

# Great Crested Newt: Post-impact monitoring at HS2 – focussing on habitats

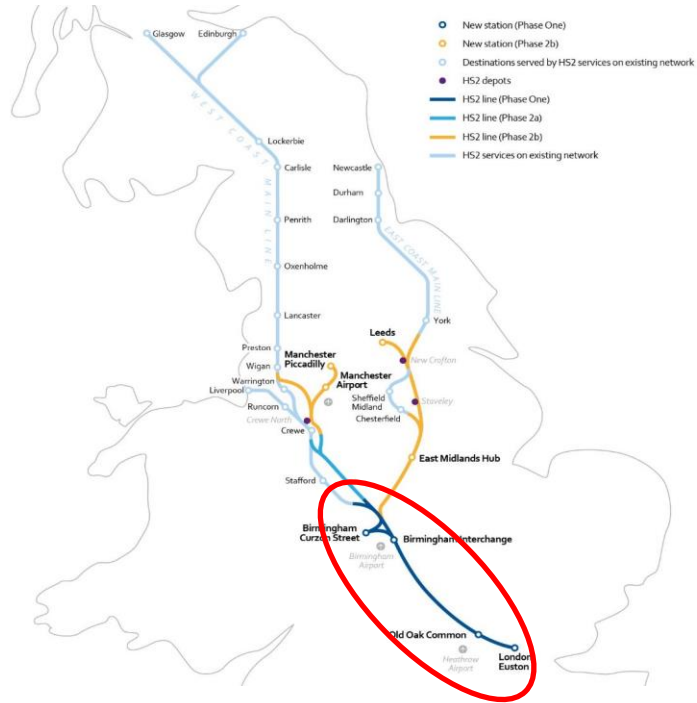
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CIEEM Autumn Conference - Mitigation Monitoring and Effectiveness  
November 2017

# Summary

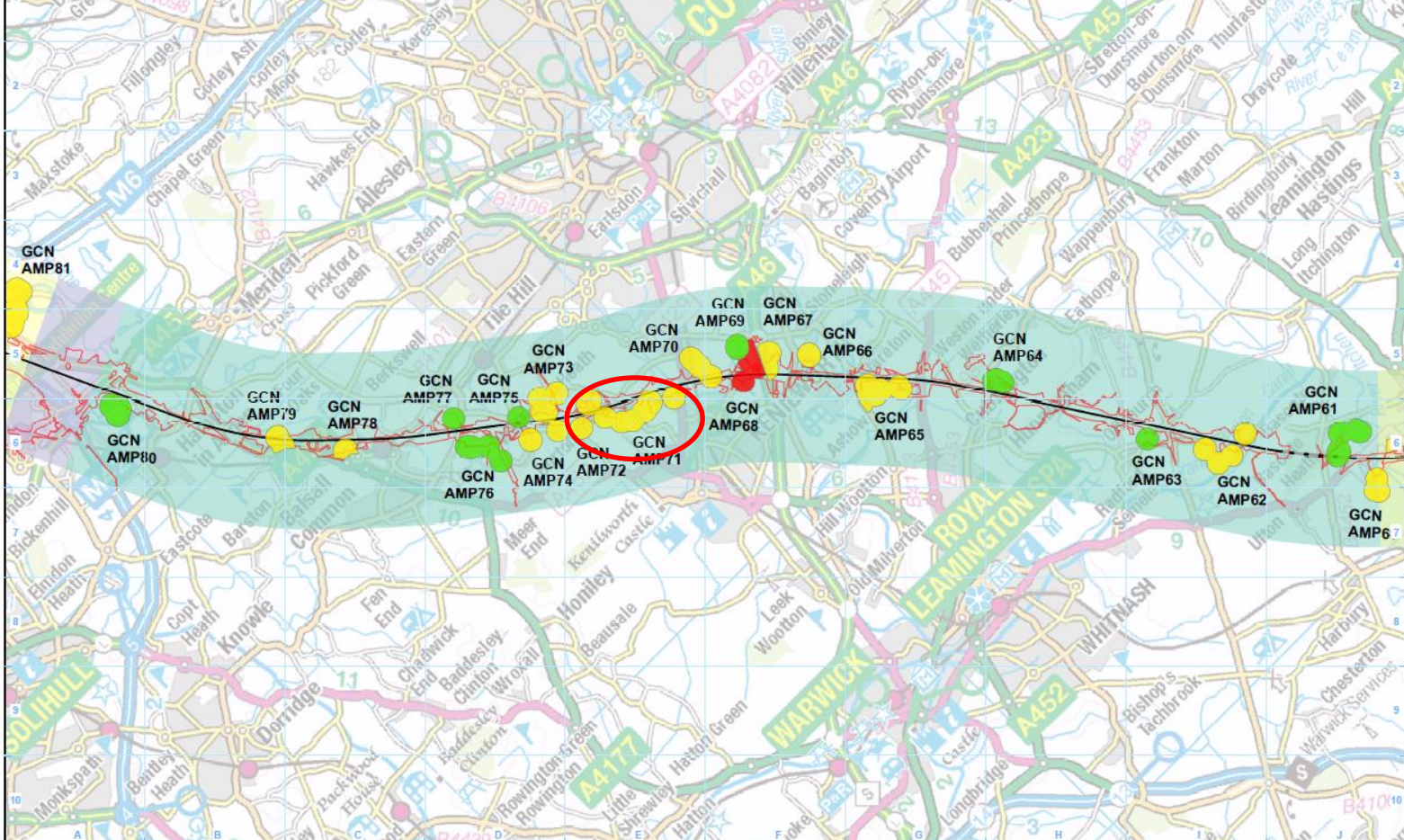


# HS2: it's quite long.....!



# What about the GCN?

- Complex requirements
  - Survey knowledge
  - Scale
  - Phasing
  - Timescale
- 105 GCN metapopulations (AMPs)
- Organisational licence
- 3 stages of impact assessment
- Route-wide assessment of licensing tests



- Legend**
- - - Route in tunnel
  - Route on surface
  - Land potentially required during construction
  - Small GCN metapopulation size class
  - Medium GCN metapopulation size class
  - Large GCN metapopulation size class

- HS2 Delivery sectors**
- S1
  - S2
  - S3
  - S4
  - C1
  - C2
  - C3
  - N1
  - N2
  - N3
  - N4



Map Number: EC-30-006  
 Map Name: EC-30 - Great Crested Newt: Populations and Habitat Assessment Phase 1 Route Wide  
 AMP Overview  
 Sector: N1 & N3

**hs2**

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is used in part or used in whole in any way.

Registered England. Vegetation cover: 100%  
 Population: 100%  
 Urban: 100%  
 Green: 100%  
 Water: 100%  
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Scale at A3: 1:80,000

0 50 100 150 200 250 300

Doc Number: -10003-

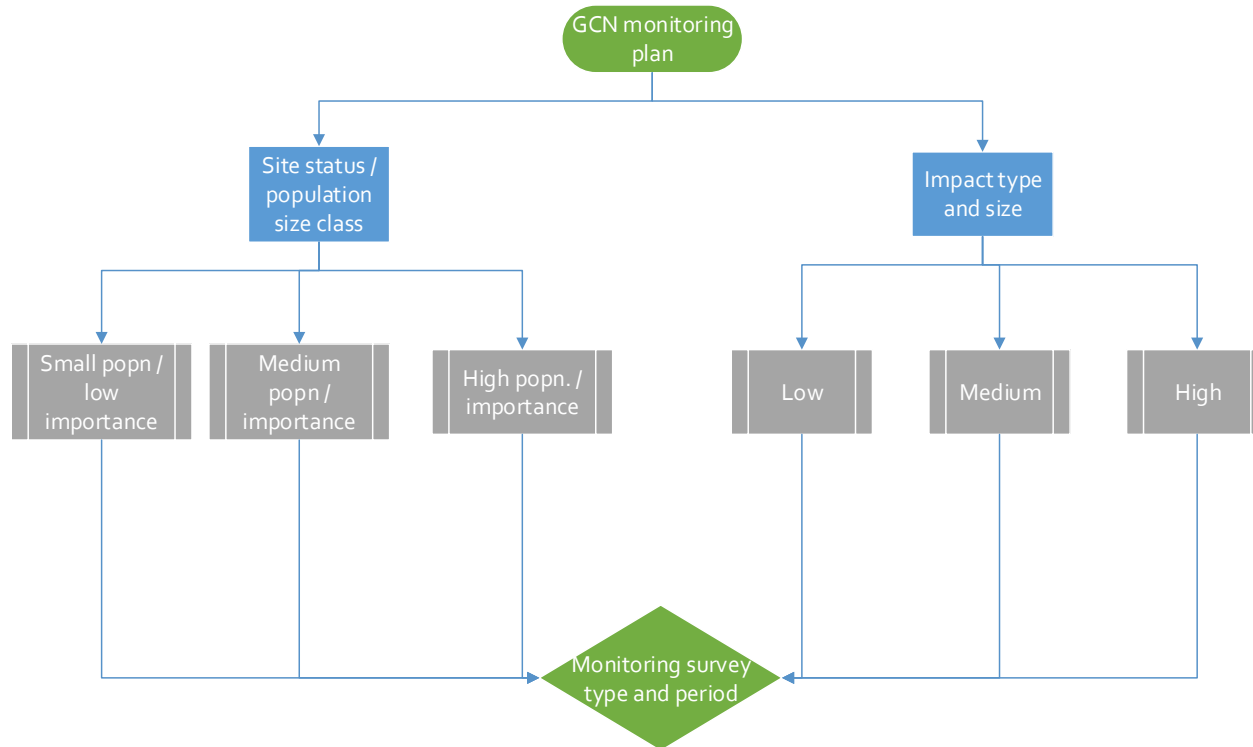
Date: 19/01/17





Monitoring...what would we normally do?

“A monitoring plan should be put in place to assess whether the great crested newt population has responded favourably to the mitigation” GCN Mitigation Guidelines





Why the need for a different  
approach.....?

# Scale.....

- 105 metapopulations.....!
- Licenced at route-wide scale
- Cost effectiveness and looking to optimise scale
- Landscape-scale thinking
- Developing approach from new Licensing Policies
- Localised adverse effects

# The Monitoring approach

habitat assessment in combination with proportionate population monitoring to determine if the mitigation and compensation provided has been successful

## Standard

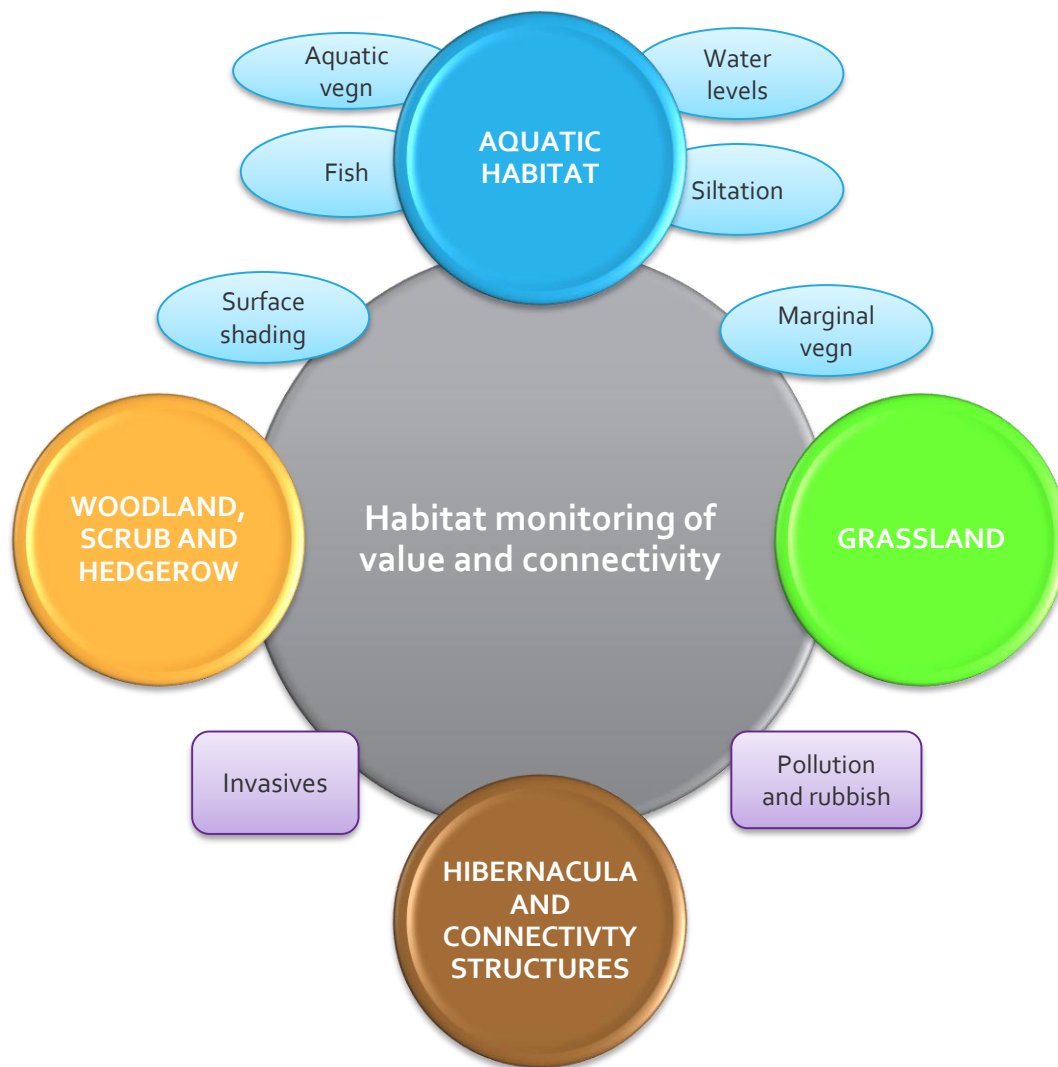
- **Exact** locations and areas
- **Detailed** prescriptions in the Method Statement
- **Work schedule** details dates and durations
- **All ponds** within impacted metapopulation monitored
- **Prescriptive** approach

## HS2

- **Outline** information on locations and areas
- **Scheme detailed design** confirms detailed prescriptions
- **Circumstances** where ponds (outside of scheme) need to be monitored
- **Judgement** based **proportionate** approach to measuring success

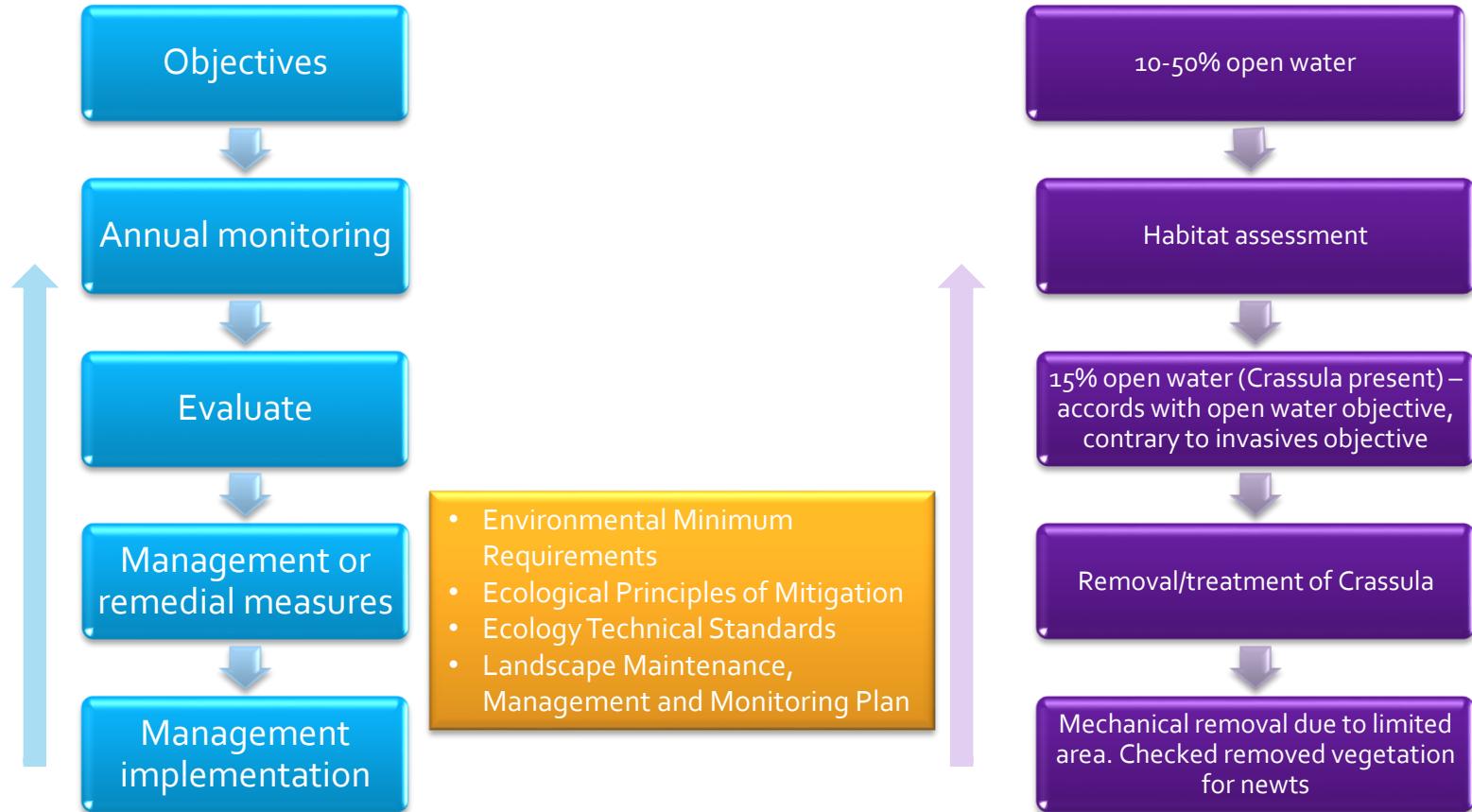
Applying the approach...

# Habitats





# Decision-making



# Population monitoring

# GCN population monitoring

Year after impact	Category A (low impacts on small or medium popn.)	Category B (medium impact on small popn., low impact on large popn.)	Category C (high impact on small popn.)	Category D (medium impact on med popn.)	Category E (high impact on med popn., medium impact on high popn.)	Category F (high impact on large popn.)
Year 1	HA only	P/A + HA	P/A + HA	P/A + HA	PSC + HA	PSC + HA
Year 2		P/A and/or HA only				
Year 3			P/A and/or HA only	PSC and/or HA only	PSC and/or HA only	PSC and/or HA only
Year 4		HA only	HA only	HA only		PSC + HA
Year 5						PSC and/or HA only
Year 6					PSC + HA	
Year 7					HA only	PSC + HA
Year 8						PSC and/or HA only
Year 9						
Year 10			P/A + HA	P/A + HA	PSC + HA	PSC + HA



Risks and benefits

- Risks
  - Relies on professional judgement
  - Consistency due to scale
- Benefits
  - Improved long-term safeguard
  - Flexibility
  - Cost
- Has the compensation been successful...?
- Evaluate success of compensation?

Thank you