











THE VISION FOR THE TIDAL THAMES
JULY 2016



ABOUT THE THAMES VISION

THE THAMES VISION IS THE FRAMEWORK FOR THE DEVELOPMENT OF THE TIDAL THAMES BETWEEN NOW AND 2035. It has been developed with stakeholders over 18 months, starting in Spring 2015. The Vision covers six goals for growth and actions to deliver these goals. This document covers the context for the Vision today, the goals and priority actions, the governance framework and how we will report progress.

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Introduction



For more than two thousand years, the River Thames has been central to London's evolution, shaping its communities and underpinning its economy. Culturally, the Thames is part of what makes London celebrated in poetry, prose, art and music. As we have cleaned the river up in the last two generations, it has become increasingly valued as a ribbon of blue space enjoyed by millions of people, sustaining a vibrant marine environment for wildlife.

The Thames Vision is a 20 year view of the river's future, developed with stakeholders with the goal of making the most of its potential, for the benefit of all. It is the first of its kind, covering 95 miles of the tidal Thames, running through London to the North Sea. The Thames is as iconic as the global city it runs through.

Over the next two decades the Vision sees the value of the Thames better understood and its potential realised. It sets out the enormous opportunities for growth on and alongside the Thames, and its importance for the wider growth of London, Kent, Essex and beyond. It embraces growth in all aspects of river use, from trade and travel to sport and recreation.

The tidal Thames sits at the centre of a capital city, and wider region, where projected demand for housing and jobs is unprecedented. The

Vision sees the river at the heart of new, sustainable communities looking towards, not away from, the Thames. By making the most of the river, the Thames will play a key role in both transporting people and goods, providing a space for sport, recreation and a cultural hub too.

We have led the development of the Vision, over the last 18 months, in our work as Custodians of the tidal Thames. This is part of our role as a Trust Port to hand the tidal Thames on in a better condition to succeeding generations. We brought people together to create this shared Vision, with input from the port, transport and housing sectors, from local communities, environmental organisations, sports clubs and others. We are very grateful for all the input and in the commitment, now, to delivering it.

We are looking forward to working with the partners who helped develop the Vision, as together we make the most of the tidal Thames.

Robin Mortimer
Chief Executive
Port of London Authority (PLA)
4 July 2016

Summary of Thames Vision goals and priority actions



PORT OF LONDON:

MORE TRADE,

The busiest ever Port of London, handling 60 – 80 million tonnes of cargo each year, on the doorstep of Europe's biggest metropolitan consumer market.

- Sustain private sector investment
- Improve navigational access to the port
- Improve rail and road access to port operations/terminals, including:
 - Lower Thames Crossing downstream of Tilbury, by 2025
 - At least three further Thames crossings to the east of Tower Bridge, that allow continuation of river trade; the first by 2022
 - Widening of the A13, by the end of 2018
 - Closure of level crossings affecting operational terminals, by 2020
- Deliver efficient, effective and sustainable PLA harbour and pilotage services to support growth



INLAND FREIGHT:

MORE GOODS OFF ROADS ONTO THE RIVER

More goods and materials routinely moved between wharves on the river – every year over 4 million tonnes carried by water – taking over 400,000 lorry trips off the region's roads.

- Double underlying intra-port freight to over 4 million tonnes
- Champion the Thames as a default choice for moving spoil and materials from infrastructure projects close to the river
- Maintain or reactivate viable cargo handling facilities, with at least five additional facilities brought into operation by 2025
- Extend the River Concordat to promote freight movements by water
- Develop the Thames Skills Academy to provide the skills needed on the Thames



Passenger Transport:

MORE JOURNEYS

Double the number of people travelling by river – reaching 20 million commuter and tourist trips every year.

- Make more efficient use of piers and river space, including new timetabling to manage peaks in traffic
- Innovate to achieve more passenger journeys at current low peak times
- Develop and implement a long-term pier strategy
- Convene a consultative forum to address issues of wash from growth in passenger transport
- Secure the infrastructure required for growth in the transport of passengers and goods on the Thames



SPORT AND RECREATION:

MORE PARTICIPANTS

Greater participation in sport and recreation on and alongside the water.

- Ascertain current levels of sport participation and work towards increasing participation on and alongside the Thames
- Extend sport opportunity zones on the Thames
- Realise new visitor moorings and publicise the availability of all visitor moorings effectively
- Join up the Thames Path from source to sea



ENVIRONMENT AND HERITAGE:

IMPROVED TIDAL THAMES ENVIRONMENT

The river the cleanest since the Industrial Revolution, with improved habitats and awareness of heritage.

- Build and bring into operation the Thames Tideway Tunnel by 2021
- Improve water quality by a range of measures including reduced litter in the river
- Improve biodiversity of sites recognised for their wildlife interest, and the connections between them
- Identify and improve access to, and appreciation of, the historic environment along the Thames
- Encourage uptake of new and green technologies to reduce the port's environmental impact



COMMUNITY AND CULTURE:

MORE PEOPLE ENJOYING THE THAMES AND ITS BANKS

A riverside which is a magnet for ramblers, historians, artists and others, whether living nearby, on the river or travelling from further afield.

- Enhance access to information about the Thames
- Educate local school children about the Thames
- Create new appropriate residential moorings accommodating suitable vessels
- Explore development of a Thames brand for culture, heritage and quality of life

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1. Context:

1.1 Future development facing the river

The Vision comes at a time when London is growing ever bigger, and there is a major focus on how to meet growing demand. The capital's population is expected to grow, on current projections, from today's 8.6 million people to 10 million by 2035, and to 11 million by 2050.

A lot of the opportunity for this growth could be delivered along the River Thames at Barking, Bexley, Greenwich, Havering, Newham and Tower Hamlets in London, and in Kent and Essex. These opportunities for significant new housing, as well as commercial space, infrastructure and other development, frame how the Thames and its banks will develop over the next two decades.

The new Mayor of London has set out the vital role that the River Thames plays in London's economy, the movement of freight and passengers and the wellbeing of all Londoners. At the same time, Lord Heseltine is leading a 2050 Thames Estuary Growth Commission, announced in the 2016 Budget,¹ and Lord Adonis is leading the National Infrastructure Commision.² These together provide the opportunity to consider an integrated river- and land-based approach to meeting the growing needs of transport, recreation, environment and well-being as well as housing.

Development of the strategic transport network to meet the needs of the growing city and the wider region will be essential. Investment in river crossings will be part of this. Transport for London has proposed 13 crossings across the Thames, mostly in east London where population growth is expected to be concentrated.³ New crossings need to be in the right place, with the right design, taking full regard of the importance of the river as a navigational waterway enshrined in common law – so that the economic, environmental and social benefits of river use continue to be realised.

River crossings need to be part of the Thames Vision, not separate from it. They can then provide the crucial infrastructure needed both in building the houses and developments and in supplying their needs once developed – transport of people and goods. It means considering a range of crossings, including: ferries (creating destination points along the Thames), tunnels and bridges. Similarly, the response to housing needs should not be to close off the opportunity to further develop cargo-handling facilities that provide opportunities for the sustainable movement of goods. The last major wave of docklands development did not make the most of the riverside locations. This time developments such as Fulham Reach are realising the opportunity to do this differently and make the most of the riverside location.



1.2 Thames Tideway Tunnel

A second significant context for the Thames Vision is the Thames Tideway Tunnel. This is the biggest single investment in water and sewerage infrastructure in London since Balzalgette's Victorian scheme created the London embankments in the nineteenth century. Like the Victorian scheme, the £4 billion Thames Tideway Tunnel will have a transformative effect on the cleanliness of the river. With the tunnel in operation, the Thames will be the cleanest it has been since the Industrial Revolution. At the same time, the river will provide the artery for transporting up to eight million tonnes of spoil and construction material for this project. This is a very important demonstration of the strategic importance of the tidal Thames in supporting infrastructure development projects. Part of the development of the Vision has focused on the new opportunities this national infrastructure project will create in the 2020s and 2030s. There are numerous ways in which the public can benefit from a cleaner river and at the same time transform the perception of the Thames.

1.3 Climate change

A third context is the world's changing climate, as greenhouse gases continue to accumulate in the atmosphere. Over the next 20 years, we can expect continuing global warming, sea level rise, significant changes in UK weather patterns and more extreme weather events. Managing flood risk throughout the Thames Estuary continues to be a high priority. The Thames Barrier will need replacing in due course, though this is not expected within the 20 year timeframe of this Vision. However, Environment Agency data shows that there will need to be continuing investment in both 'hard' and 'soft' flood defences along the Thames Estuary, to protect people and property.



1.4 Europe

We will be looking to work with river operators and users to prepare for any changes as a result of the UK's vote on membership of the European Union.

1.5 Safety

An underlying assumption throughout this Vision document is that growing river use has to be achieved with high levels of safety. The PLA, ship and terminal operators, the Maritime and Coastguard Agency (MCA), RNLI and emergency services work together to maintain and improve river safety. Initiatives include working with operators and groups to raise safety issues, providing improved safety guidance (e.g. the Rowing Code of Practice), promoting continuous improvement in vessel standards and encouraging improved reporting of incidents to the PLA and MCA, including 'near miss' reporting. Interpretation of this data has already assisted in identifying new safety initiatives, including improving the collective response to river incidents. There has been a decrease in serious or very serious incidents on the tidal Thames in recent years.5

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Thames vision 2035

Thames vision 2035

2. How the Thames Vision has developed

The Thames Vision project is led by the PLA, based on a collaborative approach, for a shared Vision for the Thames. At the PLA, we oversee safe navigation along the tidal Thames, sharing our marine, environmental, planning and other expertise to promote use of the river and safeguard its unique marine environment. More detail on what we do is included towards the end of this publication (p.34).

The Vision project was launched in March 2015, when the public and users of the river Thames were invited to 'Have Your Say' on its future. There were over 200 responses to the initial 'call for evidence', nearly half of which were from members of the public. Three public meetings – in Putney, the Southbank and Orsett – were held in May and June 2015, attracting over 200 participants. A summary of the responses is published in the Thames Vision section of the PLA website (www.pla.co.uk/ThamesVision).

We held round table discussions in September and October 2015 covering the breadth of current uses of the Thames: port and infrastructure; inland freight; passenger transport; sport and recreation; houseboats; environment and heritage; and culture and community. Over 75 organisations were involved, exploring the potential for and barriers to growth, and the priorities for achieving that growth in the next 20 years.

Alongside this engagement, we commissioned four external studies to provide a strong evidence base for the Thames Vision. The studies are published either in full or as summaries in the Thames Vision section of the PLA website (www.pla.co.uk/ThamesVision). They are on:

 River Thames economic prosperity, carried out by SQW. This estimates the economic value of maritime and port operations on the Thames.



Bringing together so many businesses to speak with one voice is something the airport operators could learn from

Daily Telegraph, 3rd January 2016

- River Thames public amenity, carried out by Oxford Economics. This estimates the amenity value of the tidal Thames, considering tourism benefits, sport and health implications and the value of living near the River Thames.
- River capacity in central London, commissioned jointly with Transport for London, carried out by Marico Marine.
 This identifies how capacity in central London could be optimised to support the growth of vessel traffic.
- Forecast growth in port trade, carried out by Stamford Research Group. A combination of econometric and market intelligence was used to derive forecasts for cargo handled in the Port of London to the year 2035.

We launched a consultation on the emerging goals and priority actions in December 2015. The responses – over 120 from the full length of the tidal Thames and covering the main sectoral interests – can be found in the Thames Vision section of the PLA website.

This document sets out the final goals and priority actions of the Thames Vision. It is a single Vision for the Thames, to be delivered by multiple stakeholders under the PLA's custodian role.



3. Thames Vision to 2035: Goals and priority actions

The Vision sets out the enormous opportunities for growth on and alongside the River Thames, and its importance for the wider growth of London, Kent and Essex. Our economic analysis shows that today the river supports over 40,000 jobs in the ports, logistics and transport sectors, generating over £4 billion of gross value added a year. In addition, there are a further 99,000 jobs in tourism and related businesses in the riparian boroughs alongside the river.

The Vision sets out how to unleash the potential growth in all types of river use. By 2035 we will see greater use of the Thames in all aspects: from port trade to passenger transport, sport and recreation to cultural enjoyment. Achieving this will require long-term thinking and strong partnerships across public, private and voluntary sectors.

The goals we have set are:

- The busiest ever Port of London, handling 60 – 80 million tonnes of cargo, on the doorstep of Europe's biggest metropolitan consumer market.
- 2. More goods and materials routinely moved between wharves on the river every year over 4 million tonnes carried by water taking over 400,000 lorries off the region's roads.
- 3. Double the number of people travelling by river reaching 20 million commuter and tourist trips every year.



- 4. Greater participation in sport and recreation on and alongside the water.
- 5. The cleanest Thames since the Industrial Revolution, with improved habitats and awareness of heritage.
- 6. A riverside which is a magnet for ramblers, historians, artists and others, whether living nearby, on the river or travelling from further afield.



The priority actions have the potential to achieve the goals identified by the public and users of the River Thames over the next 20 years. The river is a vibrant focal point and with a strategy has the capacity to further develop and facilitate sport and recreation, tourism, transport, industry, commerce, and housing. It is a mix that significantly contributes to prosperity in the London Region



British Canoeing, Goals and Priority
Actions Consultation Feedback

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These goals are bold and ambitious, reflecting the enormous potential of the river to deliver what the growing capital and the wider region need.

Alongside setting overall goals, we have looked at where these goals can best be realised. The 'Opportunity Map' for the tidal Thames (copy enclosed in the pocket in the back cover of this document) summarises current and potential river uses and infrastructure. For example, the map shows Opportunity Zones for sport: areas where there are sports already and potential new areas. The zones should encourage investment and interest in new river activity. These goals apply to the whole length of the river. To enable wider access, the map is published in an interactive format on our website: www.pla.co.uk/ThamesVision

Can it succeed? Unlike the crisis that surrounds London's shortage of aviation capacity, at least someone is standing on deck, planning ahead — long before the industry that depends



London Evening Standard, 14th December 2015

on the river has sailed into

44

Wishing only good things for the Thames – far and away the best 'thing' I've enjoyed about living in London the past 25+ years



Member of public, Goals and Priority Actions Consultation Feedback

3.1 Delivering the shared Vision

This is a shared Vision of the River Thames. Working together over the next two decades is essential to turning it into reality.

Development of the Vision has been convened and led by the PLA – the Custodians of the tidal Thames. Delivery falls to the PLA and a whole host of organisations and groups, many of whom have contributed to the development of the Vision. Those who have contributed so far are listed in the Annex (p.35).

Delivery will vary according to the priority actions required to deliver the goals:

- The PLA will be leading some of the priority actions – and we are reviewing our strategy to ensure we are well-placed to deliver.
- In other cases, different organisations are in the lead: such as Tideway building and bringing into operation the Thames Tideway Tunnel.
- Some will be new strategic alliances, working with us to deliver the Thames Vision, such as Sport England and London Sport to realise greater participation in sport on the Thames and its banks.
- Others are working together to strengthen the voice of stakeholders on key decisions affecting the Thames, such as river operators and

- terminal operators working alongside Government and national authorities to double the underlying intra-port freight carried by water or to improve road and rail access to the port.
- Some established meetings will need to take on more ambitious targets, such as the River Concordat championing the Thames as a default choice for moving spoil and materials from infrastructure projects.

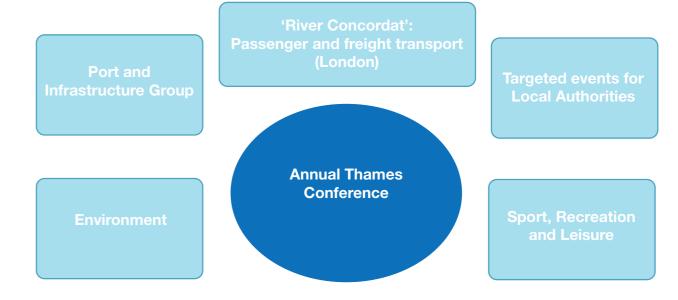
The PLA, with this combination of organisations, will work closely with the GLA and local authorities in delivering the Vision.

3.2 Tracking progress and delivery

Building on the co-design approach to developing the Vision, delivery will continue to be with a broad range of stakeholders. Each of the six goals will be met through a rolling series of time-bound priority actions with Key Performance Indicators (KPIs).

Governance will use existing fora wherever possible, for example the River Concordat, or convening new groups where necessary. Progress will be reported against priority actions at an annual conference.

Thames Vision delivery and reporting structure



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THAMES VISION 2035 THAMES VISION 2035

4. Vision goals and priority actions in detail

4.1 Port of London - More trade, more jobs

Today, 2016

The River Thames is home to the second biggest port in the UK, on the doorstep of London and the South East, the biggest markets in the UK. With 96% of UK imports/exports by volume coming in or leaving by sea, it is an essential part of the UK's infrastructure.⁶ This strategic asset supplies London, the South East and markets across the UK with life's essentials: food, fuel, building materials and household goods.

There are over 70 independently run terminals and wharves along the tidal Thames. The port handled over 45 million tonnes of goods and materials in 2015 and provided employment for 43,000 people, of whom 27,000 were directly employed in port operations, with a further 16,000 Forecast demand jobs in the supply chains that support the port and other indirect impacts. In total, the overall Gross Value Added of the Port of London in 2015 was £4 billion.7

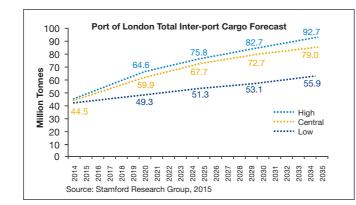
The port comprises a wide range of terminals, including:

- multi-purpose Port of Tilbury handling containerised, roll on/roll-off and bulk commodities
- London Gateway, a specialised container port
- several oil products storage terminals, including Navigator, Shell, NuStar, Esso and Calor Gas
- terminals handling building materials, owned by operators including Cemex, Hanson, Tarmac, Brett Aggregates and J Clubb; over half the aggregates sold in London are handled at a Thames wharf
- specialist terminals, including Europe's largest cane sugar refinery, Tate & Lyle at Silvertown and Ford's engine making and logistics hub at Dagenham



The Port of London is on the doorstep of Europe's biggest metropolitan consumer market, with consumer spending in Greater London forecast to grow from £129 billion in 2014 to £199 billion in 2035. London alone accounts for approximately 22.9% of UK GVA, and as part of the wider South East that figure increases to 38%.8 The Port of London is strategically placed to best service this already huge and growing market.

The PLA commissioned Stamford Research Group to undertake forecasts of growth until 2035. The forecasts are a combination of: (i) econometric modelling (from estimates of future traffic and economic activity in the UK, based on



the relationship between traffic and economic activity); and (ii) market intelligence (from market research interviewing the port terminals). This market research was applied and forecasts were produced for all types of cargo handled in the Port of London, including intra-port traffic.

Stamford Research Group forecasts that total inter-port trade will increase to between 56 and 93 million tonnes in 2035, depending upon low or high assumptions (see graph, left). For comparison, the largest tonnage ever handled in the Port of London was 61.6 million tonnes in 1964.

Forecasts for unitised trade, petroleum, aggregates/cement, other cargoes, total intra-port and inter-port traffic are published in the Vision section of the PLA's website.

Vision, 2035

We have set the goal: The 20 year Vision will see the Port of London becoming the biggest it's ever been, handling 60 - 80 million tonnes of cargo each year, on the doorstep of Europe's biggest metropolitan consumer market

To achieve this goal in a safe and sustainable way, we have set the following priority actions:

1. Sustain private sector investment. Growth will be driven primarily by the private sector. £2.5 billion of port investment is already happening or planned over the next five years alone. Sustaining these levels of investment requires a business-friendly framework of public policy and for the PLA, as statutory harbour authority, to support a commercially attractive port. As part of the development of this Vision, a 'Port & Infrastructure' group met, comprising some of the major terminal operators and key public bodies. This group will be established as a regular forum to deliver the growth goal for the Port of London. It will focus on influencing public spending decisions on major infrastructure projects, planning policy and, more generally, making the port as commercially attractive as it can be.

2. Improve navigational access to the port.

The wider Thames Estuary contains the main approach channels that provide access to the River Thames and the commercial port. This area is a dynamic natural environment where sand banks and shoals are constantly moving, dissolving and reforming. The PLA is responsible for the conservancy of the tidal Thames, which includes maintaining safe and open access to the port, by ensuring navigational channels deep enough to meet current and future shipping

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needs. The PLA will respond as appropriate to changing market demands on both capital and maintenance dredging, whilst maintaining the highest standards of environmental protection.

3. Improve rail and road access to port operations/terminals, including:

- Lower Thames Crossing downstream of Tilbury, by 2025. There is a pressing case for a new Lower Thames Crossing. The consensus view from port operators is that the most strategic option is downstream from Tilbury. The reasons for this are:
 - reducing pressure on the M25 and the existing Dartford Crossings
 - creating new routes linking the A13 and A2
 - the new logistics parks at London Gateway and the Port of Tilbury
- Highways England consulted on a new Lower Thames Crossing connecting Kent and Essex in March 2016, with the recommended solution a dual carriageway connecting junction 1 of the M2 to the M25 between junctions 29 and 30. This would cross under the River Thames via a bored tunnel crossing just east of Gravesend and Tilbury. A tunnel would ensure the full range of river uses continuing unimpeded, especially access for large sea-going vessels, as well as providing a 70mph motorway-tomotorway connection with the greatest improvement in journey times and a modern, high quality road along its entire length.

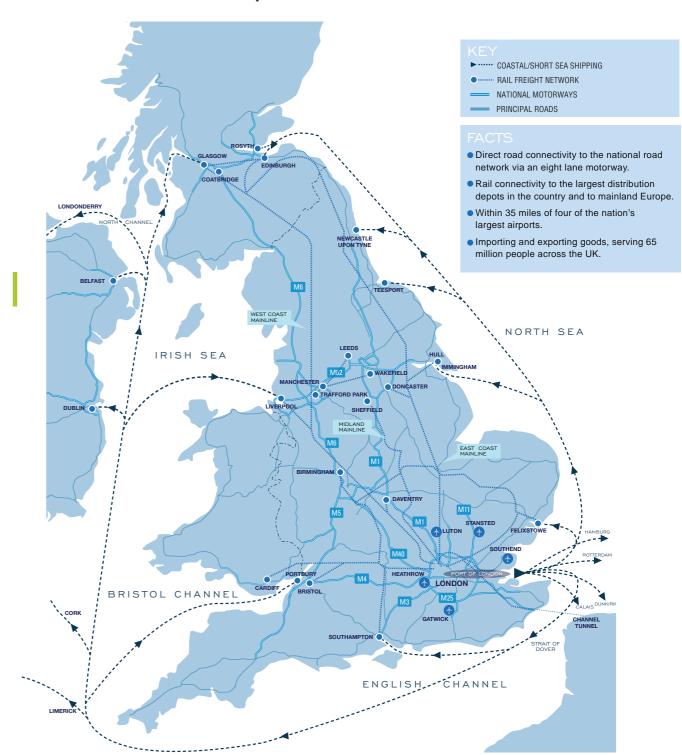
At least three further Thames crossings to

the east of Tower Bridge, that allow continuation of river trade, the first by 2022. All types of crossings – bridges, tunnels and ferries - need to be considered. The first proposed new crossing is the Silvertown Tunnel. This has the potential to bring relief to the congested Blackwall Tunnel which was last expanded in 1967. It will bring significant economic benefits to both sides of the river. For the second and third crossings, various locations have been proposed including Gallions Reach and Halfway Reach (Belvedere/Dagenham). From the port's perspective, there is a pressing need for better river crossing infrastructure to enable transport of freight, and improved connectivity for people. These need to be sited and designed so that

they allow the full range of river uses to continue, especially large sea-going vessels. In this way we will enable growth in port trade and in the transport of goods and people by river.

- Widening of the A13, by the end of 2018. Increasing the capacity of the A13, especially at and adjacent to the M25 interchanges with the Dartford Crossings, will reduce congestion and the potential for knock-on effects. The current arrangement is unsustainable: incidents very quickly have consequences, introducing inward and outward delays for cargo handling facilities in the port. All port facilities in the area would benefit from such an improvement in the local road infrastructure and its links to the motorway network.
- Closure of level crossings affecting operational terminals, by 2020. This will create 24-hour free access, thus avoiding delays associated with railway level crossings, which will be very beneficial for cargo handling facilities and safety.
- 4. Deliver efficient, effective and sustainable PLA harbour and pilotage services to support growth. The PLA's core conservancy, harbour authority and pilotage duties support all types of river use.
- For commercial traffic we provide appropriately maintained, marked and surveyed navigation channels giving optimum access for customers.
 We regularly invest in new equipment, vessels and staff to survey channels and evaluate channel depths against customer requirements.
 The same applies to Vessel Traffic Services systems and personnel in order to maintain effective planning and control of vessel movements on the Thames.
- On pilotage, our goal is to provide the optimum number of trained and experienced pilots to meet demand. Investment in both recruitment and training of new pilots will enable us to meet increased demand and create a balanced pilot group age profile. This is a priority for the PLA.
- Continued investment in simulation capabilities supports our pilot training regime and enables us, with customers, to assess new business opportunities through trialling vessel manoeuvring. We will continue to support and encourage the use of Pilotage Exemption Certificates for services calling regularly at the

Port of London in the UK Transport Network



port, as this reduces the cost to the customer and increases their flexibility for arrivals and departures.

- We support safe growth in other river uses, including passenger boat operations, inland waterways freight and sport and recreation, through the provision of advice, publication of guidance, and provision of harbour services including river patrols and driftwood clearance.
- Our goal is continuously to improve our internal processes to provide all river users with support and advice around delivery of statutory requirements such as licensing, consents, surveying, examinations and auditing, in a cost effective and timely way.

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4.2 Inland freight – More goods off roads onto the river

Today, 2016

The River Thames is a critical piece of transport infrastructure, for the capital, the region and nationally. It is by far the UK's busiest inland waterway, and volumes moved have increased to the record level of 5.5 million tonnes carried by river in 2014 as a series of strategic projects contributed significant volumes of material being moved on the river. Over the last ten years, if we exclude major projects at Blackfriars Bridge (Thameslink improvements), Lea Tunnel, London Gateway dredging and Crossrail, a long-term average of 2.15 million tonnes were transported each year in the Port of London, with 1.8 million tonnes moved in Greater London.

The Thames and its wharves (cargo-handling facilities) are critical to the river borne supply and movement of construction materials, spoil, household refuse and vegetable oils. Efficient handling of building materials and spoil is essential for both large construction projects and general building in the region now and to meet the forecast construction demand in the future.

In 2014, over 7.3 million tonnes of marine aggregates were landed at Thames wharves, with sales from London wharves increasing each year since 2010.9 Marine dredged aggregates provide 50% of all of London's aggregates supply. With continued population growth and depletion of land-won resources, demand and need for marine dredged and imported aggregates will continue to grow.

At the moment the majority of goods moved on the river are from construction projects. These have shown what is possible in terms of moving out construction and excavation waste and bringing in construction materials by river. The recently started excavation works for the Northern Line extension at Battersea will transport 600,000 tonnes of waste to Tilbury in Essex. This will remove over 40,000 lorry journeys by road and prevent 2,000 tonnes of carbon emissions.¹⁰

What is critical is growing the baseload of goods and materials routinely moved by river. This will sustain the industry at a higher level, providing the



incentive for further private investment. We will look for all riparian sites to use the river where practicable. Not just the major infrastructure projects such as the Northern Line extension, but other scales of projects too as we have seen at Battersea Power Station and at Fulham Wharf.

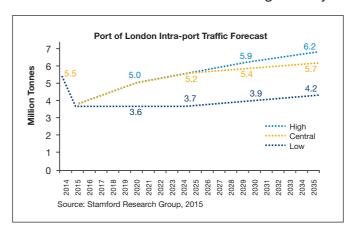
There is a strong environmental case for using the tidal river for the transport of goods and materials. Every 1,000 tonne barge on the river takes 100 lorry movements off the roads. This delivers a number of wider benefits. It reduces congestion on the roads with benefits for road safety, particularly for cyclists and pedestrians which is a key priority. It is the most environmentally sustainable option. Transport by barge is estimated to produce about one third of the greenhouse gas emissions per kilo carried, compared to the equivalent journey by lorry.¹¹

Critical to making the most of the river for moving freight, cargo-handling facilities must be available throughout the capital, Kent and Essex, to get goods and materials on and off the river and to maximise the benefit of the river's east to west link. This means both retaining viable current operational facilities and reactivating those not in operation.

Forecast demand

With strong demand for new development and the resultant pressures on land in London, it is more important than ever to protect viable wharves and to bring into use those currently vacant wharves. These will serve the needs of the construction industry and other sectors, and provide new opportunities to transport a wider range of goods by river. In the consultations there was a strong call to transport more and a greater range of materials and new goods by river over the next 20 years.

As London grows to the east, there is potential to supply these new communities, with the transport of more household and containerised goods by



river too. This would potentially enable the creation of better living environments, with fewer lorry movements and improved safety for residents.

With the concentration of container ports at Tilbury and London Gateway and the growth of logistic parks and Regional Distribution Centres (RDCs) on the banks of the Thames to the east, it makes sense to look at the potential for transporting more of the goods that have come in by sea along the river to the largest consumer market in the UK. This is the logical extension of the port centric distribution model now replacing the established transport of goods in containers to Midlands distribution centres which then come back to London. Within the 20 year time period of the Vision, this would potentially include consolidation operations for construction, supermarkets and home deliveries, and unloading infrastructure, to deliver these by sustainable road vehicles. This has the added advantage of making the Port of London more attractive to importers - the quicker the flow through time for goods from arrival at port through the logistics centre to arrival with the end user, the more attractive the offer.

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Overall the Vision is proposing a step change in inbound and outbound movement of goods and materials by river, rather than by road, setting a target for the underlying, routine transport of goods, rather than a target that includes the major infrastructure projects that are inherently more volatile in terms of volumes. This type of modal shift will require significant buy in and support at Government and local authority level.

Vision, 2035

We have set the goal: The 20 year Vision will see more goods and materials routinely moved between wharves on the river – every year over 4 million tonnes carried by water – taking over 400,000 lorry trips off the region's roads.

To achieve this goal in a safe and sustainable way, we have set the following priority actions:

1. Double underlying intra-port freight carried by water (i.e. excluding infrastructure projects) to over 4 million tonnes. A modal shift to routine transport of goods and materials by river is important. Whilst infrastructure projects provide a significant boost to internal river traffic, they are necessarily short term and cannot be foreseen. As such the Vision is promoting the doubling of the 'underlying' average volumes moved on the river. There are economic benefits in terms of the efficiency of the logistics of delivery of goods (from port to logistics centre to end customer) of this approach, enhancing the Port of London's offer to customers. There are clear environmental and quality of life benefits too, in terms of reducing air pollution and road congestion.

2. Champion the Thames as a default choice for moving spoil and materials from infrastructure projects close to the river. The challenges are to make the most of the potential of the river, for example by raising awareness and sharing best practice: incorporating water transport into riparian boroughs' transport plans and wider planning policies, as has been successful with the London Plan; use of conditions encouraging use of the river; and encouraging trials of new services to existing cargo-handling facilities, for example in west London.



- 3. Maintain or reactivate viable cargo handling facilities, with at least five additional facilities brought into operation by 2025. Having exit and entry points to the river is fundamental for freight and cargo transported by river. Strategicallyplaced operational cargo handling facilities are needed to link with road and rail. Continuation of London's safeguarded wharves policy - which protects viable wharves along the tidal Thames in Greater London for the transport of goods and materials - is vital. Equally so, reactivating safeguarded wharves that are lying dormant, with developers sitting tight hoping that they can be turned instead into riverside housing developments contrary to established policy. Within the next decade, Peruvian, Orchard and Hurlingham safeguarded wharves as well as wharves downstream of London should be brought into operation.
- 4. Extend the River Concordat to promote freight movements by water. By setting a target we can gain momentum to make this change in the same way that a target for passenger transport on the river was very effective. By having a freight target, we can encourage the modal shift from road to rail, looking at timing of freight, financial incentives (where appropriate) and having the right infrastructure in place.
- 5. Develop the Thames Skills Academy to provide the skills needed on the Thames. With sustained increases in passenger and freight movements on the Thames, and major infrastructure projects such as the Thames

Tideway Tunnel, there are immediate needs for more, well qualified people to work on vessels. These people need to be well trained, so there is a clear and pressing need to improve training provision (including Boatmaster's Licence qualifications), raise standards and enhance skills on the river.

The Thames Skills Academy is being established as a Group Training Association. This is the long-established concept of a learning partnership, in this case of marine-based employers, which is well placed to make the most of Government training systems and associated funding.



More emphasis on the value of using the Thames to reduce urban traffic and statutory redirection of certain trades to use river facilities rather than road by targeted use of planning regulation, this will require buy in at Governmental and Local Authority level so significant lobbying and collaboration is required but could be a unity point for many stakeholders



Navigator Terminals, Goals and Priority
Actions Consultation Feedback

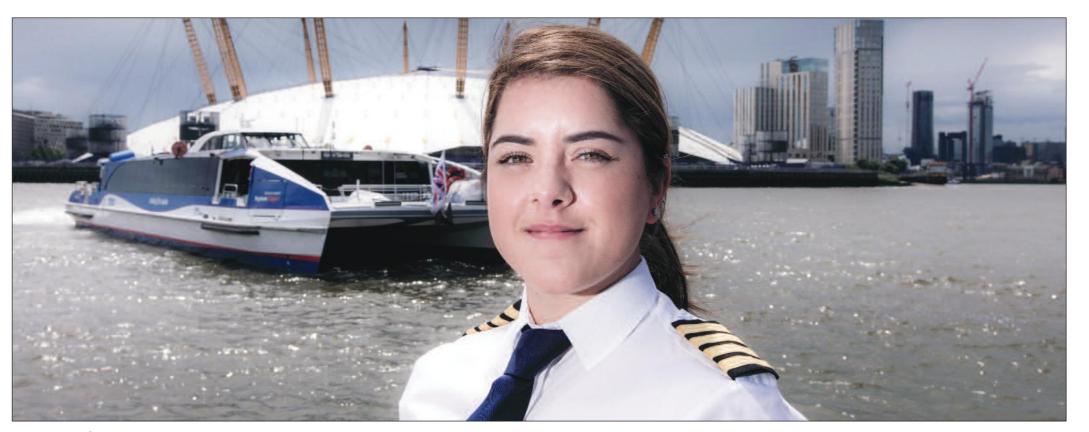
4.3 Passenger transport – More journeys

Today, 2016

The River Thames is an iconic piece of the capital's passenger transport infrastructure. The Thames adds much needed transport capacity. Boat trips are an attractive part of the tourist offer and services provide access to the 35 Thames riverside attractions. These are increasingly important with the limited coach parking available in central London.

In 2015 there were 10.3 million passenger journeys on the Thames, continuing growth in passenger travel of more than 150% over the last decade. We are well on the way to reaching 12 million passenger journeys by 2020. Transport for London is raising awareness of river transport through the 'Open up London by Boat' campaign in 2016. The breadth of what is on offer is also increasing: from commuter services to 23 piers from Putney to Woolwich Arsenal; with the commuter offer at Putney upgraded considerably with two new vessels; dinner cruise and leisure





boats; the Gravesend to Tilbury and Woolwich ferries; a paddlesteamer from London to Southend; and fast RIB experiences.

Our study into the 'amenity value' of the Thames demonstrated how much the river contributes to the wider economy. Over £2 billion of GDP is generated by tourism in the wards immediately adjacent to the Thames' banks. In total there were 23.4 million visitor trips to attractions beside the Thames, of which 4.7 million have a direct maritime connection, such as the Cutty Sark at Greenwich or HMS Belfast at Tower Bridge. 12

Forecast demand

Demand for river commuter travel is set to grow. This will be driven by population growth, close to the river. There is also increasing demand for leisure services, for example new destinations close to the Thames (e.g. the proposed Paramount Theme Park on the Swanscombe Peninsula in Kent) and to different venues (e.g. travelling by boat to concerts at the O2) as well as from increasing the leisure offer of the Thames itself. In 2015, the Thames hosted *Viking Star*, then the largest ever cruise ship at a central London mooring; the ship is recognised as

environmentally the cleanest cruise ship afloat. Some £68 million investment is planned in passenger and cruise related services over the next five years.¹³

Jointly with Transport for London, the PLA commissioned Marico Marine to ascertain the capacity of the river to accommodate passenger and freight transport in central London. The evidence showed that there is considerable capacity for more transport on the river passengers and freight - with active management. This is especially the case if more navigable space is made and if we look to increase passenger journeys in the early morning and evenings, as well as outside of summer school holidays. To make the most of this, choices are needed. Growth in every aspect of river use will not always be possible at the same time in the same place. Our experience and the research shows that some limited parts of the river in central London are already at capacity in terms of numbers of vessels over a small number of very short periods in the summer. Increasing river traffic in these areas is possible, but requires effective leadership from the PLA and Transport for London, with input from stakeholders. In

some cases this means looking at ways to improve the efficiency of how the river is used. We also have to recognise that, at times, some river uses are simply not compatible in the same stretch of water at the same time.

Vision, 2035

We have set the goal: The 20 year Vision will see double the number of people travelling by river – reaching 20 million commuter and tourist trips every year.

To achieve this goal in a safe and sustainable way, we have set the following priority actions:

1. Make more efficient use of piers and river space, including new timetabling to manage peaks in traffic. There is potential to manage timetables to avoid the current situation where the river reaches peak capacity at a small number of very short periods of time in the vicinity of Tower, Westminster and Embankment piers. New timetables will be set soon by London River Services, the operators and the PLA. These will be scheduled to achieve better berth availability and more effective management of passenger piers. We will also look to see the scope for these

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There is enormous potential for all types of river use to grow in the future. However, this should be done in a safe and sustainable way and in close collaboration with a range of partners, including local authorities, businesses, developers and the wider public



London Borough of Barking and Dagenham, Goals and Priority Actions Consultation Feedback



timetables to have regard for other users of the river. Looking forward to future years, timetabling should be routinely reviewed to make sure we are making most efficient use of piers and river space for the overall benefit of customers. We will also look at other options to better utilise river capacity in central London.

2. Innovate to achieve more passenger journeys at current low peak times. There is enormous capacity for increased passenger transport outside of peak times from Easter to the end of September in central London. Operators want to look at creating new opportunities to attract people to the river outside of peak times and places. Ideas include attracting more of the high numbers of people on the Southbank onto the river; more dining experiences; park-and-glide (i.e. park further down the river and come into London by river); and boat tours to see nature on the river. Projects include adding excitement to the river at night through illuminated bridges, lighting bridges from Tower Bridge to Albert

Bridge, and using the river to celebrate major cultural events.

- 3. Develop and implement a long-term pier strategy. With London River Services, commercial boat operators and the PLA working together, we are looking strategically at the current use of existing piers and potential siting of future piers and pier extensions for the next 10-20 years. We see the potential for new piers at Barking Riverside, Thamesmead, Erith, Purfleet, Greenhithe (Paramount), Grays and Tilbury by 2025 as shown on the Opportunity Map. This strategy will also form the basis for continuing work with riparian boroughs within and outside London to identify new opportunities.
- 4. Convene a consultative forum to address issues of wash from growth in passenger transport. At PLA public consultation events, including the Stakeholder Forum, concerns have been raised by houseboat owners and leisure stakeholders about wash, and the potential for more wash from a busier river. Concerns have

also been raised about the implications of wash for historic assets. To address these in a focused approach, a new consultative forum will also be established. We will also evaluate the performance of new forms of wash mitigation measures (for example the approach being trialed at the new Plantation Wharf Pier in Wandsworth).

5. Secure the infrastructure required for growth in the transport of passengers and goods on the Thames. An increasingly busy river will require additional infrastructure. Investment will be needed in boatyards; a modern multipurpose marine hub that can facilitate dry docking/ship repair, capable of handling all types and sizes of vessels, and common user berths for multiple uses, including transhipment, spoil removal and deliveries in and out.

4.4 Sport and recreation – More participants Today, 2016

The tidal Thames is home to a wide range of sports and recreation. There are more than 100 sport and recreation clubs along the Thames: rowing clubs, that are predominantly up river of Putney; and paddling clubs and water-sport centres offering canoeing, stand up paddle boarding and windsurfing up river of Putney, below Tower Bridge and out towards the estuary. There are also cruising, yacht and sailing clubs along the length of the Thames, as well as a number of scout groups and sea cadet units.

Every year, the Thames plays host to more than 80 major sporting events, including the University Boat Race, the race for Doggett's Coat and Badge (run every year since 1715) and the Great River Race. An estimated 5,800 people row on the tidal stretch of the Thames each year.¹²

The Thames Path provides a place for walking and cycling in the heart of London. There are at least 10 million walkers or cyclists on the Thames towpath each year. Joining it up from source to sea will raise its profile and attract more people to enjoy it. A conservative estimate suggests the value of people participating in sport and recreation on the Thames or its towpath is £132 million a year in terms of health and wellbeing benefits.¹²

Growing river use has to be supported by at least the current high level of safety. We work closely with all recreational clubs, and their representative bodies, to provide accessible safety information for participants and to support a strong safety culture along the river. The Rowing Code of Practice for rowing on the Thames, updated in 2015, by the PLA, British Rowing and Thames Regional Rowing Council is a good example of collaborative working to help users better understand rowing safety on the tidal Thames.

Swimming is currently permitted by PLA Byelaws upriver of Putney. However, the tidal Thames is not a benign environment. Open swimming organisations, including the Outdoor Swimming Society and the Wild Swimming magazine, advise people not to swim in streams/tidal flows that exceed their swimming speed (which is



approximately 0.8 metres per second for a good swimmer). The tidal flow of the Thames can run in excess of three knots (1.5 metres per second), nearly twice the speed that a capable swimmer is able to achieve. Over 100 swimmers have got into difficulties in the tidal Thames in the last five years, requiring rescue.

With the river becoming cleaner, there may be more demand for swimming. We will continue to work with swimming event organisers, as well as the RNLI, MCA and others to ensure safety and appropriate facilities. There are also a number of proposals for lidos in the tidal Thames. If these are appropriately located they could enable people to swim, if not in the river itself, then at least on the river, as in a number of other cities globally.

Forecast demand

With a growing population in London, Kent and Essex over the next 20 years, there is considerable potential for growth in participation, by developing extra capacity and increasing awareness of the current sports provision. Sport England launched its strategy 'Towards an Active Nation' in May 2016, seeking to get everyone engaged in physical activity.

The River Thames is on the doorstep of millions of residents and visitors. This provides the opportunity to help achieve Sport England's goal, as well as contribute to the delivery of London Sport's vision to make London the most physically active sporting city in the world, with a target of getting one million Londoners more active by 2020. Preserving the existing provision for sport and recreation, enabling more people to engage through better information and building the provision further – within new housing developments close to the river – will bring watersports to local communities.

Given the projected increase in the use of the river for more transport of people and goods, there will be 'Opportunity Zones' in which to focus growth in sport and recreation.

Vision, 2035

We have set the goal: The 20 year Vision will see greater participation in sport and recreation on and alongside the water.

To achieve this goal in a safe and sustainable way, we have set the following priority actions:

1. Ascertain current levels of sport participation and work towards increasing

participation on and alongside the Thames.

We will seek to gather more data on current and projected sport participation. Alongside this we will look to make available, principally digitally, more information about sports provision on the Thames. The PLA's work with the sport and recreation clubs along the Thames, as well as with Sport England and London Sport, will help deliver this. Sport England supports rowing, sailing and canoeing activity on the Thames, through British Rowing, the RYA and British Canoeing. It will also be vital to work closely with riparian boroughs and the Greater London Authority, so that the required infrastructure along the banks, including access points, is prioritised in local plans and wider strategies. We can learn best practice from case histories of where housing development by the river has brought about an increase in water sport provision for local communities, such as the new rowing facilities at the Fulham Reach development.

2. Extend sport opportunity zones on the Thames. There is potential for the growth of water sports both where there is a lot of activity already, such as rowing above Putney, and in new areas: more rowing, kayaking, canoeing and stand up paddle boarding between Kew and Teddington; more kayaking between Putney and

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It's an ambitious project which certainly outlines the current situation, along with all the complexities of its current users, but the Vision demonstrates the huge potential that the River has to offer now and in the future



Greenwich Yacht Club, Goals and Priority Actions Consultation Feedback



The Vision is excellent.
We congratulate the
PLA for producing such
a far-reaching and
enterprising plan



The Cruising Association, Goals and Priority Actions Consultation Feedback



Chelsea; and more kayaking as well as sailing between Greenwich and Crossness, particularly in Gallions and Barking reaches. Further east, there are opportunities for more yacht clubs serving sailing and motor boating as well as kayaking, and for rowing and paddle boarding in Benfleet Creek.

3. Realise new visitor moorings and publicise the availability of all visitor moorings effectively. We will examine the potential for further visitor moorings on the tidal Thames. The Opportunity Map of the tidal Thames (interactive format on our website) shows the alongside visitor moorings, up to 40 of them, at Town Pier, Gallions Point Marina, South Dock Marina, Hermitage Wharf, Imperial Wharf, Oyster Pier, Plantation Wharf Pier, Dove Pier, Chiswick Pier and Brentford Dock. There are also some visitor moorings at Limehouse and St Katherine Docks. Many of the visitor moorings are infrequently used, in spite of a lot of consultation responses stating that there are too few visitor moorings. We will look at improving availability of this information, particularly digitally, so that it is easier to find, book and use the visitor moorings. We will also look at the scope for improving existing slipways and building new ones to enable easy access to the river.

4. Join up the Thames Path from source to sea. Joining up the Path, keeping it well maintained and sign posted along the full length of the tidal Thames will require innovative thinking and a wide range of organisations working together. There is the task of 'closing the gaps' on the existing Thames Path. This will require new developments close to the Thames to retain the existing path and its views, and where there are gaps, extending the path and creating access for local communities to it. There can be particular challenges in finding the best route near wharves and terminals. This requires pragmatic solutions that achieve appropriate, safe public access, taking into account safety, regulatory and operational requirements of the operator.

There is also scope to support Natural England in its work to create a coastal path around the whole of England, with the Thames area scheduled for work to begin in 2017.



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4.5 Environment and heritage – Improved tidal Thames environment

Today, 2016

The tidal Thames provides a range of diverse, thriving habitats for many different species of fish, birds, seals and other wildlife. It is home to nine Sites of Special Scientific Interest (SSSIs), mainly inter-tidal habitats. Many of these have further international environmental designations such as RAMSAR Convention wetland sites or European designations such as Special Protection Areas or Special Areas of Conservation. The whole of the tidal Thames in Greater London is identified as a Site of Metropolitan Importance for Nature Conservation (SMI), and a number of other Sites of Importance for Nature Conservation (SINC) lie alongside the river within Greater London (such as Rainham and Wennington Marshes, Erith Marshes, Battersea Park, Barn Elms and Kew Gardens).

There are also a number of sites of borough or local importance, including Blackwall Basin, Leg of Mutton Reservoir, Petersham Meadows and Marble Hill Park, as well as most of the tributaries as they meet the Thames. The Thames plays a crucial role in the importance of these adjacent sites, and they provide additional habitats for some species that use the Thames (e.g. foraging and roosting areas for many birds).

92% of the PLA's area is covered by environmental designations of some sort. The latest surveys found over 900 seals¹³ and visits from 300,000 overwintering birds every year.

Against these positives, there are a number of major challenges to the Thames environment. The PLA-led Cleaner Thames campaign highlights one. Up to 300 tonnes of rubbish is recovered from the Thames each year, with the amount of plastic bottles growing year on year. A study by researchers at Royal Holloway, University of London and the Natural History Museum has shown that up to 70% of bottom feeding fish in the Thames has plastic fibres in their guts, which can then get into the human food chain.¹⁴

There are more than 50 major discharges of untreated sewage into the tidal Thames each year



as a result of the inadequate capacity of the Victorian infrastructure. Despite Bazalgette's foresight in building a sewerage system that could meet the demands of a much bigger London nearly 150 years on, the system no longer has sufficient capacity.

The River Thames has been a focal point of human occupation for over 440,000 years. It was diverted into its current course during the Ice Ages. Through nearly half a million years of history, settlements have risen and fallen beside the Thames, leaving many traces of our past both as buried archaeology and as an unrivalled procession of standing buildings and structures. The Thames has been used for food, transport, ceremonial deposition and also for burial. These are depicted in art, for example Canaletto's 'London: The Thames on Lord Mayor's Day'.

The Thames has been both the centre piece and vantage point from which London is experienced, from the first prehistoric peoples travelling upriver to the modern riverboat commuters today. From Tower Bridge to the Houses of Parliament, the great wharves and quaysides, and the offices of the Greater London Council, buildings addressing the river have been used to express the power of the capital. Before this, the riverside was lined

with palaces to proclaim the individual status of monarchs, princes of the Church and the aristocracy, still clearly visible at sites such as Lambeth Palace, Greenwich Palace and Somerset House.

The river has been, and is still, at the heart of pageantry which is valued as part of a long historic tradition and a strong aspect of national identity. The tradition of great riverine events such as Tudor processions continues, with the Queen's Diamond Jubilee River Pageant in 2012, alongside traditional events like the race for Doggett's Coat and Badge. State funerals of great British heroes such as Admiral Lord Nelson and Sir Winston Churchill have also used the river as a key part of the ceremony, viewed by thousands from the riverbank.

The Vision provides an opportunity to bring greater conservation focus, access and awareness raising to the vast array of heritage assets.

Opportunities

The Thames Tideway Tunnel will make the river through central London the cleanest it has been since the Industrial Revolution. With more consistent, higher water quality will come more biodiversity. There are already 125 fish species feeding on the abundant invertebrates in the river.

The waste water treatment improvements to discharges into the Thames that are being provided by investments by Tideway, Thames Water and other operators provide a great platform for cleaner water and a more sustainable river.

The Thames already has a number of environmental improvement projects like the Nature Improvement Area, Catchment Plans and Futurescape, led by an increasing number of non-profit organisations and charities such as the Wildlife Trusts, RSPB, Thames21 and Thames Estuary Partnership. Projects are driven and resourced by enthusiastic volunteers up and down the Thames.

As well as a focus on improving the environment, the Vision includes our aims to reduce the overall environmental impact of activities on the river. This means compliance with current rules, for example those set by MCA but also looking to best practice from across the world to encourage innovation and the adoption of new technologies to reduce the impact further, such as on air pollution.

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The Environment Agency's Thames Estuary 2100 programme will be providing improved flood defences across the Estuary to protect the increasing population from the growing risk of flooding due to the effects of climate change. During these works, flood defences will need to be repaired and raised. Changes are expected in the frequency of extreme weather events as a result of climate change.

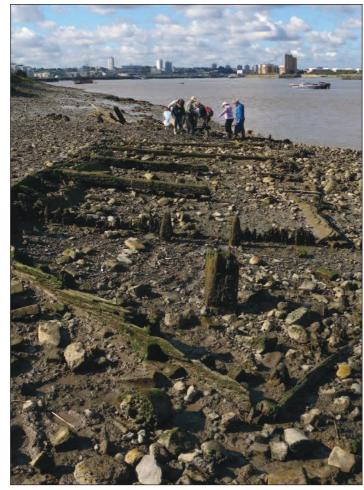
There are opportunities from the Thames Vision to encourage the preservation of the built and archeological heritage of the Thames and improve access to it. Historic England and others, including the Museum of London Archaeology, are well-placed to work with the PLA and a wide range of other stakeholders to achieve this. There is scope to identify the significance of the river's heritage assets, both designated and undesignated, and to secure their conservation in the context of a busier river.

Vision, 2035

We have set the goal: The 20 year Vision will see the river the cleanest since the Industrial Revolution, with improved habitats and awareness of heritage.

To achieve this goal in a safe and sustainable way, we have set the following priority actions:

- 1. Build and bring into operation the Thames Tideway Tunnel, by 2021. The completion of this project, extending from Acton in the west to Abbey Mills in the east, together with the Lea Tunnel and the substantial investments in capacity at Thames Water's existing sewage treatment works, will dramatically reduce both the number and total volume of sewage discharges into the Thames and its tidal tributaries. Cumulatively, this will act as the largest improvement in the water quality of the River Thames within London in a generation.
- 2. Improve water quality by a range of measures including reduced litter in the river. As well as through delivery of the tunnel, this will be achieved by parties working on improvements and best practice through the Tidal Thames Catchment Plan and the Wider Thames River Basin Management Plan. Coordinated action is also required to secure effective management of



invasive non-native species (INNS). We also want to see a reduction in litter falling into the river, which is being targeted through the awareness building 'Cleaner Thames' campaign that is focusing on plastic rubbish. The Thames Vision can widen the awareness of the campaign, drawing in other Vision stakeholders such as leisure users to reduce or give up single use plastic or dispose of them responsibly. The PLA has consulted on changes to the Thames Byelaws to ensure Class V passenger vessels do not discharge sewage into the Thames from 2023.

3. Improve biodiversity of sites recognised for their wildlife interest, and the connections between them. The nine SSSIs along the tidal River Thames are all within the PLA's jurisdiction. A priority is to get the SSSI sites into 'favourable condition', where practicable, so they support more wildlife.¹⁵

The condition of the sites will benefit from more connectivity of habitats across the Thames, for



example by looking at new stepping stone sites and managing a group of sites in a coherent way. It is also beneficial to continue to encourage communities to identify with local reserves and sites to protect and improve the access by wildlife, in land-based and marine ecosystems.

- 4. Identify and improve access to, and appreciation of, the historic environment along the Thames. Historic England is championing the significance of the river's heritage assets, both designated and undesignated, and, with others, looking at their conservation alongside greater use of the Thames. There is potential too to integrate the historic environment into other aspects of the Vision, for example in the signage for the Thames Path. There is scope to provide a better and more coherent experience of the historic environment for the public.
- 5. Encourage uptake of new and green technologies to reduce the port's environmental impact. With a focus in the first instance on air pollution, we will learn from best practice from across the world to reduce diesel emissions from all commercial vessels that use the river. With an Ultra Low Emission Zone being introduced in Central London from September 2020 applying to all cars, motorcycles, vans, minibuses, buses, coaches and heavy goods vehicles (HGVs) river transport will play its part

too to reduce exhaust emissions. Whilst the standards for vessels are set by the MCA, there is a role for the PLA in exploring how to encourage the move to greener vessels without steering trade away from the Thames. There are other opportunities, such as harnessing the energy source of the Thames that we could also explore. Water source heat pumps are already beginning to take advantage of this (e.g. at Kingston Heights on the non-tidal Thames).

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We are strongly supportive of the Thames Vision project, presenting as it does an opportunity to formulate shared thinking and aspirations for the Thames in the period to 2035



RSPB, Goals and Priority Actions Consultation Feedback

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4.6 Community and culture – More people enjoying the Thames and its banks

Today, 2016

The River Thames is a place to enjoy the sights of a historic world city and is a haven of peace in a bustling region. The city grew from the river and its history is woven into the development of London, Kent and Essex. There are four UNESCO World Heritage Sites on the banks of one river: Kew Gardens, Westminster Abbey and the Palace of Westminster, Tower of London and Maritime Greenwich. The Thames is inseparable from the cultural heritage, art and landscape of London, Essex and Kent, with people enjoying archaeological explorations on the foreshore along the Thames, visiting the National Trust property at Ham and the historic forts protecting the river at Tilbury and Gravesend.

Some 4.7 million people visit the Thames or maritime related attractions annually. On top of that, there are many one-off national and regional events on the river, such as the Queen's Diamond Jubilee River Pageant, and annual events including the University Boat Race, New Year's Eve fireworks display and the Great River Race. At least 23.4 million people visit the attractions located by the side of the Thames. A river tribute as part of the Queen's 90th birthday celebrations took part on the Thames, with the royal barge, *Gloriana*, leading a 45-strong flotilla down the Thames in June 2016.





Some 99,000 people are employed in the tourism industry in wards adjacent to the Thames, estimated to produce a £2.4 billion Gross Value Added contribution.¹²

The river connects its adjacent communities, along the Thames Path and, with crossings, across the water. Many stakeholders are keen to see more local river crossings. The Thames festivals promote and celebrate the river. Totally Thames takes place every September with a season of art and cultural events along the Thames. Some 2.6 million people experienced 215 events in September 2015. 16 2016 sees the launch of a Thames Estuary arts festival in the latter half of September, with events at venues including Tilbury Cruise Terminal, PLA at Gravesend, Chalkwell Hall and Park and the world's longest pier in Southend-on-Sea.

The Museum of London in Docklands opened in 2003 and its audience has since grown to more than 250,000 in the last year. From the outset the museum has told the story of the river, port and people of east London.

There are riverside nature reserves which also serve as education centres, such as Millennium

Ecological Park in Greenwich and Rainham Marshes, as well as activities to raise awareness of the role of the river as London's largest single natural feature in the shaping of the city.

The river is home to many residential moorings, located at 24 sites along the tidal Thames with by far the majority located upstream of Vauxhall Bridge in west London. These moorings add to the vibrancy of the Thames and meet the desire of people to live on the river.

Opportunities

The growth in London's population, combined with forecasts showing increased numbers of tourists coming to London, Kent and Essex, brings the potential for a lot more visitors to enjoy the Thames and further boost its attraction and economic impact. Tourism's contribution to London's economy is set to grow by over double from the 2013 figure of £36 billion, or 11.6 per cent of the capital's GDP, to £77.4 billion (12.8 per cent of the capital's GDP) in 2025. 17 In real terms, this amounts to an annual growth rate of 4.3% in total tourism spending, with predictions indicating a faster real growth per annum in

London compared to the rest of England.

There is a lot of activity already in the river and on its banks. There could be further potential by providing information about what's on offer and generating greater interest through a well-recognised Thames brand for environment, culture, heritage and community. As a first step towards this, we have launched a prototype of an interactive map, that can be developed further to meet some of these needs (see our website: www.pla.co.uk/ThamesVision).

The residential mooring community, who have been represented through their contributions to the public consultation and a round table discussion hosted by us as well as at our Annual Stakeholder Forum, make the case for increasing the number of residential moorings. This poses questions about where these are best located on an ever busier river.

Turbulent waters – wash – from passing boats can at times create issues for residential moorings, depending on the amount of wash, the nature of the residential vessel and location and type of mooring. Progressively, low wash vessels

are being developed and brought into use, including the PLA's harbour launches.

Houseboats need to be suitable for the conditions in which they are moored and to have secure and appropriate mooring infrastructure. Whilst there will always be wash – the MCA classify the tidal Thames as Category C/D waters where wave heights of up to one metre may be expected – further improvements can be made.

Vision, 2035

We have set the goal: The 20 year Vision will see more people coming to enjoy the Thames and its banks.

To achieve this goal in a safe and sustainable way, we have set the following priority actions:

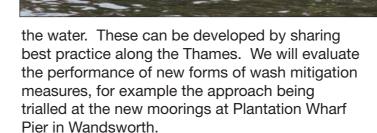
1. Enhance access to information about the Thames. Information about the River Thames already exists: on our websites (notably www.boatingonthethames.co.uk) and river transport timetables on the Transport for London website, as well as tourist information on the Visit London site.

There is an increasing demand for information about the Thames in readily accessible form, on and off the water. In the same way that the public is used to information on Blue Flag beaches or flood risk, there are calls for information about the Thames. Examples are information on tide times and water quality, and scope to use this information to inform and educate about the river, for example the species spotted or reporting

incidents of wash. The aspiration longer term is to assess how we might enhance the customer experience, for example moving from information about where sporting provision is, to being able to book there and then.

2. Educate local school children about the **Thames.** One of the important goals of the Thames Vision is to restore the link between residents of London. Kent and Essex and the River Thames. The schools in the 23 riparian boroughs provide a route for this, particularly in Key Stage 2, given the curriculum features education about and experience of rivers. There is established expertise and experience already. including through Thames21, Thames Explorer Trust's Thames education and PLA-supported outreach programmes, as well as the British Council's Rivers of the World Programme and the work of the Museum of London in Docklands. We can develop these further to target the 23 riparian borough communities.

3. Create new appropriate residential moorings accommodating suitable vessels. We consider that there is potential for more residential moorings, by locating them in appropriate opportunity locations, such as areas of Kent and Essex where existing and forecast use of the river and tidal conditions (wash) make such moorings viable (see Opportunity Map). Innovative solutions will include having the right moorings and the most appropriate vessels for the river. There is also a role for developers to find solutions that allow vessels to be moored on



4. Explore development of a Thames brand for culture, heritage and quality of life. We are exploring the potential for this with a range of organisations such as London & Partners, Visit Britain, the Greater London Authority, Historic England and the National Trust.

A lot more could be made of the global asset of the Thames, its cultural, heritage and environmental offer. By joining up the offer of the Thames – tying in culture and heritage, environment, community and transport – for residents and visitors alike, and providing a strong brand for new initiatives, more commercial, voluntary and statutory bodies will be able to work together to promote the river.

An interactive, accessible map of the offer along the whole Thames might be one way to achieve this. There is already a lot of public information about recreational opportunities on the river, through the Recreational Users Guide on our website (www.pla.co.uk), but there could be more for a wider public audience. Whilst some destinations are well known, many are not. There is no one place that shows everything that is on offer on the Thames, e.g. taking a boat to see one of the World Heritage Sites or going for lunch at Essex Wildlife Trust's Thurrock Thameside Nature Park.



The PLA is occupying a really important strategic position in seeking to identify wide goals for the Thames, as a place to live and work, its use for commercial and recreational interests, its value to London as an environmental amenity and its rewards as a visitor attraction in its own right.



Totally Thames, Goals and Priority Actions Consultation Feedback



About the Port of London Authority (PLA)

The tidal Thames runs for 95 miles from Teddington Lock in west London out to the North Sea. It is the UK's busiest inland waterway for passenger travel and freight movements, the Port of London is one of its busiest ports and the upper reaches are home to the biggest rowing centre in the UK.

As a Trust Port, we hold the tidal Thames in trust for future generations, with a duty to:

"...hand it on in the same or better condition to succeeding generations..."

A self-financing, independent organisation, our 360 strong workforce delivers the statutory harbour, pilotage, navigation and conservancy responsibilities. We have no shareholders so operate to the benefit of stakeholders. Any financial surplus we make is reinvested in the business enabling us continuously to improve the efficiency of our operations. In 2015 we estimated the total stakeholder benefit we generated was worth £37 million.⁵

Independent research in 2014 found that stakeholders most value our contributions in:¹⁸

River navigation and safety: Our port control centres, harbour masters, pilots and river patrol crews keep river users safe. Our salvage operations and divers keep the river clear of obstructions and open for business. We are responsible for river traffic control, security and navigational safety, including buoys, beacons, bridge lights and channel surveys.

Planning consultation and technical expertise:
We provide information, support and technical expertise to help river users and investors maximise the value of the river, and to do it safely. We license river works and dredging on the river, applying our expertise to keep river users safe and protect the environment.



Bringing people together and promoting the river: We bring people together to discuss how to make the best use of the Thames and advocate its potential to those unfamiliar with it. We work with, and for, a wide range of stakeholders and partners on commercial freight, investment, property, safety, conservation, leisure, tourism, passenger transport, sporting pursuits and major events. We try hard to be a 'listening' organisation as well as one that delivers what our stakeholders need and want.

Environmental stewardship: We hold the tidal Thames in trust, with the remit to hand it on to succeeding generations in the same, or better condition. A major part of our work is conservancy of the Thames, dredging and maintaining the main navigation channels on the river. As stewards of the marine environment, we carefully look after the river's many assets, conserving wildlife, keeping the river clean and free of rubbish. We also promote the use of the river as a natural, low-carbon transport route.

Annex: Organisations who have contributed to the Vision

Active 360
Ahoy Centre
Angling Trust
Armac Shipping Services Ltd
Apostleship of the Sea
Arup
Association of Thames Yacht Clubs

Avery Associates Architects

Beckett Rankine

Berkeley Group
Big Stick Advertising
Biodiversity by Design
BJ Wood and Sons Ltd
Brett Group
British Canoeing
British Marine
British Marine Aggregates Producers'
Association

Association
BuroHappold Engineering

Canary Wharf Group Castlekeep Ltd CH2M HILL TEAM2100 Chas Newens Marine

Canal and River Trust

Chas Newens Marine
Chelsea Kayak Club
Chiswick Pier Trust
City Cruises

City Cruises
City of London Corporation
City of Westminster
Clipper Ventures
CMA CGM

Company of Watermen and Lightermen Compass Point Residents Association Corporate Risk Associates Ltd

Cory Environmental Crown Estate

DEFRA
Department for Transport
Devonport Marine

Emanuel School
English Heritage
Environment Agency
Ernst & Young
Essex Chambers of Commerce
Essex County Council
Euromix Concrete

Farrells FM Conway

Gasworks Dock Partnership
Globe Rowing Club
GPS Marine
Gravesend Museum
Gravesend Rowing Club
Gravesham Borough Council
Greater London Authority
Greenergy
Greenwich Council
Greenwich Foundation for the Old Royal
Naval College

Greenwich Yacht Club

H.W. Wilson Ltd
Hammond and Sons Shipping
Hanson
Havering Council
Heatherwick Studio
Hermitage Community Moorings
Heybridge Parish Council
Historic England
Houses of Parliament

HR Wallingford (Dredging Liaison Group)
HSBC Rowing Club

Industrial Chemicals
Inland Waterways Association
Institute for Sustainability
Institute of Civil Engineers
ISM Shipping Solutions

J Clubb Ltd

Keltbray Group Holdings Kent County Council Kent Invicta Chamber of Commerce Key Fasteners Knight Dragon Kotug

Little Ship Club Livett's Group London Assembly Labour Group London Borough of Barking and Dagenham London Borough of Bexley

London Borough of Camden
London Borough of Hammersmith and
Fulham
London Borough of Hounslow

London Borough of Hounslow
London Borough of Newham
London Borough of Tower Hamlets
London City Cruise Port
London Concrete

London Corinthians Sailing Club

London Councils
London Duck Tours
London Gateway
London Kayak Company
London Nautical School
London RIB Voyages
London Riverside BID
London Rowing Club
London Sport

London Transport Museum London Wildlife Trust

MacAndrews
Marico
Marine Conservation Society
Marine Management Organisation
Mayor of London
MBNA Thames Clippers
Metal Culture
Mineral Products Association
Museum of London Group
National Maritime Development Group

National Trust
Natural England
Navigator Terminals
Newham Borough Council
Nine Elms Pier
Norfolk Broads Yachting Company
North Kent College
North Kent Yachting Association
NuStar Terminals
Nymph Limited (Lady Daphne)

Old Chiswick Protection Society OPLAC

Palmer's College
Parr's Priory Rowing Club
PD Shipping & Inspection Services
Perca Consulting
Poplar, Blackwall and District Rowing
Club
Port of London Authority
Port of Tilbury
Putney Town Centre

QRB Gloriana Queen Victoria Seamen's Rest

Ramblers Association Regents Network Realising Your Future Residents Boat Owners' Association Richmond Bridge Boat Club River Cycleway Consortium Ltd River Thames Alliance Co. Ltd. River Thames Society Rolfe Judd Planning Rowdy Boat Co Royal Borough of Greenwich Royal Borough of Kensington and Chelsea Royal HaskoningDHV Royal Yachting Association **RWE Generation UK**

S. Walsh & Sons Ltd

SCA Logistics
Shadwell Basin Outdoor Activity Centre
Shell
Shoebury Watermen's Association
Shoreline Environments/Super Yachts
Club
SKA
Sons of the Thames Rowing Club
Southbank Sailing Club
Southend Coastal Rowing Club
Southwark Cathedral
Sport England
St Pancras Cruising Club
Stema Shipping UK
Strand on the Green Sailing Club

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Tarmac

Transport for London

Thames21

Thames Anglers Conservancy

Thames Discovery Programme (MOLA)

Thames Estuary Partnership Thames Explorer Trust

Thames Gateway Kent Partnership

Thames Motor Yacht Club

Thames Regional Rowing Council

Thames Shipping

Tideway

Thames Traditional Rowing Association

Thames Vintage Boat Club

Thames Water Thamesbank

The Boat Race Company Ltd The Cruising Association

The Fishmongers' Company

The Lenox Project The Wildlife Trust

Thurrock Council Thurrock Yacht club Tide Line Art Totally Thames

Tower Bridge Yacht and Boat Club

Twickenham Yacht Club

UCL

University College London Boat Club

University of Greenwich Upnor Sailing Club

Upper Thames, Association of Thames

Yacht Clubs

Wild Capital

Urban Space Management

Urban Strategies

Viking River Cruises

Wandsworth Borough Council West London River Group Westminster City Council Westminster School Photos by:
Samuel Ashfield
Phil Bisset
Ben Fitzpatrick
Fulham Reach Boat Club
Jason Hawkes
Historic England
Museum of London
Archaeology
Richard Shellabear
Thames21
Andy Wallace

Thanks for assistance with photos to: Barn Elms Boathouse CLdN Cory Environmental Historic Royal Palaces Ramblers Association Shell

Thames Clippers
Thames Explorer Trust

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CUSTODIANS OF THE TIDAL THAMES

www.pla.co.uk @LondonPortAuth www.youtube.com/portoflondon 01474-562200