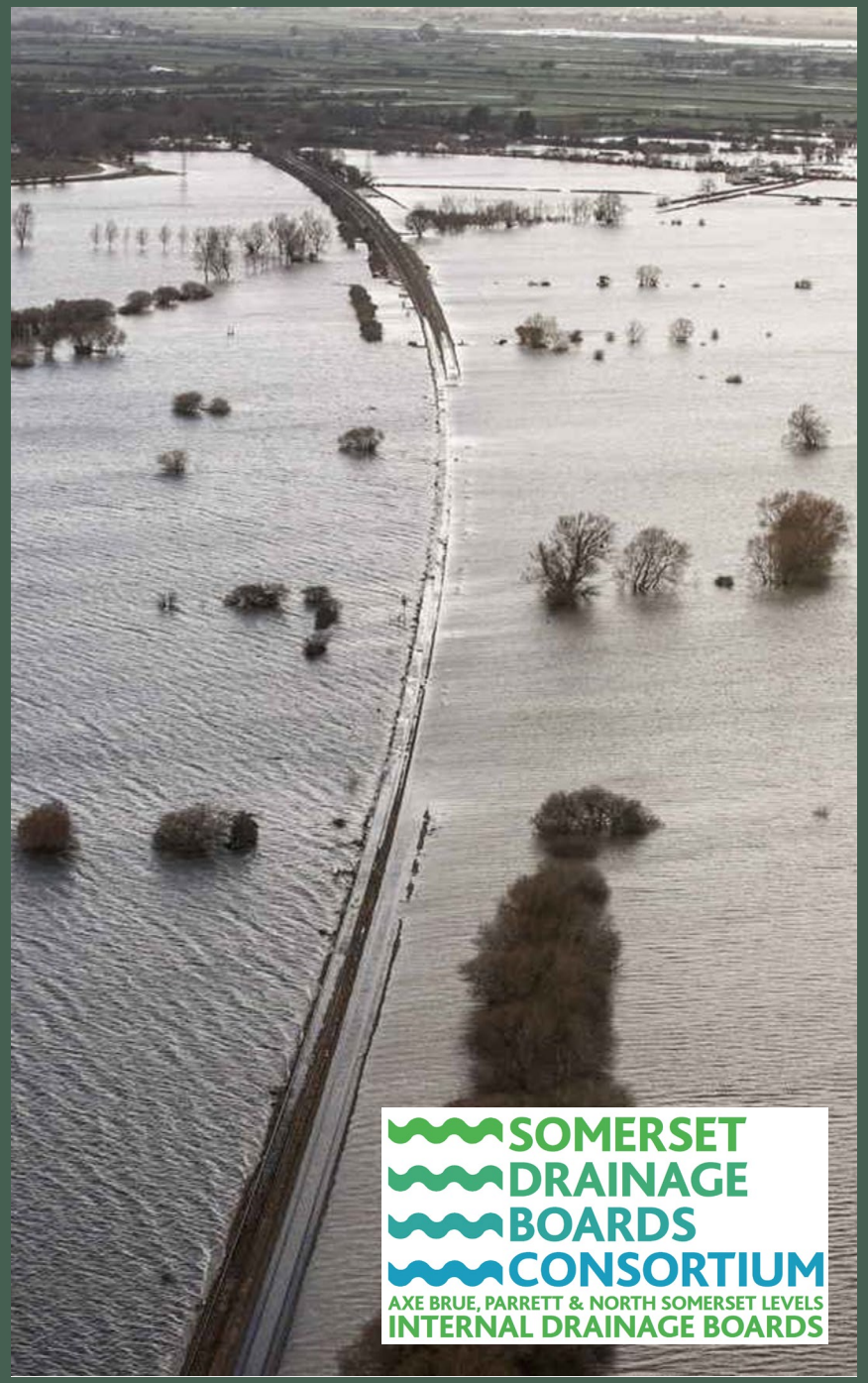
All aspects of Society have occupied these areas over generations and have become reliant on the maintenance of Main Rivers and Assets and the flood risk standards that result.

- Communities
- Property
- Transport and Communication
- Industry
- Food Production
- Environmental Designations
- Prospect of Growth



Why does maintenance matter ?

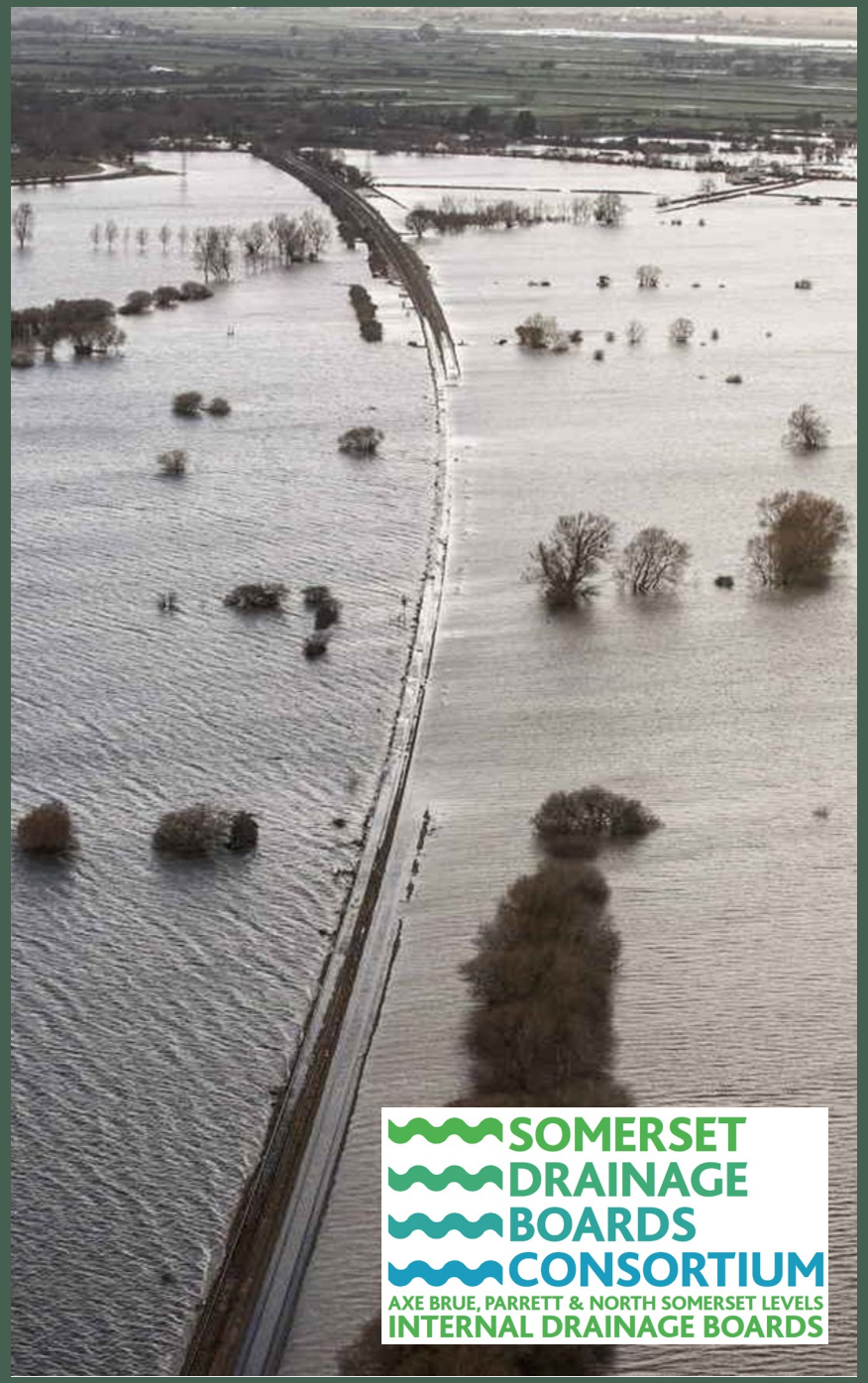
Maintenance reduces the likelihood that channel capacity will be exceeded, or assets will fail, so the likelihood, extent, depth, and duration and **damage** caused by flooding is reduced.



REALITY CHECK 1

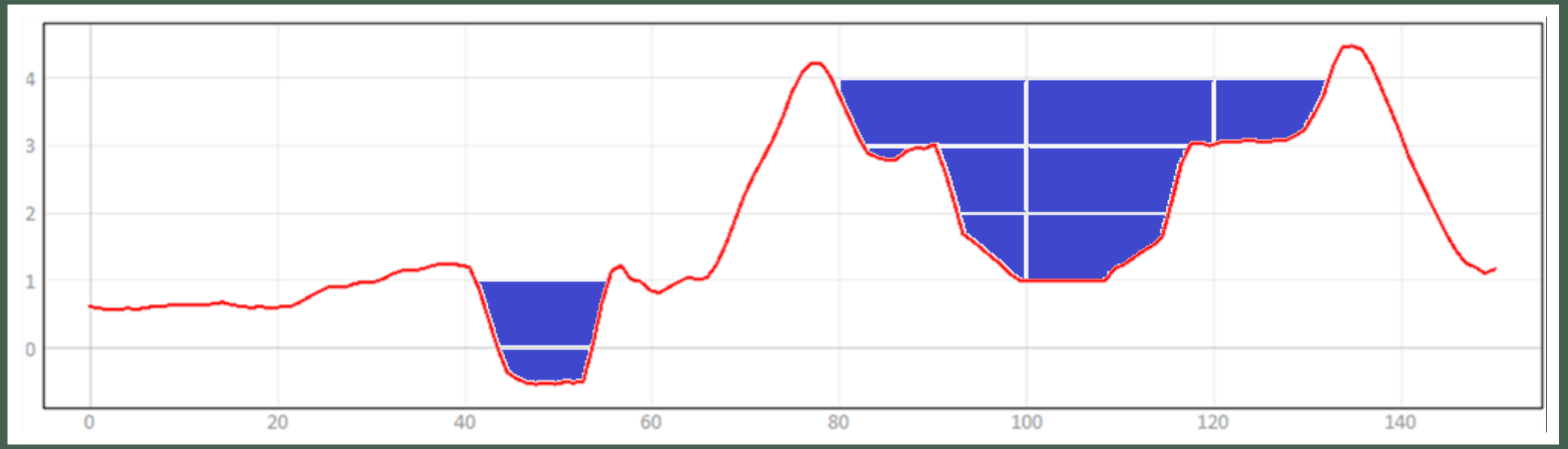
Whilst we know flooding can't be totally avoided, the likelihood and consequences have historically been managed to acceptable standards through a blend of capital improvements and maintenance.

Society in its broadest sense has developed and grown in these areas and is now dependant on these practices and standards. **No viable alternative has been offered in its place.**



Credit ADA

River Geometry Cross Section



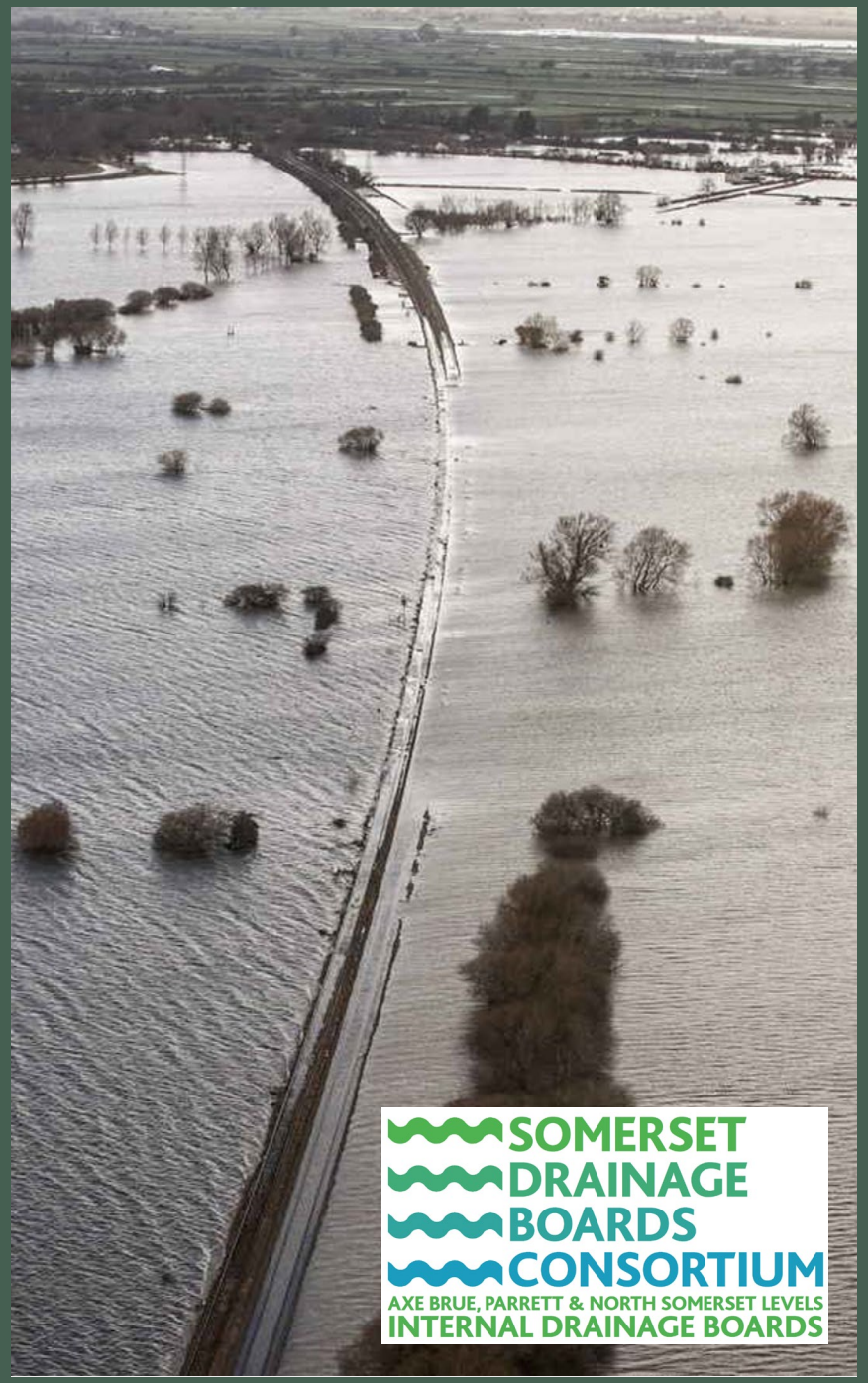
X and Y scales are not proportionate

Dependance of lowland systems on high level carriers

REALITY CHECK 2

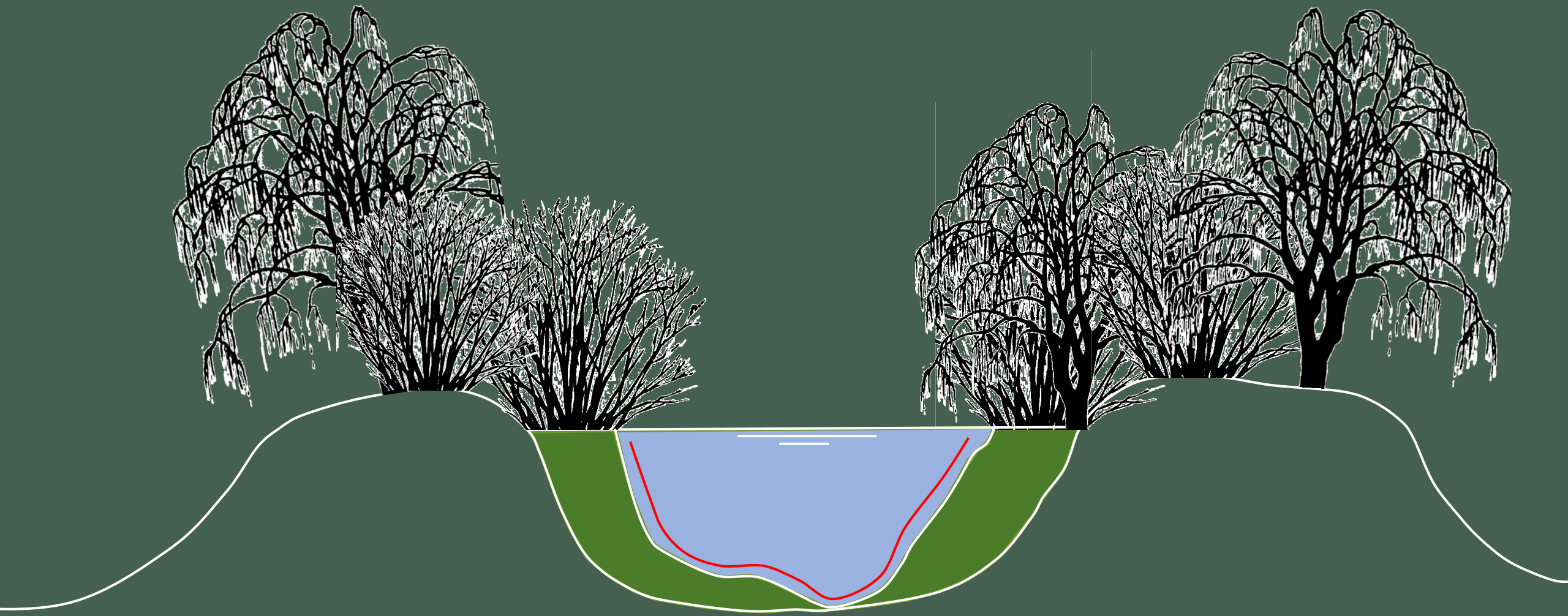
We are suffering a creeping withdrawal and decline.

The maintenance that the system has come to depend upon is now being quietly withdrawn.
Without sufficient visibility or understanding of the consequences.



Channel Conveyance and Maintenance

Neglected Main River Channel



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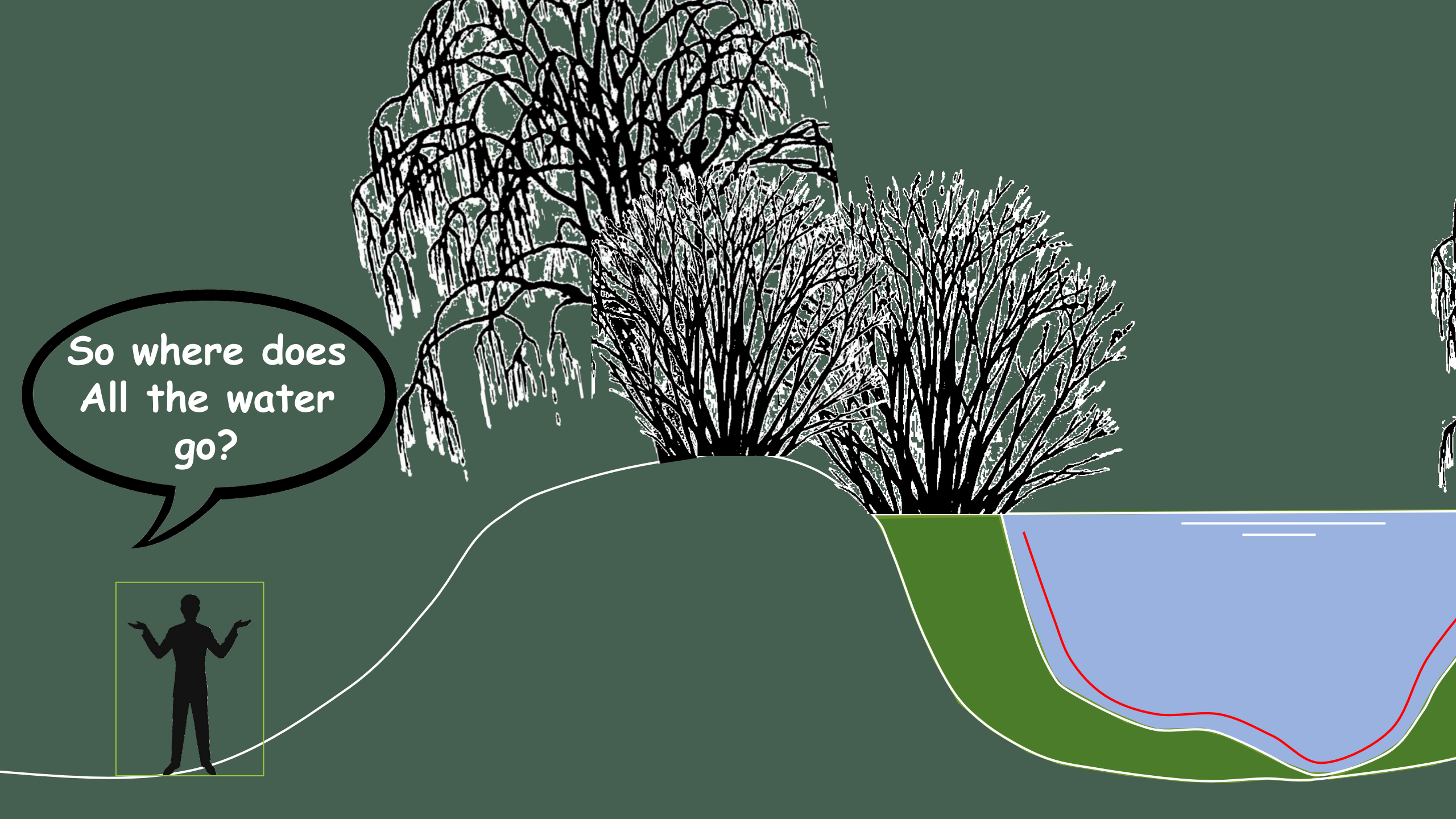
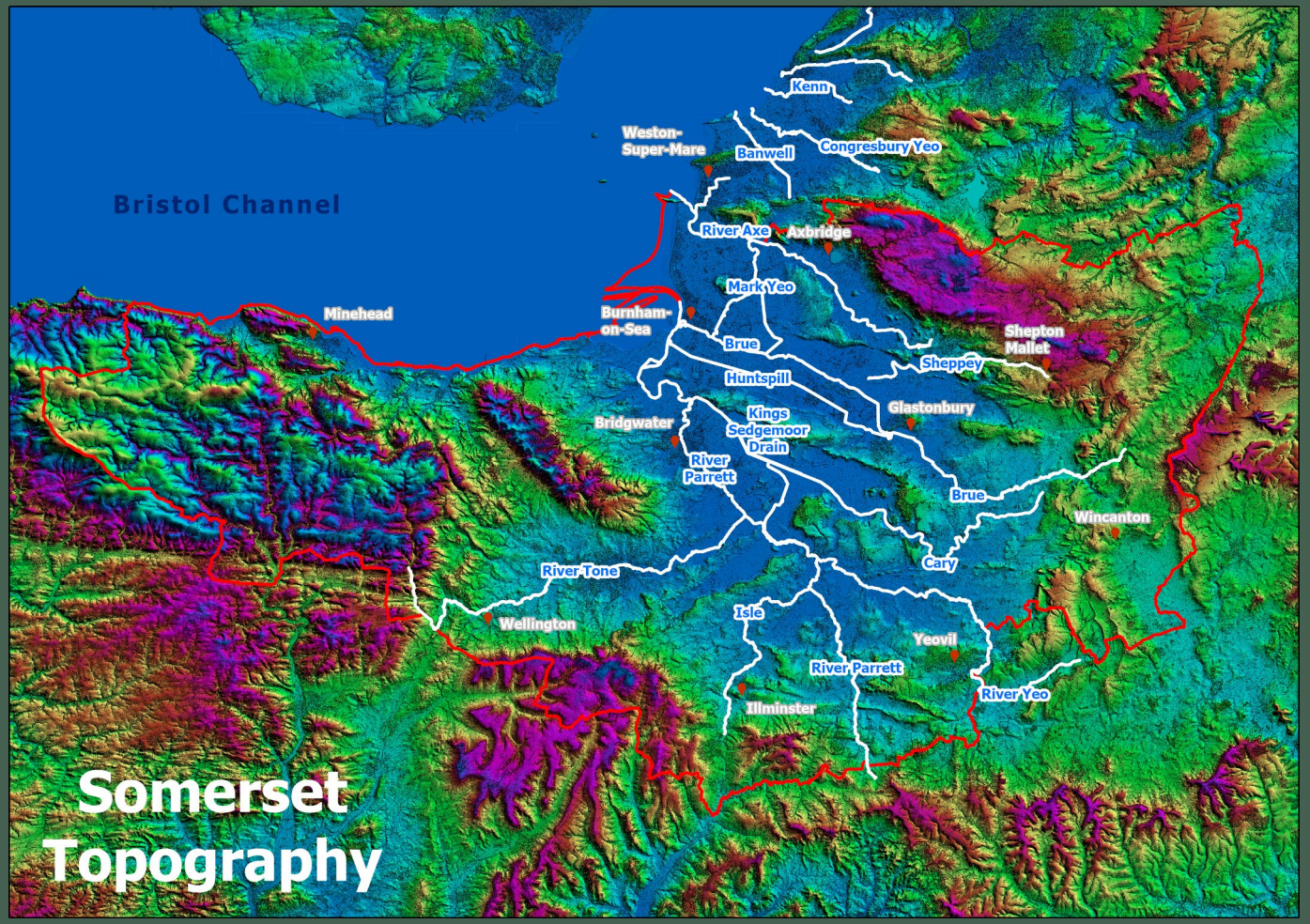
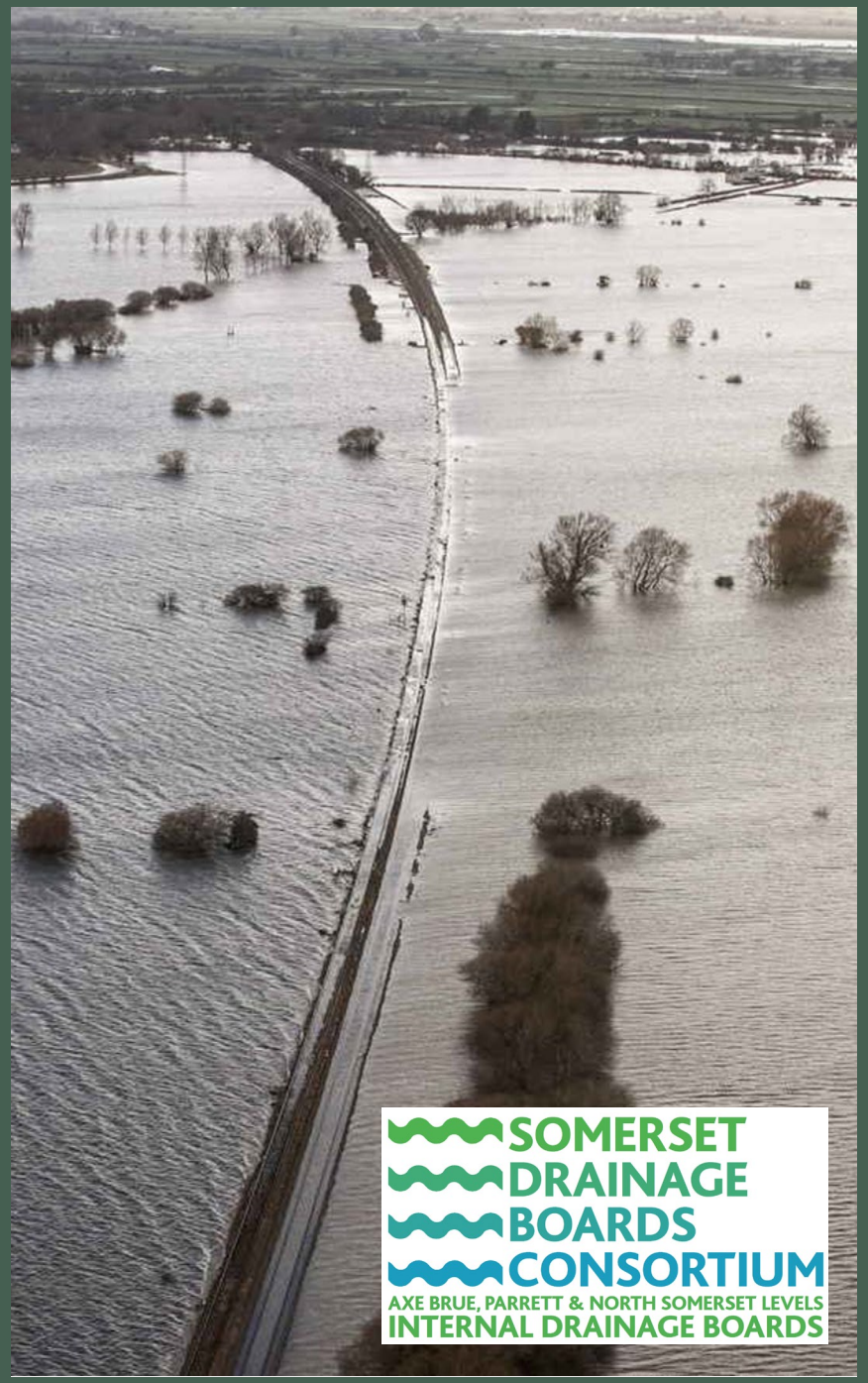

So where does All the water go?

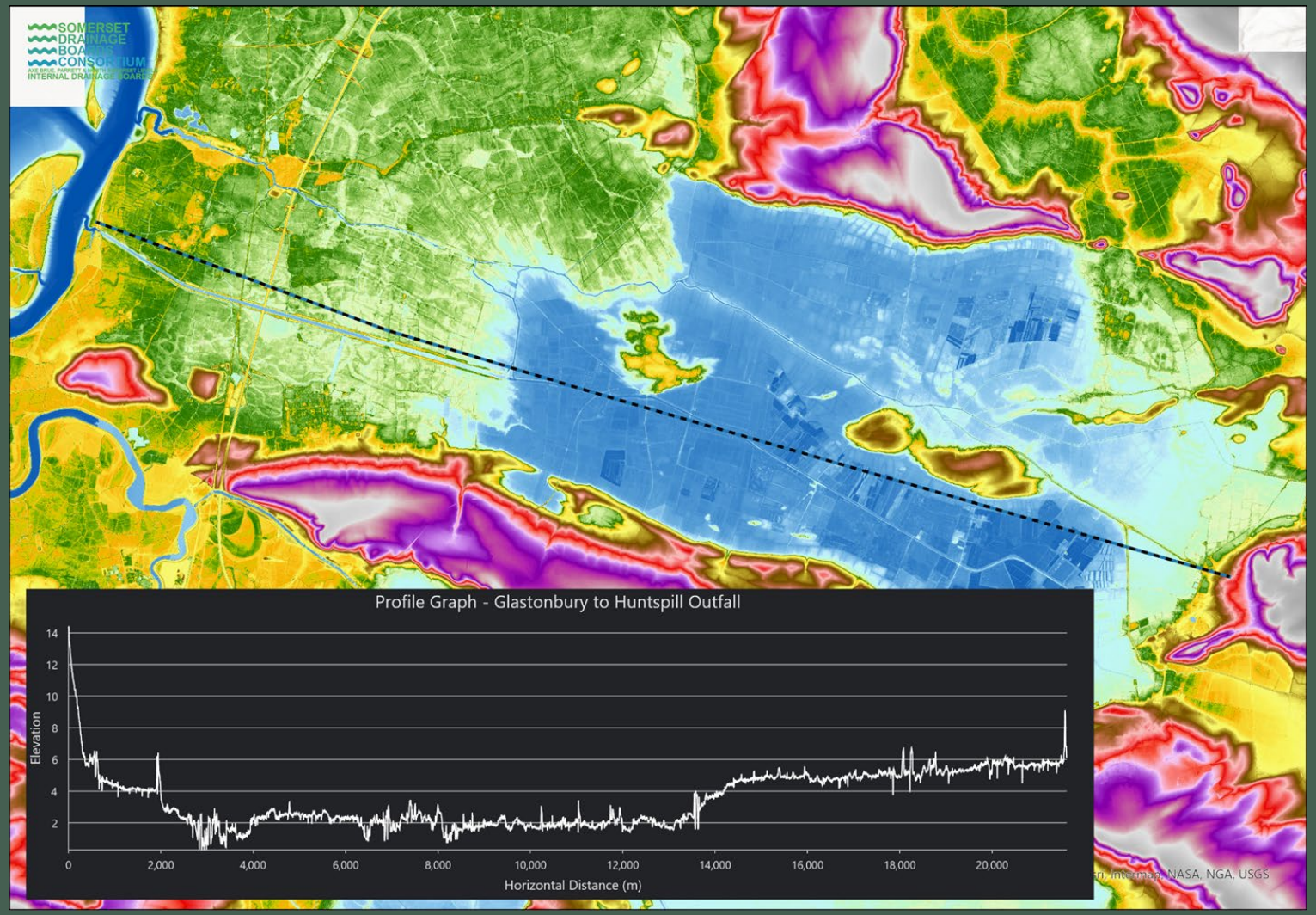
We have firsthand experience in Somerset!

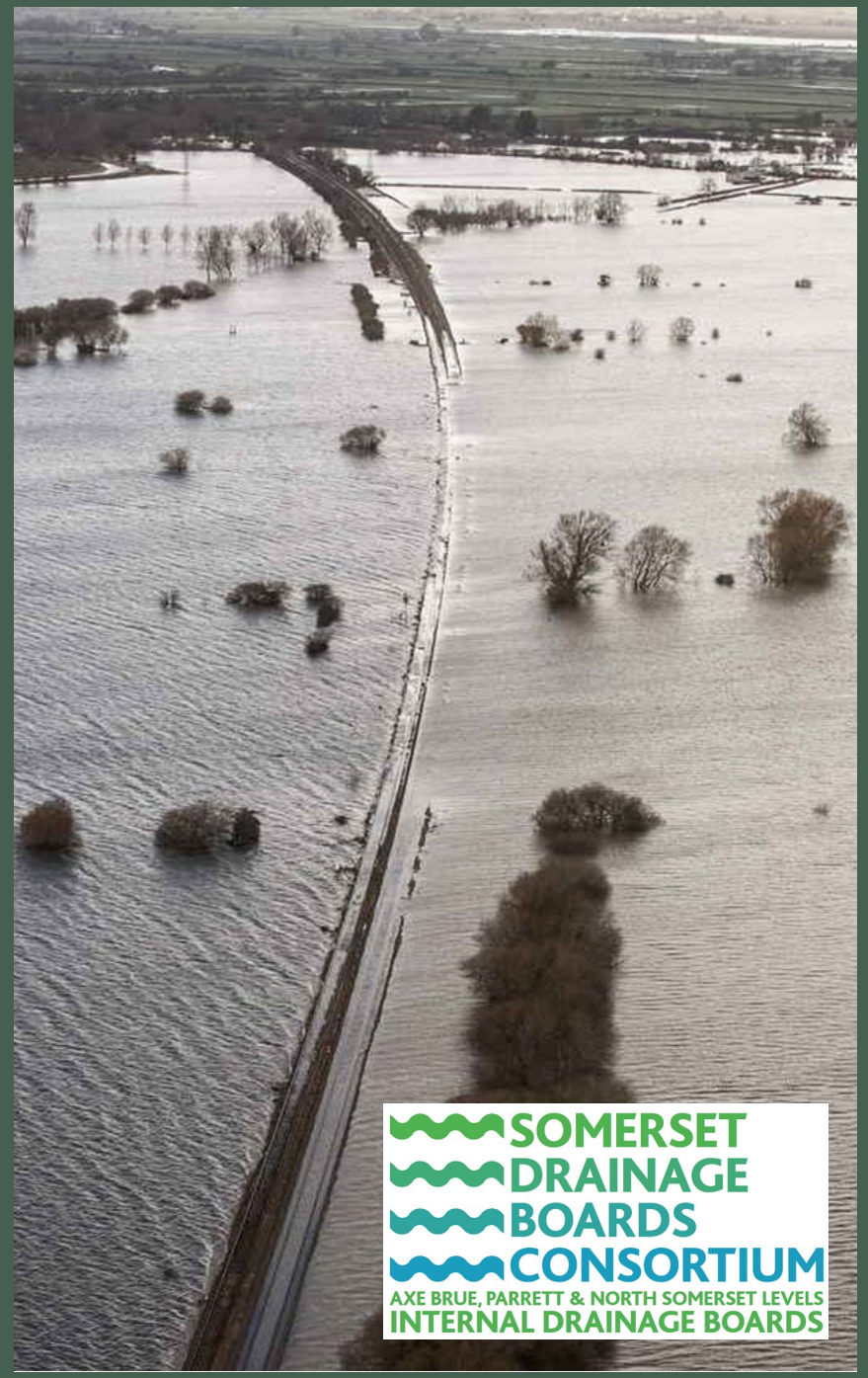
Somerset case study





SOMERSET


SOMERSET
DRAINAGE
BOARDS
CONSORTIUM
AXE BRUE, PARRETT & NORTH SOMERSET LEVELS
INTERNAL DRAINAGE BOARDS
Profile Graph - Glastonbury to Huntspill Outfall
Elevation
14
12
10
8
6
4
2
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Horizontal Distance (m)
Intermap, NASA, NGA, USGS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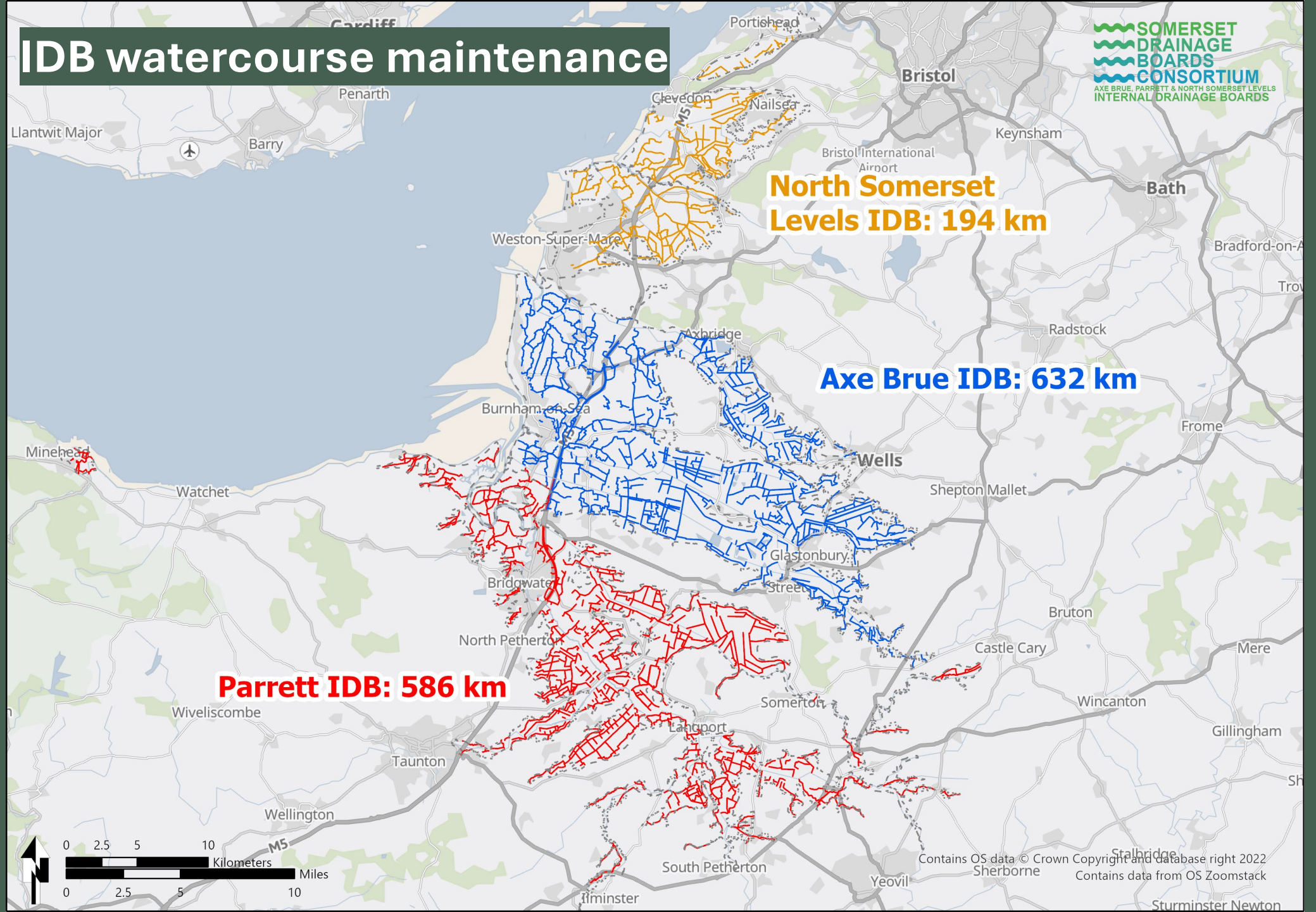
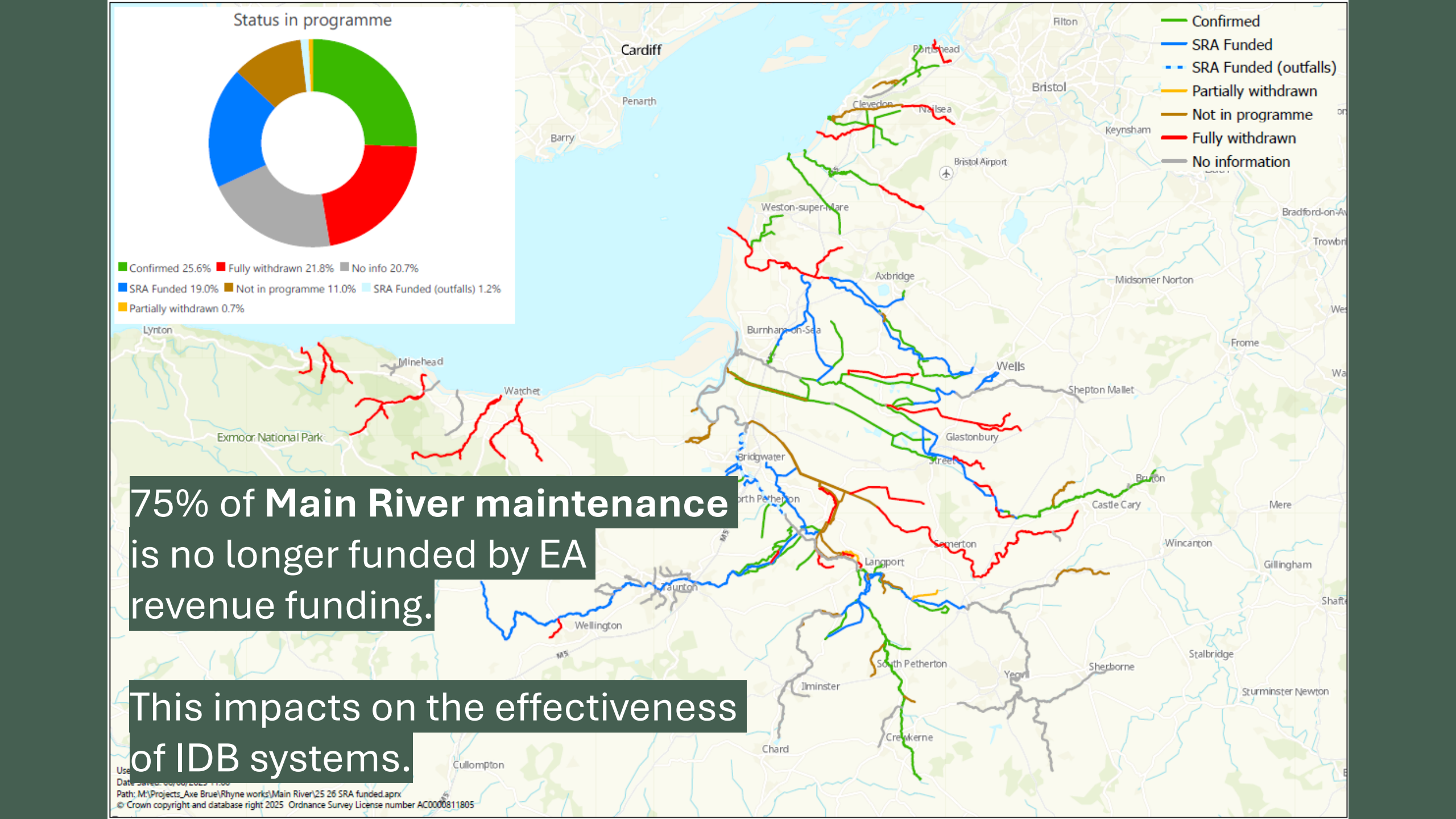
IDB watercourse maintenance




Status in programme
Confirmed 25.6%
Fully withdrawn 21.8%
No info 20.7%
SRA Funded 19.0%
Not in programme 11.0%
SRA Funded (outfalls) 1.2%
Partially withdrawn 0.7%
Confirmed
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Partially withdrawn
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Fully withdrawn
No information
75% of **Main River maintenance** is no longer funded by EA revenue funding.
This impacts on the effectiveness of IDB systems.
Cardiff
Penarth
Barry
Bristol
Clevedon
Nailsea
Keynsham
Bristol Airport
Weston-super-Mare
Axbridge
Midsomer Norton
Burnham-on-Sea
Lynton
Minehead
Watchet
Exmoor National Park
Wells
Shepton Mallet
Glastonbury
Bridgwater
Frome
Castle Cary
Somerton
Langport
Wincanton
Gillingham
Taunton
Wellington
South Petherton
Ilminster
Yeovil
Sherborne
Stalbridge
Sturminster Newton
Chard
Crewkerne
Cullompton
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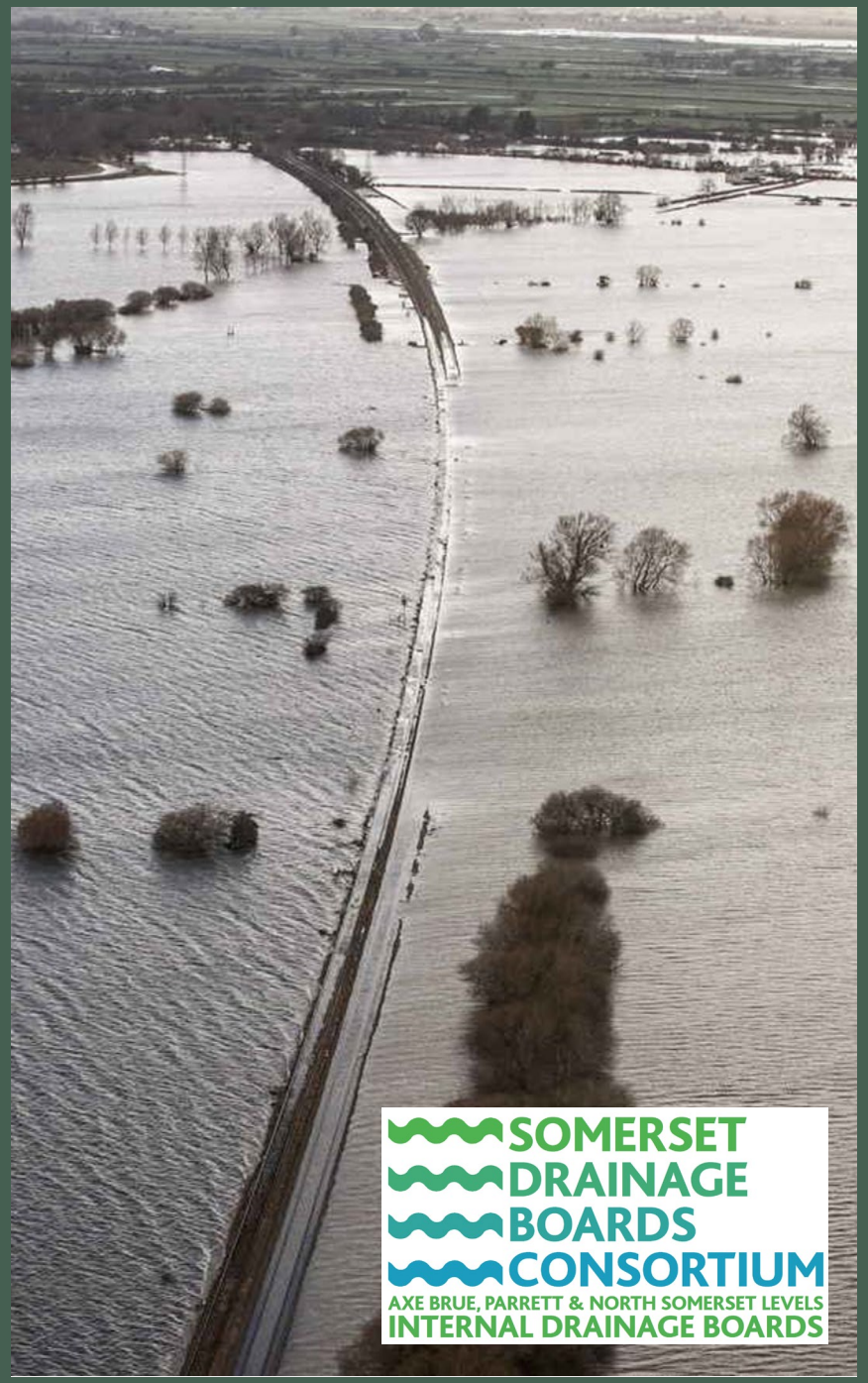
Lessons In History?

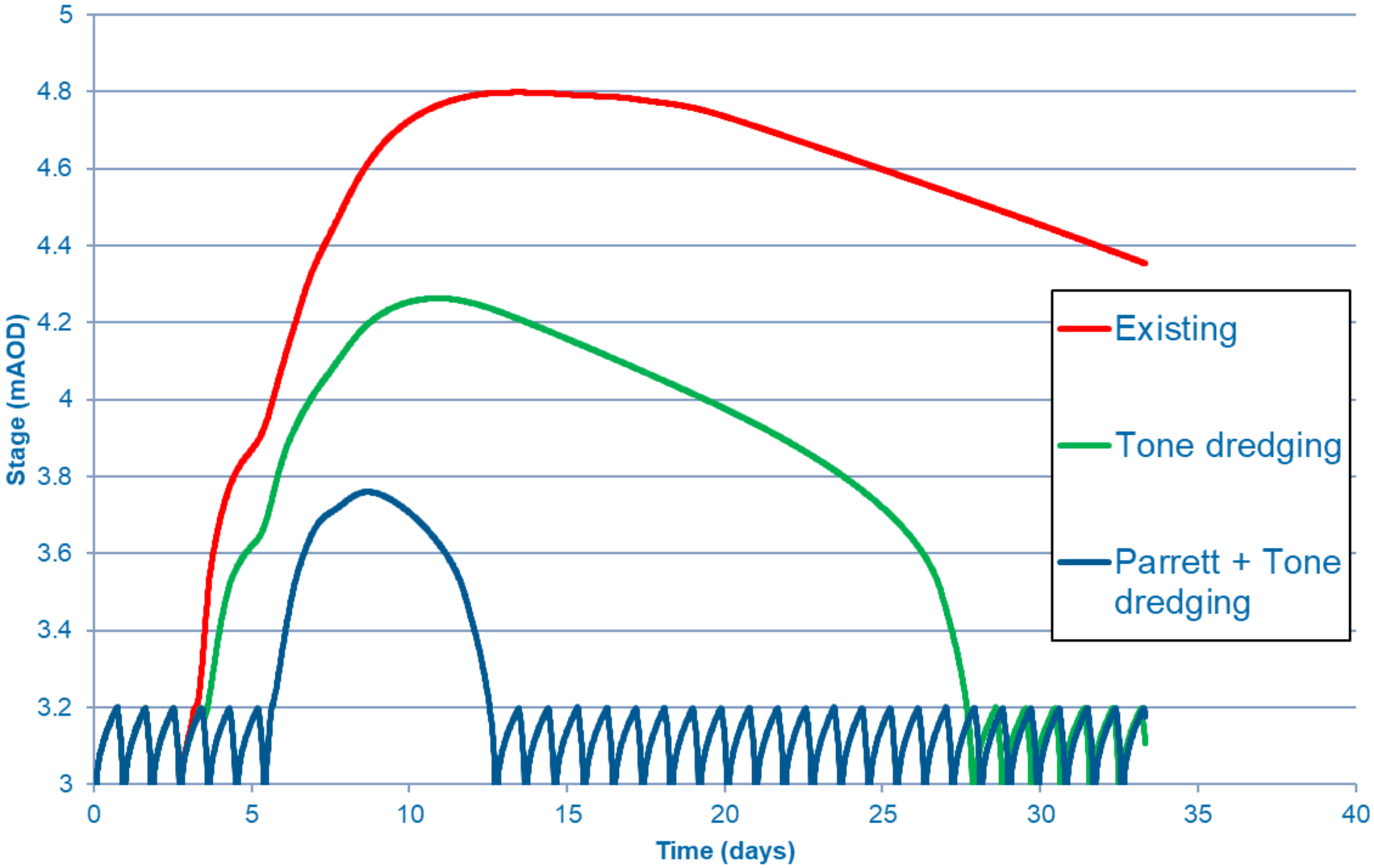
In 2012 Main River Maintenance had reduced over several years, much as is the case today.

A catastrophic and largely avoidable Summer Flood in 2012 occurred and was followed by an even more extreme flood in winter 2013/14.

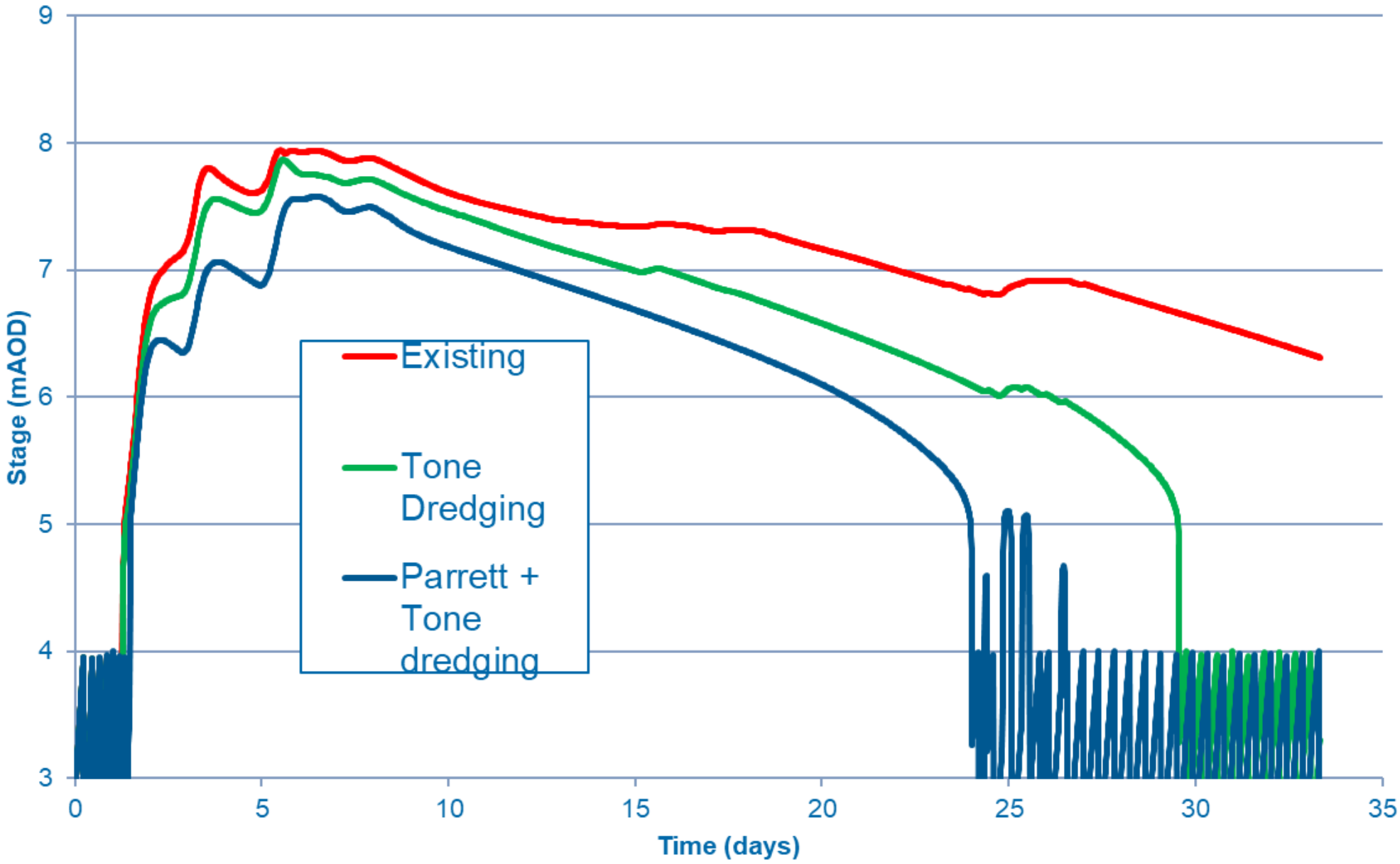
It was shown and agreed by all that had regular Main River maintenance been undertaken these events would have had much less impact.

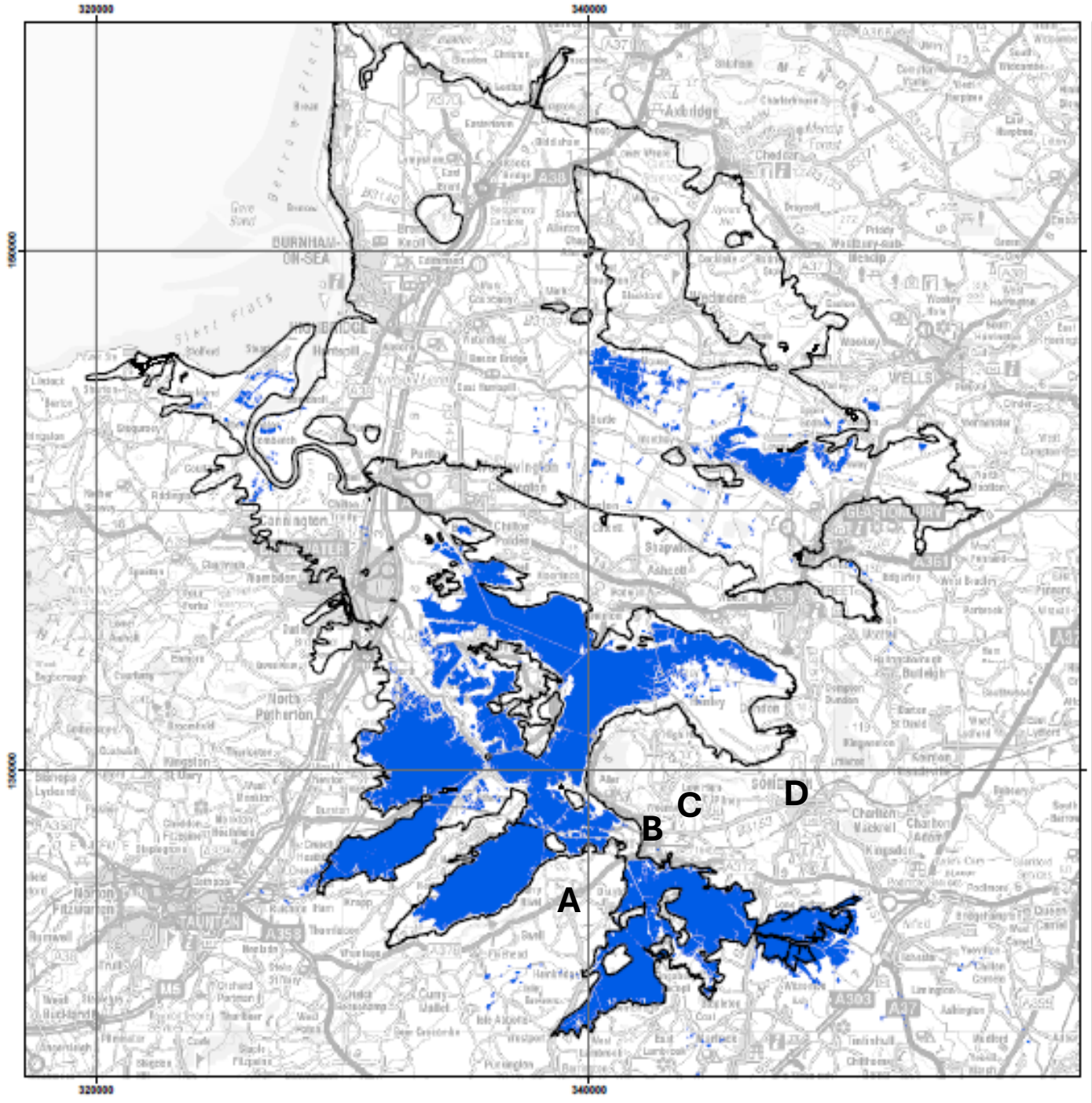


Flood levels in North Moor Main Drain - Nov 20th 2012 onwards



Flood levels in Curry Moor Main Drain - Nov 20th 2012 onwards





Flooding Somerset Levels 19th February 2014

Legend

Estimated Water Extent

Somerset Levels & Moors Boundary provided by FCRM - Wessex

0 2.5 5 10 Kilometres

Projection: Ordnance Survey 1936

Estimated flood extent on 19/02/2014

Area approx. 10,400 ha

The flood extent was estimated from TerraSAR-X satellite data acquired at

19/02/2014 18:01 UTC.

These data were used to map the water extent within the flooded analysis area.

Environment Agency Geomatics

Map generated by Environment Agency, National Operations, Geomatics.

Derivative Works product

Winter 2013/14

10,000 ha flooded

50% of Parrett Internal Drainage District flooded.

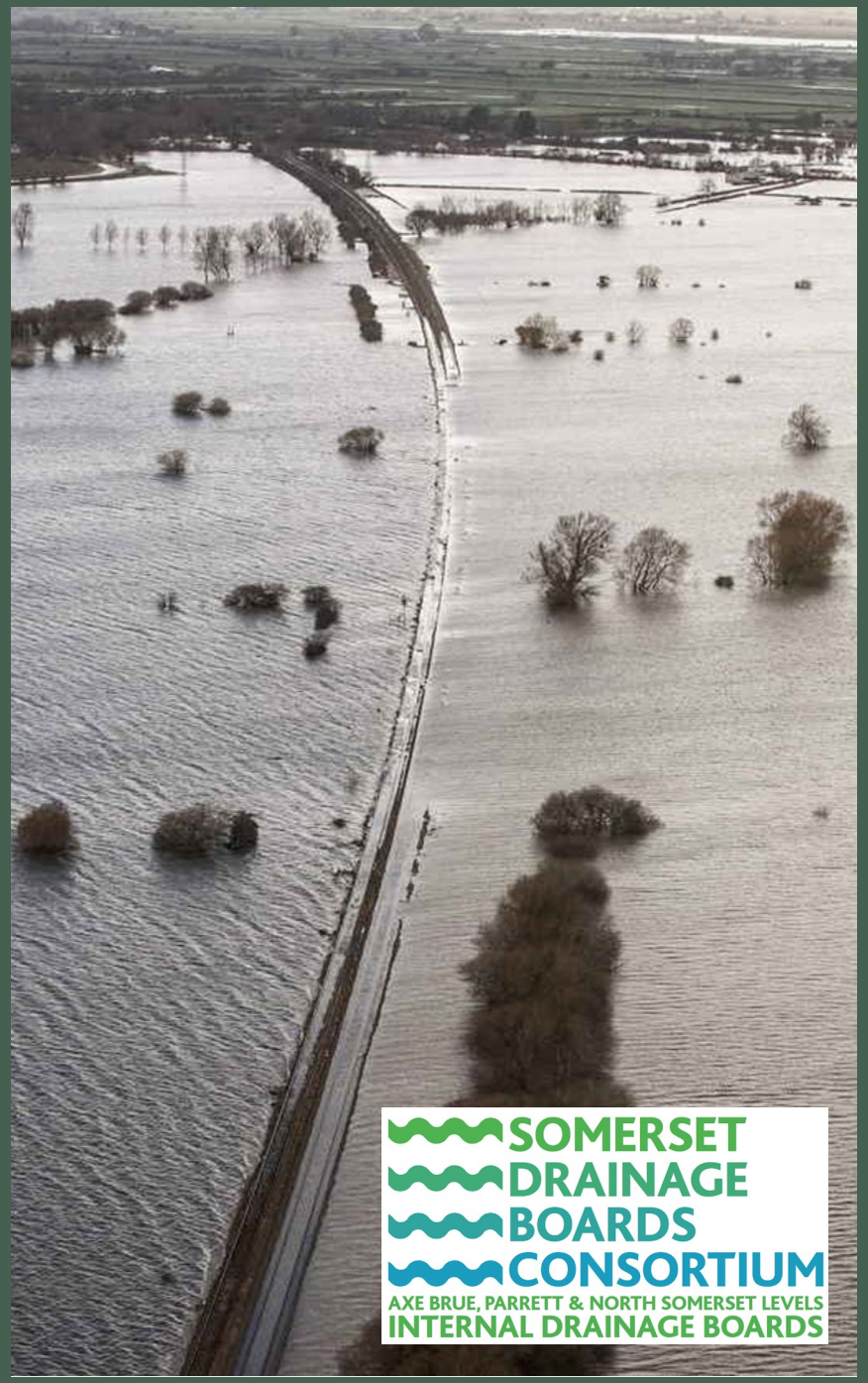
£147 million damages in 2014

Our Solution

Local community exposed the neglect to our River Systems and Assets.

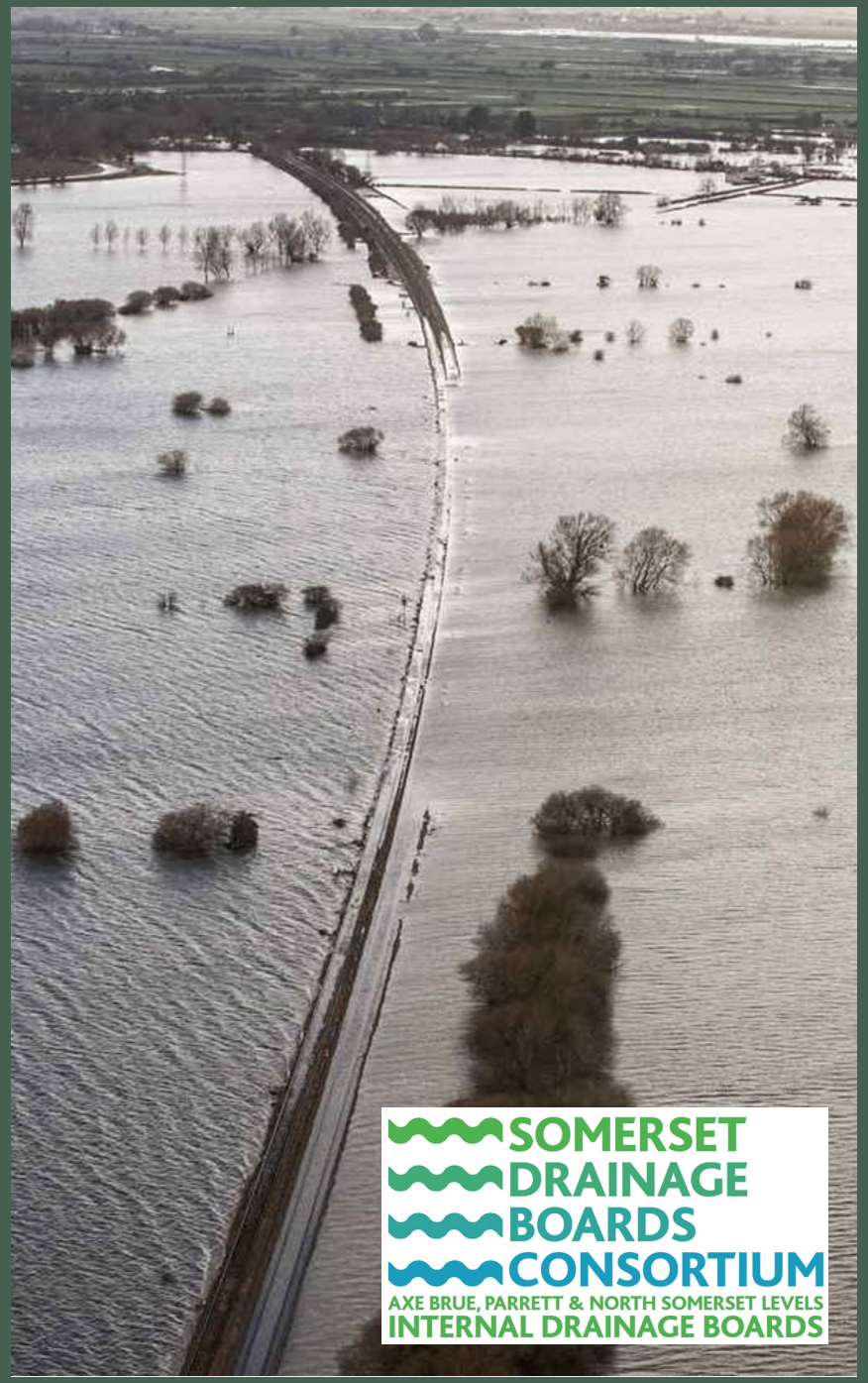
The Government of the day listened and injected cash to rectify the situation.

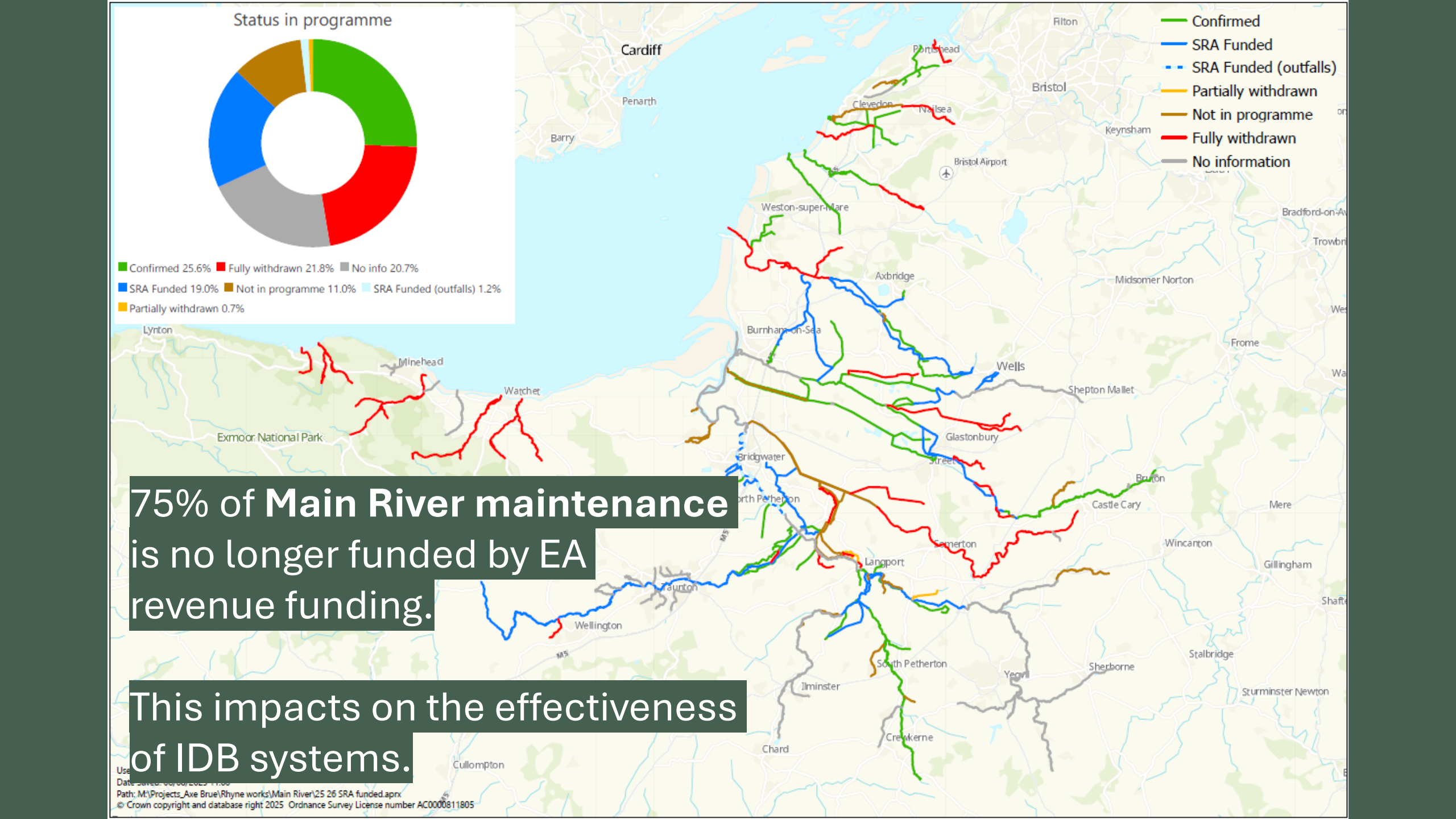
Enabled local choices with local funding going forwards, in the form of the SRA.



Many improvements were made and maintenance was restored to key Main Rivers.

However, in recent years, despite good levels of capital investment in new infrastructure, such as the Bridgwater Tidal Barrier, once again the importance maintenance has been neglected.

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Minehead
Watchet
Exmoor National Park
Wells
Shepton Mallet
Glastonbury
Bridgwater
Frome
Castle Cary
Somerton
Langport
Wincanton
Gillingham
Taunton
Wellington
South Petherton
Ilminster
Yeovil
Sherborne
Stalbridge
Sturminster Newton
Chard
Crewkerne
Cullompton
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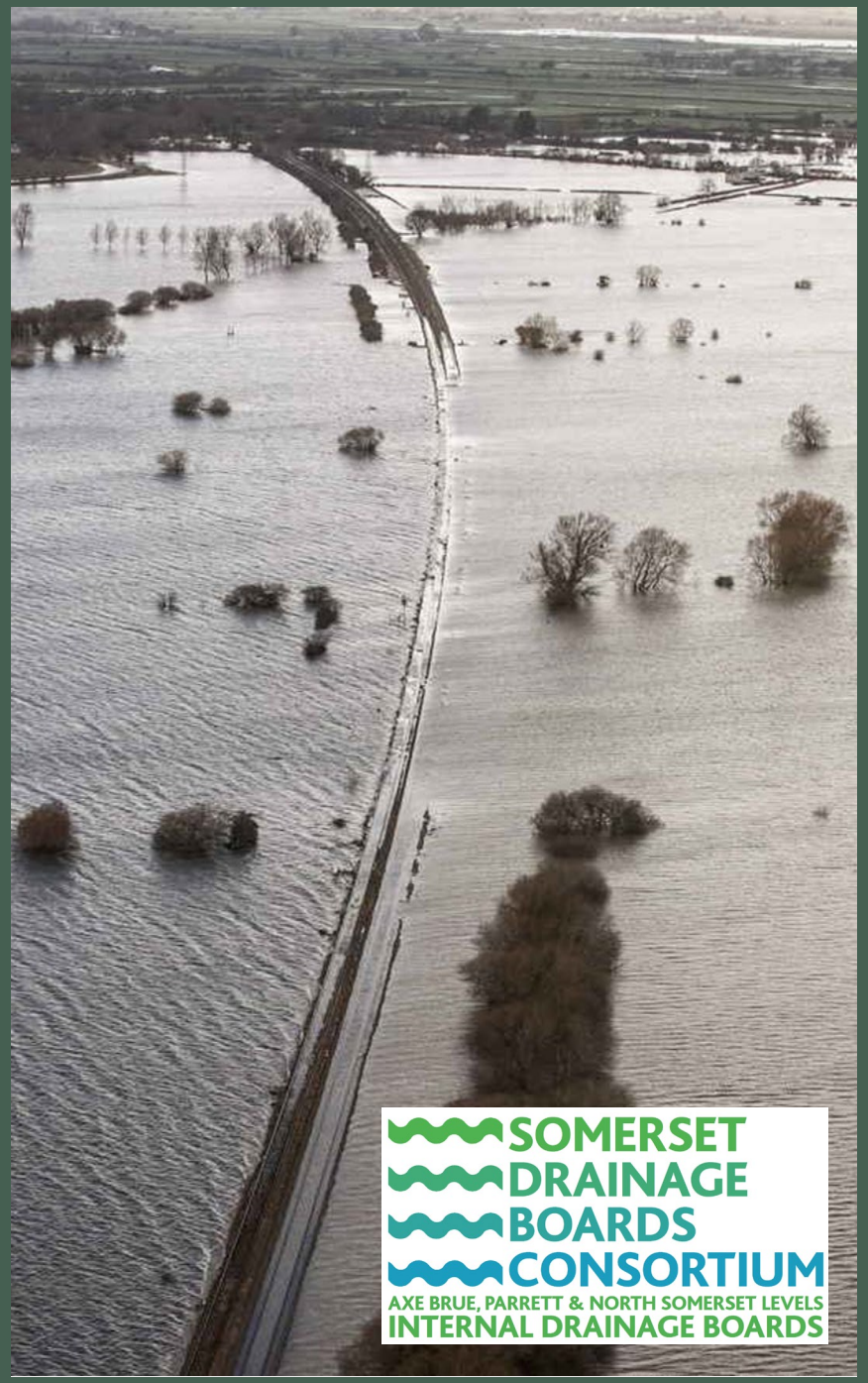
Notice of withdrawn maintenance has been sent to Riparian Owners on many watercourses

Leading to:

- Worry and concern at community scale
- Lack of future strategy and coordination
- Lack of capability
- Lack of resource
- Lack of oversight
- Withheld payment of drainage rates

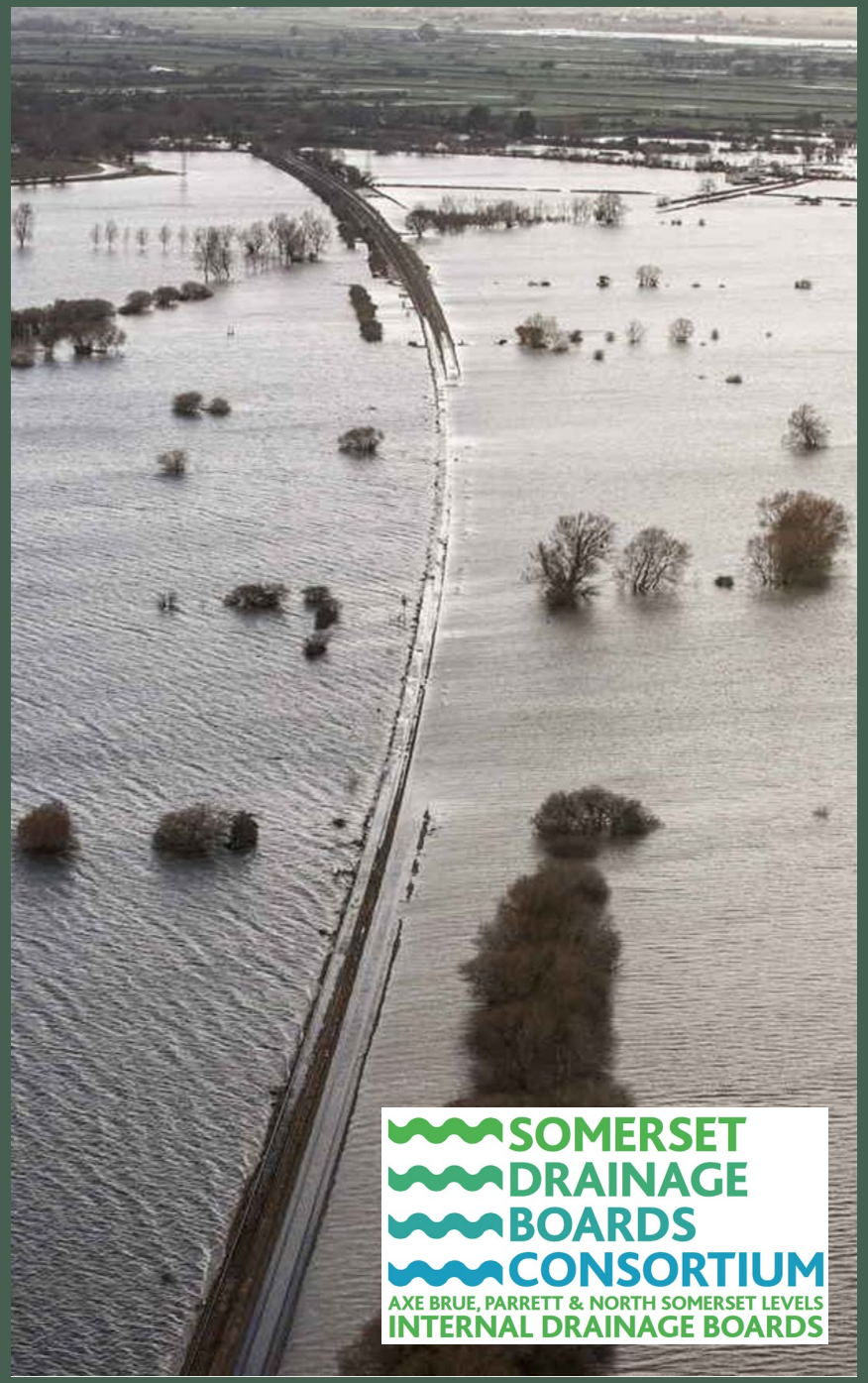
<u>Increased risk and consequence of flooding</u>



Failure to maintain

Is resulting in:

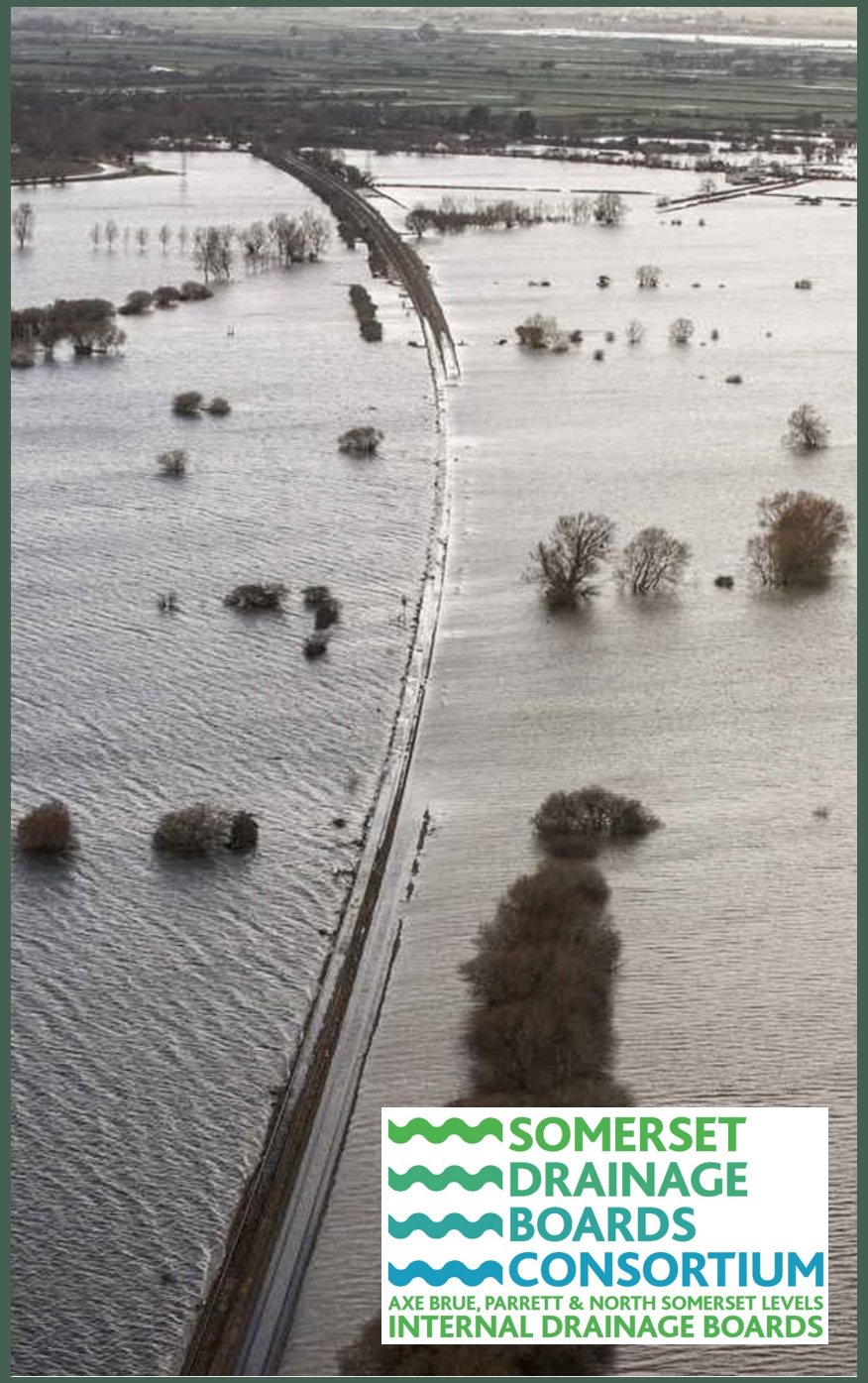
- short term savings
- increased risks of performance failure
- avoidable costs from incident response and catastrophe management
- increased cost of repair or replacement of failed systems
- adverse impacts on local, regional and national economies.



Does the future maintenance of our medium and lower flood risk systems sit in the hands of these worried but well-meaning riparian people?

The Alternative

- A **long term-maintenance plan** for Main Rivers to sustain Somerset in a changing climate – in drought and flood
- Partnership approach backed up by appropriate local and national funding – EA, IDB, SRA
- Local delivery – de-maining / PSCAs
- **But,** this will take time to implement
- Need to manage transition over ~3 years
- Need to conserve the maintenance we have until then.
- A **joint working group** to agree sustainable path forwards.



Thank you for listening

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