

Whole river restoration of English SSSI Rivers

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SSSI River Restoration



- SSSI rivers display full range of modifications
- NE developed whole-river restoration approach
- EA/NE Joint remedy
 - Whole river plans
 - Start implementation
 - Assigned 1716 km, Underway 71km Oct 09
- PSA 2010 target/WFD 2012

English Designated Rivers (whole)

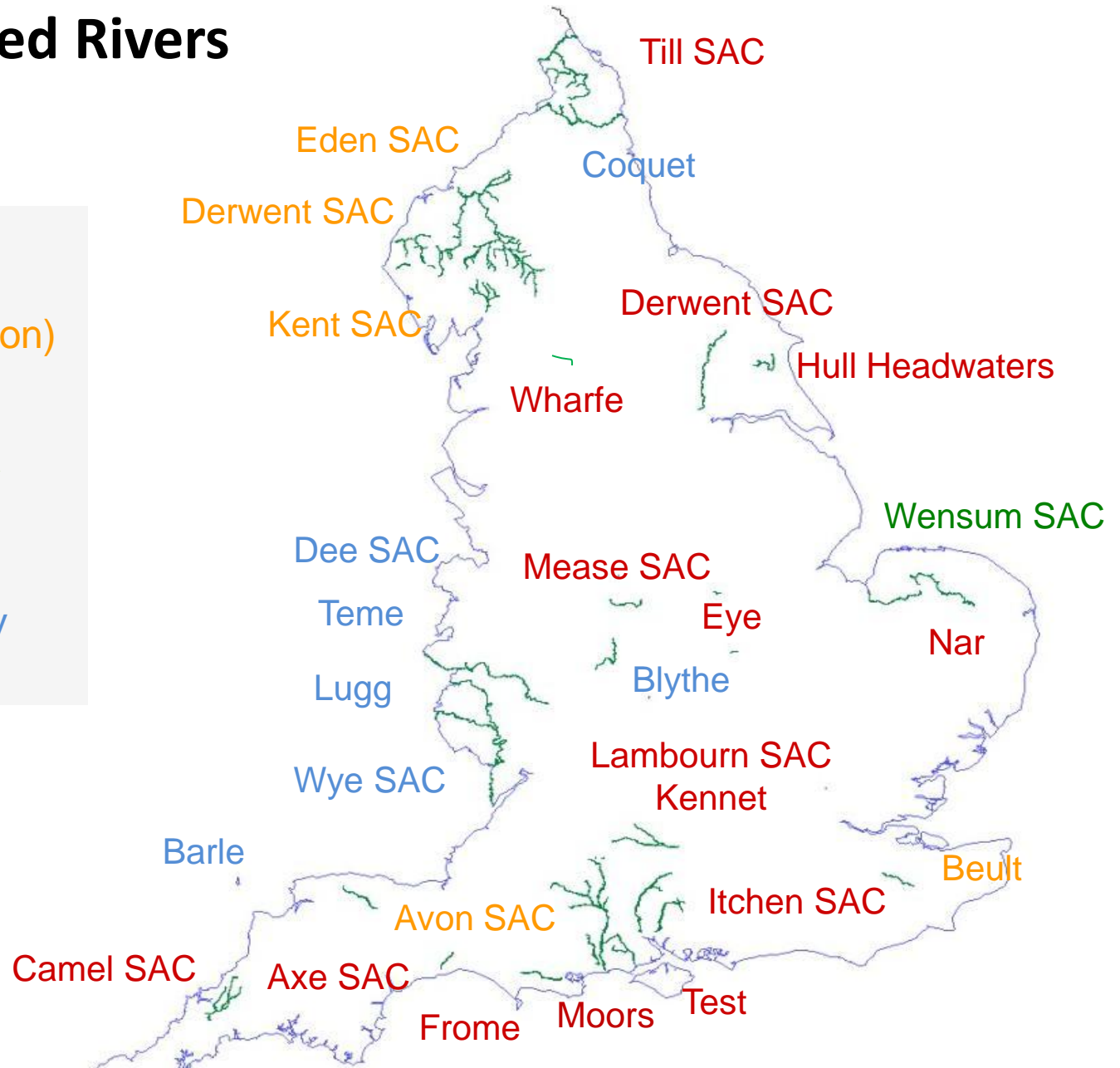
Oct 2009

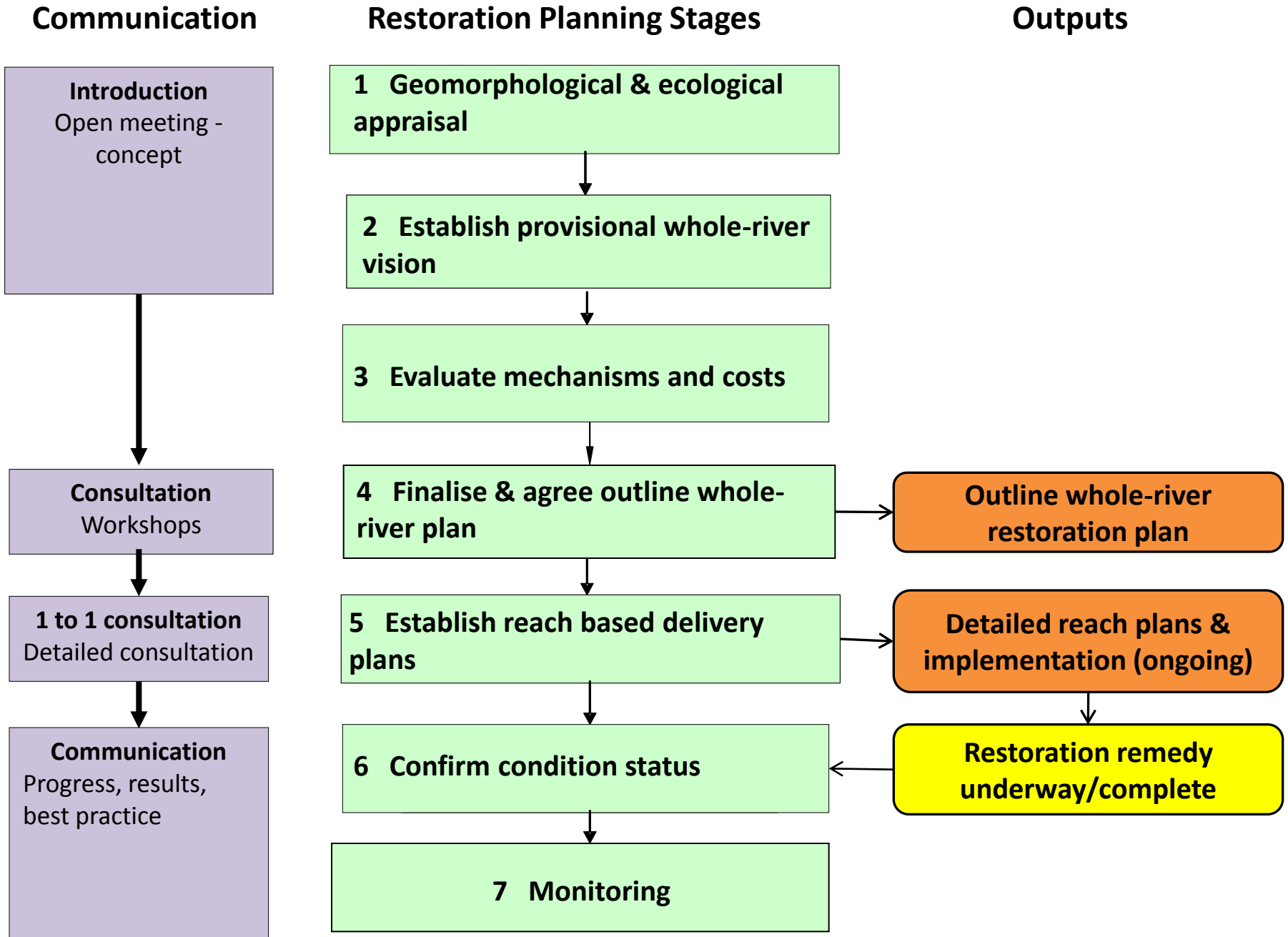
Required (in preparation)
1716 km

Restoration underway
71 km

No restoration remedy
506 km

River Units
Dove SAC
Long Preston Deeps
Hamps & Manifold





Wensum SAC

- **Pilot Plan 2007**
- **2/3 impounded, 20% unmodified**
- **Feasibility studies 5/9 units**
- **Projects: Attlebridge, Bintree, Ringland, Grt Ryburgh**
- **£160k 2011/12**



1. Meander loop before restoration



2. Meander loop after restoration



Nar

- **Plan Dec 2010 (IDB/NE/EA)**
- **Navigation, drainage, 20 structures, levees**
- **West Lexham, Castle Acre, Narborough,**
- **3 months, 1.8 km**
- **£10k 2011/12**



Avon SAC

- Plan 2010
- 207 structures, canalised, embanked
- Chisenbury, West Amesbury
- WCSP facilitation (volunteers)
- £4 million EA PAB
- £500 2011/12



Eden, Derwent and Kent SACs

Category	Description	Number of reaches and length		
		Eden	Derwent	Kent
Significant channel restoration	Opportunities for channel realignment, weir removal or the removal of extensive bank reinforcement	51 (88 km)	22 (32 km)	12 (29 km)
Assisted Natural Recovery	Removal of minor channel structures, such as old bank reinforcement and embankments	51 (88 km)	24 (41 km)	10 (15 km)
Natural recovery	The channel is currently adjusting towards favourable condition and no intervention is required	27 (31 km)	4 (4 km)	2 (6 km)
Optimal condition	Considered in optimal condition	31 (49 km)	13 (18 km)	8 (10 km)
Urban	Urban constraints prevent restoration	6 (7 km)	4 (3 km)	3 (1 km)

Eden, Kent, Derwent



**Derwent
Rivers Trust**



Consenting



ES/HLS

Capital works



River movement

Other Implementation 2011

- Kennet and Lambourn (Ops del/consultants) 190k
- Derwent + Hull Headwaters (ASM/Yorks RT) 175k
- Test and Itchen (HWT/consultants) 50k
- Mease 30k
- Frome (Ops del)

- WFD fishery projects EA/ART on wider river network
ART Phase 1 £1.7 mill, Phase 2 approx. 40 projects

Wider river network

DEFRA WFD fishery projects

- river restoration in critical SAC rivers
- all species fish passage
- eel passage
- design/feasibility studies

EA Phase 1 £1.3 million

ART Phase 1 £1.9 mill

Phase 2 approx. 40 projects



English Designated Rivers (whole)

March 2011

Remedy underway

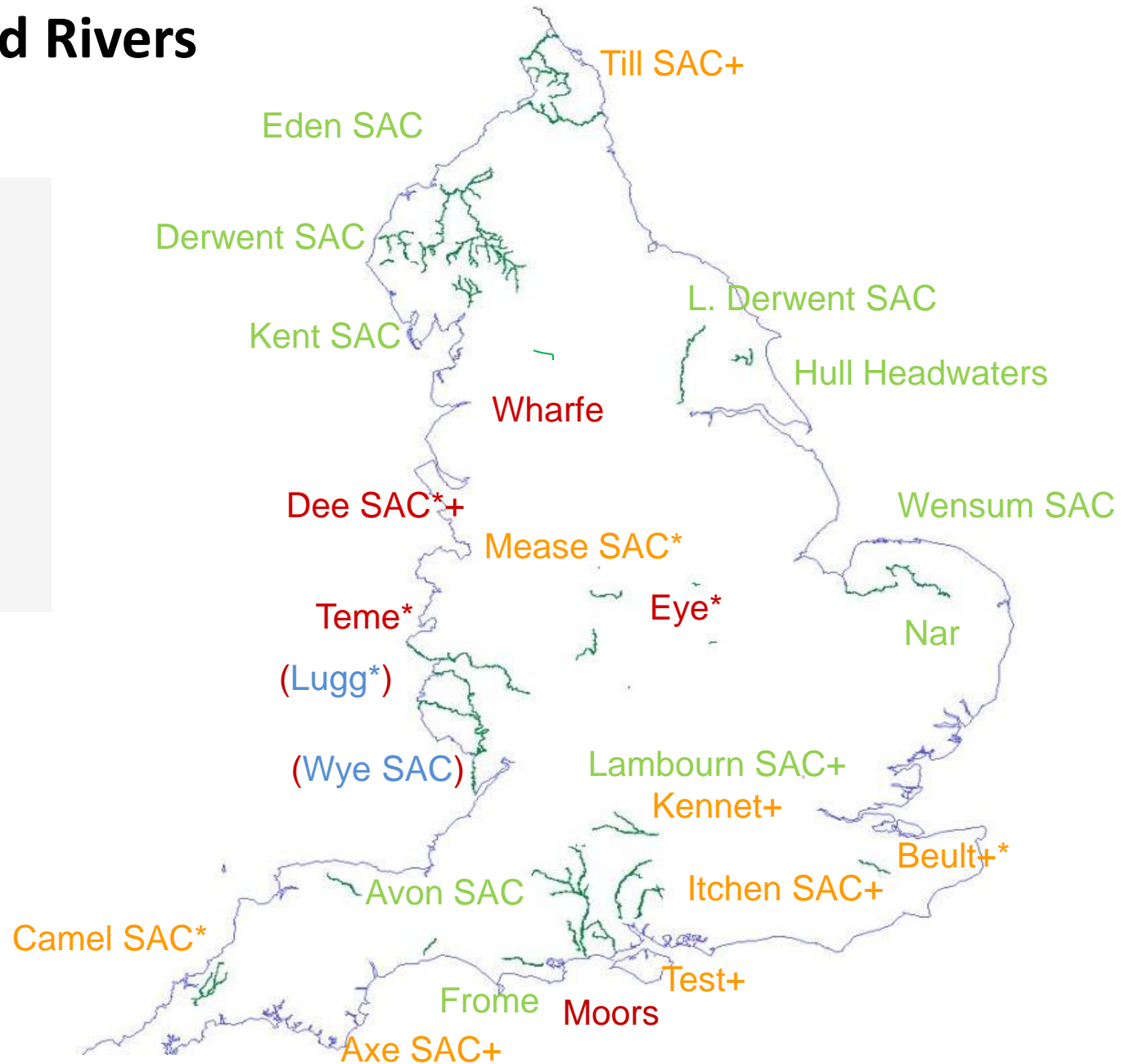
Plans in development

No action

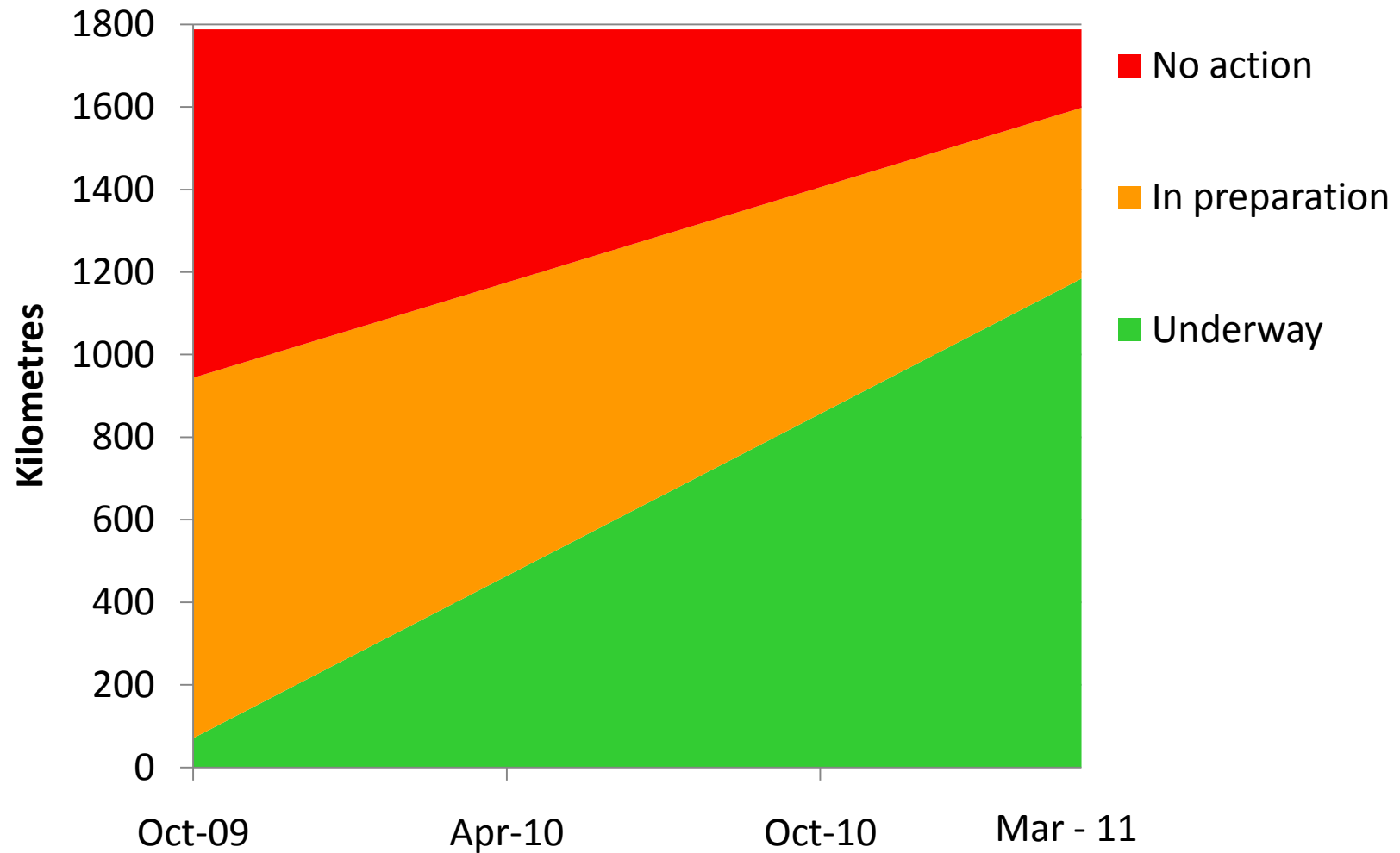
*Vision in place

+ Fluvial audit done

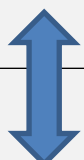
River Units
 Dove SAC*
 Long Preston SSSI
 Hamps & Manifold SSSI



River Restoration Progress



Future Implementation

Funding (inc. in-kind)	Restoration Measures			Delivery
	Minor channel & riparian land use	Major channel & bank	Major change riparian land use	
EA FCRM capital works		± 2011/12 £1.3 M		EA ops delivery/ASM or contractors 
EA FCRM maintenance	Savings?			
Environmental stewardship	-		-	"Big Society" Landowners, voluntary groups and charities, NE, EA, contractors
NE CES	+			
Woodland Grant Scheme			-	
Local interests	?		?	
HLF	?			
European (LIFE/Interreg)		+		
Direct Defra		Part of ~ £90 M over 4 yrs		

Adaption for wider river network

Designated rivers

Generation of strategic catchment-scale plans

Logical sequencing of measures

Brigading delivery mechanisms

Strategic R&D characterising effects

Progressive implementation as funds allow



Improved ways of stakeholder engagement



Improved methods of addressing constraints



Improved ways of harnessing resources



Improved characterisation of ecological and societal benefits



Wider river network

Good practice measures for HMW

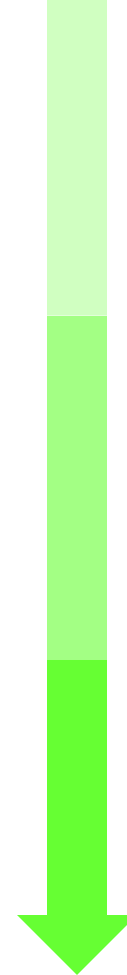
£ restoration proposals for GES where evidence is strong

Attract greater funds using strengthened evidence base

Catchment-scale evaluation and planning

Strategic links with Catchment Flood Management Plans

Increase rate of practical implementation



Time
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More Information

Examples & updates www.environment-agency.gov.uk/homeandleisure/wildlife/113442.aspx

RRC webpage with details of SSSI river restoration (in preparation)

Contact jenny.wheeldon@naturalengland.org.uk

